Fishery Management Report No. 24-36

Annual Management Report for the 2023 Southeast Alaska/Yakutat Salmon Troll Fisheries

by

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and

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December 2024

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

Symbols and Abbreviations

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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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ANNUAL MANAGEMENT REPORT FOR THE 2023 SOUTHEAST ALASKA/YAKUTAT SALMON TROLL FISHERIES

by

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ABSTRACT

This report describes the Southeast Alaska/Yakutat salmon troll fishery, management methods, and actions taken by the Alaska Department of Fish and Game during the 2023 Chinook salmon accounting period, which occurred from October 1, 2022, through September 30, 2023. Approximately 1.65 million salmon were harvested in the Southeast Alaska troll fishery with 38,800 salmon (2%) taken by hand troll gear and 1.61 million salmon (98%) by power troll gear. The harvest included 143,400 Chinook (*Oncorhynchus tshawytscha*), 1,700 sockeye (*O. nerka*), 1.06 million coho (*O. kisutch*), 90,900 pink (*O. gorbuscha*), and 357,100 chum (*O. keta*) salmon. A total of 555 power troll and 167 hand troll permit holders reported salmon harvest during the 2023 calendar year. The Chinook salmon harvest was ranked as the 6th lowest and coho salmon harvest as the 29th lowest over the last 64 years since statehood, whereas the chum salmon harvest ranked 14th highest over the same time period. The preliminary estimated Alaska hatchery contribution of Chinook salmon to the troll fishery, including hatchery terminal harvest, was 10,900 fish (8%). A total of 284,300 coho salmon produced by Alaska hatcheries were harvested by the troll fleet, accounting for 27% of the total troll coho salmon harvest. Chinook salmon escapements for 6 out of 11 Southeast Alaska indexed rivers met or exceeded the desired escapement goal ranges, whereas all 3 of the current coho salmon full indicator systems met or exceeded desired escapement goal ranges.

Keywords: Troll, Southeast Alaska, Yakutat, Chinook salmon, *Oncorhynchus tshawytscha*, coho salmon, *Oncorhynchus kisutch*, Pacific salmon, commercial fisheries, Alaska Department of Fish and Game, Annual Management Report, Pacific Salmon Treaty, Pacific Salmon Commission

INTRODUCTION

This report describes the 2023 Southeast Alaska/Yakutat (SEAK) salmon troll fisheries. An overview of the troll fishery, status of Chinook (*Oncorhynchus tshawytscha*) and coho (*O. kisutch*) salmon stocks of SEAK, and descriptions of fishery management actions and outcomes are discussed, along with a summary of the 2023 harvest estimates compared to historical harvests. The status of hatchery production and contributions to the troll fishery are summarized, as well as wild Chinook and coho salmon escapements and harvest rates. Troll effort and harvest statistics since statehood (1960 fishing season) are presented and include all-gear (troll, purse seine, drift gillnet, set gillnet, Annette Island, and sport fisheries) harvests for Chinook salmon and total commercial harvests for coho salmon.

TROLL FISHERY OVERVIEW

The Southeast Alaska/Yakutat (Region 1) commercial salmon troll fishery occurs in the waters of the State of Alaska and in the Federal Exclusive Economic Zone (EEZ) east of the longitude of Cape Suckling (5 AAC 29.010) and (5 AAC 29.020) (Figure 1). All other waters of Alaska are closed to commercial trolling. The troll fishery is managed according to regulations promulgated by the Alaska Board of Fisheries (BOF), the North Pacific Fishery Management Council, the National Marine Fisheries Service, and the U.S./Canada Pacific Salmon Commission (PSC). Regulations adopted by the BOF are listed in the State of Alaska Administrative Code, Title 5 (5 AAC), Chapter 29 Salmon Troll Fishery. The SEAK Chinook salmon fishery is managed to stay within the annual all-gear PSC preseason allowable harvest limit (Table 1), established for 2023 based on measures of Chinook salmon abundance using the statistical weeks (SW) 41–48 catch per unit effort (CPUE) from the District 13 winter power troll fishery, in combination with output from the PSC Chinook model. The annual harvest limit is allocated through regulations established by the BOF to provide 4.3% of the Chinook catch limit to the purse seine fleet, 2.9% to the drift gillnet fleet, and 1,000 fish to the set gillnet fleet. The total net gear allocation is then subtracted from the all-gear harvest limit, and the remainder of the allocation is divided between the troll and sport fisheries in an 80/20 split (5 AAC 29.060[b]). Coho salmon are managed to

ensure that biologic escapement goals (BEG) are met and achieve BOF allocation guidelines. BEGs prescribe the number of salmon in a particular stock that should be allowed to escape fisheries and spawn to provide the greatest potential for maximum sustained yield. Coho salmon fisheries that occur in Dixon Entrance near the U.S./Canada border are managed in cooperation with Canada, according to provisions of the Pacific Salmon Treaty (PST).

The commercial troll fleet is composed of power and hand troll gear types. Power trollers are limited to 4 lines operated by hydraulic, electrical, or mechanical powered gurdies, except within the EEZ north of the latitude of the southernmost tip of Cape Spencer, where 6 lines may be used (5 AAC 29.120[b][1][A] and [B]). Vessels using hand troll gear are limited to 2 lines on 2 hand-operated gurdies or 4 fishing rods, except that following the closure of the initial summer Chinook salmon retention period and prior to the winter troll fishery, 4 hand troll gurdies or 4 fishing rods may be on board and operated within the EEZ north of the latitude of the southernmost tip of Cape Spencer (5 AAC 29.120[b][2][C]). During the winter troll season only, 2 hand troll gurdies or hand-powered downriggers can be used in conjunction with 2 fishing rods (5 AAC 29.120[j]). Although the majority of the troll fleet sells their harvest to shorebased processing plants or tenders, the fleet does include some catcher–processors, or "freezer boats," which harvest and freeze their fish at sea.

The commercial troll fishery primarily harvests Chinook and coho salmon. Historically, the troll fishery harvested about 85% to 90% of the Chinook salmon taken in SEAK. Since 1980, the percentage of the Chinook salmon harvest taken by the troll fishery has declined, with a recent 10-year (2013–2022) average of 67%. The troll fleet has been managed to meet the BOF objective of an average annual harvest of 61% of the commercial coho salmon harvest since 1989 (5 AAC 29.065), although the actual annual troll harvest for the period of 1991 to 2022 has averaged 65% of the commercial harvest, with a range of 53% to 78% (Table 2). Most other species are harvested incidentally, but in recent years, hatchery-produced chum salmon have been the target of substantial troll effort. Pacific halibut under Federal Individual Fishing Quota regulations and groundfish (lingcod and rockfish) under state regulations are harvested incidentally.

Limited entry for the power troll fishery was instituted in 1974, and the first permits were issued in 1975. The number of renewals has gradually decreased over time while the number of permits fished has fluctuated from a high of 852 in 1991 to a low of 555 in 2023 (Table 3). Overall, the number of power troll permits fished has declined since 1991, with effort at historically low levels over the most recent 5 years. In the late 1970s, limited entry for the hand troll fleet was under consideration by the Commercial Fisheries Entry Commission (CFEC), and the number of hand troll permits fished doubled from 1,092 permits in 1975 to a high of 2,624 permits in 1978. Due to this increased effort, the CFEC initiated a selective limited entry regime for the hand troll fishery in 1980, and the first permits were issued in 1982. The number of hand troll permits fished declined steadily from 1979 through 2002, increased from 2003 to 2007, and has since declined to a record low 167 permits fished in 2023. The percentage of active hand troll permits in the troll fleet has declined from 76% in 1978 to 23% in 2023.

CHINOOK SALMON STOCKS

Native Chinook salmon stocks occur throughout SEAK and Yakutat, primarily in the large mainland rivers and their tributaries. In total, 34 rivers in the region are known to produce runs of Chinook salmon. The most significant are the Alsek, Taku, Stikine, Chilkat, and Behm Canal Rivers (i.e., the Unuk, Chickamin, Blossom, and Keta Rivers). The Alsek, Taku, and Stikine Rivers

are Transboundary Rivers (TBRs) where salmon originate in Canada and are managed under terms of the PST.

SEAK Chinook salmon are considered "spring type" stocks, entering spawning streams during spring and early summer months. Fry emerge the following spring and most remain in fresh water for at least 1 year before migrating seaward. Ocean residency ranges from 2 to 4 years for most Chinook salmon originating in SEAK. The troll fishery harvests several age classes of mature spawners and immature Chinook salmon during the fishing season.

Chinook salmon originating from Alaska, British Columbia, and the Pacific Northwest are harvested in the SEAK troll fishery. Non-Alaska hatchery-produced Chinook salmon fall under the terms of the PST and are referred to as treaty Chinook salmon. Stock composition information is based on coded wire tagging (CWT) studies, genetic stock analysis, age composition, and general productivity considerations. Management of Chinook salmon stocks is coordinated through the PSC.

CHINOOK SALMON FISHERY MANAGEMENT

Recent all-gear Chinook salmon harvests in SEAK (based on a moving 10-year average) have been the lowest since statehood. These lower harvests were largely driven by low abundance but also influenced by reduced allowable catches provided under terms of the PST. Harvests have generally declined since the late 1930s (Figure 2). A guideline harvest level (GHL) for all stocks and a 15-year rebuilding program for SEAK Chinook salmon stocks were established in 1981. In 1985, the PST was signed, and a coastwide rebuilding program began for depressed non-Alaska Chinook salmon stocks that contribute to SEAK fisheries. Factors contributing to declining coastwide abundance include loss of freshwater spawning and rearing habitat in the Pacific Northwest, climate change, and overfishing of wild Chinook salmon stocks.

In 1996, after 3 years without a Chinook salmon fishing agreement between the U.S. and Canada, the Letter of Agreement Regarding an Abundance-Based Approach to Managing Chinook Fisheries in Southeast Alaska (LOA) was signed. This agreement, which was in effect from 1996 through 1998, established an annual PST harvest limit based on preseason and inseason abundance estimates. In 1999, a new Chinook salmon PST agreement between the U.S. and Canada was signed. The agreement was similar to the abundance-based management of the LOA, with harvest limits based on preseason and postseason abundance estimates. However, during periods of lower abundance levels, Alaska agreed to reduced Chinook salmon harvests—below levels previously implemented in either the PST or LOA. In 2008, a new PST was signed that remained in effect through 2018; however, unlike the previous agreement, it lowered the SEAK allowable catch of Chinook salmon at all levels of projected abundance. In 2019, a new PST agreement was signed that will continue through 2028. Under terms of Chapter 3 of the new agreement, the all-gear allowable harvest limit was to be determined by the SEAK early winter District 13 power troll fishery CPUE metric estimated from data collected in SWs 41–48 (October–November), overages to the preseason harvest limit will be paid back the following year, and an incidental mortality ceiling was set at 59,400 Chinook salmon. However, following 4 years of harvest limit calculations using the winter troll CPUE metric and under the terms of the new PST agreement, Alaska Department of Fish and Game (ADF&G or "the department") was required to modify the method used to set the preseason SEAK Chinook salmon harvest limit. This modification was called for after 3 consecutive years of the CPUE metric overestimating abundance when compared to the PSC Chinook model postseason abundance estimates. In 2023, the annual harvest limit for the

SEAK Chinook salmon fishery was established using measures of Chinook salmon abundance based on SWs 41–48 CPUE from the District 13 winter power troll fishery in combination with outputs from the PSC Chinook model. This new multivariate method for estimating abundance in the SEAK fishery was approved for use by the PSC on February 16, 2023. The Abundance Index (AI) value from the multivariate model was then translated into a 17-tier catch ceiling table, with each tier representing a range of AI values and the applicable harvest ceiling.

Since 2014, annual Chinook salmon harvests have generally declined, with the 2023 harvest the 6th lowest since Alaska statehood in 1959. The annual all-gear and troll fishery Chinook salmon treaty harvests each exceeded the preseason harvest limit 20 times over the 39-year period from 1985 through 2023 (Table 1). However, fish taken in excess of the 2020 and 2021 preseason troll allocations were a result of an end of the season reallocation to utilize Chinook salmon available from the commercial net and sport fisheries.

The harvest of treaty Chinook salmon by the commercial salmon troll fleet is limited to a specific number of fish, which varies annually according to the projected abundance. The troll accounting year for treaty Chinook salmon begins in October with the start of the winter fishery, continues through the spring fishery in May and June, and ends with the summer fishery in September.

By regulation, the winter fishery is restricted to waters of Yakutat Bay and most waters east of the winter boundary line defined by established point to point landmarks between Cape Spencer and the International Boundary at Dixon Entrance (5 AAC 29.020[b]). All coastal waters to the west of the winter boundary line are closed during the winter fishery. The winter fishery begins on October 11 and may continue through April 30, or until the GHL of 45,000 treaty Chinook salmon is met. However, from 2018 to 2021, as adopted under the Unuk River Chinook salmon action plan (Lum and Fair 2018a), notwithstanding any remaining portion of the 45,000 non-Alaska hatchery-produced Chinook salmon GHL, the commercial winter troll fishery closed by emergency order on March 15 in all SEAK waters. Beginning in 2022, newly adopted provisions of the BOF action plans to conserve SEAK and TBR wild Chinook salmon stocks gave the department direction to take necessary management actions using emergency order authority. Such actions would provide for the conservation of SEAK and TBR wild Chinook salmon stocks while continuing to identify harvest opportunities that maintain conservation of these stocks. Accordingly, the 2022/2023 winter troll fishery remained open from March 16 through April 15, 2023, in a portion of the region. The extension of the late winter fishery in select outer coastal areas provided additional harvest opportunities compared to the 2018–2021 fishing seasons while maintaining conservation of SEAK and TBR wild Chinook salmon stocks. Fish tickets and port sampling data provide inseason harvest and effort information throughout the fishery.

Regulations permit spring fisheries to begin after the winter fishery is closed but no later than May 1, with fisheries continuing through June 30. However, under the broadscale regional provisions of the Unuk and Chickamin Chinook salmon stock status and action plan (Meredith et al. 2022) to conserve wild SEAK Chinook salmon stocks, the start of spring troll fishery is now delayed until May 1. The spring fishery is traditionally conducted in waters along Chinook salmon migration routes and close to hatcheries or hatchery release sites with the intent to maximize the harvest of Alaska hatchery-produced Chinook salmon. Directed commercial fisheries targeting Chinook salmon returning to the Taku and Stikine Rivers may also occur in Districts 8 and 11 if run forecasts meet inriver run thresholds.

Although there is no ceiling on the number of Chinook salmon harvested in spring fisheries, the take of treaty Chinook salmon is limited according to the percentage of Alaska hatchery fish taken in the fishery. Treaty fish are counted toward the annual PST harvest limit of Chinook salmon, whereas most Alaska hatchery fish are not. Each spring troll fishing area is managed individually and closes when the treaty limit is reached.

The guideline limits of treaty fish that may be harvested in each spring area are as follows:

Alaska hatchery contribution to the harvest	Treaty fish limit
Less than 25%	1,000
At least 25% and less than 35%	2,000
At least 35% and less than 50%	3,000
At least 50% and less than 66%	5,000
66% or more	no limit

If the preseason AI is 1.15 or above and the number of unharvested Chinook salmon remaining on the winter GHL is between 10,000 and 15,000 fish, an additional 250 non-Alaska hatchery-produced Chinook salmon will be added to the treaty limits under each tier. If the number of fish remaining on the winter GHL is greater than 15,000 fish, an additional 500 fish will be added to each treaty tier limit (5 AAC 29.090[d][3][A] and [B]). In 2023, approximately 19,400 fish remained on the winter GHL; therefore, an additional 500 Chinook salmon were added to the treaty limits for each tier.

Provisions of the Unuk and Chickamin Rivers (Meredith et al. 2022), Stikine River and Andrew Creek (Salomone et al. 2021), and northern SEAK Chinook salmon (Hagerman et al. 2022) stock status and action plans were enacted to reduce encounters of wild SEAK salmon stocks during spring troll fisheries. The plans restricted opportunities in May and June to terminal harvest areas (THA), waters in close proximity to hatchery release sites, and a few defined spring troll fishery areas located on the outer coast. Although some THAs open on June 1 and remain open for extended periods of time, others open in accordance with the fishing schedules provided in THA management plans. Spring troll fisheries targeting hatchery chum salmon in northern SEAK have initial openings delayed until June 15 to reduce encounters with wild Chinook salmon stocks. In addition, Chinook salmon retention is prohibited in all spring troll hatchery chum salmon fisheries. Fish tickets and biological sampling data provide information on harvest, effort, and stock composition for the spring fisheries. Coded wire tag data are used in season to estimate the Alaska hatchery contribution to the harvest in each spring troll area, and this information is used in combination with historical harvest timing data to determine fishing time for openings the following week.

The general summer troll fishery opens July 1 and targets the remainder of the annual troll treaty Chinook salmon harvest limit during 1 or more openings. During the summer fishery, most waters of SEAK, including outer coastal waters, are open to commercial trolling. To assist in management of the fishery, the department collects inseason fisheries performance data (FPD) through confidential interviews to estimate catch per boat day (CPBD) as a measure of troll CPUE by area. Aerial surveys of fishing vessels are conducted to obtain an immediate estimate of fishing effort and total harvest is estimated by pairing vessel counts with the CPUE information obtained from interviews. Daily summaries of conventional and electronic fish tickets are compiled to track Chinook salmon harvest during the final days of each opening, and department staff also consider

fleet reports on effort, weather, water temperatures, and other factors affecting harvest rates when determining the closure date of fisheries.

COHO SALMON STOCKS

Coho salmon are widely distributed and are believed to be present in over 2,500 streams in SEAK (Priest et al. 2021). Most coho salmon streams are small, with the number of spawners typically ranging up to 1,000 fish per stream. Because of the large number of these river systems, their collective contribution to overall production is substantial. Lake systems are also important and typically produce runs between 1,000 and 10,000 fish per system. Large populations occur in the Taku, Chilkat, Berners, Stikine, Unuk, and Chickamin Rivers, and in most Yakutat area systems. In addition to wild stocks, coho salmon produced by 12 local hatcheries contribute to the region's harvest.

Coho salmon rear in fresh water for 1 or 2 years and spend no more than 1 winter in the ocean before returning to spawn as adults. Spawning takes place during the fall and early winter months. Coho salmon harvested in the troll fishery are typically 3- to 4-year-old fish of Alaska origin and are harvested in the year they are returning to spawn. Troll harvests peak between mid-July and early September, whereas harvests in the inside gillnet fisheries peak between late August and early October. Escapements into streams generally peak in late September through early October, although some systems are earlier.

COHO SALMON FISHERY MANAGEMENT

All-gear commercial harvests of coho salmon have fluctuated between a low decade average of 1.0 million fish in the 1970s to a high decade average of 3.2 million fish in the 1990s, with an annual record of 5.5 million fish harvested in 1994 (Figure 3). The BOF approved a management plan in 1980 in response to increasing effort and efficiency in the hand troll fleet, increased capitalization and efficiency in the power troll fleet, and increased troll harvest in outside waters (Figure 4). Because there are no harvest ceilings, the SEAK coho salmon fishery management plan (5 AAC 29.110) includes provisions for midseason troll closures to provide for adequate escapement and allocation to other gear groups based on inseason assessments. The regulatory period for coho salmon retention in the troll fishery is June 1 through September 20, with a potential extension through September 30, when wild coho salmon abundance is projected to meet escapement needs after harvest and effort are considered.

Long-term wild and hatchery stock CWT programs, dockside sampling programs, escapement monitoring projects, and the troll FPD collection program all began in the early 1980s and continue through the present day. As years of data were gathered from each program, more information and understanding of stock movement, timing, and harvest were accumulated. As a result, a model was developed in 1989 to assist in the estimation of the seasonal all-gear coho salmon commercial harvest using the salmon troll FPD collected through late July. In the mid-1990s, escapement goals were established for several stocks in SEAK based on spawner–recruit relationships from long-term data sets of harvest rate, age composition, and escapement information. Inseason run strength is assessed to achieve ADF&G conservation and BOF allocation objectives in the management plan (Table 2).

Coho salmon run strength is assessed 3 times throughout the summer season. The first assessment occurs in late July and has 2 objectives: determine whether a regionwide closure is needed in late July based on the projected all-gear commercial wild coho harvest, and whether a closure of

U.S./Canada boundary waters is necessary based on troll harvest rates in troll Area 6-Southern Inside waters (Districts 1 and 2). State of Alaska commercial fishing regulations and the PST require that the SEAK troll fishery close for up to 7 days on or about July 25 if the projected all-gear commercial harvest of wild coho salmon is less than 1.1 million fish (see 5 AAC 29.110[b][1] and Attachment B [2] in PSC 2020). That projection is based on the relationship between the projected all-gear commercial wild coho harvest and regional troll harvest rates during early July. When this regulation was established, the commercial harvest of wild fish was considered the best proxy for the total abundance of wild coho salmon returning to the region, based on historical fishing patterns. The PST also requires that waters in the U.S./Canada boundary area are to be closed for 10 days beginning in SW 31 if the troll Area 6 (Dixon Entrance) average CPUE for SWs 27–29 is below 22 coho/day.

As part of the second assessment in August, the department is required to evaluate SEAK fisheries to determine if a troll closure is needed to meet allocation and conservation requirements established by the BOF. The second assessment includes updated projections of the total commercial harvest and regional abundance of wild coho salmon as well as recommendations for the length and timing for a troll conservation closure, if necessary. The strength of coho salmon runs to inside areas is evaluated, in part, by assessing cumulative CPUE in the 4 major drift gillnet fisheries; however, drift gillnet fisheries at this early date are not necessarily indicative of actual coho abundance because coho salmon are not targeted by gillnet gear until later in the season. A troll closure typically occurs in mid-August and may be in effect anywhere from 2 to 10 days, to provide for a fair start (complete troll fleet turnaround) prior to any second Chinook salmon retention period. The actual length of that closure is decided in early August when an assessment determines whether the number of coho salmon reaching inside areas is adequate to provide for spawning requirements given normal or restricted inside fisheries on coho salmon and other species (5 AAC 29.110[b][2][A]), or whether the proportional share of coho salmon harvest by the troll fishery is larger than that of inside gillnet and sport fisheries compared to average 1971–1980 base levels (5 AAC 29.110[b][2][B]).

The third coho salmon run strength assessment occurs in September and reassesses the wild commercial troll and drift gillnet harvests and total all-gear commercial harvest projections. Harvest rates, as well as cumulative harvests from the 4 primary drift gillnet fisheries, are evaluated when determining whether the troll season will be extended through September 30; season extensions are considered for areas where coho salmon escapement projections indicate that fish in excess of escapement needs are available for harvest (5 AAC 29.110[a]).

SUMMARY OF THE 2023 SEASON

A total of 722 permits (555 power troll and 167 hand troll permits) were fished during the 2023 calendar year, setting a new record low for troll fishery participation (Table 3). The number of active hand troll permits decreased by 14 permits (8%) from 2022, while the number of power troll permits decreased by 58 permits (9%) from 2022. Effort in the 2022/2023 winter troll fishery decreased by 66 permits when compared to the 2021/2022 winter fishery. Participation in the spring fishery decreased by 39 permits (12%), while the number of permits fished during the summer fishery declined by 75 permits (10%) when compared to 2022 (Table 4, Figures 5 and 6). In 2023, an effort of 3,505 boat days during spring and summer Chinook salmon retention periods was a decrease of 75% over 2022, 58% below the recent 5-year average, and 46% under the recent 10-year average effort levels (Table 5, Figure 7). Effort data was derived from dockside interviews

of troll permit holders in conjunction with harvest and effort data from troll fish tickets. Fluctuations in effort relate strongly to salmon prices, abundance, fuel costs, and to a lesser degree, the availability of alternate commercial troll opportunities in the Pacific Northwest. However, in 2023, there was an additional factor contributing to effort fluctuation: a federal lawsuit against the National Oceanic Atmospheric Administration by the Wild Fish Conservancy was still in active litigation just prior to the summer season and put the SEAK Chinook salmon troll fishery in jeopardy of remaining closed for the summer. Without a definitive answer as to whether Chinook salmon retention would be permitted in the summer troll fishery, many permit holders made alternative employment plans and chose to forgo participating in the summer fishery. Ultimately, a federal judge's decision did allow the department to prosecute the summer Chinook salmon fisheries. For numerous trollers, however, that decision came too late and resulted in new record low effort levels during the summer troll fishery.

The troll fleet harvested approximately 1.65 million salmon during the 2023 season, a decrease of 24% from 2022, and a decrease of 26% when compared to the recent 10-year average (Table 6). The 2023 troll harvest of 143,400 Chinook salmon was 27% lower than in 2022. The 2023 coho salmon harvest of 1.06 million fish was 24% higher than 2022, and peaked during the week of August 20–26, when 14% of the annual harvest was taken (Table 7). The average weight for coho salmon was slightly lower compared to 2022 and below than the recent 5-year and 10-year averages, decreasing to 5.0 lb for the season, which is the lowest average weight on record (Table 8). The 2023 harvest of 357,100 chum salmon was a decrease of 66% compared to the 2022 harvest; additionally, the 1,700 sockeye and 91,000 pink salmon harvests represent a 23% decrease and 14% increase from 2022, respectively (Table 6). In 2023, hand troll vessels harvested 39,000 salmon and power troll vessels harvested 1.61 million salmon. The proportion of the commercial troll harvest taken by the hand troll fleet has decreased from a peak of 32% in 1978 to a low of 1% in 2022, with 2023 slightly higher at 2% of the commercial troll harvest (Tables 9 and 10).

CHINOOK SALMON FISHERY

In February 2023, the PSC adopted a new multivariate model in conjunction with a 17-tier catch ceiling table to determine the preseason annual catch limit for the 2023 SEAK Chinook salmon fisheries. This multivariate model utilized the PSC Chinook model preseason AI, the SWs 41–48 CPUE from the District 13 early winter power troll fishery in SEAK, and the one-year-ahead projected AI from the prior year's PSC Chinook model calibration (projection). The multivariate model metric of 1.42 corresponded to a troll treaty harvest allocation of 152,154 Chinook salmon (Table 1).

The 2023 total all-gear Chinook salmon harvest was 235,167 fish, of which 38,425 fish were of Alaska hatchery origin (Table 11). The all-gear Alaska hatchery add-on of 32,423 fish was calculated by subtracting the pretreaty base hatchery harvest and risk adjustment from the Alaska hatchery contribution. The troll fishery harvested 143,381 Chinook salmon, of which 10,931 fish were of Alaska hatchery origin; a total of 11,344 of the 20,169 fish taken in the purse seine fishery were Alaska hatchery produced. The drift gillnet fishery harvested 12,303 Chinook salmon, of which 10,994 fish were of Alaska hatchery origin, whereas all 185 Chinook salmon harvested in the Yakutat set gillnet fishery were treaty fish. The sport fishery is estimated to have harvested 59,129 Chinook salmon, of which 5,157 fish were of Alaska hatchery origin (Tables 11 and 12). The 2023 troll treaty harvest of 136,312 fish contributed to a total all-gear treaty harvest of 202,744 Chinook salmon, resulting in an underage of 3,283 fish below Alaska's all-gear allowable catch limit.

During the 2023 season, the troll harvest of Chinook salmon was managed to (1) comply with the Chapter 3 obligations of the 2019 PST, (2) continue all-gear conservation measures for wild SEAK Chinook salmon, (3) provide maximum harvest of Alaska hatchery-produced Chinook, and (4) comply with terms of the incidental take permit issued by the National Marine Fisheries Service.

Winter Fishery

The winter troll fishery was open from October 11 through March 15, and extended in select outer coastal areas only from March 16 through April 15, with a total harvest of 27,202 Chinook salmon by a total of 232 permits (Tables 4, 11, and 13; and Figure 8). The 2023 early winter harvest of 4,598 Chinook salmon was 33% below the recent 5-year average, 61% below the recent 10-year average, and the lowest early winter harvest since 1985. Notwithstanding the opening of the fishery March 15–April 15, the late winter harvest remained below the 5-year and 10-year average catches that occurred prior to the early seasonal closures that began in 2018. The 2023 late winter fishery harvest was 23% below both the 5-year (2013–2017) average and the 10-year (2008–2017) average. The Alaska hatchery contribution of 9% in 2023 was above the 2022 and 10-year average contributions (8%), and similar to the recent 5-year (9%) average.

Spring Fishery

Since 1986, when hatchery access fisheries were established, the number of spring fisheries increased considerably, with 31 spring trolls and 6 THA fisheries open to trolling as recently as 2017. As directed by Chinook salmon actions plans adopted by the BOF and under emergency order authority, the 2023 spring fisheries were limited to 9 Chinook salmon THAs and 13 spring troll areas located on the outer coast or near hatchery release sites to conserve wild SEAK Chinook salmon. An additional 6 directed chum salmon spring fishery areas (Chinook salmon retention prohibited) were opened in 2023 (Figure 9).

The spring troll and terminal harvest area fisheries harvested 18,853 Chinook salmon from May 1 through June 30 (Table 14). A total of 235 permits reported 17,098 Chinook salmon from 2023 nonterminal spring fisheries, with the largest harvests occurring in the Sitka Sound, Mountain Point, and Redoubt Bay spring troll areas. The 2023 nonterminal area Chinook salmon harvest was 3,515 fish more than in 2022, above the recent 5-year average by 49% and below the 10-year average by 32% (Table 15). The Alaska hatchery contribution of 27% was below the recent 5-year (36%) and 10-year averages (32%). The total 2023 spring fishery and spring and summer terminal effort of 253 permits was 4% below 2022, 13% below the recent 5-year average, and 40% below the recent 10-year average (Table 15). Other species harvested during the spring and THA fisheries in May and June included 79 sockeye, 2,303 coho, 5,967 pink, and 10,461 chum salmon (Table 7).

General Summer Fishery

During the summer troll fishery, 95,948 Chinook salmon were harvested in 3 retention periods (Table 16). The first summer troll Chinook salmon retention period began on July 1 and was managed in season with no predetermined length, targeting an estimated 74,800 treaty Chinook salmon. With a projected Alaska hatchery Chinook salmon catch of 3%, the total target harvest for the first summer opening was 77,000 fish. Based on harvest rates observed in past years with similar preseason projected abundance, harvest rates were expected to be moderate (8,000–9,000 Chinook salmon per day). Similar to 2022, effort was anticipated to be slightly lower compared to recent years. As mentioned earlier, however, a unique rationale for the notable decline in effort in 2023 was the uncertainty surrounding a delayed federal court decision allowing the summer SEAK

Chinook salmon fishery to occur. Considering the reduced effort, the department estimated the harvest target would be taken in 9 to 10 days.

A total of 388 troll vessels were observed during aerial surveys conducted on July 2 (SW 27), similar to totals from the July 2018 and 2020 survey counts when an average of 607 vessels participated. After applying CPUE data generated during the first few days of Chinook salmon retention to the estimated effort, the projected daily fleet harvest was slightly lower than anticipated. With an estimated fleet harvest of 7,000 to 8,000 Chinook salmon per day, the department once again projected the target harvest would be reached after 9–10 days of fishing. However, as the fishery progressed into SW 28, and fish ticket harvest and effort data were compiled for the initial vessel landings, it became evident that participation levels were lower than anticipated. By day 9 of the opening, the estimated fleet size was down by 100 permits from the previous year. Based on the updated fleet size estimate, CPUE had declined to a daily fleet harvest rate estimate of between 6,000 and 7,000. With high winds continuing on the outer coast, it was predicted fleet size would be further reduced until weather improved, and the department determined the fishery would continue beyond the projected 9–10 days. With weather improving and estimated effort on the rise after day 10, the department projected it would take an additional 2 days of fishing to harvest the remaining allocation, and an advisory announcement was issued on July 11 to close the first Chinook salmon retention period at 11:59 PM on July 12.

A total of 86,068 Chinook salmon were harvested by 500 permits during the 12-day opening, with a harvest per day of 7,172 Chinook salmon. The fleet included a total of 36 catcher–processors (freezer boats), 15 vessels fewer than those fished in 2022. The total harvest included 1,642 Chinook salmon (2%) of Alaska hatchery origin, which is below the recent 5-year and 10-year averages (3%). After subtracting the Alaska hatchery Chinook salmon add-on of 1,041 fish from the total harvest, the treaty Chinook salmon harvest for the first retention period was 85,027 fish (Tables 11 and 16). Following the closure of the first Chinook salmon retention period, areas described under (5 AAC 29.025) *Waters of frequent high king salmon abundance* closed for the season (Figure 10).

The second Chinook salmon retention period began on August 11 and was set with a predetermined length of 1 day. A total of 85,000 treaty Chinook salmon were harvested by trollers during the first summer opening, leaving an estimated 25,000 Chinook salmon on the annual treaty troll allocation. However, in accordance with *Allocation of king salmon in the Southeastern Alaska-Yakutat Area* (5 AAC 29.060), and the *Southeast Alaska King Salmon Management Plan* (5 AAC 47.055), any underage or overage in the SEAK sport fishery is added to or subtracted from the commercial troll allocation of Chinook salmon. On August 4, the Chinook salmon harvest projection for the sport fishery indicated the sport fishery would exceed the 2023 preseason allocation by an estimated 15,000 Chinook salmon. The second summer commercial troll fishery Chinook salmon retention period allocation was then reduced accordingly, which provided for a harvest target of 10,000 Chinook salmon for the opening, and a 1-day retention period. A total of 8,221 Chinook salmon were harvested during the 1-day fishery. The total harvest included 147 Chinook salmon (2%) of Alaska hatchery origin. After subtracting the Alaska hatchery Chinook salmon add-on of 93 fish from the total harvest, the treaty Chinook salmon harvest for the second retention period was 8,128 fish (Tables 11 and 16). A total of 306 permits landed Chinook salmon during the second opening, a decrease of 194 permits when compared to the first retention period.

In 2012, the BOF adopted new language under (5 AAC 29.100) *Management of the summer salmon troll fishery* that addressed potential unharvested annual troll Chinook salmon allocation. This regulation specifies that if the department determines that the number of Chinook salmon remaining on the annual troll Chinook salmon harvest allocation is not sufficient to allow a competitive fishery, the commissioner may, by emergency order, reopen the troll fishery to the taking of Chinook salmon during a limited harvest fishery, subject to the conditions that (1) a limited harvest fishery may be opened for up to 10 days, but may not open before September 1; (2) the remaining amount of the Chinook salmon annual harvest allocation will be distributed subject to an established harvest limit; (3) Chinook salmon retained during a limited harvest fishery must be kept separate from other salmon on board the vessel; (4) both commercially sold Chinook salmon and Chinook salmon retained for personal use during a limited harvest fishery count toward the harvest limit; (5) a copy of fish tickets documenting commercially sold Chinook salmon or Chinook salmon retained for personal use during a limited harvest fishery must be kept on board the vessel while operating gear in a limited harvest fishery and during transits to or from a port of landing; (6) fish tickets must be made available to a local representative of the department upon request; (7) after the closure of a limited harvest fishing period, all Chinook salmon must be offloaded from a vessel before that vessel may be used to resume fishing for other salmon species; and (8) any other conditions the commissioner determines necessary to conduct an orderly limited harvest fishery. In late August of 2023, following the second summer Chinook retention period, the department determined that Chinook salmon remained on the annual troll allocation. However, given catch rates and fleet size from the second retention period, it was determined that an insufficient number of Chinook remained to prosecute a competitive fishery. Accordingly, on August 28, the department announced that a third, limited harvest, non-competitive Chinook salmon retention period would open for 10 days (September 1–10) to target the remaining annual troll allocation. A maximum of 9 Chinook salmon per permit were allocated during the 10-day fishing period. A total of 285 permits harvested 1,659 of the estimated 3,200 Chinook salmon remaining on the annual troll allocation during the retention period.

Districts 8 and 11 Transboundary Rivers Directed Chinook Salmon Fisheries

District 8

The 2023 preseason terminal run forecast for Stikine River large Chinook salmon (≥660 mm mid eye to tail fork length [METF]) was 11,700 fish. The forecast was below the escapement goal range of 14,000 to 28,000 fish. The 2023 terminal run size was 13,004 large Chinook salmon with an escapement of 12,864 fish.

District 11

The 2023 preseason terminal run forecast for Taku River large Chinook salmon (≥660 mm METF) was 23,000 fish. The forecast was within the escapement goal range of 19,000 to 36,000 fish. The 2023 terminal run size was 15,051 large Chinook salmon with an escapement of 14,755 fish.

Management Actions to Conserve Wild Southeast Alaska Chinook Salmon

In addition to the provisions of the management plans for winter, spring, and summer troll seasons, these fisheries are also managed pursuant to the *Policy for the management of sustainable salmon fisheries* (5 AAC 39.222), whereas impacts of fishing on salmon escapement are assessed and considered in management decisions, and necessary conservation restrictions may be imposed in order to achieve escapement, rebuild, or in some other way conserve a specific salmon stock or

group of stocks. Additionally, the PST requires that SEAK fisheries are managed to achieve escapement objectives for SEAK and TBR stocks.

The Alaska BOF approved action plans for the Unuk, King Salmon, and Chilkat Rivers Chinook salmon stocks as *stocks of management concern* (SOC) at the 2018 Southeast and Yakutat Finfish Meeting. In October 2020, the department recommended the BOF continue the Unuk, King Salmon, and Chilkat Rivers as SOC, and to adopt the Andrew Creek and Chickamin, Taku, and Stikine Rivers stocks of Chinook salmon as SOC. The BOF adopted these stocks as SOC during the October 2020 work session and reviewed draft action plans for these 7 stocks during the 2022 Southeast Alaska and Yakutat Finfish and Shellfish meeting. In years prior to 2020, the department had been taking management measures that effectively reduced harvest of Chinook salmon and recommended that those actions be formally adopted through the BOF process. The BOF concurred with the proposed management actions for each of these stocks but directed the department to apply more restrictive management measures where and/or when appropriate. The BOF also gave the department direction to relax management measures where and/or when the department determined there was opportunity to do so.

These 7 Chinook salmon stocks have missed their escapement goals in most years during the previous 10 years. Through effective management actions, harvest rates have decreased, and escapement has improved in recent years for some systems, despite continued poor runs. Chinook salmon runs were again expected to be slightly better in 2023 than in 2022, with 4 of the 5 Chinook salmon stocks (Chilkat, Taku, Unuk, and Situk Rivers) for which the department develops formal forecasts having projected runs within the range of what is needed to achieve minimum escapement goal bounds. The Stikine River was projected to be below escapement levels, even with restrictive management measures enacted to reduce harvest. Management actions continued in 2023 in accordance with the PST, State of Alaska regulations, and BOF recommended actions to reduce harvest of wild Chinook salmon across SEAK sport, commercial, personal use, and subsistence salmon fisheries. These actions resulted in 6 of 11 Chinook salmon stocks meeting their escapement goals, and increased escapements in 8 of the 11 systems when compared to 2022.

Unuk and Chickamin Rivers

Under the provisions of the *Unuk and Chickamin King Salmon Stock Status and Action Plan, 2021* (Meredith et al. 2022), troll fishery conservation restrictions began in 2023 with the early seasonal closure of the winter fishery. Notwithstanding any remaining portion of the 45,000 non-Alaska hatchery-produced Chinook salmon GHL, the winter troll fishery closed in most waters on March 15, 6 weeks prior to the April 30 regulatory closure date. However, the BOF gave the department direction to relax management measures where and/or when the department determined there was opportunity to do so. In 2023, harvest proportions of wild SEAK and TBR stocks on the outside waters of SEAK remained low due to the abundance of non-Alaska stocks prevalent in these areas, while proportions of wild SEAK and TBR stocks harvested in fisheries operating on the inside waters of SEAK remained elevated. Due to these conditions, the 2022/2023 late winter troll fishery remained open from March 16 to April 15 in waters along the outer coast, giving opportunity to harvest the remaining seasonal GHL. The Unuk and Chickamin Rivers action plan also restricts opportunities during May and June spring troll Chinook salmon fisheries to THAs, waters in close proximity to hatchery facilities or release sites, and areas identified as having low proportional harvests of wild stock SEAK Chinook salmon. Initial openings for 2023 spring troll fisheries located in the Ketchikan vicinity were delayed until June 8. Regional THA openings were also delayed until June 1, except for the Neets Bay THA, which was delayed an

additional 2 weeks and opened on June 15 in 2023. Spring troll chum salmon fisheries, as provided for in the *Districts 9, 10, 12, and 14 Enhanced Chum Salmon Troll Fisheries Management Plan* (5 AAC 29.114), were also delayed until June 15, with retention of Chinook salmon prohibited in those fisheries. Additionally, to help reduce Unuk and Chickamin Rivers Chinook salmon encounters during the summer season, a portion of Section 1-E was closed to retention and possession of Chinook salmon during the first summer troll Chinook retention period.

Taku, Chilkat, and King Salmon Rivers

The broadscale provisions of the *Unuk and Chickamin King Salmon Stock Status and Action Plan, 2021* (Meredith et al. 2022) supersede most conservation restrictions adopted under the *Northern Southeast Alaska King Salmon Stock Status and Action Plan, 2021* (Hagerman et al. 2022); however, these conservation measures would take precedence should Unuk and Chickamin Rivers Chinook salmon be delisted as SOC. Conservation measures provided under the Unuk and Chickamin Rivers plan also conserve Taku, Chilkat, and King Salmon River stocks of Chinook salmon. Although the winter fishery closes on March 15 under the Unuk and Chickamin Rivers action plan, conservation restrictions in the northern SEAK action plan state that waters of Sections 11-B, 11-C, and 11-D are closed to troll gear April 1–30, and Sections 12-B and 15-C are closed April 15–30, although the Unuk and Chickamin Rivers action plan supersedes these actions with a late winter troll closure of March 15. The waters of Section 15-A, north of the latitude of Sherman Rock, are closed to troll gear from March 16 through December 31. During May and June, spring troll Chinook salmon fisheries in northern SEAK are limited to areas of the outer coast in Districts 13 and 183 near hatcheries, hatchery release sites, or areas with a low proportional harvest of wild SEAK king salmon; all other districts remain closed. Also during spring, the hatchery chum salmon fishery openings in Districts 9, 10, 12, and 14 are delayed until June 15, and Chinook salmon retention is prohibited in these fisheries.

Lastly, as previously addressed in this report, directed troll fisheries targeting Taku River Chinook salmon were not opened in 2023.

Stikine River and Andrew Creek

Management actions taken to reduce encounters of Stikine River Chinook salmon taken under the *Stikine River and Andrew Creek King Salmon Stock Status and Action Plan, 2021* (Salomone et al. 2021) began during the winter troll fishery. Like other SEAK and TBR stocks, Stikine River and Andrew Creek Chinook salmon are harvested late in the winter fishery and benefited from the early closure on March 15. Although encounters of these stocks during the March 16 through April 30 time period are not as frequent as other SEAK or TBR stocks, some harvest occurred. Supplementary conservation measures, as described in the Unuk River section, further restricted May and June fishery opportunities and closed corridor fisheries in inside waters where Stikine River and Andrew Creek Chinook salmon have historically been encountered. These conservation restrictions closed spring Chinook salmon fisheries in Districts 5–10, delayed hatchery chum salmon fishery openings in Districts 9 and 10 until June 15, and prohibited the retention of Chinook salmon in those fisheries. Additionally, directed spring troll fisheries targeting Stikine River Chinook salmon were not opened in 2023. Stikine River and Andrew Creek Chinook salmon conservation measures were also implemented during the summer troll fishery with waters of District 8 remaining closed to Chinook salmon retention during the July 1–12 fishing period.

COHO SALMON FISHERY

For most of the 2023 summer season, weekly power troll harvest rates for coho salmon remained well above the recent 20-year average for the regionwide SEAK CPUE, and near or above average for CPUEs in all 6 regional troll management areas (Figures 11–13). The 2023 total troll coho salmon harvest of 1,055,492 fish was the 6th lowest since 1988 (Table 6), a result of reduced number of permits fished (Table 3, Figure 5). The coho salmon harvest peaked during SW 34, when 14% of the annual harvest was taken (Table 7). The coho salmon average weight of 5.0 lb was 0.3 lb smaller than in 2022, and 1.0 lb below the 5-year and 10-year average of 6.0 lb (Table 8).

The first coho salmon run strength assessment of 2023 projected an all-gear commercial harvest of 1.40 million wild fish, which was above the 1.1 million fish conservation threshold for an early season closure. Using the same CPUE values, the total wild coho salmon abundance was projected at 3.78 million fish, 0.6% below the 1982–2022 average of 3.81 million fish. Additionally, a bilateral review of the SWs 27–29 SEAK troll Area 6 (Southern Inside) coho salmon CPUE data indicated the CPUE of 24 coho/boat/day exceeded the 22 fish/day trigger threshold; therefore, no boundary area coho conservation closure was warranted. Similar to recent years and notwithstanding the SEAK CPUE value exceeding the trigger threshold, consideration was also given to the reduced exploitation of stocks transiting Dixon Entrance during the assessment period due to the closure of the Northern British Columbia (NBC) directed troll coho salmon fishery in 2023. Similar to 2022, the Department of Fisheries and Oceans, Canada, announced preseason that the 2023 directed troll coho salmon fishery in NBC would be closed for the season.

The second coho salmon run strength assessment occurred in early August and projected an all-gear commercial harvest of 1.03 million wild coho salmon and a total run of 3.91 million wild coho salmon for 2023, based on average wild coho salmon power troll CPUE through SW 30. The wild abundance projection was above the 1995–2022 average (3.88 million), whereas the wild commercial harvest projection was below the 1995–2022 average (1.79 million). The 2023 troll coho salmon harvest through SW 30 (week ending July 29) was 235,000 fish, which was above the 1971–1980 base period average of 186,000 fish, but below the recent 20-year average of 467,000 fish. Notwithstanding below average total harvest, regional harvest rates were above the 20-year average in all Big Six areas (Figure 1) from SWs 29–31, with troll effort a record low (Figures 5, 11–13). For inside drift gillnet fisheries, the 2023 cumulative CPBD through SW 31 for the Tree Point fishery (District 1) was 8%, above the 1971–1980 average but 43% below the recent 10-year average. The CPBD in the Prince of Wales fishery (District 6) exceeded the 1971–1980 average but was 49% below the recent 10-year average. The Taku/Snettisham fishery (District 11) CPBD was below the 1971–1980 comparison period by 5% but above the recent 10-year average by 88%. The CPBD in the Lynn Canal fishery (District 15) was below the 1971–1980 average by 76% and the 2013–2022 comparison period by 45% (Figure 14). Based on wild run and commercial harvest projections, regional summer troll harvest rates, cumulative harvest for all drift gillnet fisheries through SW 31, and record low troll effort, a 2-day troll fishery conservation closure was recommended.

A late season evaluation of coho salmon run strength occurred during the third week of September. By SW 38 (week beginning September 17), current escapement projections from wild Southeast Alaska/Yakutat coho salmon indicator stocks were that runs to most systems throughout the region were above or near the lower bound of escapement goal ranges. The Hugh Smith Lake adult coho salmon weir count of 687 fish through SW 37 was above the lower bound of the BEG of 500–

1,600 fish. Escapements to the northern systems of the Tsiu River, Situk River, and Tawah Creek had not been estimated at the time of the assessment. However, the set gillnet fleet operating in these areas had harvest rates above the recent 10-year average. Through SW 37, with an estimate of 8,100 Canadian-origin Taku River coho salmon harvested in the District 11 U.S. terminal drift gillnet fishery, the projected terminal run to the Taku River of 89,000 coho salmon exceeded the lower bound of the escapement goal range of 50,000 fish, but was still below the preseason forecast of 102,000. Additionally, the Canyon Island fish wheel data through SW 37 indicated 56,000 fish had passed, which was below the 1987–2022 average of 61,000 (Figure 15). Despite below average CPUE in the District 15 drift gillnet fishery through SW 36, the inriver cumulative fish wheel counts were tracking well above the recent 10-year average, and early projections affirmed Chilkat River coho salmon run would reach the BEG (Figure 16). Based on a history of the Berners River tracking closely with the total run in the Chilkat River, initial indications were for a better than average sized run. However, wild Berners River CWT recoveries in the District 15 drift gillnet fishery were well below the recent 20-year average through SW 37. Similar to 2020–2022, the wild commercial harvest and total all-gear commercial harvest projections for coho salmon were slightly below estimates in early August, largely due to reduced troll effort during mid-August to early September. Regional coho salmon harvest rates in the troll fishery were initially strong (following the closure of the first Chinook salmon retention period) and well above average, with continued above average catch rates through the second coho assessment and into the late season third run strength assessment period (SWs 34–38). The regional power troll coho CPUE peaked in SW 36, with trollers averaging 125 coho salmon per day, a rate well above the recent 20-year average for this time period (Figures 11–13). CPUE declined sharply following SW 36, and by SW 39 the regional power troll CPUE dropped to 67—still above the long-term average of 50 coho salmon per day. This decline in CPUE is fairly common as fish move toward more terminal waters and begin to head into river systems.

Harvest rates in 2 of the 4 primary drift gillnet fisheries were also above long-term averages during this same period (Figure 14). Although troll fishery coho salmon harvest rates were well above average for the entire summer season, the 2023 seasonal harvest was characterized as below average, due largely to record low effort. Projections from wild Southeast Alaska/Yakutat coho salmon indicator stocks were that runs to most systems throughout the region were at or above the lower bound of escapement goal ranges. Given these indications of above average coho salmon abundance, a 10-day extension of the summer troll season was implemented, September 21–30 (Table 17).

CHUM SALMON FISHERY

Historically, chum salmon were harvested incidentally in the summer troll fishery. They were not targeted until the Cross Sound pink and chum salmon fishery was established in 1988 as an indicator of pink and chum salmon abundance for inside waters. The troll harvest increased substantially in 1992 when, for the first time, over 1.0 million chum salmon returned to the Northern Southeast Regional Aquaculture Association (NSRAA) Hidden Falls Hatchery located on eastern Baranof Island. In 1993, the NSRAA's Medvejie/Deep Inlet facility near Sitka saw a run of over 1.0 million chum salmon, and the troll chum salmon harvest increased to over 500,000 fish. Since that time, a portion of the troll fleet has targeted chum salmon, and with the exception of 1999, 2008, and 2020, the annual troll harvest of chum salmon has been consistently greater than 100,000 fish (Table 6). Trollers choosing to target chum salmon during summer Chinook salmon openings, or during weeks when they would normally target coho salmon, redirect effort

away from those species. This redirection of effort has had some effect on the total harvest and harvest rates for Chinook and coho salmon.

Spring troll fisheries in Icy Strait, Homeshore, Northern Chatham Strait, and Keku Strait are managed to target hatchery-produced chum salmon. Under the Chinook salmon action plans and supplementary actions for conservation of SEAK and TBR Chinook salmon stocks, hatchery chum salmon fisheries did not open until June 15. During the 2023 spring and early summer fisheries, a total of 12,300 chum salmon were harvested by 17 permit holders targeting chum salmon in the Icy Strait/Cross Sound area (Table 18). The 2023 harvest and effort represent a small fraction of the 2013–2022 average of 38,500 chum salmon by 48 permits. Effort and harvest in the Keku Strait area remains confidential.

Prior to 2014, trollers targeted hatchery-produced chum salmon in West Behm Canal and Neets Bay during the last week of June, although the West Behm Canal spring troll area has been closed since 2014 to conserve Unuk River Chinook salmon. The majority of the harvest and effort in the Neets Bay area occur during the summer troll fishery. The Southern Southeast Regional Aquaculture Association assists in identifying opportunities for the troll fleet to target chum salmon in the Neets Bay THA in years when broodstock and cost-recovery needs are met. Effort and harvest have fluctuated in the THA from year to year and had continued to decline since 2018. However, in 2023, 55 troll permits harvested 149,000 chum salmon, an increase from 2022, and the highest harvest and effort since 2018. A contributing factor to the increased harvest and effort was continued fishing opportunity in July. In recent years, an early July closure for broodstock collection and cost-recovery harvest eliminated opportunities for the troll fleet in the THA. The total directed harvest of 149,000 chum salmon for Neets Bay THA and West Behm Canal was a large increase from 2019 to 2021, and represents a 48% increase in harvest with a 23% decrease in effort, when compared to the 2013–2022 average (Figure 17).

In 2023, the directed chum salmon troll fleet harvested a total of 120,000 chum salmon in Sitka Sound/Deep Inlet from a total run of 1.43 million fish returning to the Medvejie/Deep Inlet facility. This is a decrease in harvest of 711,000 fish from 2022, and 116,000 fish below the recent 10-year average. The 91 permits that fished in 2023 represent a decrease of 164 permits from 2022 and 26 permits from the 2013–2022 average (Table 18). This fishery mainly occurred during SWs 30–32, a much shorter fishing period compared to previous years. Directed hatchery chum salmon fishing effort rapidly declined throughout the region in early August due to market inconsistencies which resulted in a large drop in demand for the product and a dramatic drop in average price.

Since 2018, Crawfish Inlet has provided an opportunity for the troll fleet to harvest hatchery chum salmon during the summer season. Throughout the summer of 2023, 35 permit holders harvested a total of 57,200 chum salmon in the Crawfish Inlet THA/West Crawfish areas, with peak harvest occurring in SW 32. This represents a decrease in harvest of 108,000 fish, and a decrease in effort of 66 permits, when compared to the 2018–2022 average (Table 18).

The 2023 regional directed chum salmon troll harvest of 345,200 fish was 675,400 fish below 2022 and a decrease of 164,000 fish from the recent 5-year average. Effort directed at targeting hatchery-produced chum salmon peaked in 2013 and has fluctuated and generally been on the decline through 2020, with harvest and effort increasing to near peak levels in 2022, but declining again in 2023. The number of permits fished in all directed chum salmon troll fisheries decreased by 152 permits in 2023 when compared to 2022, and by 62 permits when compared to the recent 10-year average (Figure 17). Fluctuations in effort are driven primarily by the abundance of

hatchery chum salmon and unstable markets, but may also relate to harvest rates, abundance of other salmon species, marine environment, conservation measures, and fish behavior.

OTHER SPECIES

A total of 1,700 sockeye and 90,900 pink salmon were harvested during the 2023 troll season (Table 6). Both sockeye and pink salmon harvests for 2023 were above the 10-year average for 1960–1969, but below average for all 10-year periods between 1970 and 2019. When compared to 2022, sockeye salmon harvest decreased by 23%, and the harvest of pink salmon increased by 14%.

EXCLUSIVE ECONOMIC ZONE HARVESTS

In 2023, approximately 20% of Chinook (28,000 fish) and 11% of coho salmon (121,000 fish) harvested by the troll fishery were reported as taken outside of state waters in the EEZ (Districts 150, 152, 154, 156, 157, and 189). In addition, 171 sockeye, 652 pink, and 511 chum salmon were taken in the EEZ. A total of 29% of the summer troll Chinook salmon harvest was taken in the EEZ, an increase from the 2022 (28%) and recent 10-year (26%) averages, but a decrease from the recent 5-year average (34%). When all species are combined, 9% of the annual troll harvest was taken outside of state waters, a decrease from the recent 5-year average (14%) and similar to the recent 10-year (9%) average.

ALASKA HATCHERY PRODUCTION

Private nonprofit and federal hatcheries in SEAK produce both Chinook and coho salmon that are harvested by the troll, drift gillnet, and purse seine fleets. Hatchery-produced Chinook salmon began appearing in significant numbers in troll harvests in 1980 when an estimated 5,900 fish were harvested. Alaska hatchery contributions are generally greatest during the spring fisheries, followed by the winter and summer fisheries (Tables 13, 15, and 16). The peak harvest of Alaska hatchery fish in the troll fishery occurred in 1996, when 38,400 Alaska hatchery Chinook (27% of the total troll Chinook salmon harvest) were harvested. The all-gear Alaska hatchery Chinook salmon proportion of harvest also peaked in 1996, when 88,700 fish, or approximately 38% of the total harvest, were Alaska hatchery fish (Table 19, Figure 18). In 2023, the combined Alaska hatchery harvest contributed approximately 38,400 Chinook salmon to all fisheries, with 10,900 fish harvested in the troll fishery (Table 19).

Hatchery-produced coho salmon were first harvested in the troll fishery in 1980. The hatchery contribution to the total coho salmon harvest has increased from less than 1% in 1980 to 33% in 2018, with Alaska hatcheries producing nearly 100% of these fish. In 2023, the hatchery coho salmon contribution was 27% of the harvest for a total contribution of 285,000 fish. This was approximately 47,300 fish (14%) below the recent 20-year average (Table 20, Figure 19).

WILD STOCK ESCAPEMENT

CHINOOK SALMON ESCAPEMENT

Since a 15-year Chinook salmon rebuilding program began in 1981, ADF&G has annually estimated escapements on 11 indicator systems. These escapements were initially measured against interim goals established prior to 1985, which, in general, were set as the largest escapements seen prior to 1981. As a part of the rebuilding program, ADF&G conducted CWT studies and improved escapement estimation methods. The department also sampled for age and

sex data in the escapement in order to allow the use of spawner–recruit analytical methods to set BEGs. With improved escapement estimation methods, BEGs for the 3 TBRs stocks and the 8 SEAK stocks have subsequently been revised. Current spawning escapements are determined using observer counts, mark–recapture estimates, and weirs.

During the 2022 BOF meeting, action plans were updated for Chilkat, King Salmon, and Unuk Rivers stocks of Chinook salmon, while additional plans were adopted to conserve the Taku and Stikine Rivers stocks. All these action plans provide ADF&G managers with direction to conserve these stocks along with other wild SEAK and TBR stocks through emergency order authority. Management actions were implemented for all gear groups in 2022 and 2023, aiming to lower calendar year harvest rates and pass as many SEAK and TBR Chinook salmon to escapement as possible. In 2023, preliminary estimates indicate that 6 of the 11 index systems monitored in SEAK met or exceeded spawning escapement goals (Table 21). This was a slight increase over 2022 escapements, when 5 of the 11 indexed systems met or exceeded goals.

In 2023, 2 of the 3 TBRs stocks (Alsek, Stikine, and Taku Rivers) monitored for Chinook salmon escapement had escapements below their BEG ranges. The Alsek River had an estimated escapement of 4,330 Chinook salmon, which was within the BEG range of 3,500 to 5,300 fish. Escapement to the Stikine River, a glacial origin system near Wrangell, the largest river in SEAK, and a newly listed SOC, was estimated at 12,900 Chinook salmon. This count was below the BEG range of 14,000 to 28,000 fish, but an increase from 2022 by 3,770 fish. The Taku River, a large glacial system near Juneau and another newly listed SOC in 2022, had an estimated escapement of 14,800 Chinook salmon. This escapement fell below the lower bound of the BEG range of 19,000 to 36,000 fish, but exceeded escapements estimated in 6 of the most recent 7 years.

Chinook salmon escapements to all 4 SEAK indicator systems monitored for escapement in East Behm Canal were within BEG ranges in 2023. The Keta River, with an estimated escapement of 759 Chinook salmon, exceeded the lower bound of the BEG range of 550 to 1,300 fish. The escapement to the Blossom River of 670 Chinook salmon was within the BEG range of 500 to 1,400 fish. The Chickamin River, a newly listed stock of management concern in 2022, improved from an escapement of 2,520 in 2022 to an estimated escapement of 3,720 Chinook salmon in 2023, falling within the BEG range of 2,150 to 4,300 fish for the 4th year in a row. The Unuk River, a glacial system in northeast Behm Canal and a stock listed as an SOC in 2018, had an estimated escapement of 2,070 Chinook salmon; this was within the BEG range of 1,800 to 3,800 fish, and marks the 4th out of the last 6 years the Unuk stock has exceeded the lower bound of the BEG.

Three of the 4 remaining SEAK indicator systems (Situk and King Salmon Rivers and Andrew Creek) had Chinook salmon escapements that fell below their BEG ranges in 2023; escapement to the Chilkat River was within goal. The Situk River, a moderately sized nonglacial system near Yakutat, had an estimated escapement of 144 Chinook salmon, which was below the BEG range of 500 to 1,000 fish. The King Salmon River, a small river system located on Admiralty Island, had an estimated escapement of 68 Chinook salmon, which was a decrease from 2022, and below the BEG range of 120 to 240 fish. Andrew Creek, a small nonglacial U.S. tributary of the lower Stikine River near Wrangell, had an estimated escapement of 386 Chinook salmon; this was below the BEG range of 650 to 1,500 fish, and was the lowest escapement estimate since 2017. Lastly, the Chilkat River, another moderately sized glacial system near Haines, had an escapement of 2,230 Chinook salmon, which was within the BEG range of 1,750 to 3,500 fish, achieving the escapement goal for the 4th time in the last 5 years.

COHO SALMON ESCAPEMENT

Only a small percentage of the coho salmon escapements in SEAK are enumerated or surveyed because of the extremely scattered distribution of stocks and difficult conditions for observation of spawners during the fall months (Table 22; Priest et al. 2021). In 2023, weirs were operated on 2 systems, and foot or aerial surveys were conducted on another 22 streams. An adult mark–recapture program has been in operation since 1987 to estimate the escapement of coho salmon to the Taku River.

Migrations into spawning streams generally peak in late September. Escapement goals for indicator streams have usually been met and exceeded in many cases in recent years (Tables 22–26, Figure 20). In 2023, coho salmon runs to northern inside areas were generally within or above BEGs (Table 24). The preliminary estimated coho salmon escapement to the Taku River above Canyon Island (89,013 fish) was within the BEG range of 50,000 to 90,000 fish. In Lynn Canal, escapement of 8,040 coho salmon in Berners River was within the BEG range of 3,600 to 8,100 fish, and the Chilkat River coho salmon escapement estimate of 70,900 fish was above the BEG range of 30,000 to 70,000 fish (Table 24, Figure 21). Of the 3 index streams on the Juneau road system, the escapement count was above the BEG range for Auke Creek and within the minimum sustainable escapement goal (SEG) for Peterson Creek; an accurate survey was unable to be conducted for Montana Creek (Table 24).

Coho salmon runs were generally average in outer coastal systems, and the aggregate escapement count of 1,390 fish for 5 small streams on Baranof and Kruzof Islands was slightly above the 41-year (1982–2022) average of 1,360 fish and above the BEG of 400 to 800 fish (Table 25).

The overall index of 22,700 coho salmon for 14 streams in the Ketchikan (Southern Inside) area was above the goal of 4,250 to 8,500 fish and above the 34-year (1989–2022) average of 11,070 fish (Table 26, Figure 21). The total coho salmon escapement to Hugh Smith Lake of 2,200 fish was above the BEG range of 500 to1,600 fish and the 6th highest on record.

COHO SALMON HARVEST RATES

CWT studies conducted since the early 1980s have provided annual harvest rate estimates for 3 coho salmon stocks. These stocks include Auke Creek near Juneau; Berners River in lower Lynn Canal; and Hugh Smith Lake on the mainland, southeast of Ketchikan (Figure 20). Fish are tagged in these systems and their contributions to the fisheries are estimated through ADF&G harvest sampling and CWT processing programs. Weirs are currently operated on 2 lake systems to enumerate coho salmon escapements and estimate the proportion of the returning population that are tagged. The Berners River escapement is intensively surveyed on foot and then sampled using beach seines to examine fish. Escapement estimates for the Berners River are conservative because a lower river weir is not employed, resulting in harvest rate estimates that are likely to be biased slightly upward (Table 23).

The average 2023 total harvest rate by all fisheries on the 3 indicator stocks (Berners River, Auke Creek, and Hugh Smith Lake) was 23%, compared with the 34-year (1989–2022) average of 49% (Table 27, Figure 22). The total harvest rate estimate of 41% for the Hugh Smith Lake stock was below the recent 10-year (2013–2022) average harvest rate (52%), and well below the 1989–2022 average of 60%. The lower all-gear harvest rate for Hugh Smith Lake in 2023 was influenced by a much lower troll fleet harvest rate total index of 19%, which was below the recent 10-year average of 23% (Table 28).

The 2023 troll fishery coho salmon harvest rate index of 16% was well below the 1984−2022 average of 33% (Table 28, Figure 23) and the lowest on record, slightly below the previous low of 17% in 2022. The Alaska troll harvest rate for the Hugh Smith Lake stock (19%) was well below the long-term average (31%). Similarly, troll harvest rates for northern inside stocks (1% for Auke Creek and 3% for Berners River) were substantially below the long-term average (26% and 25%, respectively; note that harvest monitoring on the Berners River began 7 years after Auke Creek studies). The declining troll harvest rate is primarily a result of the substantial reduction in fishery participation over the recent 5-year period and especially since 2019. Since 2015, the annual number of troll permits fished has declined by 32% (Table 3, Figure 6). In addition to reduced overall effort, over the last 10 years, many permits have diversified to target hatchery chum salmon, reducing the number of boat days that trollers targeted coho salmon. The average troll fishery harvest rate of 23% from the most recent 10-year period (2013–2022) is a 36% decrease from an average of 36% during the 1982–2012 time period when opportunities to target hatchery chum salmon were fewer than during the most recent 10 years.

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TABLES AND FIGURES

Table 1.–All-gear and troll treaty Chinook salmon harvest, hatchery add-on, total harvest, treaty harvest limit, terminal exclusion harvest, and the number of fish over or under the harvest limit, 1985–2023.

	All-gear							Troll			
Year	Treaty harvest	Hatchery add-on	Terminal exclusion	Total harvest	Preseason treaty harvest limit	Postseason treaty harvest limit	Over/under preseason harvest limit	Treaty harvest	Total harvest	Preseason treaty harvest limit	Over/under preseason harvest limit
1985	268,293	6,246	0	274,539	263,000	263,000	5,293	211,933	215,811	–	–
1986	271,262	11,091	0	282,353	263,000	263,000	8,262	231,649	237,703	–	–
1987	265,323	17,095	0	282,418	263,000	263,000	2,323	231,051	242,562	218,000	13,051
1988	256,787	22,525	0	279,312	263,000	263,000	-6,213	217,088	231,364	218,000	-912
1989	269,522	21,510	0	291,032	263,000	263,000	6,522	224,182	235,716	218,000	6,182
1990	320,996	45,873	0	366,869	302,000	302,000	18,996	263,528	287,939	257,000	6,528
1991	297,986	61,476	0	359,462	273,000	273,000	24,986	231,803	264,106	228,000	3,803
1992	221,980	36,811	0	258,791	243,000	243,000	-21,020	162,617	183,759	167,790	-5,173
1993	271,193	32,910	0	304,103	263,000	263,000	8,193	212,350	226,866	201,690	10,660
1994	235,165	29,185	0	264,350	240,000	240,000	-4,835	177,146	186,331	180,400	-3,254
1995	176,939	58,800	0	235,739	175,000	202,500	1,939	115,072	138,117	–	–
1996	154,997	72,599	8,663	236,259	146,700	147,500	8,297	107,581	141,452	102,000	5,581
1997	286,696	46,463	9,843	343,002	277,200	289,500	9,496	221,944	246,409	214,761	7,183
1998	243,152	25,021	2,420	270,593	261,700	260,000	-18,548	183,489	192,066	192,176	-8,687
1999	198,842	47,725	4,453	251,020	192,800	184,200	6,042	132,741	146,219	140,728	-7,987
2000	186,493	74,316	2,481	263,290	189,900	178,500	-3,407	133,963	158,717	138,507	-4,544
2001	186,919	77,287	1,528	265,734	189,900	250,300	-2,981	128,692	153,280	138,507	-9,815
2002	357,133	68,164	1,237	426,534	356,500	371,900	633	298,132	325,308	266,056	32,076
2003	380,152	57,228	2,056	439,436	366,100	439,600	14,052	307,380	330,692	273,406	33,974
2004	417,019	75,955	6,295	499,268	383,500	418,300	33,519	321,876	354,658	286,728	35,148
2005	388,640	64,408	40,154	493,202	416,400	387,400	-27,760	304,891	338,451	311,916	-7,025
2006	360,094	48,404	27,047	435,545	346,800	354,500	13,294	263,980	282,315	256,664	7,316
2007	328,268	68,364	8,051	404,683	329,400	259,200	-1,132	240,474	268,146	243,747	-3,273
2008	172,905	66,149	5,273	244,328	170,000	152,900	2,905	126,352	151,936	125,408	944

-continued-

Table 1.–Page 2 of 2.

Year	All-gear							Troll			
	Treaty harvest	Hatchery add-on	Terminal exclusion	Total harvest	Preseason treaty harvest limit	Postseason treaty harvest limit	Over/under preseason harvest limit	Treaty harvest	Total harvest	Preseason treaty harvest limit	Over/under preseason harvest limit
2009	227,954	61,960	3,733	293,647	218,800	176,000	9,154	159,126	175,644	161,637	-2,511
2010	230,611	53,640	501	284,752	221,800	215,800	8,811	177,982	195,620	163,864	14,118
2011	291,161	65,474	739	357,374	294,800	283,300	-3,639	220,787	242,569	218,060	2,727
2012	242,821	51,392	1,106	295,319	266,800	205,100	-23,979	191,553	209,074	197,272	-5,719
2013	191,388	65,598	266	257,252	176,000	284,900	15,388	134,580	149,541	129,862	4,718
2014	435,195	56,592	736	492,522	439,400	378,600	-4,205	340,015	355,570	325,411	14,604
2015	335,026	68,097	216	403,339	237,000	337,500	98,026	251,086	269,862	175,149	75,937
2016	350,939	35,673	664	387,042	355,600	288,200	-4,896	266,172	276,432	263,197	2,975
2017	175,414	31,638	0	207,052	209,700	215,800	-34,286	123,691	129,649	154,881	-31,190
2018	127,776	36,966	0	164,742	144,500	118,700	-16,724	101,469	107,565	106,477	-5,008
2019	140,307	34,578	211	175,096	140,323	140,323	-16	103,067	109,364	103,376	-309
2020	204,624	30,164	0	234,788	205,165	140,323	-541	165,406	169,916	151,514	13,892
2021	202,082	34,092	0	236,175	205,165	140,323	-3,083	155,590	163,210	151,514	4,076
2022	238,621	37,157	0	275,778	266,585	205,165	-27,964	187,613	196,783	197,113	-9,500
2023	202,744	32,423	0	235,167	206,027	267,594	-3,283	136,312	143,381	152,154	-15,842
					1985–2023 Cumulative total		87,851		1985–2023 Cumulative total		174,744

Note: The 2018 fisheries were managed in season to 90% of the preseason treaty harvest limit for conservation. Fisheries prosecuted for the period of 2019–2023 were managed in season to 98% of the harvest limit to avoid PSC overage pay back provisions the following year. En dash indicates no data.

Table 2.–Harvest and percent of commercially harvested coho salmon by gear type in Southeast Alaska, 1991–2023.

	Troll		Purse seine		Drift gillnet		Set gillnet		All-gear total	
Year	Number	Percent (%)	Number	Percent (%)	Number	Percent (%)	Number	Percent (%)	Number	Percent (%)
1991	1,719,082	59	411,854	14	601,179	21	166,731	6	2,898,846	100
1992	1,929,945	56	505,135	15	699,448	20	290,149	8	3,424,677	100
1993	2,395,887	67	477,006	13	445,880	13	237,446	7	3,556,219	100
1994	3,467,599	63	970,100	18	744,558	13	343,903	6	5,526,160	100
1995	1,750,262	56	627,472	20	456,820	15	295,030	9	3,129,584	100
1996	1,906,769	64	447,005	15	404,627	14	227,802	8	2,986,203	100
1997	1,170,534	64	189,036	10	156,725	9	322,776	18	1,839,071	100
1998	1,636,711	59	475,232	17	441,458	16	197,669	7	2,751,070	100
1999	2,272,653	69	422,926	13	394,260	12	187,186	6	3,277,025	100
2000	1,125,219	67	210,528	12	181,796	11	170,948	10	1,688,491	100
2001	1,845,627	63	556,193	19	338,083	11	205,344	7	2,945,247	100
2002	1,315,062	53	479,489	19	491,683	20	200,888	8	2,487,122	100
2003	1,223,458	56	400,988	19	467,337	22	74,343	3	2,166,126	100
2004	1,916,675	67	405,151	14	339,466	12	196,930	7	2,858,222	100
2005	2,038,296	74	348,072	13	297,878	11	82,887	3	2,767,133	100
2006	1,362,983	74	114,313	6	277,853	15	86,085	5	1,841,234	100
2007	1,378,062	72	252,575	13	204,081	11	76,550	4	1,911,268	100
2008	1,293,030	63	215,648	11	377,469	19	153,712	8	2,039,859	100
2009	1,591,547	67	298,614	13	351,367	15	133,808	6	2,375,336	100
2010	1,343,032	59	203,631	9	579,830	25	161,584	7	2,288,077	100
2011	1,314,210	63	352,128	17	285,983	14	126,215	6	2,078,536	100
2012	1,201,724	64	280,116	15	303,041	16	98,677	5	1,883,558	100
2013	2,393,790	67	553,501	15	482,433	13	158,046	4	3,587,770	100
2014	2,248,371	66	394,174	12	599,606	18	161,977	5	3,404,128	100
2015	1,241,100	64	294,550	15	274,909	14	129,069	7	1,939,628	100
2016	1,387,590	66	267,213	13	299,645	14	144,032	7	2,098,480	100
2017	2,151,782	78	276,635	10	187,888	7	140,844	5	2,757,149	100
2018	942,622	64	156,810	11	272,951	19	95,954	7	1,468,337	100
2019	973,903	63	249,790	16	210,621	14	100,473	7	1,534,787	100
2020	750,655	72	78,710	8	130,465	13	81,709	8	1,041,539	100
2021	850,962	59	311,017	22	207,723	14	75,004	5	1,444,706	100
2022	854,374	70	168,204	14	136,717	11	62,897	5	1,222,192	100
2023	1,055,492	68	258,528	17	167,898	11	80,242	5	1,562,160	100
1991–2022 Average:	1,593,547	65	356,057	14	363,869	15	162,083	7	2,475,557	100
Board of Fisheries allocations (Est. 1989)		61	–	19	–	13	–	7	–	–
1991–2022 Deviation from allocations		6	–	-26	–	13	–	-5	–	–
2023 Deviation from allocations		11	–	-13	–	-17	–	-27	–	–

Note: Annette Island and terminal harvest are included. En dash indicates no data.

Table 3.–Southeast Alaska commercial troll permits fished, 1978–2023.

Year	Hand troll	Power troll	Total	% Hand troll
1978	2,624	816	3,440	76
1979	2,207	819	3,026	73
1980	1,667	842	2,509	66
1981	1,153	793	1,946	59
1982	1,067	810	1,877	57
1983	946	810	1,756	54
1984	860	795	1,655	52
1985	922	836	1,758	52
1986	809	827	1,636	49
1987	764	828	1,592	48
1988	778	829	1,607	48
1989	694	831	1,525	46
1990	700	840	1,540	45
1991	701	852	1,553	45
1992	647	843	1,490	43
1993	601	842	1,443	42
1994	549	808	1,357	40
1995	461	818	1,279	36
1996	412	739	1,151	36
1997	387	744	1,131	34
1998	305	734	1,039	29
1999	339	722	1,061	32
2000	316	714	1,030	31
2001	307	703	1,010	30
2002	254	666	920	28
2003	266	641	907	29
2004	325	692	1,017	32
2005	354	717	1,071	33
2006	371	739	1,110	33
2007	377	744	1,121	34
2008	376	747	1,123	33
2009	367	748	1,115	33
2010	341	730	1,071	32
2011	374	760	1,134	33
2012	355	744	1,099	32
2013	366	723	1,089	34
2014	348	758	1,106	31
2015	319	741	1,060	30
2016	272	745	1,017	27
2017	258	722	980	26
2018	237	672	909	26
2019	230	664	894	26
2020	221	631	852	26
2021	214	631	845	25
2022	181	613	794	23
2023	167	555	722	23

Note: Permits fished based on calendar year. Data from 1977–1984 taken from Commercial Fisheries Entry Commission (CFEC), and 1985–2023 data from ADFG.

Table 4.–Number of troll permits fished by gear type and fishery, 1981–2023.

	Winter fishery			Spring[a] fishery			General summer fishery			Summer
Year	Hand	Power	Total	Hand	Power	Total	Hand	Power	Total	% hand
1981	183	165	348	–	–	–	1,135	791	1,926	59%
1982	183	211	394	–	–	–	1,060	813	1,873	57%
1983	254	331	585	–	–	–	923	805	1,728	53%
1984	221	366	587	–	–	–	833	787	1,620	51%
1985	196	303	499	–	–	–	887	829	1,716	52%
1986	174	318	492	23	47	70	777	822	1,599	49%
1987	195	319	514	36	69	105	732	825	1,557	47%
1988	295	433	728	149	260	399	726	821	1,547	47%
1989	262	475	737	54	142	195	664	834	1,498	44%
1990	167	356	523	107	170	277	645	830	1,475	44%
1991	182	383	565	220	352	572	626	840	1,466	43%
1992	186	431	617	182	281	463	599	827	1,426	42%
1993	127	366	493	181	338	519	558	832	1,390	40%
1994	77	306	383	75	221	296	531	797	1,328	40%
1995	71	227	298	110	276	386	422	809	1,231	34%
1996	50	180	230	126	336	462	380	725	1,105	34%
1997	49	207	256	145	335	480	338	735	1,073	32%
1998	50	232	282	86	277	363	281	727	1,008	28%
1999	53	233	286	91	255	346	304	712	1,016	30%
2000	67	244	311	112	323	435	255	696	951	27%
2001	80	242	322	125	345	470	242	687	929	26%
2002	72	228	300	105	330	435	186	641	827	22%
2003	96	264	360	90	311	401	190	609	799	24%
2004	129	310	439	114	336	450	238	675	913	26%
2005	142	300	442	125	387	512	281	701	982	29%
2006	152	317	469	151	376	527	268	717	985	27%
2007	153	350	503	172	369	541	284	726	1,010	28%
2008	135	333	468	182	438	620	291	726	1,017	29%
2009	131	299	430	158	428	586	305	735	1,040	29%
2010	131	328	459	157	427	584	269	715	984	27%
2011	134	330	464	174	466	640	301	729	1,030	29%
2012	132	375	507	162	463	625	284	728	1,012	28%
2013	127	315	442	173	477	650	295	699	994	30%
2014	133	331	464	161	455	616	271	734	1,005	27%
2015	111	296	407	168	497	665	221	714	935	24%
2016	98	331	429	133	475	608	197	724	921	21%
2017	97	337	434	100	377	477	212	702	914	23%
2018	73	255	328	73	328	401	167	664	831	20%
2019	85	178	263	65	320	385	161	644	805	20%
2020	89	220	309	58	269	327	153	610	763	20%
2021	84	184	268	66	290	356	159	617	776	20%
2022	79	219	298	50	281	331	130	591	721	18%
2023	58	174	232	49	243	292	117	529	646	18%

Note: En dash indicates no data.

[a] Spring summary data includes experimental and terminal fisheries for both spring and summer seasons and do not include permits fished in the hatchery access fisheries in 1989 to 1992.

Table 5.–Number of days and dates the summer troll fishery was open to Chinook salmon retention (Chinook retention or CR), closed to Chinook salmon retention (Chinook nonretention or CNR), and closed to all salmon species (all) and effort during CR and CNR periods, 1985–2023.

Year	Days open	Days closed	Open dates	CR days	CR effort (boat days)	Closed dates	Days closed	CNR days	CNR effort (boat days)
1985	10	18	6/3–6/12	10	–	6/13–6/30	18 (all)	–	–
	23.6	68.4	7/1–7/22	22	–	7/23–8/14	23	–	–
	–	–	8/25–8/26	1.6	31,197	8/15–8/24	10 (all)	–	–
	–	–	–	–	–	8/26–9/20	25.4	–	–
	–	–	–	–	–	9/21–9/30	10 (all)	48.4	30,567
1986	41	62	6/20–7/15	26	–	7/16–8/10	26	–	–
	–	–	–	–	–	8/11–8/20	10 (all)	–	–
	–	–	–	–	–	8/27–8/31	5	–	–
	–	–	8/21–8/26	6	–	9/10–9/20	11	–	–
	–	–	9/1–9/9	9	35,646	9/21–9/30	10 (all)	42	29,901
1987	17	2	6/1–6/17	17	–	6/18-6/19	2 (all)	–	–
	23	80	6/20–7/12	23	21,819	7/13–8/2	21	–	–
	–	–	–	–	–	8/3–8/12	10 (all)	–	–
	–	–	–	–	–	8/13–9/20	39	–	–
	–	–	–	–	–	9/21–9/30	10 (all)	60	34,604
1988	23	2	6/6–6/28	23	–	6/29–6/30	2 (all)	–	–
	12	80	7/1–7/12	12	11,357	7/13–7/25	13	–	–
	–	–	–	–	–	7/26–8/4	10 (all)	–	–
	–	–	–	–	–	8/5–8/14	10	–	–
	–	–	–	–	–	8/15–8/24	10 (all)	–	–
	–	–	–	–	–	8/25–8/31	7	–	–
	–	–	–	–	–	9/1–9/3	3 (all)	–	–
	–	–	–	–	–	9/4–9/20	17[a]	–	–
	–	–	–	–	–	9/21–9/30	10 (all)	47	22,820
1989	25	0	6/6–6/30	25	–	none	0	–	–
	13	79	7/1–7/13	13	10,507	7/14–8/13	31	–	–
	–	–	–	–	–	8/14–8/23	10 (all)	–	–
	–	–	–	–	–	8/24–9/20	28	–	–
	–	–	–	–	–	9/21–9/30	10 (all)	59	33,278
1990	26	0	6/5–6/30	26	–	none	0	–	–
	24	68	7/1–7/22	22	–	7/23–8/12	21	–	–
	–	–	–	–	–	8/13–8/22	10 (all)	–	–
	–	–	8/23–8/24	2	17,988	8/25–9/20	27	–	–
	–	–	–	–	–	9/21–9/30	10 (all)	48	27,742
1991	24	5	6/2–6/25	24	–	6/26– 6/30	5 (all)	–	–
	7.5	84.5	7/1–7/8	7.5	6,898	7/8–8/15	38.5	–	–
	–	–	–	–	–	8/16–8/25	10 (all)	–	–
	–	–	–	–	–	8/26–9/20	26	–	–
	–	–	–	–	–	9/21–9/30	10 (all)	64.5	30,720

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Table 5.–Page 2 of 5.

Year	Days open	Days closed	Open dates	CR days	CR effort (boat days)	Closed dates	Days closed	CNR days	CNR effort (boat days)
1992	36	0	5/26–6/30	36	–	none	0	–	–
	4.5	87.5	7/1–7/4	3.5	–	7/4–8/12	39.5	–	–
	–	–	–	–	–	8/13–8/22	10 (all)	–	–
	–	–	23-Aug	1	3,878	8/24–9/20	28	–	–
	–	–	–	–	–	9/21–9/30	10 (all)	67.5	34,367
1993	38	0	5/24–6/30	38	–	none	0	–	–
	20	72	7/1–7/6	6	–	7/7–7/11	5 (all)	–	–
	–	–	–	–	–	7/12–8/12	32	–	–
	–	–	–	–	–	8/13–8/20	8 (all)	–	–
	–	–	8/21–8/25	5	–	8/26–9/11	17	–	–
	–	–	9/12–9/20	9	12,094	9/21–9/30	10 (all)	49	27,009
1994	38	1	5/23–6/29	38	–	6/30	1 (all)	–	–
	12	80	7/1–7/7	7	–	7/8–8/26	50	–	–
	–	–	–	–	–	8/27–8/28	2 (all)	–	–
	–	–	8/29–9/2	5	7,489	9/3–9/30	28	78	34,216
1995	38	2	5/22–6/28	38	–	6/29–6/30	2 (all)	–	–
	17	75	7/1–7/10	10	–	7/11–7/29	19	–	–
	–	–	7/30–8/5	7	9,013	8/6–8/12	7	–	–
	–	–	–	–	–	8/13–8/22	10 (all)	–	–
	–	–	–	–	–	8/23–9/30	39	65	19,963
1996	54	2	5/6–6/28	54	–	6/29–6/30	2 (all)	–	–
	12	80	7/1–7/10	10	–	7/11–8/13	34	–	–
	–	–	–	–	–	8/14–8/18	5 (all)	–	–
	–	–	8/19–8/20	2	5,446	8/21–9/20	31	–	–
	–	–	–	–	–	9/21–9/30	10 (all)	65	20,489
1997	52	5	5/5–6/25	52	–	6/26–6/30	5 (all)	–	–
	21	71	7/1–7/7	7	–	7/8–8/7	31	–	–
	–	–	–	–	–	8/8–8/17	10 (all)	–	–
	–	–	8/18–8/24	7	–	8/25–8/29	5	–	–
	–	–	8/30–9/5	7	9,161	9/6–9/20	15[b]	–	–
	–	–	–	–	–	9/21–9/30	10 (all)	51	14,054
1998	57	1	5/4–6/29	57	–	6/30	1 (all)	–	–
	53	39	7/1–7/11	11	–	7/12–8/11	31	–	–
	–	–	8/20–9/30	42	12,068	8/12–8/19	8 (all)	31	11,091
1999	59	0	5/3–6/30	59	–	none	0	–	–
	11	81	7/1–7/6	6	–	7/7–8/12	37	–	–
	–	–	–	–	–	8/13–8/17	5 (all)	–	–
	–	–	8/18–8/22	5	4,328	8/23–9/30	39	76	22,037
2000	74	1	4/17–6/29	74	–	6/30	1 (all)	–	–
	24	68	7/1–7/5	5	–	7/6–8/10	36	–	–
	–	–	8/11–8/12	2	–	8/13–8/22	10 (all)	–	–
	–	–	8/23–8/30	8	–	8/31–9/11	12	–	–
	–	–	9/12–9/20	9	6,237	9/21–9/30	10 (all)	48	13,399

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Table 5.–Page 3 of 5.

Year	Days open	Days closed	Open dates	CR days	CR effort (boat days)	Closed dates	Days closed	CNR days	CNR effort (boat days)
2001	76	0	4/16–6/30	76	–	none	0	–	–
	25	67	7/1–7/6	6	–	7/7–8/12	37	–	–
	–	–	–	–	–	8/13–8/17	5 (all)	–	–
	–	–	8/18–9/5	19	7,458	9/6–9/20	15	–	–
	–	–	–	–	–	9/21–9/24	4 (all)	–	–
	–	–	–	–	–	9/25–9/30	6	58	13,438
2002	77	0	4/15–6/30	77	–	none	0	–	–
	40	52	7/1–7/18	18	–	7/19–8/9	22	–	–
	–	–	–	–	–	8/10–8/11	2 (all)	–	–
	–	–	8/12–9/2	22	11,104	9/3–9/30	28	50	8,072
2003	72	0	4/20–6/30	72	–	none	0	–	–
	39	53	7/1–8/8	39	10,811	8/9–9/30	53	53	8,422
2004	70	0	4/22–6/30	70	–	none	0	–	–
	19	73	7/1–7/15	15	–	7/16–8/9	25	–	–
	–	–	–	–	–	8/10–8/11	2 (all)	–	–
	–	–	8/12–8/15	4	7,353	8/16–9/30	46	71	14,665
2005	77	0	4/15–6/30	77	–	none	0	–	–
	29.5	62.5	7/1–7/17	17	–	7/18–8/9	23	–	–
	–	–	–	–	–	8/10–8/13	4 (all)	–	–
	–	–	8/14–8/20	6.5	–	8/20–9/14	25.5	–	–
	–	–	9/15–9/20	6	10,083	9/21–9/30	10 (all)	48.5	12,688
2006	69	0	4/23–6/30	69	–	none	0	–	–
	22	70	7/1–7/12	12	–	7/13–8/8	27	–	–
	–	–	–	–	–	8/9–8/12	4 (all)	–	–
	–	–	8/13–8/22	10	9,821	8/23–8/27	5 (all)	–	–
	–	–	–	–	–	8/28–9/30	34	61	13,486
2007	61	0	5/1–6/30	61	–	none	0	–	–
	26	66	7/1–7/20	20	–	7/21–8/10	21	–	–
	–	–	–	–	–	8/11–8/15	5 (all)	–	–
	–	–	8/16–8/21	6	10,628	8/22–9/20	30	–	–
	–	–	–	–	–	9/21–9/30	10 (all)	51	12,819
2008	61	0	5/1–6/30	61	–	none	0	–	–
	11	81	7/1–7/5	5	–	7/6–8/10	36	–	–
	–	–	–	–	–	8/11–8/15	5 (all)	–	–
	–	–	–	–	–	8/22–9/20	30	–	–
	–	–	8/16–8/21	6	5,745	9/21–9/30	10 (all)	66	15,855
2009	61	0	5/1–6/30	61	–	none	0	–	–
	19	73	7/1–7/10	10	–	7/11–8/11	32	–	–
	–	–	8/17–8/25	9	7,589	8/12–8/16	5 (all)	–	–
	–	–	–	–	–	8/26–9/30	36	68	15,307
2010	61	0	5/1–6/30	61	–	none	0	–	–
	13	79	7/1–7/8	8	–	7/9–8/10	33	–	–
	–	–	8/15–8/19	5	5,549	8/11–8/14	4 (all)	–	–
	–	–	–	–	–	8/20–9/20	32	–	–
	–	–	–	–	–	9/21–9/30	10 (all)	65	16,641

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Table 5.–Page 4 of 5.

Year	Days open	Days closed	Open dates	CR days	CR effort (boat days)	Closed dates	Days closed	CNR days	CNR effort (boat days)
2011	66	0	4/25–6/30	66	–	none	0	–	–
	15	77	7/1–7/12	12	–	7/13–8/10	29	–	–
	–	–	8/15–8/17	3	5,479	8/11–8/14	4 (all)	–	–
	–	–	–	–	–	8/18–9/20	34	–	–
	–	–	–	–	–	9/21–9/30	10 (all)	63	12,611
2012	61	0	5/1–6/30	61	–	none	0	–	–
	38	54	7/1–7/9	9	–	7/10–8/6	28	–	–
	–	–	8/11–9/8	29	13,024	8/7–8/10	4 (all)	–	–
	–	–	–	–	–	9/9–9/30	22	50	8,495
2013	61	0	5/1–6/30	61	–	none	0	–	–
	6	86	7/1–7/6	6	2,671	7/7–9/30	86	86	19,785
2014	61	0	5/1–6/30	61	–	none	0	–	–
	12	80	7/1–7/7	7	–	7/8–8/9	33	–	–
	–	–	8/14–8/18	5	5,405	8/10–8/13	4 (all)	–	–
	–	–	–	–	–	8/19–9/30	43	76	16,973
2015	76	0	4/16–6/30	76	–	none	0	–	–
	8	84	7/1–7/8	8	3,174	7/9–9/30	84	84	12,758
2016	77	0	4/15–6/30	77	–	none	0	–	–
	27	65	7/1–7/5	5	–	7/6–8/8	34	–	–
	–	–	8/13–9/3	22	10,183	8/9–8/12	4 (all)	–	–
	–	–	–	–	–	9/4–9/30[c]	27	61	11,072
2017	44	17	5/1–6/30	44	–	5/29–6/14	17 (all)	–	–
	21	71	7/1–7/4	4	–	none	0	–	–
	–	–	–	–	2,156	7/5–9/30[d]	88	88	19,696
2018	61	0	5/1–6/30	61	–	none	25	–	–
	19	73	7/1–7/14	14	–	7/15–8/9	26	–	–
	–	–	8/15–8/19	5	–	8/10–8/14	5 (all)	–	–
	–	–	–	–	6,522	8/20–9/30	42	68	11,484
2019[e]	61	0	5/1–6/30	61	–	none	0	–	–
	17	75	7/1–7/5	5	–	7/6–8/4	30	–	–
	–	–	8/13–8/14	2	–	8/5–8/12	8 (all)	–	–
	–	–	9/1–9/10	10	3,437	8/15–8/31	17	–	–
	–	–	–	–	–	9/11–9/30	20	67	14,694
2020[f]	61	0	5/1–6/30	61	–	None	0	–	–
	31	61	7/1–7/6	6	–	7/7–8/6	31	–	–
	–	–	8/15–9/8	25	9,519	8/7–8/14	8 (all)	–	–
	–	–	–	–	–	9/9–9/20	12	–	–
	–	–	–	–	–	9/21–9/30	10 (all)	43	7,008
2021[f]	61	0	5/1–6/30	61	–	None	0	–	–
	30	62	7/1–7/8	8	–	7/9–8/7	30	–	–
	–	–	8/13–9/3	22	8,384	8/8–8/12	5 (all)	–	–
	–	–	–	–	–	9/4–9/30	27	57	7,695

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Table 5.–Page 5 of 5.

Year	Days open	Days closed	Open dates	CR days	CR effort (boat days)	Closed dates	Days closed	CNR days	CNR effort (boat days)
2022	61	0	5/1–6/30	61	–	None	0	–	–
	79	13	7/1–7/28	28	–	7/29–7/31	3	–	–
	–	–	8/1–9/20	51	14,003	9/21–9/30	10	13	6
2023[e]	61	0	5/1–6/30	61	–	None	0	–	–
	79	13	7/1–7/12	12	–	7/13–8/8	27	–	–
	–	–	8/11	1	–	8/9–8/10	2 (all)	–	–
	–	–	9/1–9/10	10	3,505	8/12–8/31	20	–	–
	–	–	–	–	–	9/11–9/30	20	67	8,413

Note: Spring fishery date ranges indicate only the first and last date that fisheries were open prior to July 1, when the general summer troll season began. "Days open" indicates the actual number of days open prior to July 1. "Days closed" indicates days not open between the start of the spring fisheries through June 30. En dash indicates no data.

[a] In 1988, the southern areas of Southeast Alaska were closed due to coho salmon conservation concerns.

[b] In 1997, the northern areas of Southeast Alaska were closed due to coho salmon conservation concerns.

[c] In 2016, a mark-selective fishery was conducted from September 4 to 30, when the directed Chinook salmon fishery was closed.

[d] In 2017, a mark-selective fishery was conducted from July 5 to 21, when the directed Chinook salmon fishery was closed.

[e] In 2019 and 2023, a new limited harvest fishery was implemented from September 1 to 10, allocating 2 and 9 Chinook per permit during the 10-day fisheries.

[f] The second summer troll Chinook salmon retention period was extended due to transfer of allocations from the commercial net and sport fisheries (2020) and commercial net fisheries (2021).

Table 6.–Commercial troll salmon harvest in numbers of fish by salmon species, 1960–2023.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1960	282,404	939	396,211	25,563	2,453	707,570
1961	204,289	1,264	399,932	19,303	2,679	627,467
1962	173,597	1,181	643,740	75,083	2,676	896,277
1963	243,679	2,014	693,050	106,939	6,230	1,051,912
1964	329,461	1,004	730,766	124,566	2,576	1,188,373
1965	258,902	1,872	695,887	81,127	6,359	1,044,147
1966	282,083	679	528,621	63,623	5,203	880,209
1967	274,678	157	443,677	57,372	7,051	782,935
1968	304,455	574	779,500	126,271	2,791	1,213,591
1969	290,168	444	388,443	83,727	1,708	764,490
1970	304,602	477	267,647	70,072	3,235	646,033
1971	311,439	929	391,279	104,557	7,602	815,806
1972	242,282	1,060	791,941	166,771	11,634	1,213,688
1973	307,806	1,222	540,125	134,586	10,460	994,199
1974	322,101	2,603	845,109	263,083	13,818	1,446,714
1975	287,342	584	214,219	76,844	2,784	581,773
1976	231,239	1,241	525,270	194,370	4,251	956,371
1977	271,735	5,713	506,432	281,009	11,621	1,076,510
1978	375,433	2,804	1,100,902	617,633	26,193	2,122,965
1979	337,672	7,018	918,835	629,117	24,661	1,917,303
1980	303,643	2,921	697,181	267,213	12,168	1,283,126
1981	248,782	7,476	861,146	579,436	8,680	1,705,520
1982	241,938	2,459	1,315,871	503,306	5,639	2,069,213
1983	269,821	7,973	1,276,380	498,530	20,308	2,073,012
1984	235,622	9,658	1,133,366	573,004	28,060	1,979,710
1985	215,811	7,724	1,600,230	963,719	52,793	2,840,277
1986	237,703	6,884	2,128,003	181,900	51,398	2,605,888
1987	242,562	9,722	1,041,055	486,385	12,848	1,792,572
1988	231,364	9,341	500,227	519,390	88,264	1,348,586
1989	235,716	20,171	1,415,517	1,771,409	68,986	3,511,799
1990	287,939	9,176	1,832,604	771,674	62,817	2,964,210
1991	264,106	9,805	1,719,082	427,348	28,438	2,448,779
1992	183,759	22,854	1,929,945	673,851	85,030	2,895,439
1993	226,866	25,337	2,395,887	902,872	525,160	4,076,122
1994	186,331	21,777	3,467,599	942,783	330,375	4,948,865
1995	138,117	27,323	1,750,262	714,312	277,455	2,907,469
1996	141,452	11,024	1,906,769	812,899	406,260	3,278,404
1997	246,409	39,431	1,170,534	545,309	312,042	2,313,725
1998	192,066	6,474	1,636,711	261,104	117,642	2,213,997
1999	146,219	5,730	2,272,653	540,859	74,704	3,040,165

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Year	Chinook	Sockeye	Coho	Pink	Chum	Total
2000	158,717	4,467	1,125,219	187,364	478,144	1,953,911
2001	153,280	8,992	1,845,627	258,943	467,837	2,734,679
2002	325,308	1,247	1,315,062	86,399	117,672	1,845,688
2003	330,692	4,596	1,223,458	159,643	286,410	2,004,799
2004	354,658	5,010	1,916,675	57,323	171,326	2,504,992
2005	338,451	13,277	2,038,296	109,640	174,599	2,674,263
2006	282,315	8,084	1,362,983	60,323	153,545	1,867,250
2007	268,146	6,440	1,378,062	104,440	191,685	1,948,773
2008	151,936	1,253	1,293,030	28,183	60,829	1,535,231
2009	175,644	2,929	1,591,547	75,843	342,998	2,188,961
2010	195,620	1,923	1,343,032	87,640	394,695	2,022,910
2011	242,569	5,190	1,314,210	496,234	702,914	2,761,117
2012	209,074	3,231	1,201,724	168,584	476,601	2,059,214
2013	149,541	5,020	2,393,790	684,690	1,054,204	4,287,245
2014	355,570	7,319	2,248,371	75,920	200,065	2,887,245
2015	269,862	6,977	1,241,100	259,411	424,546	2,201,896
2016	276,432	6,699	1,387,590	53,359	164,945	1,889,025
2017	129,649	5,454	2,151,782	54,473	403,998	2,745,356
2018	107,565	5,182	942,622	53,585	530,736	1,639,690
2019	109,364	6,264	973,903	70,433	269,601	1,429,565
2020	169,916	1,659	750,655	43,598	79,453	1,045,281
2021	163,210	5,251	850,962	103,559	704,367	1,827,349
2022	196,795	2,214	854,374	79,397	1,045,914	2,178,694
2023	143,381	1,695	1,055,492	90,904	357,089	1,648,561
1960–1969 Average	264,372	1,013	569,983	76,357	3,973	915,697
1970–1979 Average	299,165	2,365	610,176	253,804	11,626	1,177,136
1980–1989 Average	246,296	8,433	1,196,898	634,429	34,914	2,120,970
1990–1999 Average	201,326	17,893	2,008,205	659,301	221,992	3,108,718
2000–2009 Average	253,915	5,630	1,508,996	112,810	244,505	2,125,855
2010–2019 Average	204,525	5,326	1,519,812	200,433	462,231	2,392,326

Note: Harvest data for all species includes terminal and Annette Island harvest. Data is by calendar year from 1960 to 1978, from January 1 to September 30 for 1979, and by troll season (October 1–September 30) for 1980 to 2023.

Table 7.–Southeast Alaska commercial troll salmon harvest in numbers of fish by species and statistical week for the 2023 troll season.

Year	Week	Week of	Chinook	Sockeye	Coho	Pink	Chum	Total
2022	42	9-Oct	644	–	–	–	–	644
	43	16-Oct	919	–	–	–	–	919
	44	23-Oct	445	–	–	–	–	445
	45	30-Oct	383	–	–	–	–	383
	46	6-Nov	496	–	–	–	–	496
	47	13-Nov	649	–	–	–	–	649
	48	20-Nov	85	–	–	–	–	85
	49	27-Nov	232	–	–	–	–	232
	50	4-Dec	170	–	–	–	–	170
	51	11-Dec	313	–	–	–	–	313
	52	18-Dec	35	–	–	–	–	35
	53	25-Dec	227	–	–	–	–	227
2023	1	1-Jan	229	–	–	–	–	229
	2	8-Jan	658	–	–	–	–	658
	3	15-Jan	935	–	–	–	–	935
	4	22-Jan	865	–	–	–	–	865
	5	29-Jan	2,299	–	–	–	–	2,299
	6	5-Feb	1,329	–	–	–	–	1,329
	7	12-Feb	913	–	–	–	–	913
	8	19-Feb	747	–	–	–	–	747
	9	26-Feb	461	–	–	–	–	461
	10	5-Mar	913	–	–	–	–	913
	11	12-Mar	945	–	–	–	–	945
	12	19-Mar	1,654	–	–	–	–	1,654
	13	26-Mar	3,747	–	–	–	–	3,747
	14	2-Apr	2,792	–	–	–	–	2,792
	15	9-Apr	4,117	–	–	–	1	4,118
	16	16-Apr	–	–	–	–	–	–
	17	23-Apr	–	–	–	–	–	–
	18	30-Apr	161	–	–	–	–	161
	19	7-May	371	–	–	–	–	371
	20	14-May	899	–	–	–	–	899
	21	21-May	1,090	–	–	–	–	1,090
	22	28-May	1,556	–	–	–	2	1,558
	23	4-Jun	2,912	–	3	–	5	2,920
	24	11-Jun	4,561	–	34	5	191	4,791
	25	18-Jun	4,986	23	339	1,133	4,244	10,725
	26	25-Jun	4,081	56	1,927	4,829	6,019	16,912
	27	2-Jul	57,092	161	42,349	7,979	31,282	138,863
	28	9-Jul	27,812	122	37,143	5,967	51,443	122,487
	29	16-Jul	63	296	87,361	8,920	35,656	132,296
	30	23-Jul	27	375	115,695	28,472	45,534	190,103

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Year	Week	Week of	Chinook	Sockeye	Coho	Pink	Chum	Total
2023	31	30-Jul	1	169	109,486	26,641	110,932	247,229
	32	6-Aug	8,237	128	81,045	4,809	34,423	128,642
	33	13-Aug	–	45	70,950	366	16,751	88,112
	34	20-Aug	–	101	152,331	927	18,924	172,283
	35	27-Aug	189	76	138,377	117	1,208	139,967
	36	3-Sep	1,383	95	136,958	77	288	138,801
	37	10-Sep	85	44	61,782	31	46	61,988
	38	17-Sep	1	1	9,152	14	5	9,173
	39	24-Sep	–	1	8,144	3	7	8,155
		Winter fishery subtotal	27,202	–	–	–	1	27,203
		Spring fishery subtotal	17,098	71	879	5,712	8,808	32,568
		Summer fishery subtotal	95,963	1,482	1,049,233	75,400	259,779	1,481,857
		Hatchery terminal area subtotal	2,465	140	2,784	9,178	88,373	102,940
		Annette Island subtotal	653	2	2,596	614	128	3,993
		Grand total	143,381	1,695	1,055,492	90,904	357,089	1,648,561

Note: Weekly totals do not include Annette Island troll harvest. En dash indicates no data or confidential.

Table 8.–Average troll coho salmon dressed weight by week and weighted annual average, 2006–2023.

	Average weekly dressed weight, by year																		Averages	
Week	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2018–2022	2013–2022
27	5.6	5.0	6.3	5.3	6.0	5.5	4.9	4.9	5.8	5.7	5.9	4.7	6.1	5.5	5.0	4.9	4.9	4.3	5.3	5.3
28	5.7	5.1	6.5	5.3	6.0	5.3	4.9	4.8	5.8	5.8	5.9	4.6	6.2	5.2	4.8	4.8	4.8	4.4	5.2	5.3
29	5.7	5.3	6.6	5.2	6.2	5.4	5.0	4.9	5.8	5.7	5.9	4.7	6.4	5.3	4.7	4.7	4.9	4.4	5.2	5.3
30	5.7	5.3	6.8	5.3	6.4	5.2	5.1	5.2	5.8	5.6	6.0	4.9	6.5	5.6	4.9	4.7	4.8	4.5	5.3	5.4
31	5.9	5.4	6.9	5.7	6.6	5.3	5.3	5.3	5.9	5.7	6.2	5.0	6.7	5.6	5.1	4.8	4.9	4.6	5.4	5.5
32	6.1	5.6	7.0	5.8	6.7	5.3	5.4	5.5	6.0	5.8	6.4	5.2	6.8	5.7	5.3	5.0	5.0	4.8	5.6	5.7
33	6.6	6.0	7.1	5.7	6.8	5.4	6.2	5.6	6.3	6.0	6.6	5.4	7.2	6.3	5.7	5.1	5.1	4.9	5.9	5.9
34	6.9	5.9	7.6	6.3	7.2	5.5	6.3	5.9	6.5	6.0	7.1	5.5	7.3	6.4	6.1	5.3	5.2	5.0	6.1	6.1
35	7.4	6.2	8.0	6.3	7.2	5.4	6.5	6.2	6.8	6.3	7.5	5.7	7.7	6.8	6.8	5.8	5.5	5.4	6.5	6.5
36	7.7	6.8	8.7	6.4	7.6	5.4	6.7	6.5	7.0	6.5	8.0	6.1	7.9	7.5	7.0	6.3	5.8	5.8	6.9	6.9
37	7.9	7.3	9.1	6.6	7.9	5.5	6.8	6.5	7.3	6.6	8.1	6.3	8.1	7.6	7.1	6.8	6.0	5.8	7.1	7.0
38	8.0	7.4	9.2	6.6	8.1	5.7	6.9	6.7	7.6	6.6	8.3	6.4	8.1	7.6	7.2	6.8	6.2	5.3	7.2	7.2
39	7.9	9.3	–	6.7	8.4	6.0	7.6	6.8	7.6	6.6	8.5	6.3	8.2	8.6	7.0	6.8	6.5	5.4	7.4	7.3
40	–	–	–	6.9	–	–	7.8	7.2	7.7	6.5	8.6	–	8.7	8.1	–	7.5	5.7	–	7.4	7.5
Weighted average	6.5	5.9	7.5	5.9	7.0	5.4	5.8	5.6	6.4	6.0	6.6	5.1	7.0	6.4	5.9	5.3	5.3	5.0	6.0	6.0
Troll harvest (millions)	2.0	1.4	1.4	1.3	1.6	1.3	1.3	1.2	2.4	2.2	1.2	1.4	2.2	0.9	1.0	0.8	0.9	1.1	0.9	1.4

Note: En dash indicates no data.

Table 9.–Southeast Alaska commercial hand troll salmon harvest in numbers of fish by species, 1977–2023.

Year[a]	Chinook[b]	Sockeye[b]	Coho[b]	Pink[b]	Chum[b]	Total
1977	33,136	1,751	155,731	116,763	4,146	311,527
1978	54,377	1,155	378,927	243,469	9,573	687,501
1979	57,722	2,448	244,805	281,684	7,926	594,585
1980	52,415	1,257	179,912	111,666	4,652	349,902
1981	34,583	2,171	181,466	173,517	2,582	394,319
1982	37584	518	260,610	132,097	1,127	431,936
1983	38,625	1,530	235,692	136,646	2,777	415,270
1984	35,357	1,982	178,414	151,278	4,894	371,925
1985	33,985	1,696	260,737	251,652	9,748	557,818
1986	30912	809	339,393	40,098	6,697	417,909
1987	30,173	2,126	183,220	134,354	3,015	352,888
1988	33,889	1,894	92,341	147,609	14,534	290,267
1989	30,306	2,441	220,262	301,413	6,576	560,998
1990	40,158	1,245	273,546	154,800	6,489	476,238
1991	41,309	1,073	239,019	72,365	3,840	357,606
1992	26,154	1,905	249,506	95,481	6,027	379,073
1993	26,726	1,669	315,590	101,754	34,449	480,188
1994	14,897	1,878	436,323	56,958	32,062	542,118
1995	13,968	1,822	145,189	63,877	21,284	246,140
1996	12,569	694	197,939	31,747	53,485	296,434
1997	15,280	1,208	104,602	35,104	20,042	176,236
1998	9,305	271	119,576	11,782	2,051	142,985
1999	6,466	286	180,119	12,214	583	199,668
2000	8,697	126	67,499	5,386	6,427	88,135
2001	9,819	301	111,472	6,267	12,480	140,339
2002	11,481	34	77,961	2,753	579	92,808
2003	13,840	135	80,893	3,627	4,800	103,295
2004	18,871	148	108,629	2,403	861	130,912
2005	16,856	340	143,278	6,203	418	167,095
2006	16,366	242	74,414	3,429	437	94,888
2007	18,258	220	91,499	4,196	1,389	115,562
2008	15,416	155	83,430	1,593	863	101,457
2009	13,638	171	104,212	5,074	5,427	128,522
2010	13,030	63	88,975	5,681	9,861	117,610
2011	18,166	205	98,968	26,025	13,500	156,864
2012	13,176	226	82,068	11,037	8,193	114,700
2013	11,746	343	174,103	23,510	28,719	238,421
2014	18,412	215	120,291	5,285	2,997	147,200
2015	12,883	353	61,738	17,397	7,823	100,194
2016	10,229	291	53,702	6,775	2,240	73,237
2017	7,302	178	102,507	4,279	5,444	119,710
2018	3,952	107	37,646	2,405	5,702	49,812
2019	4,596	265	29,266	3,642	1,664	39,433
2020	4,778	54	22,803	2,285	352	30,272
2021	5,401	83	40,098	6,692	5,142	57,416
2022	5,266	41	18,796	4,442	3,661	32,206
2023	5,331	56	28,960	2,636	1,804	38,787
1977–2022 Average	21,349	829	153,199	65,624	8,425	249,427
2013–2022 Average	8,457	193	66,095	7,671	6,374	88,790

[a] Troll harvests prior to 1980 are reported by calendar year and 1980–present are reported by season, October 1–September 30. Harvest for 1979 is January 1–September 30.

[b] Harvest for all species includes Annette Islands Reserve and terminal fisheries.

Table 10.–Southeast Alaska commercial power troll salmon harvest in numbers of fish by species, 1977–2023.

Year[a]	Chinook[b]	Sockeye[b]	Coho[b]	Pink[b]	Chum[b]	Total
1977	237,578	3,962	350,701	164,246	7,475	765,494
1978	321,050	1,649	721,975	374,164	16,620	1,435,458
1979	277,274	4,570	674,030	347,433	16,735	1,319,574
1980	251,137	1,664	517,269	155,547	7,516	933,635
1981	214,923	5,305	679,680	405,919	6,098	1,311,679
1982	205,286	1,941	1,055,261	371,209	4,512	1,638,818
1983	231,144	6,443	1,040,688	361,884	17,531	1,657,398
1984	202,768	7,676	954,952	421,726	23,166	1,607,731
1985	182,576	6,026	1,339,493	712,067	43,045	2,283,392
1986	208,048	6,075	1,788,610	141,802	44,701	2,189,591
1987	213,342	7,596	857,835	352,031	9,831	1,440,632
1988	197,197	7,446	407,886	371,781	73,728	1,058,921
1989	211,417	17,730	1,195,255	1,469,996	62,410	2,952,174
1990	248,976	7,931	1,559,058	616,874	56,328	2,488,081
1991	221,442	8,732	1,480,063	354,983	24,598	2,091,281
1992	154,465	20,949	1,680,439	578,370	79,003	2,515,572
1993	202,807	23,668	2,080,297	801,118	490,711	3,598,021
1994	171,434	19,899	3,031,276	885,825	298,313	4,400,941
1995	124,705	25,501	1,605,073	650,435	256,171	2,661,840
1996	129,857	10,330	1,708,830	781,152	352,775	2,982,486
1997	231,562	38,223	1,065,932	510,205	292,000	2,137,929
1998	183,052	6,203	1,517,135	249,322	115,591	2,071,073
1999	140,157	5,444	2,092,534	528,645	74,121	2,840,376
2000	150,101	4,341	1,057,720	181,978	471,717	1,865,794
2001	143,462	8,691	1,734,155	252,676	455,357	2,594,217
2002	313,913	1,213	1,237,101	83,646	117,093	1,753,034
2003	317,213	4,461	1,142,565	156,016	281,610	1,805,391
2004	335,789	4,862	1,808,046	54,920	170,465	2,362,166
2005	321,595	12,937	1,895,018	103,437	174,181	2,495,626
2006	265,949	7,842	1,288,569	56,894	153,108	1,759,469
2007	249,890	6,220	1,286,563	100,244	190,296	1,833,213
2008	136,653	1,098	1,209,600	26,590	59,966	1,433,907
2009	162,006	2,758	1,487,335	70,769	337,571	2,060,439
2010	182,465	1,860	1,254,161	81,959	384,834	1,905,279
2011	223,957	4,985	1,214,626	470,146	689,269	2,602,983
2012	195,898	3,005	1,119,546	157,547	468,338	1,944,334
2013	137,795	4,677	2,219,797	661,181	1,025,554	4,049,004
2014	337,158	7,104	2,127,980	70,635	197,065	2,739,942
2015	256,954	6,624	1,179,462	242,014	416,727	2,101,781
2016	266,203	6,400	1,332,932	46,584	162,693	1,814,812
2017	122,282	5,248	2,045,508	49,490	397,399	2,619,927
2018	103,613	5,079	904,803	51,180	525,034	1,589,709
2019	104,761	5,999	944,637	66,791	267,937	1,390,125
2020	165,138	1,605	727,852	41,313	79,101	1,015,009
2021	157,809	5,168	810,864	96,867	699,225	1,769,993
2022	191,529	2,173	835,578	74,955	1,042,253	2,146,488
2023	138,050	1,639	1,026,532	88,268	355,285	1,609,774
1977–2022 Average	208,790	7,811	1,310,189	321,838	242,169	2,087,710
2013–2022 Average	184,324	5,008	1,312,941	140,101	481,299	2,123,673

[a] Troll harvests prior to 1980 are reported by calendar year and 1980–present are reported by season, October 1–September 30. Harvest for 1979 is January 1–September 30.

[b] Harvest for all species includes Annette Islands Reserve and terminal fisheries.

Table 11.–Southeast Alaska Chinook salmon harvests by gear and troll harvest by fishery, 2023.

Gear/fishery	Total harvest	Alaska hatchery harvest	Alaska hatchery add-on	Terminal exclusion harvest	Total terminal exclusion/Alaska hatchery add-on	Treaty harvest
Winter troll	27,202	2,508	1,589	0	1,589	25,613
Spring troll[a]	19,563	5,721	3,769	0	3,769	15,794
Summer troll						
First period	86,068	1,644	1,041	0	1,041	85,027
Second period	8,221	147	93	0	93	8,128
LHF[b]	1,659	535	339		339	1,320
Summer total[c]	95,963	2,326	1,473	0	1,473	94,490
Total traditional troll	142,728	10,555	6,831	0	6,831	135,897
Annette Island troll	653	376	238	0	238	415
Total troll harvest	143,381	10,931	7,069	0	7,069	136,312
Purse seine	20,169	11,344	10,974	0	10,974	9,195
Drift gillnet	12,303	10,994	10,379	0	10,379	1,924
Setnet	185	0	0	0	0	185
Total net[d]	32,657	22,338	21,354	0	21,354	11,303
Sport[d]	59,129	5,157	4,000	0	4,000	55,129
All gear total	235,167	38,425	32,423	0	32,423	202,744

[a] Spring troll harvest includes all HC 12 and wild terminal exclusion harvests for year.

[b] Allocated non-competitive limited harvest fishery (LHF) was conducted from September 1–10.

[c] Total summer harvest includes confiscated harvest for year.

[d] All net gear and sport totals include the general, Annette Island, and wild terminal exclusion harvests.

Table 12.–Southeast Alaska commercial and sport Chinook salmon harvests and Alaska hatchery add-on contribution, in thousands of fish, 1965–2023.

Year	Troll[a]	Net[b]	Subtotal	Sport[c]	Total	Alaska hatchery contribution	Total less Alaska hatchery contribution
1965	309	28	337	13	350	–	–
1966	282	26	308	13	321	–	–
1967	275	26	301	13	314	–	–
1968	304	27	331	14	345	–	–
1969	290	24	314	14	328	–	–
1970	305	18	323	14	337	–	–
1971	311	23	334	15	349	–	–
1972	242	44	286	15	301	–	–
1973	308	36	344	16	360	–	–
1974	322	24	346	17	363	–	–
1975	287	13	300	17	317	–	–
1976	231	10	241	17	258	–	–
1977	272	13	285	17	302	–	–
1978	375	25	400	17	417	–	–
1979	338	28	366	17	383	–	–
1980	304	20	324	20	344	–	–
1981	249	19	268	21	289	–	–
1982	242	47	289	26	315	–	–
1983	270	20	289	22	312	–	–
1984	236	32	268	22	290	–	–
1985	216	34	250	25	275	6	268
1986	238	22	260	23	282	11	271
1987	243	16	258	24	282	17	265
1988	231	22	253	26	279	23	257
1989	236	24	260	31	291	22	270
1990	288	28	316	51	367	46	321
1991	264	35	299	60	359	61	298
1992	184	32	216	43	259	37	222
1993	227	28	255	49	304	33	271
1994	186	36	222	42	264	29	235
1995	138	48	186	50	236	59	177
1996	141	37	179	58	236	73	155
1997	246	25	271	72	343	46	287
1998	192	24	216	55	271	25	243
1999	146	33	179	72	251	48	199
2000	159	41	200	63	263	74	186
2001	153	40	193	72	266	77	187
2002	325	32	357	70	427	68	357
2003	331	39	370	69	439	57	380
2004	355	64	419	81	499	76	417
2005	338	68	407	87	493	64	389
2006	282	67	350	86	436	48	360

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Year	Troll[a]	Net[b]	Subtotal	Sport[c]	Total	Alaska hatchery contribution	Total less Alaska hatchery contribution[d]
2007	268	54	322	83	405	68	328
2008	152	43	195	49	244	66	173
2009	176	48	224	70	294	62	228
2010	196	31	226	59	285	54	231
2011	243	48	291	67	357	65	291
2012	209	40	249	46	295	51	243
2013	150	51	201	56	257	66	191
2014	356	50	406	87	493	57	435
2015	270	54	324	80	403	68	335
2016	276	42	319	68	387	35	351
2017	130	25	155	52	207	32	175
2018	108	31	138	26	165	37	128
2019	109	36	145	30	175	35	140
2020	170	30	200	35	235	30	205
2021	163	31	194	42	236	34	202
2022	197	38	235	41	276	37	239
2023	143	33	176	59	235	32	203

Note: Years 1985–2001 were updated in 2001, based on add-on tables for Alaska Board of Fisheries reports. All subsequent years also based on add-on tables. En dash indicates no data.

[a] Troll harvests prior to 1980 are reported by calendar year. From 1980 to present, harvests are by season, Oct 1–Sep 30.

[b] Purse seine harvests from 1986–present do not include Chinook less than 5 pounds reported on fish tickets.

[c] Estimates of sport catches for 1965–1976 based on 1977–1980 average catch per capita data. Sport catches for 1977–2019 are based on statewide postal harvest surveys. Sport harvest for 2023 is based on preliminary creel survey data, pending completion of statewide postal harvest surveys.

[d] Total does not include terminal exclusion harvest.

Table 13.–Southeast Alaska winter troll fishery Chinook salmon harvest, permits fished, vessel landings, harvest per landing, and Alaska hatchery percent of harvest by troll accounting year (October 1–September 30), 1987–2023.

	Early Winter (October–December)				Late Winter (January–April)				Total Winter (October–April)						
Year	Chinook	Permits	Landings	Harvest/ landing	Chinook	Permits	Landings	Harvest/ landing	Chinook	Permits	Landings	Harvest/ landing	Annual total	Winter % of annual total	Alaska hatchery % of harvest
1987	18,453	365	1,235	15	10,075	290	996	10	28,528	514	2,231	13	242,562	12	10
1988	44,765	605	2,404	19	15,684	411	1,785	9	60,449	728	4,189	14	231,364	26	14
1989	24,425	630	2,239	11	9,872	337	1,403	7	34,297	737	3,642	9	235,716	15	14
1990	17,617	314	868	20	15,513	319	1,477	11	33,130	523	2,345	14	287,939	12	13
1991	19,920	310	787	25	22,719	405	2,037	11	42,639	565	2,824	15	264,106	16	24
1992	28,277	403	1,653	17	43,554	440	2,679	16	71,831	617	4,332	17	183,759	39	10
1993	20,275	310	1,194	17	42,447	418	2,366	18	62,722	493	3,560	18	226,866	28	6
1994	35,193	264	1,106	32	21,175	303	1,499	14	56,368	383	2,605	22	186,331	30	4
1995	10,382	186	627	17	7,486	223	871	9	17,868	298	1,498	12	138,117	13	12
1996	6,008	144	427	14	3,393	159	447	8	9,401	230	874	11	141,452	7	18
1997	13,252	162	626	21	7,705	185	514	15	20,957	256	1,151	18	246,409	9	8
1998	9,810	152	534	18	23,008	247	1,372	17	32,818	306	2,001	16	192,066	17	7
1999	13,989	150	579	24	16,988	253	1,435	12	30,977	286	2,026	15	146,219	21	7
2000	17,494	172	783	22	18,561	262	1,508	12	36,055	311	2,291	16	158,717	23	9
2001	11,198	198	907	12	11,388	259	1,382	8	22,586	322	2,298	10	153,280	15	12
2002	17,152	168	754	23	12,237	248	1,351	9	29,389	300	2,116	14	325,308	9	7
2003	18,672	193	725	26	32,182	313	2,365	14	50,854	360	3,090	16	330,692	15	9
2004	12,686	267	982	13	40,200	378	2,595	15	52,886	439	3,577	15	354,658	15	12
2005	12,991	275	1,103	12	37,479	375	2,955	13	50,470	444	4,058	12	338,446	15	11
2006	13,952	293	1,418	10	34,970	416	3,102	11	48,922	469	4,520	11	282,315	17	8
2007	7,642	297	1,092	7	39,230	420	2,808	14	46,872	503	3,900	12	268,149	17	10
2008	5,169	247	950	5	16,655	409	2,347	7	21,824	467	3,297	7	151,926	14	13
2009	5,511	197	770	7	19,378	379	1,983	10	24,889	380	2,753	9	175,644	14	11
2010	8,715	221	1,061	8	33,821	416	2,677	13	42,536	459	3,738	11	195,492	22	13
2011	12,867	257	1,339	10	37,959	393	2,437	16	50,826	464	3,776	13	242,123	21	7
2012	10,683	315	1,246	9	37,217	408	2,670	14	47,900	507	3,916	12	209,366	23	13
2013	8,188	248	1,070	8	18,424	376	2,255	8	26,612	442	3,325	8	148,584	18	15
2014	14,271	271	1,320	11	42,267	388	2,603	16	56,538	464	3,923	14	355,570	16	6
2015	24,138	278	1,346	18	26,535	320	2,172	12	50,673	407	3,518	14	269,862	19	5
2016	29,363	360	1,910	15	22,928	309	2,050	11	52,291	429	3,960	13	276,432	19	5
2017	6,573	244	994	7	37,316	380	2,643	14	43,889	435	3,637	12	129,596	34	7
2018	7,398	258	1,032	7	4,569	200	782	6	11,967	329	1,814	7	107,565	11	6
2019	5,907	188	760	8	6,459	187	922	7	12,366	263	1,682	7	109,364	11	13
2020	8,370	234	1,019	8	7,440	190	891	8	15,810	309	1,910	8	169,916	9	7
2021	6,312	202	790	8	8,760	174	839	10	15,072	268	1,629	9	163,068	9	11
2022	6,161	149	578	11	22,132	250	1,385	16	28,293	299	1,963	14	196,795	14	8
2023	4,598	120	463	10	22,604	186	1,222	18	27,202	232	1,685	16	143,352	19	9
2018–2022 Avg	6,830	206	836	8	9,872	200	964	10	16,702	294	1,800	9	149,342	11	9
2013–2022 Avg	11,668	243	1,082	10	19,683	277	1,654	11	31,351	365	2,736	11	192,680	16	98

Note: Data include Annette Islands Reserve troll harvest.

Table 14.–Spring troll and terminal harvest area (THA) fisheries number of Chinook salmon harvested, and days and permits fished by statistical week, 2023.

Stat area	Fishery name	Stat week	Days	Permits	Chinook
101-45	Mountain Point	23	3	19	200
		24	6	27	740
		25	7	28	911
		26	6	21	923
	Mountain Point total		22	41	2,774
101-46	Rock Point	23	3	7	65
		24	6	3	66
		25	7	9	131
		26	6	*	*
	Rock Point total		22	15	*
101-48	Carroll Inlet THA	22	3	*	*
		23	7	8	47
		24	7	0	0
		25	7	*	*
		26	6	0	0
	Carroll Inlet THA Total		30	9	56
101-95	Neets Bay THA	24	3	0	0
		25	7	*	*
		26	6	0	0
	Neets Bay THA Total		16	*	*
103-50	Bucareli Bay	20	2	10	30
		21	2	13	54
		22	3	15	63
		23	3	16	162
		24	4	14	94
		25	5	11	103
		26	5	5	33
	Bucareli Bay total		24	36	539
103-60	Trocadero Bay	20	2	11	65
		21	2	10	79
		22	2	13	102
		23	2	15	87
		24	3	15	148
		25	4	12	165
		26	4	3	13
	Trocadero Bay total		19	29	659
103-63	Port Saint Nicholas	20	5	22	89
		21	7	15	76
		22	4	6	28
	Port Saint Nicholas total		16	26	193
103-63	Port Saint Nicholas THA	22	3	0	0
		23	7	10	127
		24	7	8	117
		25	7	13	184
		26	6	3	17
	Port Saint Nicholas THA Total		30	18	445

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Stat area	Fishery name	Stat week	Days	Permits	Chinook
103-70	San Alberto Bay	20	2	20	113
		21	2	18	156
		22	2	22	203
		23	2	24	260
		24	2	16	108
		25	3	12	94
		26	4	4	50
	San Alberto Bay total		17	33	984
107-35	Anita Bay THA	22	3	6	47
		23	7	5	61
		24	7	3	31
		25	7	*	*
		26	6	*	*
	Anita Bay THA Total		30	9	166
109-40	Gunnuk Creek THA Total		30	*	*
112-22	Hidden Falls THA Total		30	0	0
113-01	Western Channel	22	1	7	29
		23	1	8	85
		24	2	19	388
		25	3	24	377
		26	3	8	70
	Western Channel total		10	40	949
113-30	Redoubt Bay	18	2	3	10
		19	2	5	58
		20	2	14	82
		21	2	12	214
		22	3	23	366
		23	3	31	689
		24	3	26	647
		25	3	27	631
	Redoubt Bay total		20	59	2,697
113-31	Goddard	22	1	3	34
		23	1	12	160
		24	2	14	262
		25	3	21	491
		26	3	4	16
	Goddard total		10	34	963
113-32	West Crawfish Inlet	22	2	*	*
		23	2	0	0
		24	3	*	*
		25	3	0	0
		26	3	0	0
	West Crawfish Inlet Total		13	4	19
113-33	Crawfish Inlet THA	22	3	4	48
		23	7	8	288
		24	7	9	249
		25	7	5	74
		26	6	0	0
	Crawfish Inlet THA Total		30	17	659

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Stat area	Fishery name	Stat week	Days	Permits	Chinook
113-35	Silver Bay THA	22	3	0	0
		23	7	*	*
		24	7	5	92
		25	7	4	39
		26	6	5	32
	Silver Bay THA Total		30	12	167
	Deep Inlet THA	22	3	*	*
		23	7	0	0
		24	7	3	33
		25	1	5	90
	Deep Inlet THA Total		18	10	127
	Sitka Sound	18	5	18	122
		19	5	16	211
		20	5	27	384
		21	5	31	316
		22	5	37	439
		23	5	33	407
		24	5	57	1,174
		25	6	72	1,388
		26	6	54	954
	Sitka Sound Total		47	119	5,395
113-62	Salisbury Sound	18	2	0	0
		19	3	4	34
		20	3	4	69
		21	3	11	130
		22	3	7	113
		23	3	14	199
		24	3	12	287
		25	4	9	65
		26	4	6	153
	Salisbury Sound Total		28	33	1,250
	Yakutat Bay	18	1	5	29
		19	1	10	68
		20	1	13	67
		21	1	12	65
		22	1	10	48
		23	1	7	42
		24	1	10	25
		25	1	5	25
		26	1	6	40
	Yakutat Bay Total		9	19	409
	Spring fishery total			235	17,098
	Terminal Area total			73	1,755
	Spring season total			241	18,853

Note: * denotes confidential or no data. Totals given may or may not include confidential data from individual weeks. Totals do not include Annette Island harvest or summer terminal harvest or effort.

Table 15.–Spring troll and terminal harvest area fisheries annual number of Chinook salmon harvested, effort, and Alaska hatchery contributions, 1986–2023.

Year	Non-terminal area spring harvest	Alaska hatchery harvest	Alaska hatchery %	Number of non-terminal areas open	Terminal area harvest[a]	Number of terminal areas open[a]	Total harvest	Total Alaska hatchery %	Total permits fished[b]
1986	776	220	31	3	0	0	776	28	70
1987	4,488	1,545	34	7	0	0	4,488	34	103
1988	8,505	2,840	34	9	100	2	8,605	34	382
1989	2,366	690	39	11	913	4	3,279	49	161
1990	7,052	4,323	60	9	16	2	7,068	61	258
1991	13,984	6,205	44	10	5,863	1	19,847	61	559
1992	11,229	5,335	50	11	4,118	2	15,347	62	454
1993	15,826	6,235	41	12	2,853	3	18,679	49	443
1994	11,269	4,949	44	12	100	4	11,369	44	283
1995	21,750	13,909	64	15	1,333	4	23,083	66	377
1996	30,963	15,532	51	16	16,416	5	47,379	67	461
1997	32,791	14,326	41	18	9,931	6	42,722	57	476
1998	19,195	5,138	26	21	1,313	4	20,508	31	361
1999	18,351	8,411	48	21	2,367	5	20,718	52	339
2000	20,990	10,799	53	26	7,966	7	28,956	65	392
2001	28,250	15,349	54	24	7,081	5	35,331	63	435
2002	37,610	18,131	48	30	6,040	4	43,650	55	433
2003	35,452	12,331	35	26	3,840	5	39,292	41	382
2004	55,186	20,313	37	31	1,610	5	56,796	39	445
2005	58,421	18,182	31	32	2,280	5	60,701	34	498
2006	36,918	9,656	26	25	1,018	6	37,936	28	511
2007	48,476	18,320	38	23	1,310	5	49,786	39	539
2008	36,638	18,307	50	24	4,494	7	41,132	55	591
2009	32,581	12,284	38	27	278	7	32,859	38	557
2010	28,564	11,010	39	27	1,221	8	29,785	41	546
2011	38,936	15,586	40	28	2,144	8	41,080	43	592
2012	24,771	10,569	43	33	794	7	25,565	44	553
2013	37,308	14,419	39	32	979	8	38,287	40	590
2014	42,548	10,670	25	34	1,260	9	43,808	27	585
2015	53,720	17,870	33	34	779	8	54,499	34	609
2016	42,473	9,826	23	34	322	9	42,795	24	585
2017	17,386	2,981	17	31	863	8	18,249	21	436
2018	6,962	3,455	50	8	1,332	11	8,294	58	306
2019	10,369	4,147	40	10	1,943	11	12,312	49	296
2020	12,136	3,038	25	11	1,464	11	13,600	33	288
2021	14,451	4,576	32	11	2,086	10	16,537	40	293
2022	13,583	4,410	32	11	2,116	11	15,699	42	263
2023	17,098	4,606	27	13	2,465	11	19,563	36	253

Note: Does not include Annette Islands Reserve harvest or hatchery access fishery harvest, which occurred in 1989–1992.

[a] Terminal harvest and areas open include troll harvest and openings from both spring and summer terminal fisheries.

[b] Total permits fished includes spring troll effort and terminal effort during spring and summer for Chinook salmon harvest only.

Table 16.–Summer troll fishery Chinook salmon harvests and harvest rates, 1985–2023.

Year	Fishing period	Days	Chinook harvest[a]	Harvest/day	Permits[b]	Abundance index[c]	AK hatchery harvest	AK hatchery percent (%)
1985	June 3–12	10	65,377	6,538	1,119	–	3,644	6
	July 1–22	22	114,372	5,199	1,334	–	2,733	2
	August 25–26	2	13,229	8,268	859	–	407	3
	Totals	34	192,978	5,743	–	1.68	6,784	4
1986	June 20–July 15	26	154,623	5,947	1,321	–	5,789	4
	August 21–26	6	31,878	5,313	1,124	–	1,346	4
	September 1–9	9	27,496	3,055	936	–	1,203	4
	Totals	41	213,997	5,219	–	1.37	8,338	4
1987	June 20–July 12	23	209,513	9,109	1,331	1.60	11,712	6
1988	July 1–12	12	162,047	13,504	1,343	1.93	8,141	5
1989	July 1–13	13	167,492	12,884	1,234	1.79	5,831	3
1990	July 1–22	22	200,090	9,095	1,311	–	13,037	7
	August 23–24	2	11,858	5,929	834	–	1,250	11
	Totals	24	211,948	8,831	–	1.78	14,287	7
1991	July 1–8	8	154,020	20,536	1,304	1.66	6,605	4
1992	July 1–4	4	65,627	18,751	1,105	–	2,268	3
	August 23	1	6,941	6,941	717	–	189	3
	Totals	5	72,568	16,126	–	1.63	2,457	3
1993	July 1–6	6	101,164	16,861	1,148	–	3,189	3
	August 21–25	5	24,865	4,973	732	–	446	2
	September 12–20	9	19,131	2,126	547	–	1,300	7
	Totals	20	145,160	7,258	–	1.92	4,935	3
1994	July 1–7	7	98,338	14,048	1,011	–	4,252	4
	August 29–September 2	5	20,224	4,045	708	–	1,100	5
	Totals	12	118,562	9,880	–	1.67	5,352	5
1995	July 1–10	10	75,889	7,589	1,001	–	8,139	11
	July 30–August 5	7	21,277	3,040	805	–	1,581	7
	Totals	17	97,166	5,716	–	0.91	9,720	10
1996	July 1–10	10	76,392	7,639	825	–	4,639	6
	August 19–20	2	8,275	4,138	418	–	203	2
	Totals	12	84,667	7,056	–	0.90	4,842	6
1997	July 1–7	7	122,490	17,499	847	–	3,532	3
	August 18–24	7	37,525	5,361	719	–	657	1
	August 30–September 5	7	22,702	3,243	504	–	118	1
	Totals	21	182,717	8,701	–	1.37	4,307	2

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Table 16.–Page 2 of 4.

Year	Fishing period	Days	Chinook harvest[a]	Harvest/day	Permits[b]	Abundance index[c]	AK hatchery harvest	AK hatchery percent (%)
1998	July 1–11	11	102,765	9,342	808	–	2,699	3
	August 20–September 30	42	35,975	857	667	–	1,090	3
	Totals	53	138,740	2,618	–	1.27	3,789	3
1999	July 1–6	6	78,126	13,021	696	–	3,007	4
	August 18–22	5	16,397	3,279	554	–	698	4
	Totals	11	94,523	8,593	–	1.12	3,705	4
2000	July 1–5	5	50,768	10,154	714	–	2,608	5
	August 11–12	2	12,423	6,212	475	–	853	7
	August 23–30	8	24,862	3,108	537	–	2,594	10
	September 12–20	9	5,712	635	207	–	792	14
	Totals	24	93,765	3,907	–	1.10	6,847	7
2001	July 1–6	6	64,854	10,809	712	–	3,700	6
	August 18–September 5	19	30,509	1,606	610	–	1,327	4
	Totals	25	95,363	3,815	–	1.29	5,027	5
2002	July 1–18	18	187,003	10,389	677	–	4,866	3
	August 12–September 2	22	65,326	2,969	517	–	1,563	2
	Totals	40	252,329	6,308	–	1.82	6,429	3
2003	July 1–August 8	39	240,573	6,169	664	2.17	7,677	3
2004	July 1–15	15	193,992	12,933	710	–	8,670	4
	August 12–15	4	50,933	12,733	598	–	1,258	2
	Totals	19	244,925	12,891	–	2.06	9,928	4
2005	July 1–17	17	151,128	8,890	782	–	7,078	5
	August 14–20	6.5	70,422	10,834	657	–	2,735	4
	September 15–20	6	5,303	884	289	–	507	10
	Totals	29.5	226,853	7,690	–	1.90	10,320	5
2006	July 1–12	12	129,810	10,818	791	–	3,331	3
	August 13–22	10	65,590	6,559	723	–	2,865	4
	Totals	22	195,400	8,882	–	1.73	6,196	3
2007	July 1–20	20	140,549	7,027	831	–	5,392	4
	August 16–21	6	30,778	5,130	691	–	888	3
	Totals	26	171,327	6,590	–	1.34	6,280	4
2008	July 1–5	5	59,913	11,983	763	–	3,451	6
	August 16–21	6	28,983	4,831	715	–	416	1
	Totals	11	88,896	8,081	–	1.01	3,867	4
2009	July 1–10	10	84,575	8,458	854	–	3,375	4
	August 17–25	9	33,012	3,668	678	–	1,848	6
	Totals	19	117,587	6,189	–	1.20	5,223	4

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Table 16.–Page 3 of 4.

Year	Fishing period	Days	Chinook harvest[a]	Harvest/day	Permits[b]	Abundance index[c]	AK hatchery harvest	AK hatchery percent (%)
2010	July 1–8	8	74,575	9,322	782	–	2,914	4
	August 15–19	5	48,455	9,691	681	–	1,443	3
	Totals	13	123,030	9,464	–	1.31	4,357	4
2011	July 1–12	12	120,916	10,076	795	–	3,333	3
	August 15–17	3	29,736	9,912	605	–	923	3
	Totals	15	150,652	10,043	–	1.62	4,256	3
2012	July 1–9	9	61,624	6,847	790	–	1,950	3
	August 11–September 8	29	73,970	2,551	783	–	3,672	5
	Totals	38	135,594	3,568	–	1.24	5,622	4
2013	July 1–6	6	84,653	14,109	714	1.63	3,573	4
2014	July 1–7	7	199,431	28,490	811	–	3,460	2
	August 14–18	5	55,653	11,131	654	–	2,227	4
	Totals	12	255,084	21,257	–	2.20	5,687	2
2015	July 1–8	8	164,640	20,580	768	1.95	4,310	3
2016	July 1–5	5	106,630	21,326	741	–	1,197	1
	August 13–September 3	22	74,240	3,375	659	–	954	1
	September 4–30 MSF[d]	27	459	17	150	–	10	
	Totals	27	181,329	6,716	–	2.06	2,161	1
2017	July 1–4	4	64,325	16,081	700	–	1,808	3
	July 5–21 MSF[d]	17	2,680	158	365	–	135	5
	Totals	4	67,005	16,751	–	1.31	1,950	3
2018	July 1–14	14	58,992	4,214	616	–	3,319	6
	August 15–19	5	27,742	5,548	565	–	1,007	4
	Totals	19	86,734	4,565	–	0.92	4,326	5
2019	July 1–5	5	58,558	11,712	592	–	1,049	2
	August 13–14	2	24,669	12,335	531	–	478	2
	September 1–10 LHF[e]	10	675	68	371	–	0	0
	Totals	17	83,902	11,853	–	1.04	1,527	2
2020	July 1–6	6	71,494	11,916	603	–	763	1
	August 15–September 8	25	68,893	2,756	571	–	2,425	4
	Totals	31	140,387	4,529	–	1.11	3,188	2

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Table 16.–Page 4 of 4.

Year	Fishing period	Days	Chinook harvest[a]	Harvest/day	Permits[b]	Abundance index[c]	AK hatchery harvest	AK hatchery percent (%)
2021	July 1–8	8	70,465	8,808	583	–	2,564	4
	August 13–September 3	22	60,814	2,764	540	–	1,937	3
	Totals	30	131,279	4,376	678	1.23	4,501	4
2022	July 1–28	28	93,336	3,333	583	–	2,279	2
	August 1–September 20	51	59,385	1,164	522	–	3,064	5
	Totals	79	152,721	1,933	656	1.16	5,343	3
2023	July 1–12	12	86,068	7,172	500	–	1,642	2
	August 11	1	8,221	8,221	306	–	135	2
	September 1–10	10	1,659	166	285	–	90	5
	Totals		95,948	4,172	561	1.15	1,867	2

Note: En dash indicates no data.

[a] Does not include experimental, terminal, or hatchery access fisheries; Annette Islands Reserve; and confiscated harvest.

[b] The number of permits fished is for vessels that landed Chinook salmon.

[c] The abundance index (AI) given for 1984–2021 is the first postseason AI and for 2022 is the preseason winter troll CPUE metric translated to the equivalent AI value.

[d] In 2016 and 2017, a mark-selective fishery (MSF) to target adipose-clipped surplus hatchery-origin- Chinook salmon was opened.

[e] In 2019 and 2023, a limited harvest fishery (LHF) was implemented, allocating 2 and 9 Chinook salmon per permit during the 10-day fisheries.

Table 17.–Coho salmon midseason closure dates and extensions, 1982–2023.

Year	Closure dates	Days closed	Extension	Area extensions and restrictions
1982	Jul 29–Aug 7	10	None	–
1983	Aug 5–14	10	None	–
1984	Aug 15–24	10	None	–
1985	Aug 15–24	10	None	–
1986	Aug 11–20	10	None	–
1987	Aug 3–12	10	None	–
1988	Aug 15–24	10	None	–
1989	Aug 14–23	10	None	–
1990	Aug 13–22	10	None	–
1991	Aug 16–24	10	None	–
1992	Aug 13–22	10	None	–
1993	Aug 13–20	8	None	–
1994	Aug 27–28	2	Sep 21–30	Districts 1–16 open with area restrictions
1995	Aug 13–22	10	Sep 21–30	Districts 1–16 open with area restrictions
1996	Aug 14–18	5	None	–
1997	Aug 8–17	10	None	–
1998	Aug 12–19	8	Sep 21–30	Districts 1–13 open with area restrictions
1999	Aug 13–17	5	Sep 21–30	Districts 1–16 open with area restrictions
2000	Aug 13–22	10	None	–
2001	Aug 13–17	5	Sep 21–30	Districts 1–16 and 183 open (all state waters)*
2002	Aug 10–11	2	Sep 21–30	Entire region open except portion of Sitka Sound*
2003	No closure	0	Sep 21–30	Entire region open*
2004	Aug 10–11	2	Sep 21–30	Entire region open*
2005	Aug 10–13	4	None	–
2006	Aug 9–12	4	–	–
	Aug 23–27	5	Sep 21–30	Districts 10–15, 181, 183 and 191 open with area restrictions
2007	Aug 11–15	5	None	–
2008	Aug 11–15	5	None	–
2009	Aug 12–16	5	Sep 21–30	Districts1–11, 181, 183, 189, 191 open; Districts 12, 13, 154 open with area restrictions
2010	Aug 11–14	4	None	–
2011	Aug 10–14	5	None	–
2012	Aug 7–10	4	Sep 21–30	Districts 1–11, 13, 16, 181, 183, 189, 191 open; Districts 12 and 14 open with area restrictions
2013	No closure	0	Sep 21–30	Entire region open*
2014	Aug 10–13	4	Sep 21–30	Entire region open*
2015	No closure	0	Sep 21–30	Districts 3–11, 13, 16, 181, 183, 189, 191 open; Districts 1, 2, 12 and 14 open with area restrictions
2016	Aug 9–12	4	Sep 21–30	Entire region open*
2017	No closure	0	Sep 21–30	Districts 103, 104, 181, 183, 189, 191, 152 open; Districts 113 and 154 open with area restrictions
2018	Aug 10–14	5	Sep 21–30	Entire region open except in Districts 1 and 2: waters south of latitude of Foggy Point are closed
2019	Aug 5–12	8	Sep 21–30	Entire region open*; Additional closure in Section 15-A by EO
2020	Aug 7–14	8	None	–
2021	Aug 8–12	5	Sep 21–30	Entire region open*; Additional closure in Section 15-A by EO
2022	Jul 29–31	3	None	–
2023	Aug 9–10	2	Sep 21–30	Entire region open*; Additional closure in Section 15-A by EO

Note: * = During these years, areas of high Chinook salmon abundance remained closed, and Yakutat area closures were in effect during coho salmon extension periods. En dash indicates no data. EO = emergency order.

Table 18.–Weekly troll chum salmon harvest and effort in Icy Straits/Homeshore/Northern Chatham Strait, Neets Bay/West Behm Canal, Sitka Sound, and Crawfish Inlet, and the regionwide totals, 2017–2023.

Icy Strait/Homeshore/Northern Chatham Strait

	2017		2018		2019		2020		2021		2022		2023	
Week	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits
23	–	–	–	–	–	–	–	–	–	–	–	–	–	–
24	18	4	404	11	*	*	–	–	–	–	–	–	*	*
25	452	10	1,178	20	5,240	20	44	3	1,856	9	354	8	3,846	8
26	367	4	2,824	18	5,333	27	*	*	1,618	13	519	6	3,987	8
27	*	*	970	17	184	5	–	–	*	–	564	4	2,906	9
28	–	–	141	4	884	8	–	–	–	–	1,636	5	1,260	3
29	–	–	103	7	379	5	–	–	–	–	780	6	*	*
Total	970	15	5,620	44	12,031	38	57	3	3,562	19	3,889	19	12,253	17

Neets Bay THA/West Behm Canal

	2017		2018		2019		2020		2021		2022		2023	
Week	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits
26	7,960	19	255	8	–	–	–	–	*	*	–	–	1,455	6
27	65,511	52	9,562	65	194	7	*	*	–	–	–	–	24,787	28
28	85,600	82	30,564	87	3,013	36	666	3	*	*	5,652	12	46,652	47
29	47,724	81	33,234	98	1,785	28	*	*	*	*	2,583	13	27,801	45
30	699	7	36,213	73	714	10	–	–	817	6	3,249	9	22,298	25
31	9,944	18	12,056	50	188	4	–	–	*	*	1,950	3	23,943	21
32	8,535	22	377	11	–	–	–	–	–	–	*	*	1,789	8
33	337	8	175	7	–	–	–	–	–	–	*	*	*	–
34	465	6	172	7	–	–	–	–	–	–	*	*	*	–
35	2,614	21	139	6	*	*	–	–	–	–	*	*	*	–
36	2,950	19	732	11	–	–	–	–	–	–	*	*	*	–
37	3,447	13	653	12	–	–	–	–	–	–	–	–	–	–
38	*	*	33	10	–	–	–	–	–	–	–	–	–	–
Total	235,786	95	124,183	120	5,929	45	1,004	5	1,704	9	23,677	19	148,725	55

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Sitka Sound/Deep Inlet THA

	2017		2018		2019		2020		2021		2022		2023	
Week	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits
25	–	–	–	–	–	–	–	–	–	–	–	–	*	*
26	–	–	–	–	–	–	–	–	–	–	–	–	*	*
27	–	–	–	–	–	–	–	–	–	–	–	–	1,018	8
28	–	–	–	–	–	–	–	–	–	–	–	–	1,222	8
29	–	–	–	–	*	*	*	*	–	–	–	–	2,686	13
30	778	5	–	–	175	5	*	*	–	–	20,427	54	18,795	41
31	30,497	55	324	5	443	11	1,974	6	4,806	10	72,184	125	69,338	77
32	83,547	100	31,719	83	18,947	80	384	6	88,817	81	163,600	165	9,995	31
33	28,402	78	42,027	88	8,671	32	230	3	82,123	91	314,858	219	1,999	5
34	7,326	44	24,786	65	3,403	29	977	8	227,626	117	131,414	204	13,508	6
35	4,334	25	20,191	60	572	7	2,510	10	94,326	104	100,907	146	957	3
36	147	3	2,203	25	*	*	–	*	3,679	33	27,226	62	–	–
Total	155,031	115	121,464	138	32,331	100	6,427	23	501,384	159	830,909	255	119,585	91

West Crawfish/Crawfish Inlet THA

	2017		2018		2019		2020		2021		2022		2023	
Week	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits
30	–	–	–	–	–	–	–	–	–	–	547	6	*	*
31	–	–	17,953	55	12,136	23	2,104	5	9,130	21	7,154	15	14,617	17
32	–	–	868	5	18,173	50	16,894	35	4,377	23	18,402	42	21,842	24
33	–	–	34,688	44	76,213	97	20,767	41	53,518	42	48,716	62	14,524	11
34	–	–	85,635	95	32,951	87	13,953	21	70,282	45	34,015	60	5,123	6
35	–	–	70,715	68	19,532	32	9,981	12	33,114	44	34,895	43	–	–
36	–	–	28,629	54	26,573	30	938	3	–	–	5,240	15	–	–
37	–	–	13,081	18	2,928	14	–	–	–	–	*	*	–	–
38	–	–	3,210	4	–	–	–	–	–	–	*	*	–	–
39	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total	–	–	254,779	134	188,506	125	64,637	51	170,421	77	149,605	118	57,230	35

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Table 18.–Page 3 of 3.

Region														
	2017		2018		2019		2020		2021		2022		2023	
Week	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits
23	–	–	–	–	–	–	–	–	–	–	–	–	–	–
24	19	5	230	6	*	*	–	–	–	–	–	–	158	4
25	457	12	1,190	22	5,240	20	47	5	1,892	17	354	8	3,879	12
26	8,323	23	2,599	24	5,334	28	16	3	1,637	20	523	9	5,496	21
27	65,516	56	13,073	95	578	21	*	*	229	8	990	9	29,185	51
28	85,676	84	34,470	100	4,420	49	677	5	145	6	7,542	30	49,737	65
29	47,899	84	34,401	101	2,783	39	323	5	677	10	4,884	28	34,347	67
30	1,748	15	39,192	75	2,372	24	*	*	1,450	11	30,266	82	44,014	70
31	41,504	74	31,777	107	13,559	38	4,239	12	15,705	30	82,045	142	108,627	107
32	93,468	121	33,898	96	37,709	101	17,340	38	94,926	89	189,466	194	33,626	60
33	28,812	86	79,245	101	84,971	111	20,997	43	135,800	102	369,237	246	16,523	14
34	7,844	50	114,055	137	36,354	101	15,036	27	299,223	142	165,816	229	18,633	11
35	7,081	46	92,385	117	20,183	40	12,495	22	128,657	122	136,015	162	961	4
36	3,097	22	32,411	77	26,661	33	949	4	3,689	33	32,508	73	–	–
37	3,456	14	13,940	24	2,952	16	*	*	–	–	390	8	–	–
38	*	*	3,290	11	*	*	–	–	–	–	*	*	–	–
Total	394,900	191	526,171	267	243,142	208	72,598	75	684,033	209	1,020,567	316	345,186	164

Note: Numbers for harvest and permits fished are based on vessels that targeted chum salmon. En dashes (–) = no effort or harvest; * = confidential data.

Table 19.–Total Chinook salmon harvest and Alaska hatchery harvest by gear, 1987–2023.

	Purse seine		Drift gillnet		Set gillnet		Troll		Sport		All gear	
Year	Total	AK Hatchery	Total	AK Hatchery	Total	AK Hatchery	Total	AK Hatchery	Total	AK Hatchery	Total	AK Hatchery
1987	4,503	162	8,957	1,846	2,072	4	242,562	16,195	24,324	5,336	282,418	23,544
1988	11,142	320	9,658	4,474	894	0	231,364	19,503	26,160	5,112	279,312	29,409
1989	13,171	2,298	9,948	4,106	798	0	235,716	16,366	31,071	5,859	291,032	28,685
1990	11,389	2,529	15,217	9,240	663	3	287,939	29,834	51,218	11,546	366,869	53,646
1991	13,793	2,618	19,254	11,849	1,747	40	264,106	37,498	60,492	18,022	359,462	70,055
1992	18,339	1,224	11,740	7,484	2,025	10	183,759	25,738	42,892	9,464	258,791	43,934
1993	8,364	1,751	18,280	11,378	1,311	0	226,866	18,226	49,246	8,321	304,103	39,677
1994	14,839	3,201	16,918	11,767	3,897	2	186,331	12,389	42,365	9,083	264,350	36,442
1995	25,117	17,319	13,464	7,504	9,374	0	138,117	27,174	49,667	16,524	235,739	68,520
1996	22,225	20,692	10,219	6,245	4,854	2,854	141,452	38,365	57,509	20,586	236,259	88,742
1997	10,338	6,223	11,467	6,759	3,264	1,262	246,409	28,795	71,524	20,275	343,002	63,314
1998	14,503	6,054	6,207	3,903	2,804	804	192,066	12,397	55,013	10,549	270,593	33,706
1999	17,900	11,933	9,712	5,255	5,108	3,108	146,219	16,935	72,081	22,169	251,020	59,401
2000	22,905	18,401	16,035	12,323	2,460	460	158,717	28,963	63,173	24,510	263,290	84,657
2001	20,439	14,991	17,091	11,968	2,633	631	153,280	28,480	72,291	30,862	265,734	86,933
2002	17,695	11,717	11,484	6,508	2,510	510	325,308	31,647	69,537	27,598	426,534	77,979
2003	24,134	6,911	11,398	8,080	3,842	1,566	330,692	27,614	69,370	23,547	439,436	67,718
2004	39,633	11,848	21,671	14,199	2,734	446	354,658	37,511	80,572	27,599	499,268	91,603
2005	19,867	7,233	47,620	5,469	688	0	338,451	35,678	86,575	25,178	493,202	73,558
2006	24,969	10,302	41,913	7,373	554	0	282,315	20,783	85,794	18,168	435,545	56,626
2007	27,267	11,068	25,152	12,742	1,269	0	268,146	30,409	82,849	22,822	404,683	77,041
2008	15,540	12,204	27,023	15,002	563	0	151,936	28,887	49,265	18,766	244,328	74,860
2009	29,012	16,241	19,015	9,865	411	0	175,644	20,455	69,565	24,988	293,647	71,549
2010	16,044	13,600	14,310	10,783	275	0	195,620	21,400	58,503	16,335	284,752	62,117
2011	26,404	17,700	21,294	15,799	532	0	242,569	25,207	66,575	14,325	357,374	73,032
2012	21,145	15,347	18,191	12,348	414	0	209,074	21,149	46,495	10,315	295,319	59,158
2013	23,104	17,059	27,316	22,613	900	0	149,541	17,934	56,392	15,387	257,252	72,993
2014	27,378	11,649	22,369	18,616	263	0	355,570	18,382	86,942	15,066	492,522	63,713
2015	30,274	18,582	22,982	17,925	462	0	269,862	22,110	79,759	16,822	403,339	75,439
2016	28,244	8,303	13,789	9,495	230	0	276,432	13,768	68,347	10,589	387,042	42,155
2017	10,958	8,074	13,772	10,911	367	0	129,649	8,646	52,306	10,782	207,052	38,412
2018	16,563	15,653	14,128	11,198	86	0	107,565	9,201	26,400	6,859	164,742	42,911
2019	21,367	12,506	14,419	12,774	246	0	109,364	8,841	29,700	6,600	175,096	40,721
2020	16,892	11,459	12,629	10,613	251	0	169,916	7,640	35,100	6,300	234,788	36,012
2021	17,765	10,472	12,942	11,575	276	0	163,210	11,538	41,982	6,614	236,175	40,198
2022	26,568	11,823	11,068	9,605	182	0	196,795	12,869	41,176	9,031	275,790	43,327
2023	20,169	11,344	12,303	10,994	185	0	143,381	10,931	59,129	5,157	235,167	38,425

Note: Data include terminal area and Annette Island harvests. 2023 sport harvest data are inseason estimates; final estimate pending analyses of mail-in survey data.

Table 20.–Annual troll coho salmon harvest and estimated wild and hatchery contributions, 1960–2023.

Year	Total harvest	Wild contribution	Alaska hatchery	Other hatchery	Total hatchery	Percent (%) hatchery
1960	396,211	396,211	–	–	–	–
1961	399,932	399,932	–	–	–	–
1962	643,740	643,740	–	–	–	–
1963	693,050	693,050	–	–	–	–
1964	730,766	730,766	–	–	–	–
1965	695,887	695,887	–	–	–	–
1966	528,621	528,621	–	–	–	–
1967	443,677	443,677	–	–	–	–
1968	779,500	779,500	–	–	–	–
1969	388,443	388,443	–	–	–	–
1970	267,647	267,647	–	–	–	–
1971	391,279	391,279	–	–	–	–
1972	791,941	791,941	–	–	–	–
1973	540,125	540,125	–	–	–	–
1974	845,109	845,109	–	–	–	–
1975	214,219	214,170	–	–	–	–
1976	525,270	524,762	–	–	–	–
1977	506,432	506,845	–	–	–	–
1978	1,100,902	1,100,902	–	–	–	–
1979	918,835	918,845	–	–	–	–
1980	697,181	694,019	2,881	281	3,162	<1
1981	861,146	845,007	15,920	218	16,139	2
1982	1,315,871	1,279,950	35,486	435	35,921	3
1983	1,276,380	1,223,558	51,882	940	52,822	4
1984	1,133,366	1,061,739	69,480	2,147	71,627	6
1985	1,600,230	1,493,476	106,575	179	106,754	7
1986	2,128,003	1,849,726	269,396	8,881	278,277	13
1987	1,041,055	949,671	87,882	3,502	91,384	9
1988	500,147	472,404	25,795	1,948	27,743	6
1989	1,415,517	1,293,852	116,906	4,759	121,665	9
1990	1,832,604	1,542,035	278,998	11,571	290,569	16
1991	1,719,082	1,334,396	368,820	15,866	384,686	22
1992	1,929,945	1,509,108	403,201	17,636	420,837	22
1993	2,395,887	1,999,832	382,686	13,369	396,055	17
1994	3,467,599	3,028,989	425,708	12,902	438,610	13
1995	1,750,262	1,499,159	243,730	7,373	251,103	14
1996	1,906,769	1,452,321	445,647	8,801	454,448	24
1997	1,170,534	920,058	248,014	2,462	250,476	21
1998	1,636,711	1,307,090	322,047	7,574	329,621	20
1999	2,272,653	1,758,554	500,620	13,479	514,099	23
2000	1,125,219	870,546	247,923	6,750	254,673	23

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Table 20.–Page 2 of 2.

Year	Total harvest	Wild contribution	Alaska hatchery	Other hatchery	Total hatchery	Percent (%) hatchery
2001	1,845,627	1,474,116	367,856	3,655	371,511	20
2002	1,315,062	978,938	335,229	895	336,124	26
2003	1,223,458	936,967	283,723	2,767	286,491	23
2004	1,916,675	1,604,313	307,638	4,723	312,362	16
2005	2,038,296	1,703,996	329,687	4,613	334,300	16
2006	1,362,983	1,146,391	215,729	863	216,592	16
2007	1,378,062	1,073,055	304,144	863	305,007	22
2008	1,293,030	1,022,288	269,778	964	270,742	21
2009	1,591,547	1,344,065	246,040	1,442	247,482	16
2010	1,343,032	1,058,027	284,112	892	285,005	21
2011	1,314,210	970,294	343,360	557	343,916	26
2012	1,201,724	908,500	292,237	987	293,224	24
2013	2,393,790	1,660,756	731,971	1,063	733,034	31
2014	2,248,371	1,628,602	618,092	1,677	619,769	28
2015	1,241,100	872,858	367,951	291	368,242	30
2016	1,387,590	1,048,766	336,120	2,102	337,868	24
2017	2,151,782	1,763,912	386,974	897	387,870	18
2018	942,622	628,452	313,797	374	314,170	33
2019	973,903	660,271	313,140	492	313,632	32
2020	750,655	564,679	184,829	1,146	185,976	25
2021	850,962	620,877	229,461	624	230,085	27
2022	854,374	600,881	252,852	641	253,493	30
2023	1,055,492	770,844	284,289	359	284,648	27
Average 1992–2001	1,950,121	1,581,977	358,743	9,400	368,143	20
Average 2002–2022	1,417,773	1,085,566	330,803	1,375	332,161	24

Note: Data includes harvest from Annette Islands Reserve and hatchery terminal harvest areas. En dash indicates no data.

Table 21.–Southeast Alaska and Transboundary Rivers wild Chinook salmon escapement estimates, 1975–2023.

	Southeast Alaska stocks								Transboundary Rivers stocks		
Year	Situk River	Chilkat River	King Salmon River	Andrew Creek	Unuk River	Chickamin River[a]	Blossom River[a]	Keta River[a]	Alsek River	Taku River	Stikine River
1975	–	–	64	507	–	1,758	565	611	–	12,920	7,571
1976	1,421	–	99	404	–	746	263	253	5,282	24,582	5,723
1977	1,732	–	204	456	4,706	1,724	433	692	12,706	29,497	11,445
1978	808	–	87	388	5,344	1,463	553	1,180	12,034	17,124	6,835
1979	1,284	–	134	327	2,783	1,135	209	1,282	17,354	21,617	12,610
1980	905	–	106	282	4,909	2,114	344	578	10,718	39,239	30,573
1981	702	–	90	536	3,532	1,824	615	990	8,587	49,559	36,057
1982	434	–	229	672	6,528	2,712	1,335	2,270	9,584	23,848	40,488
1983	592	–	245	366	5,436	2,845	2,279	2,474	10,344	9,794	6,424
1984	1,726	–	265	389	8,876	5,235	1,966	1,836	7,213	20,778	13,995
1985	1,521	–	175	624	5,721	4,541	2,744	1,878	6,087	35,916	16,037
1986	2,067	–	255	1,381	10,273	8,289	4,946	2,077	11,069	38,111	14,889
1987	1,379	–	196	1,537	9,533	4,631	5,221	2,312	11,276	28,935	24,632
1988	868	–	208	1,100	8,437	3,734	1,486	1,731	8,852	44,524	37,554
1989	637	–	240	1,034	5,552	4,437	1,331	3,477	10,178	40,329	24,282
1990	628	–	179	1,295	2,856	2,679	995	1,824	8,775	52,142	22,619
1991	889	5,882	134	780	3,165	2,313	925	819	11,667	51,645	23,206
1992	1,595	5,277	99	1,517	4,223	1,644	581	653	5,773	55,889	34,129
1993	952	4,463	266	2,067	5,160	1,848	1,173	1,090	13,917	66,125	58,962
1994	1,271	6,792	213	1,115	3,435	1,843	623	921	15,970	48,368	33,094
1995	4,330	3,768	147	669	3,730	1,691	840	527	24,772	33,805	16,784
1996	1,800	4,902	292	653	5,639	1,587	851	894	15,922	79,019	28,949
1997	1,878	8,089	362	571	2,970	1,292	511	740	12,494	114,938	26,996
1998	924	3,656	134	950	4,132	1,857	364	542	6,833	31,039	25,968
1999	1,461	2,258	304	1,180	3,914	2,337	820	831	14,615	16,786	19,947
2000	1,785	2,029	138	1,346	5,872	3,805	894	903	7,905	34,997	27,531
2001	562	4,514	149	2,055	10,541	5,177	789	1,032	6,705	46,644	63,523
2002	1,000	4,034	155	1,708	6,988	5,007	867	1,237	5,569	55,044	50,875
2003	2,163	5,631	119	1,160	5,546	4,579	786	969	5,904	36,435	46,824
2004	756	3,406	135	2,991	3,963	4,268	1,289	1,132	7,083	75,032	48,900

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Table 21.–Page 2 of 2.

	Southeast Alaska stocks								Transboundary Rivers stocks		
Year	Situk River	Chilkat River	King Salmon River	Andrew Creek	Unuk River	Chickamin River	Blossom River	Keta River	Alsek River	Taku River	Stikine River
2005	610	3,361	143	1,979	4,742	4,257	1,722	1,496	4,390	38,599	39,833
2006	747	3,003	150	2,124	5,645	6,318	1,312	2,248	2,321	42,191	24,405
2007	677	1,435	181	1,736	5,668	4,242	522	936	2,827	14,749	14,560
2008	413	2,881	120	981	3,104	5,277	995	1,093	1,885	26,645	18,352
2009	902	4,406	109	628	3,157	2,902	476	659	6,239	22,761	12,972
2010	197	1,797	158	1,205	3,835	5,491	1,405	1,430	9,526	28,769	15,148
2011	240	2,674	192	936	3,195	4,052	569	671	6,850	19,672	14,511
2012	322	1,723	155	587	956	2,109	793	725	3,027	16,713	22,332
2013	912	1,719	94	920	1,135	2,223	987	1,484	4,992	18,002	16,784
2014	475	1,534	68	1,261	1,691	3,097	840	1,321	3,357	23,532	24,374
2015	174	2,456	50	796	2,623	2,760	642	915	5,697	23,567	21,597
2016	329	1,386	149	402	1,463	964	522	1,342	2,514	9,177	10,554
2017	1,187	1,173	85	349	1,203	722	341	903	1,741	8,214	7,335
2018	420	873	30	482	1,971	2,052	1,087	1,662	4,348	7,271	8,603
2019	623	2,028	27	698	3,115	1,610	557	1,041	6,327	11,558	13,817
2020	1,197	3,180	100	470	1,135	2,280	515	668	5,308	15,593	9,753
2021	1,064	2,038	134	530	2,667	2,404	170	707	5,616	11,341	8,376
2022	890	1,582	123	821	1,304	2,522	395	589	3,365	12,722	9,090
2023	144	2,234	68	386	2,072	3,719	670	759	4,329	14,755	12,864
Lower	500	1,750	120	650	1,800	2,100	500	550	3,500	19,000	14,000
Upper	1,000	3,500	240	1,500	3,800	4,300	1,400	1,300	5,300	36,000	28,000

Note: Preliminary estimates, pending final report publication (for past 5 years). Spawning escapement goals are for large (≥660 mm mid eye to tail fork [METF] length, or fish age-1.3 and older) fish, except for the Alsek River which is germane to fish age-1.2 and older and can include fish <660 mm METF length. En dash indicates no data.

Table 22.–Escapement goal performance for coho salmon indicator streams in Southeast Alaska (SEAK), 1995–2023.

	Southeast Alaska									Yakutat			All-gear commercial harvest (millions)
Year	Auke Creek	Berners River	Ford Arm Lake	Hugh Smith Lake	Chilkat River	Montana Creek	Petersen Creek	Sitka index[a]	Ketchikan index[b]	Tawah Creek	Situk River	Tsiu/Tsivat River	
1995	I	I	I	E	E	I	E	E	E	I	I	I	3.13
1996	E	I	I	I	I	I	E	E	E	I	I	I	2.99
1997	E	E	E	I	I	I	I	E	I	I	I	I	1.84
1998	E	I	E	I	I	I	I	E	I	NA	NA	NA	2.75
1999	E	E	E	E	E	I	E	I	I	NA	NA	NA	3.28
2000	E	E	I	I	E	I	I	E	E	NA	NA	I	1.69
2001	E	E	I	E	E	I	I	E	E	NA	NA	NA	2.95
2002	E	E	E	E	E	E	I	E	E	E	E	E	2.49
2003	E	E	E	E	E	I	I	E	E	E	I	NA	2.17
2004	I	E	E	I	E	U	E	E	E	I	E	NA	2.86
2005	I	I	E	E	I	U	I	E	E	U	U	I	2.77
2006	E	I	E	I	E	I	E	E	I	I	I	I	1.84
2007	I	U	I	E	U	U	I	E	I	I	I	I	1.91
2008	E	I	E	E	I	I	E	E	E	NA	NA	I	2.04
2009	I	I	I	E	I	I	I	E	I	E	I	I	2.38
2010	I	I	I	E	E	I	E	E	I	E	E	I	2.29
2011	E	I	I	E	I	I	I	E	I	U	I	I	2.08
2012	E	I	I	E	I	U	I	E	E	I	U	I	1.88
2013	E	I	I	E	I	U	I	E	E	I	E	E	3.60
2014	E	E	E	E	E	I	E	E	E	I	I	I	3.40
2015	E	E	E	I	I	E	I	E	E	NA	I	I	1.90
2016	I	I	NA	I	U	I	U	E	E	U	I	E	2.10
2017	I	I	NA	I	I	I	U	E	E	I	I	E	2.80
2018	U	U	NA	I	I	I	I	E	E	I	I	E	1.47
2019	I	E	NA	I	I	U	NA	E	I	I	E	NA	1.54
2020	U	U	NA	I	U	I	NA	I	E	NA	NA	E	1.04
2021	I	I	NA	I	I	U	U	E	E	NA	NA	NA	1.44
2022	I	I	NA	I	I	NA	U	E	E	NA	NA	NA	1.22
2023	E	I	NA	E	E	NA	I	E	E	NA	E	NA	1.56

Note: E = exceeded goal, U = under goal, I = within goal, NA = no escapement estimates available.

[a] The Sitka survey index is the sum of peak survey counts on 5 streams.

[b] The Ketchikan survey index is the sum of peak aerial survey counts on 14 streams.

Table 23.–Escapement estimates for 4 Southeast Alaska coho salmon indicator stocks, 1980–2023.

Year	Auke Creek	Berners River	Ford Arm Lake	Hugh Smith Lake
1980	698	N/A	N/A	N/A
1981	646	N/A	N/A	N/A
1982	447	7,505	2,655	2,144
1983	694	9,840	1,931	1,487
1984	651	2,825	N/A	1,407
1985	942	6,169	2,324	903
1986	454	1,752	1,552	1,782
1987	668	3,260	1,694	1,117
1988	756	2,724	3,119	513
1989	502	7,509	2,176	433
1990	697	11,050	2,192	870
1991	808	11,530	2,761	1,836
1992	1,020	15,300	3,866	1,426
1993	859	15,670	4,202	832
1994	1,437	15,920	3,227	1,753
1995	460	4,945	2,446	1,781
1996	515	6,050	2,500	950
1997	609	10,050	4,718	732
1998	862	6,802	7,049	983
1999	845	9,920	3,800	1,246
2000	683	10,650	2,304	600
2001	842	19,290	2,209	1,580
2002	1,112	27,700	7,109	3,291
2003	585	10,110	6,789	1,510
2004	416	14,450	3,539	840
2005	450	5,220	4,257	1,732
2006	582	5,470	4,737	891
2007	352	3,915	2,567	1,244
2008	600	6,870	5,173	1,741
2009	360	4,230	2,181	2,281
2010	417	7,520	1,610	2,878
2011	517	6,050	1,908	2,137
2012	837	5,480	2,282	1,908
2013	736	6,280	1,573	3,048
2014	1,533	15,480	3,025	4,110
2015	577	9,940	3,281	944
2016	204	6,733	N/A	979
2017	283	7,040	N/A	1,266
2018	146	3,550	N/A	619
2019	345	9,405	N/A	1,239
2020	173	3,296	N/A	634
2021	322	5,933	N/A	903
2022	449	4,472	N/A	892
2023	759	8,039	N/A	2,207
1980–2022 Average	630	8,485	3,235	1,450
Escapement goal range:	200–500	3,600–8,100	1,300–2,900	500–1,600

Table 24.–Northern Inside area coho salmon escapements, 1983–2023.

Year	Auke Creek (weir)	Montana Creek	Peterson Creek	Total roadside index	Berners River	Chilkat River	Taku River[a]
1983	694	636	219	1,549	9,840	–	–
1984	651	581	189	1,421	2,825	–	–
1985	942	810	276	2,028	6,169	–	–
1986	454	60	363	877	1,752	–	–
1987	668	314	204	1,186	3,260	37,432	55,457
1988	756	164	542	1,462	2,724	29,495	39,450
1989	502	566	242	1,310	7,509	48,833	56,808
1990	697	1,711	324	2,732	11,050	79,807	72,196
1991	808	1,415	410	2,633	11,530	84,517	127,484
1992	1,020	2,512	403	3,935	15,300	77,588	83,729
1993	859	1,352	112	2,323	15,670	58,217	119,330
1994	1,437	1,829	318	3,584	15,920	194,425	96,343
1995	460	600	277	1,337	4,945	56,737	55,710
1996	511	798	263	1,572	6,050	37,331	44,635
1997	609	1,018	186	1,813	10,050	43,519	32,345
1998	862	1,160	102	2,124	6,802	50,758	61,382
1999	845	1,000	272	2,117	9,920	57,140	60,768
2000	683	961	202	1,846	10,650	84,843	64,700
2001	842	1,119	106	2,067	19,290	107,697	104,394
2002	1,112	2,448	195	3,755	27,700	204,925	219,360
2003	585	808	203	1,596	10,110	133,109	183,112
2004	416	364	284	1,064	14,450	67,053	129,327
2005	450	351	139	940	5,220	34,575	135,558
2006	582	1,110	439	2,131	5,470	79,050	122,384
2007	352	324	226	902	3,915	24,770	74,246
2008	600	405	660	1,665	6,870	56,369	95,226
2009	360	698	123	1,181	4,230	47,911	103,950
2010	417	630	467	1,514	7,520	84,909	126,830
2011	517	709	138	1,364	6,050	61,099	70,871
2012	837	394	190	1,421	5,480	36,961	70,775
2013	736	367	126	1,229	6,280	51,324	68,117
2014	1,533	911	284	2,728	15,480	130,200	124,171
2015	577	1,204	202	1,983	9,940	47,930	60,178
2016	204	746	52	1,002	6,733	26,280	87,704
2017	283	634	20	937	7,040	34,742	57,868
2018	146	1,160	110	1,416	3,550	66,085	51,173
2019	345	203	–	–	9,405	34,779	82,759
2020	173	495	65	733	3,296	29,349	52,126
2021	322	392	15	729	5,933	55,220	75,526
2022	449	–	65	–	4,472	43,519	65,709
2023	759	–	192	–	8,039	70,881	89,013
1983–2022 Average	632	845	231	1,742	8,510	66,625	86,992
Goals: Point	340	–	–	–	–	50,000	–
Lower	200	400	100	–	3,600	30,000	50,000
Upper	500	1,200	250	–	8,100	70,000	90,000

Note: En dash indicates no data.

[a] The listed Taku River lower bound is the inriver run threshold of 38,000 fish specified in the Pacific Salmon Treaty minus an allowance of 3,000 fish caught in inriver fisheries.

Table 25.–Sitka area coho salmon escapement index, 1982–2023.

Year	Starrigavan Creek	Sinitsin Creek	St. John's Creek	Nakwasina River	Eagle River	Total index[a]	Ford Arm Lake (weir)
1982	317	46	**116**	**580**	**486**	1,545	2,655
1983	45	31	20	217	**144**	457	1,931
1984	385	160	154	715	**649**	2,063	**4,765**
1985	193	144	109	408	**392**	1,246	2,324
1986	57	**72**	**53**	275	245	702	1,552
1987	36	21	**22**	47	167	293	1,694
1988	45	56	71	104	**127**	403	3,119
1989	101	76	89	129	**181**	576	2,176
1990	39	80	38	195	214	566	2,192
1991	142	186	107	621	454	1,510	2,761
1992	241	265	110	654	629	1,899	3,866
1993	256	213	90	**644**	513	1,716	4,202
1994	304	313	227	404	717	1,965	3,227
1995	274	152	99	626	336	1,487	2,446
1996	59	150	201	553	488	1,451	2,500
1997	55	90	68	300	296	809	4,718
1998	123	109	57	653	300	1,242	7,049
1999	167	48	25	291	**245**	776	3,800
2000	144	62	30	459	108	803	2,304
2001	133	132	80	753	417	1,515	2,209
2002	227	169	100	713	659	1,868	7,109
2003	95	102	91	440	373	1,101	6,789
2004	143	112	79	399	391	1,124	3,539
2005	76	67	173	892	460	1,668	4,257
2006	386	152	121	996	992	2,647	4,737
2007	130	39	86	385	426	1,066	2,567
2008	96	73	43	839	66	1,117	5,173
2009	128	160	140	335	393	1,156	2,181
2010	70	171	85	307	640	1,273	1,610
2011	230	392	163	636	801	2,222	1,908
2012	59	133	144	296	525	1,157	2,282
2013	113	125	179	412	585	1,414	1,573
2014	274	255	156	600	876	2,161	3,025
2015	286	252	152	1,133	421	2,244	3,281
2016	328	199	398	1,098	920	2,943	N/A
2017	122	62	73	545	478	1,280	N/A
2018	88	174	134	569	537	1,502	N/A
2019	47	102	169	570	592	1,480	N/A
2020	46	10	50	225	299	630	N/A
2021	44	191	106	544	601	1,486	N/A
2022	85	149	167	444	518	1,363	N/A
2023	60	45	84	595	608	1,392	N/A
1982–2022 Average	151	134	112	512	455	1,364	3,280

[a] Total index is the sum of counts and interpolated values. Interpolated values are shown in bold print.

Table 26.–Southern inside (Ketchikan) area coho salmon escapement index, 1989–2023.

Year	Herman Creek	Grant Creek	Eulachon River	Klahini River	Indian River	Barrier Creek	King Creek	Choca Creek	Carroll River	Blossom River	Keta River	Marten River	Humpback Creek	Tombstone River	Total survey index	Hugh Smith Lake (weir)
1989	75	101	290	15	925	450	510	200	70	1,000	650	1,175	350	950	7,194	433
1990	150	30	235	150	**255**	**50**	35	**81**	**129**	800	550	575	135	275	4,320	870
1991	245	50	285	50	550	100	300	220	375	725	800	575	671	775	7,557	1,836
1992	115	270	860	90	675	100	250	150	360	650	627	1,285	550	1,035	8,443	1,426
1993	90	175	460	50	475	325	110	300	310	850	725	1,525	600	1,275	8,102	832
1994	265	220	755	200	560	175	325	225	475	775	1,100	2,205	560	850	10,443	1,753
1995	250	94	435	165	600	220	415	180	400	800	1,155	1,385	82	2,446	10,408	1,781
1996	94	92	383	40	570	230	457	220	240	829	1,506	1,924	440	1,806	9,781	950
1997	75	**78**	420	60	**372**	**73**	**292**	175	140	1,143	571	759	32	847	5,770	732
1998	94	130	460	120	304	50	411	190	**265**	1,004	1,169	1,961	256	666	8,063	983
1999	75	127	657	150	356	25	627	225	425	598	1,895	1,518	520	840	9,284	1,246
2000	135	94	600	110	380	72	620	180	275	1,354	1,619	1,421	102	1,672	9,234	600
2001	80	110	929	151	1,140	**165**	891	450	173	1,561	**1,662**	1,956	506	**1,587**	12,941	1,580
2002	88	138	1,105	20	940	70	700	220	270	1,359	1,368	2,302	2,004	1,639	15,514	3,291
2003	242	**185**	875	39	690	57	1,140	380	**444**	1,940	1,934	1,980	214	1,745	13,374	1,510
2004	150	230	801	170	935	250	640	180	455	1,005	1,200	1,835	1,230	823	10,744	840
2005	510	300	1,240	360	890	190	810	270	500	3,680	3,290	1,130	500	1,170	16,572	1,732
2006	165	**107**	190	176	280	30	405	130	**257**	2,300	645	335	260	1,600	7,771	891
2007	134	75	**270**	35	245	15	290	210	**163**	990	970	351	3	**609**	5,604	1,244
2008	115	55	570	25	1,250	23	420	100	**620**	7,100	**2,426**	925	2,600	360	18,331	1,741
2009	**149**	330	330	340	750	110	1,050	100	1,100	**1,518**	315	1,675	700	225	10,973	2,281
2010	85	102	370	**63**	880	90	570	190	**173**	350	550	350	200	**645**	7,495	2,878
2011	**88**	**80**	350	**70**	175	**75**	110	85	**192**	1,235	**749**	350	850	**716**	7,260	2,137
2012	25	60	400	**162**	170	40	**693**	110	330	2,400	3,300	2,650	360	1,250	13,858	1,908
2013	**193**	**176**	**698**	**153**	**834**	**164**	**655**	**265**	215	2,140	1,560	2,370	530	1,340	14,342	3,048
2014	425	80	660	**226**	1,500	**242**	850	400	220	2,000	1,300	**2,651**	**1,075**	5,000	20,738	4,110
2015	20	200	550	**136**	1,200	**146**	550	200	450	2,310	1,470	1,555	210	1,035	10,988	956
2016	160	25	810	**450**	370	**90**	540	315	750	3,070	2,470	2,120	280	1,970	14,364	944
2017	40	167	540	**280**	850	**20**	100	240	285	3,100	2,450	1,675	830	980	12,823	1,266
2018	75	**55**	280	70	610	**95**	595	110	160	3,100	3,300	1,750	**1,800**	2,700	14,700	619
2019	240	60	220	**116**	420	20	800	700	60	2,200	570	1,410	600	500	7,916	1,239
2020	280	80	2,200	100	950	30	850	60	20	1,800	1,400	200	200	440	8,610	634
2021	660	**297**	980	**299**	400	320	610	210	900	9,000	3,600	1,230	1,000	1,500	21,006	903
2022	**208**	20	1,500	**170**	350	150	220	150	434	4,400	2,200	450	120	**1,573**	11,945	892
2023	210	140	2,150	20	620	**315**	2,600	720	70	6,000	7,300	750	150	1,650	22,695	2,207
1989–2022 Average	170	129	638	142	643	125	525	218	342	2,032	1,503	1,399	599	1,260	11,073	1,473

Note: Total index is the sum of counts and interpolated values. Interpolated values are shown in bold print.

Table 27.–Coho salmon harvest rates by indicator stock for combined commercial and sport fisheries, 1983–2023.

Year	Auke Creek	Berners River	Hugh Smith Lake	Average	Ford Arm Lake
1983	44%	–	62%	–	69%
1984	41%	–	65%	–	–
1985	44%	–	63%	–	52%
1986	53%	–	59%	–	62%
1987	43%	–	50%	–	48%
1988	37%	–	65%	–	48%
1989	55%	57%	82%	64%	65%
1990	53%	63%	82%	66%	58%
1991	31%	62%	68%	54%	54%
1992	46%	62%	71%	59%	59%
1993	46%	64%	80%	63%	67%
1994	53%	74%	81%	70%	72%
1995	44%	80%	73%	66%	64%
1996	55%	70%	76%	67%	57%
1997	20%	30%	73%	41%	52%
1998	39%	66%	78%	61%	56%
1999	41%	65%	70%	59%	63%
2000	30%	45%	55%	43%	71%
2001	38%	35%	49%	41%	74%
2002	27%	39%	39%	35%	53%
2003	35%	60%	59%	51%	49%
2004	44%	51%	66%	54%	71%
2005	38%	54%	53%	48%	58%
2006	34%	60%	54%	49%	52%
2007	34%	50%	62%	49%	70%
2008	39%	47%	54%	46%	53%
2009	39%	49%	48%	45%	69%
2010	46%	61%	47%	51%	64%
2011	35%	44%	46%	42%	82%
2012	22%	31%	54%	36%	63%
2013	42%	65%	56%	54%	78%
2014	20%	36%	47%	34%	72%
2015	25%	32%	51%	36%	52%
2016	25%	28%	62%	38%	–
2017	41%	45%	48%	45%	–
2018	56%	49%	60%	54%	–
2019	29%	22%	52%	34%	–
2020	20%	24%	42%	29%	–
2021	25%	26%	54%	35%	–
2022	11%	23%	52%	29%	–
2023	13%	15%	41%	23%	–
1989–2022 Average	36%	49%	60%	49%	63%

Note: En dash indicates no data.

Table 28.–Coho salmon harvest rates by indicator stock for the Southeast Alaska troll fishery, 1984–2023.

Year	Auke Creek	Berners River	Ford Arm Lake	Hugh Smith Lake	Total Index
1984	34%	–	–	–	–
1985	35%	–	52%	–	39%
1986	43%	–	61%	–	44%
1987	37%	–	45%	–	36%
1988	25%	–	47%	–	31%
1989	48%	49%	62%	51%	52%
1990	43%	41%	57%	38%	43%
1991	17%	17%	53%	36%	32%
1992	32%	31%	56%	38%	39%
1993	38%	36%	62%	53%	48%
1994	35%	35%	60%	46%	44%
1995	32%	29%	53%	30%	35%
1996	39%	42%	53%	40%	43%
1997	12%	14%	48%	49%	34%
1998	31%	42%	49%	41%	41%
1999	34%	36%	58%	42%	42%
2000	24%	20%	57%	36%	35%
2001	31%	24%	67%	22%	33%
2002	18%	15%	38%	16%	21%
2003	23%	22%	31%	24%	25%
2004	27%	29%	64%	41%	40%
2005	33%	33%	51%	32%	36%
2006	22%	24%	39%	36%	32%
2007	25%	30%	65%	38%	39%
2008	30%	24%	41%	19%	27%
2009	30%	27%	65%	24%	34%
2010	25%	27%	48%	22%	29%
2011	17%	28%	24%	20%	22%
2012	20%	21%	46%	20%	25%
2013	32%	33%	48%	25%	33%
2014	14%	14%	46%	24%	24%
2015	20%	20%	45%	24%	27%
2016	7%	8%	–	31%	24%
2017	34%	28%	–	28%	33%
2018	20%	13%	–	15%	20%
2019	6%	7%	–	24%	20%
2020	0%	5%	–	24%	18%
2021	8%	10%	–	17%	18%
2022	5%	4%	–	18%	17%
2023	1%	3%	–	19%	16%
1984–2022 Average	26%	25%	51%	31%	33%

Note: En dash indicates no data.

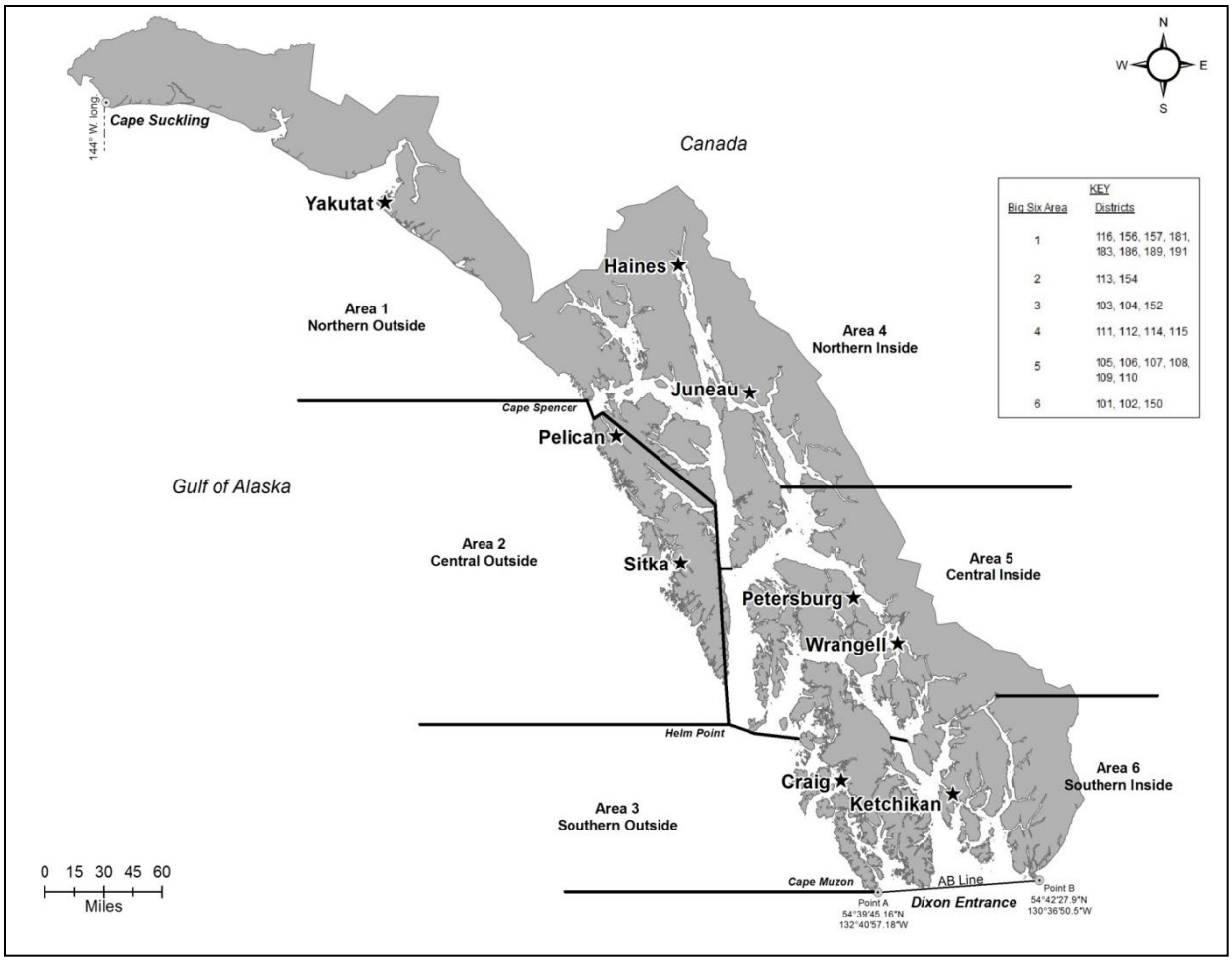


Figure 1.–Map of Southeast Alaska commercial troll fishery and Big Six management areas, Cape Suckling to Dixon Entrance.

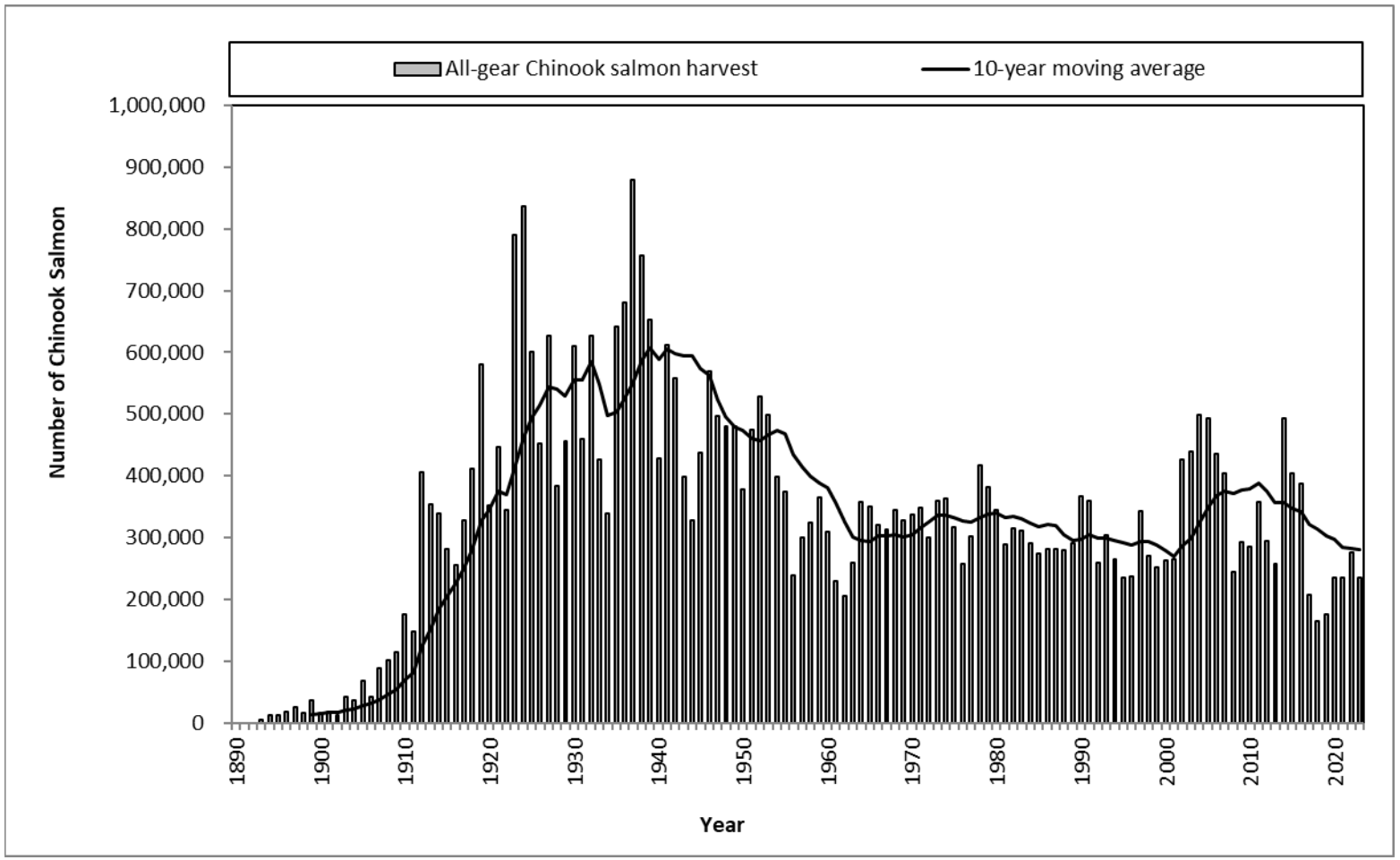


Figure 2.–All-gear harvests of Chinook salmon in common property fisheries, 1893–2023.

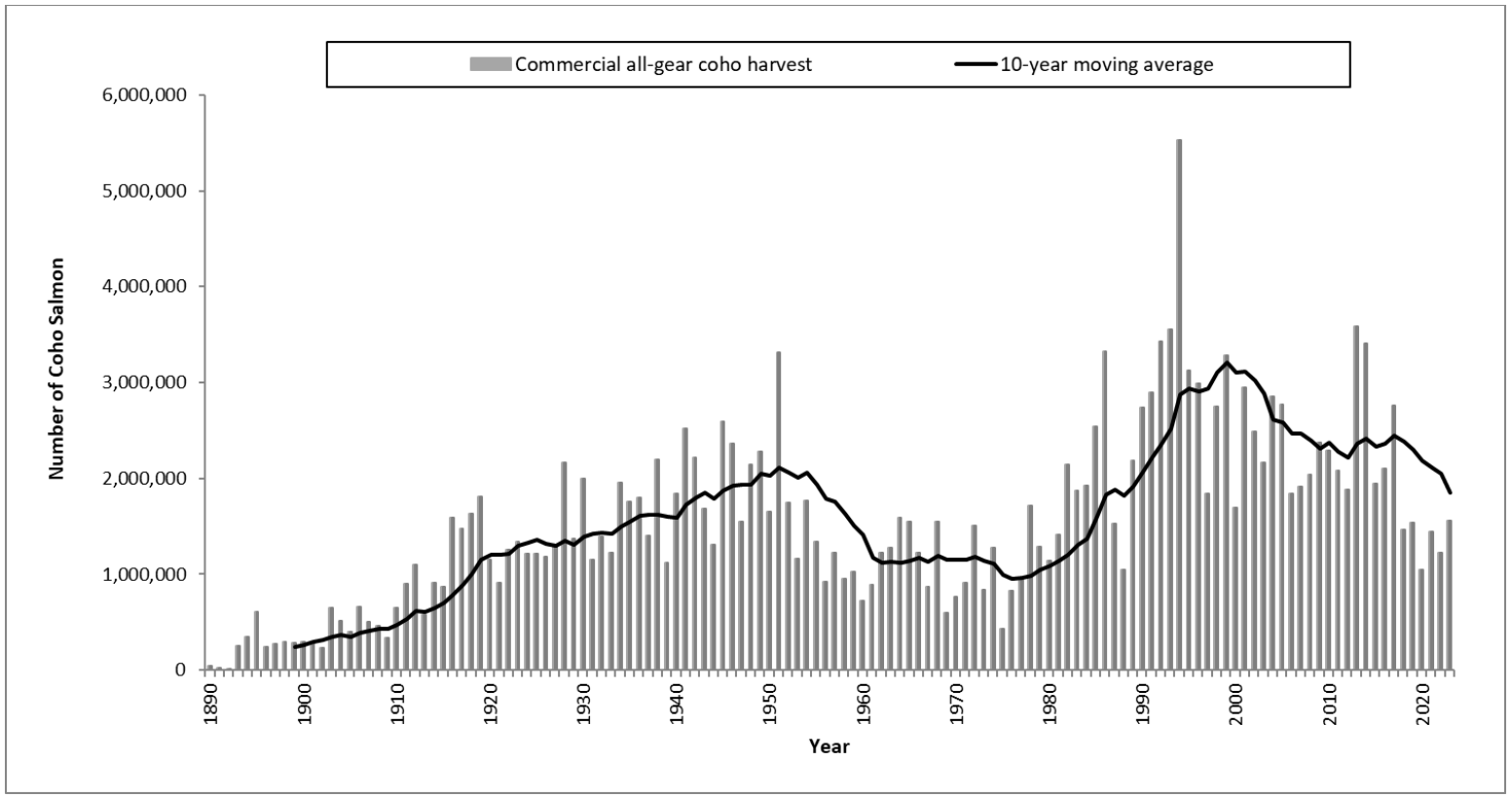


Figure 3.–Commercial all-gear harvests of coho salmon in common property fisheries, 1890–2023.

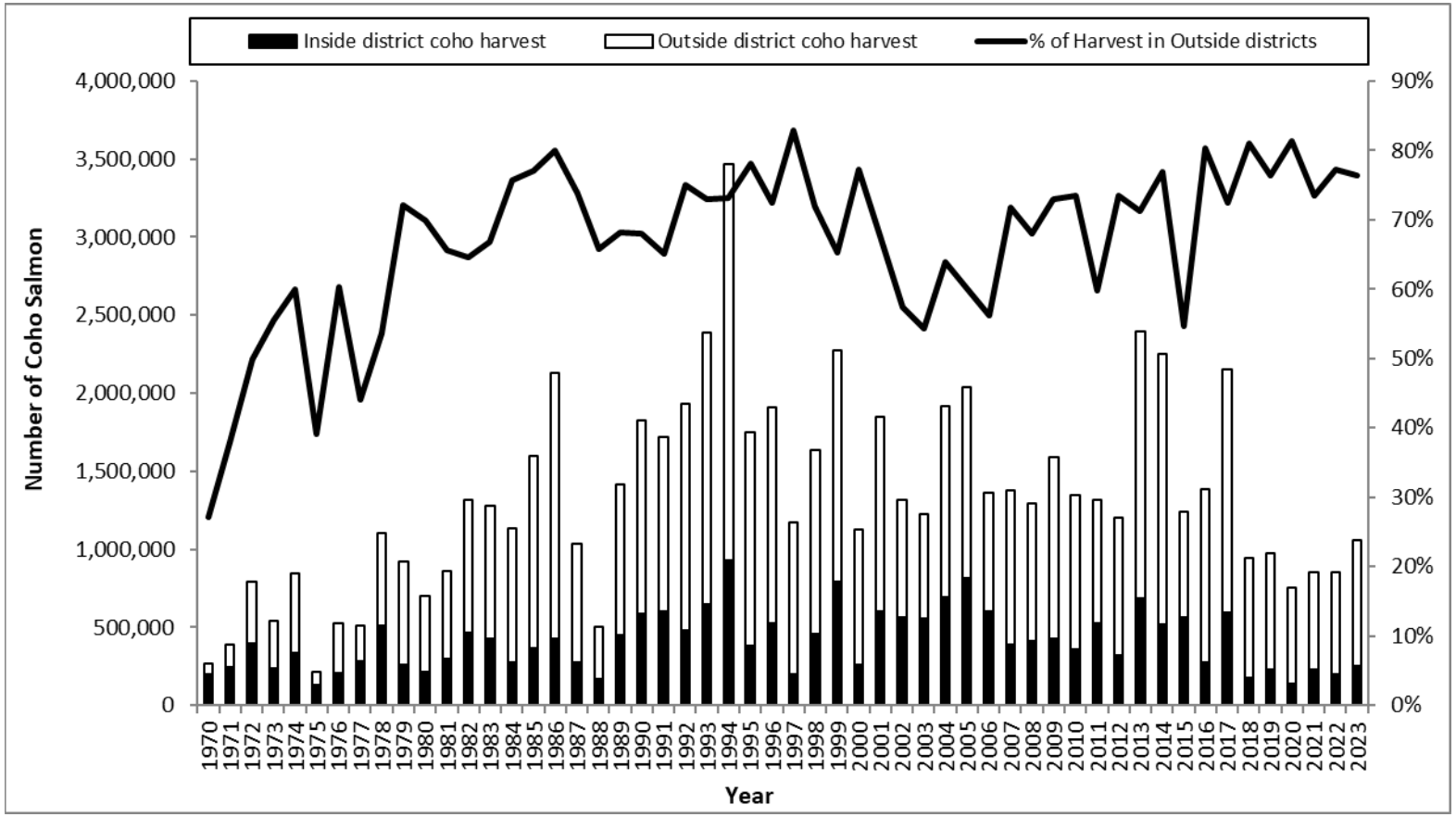


Figure 4.–Southeast Alaska troll coho salmon harvest in outside (Gulf of Alaska) and inside districts and percentage of harvest taken in outside districts, 1970–2023.

Note: Outside districts are 103, 104, 113, 116, 152, 154, 156, 157, 181, 183, 189, 191; inside districts are 101, 102, 105, 106, 107, 108, 109, 110, 111, 112, 114, and 115.

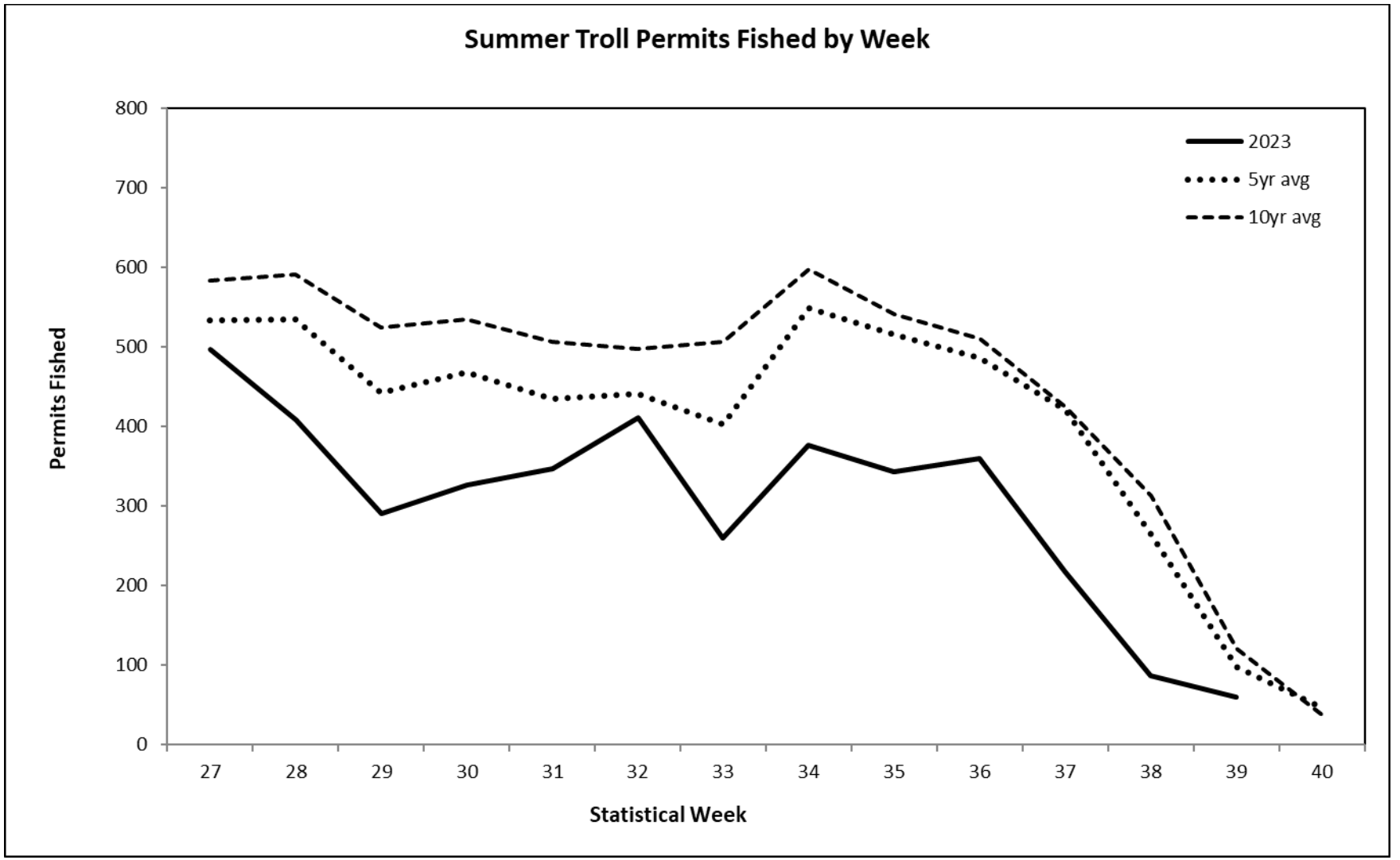


Figure 5.–Number of troll permits fished by week during summer troll fishery, 2023 vs. 5-year and 10-year averages.

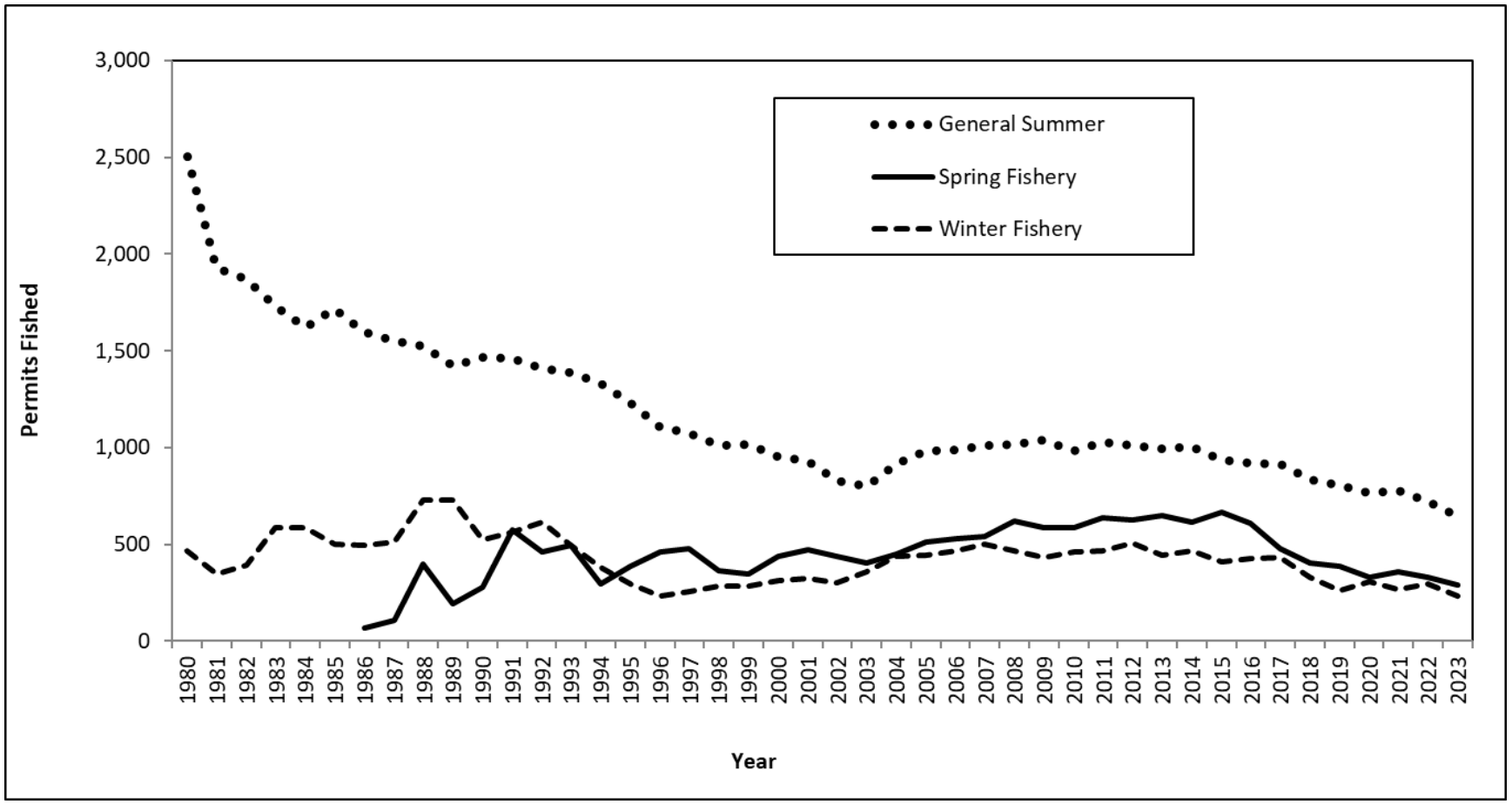


Figure 6.–Number of troll permits fished in the general summer, winter, and spring fisheries, 1980–2023.

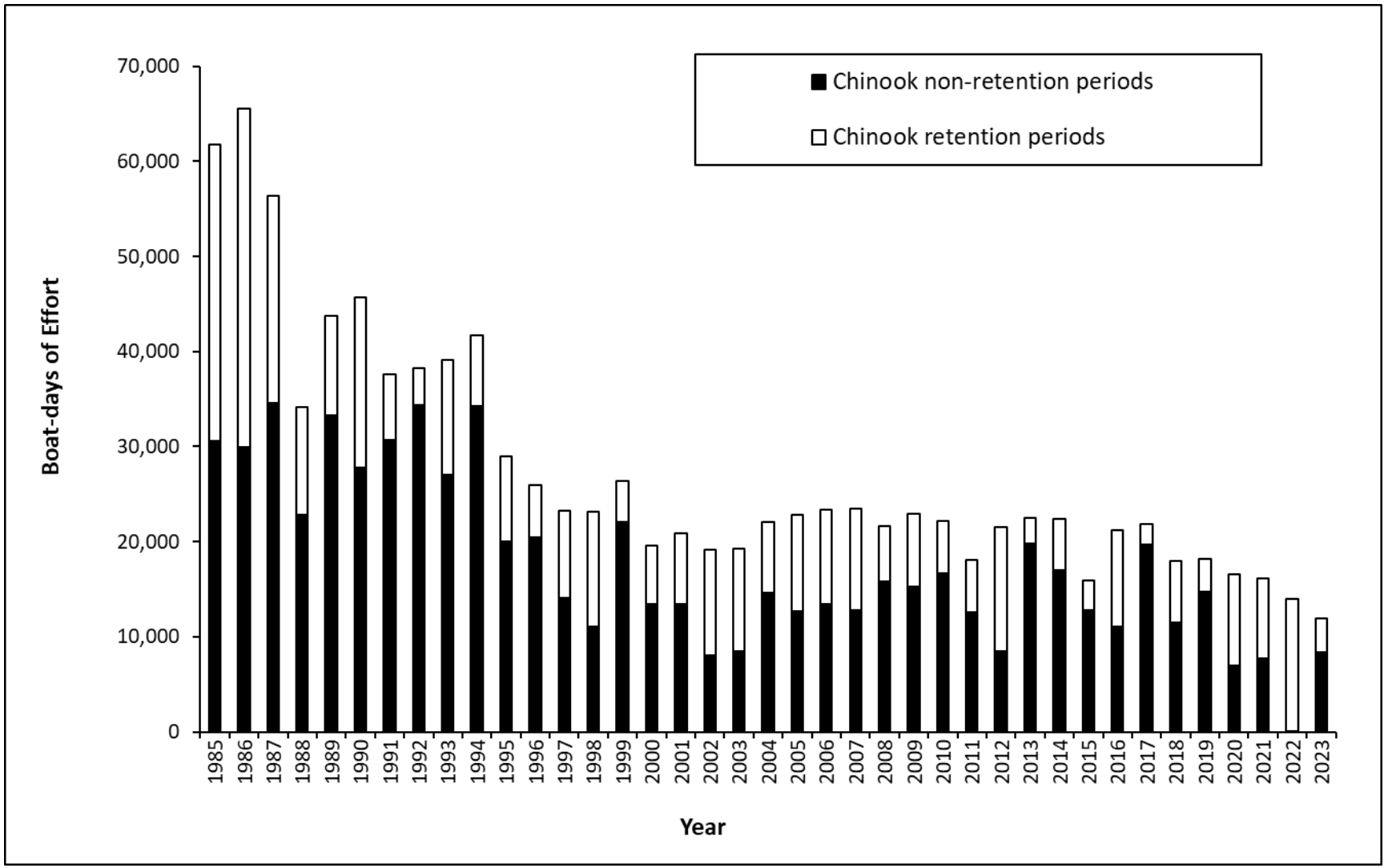


Figure 7.–General summer troll fishery boat days of effort during Chinook salmon retention and nonretention fishing periods, 1985–2023.

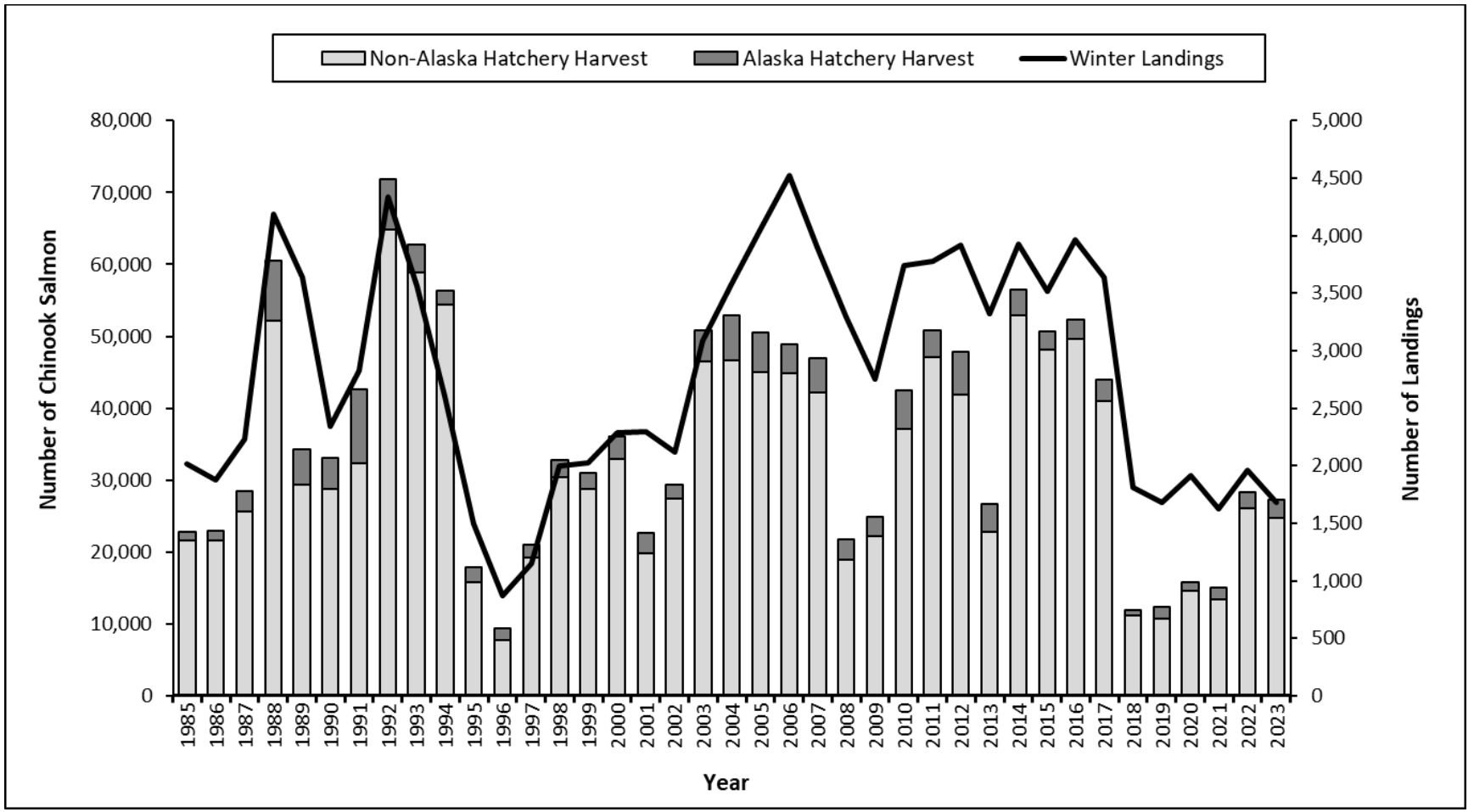


Figure 8.–Southeast Alaska winter troll fishery non-Alaska and Alaska hatchery Chinook salmon harvests and landings, 1985–2023.

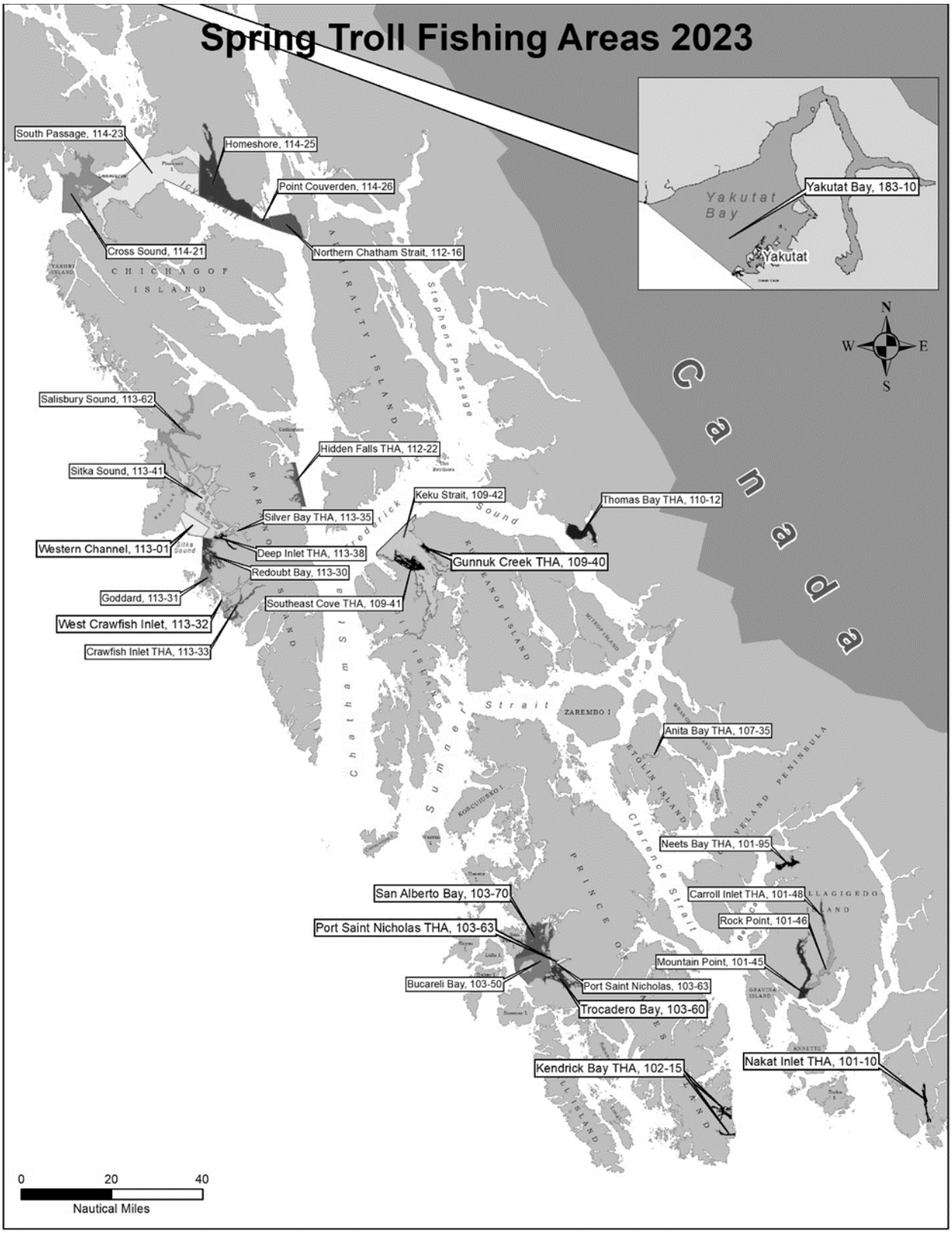
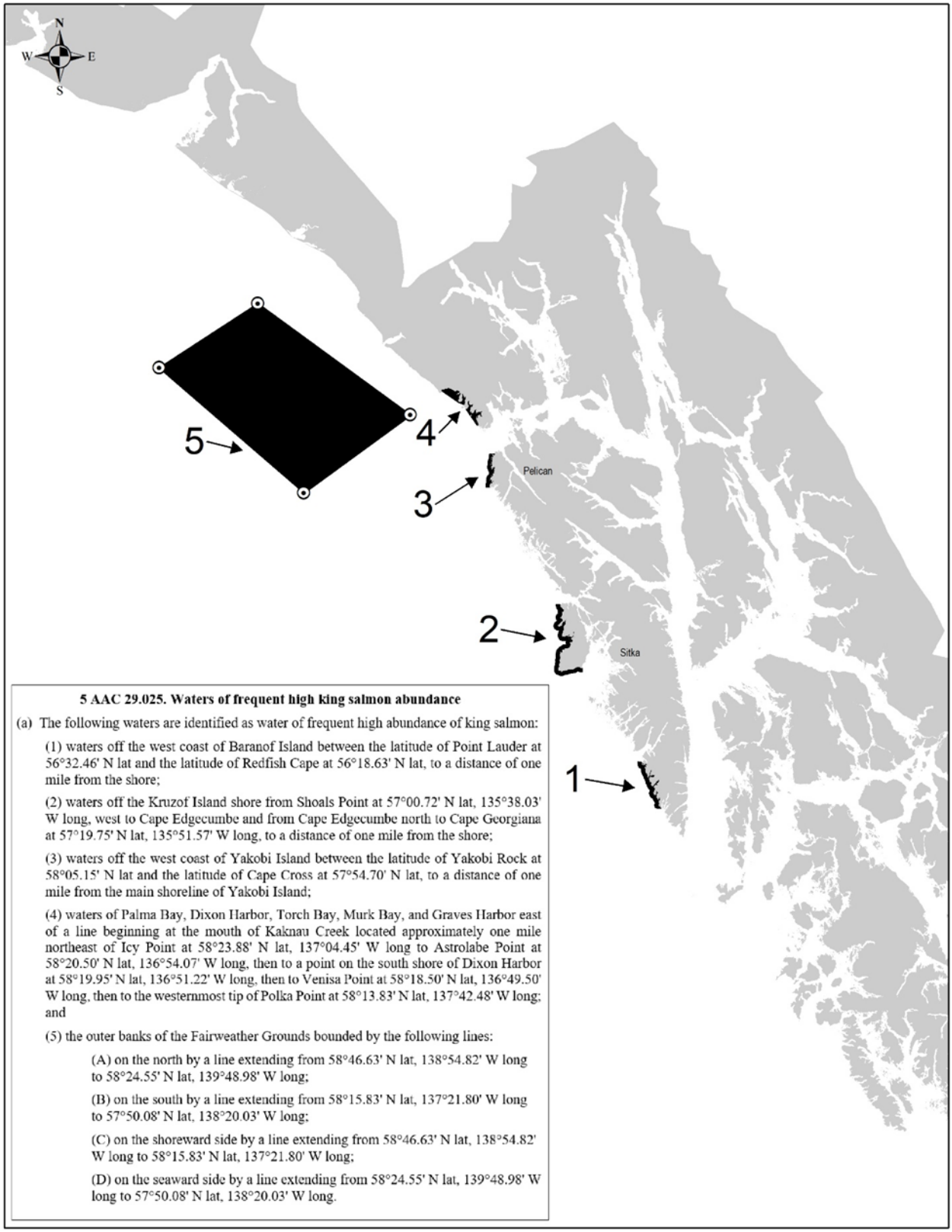


Figure 9.–Map of spring troll fishing areas, 2023.



5 AAC 29.025. Waters of frequent high king salmon abundance

(a) The following waters are identified as water of frequent high abundance of king salmon:

(1) waters off the west coast of Baranof Island between the latitude of Point Lauder at 56°32.46' N lat and the latitude of Redfish Cape at 56°18.63' N lat, to a distance of one mile from the shore;

(2) waters off the Kruzof Island shore from Shoals Point at 57°00.72' N lat, 135°38.03' W long, west to Cape Edgecumbe and from Cape Edgecumbe north to Cape Georgiana at 57°19.75' N lat, 135°51.57' W long, to a distance of one mile from the shore;

(3) waters off the west coast of Yakobi Island between the latitude of Yakobi Rock at 58°05.15' N lat and the latitude of Cape Cross at 57°54.70' N lat, to a distance of one mile from the main shoreline of Yakobi Island;

(4) waters of Palma Bay, Dixon Harbor, Torch Bay, Murk Bay, and Graves Harbor east of a line beginning at the mouth of Kaknau Creek located approximately one mile northeast of Icy Point at 58°23.88' N lat, 137°04.45' W long to Astrolabe Point at 58°20.50' N lat, 136°54.07' W long, then to a point on the south shore of Dixon Harbor at 58°19.95' N lat, 136°51.22' W long, then to Venisa Point at 58°18.50' N lat, 136°49.50' W long, then to the westernmost tip of Polka Point at 58°13.83' N lat, 137°42.48' W long; and

(5) the outer banks of the Fairweather Grounds bounded by the following lines:

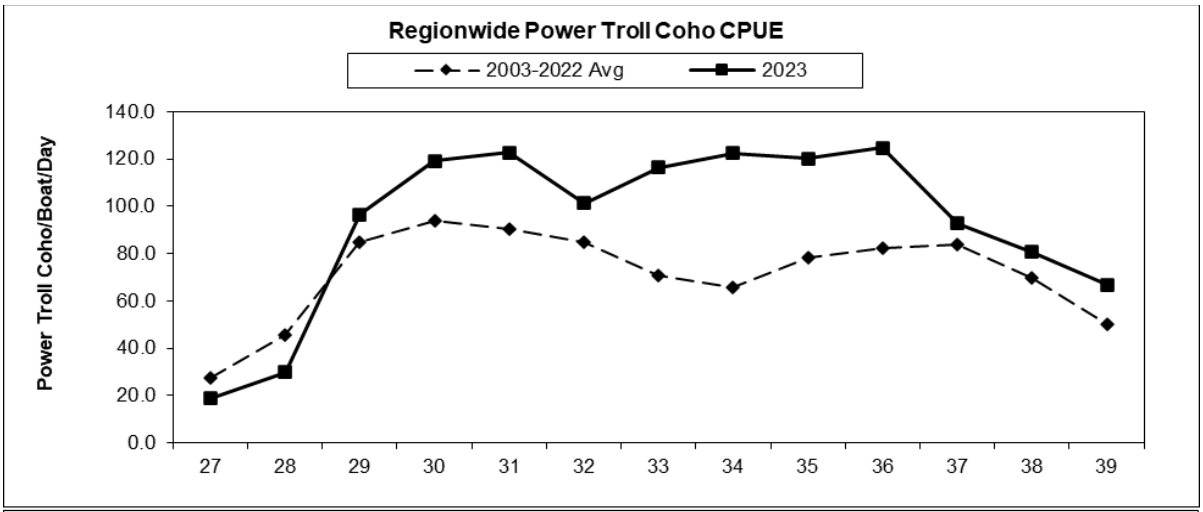
(A) on the north by a line extending from 58°46.63' N lat, 138°54.82' W long to 58°24.55' N lat, 139°48.98' W long;

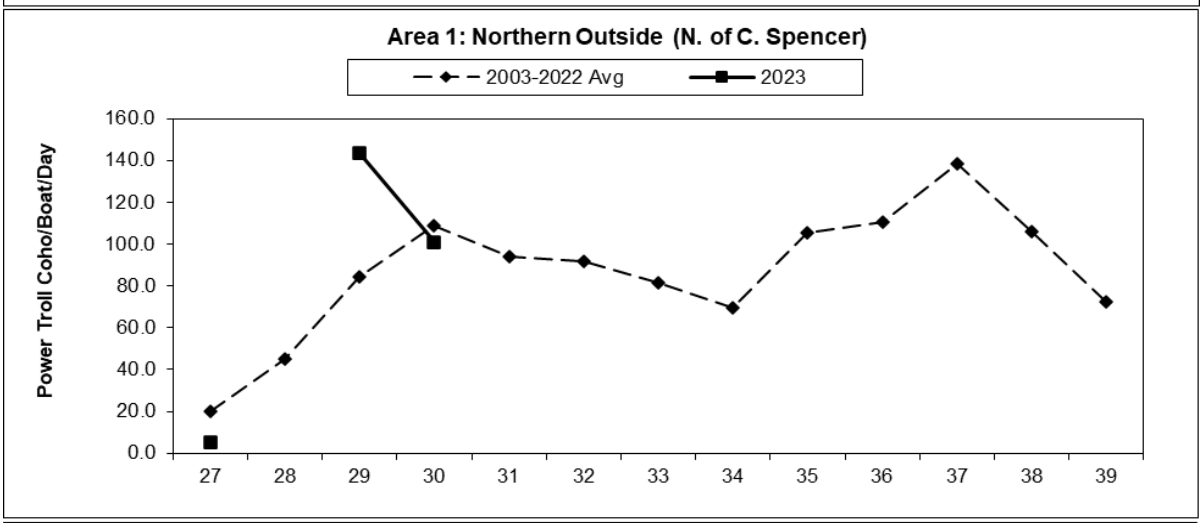
(B) on the south by a line extending from 58°15.83' N lat, 137°21.80' W long to 57°50.08' N lat, 138°20.03' W long;

(C) on the shoreward side by a line extending from 58°46.63' N lat, 138°54.82' W long to 58°15.83' N lat, 137°21.80' W long;

(D) on the seaward side by a line extending from 58°24.55' N lat, 139°48.98' W long to 57°50.08' N lat, 138°20.03' W long.

Figure 10.–Map of areas of high Chinook (king) salmon abundance (black shaded areas), which close during part of the summer fishery.





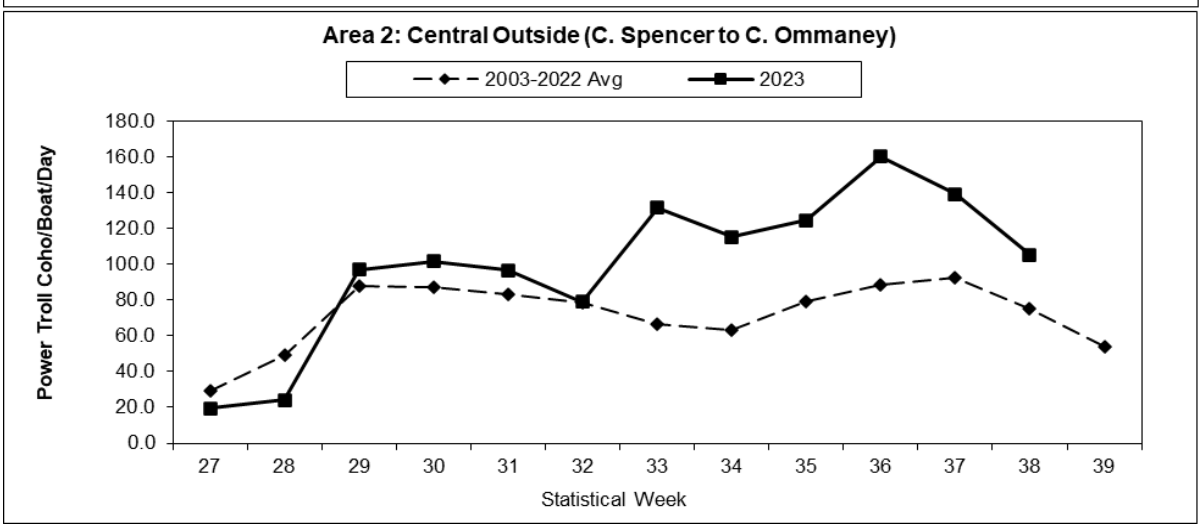


Figure 11.–Average power troll coho salmon CPUE by statistical week, comparing 2023 results with the 2003–2022 average, for the entire Southeast Alaska region ("Regionwide"), Northern Outside (Area 1), and Central Outside (Area 2).

Note: Reduced CPUE values for SW 27–28 are influenced by vessels targeting Chinook instead of coho. Weeks with fewer than 3 permits interviewed are confidential and have been omitted.

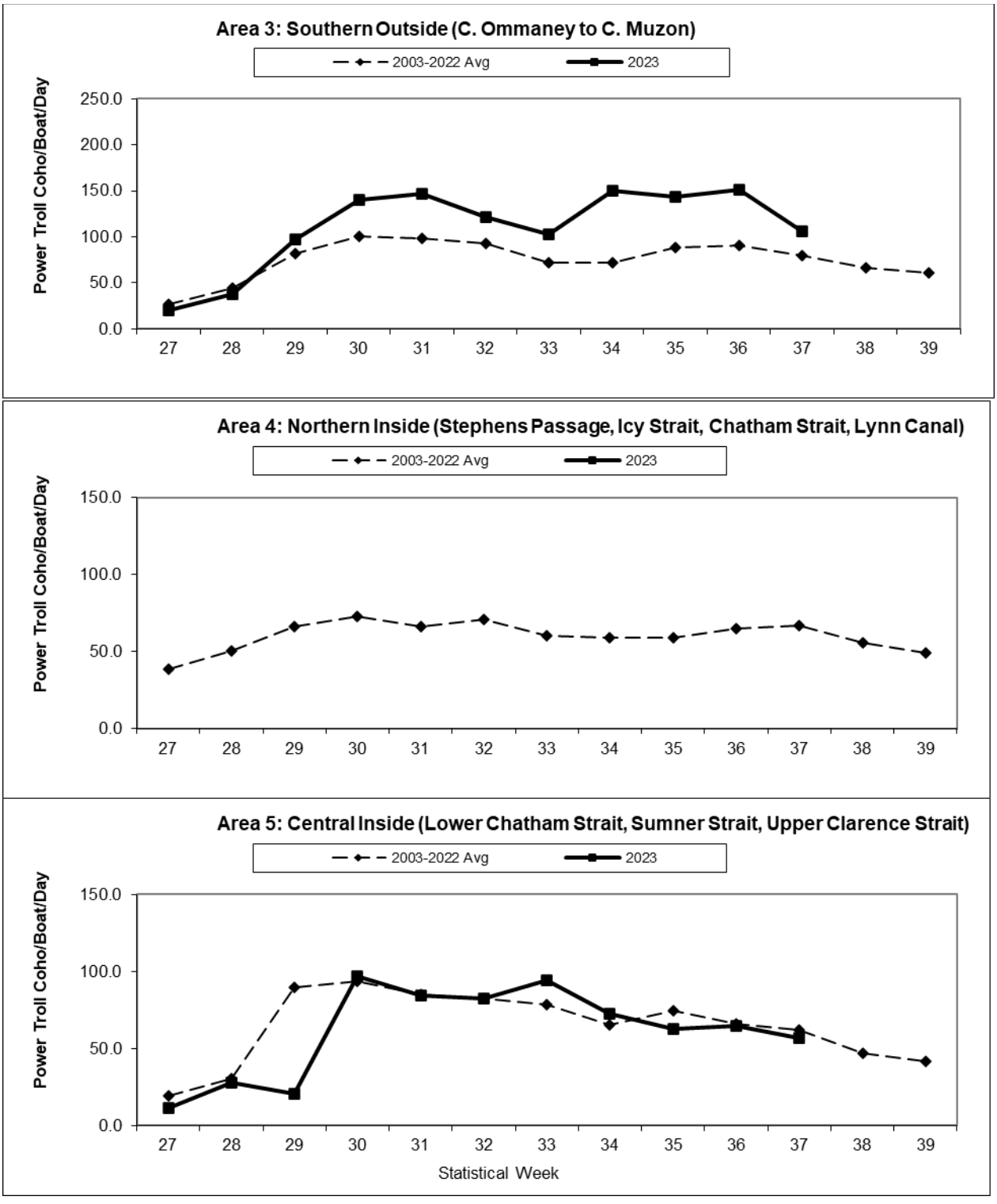


Figure 12.–Average power troll coho salmon CPUE by statistical week, comparing 2023 results with the 2003–2022 average, for Southeast Alaska: Southern Outside (Area 3), Northern Inside (Area 4), and Central Inside (Area 5).

Note: Reduced CPUE values for SW 27–28 are influenced by vessels targeting Chinook instead of coho. Weeks with fewer than 3 permits interviewed are confidential and have been omitted.

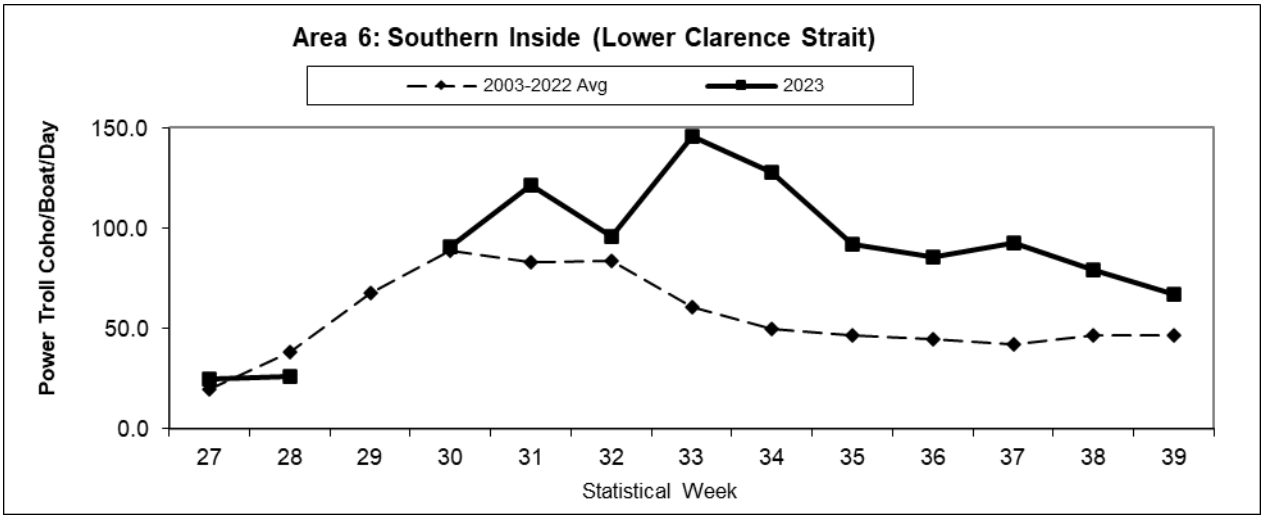


Figure 13.–Average power troll coho salmon CPUE by statistical week, comparing 2023 results with the 2003–2022 average, for Southeast Alaska: Southern Inside (Area 6).

Note: Reduced CPUE values for weeks 27–28 are influenced by vessels targeting Chinook instead of coho. Weeks with fewer than 3 permits interviewed are confidential and have been omitted.

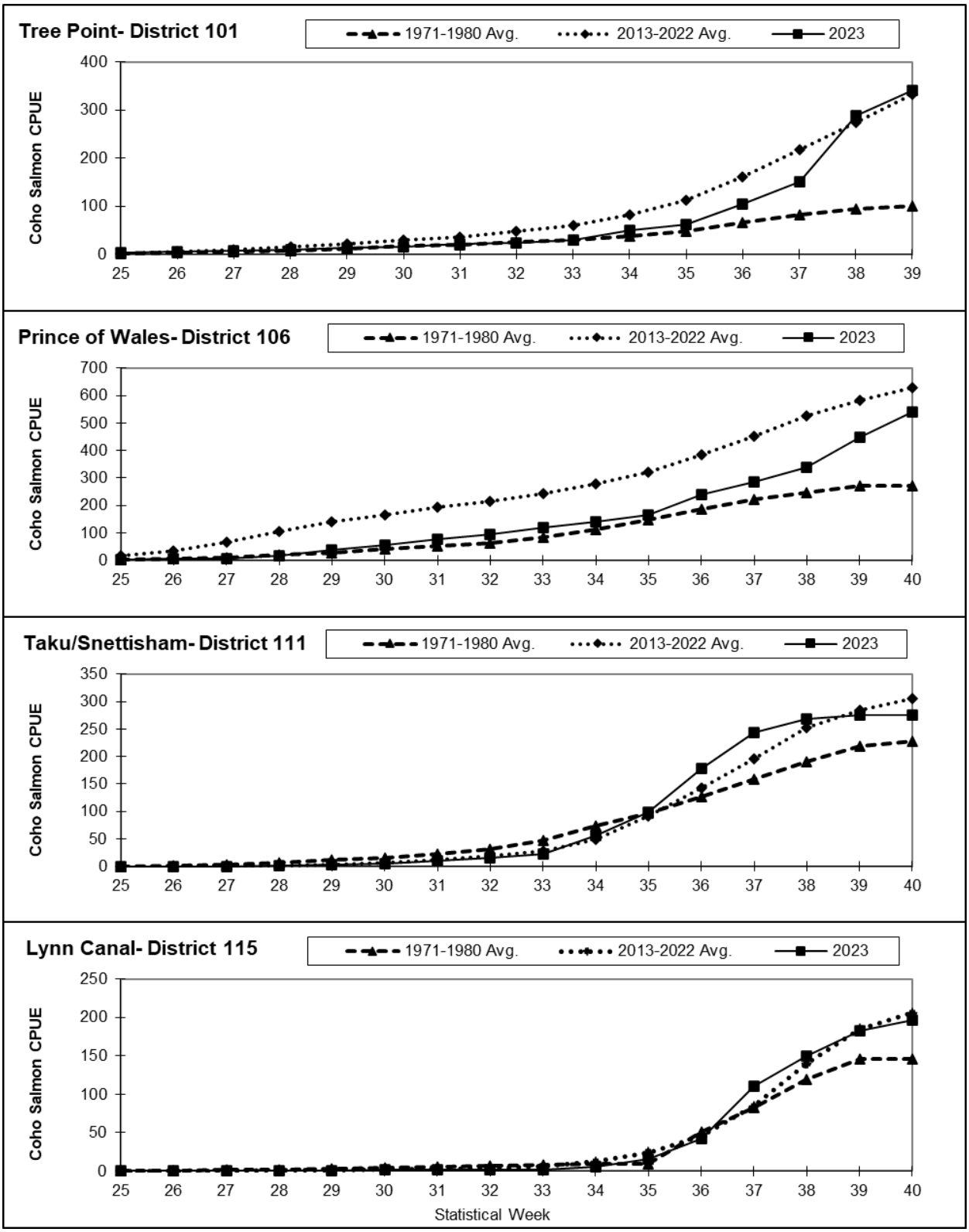


Figure 14.–Cumulative coho salmon CPUE by statistical week, comparing 2023 to the 1971–1980 and 2013–2022 averages, for the 4 indicator drift gillnet fisheries.

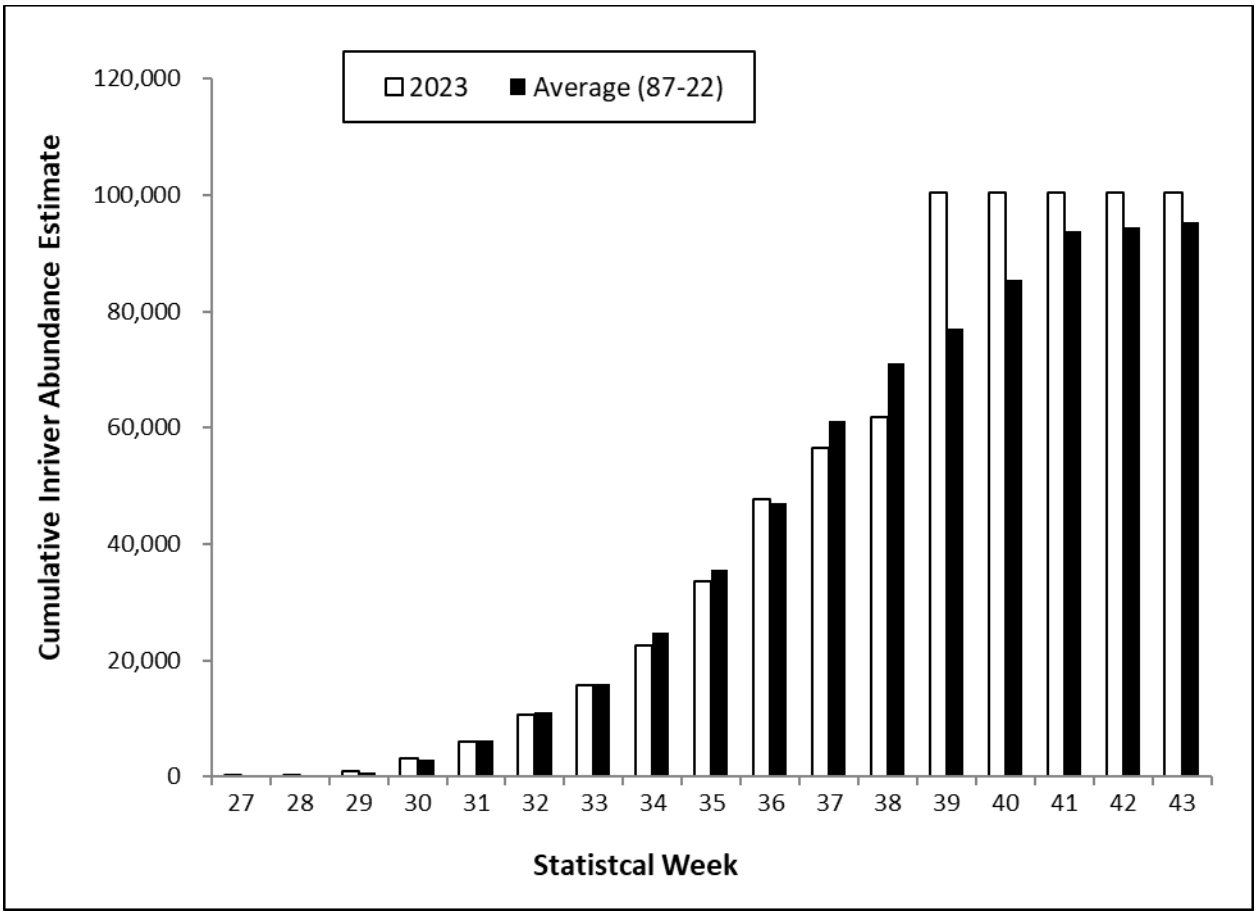


Figure 15.–Preliminary cumulative mark–recapture abundance estimates for Taku River coho salmon from Canyon Island fish wheels, for 2023 and the 1987–2022 average.

Note: Much of the weekly data are interpolated due to a paucity of available data from the Canadian inriver fishery for most weeks.

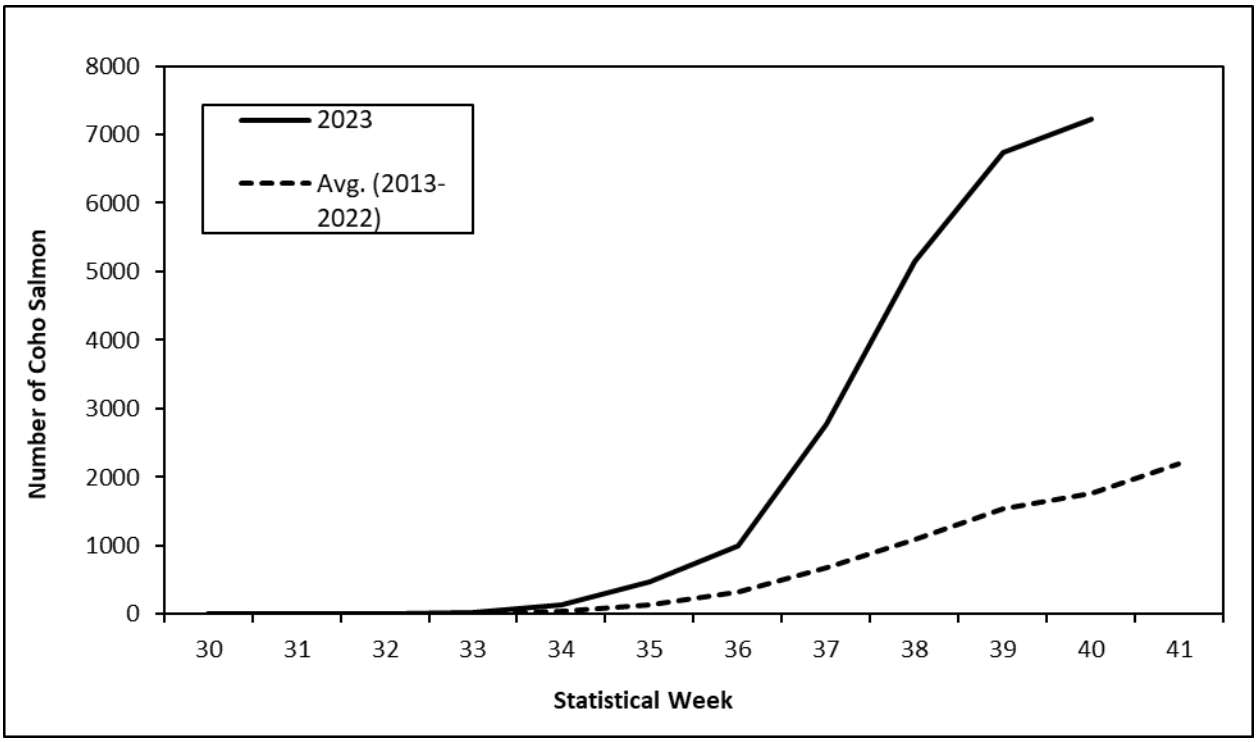


Figure 16.–Cumulative weekly harvest of coho salmon in the Chilkat River fish wheels, for 2023 and the 2013–2022 average.

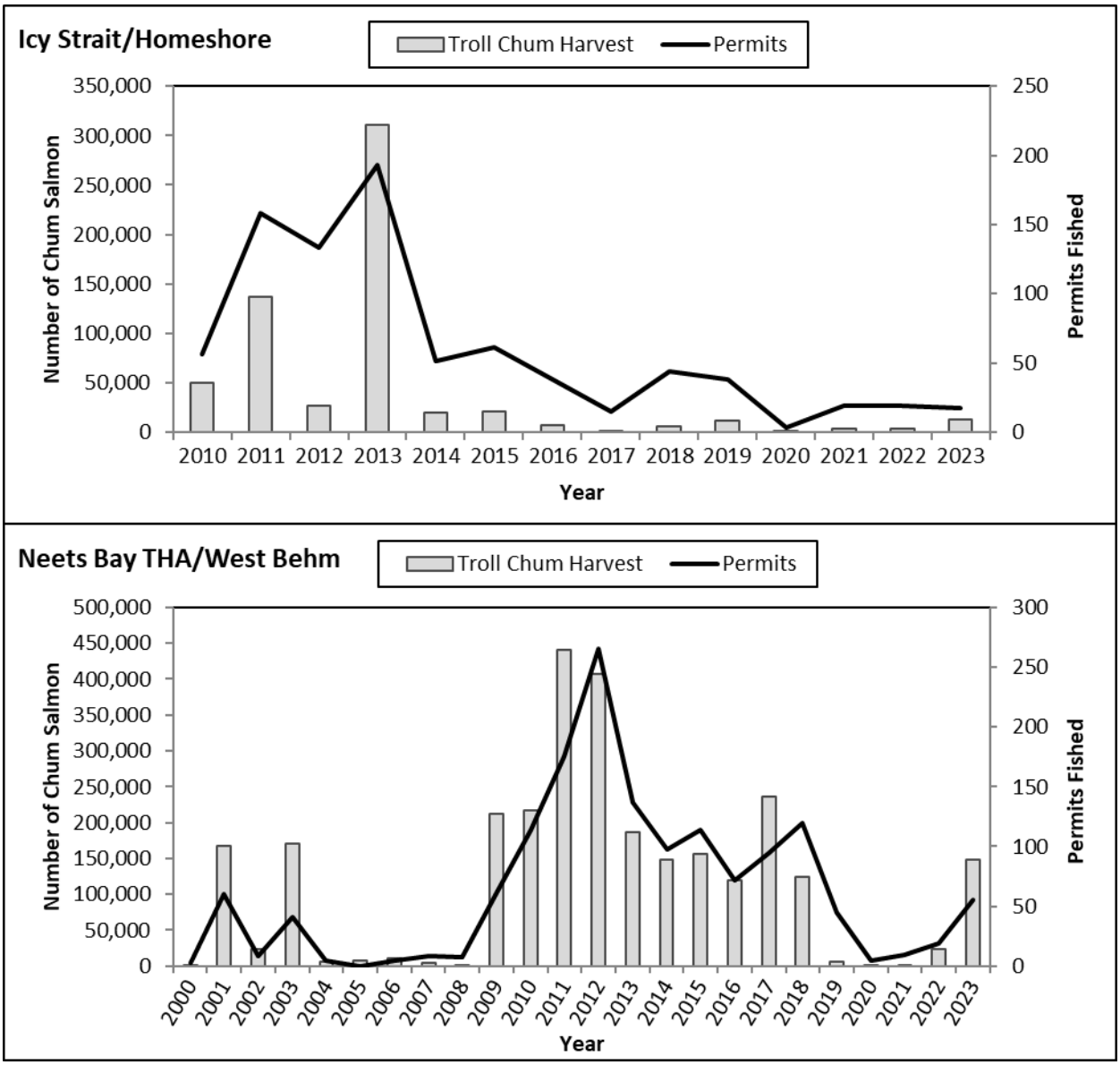


Figure 17.–Directed troll chum salmon harvest and effort in Icy Strait/Homeshore, 2010–2023, and Neets Bay/West Behm Canal, 2000–2023.

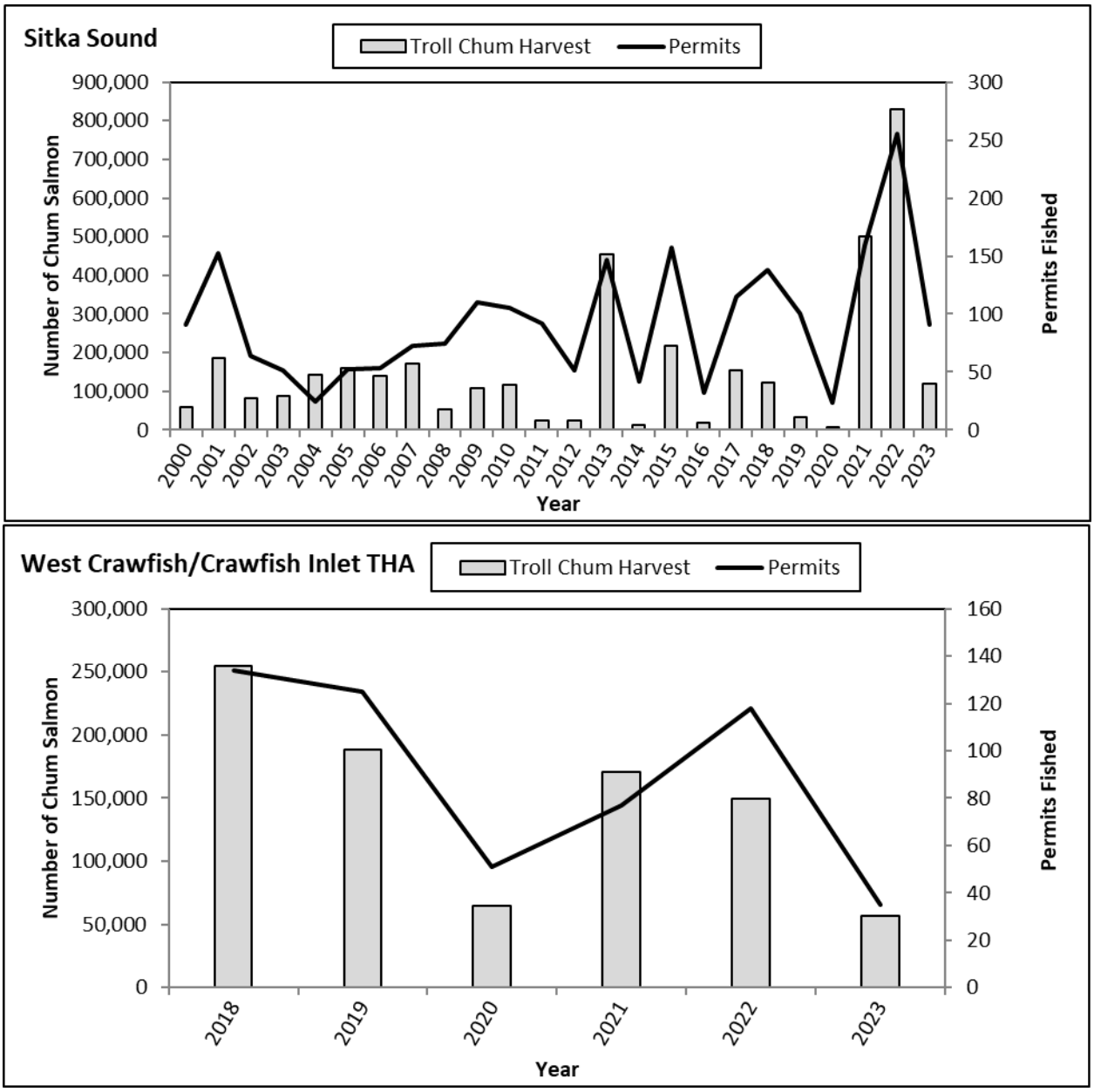


Figure 18.–Directed troll chum salmon harvest and effort in Sitka Sound, 2000–2023; and 2018–2023 in Crawfish/West Crawfish Inlets.

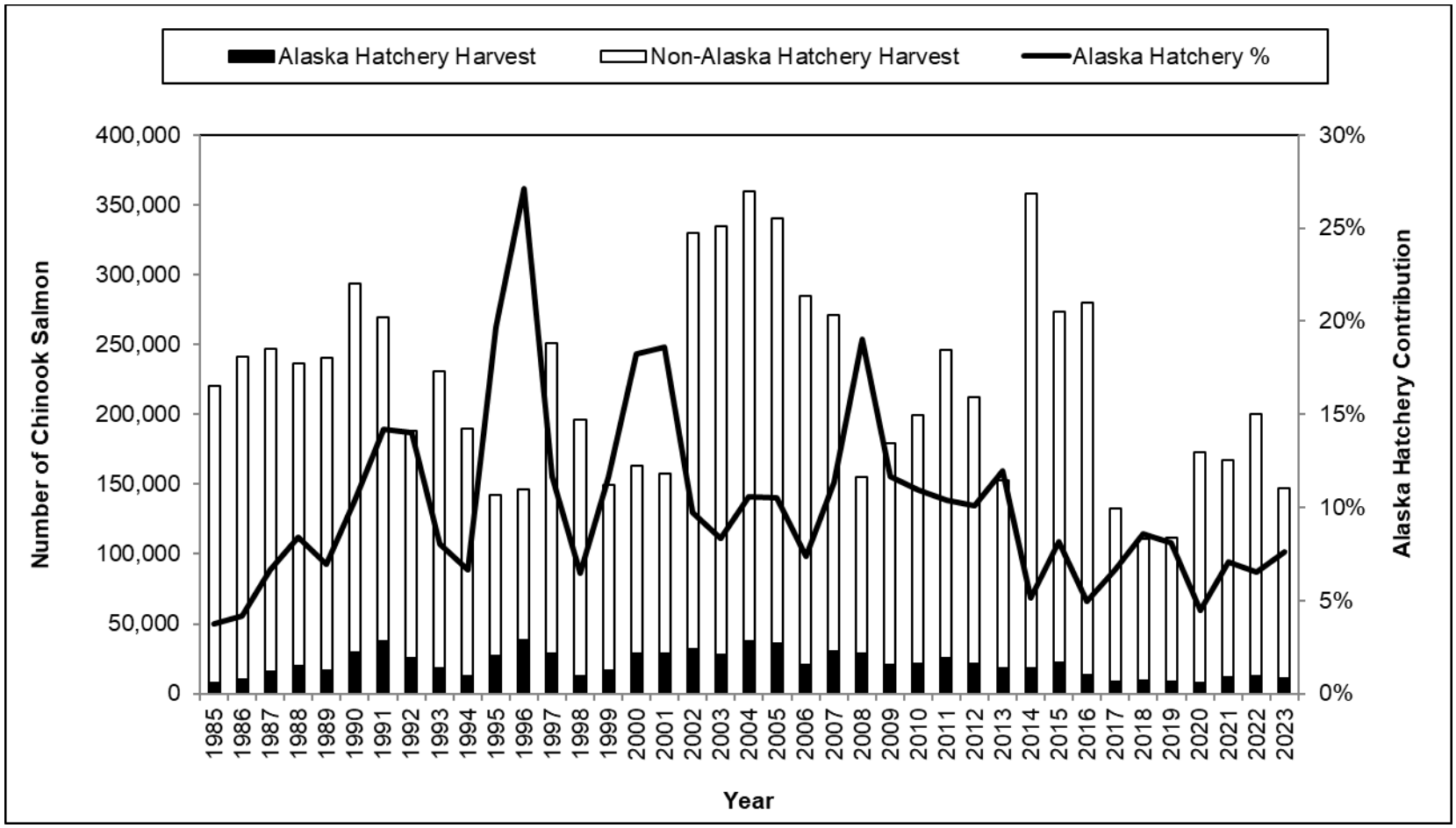


Figure 19.–Alaska hatchery Chinook salmon contributions to the Southeast Alaska troll fishery, 1985–2023.

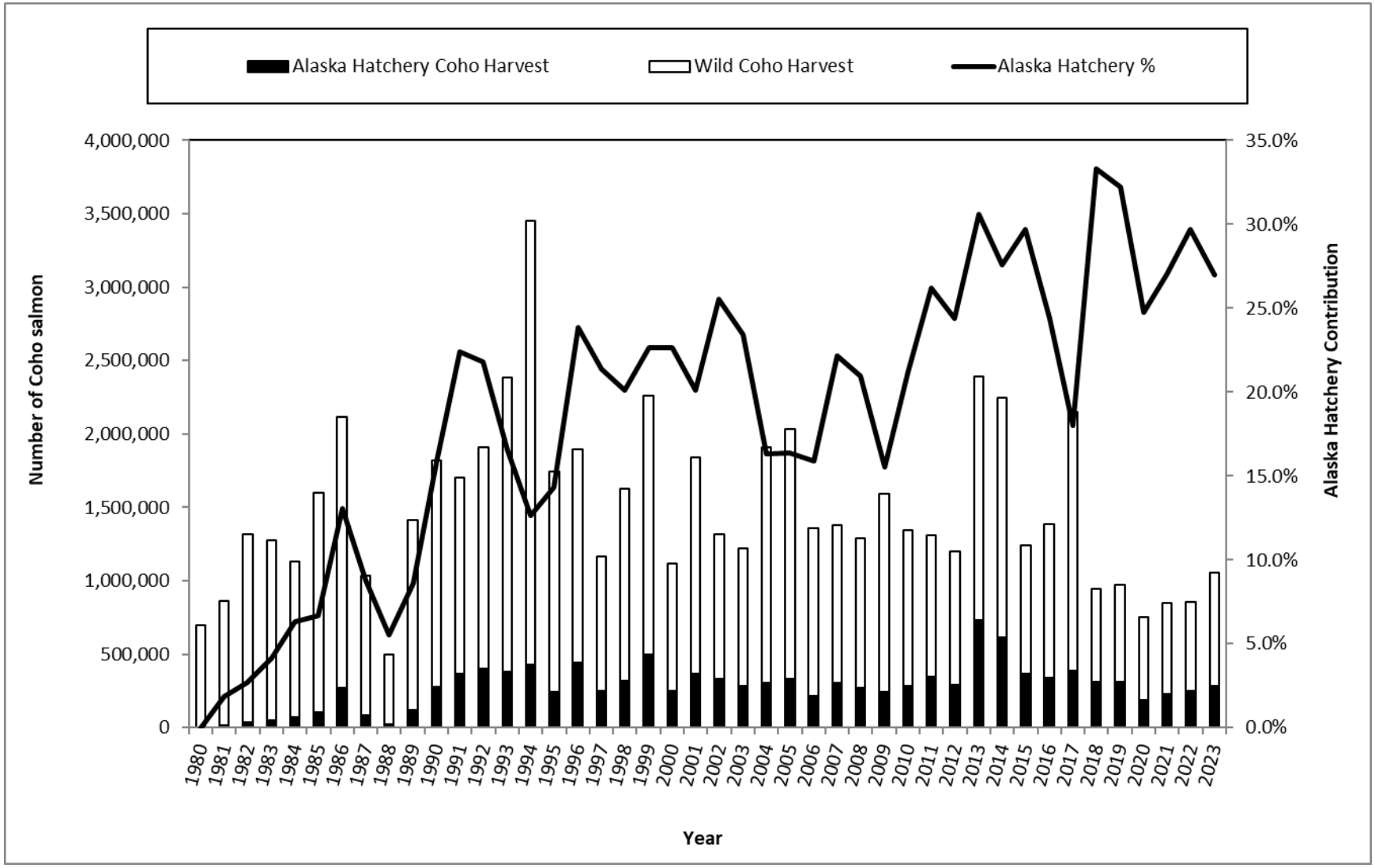


Figure 20.–Alaska hatchery and wild coho salmon contributions to the Southeast Alaska troll fishery, 1980–2023.

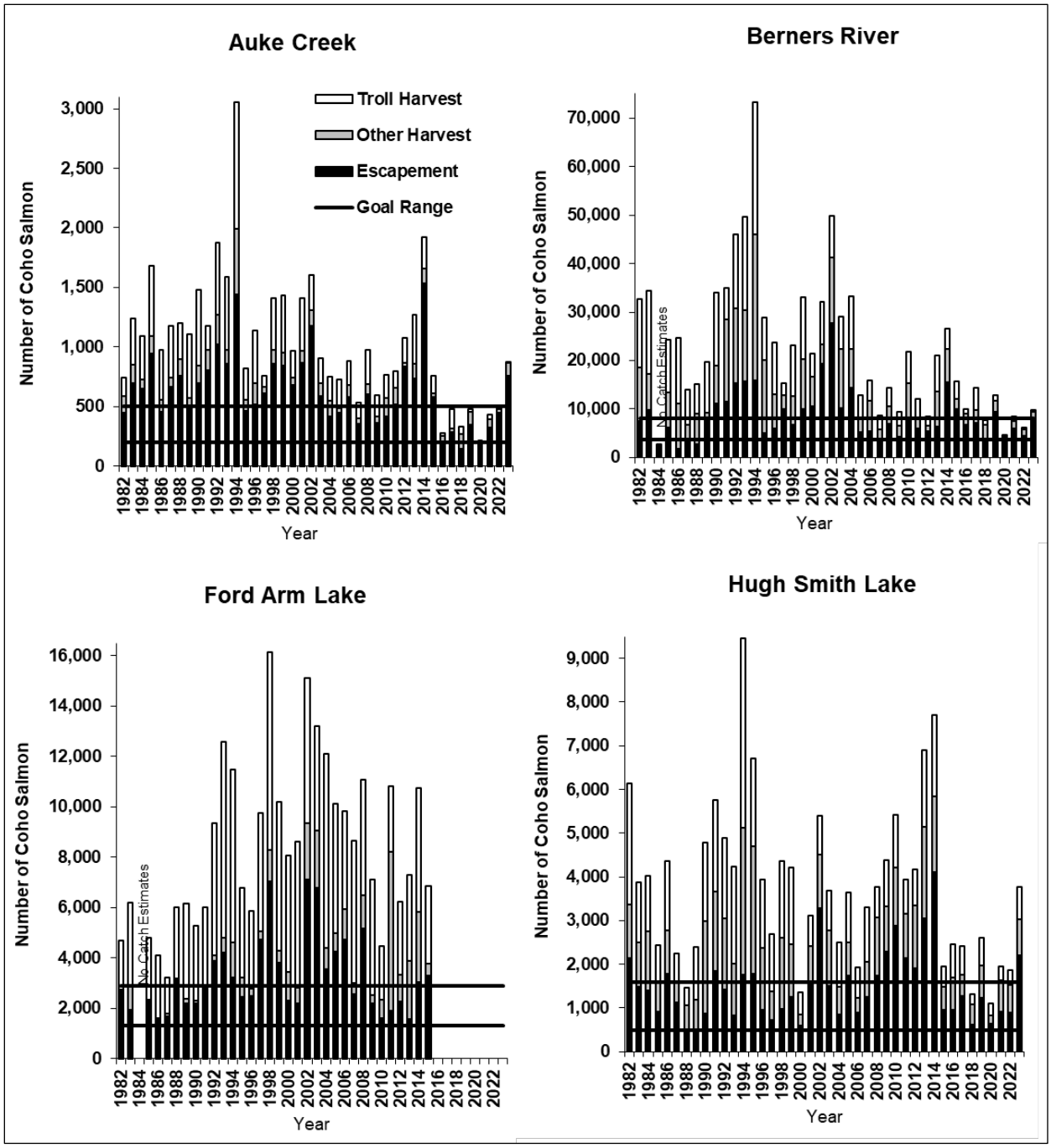


Figure 21.–Total run size, harvest, escapement, and BEG range for 4 wild Southeast Alaska coho salmon indicator stocks, 1982–2023. Horizontal bars are the minimum and maximum BEG.

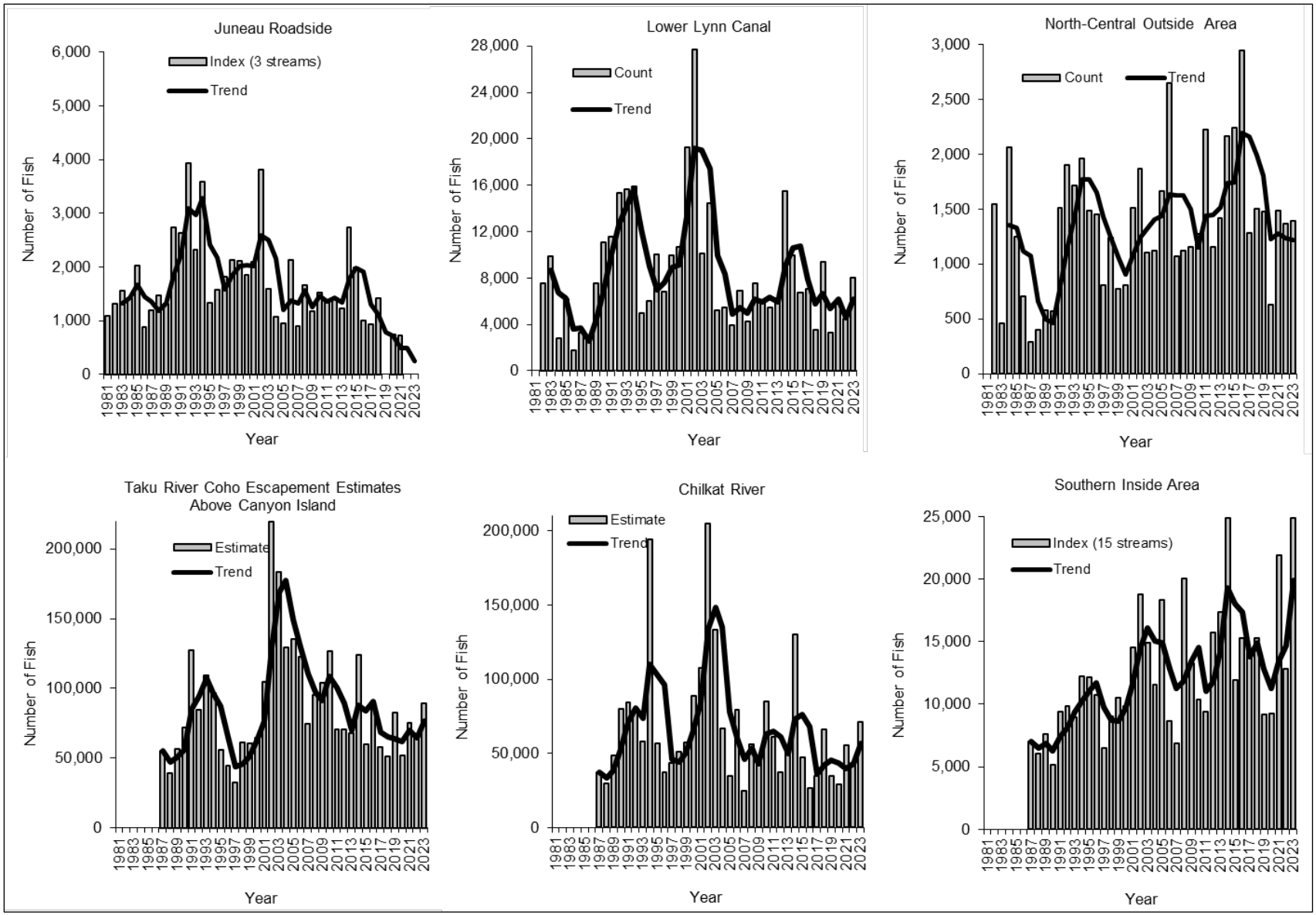


Figure 22.–Coho salmon escapement counts and estimates in index streams in 6 areas of Southeast Alaska, 1981–2023.

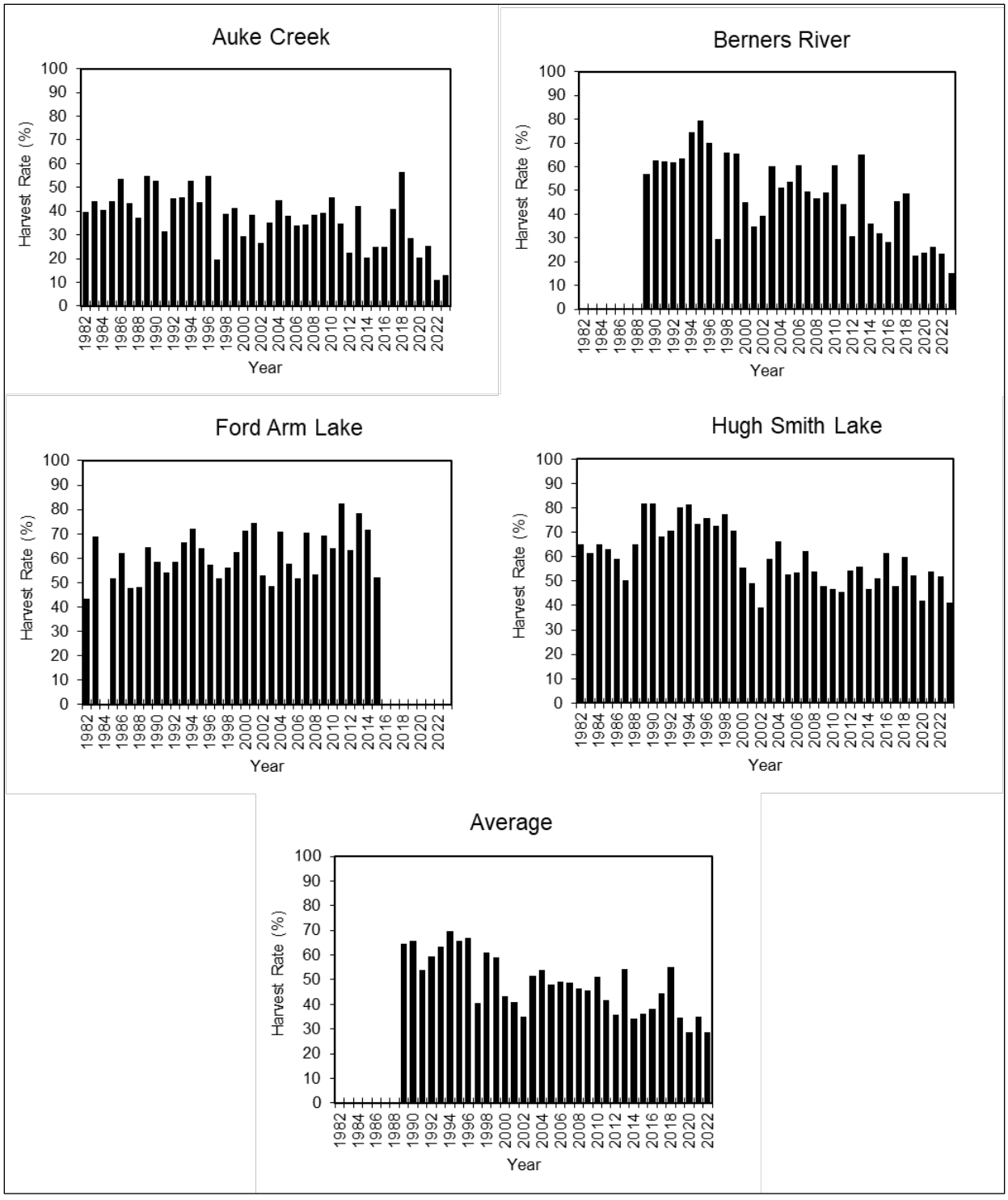


Figure 23.–Estimated coho salmon total harvest rates for all fisheries combined, for the coho salmon full indicator stocks, 1982–2023.

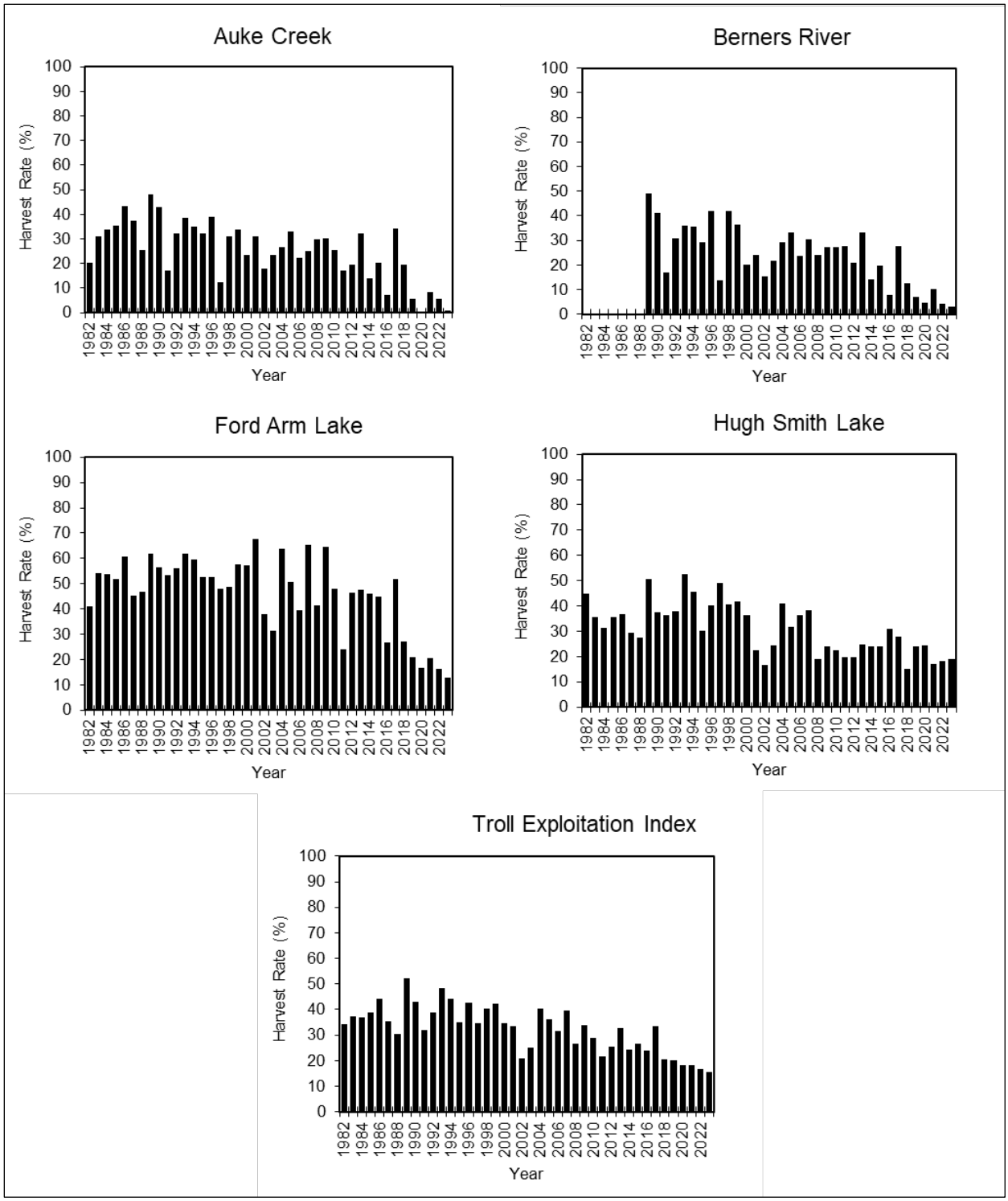


Figure 24.–Estimated coho salmon harvest rates by the Southeast Alaska troll fishery for the full indicator stocks, 1982–2023.