Fishery Management Report No. 14-10

Annual Management Report for the 2013 Southeast Alaska/Yakutat Salmon Troll Fisheries

by

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and

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March 2014

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

Symbols and Abbreviations

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

Weights and measures (metric)

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

Weights and measures (English)

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

Time and temperature

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

Physics and chemistry

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

General

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

Mathematics, statistics

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

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ABSTRACT

This report describes the Southeast Alaska salmon troll fishery, management methods and actions taken by the Alaska Department of Fish and Game (ADF&G) from October 1, 2012, through September 30, 2013. Approximately 4.3 million salmon were harvested in the 2013 Southeast Alaska troll fishery. The harvest included 149,615 Chinook (*Oncorhynchus tshawytscha*), 5,021 sockeye (*O. nerka*), 2,393,807 million coho (*O. kisutch*), 684,692 pink (*O. gorbuscha*), and 1,054,695 chum (*O. keta*) salmon landed by 723 power troll and 366 hand troll permit holders during the calendar year. Of this, 238,422 salmon (6%) were taken by hand troll gear and 4,049,478 million salmon (94%) by power troll gear. The Chinook salmon harvest ranked 4th lowest since statehood, while the coho salmon harvest ranked 3rd highest and the chum salmon harvest ranked highest on record. The preliminary estimated Alaska hatchery contribution of Chinook salmon to the troll fishery, including hatchery terminal harvest, was 17,935 fish (12%). A total of 704,836 coho salmon produced by Alaska hatcheries were harvested by the troll fleet, which accounted for 30% of the total troll coho salmon harvest. Chinook escapements for seven out of eleven Southeast Alaska rivers were within the desired escapement goal ranges, while coho salmon escapements were generally within the desired escapement goal ranges.

Key words: Troll, Southeast Alaska, 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

The Southeast Alaska/Yakutat commercial salmon troll fishery occurs in State of Alaska and Federal Exclusive Economic Zone (EEZ) waters east of Cape Suckling and north of Dixon Entrance. The fishery is managed according to regulations promulgated by the Alaska Board of Fisheries (BOF), the North Pacific Fishery Management Council (NPFMC), the National Marine Fisheries Service (NMFS), and the U.S./Canada Pacific Salmon Commission (PSC). Regulations adopted by the board are listed in the State of Alaska Administrative Code, Title 5 (5AAC), *Chapter 29 - Salmon Troll Fishery*. The department, under emergency order authority, conducts inseason management. The Chinook salmon fishery is managed to achieve a harvest target based on the 2008 Bilateral Pacific Salmon Treaty Agreement. The treaty agreement specifies a harvest based on a relationship between a preseason Abundance Index (AI) generated by the Pacific Salmon Commission's Chinook Technical Committee and a target harvest rate specified in the agreement. Coho salmon are managed to ensure escapement goals and to achieve board allocation guidelines. Coho salmon near Dixon Entrance are managed in cooperation with Canada according to the treaty agreement.

Troll harvest and effort statistics since statehood (1960 fishing season) are presented, as well as all-gear harvest of Chinook and coho salmon. Status of wild coho (*Oncorhynchus kisutch*) and Chinook salmon (*O. tshawytscha*) stocks of Southeast Alaska and Yakutat, as well as hatchery production and contributions to the troll fishery are included. Wild coho and Chinook salmon escapements, along with wild coho salmon exploitation rates are discussed. Troll harvest of Alaska hatchery-produced chum salmon (*O. keta*) and associated effort are described.

CHINOOK SALMON AND COHO SALMON STOCK DESCRIPTION AND STATUS

CHINOOK SALMON STOCKS

Native Chinook salmon stocks occur throughout Southeast Alaska 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 important are the Alsek, Taku, Stikine, Chilkat, and the Behm Canal rivers (i.e., Unuk, Chickamin, Blossom, and Keta rivers). The three major river systems (Alsek, Taku, and Stikine rivers), as well as several mid-sized systems (Unuk, Chickamin and Chilkat rivers) are transboundary rivers, originating in Canada and flowing through Alaska to the Pacific Ocean. The Pacific Salmon Commission, under the terms of the Pacific Salmon Treaty (PST), addresses shared ownership and coordinated management of the Alsek, Taku, and Stikine rivers.

Southeast Alaska Chinook salmon stocks are all "spring type," entering spawning streams during spring and early summer months. Fry emerge the following spring and most remain in freshwater for at least one year before migrating seaward. Ocean residency ranges from two to four years for most Chinook salmon originating in Southeast Alaska. Trollers harvest several age classes of mature spawners and immature Chinook salmon during the fishing season.

Current information indicates that the majority of Chinook salmon harvested in the Southeast Alaska troll fishery are produced from spawning streams and hatcheries in the Pacific Northwest and Canada. This information is based on age composition, coded wire tagging (CWT) studies, and general productivity considerations. Management of Chinook salmon stocks is coordinated through the Pacific Salmon Commission.

COHO SALMON STOCKS

Coho salmon occur in more than 2,000 streams in Southeast Alaska. Most coho salmon streams are small, with the number of spawners typically ranging up to 1,000 fish. Because of the large number of these systems, they collectively contribute substantially to overall production. Lake systems are also important and typically produce returns between 1,000 and 10,000 fish. Large populations occur in the Taku, Chilkat, Berners, Stikine, Unuk, and Chickamin rivers and in most Yakutat area systems. Spawning takes place during the fall and early winter months. Typically coho salmon rear in freshwater for one or two years, and spend no more than one winter in the ocean before returning to spawn as adults. Most coho salmon harvested by Southeast Alaska trollers are three-year-old and four-year-old fish of Alaska origin and are harvested in the year of spawning.

DESCRIPTION OF THE TROLL FISHERY

The commercial troll fishery in Southeast Alaska and Yakutat (Region 1) occurs in State of Alaska waters 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 commercial troll fleet is comprised of hand and power troll gear types. Vessels using hand troll gear are limited to two lines on two hand-operated gurdies or four fishing rods, except that following the closure of the initial summer Chinook retention period and prior to the winter troll

fishery, four hand troll gurdies or four fishing rods may be onboard and operated within the EEZ north of the latitude of the southernmost tip of Cape Spencer [5 AAC 29.120(b) (2) (C)]. Another exception permits two hand troll gurdies or hand-powered downriggers to be used in conjunction with two fishing rods during the winter troll season only. Vessels using power troll gear are generally larger than those using hand troll gear. Power trollers are limited to four lines on power-operated gurdies, except within the EEZ north of the latitude of the southernmost tip of Cape Spencer, where six lines may be used [5 AAC 29.120 (b)(1)(A) and (B)]. While the majority of the troll fleet sells their catch to processing plants onshore, the fleet does include some catcher-processors, or "freezer boats," which harvest and freeze their catch at sea. The number of freezer boats has declined slightly in recent years. In 2013, a total of 49 freezer boats made landings, compared to 50 in 2012. Some out-of-state permit holders chose not to fish in Southeast Alaska, in favor of participating in fisheries off the coast of Washington, Oregon, or California.

The commercial troll fishery harvests primarily Chinook and coho salmon. Historically, the troll fishery harvested about 85% to 90% of the Chinook salmon taken in Southeast Alaska. Since 1980, the percentage of the Chinook salmon harvest taken by the troll fishery has declined due to harvest ceilings imposed as part of the PST coastwide rebuilding program, as well as allocation guidelines established by the Alaska Board of Fisheries (BOF). Since 1989, the troll fleet has been managed to harvest an average of 61% of the commercial coho salmon harvest over the long-term [5 AAC 29.065], though the actual troll harvest has averaged 64% of the commercial harvest, with a range of 53% to 74%.

Most other species are harvested incidentally, though in recent years, hatchery-produced chum salmon have been the target of significant troll effort in a few locations. The troll fleet also incidentally harvests Pacific halibut under federal Individual Fishing Quota regulations and groundfish (including lingcod and rockfish) under state regulations.

CHINOOK SALMON FISHERY

Commercial trolling for Chinook salmon occurs during both winter and summer seasons. The winter season is defined as October 1–April 30, or until 45,000 non-Alaska hatchery-produced Chinook salmon are harvested, with a guideline harvest level of 43,000−47,000 non-Alaska hatchery-produced fish, plus the number of Alaska hatchery-produced Chinook salmon harvested during the winter fishery. The summer season is defined as May 1 (or the end of the winter season) through September 30.

By regulation, the open area during the winter fishery is restricted to those areas lying east of the "surf line" south of Cape Spencer, and the waters of Yakutat Bay [5 AAC 29.020 (b)]. All outer coastal areas, including the EEZ, are closed during the winter fishery. The summer season is divided into the spring and general summer fisheries. The spring fisheries are intended to increase the harvest of Alaska hatchery-produced Chinook salmon and occur primarily in inside waters near hatchery release areas or along migration routes of returning hatchery fish. These fisheries begin after the winter fishery closes and may continue through June 30. The spring troll fisheries can begin prior to May 1 if the winter fishery closes early, when the harvest cap of 45,000 Chinook salmon is reached. The general summer fishery opens July 1 and harvests the majority of the annual Chinook salmon quota. During the summer fishery, most waters of the Southeast Alaska/Yakutat area are open to commercial trolling, including outer coastal waters.

Recent all-gear Chinook salmon harvests in Southeast Alaska (based on a moving 10-year average) have been the highest since statehood and are an exception to the declining trend in harvests since the late 1930s (Figure 2). The reductions in harvests prior to the 2000 season occurred primarily because of harvest ceilings imposed by the BOF and the PST. A guideline harvest level for all stocks and a 15-year rebuilding program for Southeast Alaska Chinook salmon stocks were established in 1981. In 1985, the PST was signed, and a coastwide rebuilding program for depressed non-Alaska Chinook salmon stocks that contribute to the Southeast Alaska fisheries began. The decline in coastwide abundance was primarily the result of overfishing of natural Chinook salmon stocks and the loss of freshwater spawning and rearing habitat in the Pacific Northwest. Abundance of Chinook salmon stocks harvested in Southeast Alaska fisheries has generally increased since the rebuilding programs began, with peak abundance approximately twice the average 1979–1982 base period abundance, though abundance has declined in some systems during recent years.

In 1996, after three years without a Chinook salmon annex 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 among the U.S. members of the PST. This agreement, which was in effect from 1996 through 1998, established an annual treaty quota based on preseason and inseason abundance estimates. In 1999, a new set of Pacific Salmon Treaty Agreements (PSTA) was signed under the PST, including an agreement for Chinook salmon. The new Chinook salmon agreement was similar to the abundance-based management of the LOA, with quotas based on preseason and postseason abundance estimates. However, under the PSTA, Alaska agreed to lower Chinook salmon harvests at lower abundance levels than had been implemented in either the PST or the LOA. In 2008, a new PSTA was signed, which will remain in effect through 2018.

Over the past 28 years, since 1985, the all-gear harvest of treaty[1] Chinook salmon has exceeded the preseason quota 19 times. Since 1987, the troll harvest of treaty Chinook salmon has exceeded the preseason treaty quota 15 times (Table 1).

CHINOOK SALMON MANAGEMENT METHODS

The harvest of treaty Chinook salmon by commercial salmon trollers is limited to a specific number of fish, which varies annually according to an abundance estimate. The accounting of treaty Chinook harvested by trollers begins with the winter fishery and ends with the summer fishery.

The winter troll fishery is managed to not exceed the guideline harvest level (GHL) of 45,000 Chinook salmon plus the number of non-Alaska hatchery-produced Chinook salmon. Fish tickets provide inseason information on harvest and effort throughout the fishery. In years when the winter fishery closed prior to April 30 because the GHL was reached (2003–2006, 2011 and 2012), daily tallies from regional processors were an important tool in tracking harvest during

[1] Under the terms of the PST, the number of treaty fish is the total harvest minus the add-on. The add-on is the number of Alaska hatchery-produced Chinook salmon minus: 1) 5,000 fish for pre-treaty harvests of Alaska hatchery Chinook salmon and 2) a risk factor. The risk factor is the standard deviation of the estimate of the total number of Alaska hatchery Chinook salmon.

the final weeks of the fishery. During these years, several spring fishery areas opened prior to May 1.

Spring fisheries are conducted along Chinook salmon migration routes or close to the following hatcheries and release sites: Little Port Walter Hatchery; Port Armstrong Hatchery; Macaulay Hatchery (Douglas Island Pink and Chum, Inc.); Whitman Lake Hatchery; Crystal Lake Hatchery; Neets Bay and Anita Bay release sites (Southern Southeast Regional Aquaculture Association); and Medvejie Hatchery and Hidden Falls Hatchery (Northern Southeast Aquaculture Association).

Most spring troll and terminal troll fisheries target Alaska hatchery-produced Chinook salmon, though non-Alaska hatchery (treaty) Chinook are also harvested. While there is no ceiling on the number of Chinook salmon harvested in the spring fisheries, the take of treaty Chinook salmon is limited according to the percentage of the Alaska hatchery fish taken in the fishery. Non-Alaska hatchery fish are counted towards the annual treaty quota of Chinook salmon under the Pacific Salmon Treaty, while most of the Alaska hatchery fish are not.

The guideline limits of treaty fish that may be harvested in each spring fishing 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

Each spring troll fishing area is managed individually. Fish tickets and biological sampling data provide information on harvest, effort and stock composition. This information is processed on a daily basis and is essential for the inseason management of the spring fisheries.

In addition to targeting Chinook salmon, trollers have been targeting hatchery-produced chum salmon during the spring in Icy Strait, West Behm Canal and Neets Bay. Please refer to the Chum Troll Fishery section of this document for more detail. During years in which the winter fishery is open through April 30, several spring troll areas typically open on May 1 and are open continually, rather than on a weekly schedule. These areas have had historically high Alaska hatchery contributions or have had both a low harvest and a treaty Chinook component that was well below the limit for that area. Those areas could be closed, however, if the treaty Chinook limit is exceeded. Other spring troll areas open by emergency order for two days per week (Monday–Tuesday) at the start of the season. However, some of the more remote areas may be opened for longer periods initially, in order to attract trollers to these areas and hopefully obtain large enough samples to provide precise estimates of Alaska hatchery contributions. While most Terminal Harvest Areas (THA) open on May 1 and remain open for extended periods of time, some open in accordance with the fishing schedules provided for in the Terminal Harvest Area management plans. ADF&G personnel examine fish deliveries, and the heads of adipose fin-clipped fish are shipped to the ADF&G Mark, Tag and Age Lab in Juneau. Coded wire tag data, provided by the tag lab, is used inseason to estimate the Alaska hatchery contribution to the harvest in each area. Fishing time for the following weeks is determined using this information in combination with historical harvest timing information in each area. Fishing time is extended or

curtailed during the week by emergency order as more tag data and harvest information becomes available.

If the preseason Abundance Index is 1.15 or above (commercial troll allocation of 120,833 Chinook salmon) and the number of Chinook remaining on the winter GHL to be harvested is between 10,000 and 15,000 fish, then an additional 250 non-Alaska hatchery-produced Chinook salmon will be added to the treaty caps under each tier. If the number of Chinook salmon remaining on the winter GHL is greater than 15,000 fish, then an additional 500 Chinook salmon will be added to the treaty cap tiers [5 AAC 29.090(d)(3)]. In 2013, the preseason Abundance Index was 1.20 and the winter fishery harvest of 26,612 was 18,388 fish below the GHL of 45,000 fish. As a result, an additional 500 Chinook salmon were added to the treaty cap tiers of each spring fishery area in 2013.

Directed Chinook salmon fisheries have also been conducted during May and June in some recent years. An agreement was approved between the United States and Canada during the Pacific Salmon Commission meeting held in February 2005. This agreement allows directed commercial and sport fisheries on Chinook salmon returning to the Taku and Stikine Rivers, depending on the run forecasts. Management plans were adopted by the BOF in January of 2006, which describe fishing areas and schedules for commercial and sport fisheries in Districts 8 and 11. Management plans were adopted by the BOF in January of 2006, which describe fishing areas and schedules for commercial and sport fisheries in Districts 8 and 11. In 2009, the U.S. and Canada agreed to a revised escapement goal range for large Taku River Chinook salmon of 19,000 to 36,000 fish, with a point goal of 25,500 large Chinook salmon.

The summer troll Chinook salmon fishery targets the remainder of the troll treaty Chinook quota during one or more openings. Due to the time lag between when fish are harvested and when the harvest information is received through fish ticket receipts, ADF&G conducts a Fisheries Performance Data program (FPD) to estimate the catch per unit of effort (catch per boat day [CPBD]) inseason during the summer fishery. Confidential interviews are conducted with trollers to obtain detailed CPBD data. Aerial vessel surveys are conducted to obtain an immediate estimate of fishing effort. Total harvest to date is estimated by multiplying aerial vessel counts with the CPBD obtained from the interviews. Daily tallies from processors are an important tool in tracking harvest during the final days of each summer Chinook opening, similar to the winter fishery. The department encourages trollers to report information on catch rates, effort, weather, water temperatures and other factors that influence the pace of the fishery by telephone or email during Chinook openings.

COHO SALMON FISHERY

The regulatory period for coho salmon retention in the troll fishery is June 1 through September 20, with a potential extension through September 30 in years when wild coho salmon abundance is projected to meet escapement needs after harvest and effort are considered [5 AAC 29.110(a)]. Troll harvests of coho salmon peak between mid-July and early September, while harvests in the inside gillnet fisheries peak between late August and early October (Figure 3). Escapements into streams generally peak in late September through early October, though escapement timing into some systems is earlier. Figure 3 presents combined run timing for three coho index lake systems which have relatively early escapement timing, with peak returns in late August.

All-gear harvests of coho salmon averaged 2.0 million fish during the 1940s (Figure 4). A decline in average harvest occurred during the next three decades, with a low decade average of

1.0 million fish in the 1970s. The BOF adopted a coho salmon fishery management plan 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 5). This plan, adopted in 1980, provides for conservation and allocation of coho salmon stocks in Southeast Alaska. The initial plan set the precedent for a mid-season troll closure to provide for adequate distribution of coho salmon escapement and for allocation to other gear groups.

The average all-gear commercial coho salmon harvest increased to 1.9 million fish in the 1980s, 3.2 million fish in the 1990s, and 2.3 million fish in the 2000s, with an annual record of 5.5 million fish harvested in 1994 (Figure 4). Factors contributing to the increased harvests over these previous decades include better spawning escapement levels achieved under the conservative management regime implemented in 1980, and increased marine survivals due to favorable environmental conditions (Table 2).

COHO SALMON MANAGEMENT METHODS

The coho salmon fisheries are managed to comply with the Southeastern Alaska/Yakutat Area coho salmon fishery management plan [5 AAC 29.110]. Inseason run strength is used to achieve ADF&G conservation objectives and BOF allocation objectives in the management plan (Table 3). The current coho management plan calls for a troll closure for up to seven days in late July if the total projected commercial harvest of wild coho salmon is less than 1.1 million fish [5 AAC 29.110 (b)(1)]. A troll closure for up to ten days typically occurs in mid-August and is required to be a minimum of two days by regulation for a fair start prior to the second Chinook salmon opening. The actual length of that closure is determined in early August, when an assessment determines whether the number of coho reaching inside areas is adequate to provide for spawning requirements, given usual or restricted inside fisheries on coho and other species [5 AAC 29.110 (b)(2)(A)]; or the proportional share of coho salmon harvest by the troll fishery is larger than that of inside gillnet and recreational fisheries compared to average 1971–1980 levels [5 AAC 29.110 (b)(2)(B)]. If the department has concerns for coho escapement or allocation, the closure would be longer than two days and could last as many as ten.

There are no harvest ceilings for Southeast Alaska coho salmon fisheries. However, under the 2008 PSTA, the area near the U.S./Canada border will close if the harvest rates by Alaska trollers fishing in the border area during early July fall below specified thresholds.

Long-term wild stock and hatchery stock CWT programs, dockside sampling programs to sample the harvest for CWTs, escapement monitoring, 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, stock timing, and stock harvest were accumulated. As a result, a model was developed in 1989 to accurately estimate the end of season all-gear coho salmon commercial harvest by late July using the salmon troll FPD. In the mid-1990s, escapement goals were established for several stocks in Southeast Alaska based on spawner-recruit relationships from long-term databases of harvest rate, harvest, age composition, and escapement information. These long-term monitoring programs have provided the backbone for successful conservation of coho salmon in Southeast Alaska.

EFFORT IN THE TROLL FISHERY

Limited entry for the power troll fishery was adopted in 1974 and the first permits were issued in 1975, when 1,078 permits were renewed and 760 were fished. The number of renewals gradually decreased over time while the number of permits fished fluctuated between a low of 641 in 2003 to a peak of 852 in 1991.

After the power troll fleet came under limited entry, the hand troll fleet, which was not yet limited, increased dramatically. 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 1,100 permits in 1975 to a high of 2,644 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, when hand troll participation reached a low point of 254 permits. From 2003–2008, the number of hand troll permits fished increased to 376, and has since declined to 366 permits fished in 2013. The percentage of active hand troll permits in the fleet declined from 76% in 1978 to a low of 28% in 2002, followed by an increasing trend through 2008. The percentage has remained relatively stable at 31% to 34% since then (Table 4).

Historically, the number of fishing days in the Chinook salmon general summer fishery dropped from a high of 169 days in 1978 and 1979 to a low of 4.5 days in 1992. Prior to 1980, there were no regional closures during the summer season, April 15–September 30. Summer fishery Chinook retention boat-days of effort have ranged from a high of 35,646 in 1986 to a low of 2,674 boat-days in 2013.

SUMMARY OF THE 2013 SEASON

In 2013, a total of 723 power troll permits were fished and 366 hand troll permits were fished during the calendar year (Table 4; Figure 6). Power troll effort has been relatively stable when compared to hand troll effort. Hand troll effort for all fisheries increased when compared to 2012, while power troll effort declined. Effort decreased by 65 permits during the winter fishery, increased by 15 permits during the spring fishery and decreased by 17 permits during the summer fishery when compared to effort in 2012 (Table 5; Figure 7). The increase in hand troll effort compared to the 2012 season was around 1%, while power troll effort decreased by 4%.

Fluctuations in effort relate strongly to salmon prices and, to a lesser degree, to the availability of alternate commercial troll opportunities in the Pacific Northwest. The number of boat-days of effort in 2013 during Chinook retention periods was 2,674, down 79% from 13,024 boat-days in 2012 (Table 6; Figure 8). Effort data was derived from dockside interviews of trolling vessels in conjunction with harvest and effort data from troll fish tickets.

The troll fleet harvested approximately 4.3 million salmon during the 2013 season, which is more than double the 2012 harvest and the recent 10-year average. The harvest of each species except Chinook salmon was higher than the 2012 harvest. The chum salmon harvest was the highest since statehood, while the coho harvest ranked third (Table 7). The entire Chinook salmon harvest was taken during a single Chinook retention period, July 1–6. The coho salmon harvest peaked during the week of July 21–27 (Table 8). Regional coho salmon harvest rates were well above average during the entire season. The average weight of coho salmon, at 5.5 lbs, was slightly lower than in 2012, but was nearly a pound below the 5-year and 10-year averages (Table 9). The troll season was extended through September 30 for the entire region.

In 2013, hand troll vessels harvested 238,422 salmon and power troll vessels harvested 4.0 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 6% in 2013 (Tables 10 and 11).

The winter troll fishery was open from October 11, 2012 through April 30, 2013, and harvested 26,612 Chinook salmon. The spring fishery harvested 38,001 Chinook salmon during May and June. The summer troll fishery harvested 84,653 Chinook salmon during one retention period, July 1–6.

NEW TROLL FISHERY REGULATIONS

During the 2012 BOF meeting, new regulations were adopted that affect the management of the troll fishery, though the new regulations did not go into effect until July 13, 2013.

1. A plan was adopted providing for the orderly development of an enhanced chum salmon fishery in Cross Sound, Icy Strait, and Northern Chatham Strait, while providing for conservation of wild stocks.
    a. Spring fishery areas in District 14 are to be managed to minimize the harvest of wild chum salmon while adhering to 5 AAC 29.090. MANAGEMENT OF THE SPRING SALMON TROLL FISHERIES, with the exception of the Port Althorp Fishery Area, which will be managed to maximize the harvest of Alaska hatchery Chinook salmon as it has been in the past.
    b. The Northern Chatham Strait Fishery Area in District 12 may be opened by emergency order for up to four weekdays per week beginning the second Monday in June through the last week of June for pink and chum salmon retention only.
2. Coho salmon retention begins on June 1 rather than June 15.
3. *The Situk-Ahrnklin Inlet and Lost River King Salmon Management Plan* was revised to remove the projected Situk River king salmon run strength as a trigger for a potential spring troll fishery in Yakutat Bay and to use "escapement" instead of "inriver run" as the criteria for triggering management actions. The fishery may open by emergency order one day per week during May and June, with a maximum harvest of 1,000 king salmon.
4. The number of fishing rods that may be onboard a hand troll vessel year-round is no longer limited to four, in order to allow spare rods in case of breakage. However, the number of fishing rods that may be operated from a hand troll vessel has not changed.
5. A portion of Bear Cove in the Silver Bay Special Harvest Area is closed to troll gear to protect broodstock and provide safety, as has been done by emergency order in recent years.
6. The western boundary of the Deep Inlet Terminal Harvest Area was modified, increasing the area open to trolling from the beginning of the rotational fishery through the third Saturday in June, to increase the harvest of enhanced Chinook salmon.
7. The Hidden Falls Terminal Harvest Area is open to troll coho retention from June 1 through September 20 and will remain open during any troll coho closures.
8. Troll area boundaries were modified in West Behm Canal (Section 1-E) from July 1to September 20, as has been done by emergency order during the past two years.
9. Regulations stating when portions of Section 1-F are open to trolling during summer fishery were revised and clarified.

10. The criteria for extending the coho fishery after September 20 was modified as follows: the regulatory period for coho retention in the troll fishery is June 15 through September 20, with a potential extension through September 30 in years when wild coho salmon abundance is projected to meet escapement needs after harvest and effort are considered.

CHINOOK SALMON FISHERY

During the 2013 season, the troll harvest of Chinook salmon was managed to: 1) comply with the 2008 PSTA, 2) continue the Southeast Alaska natural Chinook conservation program, 3) provide maximum harvest of Alaska hatchery-produced Chinook, 4) minimize incidental mortality during Chinook non-retention periods by closing areas of high Chinook salmon abundance, and 5) to comply with terms of the incidental take permit issued by the National Marine Fisheries Service. The 2013 Chinook fishery was managed to achieve an all-gear harvest of 176,000 treaty Chinook salmon. The all-gear treaty harvest was 183,886 fish, which was 4% over the all-gear quota. The troll treaty harvest was 134,960 fish, which was 4% over the troll treaty allocation (Table 1).

The 2013 total all-gear (troll, purse seine, drift gillnet, set gillnet, Annette Island, and recreational fisheries) Chinook salmon harvest was 246,727 fish, of which 183,886 were treaty fish. A total of 70,205 fish were of Alaska hatchery origin. The all-gear Alaska hatchery add-on, 62,574 in 2013, was calculated by subtracting the pre-treaty base hatchery harvest and risk adjustment from the Alaska hatchery contribution (Tables 12 and 13). Trollers harvested 149,615 Chinook salmon of which 134,960 were treaty fish. Purse seiners harvested 23,110 Chinook salmon of which 6,706 were treaty fish. The drift gillnet fleet harvested 27,316 Chinook salmon, of which 6,020 were treaty fish (Troll, purse seine and drift gillnet harvests include terminal area and Annette Island harvests). The Yakutat set gillnet fleet harvested 900 Chinook salmon, all of which were treaty fish. Recreational fisheries (including anglers and charters) harvested 45,787 Chinook salmon, of which 35,299 were treaty fish.

Winter Fishery

The 2013 winter troll fishery began October 11, 2012 and continued through April 30, 2013. A total of 442 vessels participated in the fishery, with a harvest of 26,612 Chinook salmon (Tables 5, 12 and 14; Figure 9). The harvest decreased by 44% and the catch per landing decreased by 35% when compared to the 2012 season. The 2013 harvest was 29% below the five-year average and 39% below the 10-year average harvest (Table 14; Figure 9). The Alaska hatchery contribution, at 15%, was above average (11%) and was the highest since 1996 (Table 14). While the harvest during the early winter fishery was somewhat lower than in recent years, harvests were substantially lower during the late winter fishery. Effort was similar to the 5-year average but was down by 65 permits compared to 2012.

Spring Fishery

A total of 613 vessels participated in the 2013 non-terminal spring fisheries, with a harvest of 37,318 Chinook salmon. The largest Chinook salmon harvests were taken in the Sitka Sound, Tebenkof Bay and Ketchikan spring troll areas (Table 15). The Chinook salmon harvest was 12,540 fish greater than the 2012 non-terminal harvest (Table 16). The Alaska hatchery contribution, at 41%, was below that of 2012, (Table 16) but equal to the 5-year average (41%). Normally, the Alaska hatchery contribution increases as the fishery progresses but this was not the case in 2013. The Alaska hatchery contribution peaked at 46% during the first week of June,

then declined to 41% by late June. Effort was 7% higher than in 2012 and 4% higher than the 5-year average (Table 16). A total of 32 spring areas and six terminal fisheries were open during 2013 (Figure 10). Other species harvested during the spring season, including Annette Island troll, were 823 sockeye, 27,156 coho, 77,345 pink and 330,070 chum salmon (Table 8).

Yakutat Bay Spring Fishery

A spring troll fishery opened for the first time in Yakutat Bay. The BOF established regulations in 2012 that allow ADF&G to open, by emergency order, a spring salmon troll fishery for one day per week during the months of May and June in the Yakutat Bay area east of a line from Point Manby to Ocean Cape. The maximum harvest allowed is 1,000 Chinook salmon and is not based on the composition of Alaska hatchery fish. A total of 1,012 Chinook salmon were harvested by 31 permits during seven, 1-day openings. The Alaska hatchery contribution was 5%. A postseason analysis of genetic stock composition will be conducted in order to determine the presence or absence of wild stocks in the catch.

Districts 8 And 11 Transboundary Rivers Directed Chinook Salmon Fisheries

District 8

The 2013 preseason terminal run forecast for large Stikine River king salmon was 22,400 fish; insufficient for an Allowable Catch for either the U.S. or Canada, so directed fisheries did not occur in May. An inseason terminal run estimate produced in late May was again too low to allow for directed fisheries. Spring troll fisheries targeting Alaska hatchery-produced Chinook salmon were opened on a limited basis in District 8, according to the *Spring Troll Management Plan.* The preliminary escapement estimate of 18,200 fish is within the escapement goal range of 14,000–28,000.

District 11

The 2013 pre-season terminal run forecast for large Taku River king salmon was 26,100 fish; insufficient for an Allowable Catch for either the U.S. or Canada, so directed fisheries did not occur in May. An inseason terminal run estimate produced in late May was again too low to allow for directed fisheries. The preliminary escapement estimate of 17,000 fish is below the escapement goal range of 19,000–36,000.

General Summer Fishery

In 2013, ADF&G received the preseason abundance index of 1.20 the first week of April, which translated to an all-gear quota under the PSTA of 176,000 treaty Chinook salmon (Table 1). Under the current fisheries allocation scheme, the purse seine fleet was allocated 7,568 (4.3%) fish, the drift gillnet fleet 5,104 (2.9%) fish, and the set gillnet fleet 1,000 fish, for a total of 13,672 fish to the combined net gears. The remainder of 162,328 fish was then divided between the troll and sport fisheries in an 80/20 split, which translated to 129,862 fish to the troll fishery and 32,466 fish to the sport fishery [5 AAC 29.060(b)].

The summer troll Chinook quota is calculated by subtracting the pre-summer treaty harvest, as estimated on June 24, from the troll treaty allocation. The pre-summer harvest is the sum of the winter treaty harvest (22,597 fish), the projected spring treaty harvest (15,455 fish), the pre-treaty Alaska hatchery harvest (3,700 fish), a statistical risk factor related to the Alaska hatchery contribution estimate (1,000 fish), and the Transboundary River directed harvest (above the base period harvest), which was zero in 2013. The resultant sum (38,052) is then subtracted from the

troll allocation, yielding an initial estimate of 87,111 treaty Chinook for the general summer quota.

According to 5 AAC 29.100, Management of the summer salmon troll fishery, 70% of the summer troll quota is to be taken in the first opening beginning July 1, and the remaining 30% harvested following any closure for coho salmon management in August. The Chinook salmon target harvest for the first opening was announced as 62,864 fish, which included an estimated 3% Alaska hatchery component (1,886) and 60,978 treaty fish.

The first summer troll Chinook retention period was set at a predetermined number of days, from July 1−6, due to the relatively low harvest target and anticipated fishery performance at similar abundance indices. Aerial vessel count surveys were conducted on July 2, with a total of 426 vessels counted, a decrease of approximately 122 vessels compared to survey counts during the same week last year. However, more than 700 permits made landings according to fish ticket data, which is similar to effort seen in recent years. Compared to 2012, a larger portion of the fleet chose to target Chinook rather than chum salmon, taking advantage of high catch rates and prices. Following the first opening, the areas of high Chinook salmon abundance (5 AAC 29.050) closed for the remainder of the season (Figure 11). The total July harvest was estimated at that time to be 84,000 fish, which fulfilled the summer troll allocation. The catch/fleet/day of 14,100 far exceeded the anticipated catch/fleet/day and was the highest since 1997 (Table 17). With the summer troll harvest complete, the 2013 troll treaty allocation of 129,862 was reached, so there was no second Chinook salmon retention period.

During the first week of August, the department announced that the troll fishery would remain open until further notice. A troll closure was not required by regulation, since there was no second Chinook retention period during the summer fishery and therefore no need for a 2-day "fair start" closure. Based on the second coho salmon run strength assessment for the year, ADF&G determined that a troll closure was unnecessary. The wild return and commercial harvest projections were well above average and second only to those in 1994, when the coho salmon return was the largest on record. High abundance levels had been observed throughout the region for several weeks.

The total summer fishery Chinook salmon harvest was 84,672 fish, of which 2,880 fish, or 3%, were of Alaska hatchery origin and 2,299 were counted as hatchery add-on (Table 12). A total of 82,316 treaty Chinook salmon were harvested in the summer fishery, which was 4,795 (6%) less than the pre-summer estimated harvest target.

COHO SALMON FISHERY

Coho salmon retention began on June 1 for the first time, due to a new regulation adopted by the BOF. Most of the 27,156 coho harvested during the spring troll fisheries (outside terminal harvest areas) were taken after June 15, which is the date when troll coho retention began prior to 2013.

The majority of troll coho salmon harvest is taken during the general summer fishery, which begins on July 1 each year. The first run strength assessment in late July projected an all-gear commercial harvest of 3.01 million wild coho, well above the 1.1 million fish conservation threshold for an early season closure [5 AAC 29.110 (b) (1)]. The total wild coho abundance was projected at 5.73 million fish, which was 55% above the 1982–2012 average of 3.70 million fish and would rank 2nd out of the most recent 32 years (second only to the 6.7 million fish in 1994).

It was also determined that a boundary area closure was not required. The Pacific Salmon Treaty requires that waters in the boundary area be closed for 10 days beginning in statistical week 31 if the mean-average troll coho CPUE for weeks 27–29 in troll Area 6 (Districts 1 and 2) is between 15 and 22 coho/day. The mean-average CPUE for the fishery this year was 88 coho/day, which is well above the trigger for a closure and well above the 1993–2012 average. Regional power troll catch rates were substantially above average during the first three weeks of the summer fishery and exceeded those seen in 1994, when the coho harvest was the largest on record.

The second coho salmon run strength assessment in early August projected an all-gear commercial catch of 3.25 million wild coho and a total return of 5.91 million wild coho, based on average wild coho power troll CPUE for the summer troll season through week 31. Both projections were the 2nd highest in 32 years. Regional troll fishery catch rates were well above average during the first five weeks of the summer fishery and were the highest in 20 years, surpassing those seen in 1994. The estimated 2013 troll coho salmon harvest through week 31 (week beginning July 28) was approximately 827,203 fish, which was ahead of all time comparison periods. Catch rates in 2013 have been well above the 1993–2012 average in each of the Big-6 areas as well as for the region as a whole during the first five weeks of the summer season (Figures 12 to 14).

As part of the August assessment, the strength of returns to inside areas was evaluated by assessing the performance of the drift gillnet fisheries. One of the best measures of coho run strength is cumulative catch-per-boat-day (CPBD) in the four major drift gillnet fisheries, though gillnet fisheries at this early date are not necessarily very good indicators of the actual coho abundance. The 2013 cumulative CPBD for Tree Point exceeded the 1971–1980, 1993–2012, and 2008–2012 catch comparison periods. The CPBD in the Prince of Wales fishery exceeded the 1971–80 and 1993–2012 comparison periods, but was slightly below the recent 5-year average from 2008–2012. The CPBD in the Taku/Snettisham was below the 1971–1980 period, but exceeded the averages of the 1993–2012 and 2008–2012 comparison periods. The Lynn Canal fishery CPBDs were lower than that of all comparison periods (Figure 15). The coho salmon management plan utilizes a run assessment based largely on wild stock escapement projections and catch per unit of effort in the drift gillnet fisheries. Only the District 6 fishery shows substantial numbers of hatchery fish in the catch through late July/early August, so the strength of the District 6 wild component is of particular interest. The cumulative wild CPBD in District 6 was above the 1971–1980, recent 20-year and 5-year averages.

The cumulative Taku River fishwheel count as of early August was estimated to be below the 10-year average, though the catch may under-represent abundance by nearly half because one of two fish wheels had been relatively ineffective during the season. The inriver commercial catch in the Taku River as well as the District 11 gillnet cumulative coho CPUE through week 31 were above average. Though early August is far too early to assess Chilkat coho escapement, as the 10-year average fish wheel catch through this week is only five fish, a very preliminary projection for Chilkat escapement indicated about 58,000 spawners, based on smolt capture success in 2012 and inseason CWT recoveries to date. That projection would fall within the escapement goal range. Escapement projections for coho salmon index systems appeared adequate at the time of the second assessment. Based on the exceptional wild return and commercial harvest projections, the above-average troll catch rates throughout the region since July 1 and the above-average cumulative drift gillnet harvest, a closure was not recommended and the troll fishery remained open through September.

The regulatory period for coho salmon retention in the troll fishery is June 1 through September 20, with a potential extension through September 30 in years when wild coho abundance is projected to meet escapement needs after harvest and effort are considered. Coho run strength was assessed for a third time during the second week of September to provide support for the extension of the troll season. Based on power troll CPUE for weeks 27–36, the wild coho abundance was projected to be 5.73 million, which is 53% above the 1982−2012 average. The wild commercial catch was projected to be 3.32 million, which was 60% above the 1982−2012 average. Both projections were second only to 1994. The regional troll CPUE had been substantially above the 20-year average throughout the summer and had increased during the most recent four weeks.

Returns to most systems in Southeast were projected to be near or within their escapement goal ranges. Escapement to the Situk River had already exceeded the goal range, while the escapement to the Tsiu River was estimated to be within the goal range. The return to the Taku River was projected to reach the 70,000 fish escapement target and fish wheel data indicated 78,500 (Figure 16). An average return of 85,000 was projected for the Chilkat River, based on cumulative fishwheel counts (Figure 17). A strong return was projected to Auke Creek. A drift gillnet fishery was conducted in Berners Bay for the first time since 2006. The inriver abundance in the Stikine River was reported to be very high. Hugh Smith appeared to be strong and was projected to exceed the goal. Ford Arm was the only indicator system without a strong return, though a troll extension would not affect that stock. Factors contributing to the exceptional fishing in Southern Southeast Alaska waters were the large return to the Klawock hatchery and strong escapements to the Nass and Skeena Rivers in Northern British Columbia.

Drift gillnet fishery catch rates, a primary indicator for inside abundance, were all above average during the week in which the third assessment was done. The cumulative harvest in the drift gillnet fisheries was also above average at that time.

On September 13, the department issued a news release announcing that the troll fishery would be extended through September 30 in all waters of the region. During the past 19 years (1994–2012), the coho salmon season has been extended 11 times (Table 18). There have been only two other years (2003 and 2004) that the entire region was open through September 30. Prior to 1994, extensions after September 20 were not allowed. The postseason 2013 estimated wild coho salmon abundance of 5,260,329 million fish was 34% above the recent 20-year (1992–2012) average, and is the second highest estimate on record, dating back to 1982. The total troll coho salmon harvest of 2,393,807 fish was the 3rd highest since 1960, behind 1993 and 1994 (Table 7). The average dressed weight of troll-caught coho salmon of 5.5 pounds was 18% below average for all years since 1970. Size of coho salmon returning to the region has exhibited a prominent two-year cycle in recent years, with odd-year dressed weights averaging nearly a pound lighter compared with even years. In addition, dressed weight of both coho and Chinook salmon is positively correlated with the Pacific Decadal Oscillation, which has recently entered a negative (cold) phase.

CHUM SALMON FISHERY

Spring Chum Salmon Fishery

Trollers target hatchery-produced chum salmon in the spring troll areas located in Icy Strait (District 14) and northern Chatham Strait (District 12). The majority of the District 14 chum harvest occurs in the Homeshore and Point Sophia fisheries. During the 2013 spring troll and

early general summer fisheries at Homeshore and Point Sophia, a total of 311,388 chum salmon were harvested by the 192 permit holders that targeted chum (Table 19). This is both the largest troll chum salmon harvest and effort in the District 14 area since the directed chum fisheries began in 2010. Other salmon species are harvested in these fisheries, but are taken incidentally.

The Northern Chatham Strait spring troll area opened for the first time in 2013 to target hatchery-produced chum salmon. The fishery was open Monday–Thursday, beginning the second Monday in June through the end of June, for pink and chum salmon retention only. A total of 596 pink salmon and 2,616 chum salmon were harvested by eight permit holders.

Trollers also targeted chum salmon returning to the Neets Bay hatchery during the last week of June, though the majority of the harvest and effort occurs during the summer troll fishery. Approximately 2,227 chum salmon were harvested by 11 permit holders during the last week of June (Table 19).

Summer Chum Salmon Fishery

Historically, chum salmon were harvested incidentally in the general summer troll fishery and were not targeted until the Cross Sound pink and chum fishery was established in 1988 as an indicator of pink and chum salmon abundance in inside waters. The troll chum harvest increased substantially in 1992, when for the first time over 1 million chum salmon returned to the Hidden Falls hatchery, located on eastern Baranof Island and operated by the Northern Southeast Regional Aquaculture Association. In 1993, the Northern Southeast Aquaculture Association Medvejie/Deep Inlet facility near Sitka saw a return of over 1.0 million chum and the troll chum salmon harvest increased to over 500,000 fish. Since that time, trollers have targeted chum and, with the exception of 1999 and 2008, the annual troll harvest of chum salmon has been consistently greater than 100,000 fish (Table 7). The 2013 chum harvest of 1,054,695 for all troll fisheries combined is the largest since statehood, and nearly 352,000 more than the previous annual high. Effort directed at targeting hatchery-produced chum salmon has increased in recent years (Figure 18). Some trollers have chosen to target chum salmon during the summer Chinook salmon openings or during weeks when they would normally target coho salmon. Though the troll fishery is not managed for chum salmon, the redirection of effort away from Chinook and coho salmon, which are managed inseason, has some effect on the total harvest and catch rates of those species.

In 2013, trollers harvested a total of 462,530 chum salmon in Sitka Sound from a total return of 2,239,714 fish to the Medvejie/Deep Inlet facility. This represents the largest troll chum harvest for the area dating back to statehood, and is more than 273,000 fish greater than the previous year high. The majority (275,829) were harvested over a two-week period in mid-August (weeks 32 and 33), when 106 permits targeted chum salmon within Sitka Sound (Table 19).

The Southern Southeast Regional Aquaculture Association allows the troll fleet to target chum salmon in the Neets Bay Terminal Harvest Area (THA) only in years in which a surplus above broodstock and cost recovery needs is identified. In 2013, effort declined, but harvest within the THA increased substantially, with 104 permits harvesting 76,005 chum salmon, the highest annual harvest to date. Similar to effort in the Neets Bay THA, the number of troll permits targeting chum in the West Behm Canal area declined in 2013. A total of 145 permits harvested 112,649 chum salmon during the spring and summer troll fisheries. When compared to 2012, this is a decrease of 69% and 46% for harvest and effort, respectively. The total troll chum salmon

harvest for Neets Bay and all of West Behm canal combined was 188,837, which was a decrease of more than 222,000 chum salmon from 2012 (Figure 18).

OTHER SPECIES

A total of 5,021 sockeye and 684,692 pink salmon were harvested during the general 2013 troll seasons (Table 7). The sockeye salmon harvest was below average when compared to 10–year averages from 1980–2009, but above average for the 1960–1979 period. Pink salmon harvests exceeded all historical 10-year averages from 1960–2009. In 2013, a number of trollers chose to target pink salmon in the mid-Chatham Strait/Frederick Sound area during July and early August. This directed pink fishery accounted for more than 320,000 fish, approximately 47% of the annual troll pink harvest.

EXCLUSIVE ECONOMIC ZONE (EEZ) HARVESTS

In 2013, approximately 8% of the Chinook (11,593 fish) and 2% of the coho salmon (57,040 fish) harvested by the troll fishery (Figure 5) was reported as taken outside of state waters in the EEZ (Districts 150, 152, 154, 156, 157, and 189). In addition, 64 sockeye, 1,018 pink, and 746 chum salmon were taken in the EEZ. The Chinook salmon harvest of 11,593 from the EEZ represents 14% of the harvest during the first troll Chinook retention period of the 2013 summer. This compares to 5-year and 10-year averages of 26% and 24%, respectively. When all species are combined, 2% of the troll harvest was reported to be taken outside state waters, a 1% decrease in the percent of the total troll harvest compared to 2012. Although this is a decrease from both the 5-year and 10-year averages, the number of salmon harvested in the EEZ in 2013 was an increase over 2011 and 2012. The increase in harvest above recent years was primarily due to overall coho abundance in 2013, with the regional troll coho harvest being the third highest on record.

ALASKA HATCHERY PRODUCTION

Private non-profit and federal hatcheries in Southeast Alaska 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 14, 16, and 17). The peak harvest of Alaska hatchery fish to the troll fishery occurred in 1996, when trollers harvested 38,365 Alaska hatchery Chinook, or 27% of the total troll Chinook salmon harvest. The all-gear Alaska hatchery Chinook harvest peaked in 2001, when 85,404 fish, or approximately 32% of the total harvest, were caught (Table 20; Figure 19). In 2013, the combined Alaska hatchery harvest contributed approximately 70,205 Chinook salmon to the commercial and sport fisheries, with 17,935 fish harvested in the troll fishery and 12,504 fish in the sport fishery (Table 20).

Hatchery-produced coho salmon were first documented in the troll harvest in 1980. The hatchery contribution to the total coho salmon harvest has increased from less than 1% in 1980 to 30% in 2013, with Alaska hatcheries producing nearly 100% of these fish. In 2013, the hatchery coho salmon contribution was 30% of the harvest, the highest seasonal contribution on record, and had a total contribution of 705,814 fish. This was nearly 189,000 fish more than the previous annual high (Table 21; Figure 20). Hatchery coho contributions peaked in late July (week 30), when approximately 81,726 hatchery coho were harvested for the week.

WILD STOCK ESCAPEMENT

CHINOOK SALMON ESCAPEMENT

Since a 15-year Chinook salmon rebuilding program began in 1981, ADF&G has annually estimated Chinook salmon 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 age and sex data in the escapement in order to collect data that would, when included with escapement data, allow the use of spawner-recruit analytical methods to set Biological Escapement Goals (BEG) to achieve maximum sustained yield. With improved escapement estimation, BEG for the three Transboundary River stocks and the eight Southeast Alaska stocks have subsequently been revised.

The three Transboundary River stocks that are monitored for Chinook salmon escapement are the Alsek, Taku, and Stikine Rivers. Of the three, the Alsek and Stikine had escapements within their BEG ranges, while the Taku escapement fell below the range for 2013. The Alsek, a large glacial system near Yakutat, had an estimated escapement of 5,044 Chinook in 2013. This is nearly double the escapement from 2012 and slightly above the 10-year average, but falls below the 5-year average escapement to this system. In 2013, Chinook escapement to the Stikine River, a glacial origin system near Wrangell, and the largest river in Southeast Alaska, fell within the BEG range. Although the estimated escapement of 18,172 fish in 2013 was below 2012 and the 10-year average, it did exceed the recent 5-year average. Chinook escapement to the Taku River, a large glacial system near Juneau, fell below the escapement goal range in 2013. The estimated escapement of 17,025 fish was below 2012, all historical averages, and was the 5th lowest estimated escapement dating back to 1975.

Of the eight Southeast Alaska indicator systems, Andrew Creek and the Situk, Chickamin, Blossom, and Keta Rivers all had escapements within their BEG ranges, while the Chilkat, King Salmon, and Unuk Rivers had escapement values below their BEG ranges. Andrew Creek, a small non-glacial U.S. tributary of the Lower Stikine River near Wrangell, had Chinook salmon escapement that met BEG for 2013. The estimated escapement of 920 fish was below the 10-year average, but was an increase from both 2012 and the 5-year average. The Situk River, a non-glacial system located near Yakutat had the largest percent increase in escapement in 2013. The escapement of 912 Chinook exceeded both the 5-year and 10-year averages, and was nearly three times larger than the escapement from 2012. The Chickamin, Blossom, and Keta Rivers, all located in east Behm Canal near Ketchikan, also had Chinook salmon escapements that met BEG for 2013. Although the Chickamin was below both the 5-year and 10-year averages, the estimated escapement of 468 fish in 2013 was an increase from 2012, and was within the BEG range. The 2013 escapement to the Blossom River of 987 Chinook was above the 5-year and 10-year averages, and exceeded the escapement from 2012 by 20%. In 2013, the Keta River was the only indicator system that exceeded the BEG range, with an estimated escapement of 1,484 spawners. This was above the 5-year and 10-year averages, and more than twice the escapement from 2012. The Chilkat River, a moderate-sized glacial system near Haines, had a Chinook escapement that fell below the BEG range in 2013. Although the estimated escapement of 1,683 fish was a small increase from 2012, it was below both the 5-year and 10-year averages. In 2013, Chinook escapement to the King Salmon River, a small non-glacial system located near the head

of Seymour Canal on Admiralty Island, did not meet the BEG, and was below 2012, the 5-year, and 10-year averages. The Unuk River, a glacial system in east Behm Canal, also had escapement that fell below the BEG range. The escapement of approximately 1,135 Chinook in 2013 was above 2012, but fell below both the 5-year and 10-year averages for the system. In 2013, escapements generally increased from those in 2012, with 8 of the 11 index counts above the 2012 escapement values. In summary, seven of the 11 systems had escapements above or within escapement goal ranges (Table 22).

COHO SALMON ESCAPEMENT

Only a small percentage of the coho salmon escapements in Southeast Alaska are enumerated or surveyed because of the extremely scattered distribution of stocks and difficult conditions for observation of spawners during the fall months (Table 23). In 2013, weirs were operated on three systems, while foot or aerial surveys were conducted on another 27 streams. An adult tagging and recovery program has been in operation since 1987 to estimate the escapement of coho salmon to the Taku River.

Variations in environmental conditions and run timing can cause serious problems in obtaining ground and aerial survey escapement estimates that reflect actual spawner abundance. High water events appear to trigger spawning but also adversely affect stream visibility and, therefore, make it difficult or impossible to accurately count fish. Once spawning occurs, stream life is typically very short and post-spawners are quickly removed by predators or flushed downstream by high water. Survey counts are usually higher when fall weather is dry and fish continue to accumulate in streams before spawning occurs. Low peak counts are often associated with fall seasons when sequential, protracted freshets occur in October that bring fish to the spawning areas and then flush out post-spawners, while at the same time severely limiting survey opportunities. Improved precision can be obtained by conducting multiple surveys throughout the fall. This is feasible for some systems such as Juneau roadside streams, but is more difficult and expensive for remote streams such as the major coho salmon producing systems in southern Southeast Alaska.

CWT studies conducted since the early 1980s have provided annual harvest rate estimates for four coho salmon stocks. These stocks include Auke Creek near Juneau, the Berners River in lower Lynn Canal, Ford Arm Lake on the outer coast north of Sitka, and Hugh Smith Lake on the mainland southeast of Ketchikan (Figure 21). Fish are tagged in these systems and their contribution to the fisheries is estimated through ADF&G harvest sampling and CWT processing programs. Weirs are operated on the three lake systems to enumerate coho salmon escapements and to estimate the fraction of the returning population marked with CWTs. The Berners River escapement is intensively surveyed on foot. Samples for estimating the fraction of the returning population marked with CWTs are collected with beach seines. Escapement estimates for the Berners River are conservative, since a lower river weir is not employed, resulting in harvest rate estimates that are likely to be biased upward (Table 24).

Migrations into spawning streams generally peak in late September. Escapement goals of indicator streams are usually met, and have been exceeded in many cases in recent years (Tables 23–27; Figure 21). In 2013, escapements to systems in the northern inside areas were within or above goal for all stocks, with the exception of Montana Creek where the peak count of 367 spawners was slightly below the goal of 400–1,200 spawners (Table 25). The estimated escapement to the Taku River above Canyon Island (68,229 spawners) was nearly double the

threshold goal (35,000 spawners). Escapements to the Berners River (6,280 spawners) and Chilkat River (51,324 spawners) were both near the mid-point of their goals of 4,000–9,200 spawners and 30,000–70,000 spawners, respectively (Table 25; Figure 21). Of the three index streams on the Juneau road system the escapement count was above-goal for Auke Creek, within goal for Peterson Creek and slightly below-goal for Montana Creek (Table 25).

The escapement count of 1,414 spawners for five small streams on Baranof and Kruzof Islands was above-average (1,270 spawners) and well above the goal of 400–800 spawners. The overall escapement index of 2,987 spawners in all six monitored streams in the Sitka area, including Ford Arm Creek on Chichagof Island was below the historical (1982–2012) average of 4,592 spawners (Table 26; Figure 22). The total escapement of 1,573 spawners to Ford Arm Creek, while within goal (1,300−2,900 spawners) was the second lowest escapement on record and less than half the historical average of 3,292 spawners. The escapement resulted from an all-gear exploitation rate of 78% (Table 28; Figure 23) on a return estimated at 7,170 adults that was 15% below average (8,468 adults; Figure 21). Although the troll exploitation rate (48%) was below average (52%), the purse seine exploitation rate of 29% was the second highest on record. Marine sport fisheries accounted for an estimated 1% of the return. An intensive purse seine fishery was conducted in Ford and Slocum Arms, and 2013 was the third consecutive year in which the Ford Arm Creek stock showed a pattern of early entry into Khaz Bay and a high purse seine exploitation rate.

The overall index of 14,597 spawners for 15 streams in the Ketchikan (Southern Inside) area was above the 1987–2012 average of 9,642 spawners (Table 27; Figure 22). The total escapement of 3,048 spawners to Hugh Smith Lake was the second highest on record, and well above goal range (500–1,600 spawners) for the sixth year in a row. The aggregate survey index count for the other 14 streams (11,549 spawners) was well-above the goal range of 4,250–8,500 spawners.

COHO SALMON EXPLOITATION RATES

The 2013 average troll fishery exploitation rate of 28% for the four primary indicator stocks (Berners River, Auke Creek, Ford Arm Lake, and Hugh Smith Lake) was well-below the 1982−2012 average of 38% (Table 28; Figure 24). Extensive targeting of chum salmon by trollers was again a contributing factor. The troll exploitation rate for the Hugh Smith Lake stock (25%) was the highest since 2007 but remained well below the 1982–1999 average of 39%. The troll exploitation rate on the Auke Creek stock was estimated at 32%, highest since 2005 and above the long-term average of 29%, and close to the 1982–1999 average (33%). The troll exploitation rate estimate of 48% for Ford Arm Creek was below the long-term average of 52%.

The average 2013 total exploitation rate by all fisheries on the four stocks was 61%, compared with the 1982–2011 average of 57% (Table 29; Figure 23). The Ford Arm Creek exploitation rate estimate of 78% was the second highest on record, owing in part to a high purse seine catch estimated at 2,069 fish, representing 29% of the estimated total return. The total exploitation rate of 55% for the Hugh Smith Lake stock was below the long-term average of 63% and far below the 1990s average of 75%, continuing a recent trend of lower all-fishery exploitation rates for that stock beginning in 2000. The decrease in exploitation has been spread broadly across fisheries, with the smallest change in northern British Columbia fisheries and the Tree Point gillnet fishery and greater decreases in more northern fisheries.

Table 1.–All-gear and Troll Treaty Chinook salmon harvest, hatchery add-on, total harvest, Treaty quota, terminal exclusion harvest and the number of fish over or under the quota, 1985–2013.

	ALL-GEAR							TROLL			
Year	Treaty Harvest	Hatchery Add–on	Terminal Exclusion	Total Harvest	Pre-Season Treaty Quota	Post-Season Treaty Quota	Over/Under Pre-Season Quota	Treaty Harvest	Total Harvest	Preseason Treaty Quota	Over/Under Preseason Quota
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	5581
1997	286,696	46,463	9,843	343,002	277,200	289,500	9,496	221,944	246,409	214,761	7183
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	-7,986
2000	186,493	74,316	2,481	263,290	189,900	178,500	-3,407	133,963	158,717	138,507	-4,545
2001	186,919	77,287	1,528	265,734	189,900	250,300	-2,981	128,692	153,280	138,507	-9,816
2002	357,133	68,164	1,237	426,534	356,500	371,900	633	298,132	325,308	266,056	32,075
2003	380,152	57,228	2,056	439,436	366,100	439,600	14,052	307,380	330,692	273,406	33,973
2004	417,019	75,955	6,295	499,268	383,500	418,300	33,519	321,876	354,658	286,728	35,148
2005	388,137	64,826	40,154	493,117	416,400	387,400	-28,263	304,622	338,451	311,916	-7,257
2006	359,566	48,893	27,047	435,505	346,800	354,500	12,766	263,754	282,315	256,664	7,560
2007	327,697	68,891	8,051	404,639	329,400	259,200	-1,703	240,233	268,146	243,747	-3,348
2008	172,341	66,616	5,273	244,230	170,000	152,900	2,341	126,162	151,936	125,408	953
2009	227,533	62,407	3,733	293,674	218,800	176,000	8,733	158,959	175,644	161,637	-2,633
2010	230,250	53,949	500	284,699	221,800	215,800	8,450	177,779	195,614	163,864	13,944
2011	290,297	65,954	739	356,989	294,800	283,300	-4,503	220,118	242,193	218,060	2,702
2012	242,034	51,882	1,106	295,022	266,800	205,100	-24,766	191,271	209,036	197,272	-6,001
2013	183,886	62,574	267	246,727	176,000		7,886	134,960	149,615	129,862	5,098
					1985-2012 Cumulative Total		64,600			1985-2012 Cumulative Total	119,732

Note: 2013 quota is based on the preseason Abundance Index. The final quota is based on the first postseason calibration of the Abundance Index.

Table 2.–Estimated survival rate of coho salmon smolts and pre-smolts from wild and hatchery stocks in Southeast Alaska, 1980–2013.

	Wild Stock						Lake Hatchery		Hatchery					Hatchery-Remote Release					
	Auke Creek	Berners River		Ford Arm Lake	Hugh Smith Lake	Taku River	Deer Lake	Neck Lake	Hidden Falls	Medvejie	DIPAC	Witman Lake[a]	Neets Bay[a]	Burnett Inlet	Anita Bay	Shamrock Bay	Deep Inlet	Nakat Inlet	Earl West Cove
Return Year	Smolts	Pre-smolts	Smolts	Pre-smolts	Smolts	Smolts	Smolts	Smolts	Smolts	Smolts	Smolts	Smolts	Smolts	Smolts	Smolts	Smolts	Smolts	Smolts	Smolts
1980	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1981	9	—	—	—	—	—	—	—	—	—	—	4	8	—	—	—	—	—	—
1982	11	3	—	6	—	—	—	—	—	—	—	3	10	—	—	—	—	—	—
1983	18	7	—	10	13	—	—	—	—	—	—	9	13	—	—	—	—	—	—
1984	16	—	—	—	8	—	—	—	—	—	—	3	9	—	—	—	—	9	—
1985	25	6	—	12	8	—	—	—	—	—	—	13	12	—	—	—	—	—	—
1986	17	5	—	9	19	—	—	—	—	—	—	17	11	—	—	—	—	—	—
1987	21	3	—	5	10	—	6	—	—	—	—	3	4	—	—	—	—	5	10
1988	17	5	—	7	4	—	—	—	—	—	—	5	1	—	—	—	—	6	5
1989	14	4	—	12	9	—	7	—	—	—	—	2	1	—	—	—	—	3	2
1990	21	9	21	10	18	—	17	—	—	—	—	7	14	—	—	—	—	7	14
1991	23	—	25	11	17	—	24	—	16	—	24	12	13	—	—	—	10	14	12
1992	33	—	24	15	21	20	20	—	29	—	18	9	17	—	—	—	8	17	16
1993	24	—	15	22	13	14	13	—	20	20	10	5	11	—	—	—	16	11	12
1994	35	—	29	14	20	23	23	—	23	14	17	9	7	—	—	15	14	8	16
1995	11	—	16	5	14	12	13	—	14	12	6	4	6	—	—	14	16	10	7
1996	23	—	12	6	18	10	11	—	13	9	6	5	7	—	—	5	8	10	7
1997	19	—	12	15	8	7	6	—	6	3	5	8	5	—	—	1	—	6	5
1998	23	—	17	20	12	14	5	16	12	15	10	5	7	—	—	8	—	5	5
1999	19	—	13	8	14	10	17	4	16	14	15	10	8	6	—	7	—	8	10
2000	19	—	12	13	7	6	1	5	10	11	10	4	6	2	—	—	—	5	4
2001	28	—	12	8	13	9	15	5	12	7	9	6	8	14	—	2	—	5	5
2002	27	—	19	15	15	11	30	5	24	10	14	9	13	15	8	3	—	4	—
2003	25	—	19	17	14	10	6	6	10	14	10	8	10	13	9	2	—	8	—
2004	20	—	18	12	11	8	22	4	10	5	8	4	7	3	3	5	—	4	—
2005	16	—	9	8	9	6	13	2	9	6	7	6	5	2	8	6	3	6	—
2006	21	—	13	10	7	11	13	2	10	3	6	4	2	2	11	2	—	6	—
2007	12	—	7	10	9	4	8	3	2	4	4	8	5	7	8	—	4	9	—
2008	24	—	16	15	13	5	4	2	10	2	8	11	7	12	9	—	2	8	—
2009	16	—	9	7	18	8	8	6	5	0	5	14	4	21	12	—	0	7	—
2010	16	—	13	7	21	11	5	7	7	—	8	8	8	11	9	—	0	8	—
2011	13	—	9	13	10	8	7	7	10	—	10	6	2	9	1	—	—	2	—
2012	10	—	8	7	13	8	7	7	1	2	4	5	9	10	5	—	3	6	—
2013	21		14	7	17	11	12	2	5	11	12	10	8	13	7	—	11	13	—
Average	19	5	15	11	13	10	12	5	12	8	10	7	8	9	8	6	7	7	9

Note: Wild stock survival represents survival from the time of tagging until return to the fisheries. Hatchery stock survival represents survival from the time of smolt release to return to the fisheries.

[a] Whitman Lake and Neets Bay returns from 1981 to 1983 represent hatchery-raised releases from wild broodstock.

Table 3.–Harvest and percent of commercially harvested coho salmon by gear type in Southeast Alaska, 1989–2013.

	Commercial Troll		Purse Seine		Drift Gillnet		Set Gillnet		All–Gear Total	
Year	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1989	1,415,517	65%	333,116	15%	255,689	12%	176,816	8%	2,181,138	100%
1990	1,832,604	67%	379,334	14%	377,803	14%	148,891	5%	2,738,632	100%
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	1,343,151	59%	202,873	9%	578,303	25%	161,584	7%	2,285,911	100%
2011	1,314,018	63%	351,994	17%	285,951	14%	126,215	6%	2,078,178	100%
2012	1,200,896	64%	280,142	15%	303,047	16%	98,677	5%	1,882,762	100%
2013	**2,393,807**	**67%**	**553,509**	**15%**	**482,433**	**13%**	**158,046**	**4%**	**3,587,795**	**100%**
1989–2012 Average:	1,685,270	64%	389,788	14%	394,674	15%	181,765	7%	2,651,497	100%
Board of Fisheries Allocations (Established 1989)		61%		19%		13%		7%		
89–12 Deviation from Allocations		5%		-24%		14%		-2%		
2013 Deviation from Allocations		9%		-19%		3%		-37%		

Note: Annette Island and terminal harvests are included.

Table 4.–Southeast Alaska commercial troll permits renewed and fished, 1975 to 2013.

	Hand Troll Permits		Power Troll Permits		Total	HT/total
Year	Renewed[a]	Fished	Renewed[a]	Fished	Fished	Fished
1975	2,087	1,100	1,078	760	1,860	59%
1976	2,082	1,242	998	742	1,984	63%
1977	2,951	1,852	970	746	2,598	71%
1978	3,922	2,644	976	817	3,461	76%
1979	3,700	2,195	978	813	3,008	73%
1980	2,436	1,713	973	848	2,561	67%
1981	2,048	1,172	969	797	1,969	60%
1982	1,906	1,185	967	819	2,004	59%
1983	2,031	1,016	967	820	1,836	55%
1984	1,983	875	961	799	1,674	52%
1985	1,954	925	959	837	1,762	52%
1986	1,893	817	957	830	1,647	50%
1987	1,825	769	956	830	1,599	48%
1988	1,788	798	956	846	1,644	49%
1989	1,747	700	955	846	1,546	45%
1990	1,702	701	956	840	1,541	45%
1991	1,644	704	958	852	1,556	45%
1992	1,596	648	957	843	1,491	43%
1993	1,552	603	956	842	1,445	42%
1994	1,514	550	954	808	1,358	41%
1995	1,479	462	954	819	1,281	36%
1996	1,423	413	965	739	1,152	36%
1997	1,384	389	964	745	1,134	34%
1998	1,338	306	965	735	1,041	29%
1999	1,305	340	965	722	1,062	32%
2000	1,257	317	962	714	1,031	31%
2001	1,212	307	964	703	1,010	30%
2002	1,158	254	962	666	920	28%
2003	1,120	267	961	641	908	29%
2004	1,101	325	960	692	1,017	32%
2005	1,084	353	961	718	1,071	33%
2006	1,068	371	961	741	1,112	33%
2007	1,051	377	961	744	1,121	34%
2008	1,044	377	961	747	1,124	34%
2009	1,034	367	961	748	1,115	33%
2010	1,018	341	961	730	1,071	32%
2011	952	374	943	760	1,134	33%
2012	903	355	933	744	1,099	32%
2013	**927**	**366**	**943**	**723**	**1,089**	**34%**

[a] Permits renewed from CFEC, both renewed and fished based on calendar year from 1985–2013.

Table 5.–Number of permits fished, by gear type and fishery, 1980–2013.

	Winter Fishery			Spring[a] Fishery			General Summer Fishery		
	Troll Gear Type		Total	Troll Gear Type		Total	Troll Gear Type		Total
Year	Hand	Power	Winter	Hand	Power	Spring	Hand	Power	Summer
1980	262	204	466	–	–	–	1,661	843	2,504
1981	183	165	348	–	–	–	1,135	791	1,926
1982	183	211	394	–	–	–	1,060	813	1,873
1983	254	331	585	–	–	–	923	805	1,728
1984	221	366	587	–	–	–	833	787	1,620
1985	196	303	499	–	–	–	887	829	1,716
1986	174	318	492	23	47	70	777	822	1,599
1987	195	319	514	36	69	105	732	825	1,557
1988	295	433	728	149	260	399	726	821	1,547
1989	262	475	737	54	142	195	664	834	1,498
1990	167	356	523	107	170	277	662	834	1,496
1991	182	383	565	220	352	245	670	849	1,519
1992	186	431	617	182	281	463	599	835	1,434
1993	127	366	493	181	338	519	553	831	1,384
1994	77	306	383	75	221	296	531	798	1,329
1995	71	227	298	110	276	386	422	809	1,231
1996	50	180	230	126	336	462	380	725	1,105
1997	49	207	256	145	335	480	338	734	1,072
1998	53	253	306	86	277	363	284	740	1,024
1999	53	233	286	91	255	346	307	718	1,025
2000	67	244	311	112	323	435	255	714	969
2001	80	242	322	125	345	470	252	711	963
2002	72	228	300	105	330	330	251	671	922
2003	96	264	360	90	311	368	187	605	792
2004	129	310	439	114	336	450	238	675	913
2005	142	302	444	125	387	512	283	702	985
2006	152	317	469	151	378	517	270	718	988
2007	153	350	503	172	369	523	284	726	1,010
2008	134	333	467	182	438	620	291	726	1,017
2009	111	269	380	158	428	586	306	735	1,041
2010	131	328	459	157	427	584	268	716	984
2011	134	330	464	174	466	640	300	728	1,028
2012	132	375	507	161	462	623	284	728	1,012
2013	**127**	**315**	**442**	**169**	**469**	**638**	**296**	**699**	**995**

[a] Spring Includes experimental and terminal fisheries; does not include permits fished in the hatchery access fisheries in 1989–1992; includes terminal area permits for both spring and summer fisheries.

Table 6.–Number of days and dates the summer troll salmon fishery was open to Chinook retention (CR), closed to Chinook retention (Chinook non-retention or CNR), closed to all salmon species (all) and effort during CR and CNR periods, 1985–2013.

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

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Table 6.–Page 2 of 4.

Year	Days Open	Days Closed	Open Dates	CR Days	CR Effort (Boat– days)	Closed Dates	Days Closed	CNR Days	CNR Effort (Boat Days)
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
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)		
			8/23	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

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Table 6.–Page 3 of 4.

Year	Days Open	Days Closed	Open Dates	CR Days	CR Effort (Boat– days)	Closed Dates	Days Closed	CNR Days	CNR Effort (Boat Days)
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
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

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Table 6.–Page 4 of 4.

Year	Days Open	Days Closed	Open Dates	CR Days	CR Effort (Boat– days)	Closed Dates	Days Closed	CNR Days	CNR Effort (Boat Days)
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		
			8/17–25	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
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**	**2,674**	**7/7-9/30**	**86**	**86**	**19,785**

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.

[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.

Table 7.–Annual commercial troll salmon harvest in numbers of fish by species, 1960–2013.

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	582,276
1976	231,239	1,241	525,270	194,370	4,251	955,304
1977	271,735	5,713	506,432	281,009	11,621	1,077,142
1978	375,433	2,804	1,100,902	617,633	26,193	2,122,965
1979	334,317	7,018	918,835	629,117	24,661	1,913,968
1980	303,643	2,921	697,181	267,213	12,168	1,281,888
1981	248,782	7,476	861,146	579,436	8,680	1,705,254
1982	241,938	2,459	1,315,871	503,306	5,639	2,069,700
1983	269,821	7,973	1,276,380	498,530	20,308	2,072,756
1984	235,622	9,658	1,133,366	573,004	28,060	1,978,455
1985	215,811	7,724	1,600,230	963,719	52,793	2,839,930
1986	237,703	6,884	2,128,003	181,900	51,398	2,604,994
1987	242,562	9,722	1,041,055	486,385	12,848	1,793,327
1988	231,364	9,341	500,227	519,390	88,264	1,348,572
1989	235,716	20,171	1,415,517	1,771,409	68,986	3,511,643
1990	287,939	9,176	1,832,604	771,674	62,817	2,963,990
1991	264,106	9,805	1,719,082	427,348	28,438	2,447,994
1992	183,759	22,854	1,929,945	673,851	85,030	2,894,420
1993	226,866	25,337	2,395,887	902,872	525,160	4,075,603
1994	186,331	21,777	3,467,599	942,783	330,375	4,942,822
1995	138,117	27,323	1,750,262	714,312	277,455	2,907,329
1996	141,452	11,024	1,906,769	812,899	406,260	3,278,309
1997	246,409	39,431	1,170,534	545,309	312,042	2,313,649
1998	192,066	6,474	1,636,711	261,104	117,642	2,213,767
1999	146,219	5,730	2,272,653	540,859	74,704	3,039,905

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Table 7.–Page 2 of 2.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
2000	158,717	4,467	1,125,219	187,364	478,144	1,953,546
2001	153,280	8,992	1,845,627	258,943	467,837	2,733,039
2002	325,308	1,247	1,315,062	86,399	117,672	1,840,686
2003	330,692	4,596	1,223,458	159,643	286,410	2,001,850
2004	354,658	5,010	1,916,675	57,323	171,326	2,493,066
2005	338,451	13,277	2,038,296	109,640	174,599	2,662,529
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	1,948,776
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	195,614	1,923	1,343,151	87,640	394,695	2,022,903
2011	242,193	5,190	1,313,594	496,171	702,769	2,759,845
2012	209,036	3,224	1,200,896	168,583	476,469	2,058,538
2013	**149,615**	**5,021**	**2,393,807**	**684,692**	**1,054,695**	**4,287,830**
1960–69 Avg	264,372	1,013	569,983	76,357	3,973	915,697
1970–79 Avg	298,830	2,365	610,176	253,804	11,626	1,176,810
1980–89 Avg	246,296	8,433	1,196,898	634,429	34,914	2,120,652
1990–99 Avg	201,326	17,893	2,008,205	659,301	221,992	3,107,779
2000–09 Avg	253,914	5,630	1,508,996	112,810	244,505	2,122,493

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) from 1980 to 2013.

Table 8.–Southeast Alaska commercial troll salmon harvest in numbers of fish by species by statistical week, for the 2013 troll season.

Year	Week	Week Of	Chinook	Sockeye	Coho	Pink	Chum	Total
2012	41	7-Oct	1,226	0	0	0	0	1,226
	42	14-Oct	1,507	0	0	0	0	1,507
	43	21-Oct	1,333	0	0	0	0	1,333
	44	28-Oct	843	0	0	0	0	843
	45	4-Nov	975	0	0	0	0	975
	46	11-Nov	790	0	0	0	0	790
	47	18-Nov	348	0	0	0	0	348
	48	25-Nov	426	0	0	0	0	426
	49	2-Dec	295	0	0	0	0	295
	50	9-Dec	193	0	0	0	0	193
	51	16-Dec	163	0	0	0	0	163
	52	23-Dec	58	0	0	0	0	58
	53	30-Dec	31	0	0	0	0	31
2013	1	1-Jan	57	0	0	0	0	57
	2	6-Jan	208	0	0	0	0	208
	3	13-Jan	255	0	0	0	0	255
	4	20-Jan	442	0	0	0	0	442
	5	27-Jan	286	0	0	0	0	286
	6	3-Feb	302	0	0	0	0	302
	7	10-Feb	274	0	0	0	0	274
	8	17-Feb	460	0	0	0	0	460
	9	24-Feb	236	0	0	0	0	236
	10	3-Mar	1,104	0	0	0	0	1,104
	11	10-Mar	959	0	0	0	0	959
	12	17-Mar	970	0	0	0	2	972
	13	24-Mar	1,021	0	0	0	0	1,021
	14	31-Mar	1,910	0	0	0	0	1,910
	15	7-Apr	882	0	0	0	1	883
	16	14-Apr	2,864	0	0	0	4	2,868
	17	21-Apr	4,150	0	0	0	20	4,170
	18	28-Apr	2,049	0	0	0	2	2,051
	19	5-May	889	0	0	0	0	889
	20	12-May	1,552	0	0	0	13	1,565
	21	19-May	1,242	1	0	0	5	1,248
	22	26-May	2,663	2	12	0	54	2,731
	23	2-Jun	4,198	35	674	3	14,330	19,240
	24	9-Jun	7,629	87	2,551	188	38,174	48,629
	25	16-Jun	10,674	335	10,102	11,056	148,872	181,039
	26	23-Jun	8,044	351	13,047	60,939	118,373	200,754
	27	30-Jun	85,075	695	155,751	34,833	40,736	317,090
	28	7-Jul	0	518	109,429	49,985	50,068	210,000
	29	14-Jul	0	740	271,056	123,067	55,717	450,580
	30	21-Jul	0	903	293,698	152,338	58,001	504,940

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Table 8.–Page 2 of 2.

Year	Week	Week Of	Chinook	Sockeye	Coho	Pink	Chum	Total
2013	31	28-Jul	0	286	236,367	127,252	92,825	456,730
	32	4-Aug	0	258	260,133	75,583	136,863	472,837
	33	11-Aug	0	305	235,579	27,474	165,843	429,201
	34	18-Aug	0	125	215,605	6,742	46,078	268,550
	35	25-Aug	0	129	201,554	1,662	3,329	206,674
	36	1-Sep	0	61	190,506	385	3,151	194,103
	37	8-Sep	0	44	95,619	57	2,967	98,687
	38	15-Sep	0	19	67,912	32	983	68,946
	39	22-Sep	0	4	11,384	0	33	11,421
	40	29-Sep	0	0	1,482	0	5	1,487
		Winter fishery subtotal	26,612	0	0	0	29	26,641
		Spring fishery subtotal	37,354	823	27,156	77,345	330,070	472,748
		Summer fishery subtotal	84,673	4,076	2,348,967	594,409	646,359	3,678,484
		Hatchery terminal area subtotal	976	122	17,684	12,938	78,237	109,957
		Grand Total:	149,615	5,021	2,393,807	684,692	1,054,695	4,287,107

Notes: Weekly totals do not include hatchery terminal area and Annette Island troll harvests.

Table 9.–Average troll coho salmon dressed weight by week and weighted annual average, 1997–2013.

	Average Weekly Dressed Weight, by Year																	Averages	
Week of	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	**2013**	2008–2012	2003–2012
1-Jul	5.3	6.6	4.7	5.7	5.7	5.9	5.5	5.7	5.2	5.3	4.9	6.3	5.4	5.9	5.3	4.9	**4.8**	5.6	5.4
8-Jul	5.2	6.8	4.7	5.7	5.6	6.2	5.5	6.1	5.2	5.6	5.1	6.5	5.4	6	5.3	4.9	**4.8**	5.6	5.6
15-Jul	5.4	6.8	4.8	6	5.6	6.5	5.6	6.1	5.2	5.6	5.3	6.7	5.3	6.2	5.4	5.0	**4.9**	5.7	5.6
22-Jul	5.6	6.9	5	6.1	5.7	6.4	5.8	6.1	5.3	5.6	5.3	6.9	5.4	6.4	5.1	5.1	**5.1**	5.8	5.7
29-Jul	5.8	7	5.2	6.3	6	6.5	6	6	5.2	5.7	5.4	6.9	5.7	6.6	5.2	5.2	**5.3**	5.9	5.8
5-Aug	6	7.1	5.4	6.5	6.1	6.8	6.2	6.2	5.3	5.9	5.5	7.1	5.8	6.6	5.3	5.4	**5.5**	6.1	5.9
12-Aug	–	7.2	5.4	6.6	6.2	7	6.3	6.4	5.5	6.1	5.9	7.4	5.8	6.8	5.3	6.2	**5.5**	6.3	6.2
19-Aug	7	7.7	5.8		6.6	7.1	6.6	6.8	6	6.6	5.9	8.2	6.3	7.1	5.5	6.2	**5.9**	6.7	6.5
26-Aug	7.6	7.8	6	7.5	6.6	7.6	6.9	7	6.2	6.8	6.2	8.4	6.3	7.2	5.3	6.5	**6.2**	6.7	6.7
2-Sep	8.2	8.5	6.1	8	6.8	7.8	7.2	7.4	6.3	7.4	6.7	8.8	6.4	7.5	5.4	6.6	**6.5**	7.0	7.0
9-Sep	8.8	8.8	6.4	8.2	7.2	8	7.4	7.7	6.7	7.7	7.2	9	6.5	7.8	5.5	6.8	**6.4**	7.1	7.2
16-Sep	8.9	9.2	6.6	8.4	7.7	8.1	7.6	7.8	6.9	7.9	7.4	9.1	6.6	8.1	5.6	6.8	**6.6**	7.3	7.4
23-Sep	–	9.4	6.4	8.5	7.1	8	7.8	7.8	6.7	7.8	–	–	6.6	8.3	5.9	7.6	**6.8**	7.1	7.3
30-Sep	–	9.5	6.6	7.8	7.7	8.1	7.7	8.5	–	–	–	–	6.9	–	–	7.8	**7.2**	7.4	7.7
Weighted Average:	6.5	7.4	5.4	6.5	6.1	6.9	6.5	6.6	5.7	6.4	5.8	7.6	5.9	6.9	5.4	5.8	**5.5**	6.3	6.3
Troll Harvest (Millions)	1.2	1.6	2.3	1.1	1.8	1.3	1.2	1.9	2.0	1.4	1.4	1.3	1.6	1.3	1.3	1.2	**2.4**	1.3	1.5

Table 10.–Southeast Alaska annual commercial hand troll salmon harvest in numbers of fish by species, 1975–2013.

Year[a]	Chinook[b]	Sockeye[b]	Coho[b]	Pink[b]	Chum[b]	Total
1975	28,000	95	40,920	28,815	541	98,371
1976	26,324	507	88,859	44,406	2,061	162,157
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	13,207	226	81,929	11,037	8,193	114,592
2013	**11,747**	**343**	**174,103**	**23,510**	**28,719**	**238,422**
Average 1975–2012	25,049	968	171,470	79,348	8,589	285,425
Average 2003–2012	15,765	191	95,623	6,927	4,575	123,080

[a] Prior to 1975, hand and power troll harvests were not reported separately. Troll harvests prior to 1980 are reported by calendar year. From 1980–present, harvests are by season, Oct.1–Sept.30. Harvest for 1979 Jan 1– Sept.30.

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

Table 11.–Southeast Alaska annual commercial power troll salmon harvest in numbers of fish by species, 1975–2013.

Year[a]	Chinook[b]	Sockeye[b]	Coho[b]	Pink[b]	Chum[b]	Total
1975	259,646	489	173,299	48,029	2,243	483,869
1976	203,777	734	436,411	149,964	2,190	793,646
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	196,159	2,998	1,118,967	157,546	468,276	1,943,946
2013	**137,868**	**4,678**	**2,219,704**	**661,183**	**1,026,045**	**4,049,478**
Average 1975–2012	216,442	8,170	1,256,534	357,935	166,608	2,001,972
Average 2003–2012	239,170	5,002	1,370,534	127,852	290,951	2,020,226

[a] Prior to 1975, hand and power troll harvests were not reported separately. Troll harvests prior to 1980 are reported by calendar year. From 1980 –present, harvests are by season, Oct.1 –Sept.30. Harvest for 1979 Jan 1–Sept.30.

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

Table 12.–Southeast Alaska Chinook Salmon harvests by gear and troll harvest by fishery, 2013.

Gear/Fishery	Total Harvest	Alaska Hatchery Harvest	Alaska Hatchery Add-on	Terminal Exclusion Harvest	Total Term. Exclusion/ Alaska Hatchery Add-on	Treaty Harvest
Winter Troll	26,587	3,383	2,708	0	2,708	23,879
Spring Troll[a]	38,357	11,680	9,408	240	9,648	28,552
Summer Troll						
First Period	84,615	2,872	2,299	0	2,299	82,316
Second Period	0	0	0	0	0	0
Summer Total[b]	84,615	2,872	2,299	0	2,299	82,316
Total Traditional Troll	149,559	17,935	14,414	240	14,655	134,747
Annette Is. Troll	56	0	0	0	0	56
Total Troll Harvest	**149,615**	**17,935**	**13,175**	**240**	**13,415**	**134,960**
Purse Seine	23,110	17,044	16,404	0	16,404	6,706
Drift Gillnet	27,316	22,722	21,269	27	21,296	6,020
Setnet	900			0	0	900
Total Net[c]	51,325	39,766	37,672	27	37,700	13,626
Sport[c]	46,787	12,504	10,488	0	10,488	35,299
All Gear Total	**246,727**	**70,205**	**62,574**	**267**	**62,841**	**183,886**

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

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

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

Table 13.–Annual Southeast Alaska commercial and recreational Chinook salmon harvests and Alaska hatchery contribution, in thousands of fish, 1965–2013.

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	6	338
1981	249	19	268	21	289	2	287
1982	242	47	289	26	315	1	314
1983	270	20	289	22	312	3	309
1984	236	32	268	22	290	6	284
1985	216	34	250	25	275	13	262
1986	238	22	260	23	282	17	265
1987	243	16	258	24	282	24	258
1988	231	22	253	26	279	29	250
1989	236	24	260	31	291	29	262
1990	288	28	316	51	367	54	313
1991	264	35	299	60	359	70	289
1992	184	32	216	43	259	44	215
1993	227	28	255	49	304	40	264
1994	186	36	222	42	264	36	228
1995	138	48	186	50	236	69	167
1996	141	37	179	58	237	89	148
1997	246	25	271	72	340	63	277
1998	192	24	216	55	271	34	237
1999	146	33	179	72	251	59	192
2000	159	41	200	63	252	85	167
2001	153	40	193	72	266	87	179
2002	325	32	357	70	427	78	349
2003	331	39	370	69	439	68	371
2004	355	64	419	81	499	91	408
2005	338	68	407	87	493	74	418
2006	282	67	350	86	436	57	378
2007	268	54	322	83	405	77	327
2008	152	43	195	49	244	74	170
2009	176	48	224	70	294	72	222
2010	195	31	226	59	285	62	219
2011	242	48	290	67	357	73	285
2012	209	39	249	47	295	60	242
2013	**150**	**51**	**201**	**47**	**247**	**70**	**184**

Note: Years 1985–2001 were updated in 2001, based on Add–on tables for BOF reports. All subsequent years also based on Add–on tables.

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

[b] Purse seine harvests from 1986–present do not include Chinook less than five 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 1977–1999 based on statewide postal harvest surveys. Sport harvest for 2013 based on preliminary creel survey data, pending completion of statewide postal harvest surveys.

Table 14.–Southeast Alaska winter troll fishery Chinook salmon harvest, permits fished, vessel landings, catch per landing, and Alaska hatchery percent of harvest by troll accounting year (October 1–September 30), 1985–2013.

	---Early Winter (October-December)---				---Late Winter (January-April)---				--Total Winter (October-April)--						
Year	Chinook	Permits	Landings	Catch/ Landing	Chinook	Permits	Landings	Catch/ Landing	Chinook	Permits	Landings	Catch/ Landing	Annual Total	Winter % of Annual Total	Alaskan Hatchery % of Catch
1985	14,235	371	869	16	8,590	316	1,148	7	22,825	499	2,017	11	215,811	11%	6%
1986	16,779	353	1,049	16	6,147	257	832	7	22,926	492	1,881	12	237,703	10%	6%
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%**
2008–12 avg	8,589	247	1,073	8	29,006	401	2,423	11	37,595	455	3,468	11	194,910	19%	11%
2003–12 avg	10,889	256	1,069	11	32,909	391	2,594	13	43,798	449	3,632	12	254,881	17%	11%

Note: Data includes Annette Island troll harvests.

Table 15.–The number of Chinook salmon harvested and permits fished in the 2013 spring troll fisheries by statistical week, including spring fishery areas as well as terminal harvest areas.

Stat Area	Fishery Name	Stat Week	Open	Close	Days	Permits	Chinook	AK%
101-21	West Rock	20	05/15	05/17	3	[a]	[a]	[b]
		21	05/22	05/24	3	[a]	[a]	[b]
		22	05/29	05/31	3	3	52	[b]
		23	06/05	06/07	3	7	160	1%
		24	06/12	06/14	3	14	542	22%
		25	06/19	06/21	3	6	129	0%
		26	06/26	06/27	2	[a]	[a]	[b]
	West Rock Total				*20*	*20*	*976*	*12%*
101-29	Ketchikan Area	18	05/01	05/04	4	[a]	[a]	[b]
		19	05/05	05/11	7	9	62	2%
		20	05/12	05/18	7	12	140	20%
		21	05/19	05/25	7	19	184	16%
		22	05/26	06/01	7	23	237	13%
		23	06/02	06/08	7	40	489	75%
		24	06/09	06/15	7	48	636	51%
		25	06/16	06/22	7	54	1,134	43%
		26	06/23	06/29	7	52	805	51%
		27	06/30	06/30	1	9	116	98%
	Ketchikan Area Total				*61*	*97*	*3,806*	*47%*
101-41	Point Alava	20	05/15	05/17	3	[a]	[a]	[b]
		21	05/22	05/24	3	[a]	[a]	0%
		22	05/29	05/31	3	[a]	[a]	28%
		23	06/05	06/07	3	4	55	0%
		24	06/12	06/14	3	[a]	[a]	[b]
		25	06/18	06/21	4	[a]	[a]	[b]
		26	06/24	06/29	6	[a]	[a]	[b]
		27	06/30	06/30	1	[a]	[a]	[b]
	Point Alava Total				*26*	*4*	*72*	*20%*
101-90	West Behm Canal	18	05/01	05/04	4	[a]	[a]	[b]
		19	05/05	05/11	7	[a]	[a]	[b]
		20	05/12	05/18	7	[a]	[a]	[b]
		21	05/19	05/25	7	[a]	[a]	[b]
		22	05/26	06/01	7	[a]	[a]	0%
		23	06/02	06/08	7	3	15	100%
		24	06/09	06/15	7	[a]	[a]	[b]
		25	06/16	06/22	7	[a]	[a]	0%
		26	06/23	06/29	7	8	28	[b]
		27	06/30	06/30	1	7	5	0%
	West Behm Canal Total				*61*	*14*	*55*	*76%*
102-09	Stone Rock Bay	20	05/13	05/14	2	[a]	[a]	[b]
		21	05/20	05/21	2	[a]	[a]	[b]
		22	05/27	05/28	2	5	73	28%
		23	06/03	06/04	2	9	209	30%
		24	06/10	06/11	2	8	66	99%
		25	06/17	06/19	3	8	203	6%
		26	06/22	06/26	5	10	374	17%
	Stone Rock Bay Total				*18*	*24*	*935*	*24%*

-continued-

Table 15.–Page 2 of 6.

Stat Area	Fishery Name	Stat Week	Open	Close	Days	Permits	Chinook	AK%
102-10	Kendrick Bay	20	05/12	05/14	3	[a]	[a]	[b]
		21	05/19	05/21	3	5	70	25%
		22	05/26	05/28	3	4	85	100%
		23	06/02	06/04	3	11	110	31%
		24	06/09	06/14	6	17	354	67%
		25	06/18	06/22	5	4	53	44%
		26	06/23	06/29	7	4	153	0%
		27	06/30	06/30	1	[a]	[a]	0%
	Kendrick Bay Total				*31*	*24*	*829*	*48%*
105-41	Sumner Strait	19	05/06	05/07	2	10	38	43%
		20	05/13	05/14	2	11	85	27%
		21	05/20	05/21	2	12	108	38%
		22	05/27	05/29	3	20	326	32%
		23	06/03	06/05	3	32	512	44%
		24	06/10	06/12	3	21	265	1%
		25	06/17	06/20	4	17	181	24%
		26	06/24	06/26	3	14	111	0%
	Sumner Strait Total				*22*	*47*	*1,626*	*28%*
106-20	Clarence Strait	18	05/01	05/04	4	[a]	[a]	[b]
		19	05/05	05/11	7	[a]	[a]	[b]
		20	05/12	05/18	7	[a]	[a]	[b]
		21	05/19	05/25	7	[a]	[a]	[b]
		22	05/26	06/01	7	[a]	[a]	[b]
		23	06/02	06/08	7	3	46	20%
		24	06/09	06/15	7	[a]	[a]	0%
		25	06/16	06/22	7	[a]	[a]	[b]
		26	06/23	06/29	7	[a]	[a]	[b]
		27	06/30	06/30	1	[a]	[a]	[b]
	Clarence Strait Total				*61*	*6*	*62*	*15%*
106-30	Steamer Point	18	05/01	05/04	4	[a]	[a]	[b]
		19	05/05	05/11	7	[a]	[a]	0%
		20	05/12	05/18	7	[a]	[a]	[b]
		21	05/19	05/25	7	[a]	[a]	[b]
		22	05/26	06/01	7	[a]	[a]	[b]
		23	06/02	06/08	7	3	16	100%
		24	06/09	06/15	7	10	109	90%
		25	06/16	06/22	7	11	170	100%
		26	06/23	06/29	7	12	158	100%
		27	06/30	06/30	1	6	70	47%
	Steamer Point Total				*61*	*23*	*542*	*100%*
106-41	SnowPass	19	05/09	05/11	3	[a]	[a]	[b]
		20	05/16	05/18	3	[a]	[a]	0%
		21	05/23	05/25	3	[a]	[a]	[b]
		22	05/30	06/01	3	[a]	[a]	0%
		23	06/06	06/08	3	[a]	[a]	[b]
		24	06/13	06/15	3	3	8	[b]
		25	06/20	06/22	3	[a]	[a]	[b]
		26	06/27	06/29	3	[a]	[a]	[b]
		27	06/30	06/30	1	[a]	[a]	[b]
	SnowPass Total				*25*	*5*	*24*	*0%*

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Table 15.–Page 3 of 6.

Stat Area	Fishery Name	Stat Week	Open	Close	Days	Permits	Chinook	AK%
107-10	Ernest Sound	18	05/01	05/04	4	[a]	[a]	[b]
		19	05/05	05/11	7	[a]	[a]	0%
		20	05/12	05/18	7	7	69	0%
		21	05/19	05/25	7	3	15	0%
		22	05/26	06/01	7	3	9	[b]
		23	06/02	06/08	7	4	21	93%
		24	06/09	06/15	7	[a]	[a]	[b]
		25	06/16	06/22	7	[a]	[a]	53%
		26	06/23	06/29	7	[a]	[a]	[b]
		27	06/30	06/30	1	[a]	[a]	[b]
	Ernest Sound Total				*61*	*17*	*213*	*28%*
108-10	Chichagof Pass	19	05/06	05/08	3	6	22	0%
		20	05/13	05/15	3	12	43	0%
		21	05/20	05/22	3	17	161	32%
		22	05/28	05/30	3	6	16	0%
		23	06/04	06/06	3	10	100	75%
		24	06/11	06/12	2	13	111	41%
		25	06/17	06/19, 22	4	11	45	100%
		26	06/23	06/29	7	5	86	57%
		27	06/30	06/30	1	[a]	[a]	100%
	Chichagof Pass Total				*29*	*29*	*612*	*55%*
109-10	Little Port Walter	19	05/08	05/10	3	5	14	7%
		20	05/15	05/17	3	7	68	55%
		21	05/22	05/24	3	8	13	58%
		22	05/29	05/31	3	13	82	61%
		23	06/04	06/07	4	18	472	55%
		24	06/11	06/15	5	16	394	48%
		25	06/18	06/22	5	23	1,380	7%
		26	06/23	06/29	7	24	1,063	54%
		27	06/30	06/30	1	1	19	[b]
	Little Port Walter Total				*34*	*52*	*3,505*	*35%*
109-62	Tebenkof Bay	19	05/06	05/08	3	23	557	24%
		20	05/13	05/15	3	28	758	36%
		21	05/20	05/21	2	28	204	71%
		22	05/27	05/29	3	36	605	37%
		23	06/03	06/05	3	28	395	63%
		24	06/10	06/13	4	32	1,586	33%
		25	06/17	06/19	3	39	2,222	17%
	Tebenkof Bay Total				*21*	*85*	*6,327*	*30%*
110-31	Frederick Sound	18	05/01	05/04	4	[a]	[a]	0%
		19	05/05	05/11	7	4	15	0%
		20	05/12	05/18	7	4	12	0%
		21	05/19	05/25	7	[a]	[a]	[b]
		22	05/26	06/01	7	5	29	0%
		23	06/02	06/08	7	13	81	2%
		24	06/09	06/15	7	7	39	21%
		25	06/16	06/22	7	7	36	9%
		26	06/23	06/29	7	5	35	67%
		27	06/30	06/30	1	[a]	[a]	[b]
	Frederick Sound Total				*61*	*26*	*249*	*15%*

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Table 15.–Page 4 of 6.

Stat Area	Fishery Name	Stat Week	Open	Close	Days	Permits	Chinook	AK%
112-12	Chatham Strait	18	05/01	05/04	4	[a]	[a]	0%
		19	05/05	05/11	7	9	32	68%
		20	05/12	05/18	7	17	128	50%
		21	05/19	05/25	7	11	48	20%
		22	05/26	06/01	7	13	104	22%
		23	06/02	06/08	7	5	33	332%
		24	06/09	06/15	7	19	385	48%
		25	06/16	06/22	7	10	102	52%
		26	06/23	06/29	7	3	58	100%
		27	06/30	06/30	1	[a]	[a]	[b]
	Chatham Strait Total				*61*	*56*	*939*	*57%*
112-65	Hawk Inlet	19	05/05	05/11	7	[a]	[a]	[b]
		20	05/12	05/18	7	[a]	[a]	[b]
		21	05/19	05/25	7	[a]	[a]	[b]
		22	05/26	06/01	7	3	25	0%
		23	06/02	06/08	7	[a]	[a]	[b]
		24	06/09	06/15	7	5	6	[b]
		25	06/16	06/22	7	4	0	[b]
		26	06/23	06/29	7	[a]	[a]	[b]
		27	06/30	06/30	1	[a]	[a]	[b]
	Hawk Inlet Total				*57*	*12*	*43*	*0%*
113-01	Western Channel	20	05/13	05/13	1	3	5	0%
		21	05/20	05/20	1	8	24	100%
		22	05/28	05/28	1	17	131	97%
		23	06/03	06/07	5	32	367	57%
		24	06/10	06/15	6	22	549	10%
		25	06/17	06/21	5	39	1,010	32%
		26	06/24	06/26	3	46	1,075	10%
	Western Channel Total				*22*	*91*	*3,161*	*27%*
113-30	Redoubt Bay	19	05/06	05/07	2	3	7	0%
		20	05/13	05/14	2	3	9	19%
		21	05/20	05/21	2	4	30	0%
		22	05/28	05/29	2	5	40	4%
		23	06/03	06/04	2	[a]	[a]	100%
		24	06/10	06/11	2	10	98	51%
		25	06/17	06/19	3	12	318	26%
		26	06/24	06/26	3	12	570	20%
	Redoubt Bay Total				*18*	*30*	*1,084*	*26%*
113-31	Biorka Island	23	06/03	06/03	1	12	37	100%
		24	06/10	06/10	1	17	143	28%
		25	06/17	06/18	2	21	712	0%
		26	06/24	06/24	1	22	366	20%
	Biorka Island Total				*5*	*51*	*1,258*	*12%*
113-32	Goddard	20	05/13	05/14	2	[a]	[a]	0%
		21	05/20	05/21	2	[a]	[a]	[b]
		22	05/28	05/29	2	3	16	0%
		23	06/03	06/04	2	[a]	[a]	0%
		24	06/10	06/11	2	5	69	0%
		25	06/17	06/18	2	7	449	15%
		26	06/24	06/25	2	12	619	24%
	Goddard Area Total				*14*	*20*	*1,181*	*18%*

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Table 15.–Page 5 of 6.

Stat Area	Fishery Name	Stat Week	Open	Close	Days	Permits	Chinook	AK%
113-41	Sitka Sound	18	05/01	05/04	4	[a]	[a]	[b]
		19	05/05	05/11	7	12	29	32%
		20	05/12	05/18	7	5	13	0%
		21	05/19	05/25	7	15	74	0%
		22	05/26	06/01	7	42	500	79%
		23	06/02	06/08	7	62	705	100%
		24	06/09	06/15	7	61	1,760	61%
		25	06/16	06/22	7	73	1,730	78%
		26	06/23	06/29	7	76	1,599	36%
		27	06/30	06/30	1	6	122	0%
	Sitka Sound Total				*61*	*149*	*6,534*	*64%*
113-62	Salisbury Sound	19	05/06	05/08	3	[a]	[a]	0%
		20	05/13	05/15	3	4	6	0%
		21	05/20	05/22	3	[a]	[a]	2%
		22	05/28	05/30	3	3	20	76%
		23	06/03	06/05	3	[a]	[a]	5%
		24	06/10	06/13	4	[a]	[a]	[b]
		25	06/17	06/20	4	[a]	[a]	26%
		26	06/24	06/27	4	12	398	38%
	Salisbury Sound Total				*27*	*20*	*695*	*28%*
113-95	Lisianski Inlet	19	05/06	05/08	3	4	17	0%
		20	05/13	05/15	3	4	61	44%
		21	05/20	05/22	3	[a]	[a]	[b]
		22	05/27	05/30	4	[a]	[a]	0%
		23	06/03	06/06	4	5	31	100%
		24	06/10	06/13	4	[a]	[a]	[b]
		25	06/17	06/21	5	[a]	[a]	[b]
		26	06/24	06/28	5	[a]	[a]	[b]
	Lisianski Inlet Total				*31*	*11*	*161*	*74%*
113-97	Stag Bay	19	05/05	05/11	7	[a]	[a]	[b]
		20	05/12	05/18	7	[a]	[a]	[b]
		21	05/19	05/25	7	[a]	[a]	[b]
		22	05/26	06/01	7	[a]	[a]	[b]
		23	06/02	06/08	7	[a]	[a]	[b]
		24	06/09	06/15	7	[a]	[a]	[b]
		25	06/16	06/22	7	3	22	0%
		26	06/23	06/29	7	[a]	[a]	[b]
		27	06/30	06/30	1	[a]	[a]	[b]
	Stag Bay Total				*57*	*3*	*28*	*0%*
114-21	Cross Sound	19	05/05	05/11	7	[a]	[a]	[b]
		20	05/12	05/18	7	4	59	0%
		21	05/19	05/25	7	6	47	100%
		22	05/26	06/01	7	4	48	[b]
		23	06/02	06/08	7	[a]	[a]	[b]
		24	06/09	06/15	7	[a]	[a]	[b]
		25	06/16	06/22	7	16	27	[b]
		26	06/23	06/29	7	23	56	[b]
		27	06/30	06/30	1	[a]	[a]	[b]
	Cross Sound Total				*57*	*34*	*278*	*32%*

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Table 15.–Page 6 of 6.

Stat Area	Fishery Name	Stat Week	Open	Close	Days	Permits	Chinook	AK%
114-23	South Passage	19	05/05	05/11	7	[a]	[a]	[b]
		20	05/12	05/18	7	[a]	[a]	[b]
		21	05/19	05/25	7	[a]	[a]	[b]
		22	05/26	06/01	7	[a]	[a]	[b]
		23	06/02	06/08	7	[a]	[a]	[b]
		24	06/09	06/15	7	3	3	[b]
		25	06/16	06/22	7	[a]	[a]	[b]
		26	06/23	06/29	7	14	17	0%
		27	06/30	06/30	1	[a]	[a]	[b]
	South Passage Total				*57*	*20*	*26*	*0%*
114-25	Homeshore	19	05/05	05/11	7	[a]	[a]	[b]
		20	05/12	05/18	7	3	28	[b]
		21	05/19	05/25	7	[a]	[a]	[b]
		22	05/26	06/01	7	7	24	[b]
		23	06/02	06/08	7	42	104	0%
		24	06/09	06/15	7	113	101	0%
		25	06/16	06/22	7	144	157	100%
		26	06/23	06/29	7	130	188	100%
		27	06/30	06/30	1	41	7	0%
	Homeshore Total				*57*	*176*	*615*	*100%*
114-27	Point Sophia	19	05/05	05/11	7	[a]	[a]	[b]
		20	05/12	05/18	7	[a]	[a]	[b]
		21	05/19	05/25	7	[a]	[a]	[b]
		22	05/26	06/01	7	[a]	[a]	[b]
		23	06/02	06/08	7	3	0	[b]
		24	06/09	06/15	7	9	8	[b]
		25	06/16	06/22	7	17	10	[b]
		26	06/23	06/29	7	14	7	[b]
		27	06/30	06/30	1	[a]	[a]	[b]
	Point Sophia Total				*57*	*36*	*35*	*0%*
114-50	Port Althorp	19	05/06	05/08	3	[a]	[a]	[b]
		20	05/13	05/15	3	[a]	[a]	0%
		21	05/20	05/22	3	4	25	0%
		22	05/27	05/29	3	8	63	0%
		23	06/03	06/05	3	6	59	0%
		24	06/10	06/12	3	5	68	0%
		25	06/17	06/19	3	5	77	0%
		26	06/24	06/26	3	5	124	10%
	Port Althorp Total				*24*	*20*	*433*	*3%*
183-10	Yakutat Bay	19	05/06	05/06	1	15	35	0%
		20	05/13	05/13	1	10	50	0%
		21	05/20	05/20	1	12	141	0%
		22	05/27	05/27	1	15	130	16%
		23	06/03	06/03	1	17	99	0%
		24	06/13	06/13	1	14	207	0%
		25	06/20	06/20	1	16	350	9%
	Yakutat Bay Total				*7*	*31*	*1,012*	*5%*
Spring Fishery Total						**613**	**37,318**	**41%**
Terminal Area Total						**40**	**685**	**100%**
Spring Season Total						**617**	**38,001**	**42%**

Note: Totals do not include Annette Island harvests or summer terminal harvest and effort.
Weekly and total permits fished includes effort for both Chinook and Chum salmon.

[a] Denotes confidential data. Totals given may or may not include individual weeks confidential data.

[b] Denotes absence of coded-wire tag sampling for given week.

Table 16.–Spring troll Chinook salmon fishery harvest, effort, and Alaska hatchery contributions, 1986–2013.

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	Total Harvest	Total Alaska Hatchery %	Total Permits Fished
1986	776	240	31%	3	0	0	776	31%	70
1987	4,488	1,548	34%	7	0	0	4,488	34%	105
1988	8,505	2,931	34%	9	100	2	8,605	35%	382
1989	2,366	922	39%	11	913	4	3,279	56%	161
1990	7,052	4,255	60%	9	16	2	7,068	60%	258
1991	13,984	6,129	44%	10	5,863	1	19,847	60%	559
1992	11,229	5,604	50%	11	4,118	2	15,347	63%	454
1993	15,826	6,525	41%	13	2,853	3	18,679	50%	442
1994	11,269	4,939	44%	12	100	4	11,369	44%	283
1995	21,750	13,990	64%	15	1,333	4	23,083	66%	377
1996	30,963	15,672	51%	16	16,416	5	47,379	68%	461
1997	32,791	13,556	41%	17	9,931	6	42,722	55%	476
1998	19,195	5,012	26%	21	1,313	4	20,508	31%	361
1999	18,351	8,766	48%	23	2,367	5	20,718	54%	339
2000	20,990	11,217	53%	25	7,966	4	28,956	66%	392
2001	28,250	13,726	49%	26	7,081	5	35,331	59%	435
2002	37,610	17,398	46%	31	6,040	4	43,650	54%	433
2003	35,452	11,949	34%	26	3,840	4	39,292	40%	382
2004	55,186	19,863	36%	31	1,610	5	56,796	38%	445
2005	58,421	18,195	31%	30	2,280	4	60,701	34%	498
2006	36,918	9,430	26%	24	1,018	5	37,936	28%	511
2007	48,476	18,263	38%	25	1,310	4	49,786	39%	539
2008	36,638	17,769	48%	22	4,494	5	41,132	54%	591
2009	32,581	12,374	38%	27	278	5	32,859	39%	557
2010	28,617	11,161	39%	27	1,162	5	29,779	41%	546
2011	38,936	14,948	38%	28	2,144	5	41,080	42%	592
2012	24,771	10,756	43%	33	794	5	25,565	45%	552
2013	**37,318**	**15,181**	**41%**	**32**	**976**	**6**	**38,294**	**42%**	**589**

Note: Does not include Annette Island harvest or Hatchery Access fishery harvest, which occurred in 1989–1992. Total permits fished includes spring troll effort and terminal effort during spring and summer for vessels that landed Chinook.

[a] Terminal harvest includes troll harvest from both spring and summer terminal fisheries.

Table 17.–Southeast Alaska troll Chinook salmon catch-per-fleet-day during the general summer fishery, 1985–2013.

Year	Fishing Period	Days	Chinook Harvest[a]	Catch/Fleet Day	Permits	Abundance Index[b]	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%
		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%
		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%
		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%
		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%
		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%
		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%
		17	97,166	5,716		0.91	9,720	10%

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Table 17.–Page 2 of 3.

Year	Fishing Period	Days	Chinook Harvest[a]	Catch/Fleet Day	Permits[b]	Abundance Index[c]	AK Hatchery Harvest	AK Hatchery Percent
1996	July 1–10	10	76,392	7,639	825		4,639	6%
	August 19–20	2	8,275	4,138	418		203	2%
		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%
		21	182,717	8,701		1.37	4,307	2%
1998	July 1–11	11	102,765	9,342	808		2,699	3%
	August 20–Sept. 30	42	35,975	857	667		1,090	3%
		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%
		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%
		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%
		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%
		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%
		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%
		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%
		22	195,400	8,882		1.73	6,196	3%

-continued-

Table 17.–Page 3 of 3.

Year	Fishing Period	Days	Chinook Harvest[a]	Catch/Fleet Day	Permits	Abundance Index[b]	AK Hatchery Harvest	AK Hatchery Percent
2007	July 1–20	20	140,549	7,027	831		5,392	4%
	August 16–21	6	30,778	5,130	691		888	3%
		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%
		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%
		19	117,587	6,189		1.20	5,223	4%
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%
		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%
		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%
		38	135,594	3,568		1.24	5,622	4%
2013	July 1–6	6	84,653	14,109	714	1.20	3,573	4%

[a] The general summer fishery does not include experimental, terminal, or hatchery access fisheries, which target Alaska hatchery stocks. Also, these catch numbers do not include Annette Island or confiscated harvest.

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

[c] The abundance index given for 1985–2012 is the first post season index and for 2013 is the preseason index. The Abundance Indices are estimated by the Chinook Technical Committee of the Pacific Salmon Commission.

Table 18.–Coho salmon mid-season closure dates and extensions, 1980–2013.

Year	Closure Dates	Days Closed	Extension	Area Extensions and Restrictions
1980	July 15–24	10	None	
1981	August 10–19	10	None	
1982	July 29–August 7	10	None	
1983	August 5–14	10	None	
1984	August 15–24	10	None	
1985	August 15–24	10	None	
1986	August 11–20	10	None	
1987	August 3–12	10	None	
1988	August 15–24	10	None	
1989	August 14–23	10	None	
1990	August 13–22	10	None	
1991	August 16–24	10	None	
1992	August 13–22	10	None	
1993	August 13–20	8	None	
1994	August 27–28	2	9/21–9/30	Districts 1–16 open with area restrictions
1995	August 13–22	10	9/21–9/30	Districts 1–16 open with area restrictions
1996	August 14–18	5	None	
1997	August 8–17	10	None	
1998	August 12–19	8	9/21–9/30	Districts 1–13 open with area restrictions
1999	August 13–17	5	9/21–9/30	Districts 1–16 open with area restrictions
2000	August 13–22	10	None	
2001	August 13–17	5	9/25–9/30	Districts 1–16 and 183 open (all state waters)[a]
2002	August 10–11	2	9/21–9/30	Entire region open except portion of Sitka Sound[a]
2003	No closure	0	9/21–9/30	Entire region open[a]
2004	August 10–11	2	9/21–9/30	Entire region open[a]
2005	August 10–13	4	None	
2006	August 9–12	4		
	August 23–27	5	9/21–9/30	Dist.10–15, 181, 183 and 191 open with area restrictions
2007	August 11–15	5	None	
2008	August 11–15	5	None	
2009	August 12–16	5	9/21–9/30	Districts 1–11, 181, 183, 189, 191 open; Districts 12, 13, 154 open with area restrictions
2010	August 11–14	4	None	
2011	August 10–14	5	None	
2012	August 7–10	4	9/21–9/30	Districts 1–11, 13, 16, 181, 183, 189, 191 open; 12 and 14 open with area restrictions.
2013	**No closure**	**0**	**9/21–9/30**	**Entire region open[a]**

[a] During these years, areas of high Chinook abundance remained closed and Yakutat area closures were in effect during coho salmon extension periods.

Table 19.–Weekly troll Chum salmon harvest and effort in Icy Straits/Homeshore, Neets Bay/West Behm Canal, Sitka Sound, and the region 2010–2013.

Icy Strait/Homeshore

	2010		2011		2012		2013	
Week	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits
23	–	–	–	–	–	–	14,103	43
24	–	–	5,613	27	554	24	35,784	118
25	*	–	23,571	100	8,088	95	140,938	154
26	16,603	30	79,951	140	9,386	83	100,270	141
27	14,979	38	27,496	87	7,340	37	19,008	57
28	15,863	32	451	6	1,665	18	1,158	15
Total	49,607	56	137,244	158	27,175	133	311,388	192

Neets Bay/West Behm Canal

	2010		2011		2012		2013	
Week	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits
26	*	*	*	*	13,862	45	2,227	11
27	3,968	10	1,225	17	32,108	106	18,250	41
28	37,631	48	35,576	78	77,851	209	54,609	106
29	116,454	106	129,494	140	99,560	247	68,233	115
30	45,857	82	122,343	153	78,078	182	22,383	77
31	393	4	47,642	97	17,238	97	10,625	21
32	*	*	24,527	45	1,714	10	3,877	15
33	*	*	6,387	21	8,750	26	328	4
34	–	–	7,650	14	13,920	33	369	4
35	–	–	16,230	31	29,897	55	914	5
36	599	3	20,563	47	28,143	72	2,643	7
37	3,503	5	10,499	36	4,117	51	1,943	6
38	6,736	6	16,728	25	872	10	–	–
Total	216,465	114	439,073	173	406,335	265	186,575	137

Sitka Sound

	2010		2011		2012		2013	
Week	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits
25	–	–	–	–	–	–	2,206	34
26	–	–	–	–	–	–	7,825	41
27	–	–	–	–	–	–	2,629	13
28	–	–	–	–	–	–	5,746	13
29	112	4	–	–	–	–	5,561	19
30	26	3	*	*	–	–	33,582	46
31	18,421	44	3,438	21	377	3	80,843	94
32	35,632	84	13,129	78	15,529	39	122,081	101
33	30,159	87	4,315	34	6,742	31	153,748	106
34	23,302	54	90	3	1,136	8	42,120	78
35	1,246	12	31	3	–	–	1,198	8
Total	110,587	113	21,238	92	23,797	51	457,604	179

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Table 19.–Page 2 of 2).

Region

	2010		2011		2012		2013	
Week	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits
23	–	–	*	*	*	*	14,105	44
24	–	–	5613	27	558	25	35,727	120
25	–	–	23,571	100	8,239	102	141,851	162
26	16,608	32	80,146	142	23,234	125	109,594	167
27	18,846	45	28,873	105	39,422	143	41,355	101
28	53,494	69	36,829	88	79,508	226	63,492	137
29	118,703	124	130,225	145	99,685	250	74,708	139
30	45,907	85	123,183	156	78,078	182	56,088	123
31	18,814	46	52,297	121	17,615	100	92,533	117
32	36,819	85	39,489	125	17,243	49	127,392	117
33	30,215	87	10,702	55	15,736	58	154,152	111
34	22,941	51	8,379	21	14,951	40	44,037	84
35	2,930	18	16,261	34	29,906	56	2,112	13
36	6,557	18	20,569	48	28,143	72	2,817	9
37	3,503	5	10,570	38	4,117	51	2,156	8
38	6,736	6	16,778	27	872	10	*	*
Total	382,163	193	603,533	299	457,352	352	962,181	366

Note: Numbers for harvest and permits fished are based on vessels that targeted chum salmon.

–no effort or harvest

*confidential data

Table 20.–Total Chinook salmon harvest and Alaska hatchery harvest by gear, 1985–2013.

	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
1985	21,593	150	10,679	976	1,232	0	215,811	8,071	24,858	3,365	274,539	12,562
1986	12,132	813	8,539	1,437	1,428	0	237,703	8,338	22,551	5,239	282,353	15,827
1987	4,503	162	8,957	1,846	2,072	4	242,562	16,195	24,324	5,336	282,418	23,539
1988	11,142	320	9,658	4,474	894	0	231,364	19,503	26,160	5,112	279,312	29,410
1989	13,171	2,298	9,948	4,106	798	0	235,716	16,366	31,071	5,859	291,032	28,629
1990	11,389	2,529	15,217	9,240	663	3	287,939	29,834	51,218	11,546	366,869	53,149
1991	13,793	2,618	19,254	11,849	1,747	40	264,106	37,498	60,492	18,022	359,462	69,987
1992	18,339	1,224	11,740	7,484	2,025	10	183,759	25,738	42,892	9,464	258,791	43,910
1993	8,364	1,751	18,280	11,378	1,311	0	226,866	18,226	49,246	8,321	304,103	39,676
1994	14,839	3,201	16,918	11,767	3,897	2	186,331	12,389	42,365	9,083	264,350	36,440
1995	25,117	17,319	13,464	7,504	9,374	0	138,117	27,174	49,667	16,524	235,739	68,521
1996	22,225	20,692	10,219	5,793	4,854	0	141,452	38,365	57,509	15,229	236,259	80,079
1997	10,338	6,223	11,467	4,538	3,264	0	246,409	28,795	71,524	13,914	343,002	53,470
1998	14,503	6,054	6,207	3,903	2,804	0	192,066	12,397	55,013	8,933	270,593	31,287
1999	17,900	11,933	9,712	5,255	5,108	0	146,219	16,935	72,081	20,824	251,020	54,947
2000	22,905	18,401	16,035	11,902	2,460	0	158,717	28,963	63,173	22,910	263,290	82,176
2001	20,439	14,991	17,091	11,968	2,633	0	153,280	28,480	72,291	29,965	265,734	85,404
2002	17,695	11,717	11,484	6,508	2,510	0	325,308	31,647	69,537	26,871	426,534	76,742
2003	24,134	6,911	11,398	8,080	3,842	0	330,692	27,614	69,370	23,057	439,436	65,662
2004	39,633	11,848	21,671	8,482	2,734	0	354,658	37,512	80,572	27,022	499,268	84,864
2005	19,867	7,233	47,539	5,387	685	0	338,451	35,678	86,575	25,178	493,117	73,477
2006	24,969	10,302	41,867	7,361	560	0	282,315	20,783	85,794	18,168	435,505	56,614
2007	27,267	11,091	25,152	12,747	1225	0	268,146	30,409	82,849	22,822	404,639	77,069
2008	15,540	12,204	27,050	15,019	439	0	151,936	28,837	49,265	18,766	244,230	74,826
2009	29,012	16,241	19,015	9,856	437	0	175,644	20,411	69,565	24,988	293,674	71,495
2010	15,876	13,428	14,426	10,817	280	0	195,614	21,347	58,503	16,335	284,699	61,926
2011	26,404	17,752	21,293	15,817	523	0	242,193	25,260	66,576	14,161	356,989	72,990
2012	21,145	15,347	17,964	12,337	382	0	209,036	21,132	46,495	10,335	295,022	59,150
2013	**23,110**	**17,044**	**27,316**	**22,722**	**900**	**0**	**149,615**	**17,935**	**45,787**	**12,504**	**246,727**	**70,205**

Note: Data includes Terminal area and Annette Island harvests. 2013 sport fish data are inseason estimates. Final estimates pending analyses of mail–in survey data.

Table 21.–Total Southeast Alaska troll coho salmon harvest and estimated wild and hatchery contributions, 1960–2013.

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	704,297	2,881	281	3,162	<1%
1981	861,146	846,088	15,920	218	16,139	2%
1982	1,315,871	1,285,969	35,486	435	35,921	3%
1983	1,276,380	1,227,242	51,882	940	52,822	4%
1984	1,133,366	1,062,327	69,480	2,147	71,627	6%
1985	1,600,230	1,499,661	106,575	179	106,754	7%
1986	2,128,003	1,850,004	269,396	8,881	278,277	13%
1987	1,041,055	950,757	87,882	3,493	91,375	9%
1988	500,147	472,334	25,795	1,948	27,743	6%
1989	1,415,512	1,248,491	116,906	4,759	121,665	9%
1990	1,832,604	1,559,530	278,996	11,573	290,568	16%
1991	1,719,060	1,336,889	368,824	15,866	384,690	22%
1992	1,929,899	1,509,115	403,208	17,636	420,843	22%
1993	2,395,711	2,013,913	382,645	13,369	396,014	17%
1994	3,467,597	2,946,740	503,675	13,441	517,115	15%
1995	1,750,221	1,414,052	325,827	8,060	333,887	19%
1996	1,906,753	1,456,794	440,086	9,558	449,644	24%
1997	1,170,460	927,301	240,545	2,504	243,049	21%
1998	1,636,707	1,306,516	322,071	7,592	329,663	20%
1999	2,271,769	1,772,608	500,550	13,484	514,034	23%
2000	1,124,854	876,142	244,111	6,862	250,973	22%
2001	1,843,997	1,472,073	367,654	3,637	371,291	20%
2002	1,310,060	973,893	332,963	895	333,857	25%
2003	1,220,782	936,969	282,425	2,768	285,192	23%
2004	1,915,066	1,602,879	307,481	4,706	312,187	16%
2005	2,036,104	1,703,464	328,028	4,612	332,640	16%
2006	1,360,267	1,144,707	214,694	866	215,560	16%
2007	1,376,753	1,071,709	304,193	851	305,044	22%
2008	1,273,716	1,011,201	261,558	957	262,515	21%
2009	1,590,259	1,343,471	245,347	1,440	246,788	16%
2010	1,342,211	1,056,713	284,591	907	285,498	21%
2011	1,302,734	964,365	337,843	526	338,369	26%
2012	1,199,901	890,538	308,466	897	309,363	26%
2013	**2,376,123**	**1,670,309**	**704,836**	**978**	**705,814**	**30%**
Avg. 1983–1992	1,457,626	1,271,635	177,894	6,742	184,637	11%
Avg. 1993–2012	1,674,796	1,344,302	326,738	4,897	331,634	20%

Note: Data includes Annette Island troll harvests and excludes terminal area harvests.

Table 22.–Estimates of total escapements of Chinook salmon to escapement indicator systems and to Southeast Alaska and transboundary rivers, 1975–2013.

	Southeast Alaska Stocks								Transboundary River Stocks		
Year	Situk River	Chilkat River	King Salmon River	Andrew Creek	Unuk River	Chickamin River[a]	Blossom River	Keta River	Alsek River	Taku River	Stikine River
1975	–	–	64	507	–	370	565	611		12,920	7,571
1976	1,421	–	99	404	–	157	263	253	5,282	24,582	5,723
1977	1,732	–	204	465	4,706	363	433	692	12,706	29,496	11,445
1978	808	–	87	388	5,344	308	553	1,180	12,034	17,124	6,835
1979	1,284	–	134	327	2,783	239	209	1,282	17,354	21,617	12,610
1980	905	–	106	282	4,909	445	344	578	10,862	39,239	30,573
1981	702	–	154	536	3,532	384	615	990	8,502	49,559	36,057
1982	434	–	394	672	6,528	571	1,335	2,270	9,475	23,847	40,488
1983	592	–	245	366	5,436	599	2,279	2,474	10,344	9,795	6,424
1984	1,726	–	265	389	8,876	1,102	1,966	1,836	7,238	20,778	13,995
1985	1,521	–	175	622	5,721	956	2,744	1,878	6,127	35,916	16,037
1986	2,067	–	255	1,379	10,273	1,745	4,946	2,077	11,069	38,110	14,889
1987	1,379	–	196	1,537	9,533	975	5,221	2,312	11,141	28,935	24,632
1988	868	–	208	1,100	8,437	786	1,486	1,731	8,717	44,524	37,554
1989	637	–	240	1,034	5,552	934	1,331	3,477	10,119	40,329	24,282
1990	628	–	179	1,295	2,856	564	995	1,824	8,609	52,143	22,619
1991	889	5,897	134	780	3,165	487	925	819	11,625	51,645	23,206
1992	1,595	5,284	99	1,517	4,223	346	581	653	5,773	55,889	34,129
1993	952	4,472	266	2,067	5,160	389	1,173	1,090	13,855	66,125	58,962
1994	1,271	6,795	213	1,115	3,435	388	623	921	15,863	48,368	33,094
1995	4,330	3,790	147	669	3,730	356	840	527	24,772	33,805	16,784
1996	1,800	4,920	292	653	5,639	422	851	894	15,922	79,019	28,949
1997	1,878	8,100	362	571	2,970	272	511	740	12,494	114,938	26,996
1998	924	3,675	134	950	4,132	391	364	446	6,833	31,039	25,968
1999	1,461	2,271	304	1,180	3,914	492	820	968	14,597	16,786	19,947
2000	1,785	2,035	138	1,346	5,872	801	894	914	7,905	34,997	27,531
2001	656	4,517	149	2,055	10,541	1,010	789	1,032	6,705	46,554	63,523
2002	1,000	4,051	155	1,708	6,988	1,013	867	1,237	5,569	55,044	50,875
2003	2,117	5,657	119	1,160	5,546	964	786	969	5,904	36,435	46,824
2004	698	3,422	135	2,991	3,963	798	734	1,132	7,083	75,032	48,900

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Table 22.–Page 2 of 2.

	Southeast Alaska Stocks								Transboundary River Stocks		
Year	Situk River	Chilkat River	King Salmon River	Andrew Creek	Unuk River	Chickamin River[a]	Blossom River	Keta River	Alsek River	Taku River	Stikine River
2005	595	3,366	143	1,979	4,742	924	926	1,496	4,478	38,725	40,501
2006	295	3,039	150	2,124	5,645	1,330	1,270	2,248	2,323	42,296	24,405
2007	677	1,442	181	1,736	5,668	893	522	936	2,827	14,854	14,560
2008	413	2,905	120	981	3,104	1,111	995	1,093	1,885	27,383	18,352
2009	902	4,429	109	628	3,157	611	476	659	6,239	22,801	11,086
2010	167	1,815	158	1,205	3,835	1,156	1,405	1,430	9,518	29,302	15,180
2011	240	2,688	192	936	3,195	852	569	671	6,668	27,523	14,569
2012	322	1,627	155	587	956	444	793	725	2,660	19,429	22,671
2013	**912**	**1,683**	**94**	**920**	**1,135**	**468**	**987**	**1,484**	**5,044**	**17,025**	**18,172**
08–12 Avg	409	2,693	147	867	2,849	835	848	916	5,394	25,288	16,372
03–12 Avg	643	3,039	146	1,433	3,981	908	848	1,136	4,959	33,378	25,705
Goals:											
Lower	500	1,750	120	650	1,800	450	565	525	3,500	19,000	14,000
Upper	1,000	3,500	240	1,500	3,800	900	1,160	1,200	5,300	36,000	28,000

[a] Escapement is enumerated using index counts on the Chickamin and are not expanded to an estimate of total escapement.

Table 23.–Escapement goal performance for indicator coho salmon streams in Southeast Alaska (SEAK) and Yakutat, 1993–2013.

Year	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
SEAK AREA																					
Auke Cr.	E	E	I	E	E	E	E	E	E	E	E	I	I	E	I	E	I	I	E	E	E
Berners R.	E	E	I	I	E	I	E	E	E	E	E	E	I	I	U	I	I	I	I	I	I
Ford Arm L.	E	E	I	I	E	E	E	I	I	E	E	E	E	E	I	E	I	I	I	I	I
Hugh Smith L.	I	E	E	I	I	I	E	I	E	E	E	I	E	I	E	E	E	E	E	E	E
Chilkat River	E	E	E	I	I	I	E	E	E	E	E	E	I	E	U	I	I	E	I	I	I
Montana Cr.	E	E	I	I	I	I	I	I	I	E	I	U	U	I	U	I	I	I	I	U	U
Petersen Cr.	I	E	E	E	I	I	E	I	I	I	I	E	I	E	I	E	I	E	I	I	I
Sitka Index	E	E	E	E	E	E	I	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Ketchikan Index	I	E	E	E	I	I	I	E	E	E	E	E	E	I	I	E	I	I	I	E	E
YAKUTAT AREA																					
Lost R.	I	E	I	I	I	NA	NA	NA	NA	E	E	I	U	I	I	NA	E	E	U	I	I
Situk R.	E	E	I	I	I	NA	NA	NA	NA	E	I	E	U	I	I	NA	I	E	I	U	E
Tsiu/Tsivat R.	I	E	I	I	I	NA	NA	I	NA	E	NA	NA	I	I	I	I	I	I	I	I	E
All-Gear Commercial																					
Harvest (Millions)	3.56	5.5	3.1	3.0	1.8	2.8	3.3	1.7	2.9	2.5	2.2	2.9	2.8	1.8	1.9	2.0	2.4	2.3	2.1	1.9	3.6

E = exceeded goal, U = under goal, I = within goal, NA = no escapement estimate available.

Table 24.–Escapement estimates for four Southeast Alaska coho salmon indicator stocks, 1980–2013.

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**
1980 –2012 Average:	676	8,896	3,296	1,446
Escapement Goal Range:	200–500	4,000–9,200	1,300–2,900	500–1,600

Note: Years when no escapement assessment occurred are indicated by "N/A."

Table 25.–Northern Inside area coho salmon escapements, 1981–2013.

Year	Auke Creek (Weir)	Montana Creek	Peterson Creek	Total Roadside Index	Berners River	Chilkat River	Taku River[a]
1981	646	227	219	1,092	—	—	—
1982	447	545	320	1,312	7,505	—	—
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	84,853
1993	859	1,352	112	2,323	15,670	58,217	109,457
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	60,844
2000	683	961	202	1,846	10,650	88,620	64,700
2001	842	1,119	106	2,067	19,290	108,698	104,460
2002	1,112	2,448	195	3,755	27,700	205,429	219,360
2003	585	808	203	1,596	10,110	134,340	183,038
2004	416	364	284	1,064	14,450	67,465	132,153
2005	450	351	139	940	5,220	38,589	91,552
2006	582	1,110	439	2,131	5,470	80,683	140,022
2007	352	324	226	902	3,915	25,493	49,632
2008	600	405	660	1,665	6,870	57,376	95,360
2009	360	698	123	1,181	4,230	47,911	104,321
2010	417	630	467	1,514	7,520	87,381	126,830
2011	517	709	138	1,364	6,050	64,511	70,887
2012	837	394	190	1,421	5,480	38,677	70,742
2013	**736**	**367**	**126**	**1,229**	**6,280**	**51,324**	**68,229**
1981–2012 Average	676	863	269	1,808	8,896	73,114	90,385
Goals:							
Point	340				6,300	50,000	
Lower	200	400	100		4,000	30,000	35,000
Upper	500	1,200	250		9,200	70,000	

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

Table 26.–Sitka area coho salmon escapement index, 1982–2013.

Year	Starrigavan Creek	Sinitsin Creek	St. John's Creek	Nakwasina River	Eagle River	Ford Arm Lake (Weir)	Total Index[a]
1982	317	46	***116***	***577***	***482***	2,662	4,201
1983	45	31	20	217	***143***	1,938	2,394
1984	385	160	154	715	***645***	***4,232***	6,291
1985	193	144	109	408	***390***	2,324	3,568
1986	57	***73***	***53***	275	245	1,546	2,249
1987	36	21	***22***	47	167	1,694	1,987
1988	45	56	71	104	***126***	3,028	3,430
1989	101	76	89	129	***180***	2,177	2,752
1990	39	80	38	195	214	2,190	2,756
1991	142	186	107	621	454	2,761	4,271
1992	241	265	110	654	629	3,847	5,746
1993	256	213	90	***644***	513	4,202	5,918
1994	304	313	227	404	717	3,228	5,193
1995	274	152	99	626	336	2,445	3,932
1996	59	150	201	553	488	2,500	3,951
1997	55	90	68	300	296	4,965	5,774
1998	123	109	57	653	300	7,049	8,291
1999	167	48	27	291	***243***	3,598	4,374
2000	144	62	30	459	108	2,287	3,090
2001	133	132	80	703	417	2,178	3,643
2002	227	169	100	713	659	7,109	8,977
2003	95	102	91	440	373	6,789	7,890
2004	143	112	79	399	391	3,539	4,663
2005	76	67	173	892	460	4,257	5,925
2006	386	152	121	996	992	4,737	7,384
2007	130	39	86	385	426	2,567	3,633
2008	96	73	43	839	66	5,173	6,290
2009	128	160	140	335	393	2,164	3,320
2010	70	171	85	307	640	1,610	2,883
2011	230	392	163	636	801	1,908	4,130
2012	59	133	144	296	525	2,282	3,439
2013	**113**	**125**	**179**	**412**	**585**	**1,573**	**2,987**
1982–2012 Average	152	128	99	476	419	3,267	4,542

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

Table 27.–Southern inside (Ketchikan) area coho salmon escapement index, 1987–2013.

Year	Herman Creek	Grant Creek	Eulachon River	Klahini River	Indian River	Barrier Creek	King Creek	Choca Creek	Carroll River	Blossum River	Keta River	Marten River	Hugh Smith L. (Weir)	Humpback Creek	Tombstone River	Total Index[a]
1987	92	***88***	154	***62***	***387***	***98***	***304***	***145***	180	700	800	740	1,118	650	532	6,051
1988	72	150	205	20	300	50	175	150	193	790	850	600	513	52	1,400	5,520
1989	75	101	290	15	925	450	510	200	70	1,000	650	1,175	433	350	950	7,194
1990	150	30	235	150	***282***	***72***	35	***105***	***139***	800	550	575	870	135	275	4,403
1991	245	50	285	50	550	100	300	220	375	725	800	575	1,826	671	775	7,547
1992	115	270	860	90	675	100	250	150	360	650	627	1,285	1,426	550	1,035	8,443
1993	90	175	460	50	475	325	110	300	310	850	725	1,525	830	600	1,275	8,100
1994	265	220	755	200	560	175	325	225	475	775	1,100	2,205	1,753	560	850	10,443
1995	250	94	435	165	600	220	415	180	400	800	1,155	1,385	1,781	82	2,446	10,408
1996	94	92	383	40	570	230	457	220	240	829	1,506	1,924	958	440	1,806	9,789
1997	75	***85***	420	60	***371***	***94***	***292***	175	140	1,143	571	759	732	32	847	5,795
1998	94	130	460	120	304	50	411	190	***255***	1,004	1,169	1,961	983	256	666	8,053
1999	75	127	657	150	356	25	627	225	425	598	1,895	1,518	1,246	520	840	9,284
2000	135	94	600	110	380	72	620	180	275	1,354	1,619	1,421	600	102	1,672	9,234
2001	80	110	929	151	1,140	***212***	891	450	173	1,561	***1,612***	1,956	1,580	506	***1,704***	13,055
2002	88	138	1,105	20	940	70	700	220	270	1,359	1,368	2,302	3,291	2,004	1,639	15,514
2003	242	***197***	875	39	690	57	1,140	380	***427***	1,940	1,934	1,980	1,510	214	1,745	13,369
2004	150	***230***	801	170	935	250	640	180	***455***	1,005	1,200	1,835	840	1,230	823	10,744
2005	510	***300***	1,240	360	890	190	810	270	***500***	3,680	3,290	1,130	1,732	500	1,170	16,572
2006	165	***124***	190	176	280	30	405	130	***272***	2,300	645	335	891	260	1,600	7,803
2007	134	***75***	***298***	35	245	15	290	210	***171***	990	970	351	1,224	3	***701***	5,712
2008	115	55	570	25	1,250	23	420	100	***613***	7,100	***2,524***	925	1,741	2,600	360	18,421
2009	***160***	330	330	340	750	110	1,050	100	1,100	***1,041***	315	1,675	2,282	700	225	10,508
2010	85	102	370	0	880	***90***	570	190	***209***	350	550	350	2,878	200	***710***	7,534
2011	***100***	***94***	350	***75***	175	***87***	110	85	***225***	1,235	***739***	350	2,137	850	***726***	7,338
2012	25	60	400	***175***	170	40	***680***	110	330	2,400	3,300	2,650	1,908	360	1,250	13,858
2013	***221***	***217***	***805***	***138***	***864***	***249***	***602***	***298***	***215***	2,140	1,560	2,370	3,048	530	1,340	14,597
1987–2012 Average	142	135	525	110	580	124	482	196	330	1,422	1,249	1,288	1,426	555	1,078	9,642

Note: Interpolated values are shown in italic print.

[a] Total index is the sum of counts and interpolated values.

Table 28.–Overall coho salmon percentage exploitation rates by indicator stock for the Alaska troll fishery, 1982–2013.

Year	Auke Lake	Berners River	Ford Arm Lake	Hugh Smith Lake	Weighted Average
Alaska Troll Fishery:					
1982	20	42	41	45	37
1983	31	50	54	35	43
1984	34	—	—	31	40
1985	35	45	52	36	42
1986	43	55	61	37	49
1987	37	53	45	29	41
1988	25	40	47	28	35
1989	48	53	62	51	53
1990	43	44	57	38	45
1991	17	18	53	36	31
1992	32	33	56	38	40
1993	38	39	62	53	48
1994	35	37	60	46	44
1995	32	31	53	30	36
1996	39	44	53	40	44
1997	12	16	48	49	31
1998	31	44	49	41	41
1999	34	40	58	42	43
2000	24	25	57	36	35
2001	31	28	67	22	37
2002	18	17	38	16	22
2003	23	24	31	24	26
2004	27	33	64	41	41
2005	33	37	51	32	38
2006	22	26	39	36	31
2007	25	34	65	38	41
2008	30	27	41	19	29
2009	30	30	65	24	37
2010	25	30	48	22	31
2011	17	31	24	21	23
2012	20	24	46	20	28
2013	**32**	**36**	**48**	**25**	**28**
1982–2012 Average	29	35	52	34	38

Table 29.–Overall coho salmon percentage exploitation rates by indicator stock for the all fisheries combined, 1982–2013.

Year	Auke Lake	Berners River	Ford Arm Lake	Hugh Smith Lake	Weighted Average
All Fisheries:					
1982	40	76	43	65	56
1983	44	71	69	62	61
1984	41	—	—	65	59
1985	44	75	52	63	58
1986	53	93	62	59	67
1987	43	77	48	50	54
1988	37	82	48	65	58
1989	55	62	65	82	66
1990	53	67	58	82	65
1991	31	67	54	68	55
1992	46	67	59	71	60
1993	46	68	67	80	65
1994	53	78	72	81	71
1995	44	83	64	73	66
1996	55	75	57	76	66
1997	20	35	52	73	45
1998	39	71	56	78	61
1999	41	70	63	70	61
2000	30	51	71	55	52
2001	38	40	74	49	50
2002	27	45	53	39	41
2003	35	65	49	59	52
2004	44	56	71	66	59
2005	38	59	58	53	52
2006	34	66	52	54	51
2007	34	55	70	62	56
2008	39	51	53	54	49
2009	39	55	69	48	53
2010	46	65	64	47	55
2011	35	49	82	41	52
2012	22	35	63	54	43
2013	**42**	**70**	**78**	**55**	**61**
1982–2012 Average	40	64	61	63	57

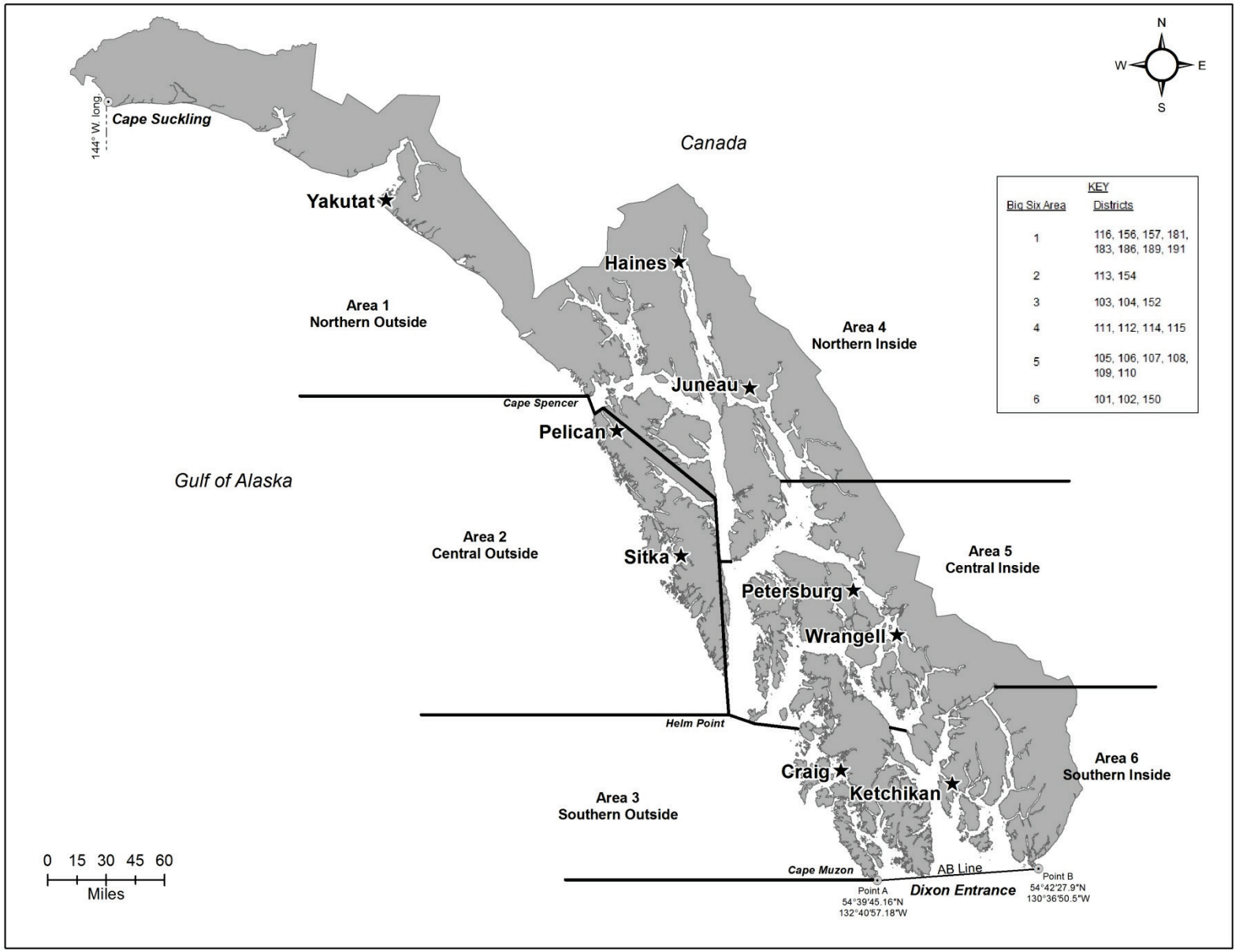

Figure 1.–Map of Southeast Alaska commercial troll fishing and Big Six management areas, Cape Suckling to Dixon Entrance.

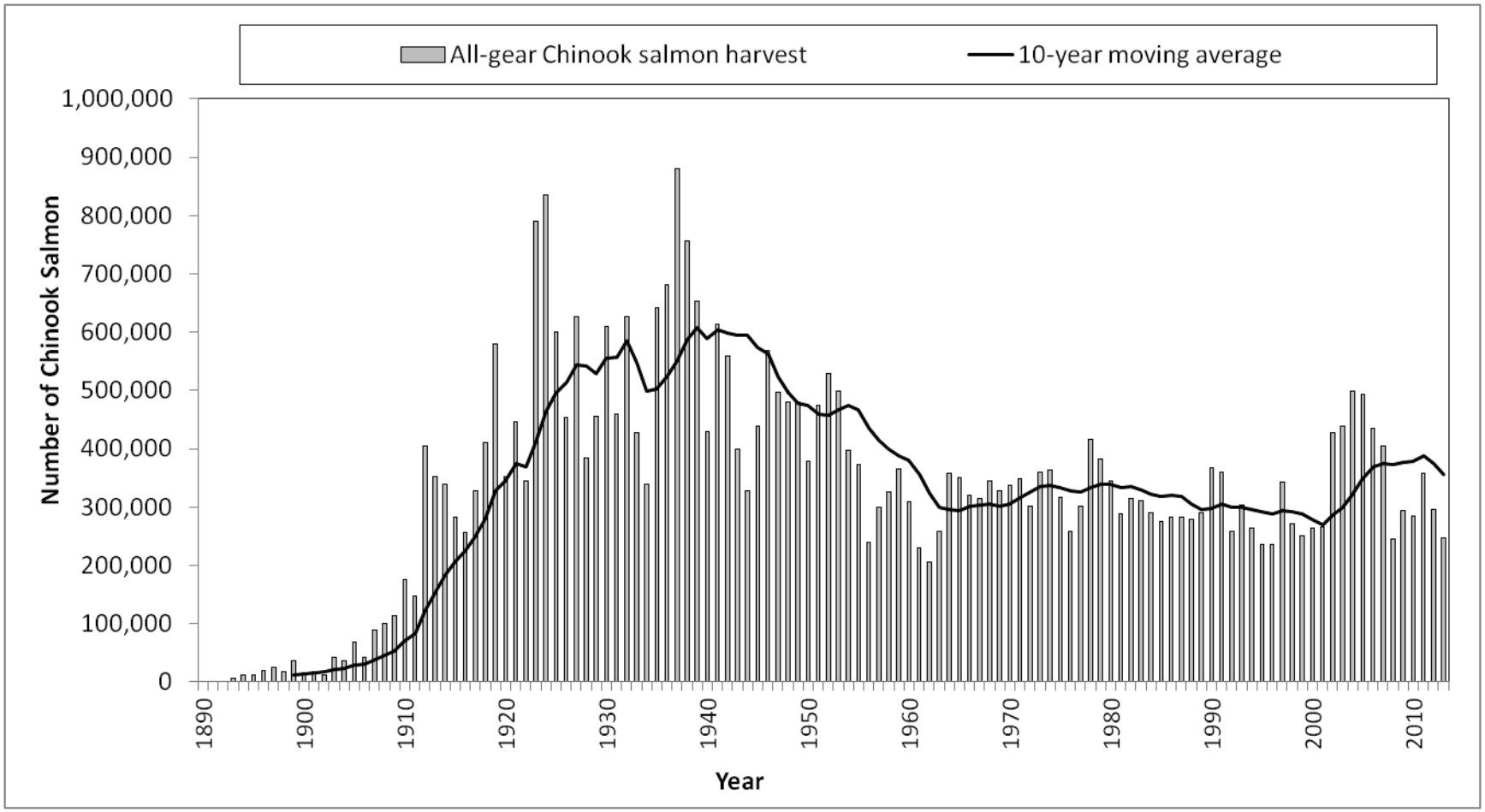

Figure 2.–All-gear harvests of Chinook salmon in common property fisheries, 1891–2013.

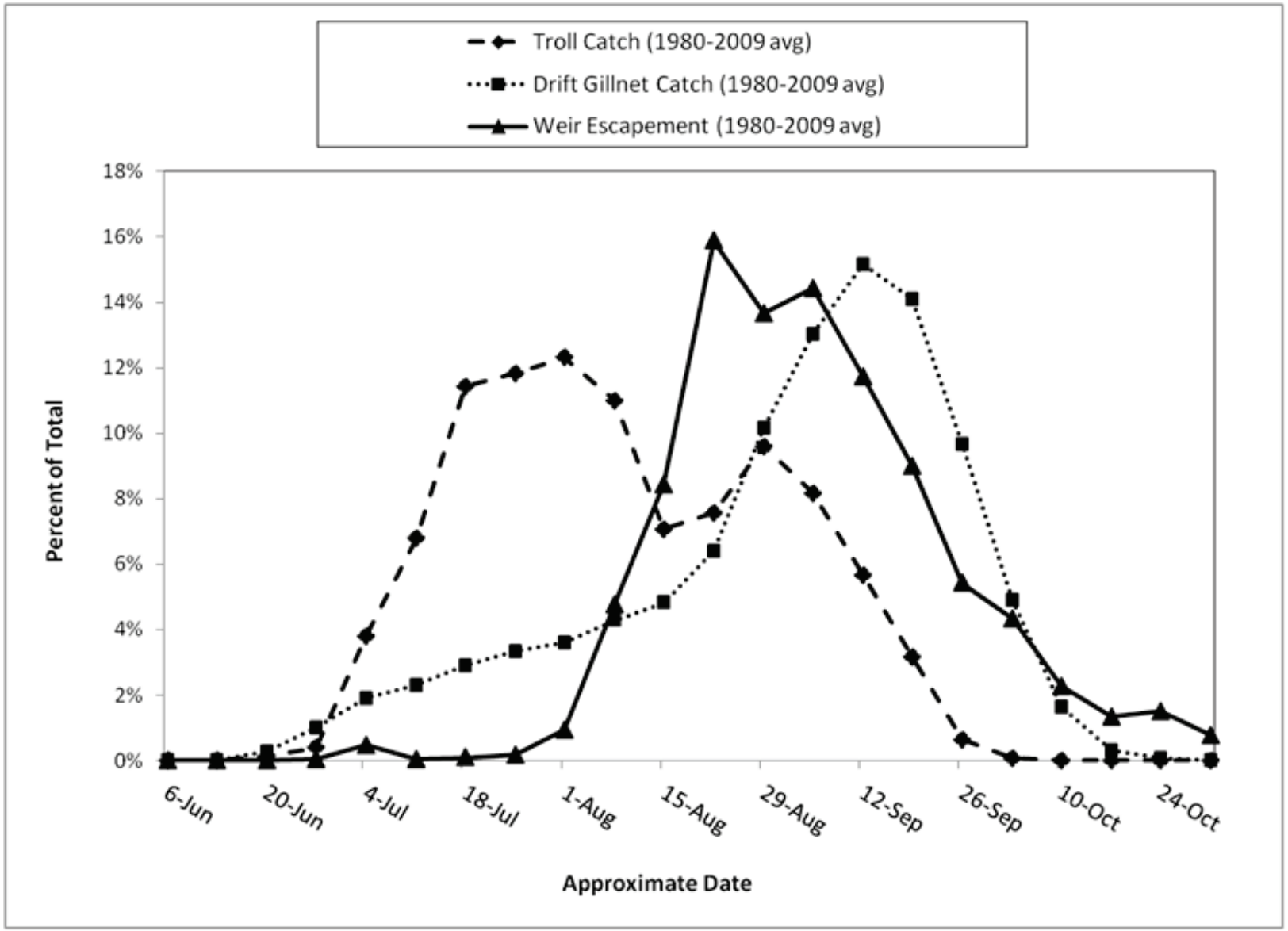

Figure 3.–Average weekly coho harvest timing of the Southeast Alaska commercial troll and drift gillnet fisheries (1980–2009), and the average weekly coho salmon escapement timing of the Hugh Smith Lake, Ford Arm Lake and Auke Creek weirs (1980–2009).

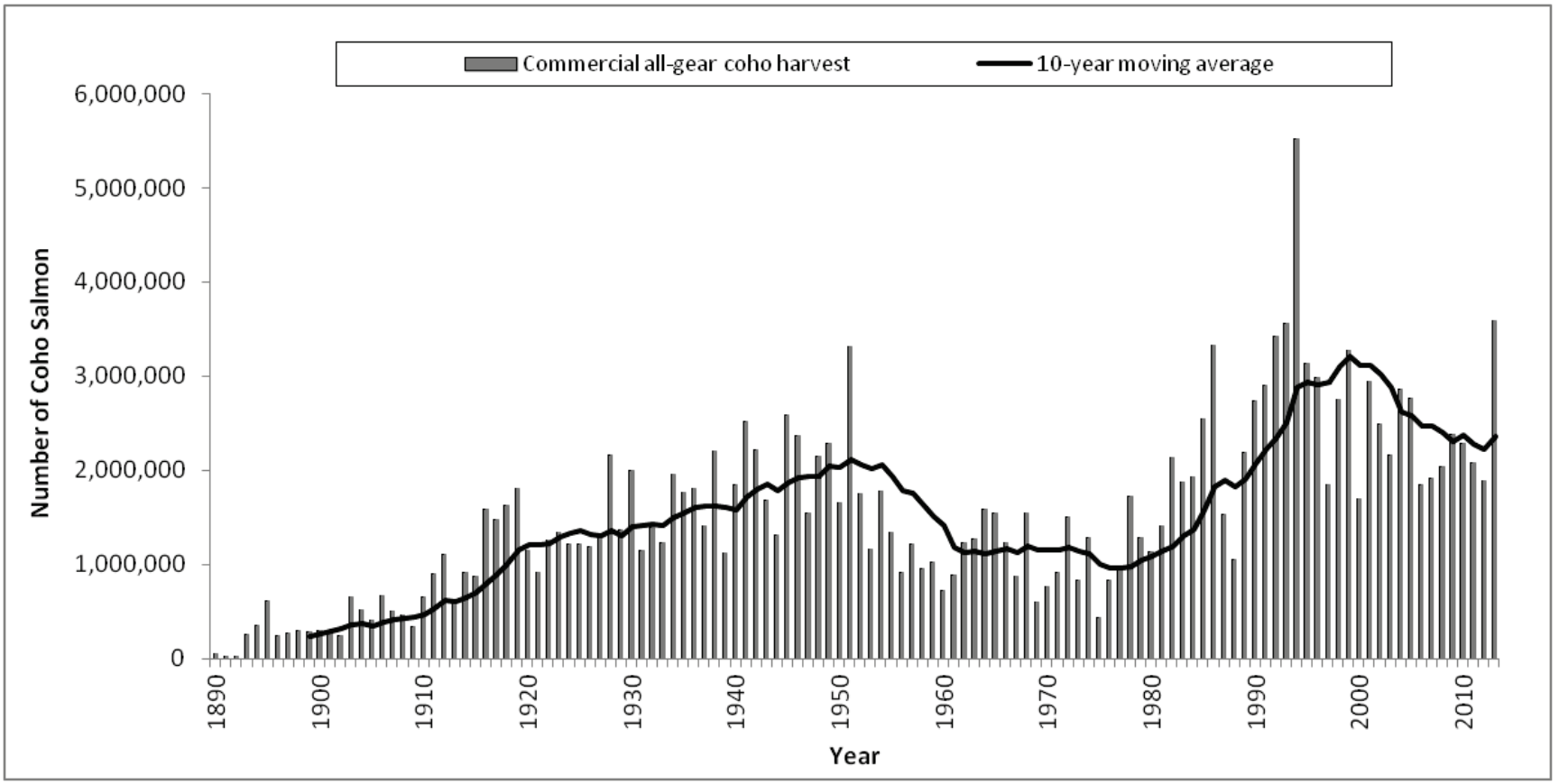

Figure 4.–Commercial all-gear harvests of coho salmon in common property fisheries, 1890–2013.

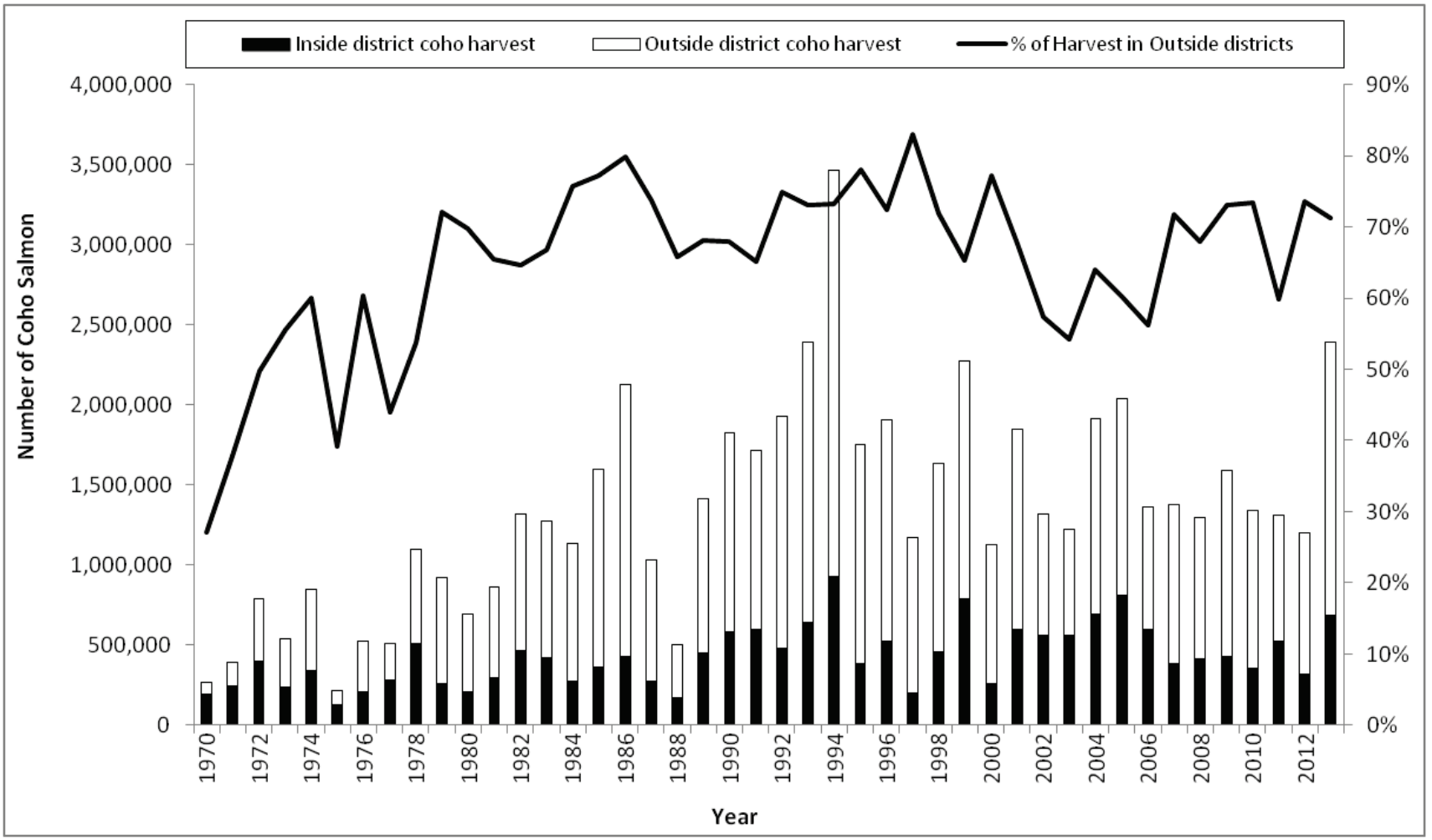

Figure 5.–Southeast Alaska troll coho salmon harvest in the outside (Gulf of Alaska) districts, the inside districts and the percentage of the harvest taken in the outside districts, 1970–2013.

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, 114,115.

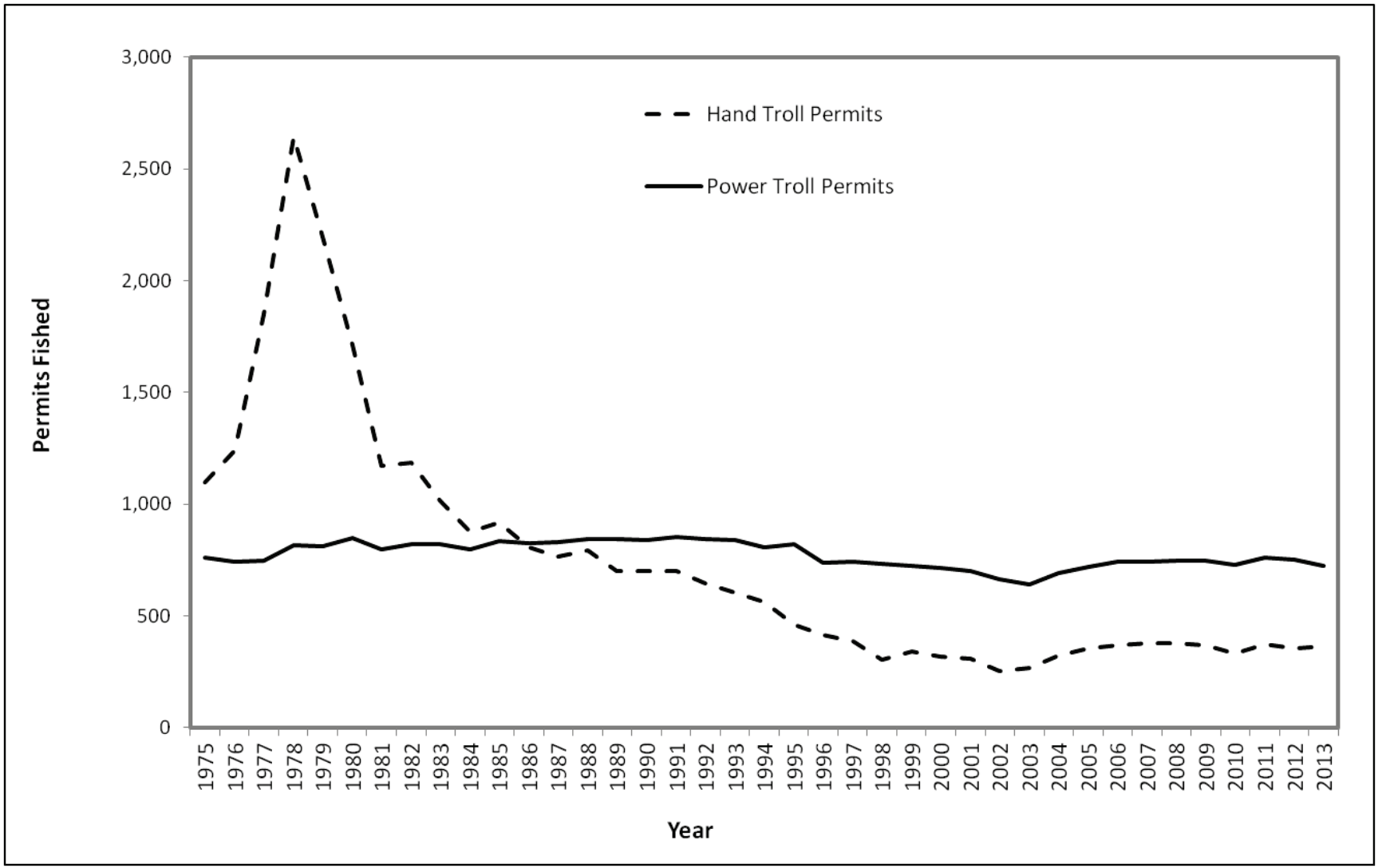

Figure 6.–Number of troll permits fished by gear type, 1975–2013.

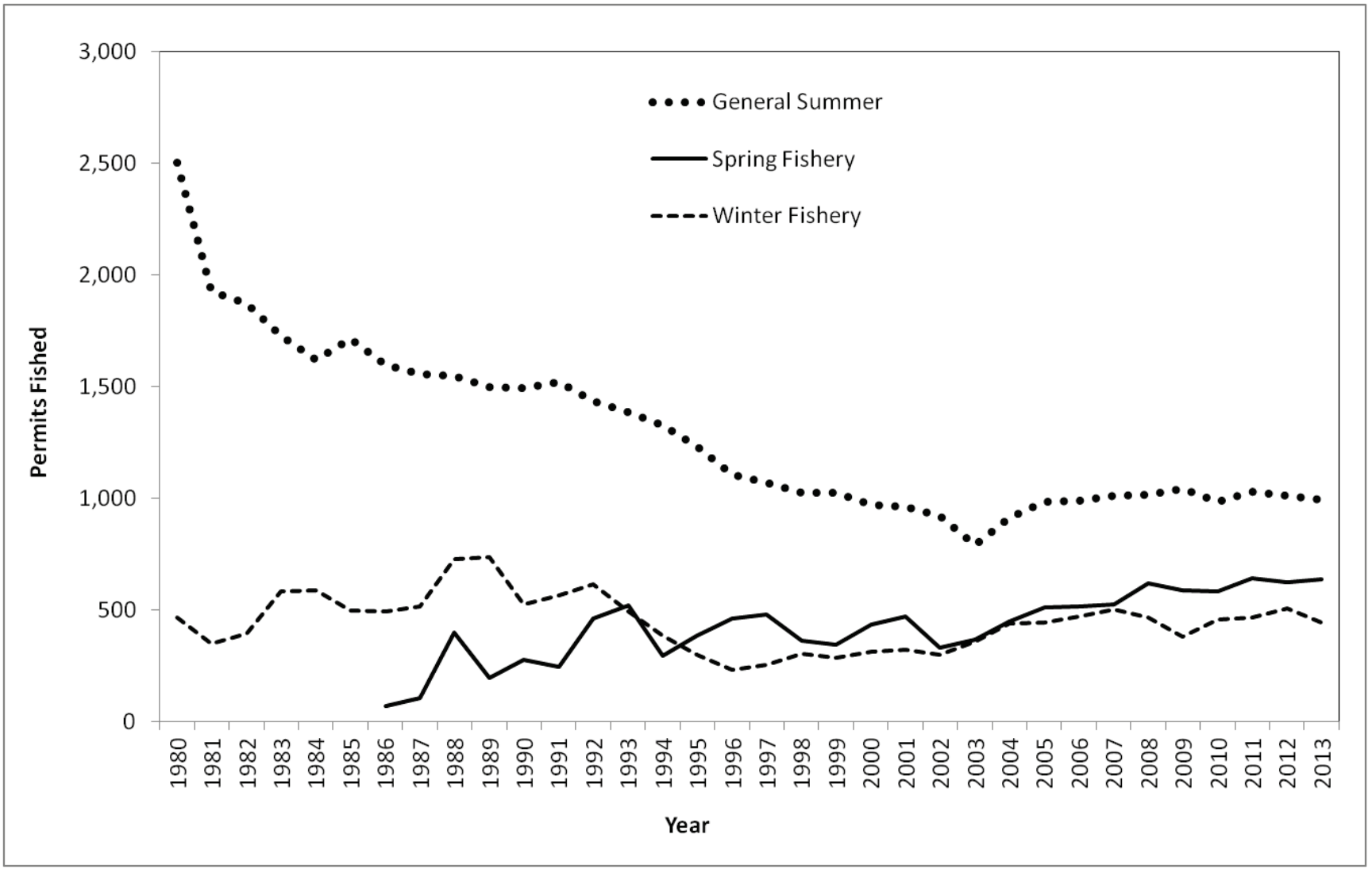

Figure 7.–Number of troll permits fished in the general summer, winter, and spring fisheries, 1980–2013.

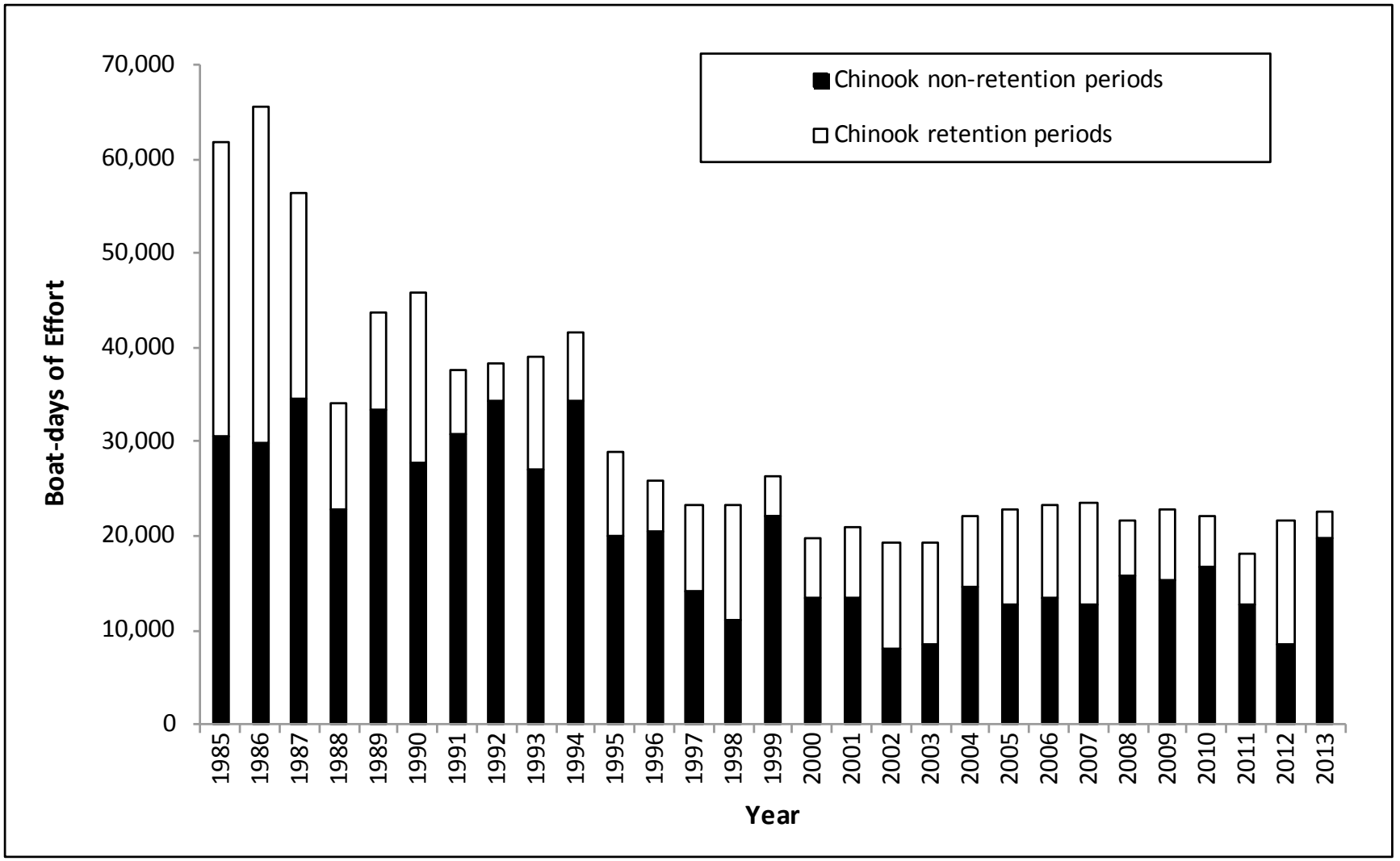

Figure 8.–General summer troll fishery boat-days of effort during Chinook salmon retention and Chinook non-retention fishing periods, 1985–2013.

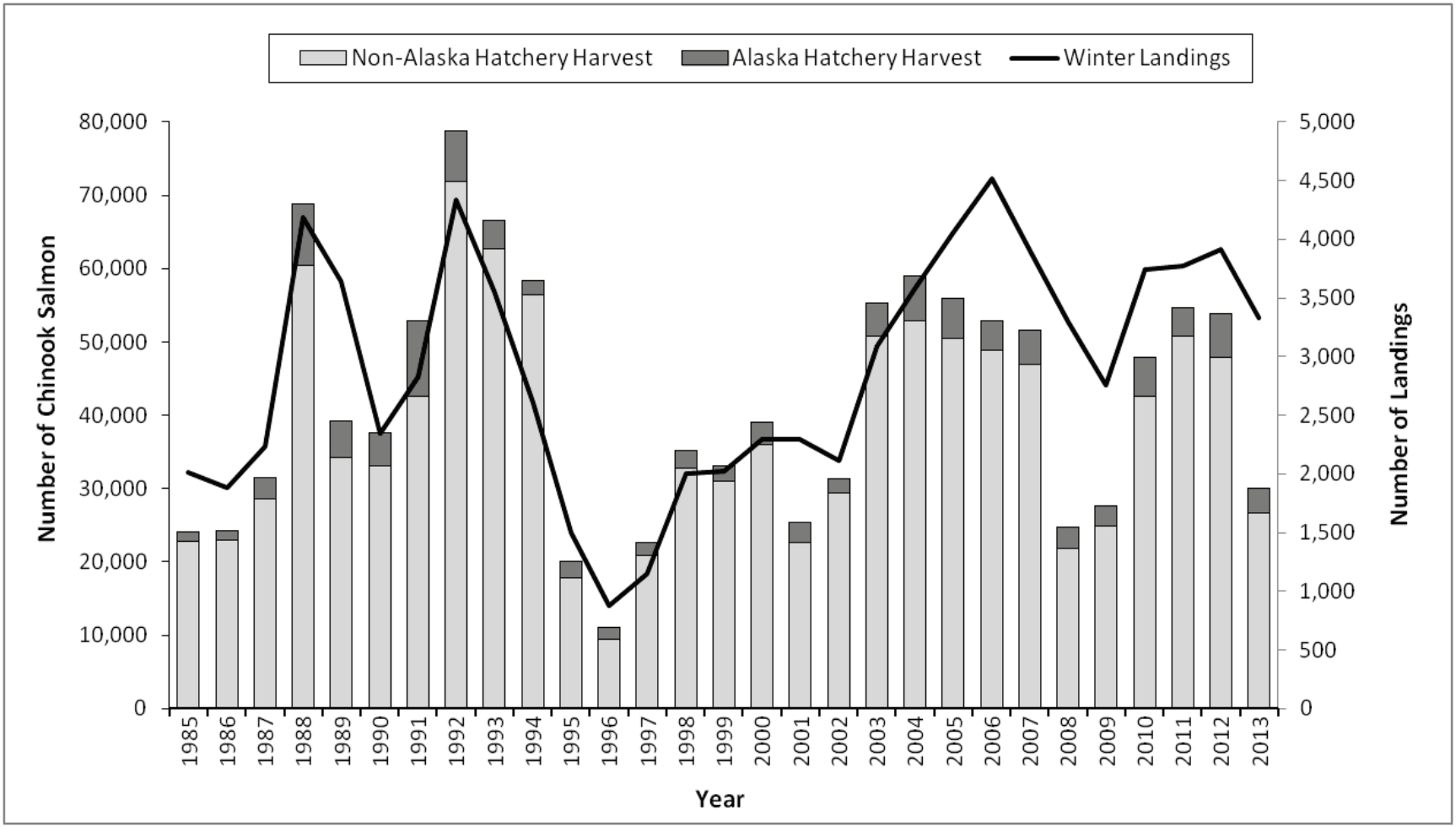

Figure 9.–Southeast Alaska winter troll fishery Non-Alaska and Alaska Hatchery Chinook salmon harvests and landings, 1985–2013.

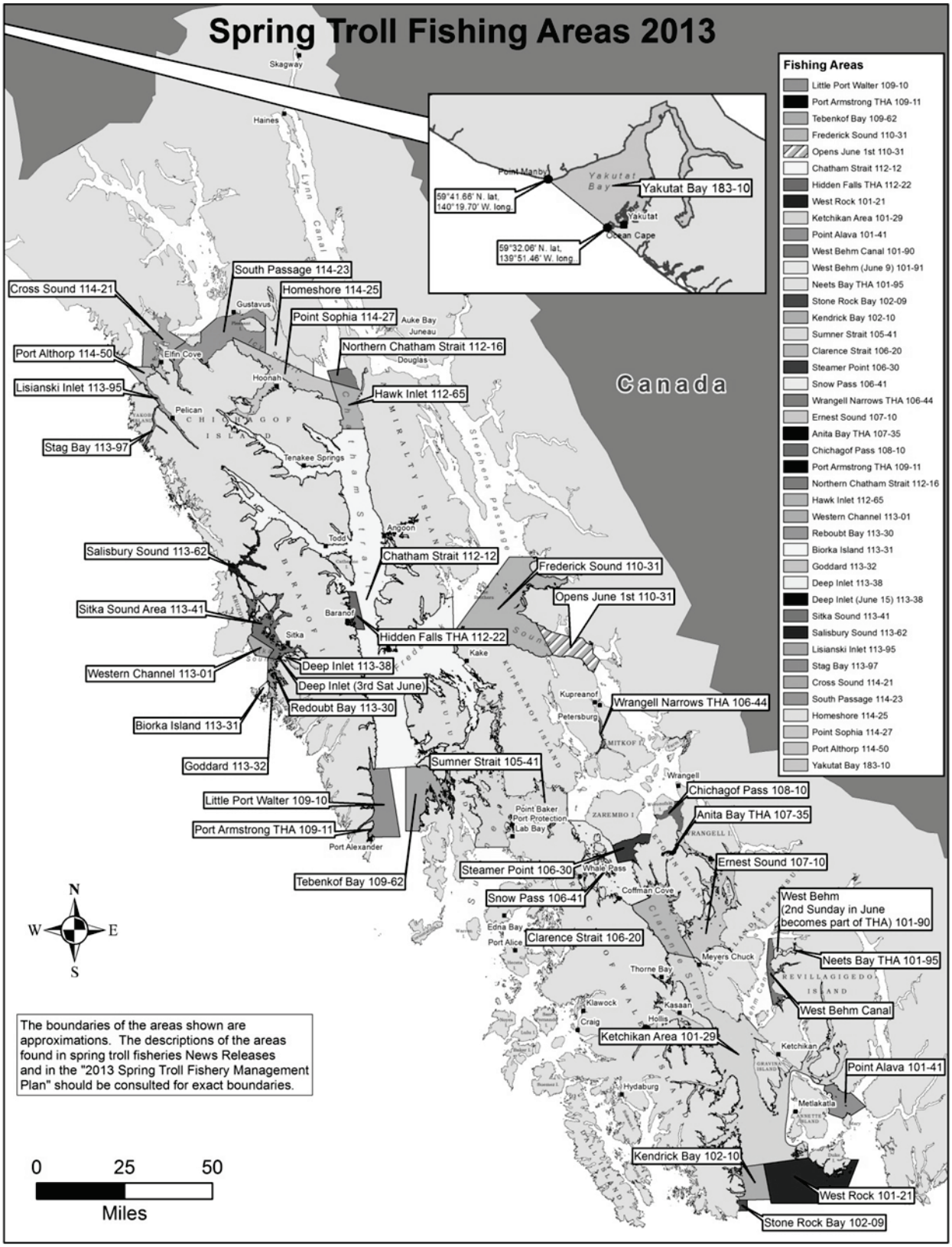

Figure 10.–Map of spring troll fishing areas, 2013.

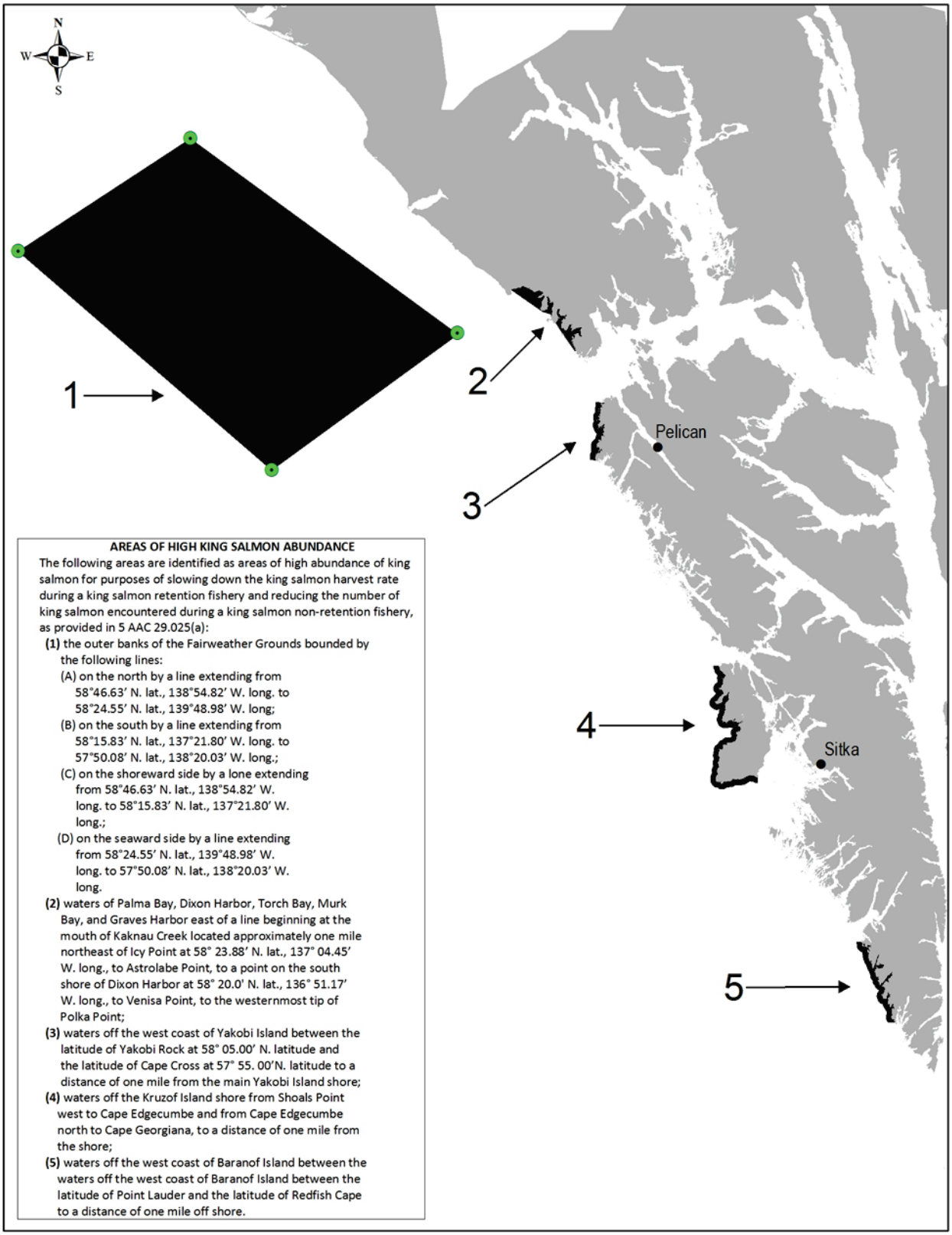

Figure 11.–Map of areas of high king salmon abundance (shaded areas), which close during part of the summer fishery.

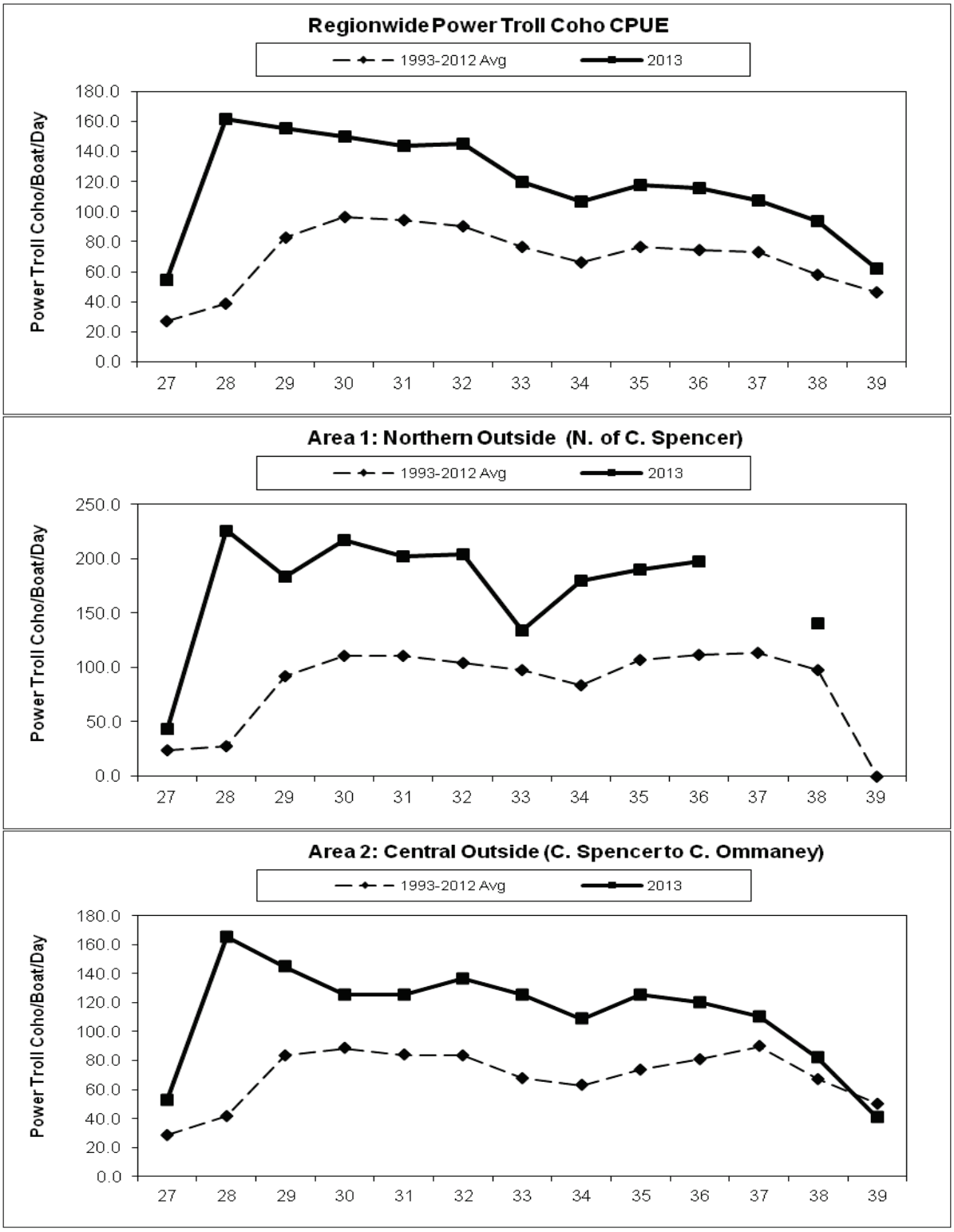

Figure 12.–Average power troll coho salmon harvest per boat day (CPUE) comparing 2013 results with the 1993–2012 average, for Southeast Alaska, regionwide, Northern Outside, and Central Outside (Areas 1 and 2).

Note: Low CPUE for week 27 is influenced by vessels targeting Chinook instead of coho salmon. Weeks with less than three permits interviewed are confidential, and have been omitted.

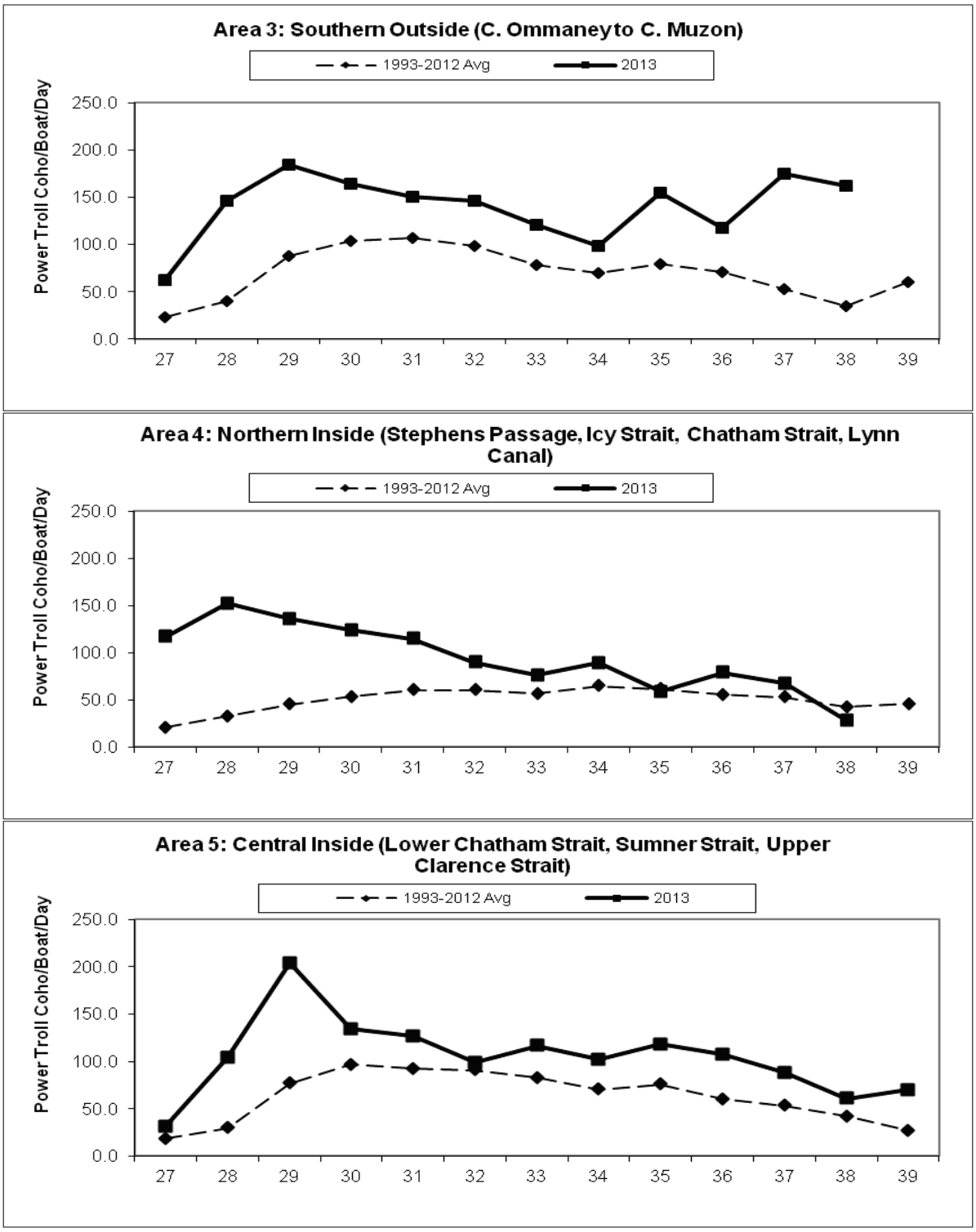

Figure 13.–Average power troll coho salmon harvest per boat day (CPUE) comparing 2013 results with the 1993–2012 average, for Southeast Alaska, Southern Outside, Northern Inside, and Central Inside (Areas 3, 4, and 5).

Note: Low CPUE for week 27 is influenced by vessels targeting Chinook instead of coho salmon. Weeks with less than three permits interviewed are confidential, and have been omitted.

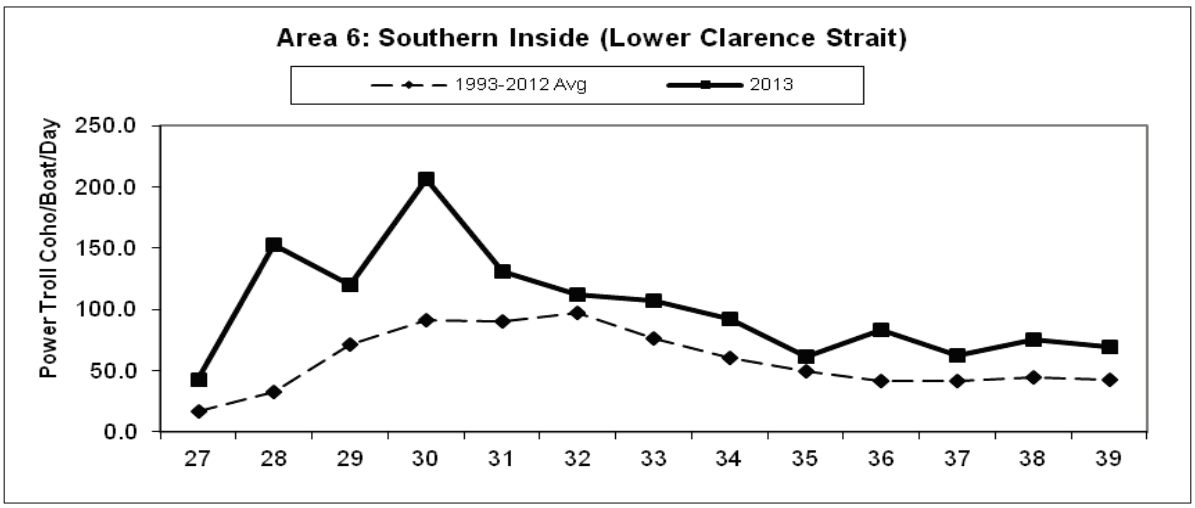

Figure 14.–Average power troll coho salmon harvest per boat day (CPUE) comparing 2013 results with the 1993–2012 average, for Southeast Alaska, Southern Inside (Area 6).

Note: Low CPUE for week 27 is influenced by vessels targeting Chinook instead of coho salmon. Weeks with less than three permits interviewed are confidential, and have been omitted.

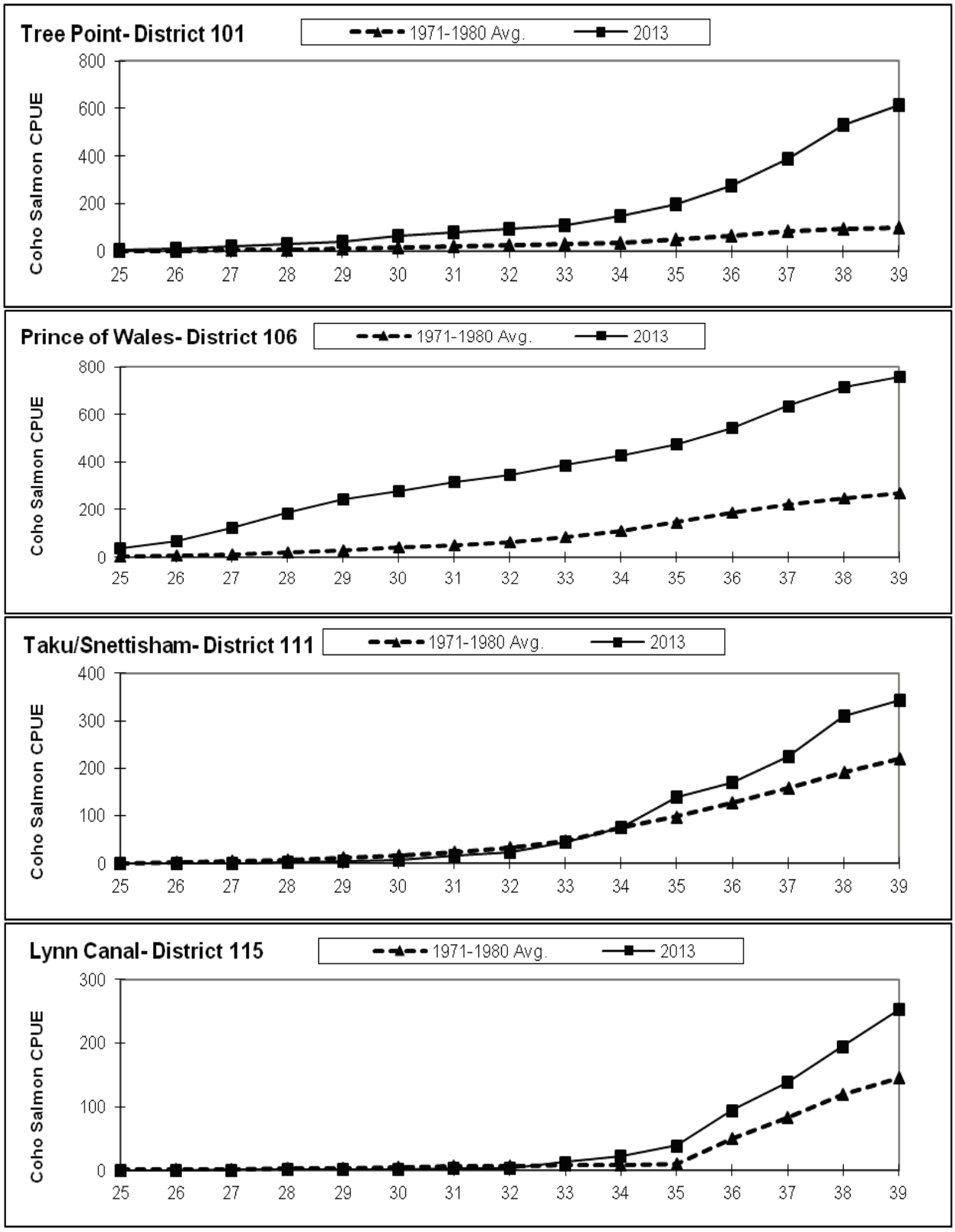

Figure 15.–Cumulative coho salmon catch-per-boat-day comparing 2013 to the 1971–1980 average, for the four indicator drift gillnet fisheries.

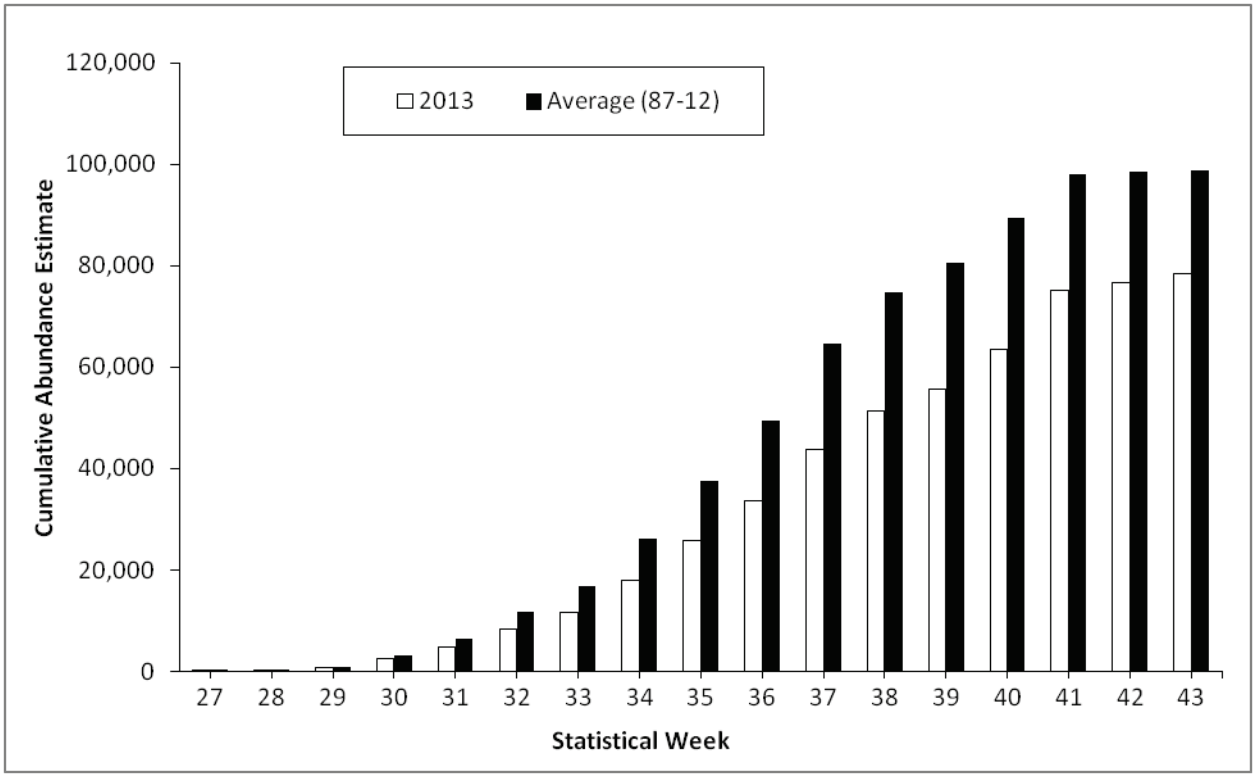

Figure 16.–Cumulative mark–recapture abundance estimate for Taku River coho salmon from Canyon Island fish wheels, for 2013 and the 1987–2012 average.

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

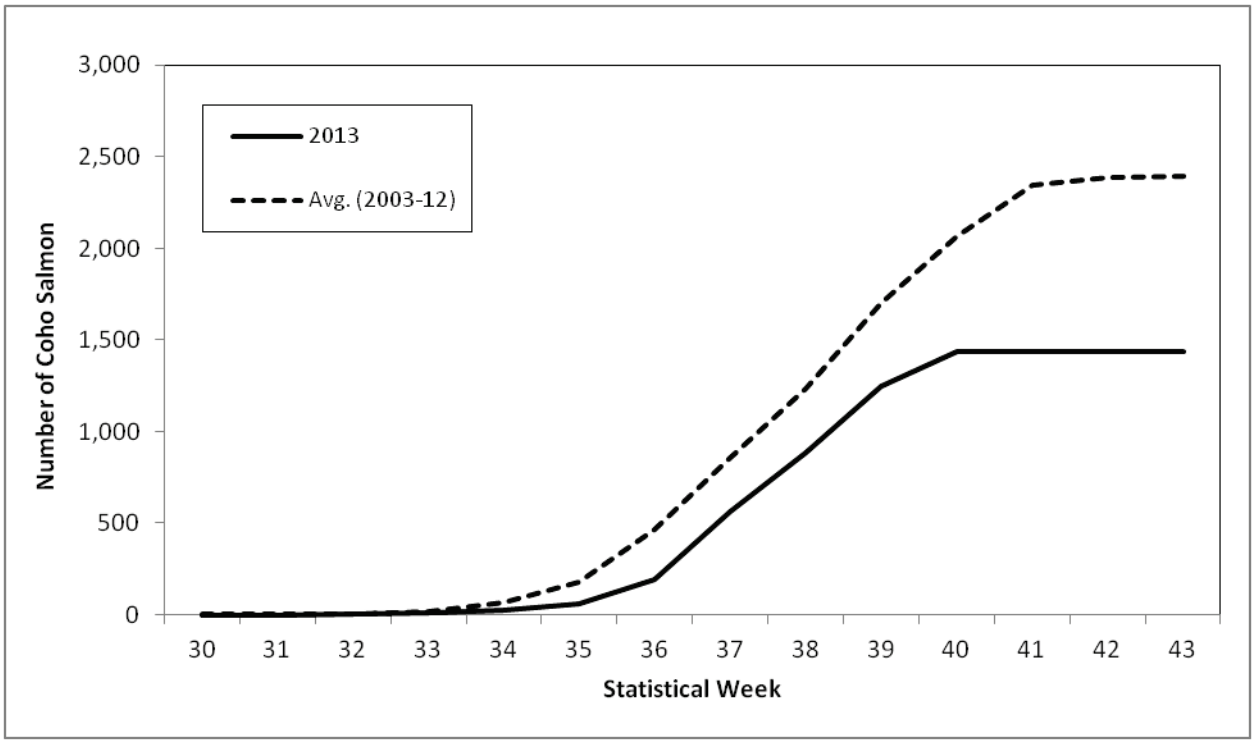

Figure 17.–Cumulative weekly catch of coho salmon in the Chilkat River fish wheels, for 2013 and the 2003–2012 average

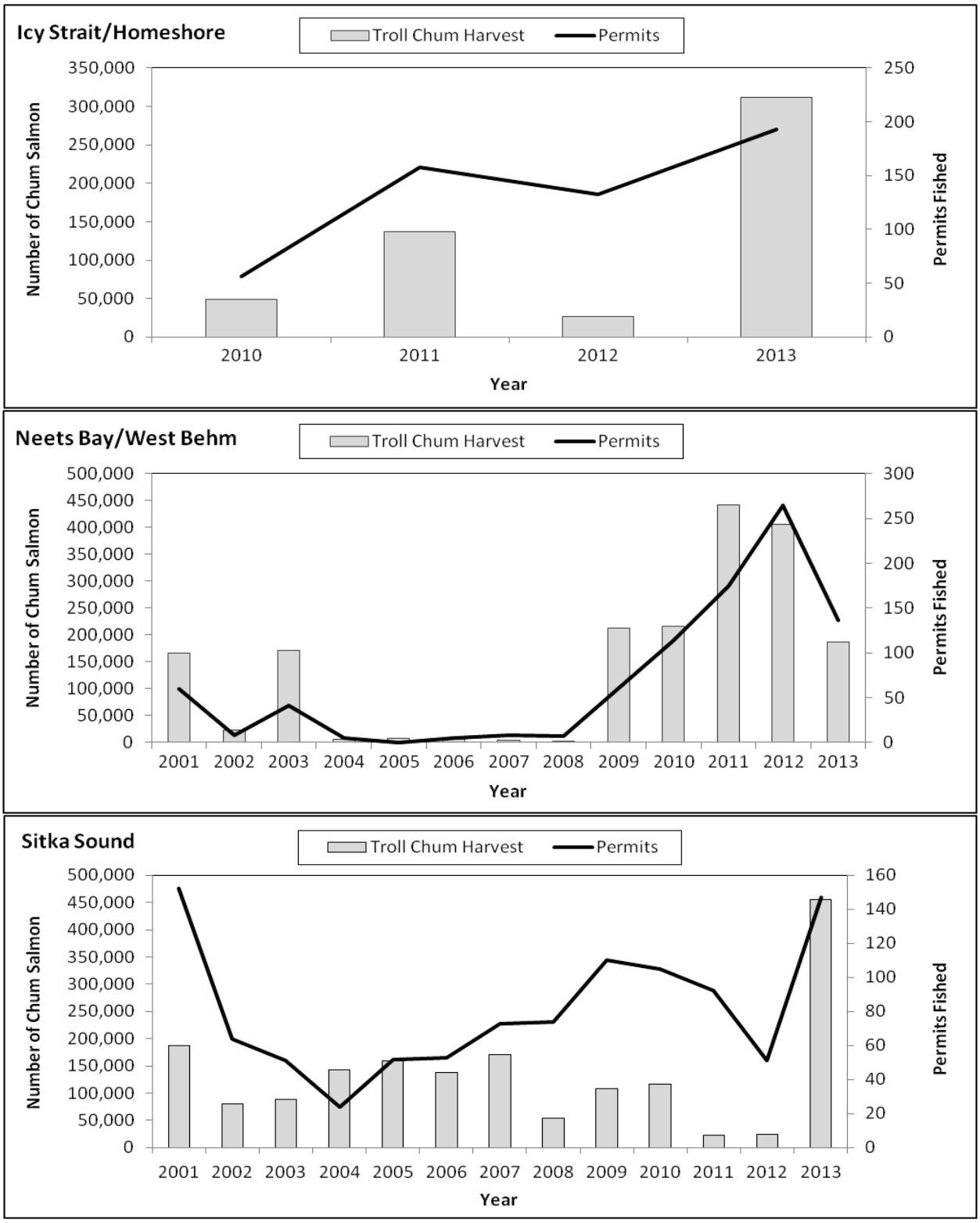

Figure 18.–Annual harvest and number of permits fished for chum salmon, Icy Strait/Homeshore, Neets Bay/West Behm Canal and Sitka Sound 2001–2013. Both harvest and effort based on all troll vessels that targeted chum.

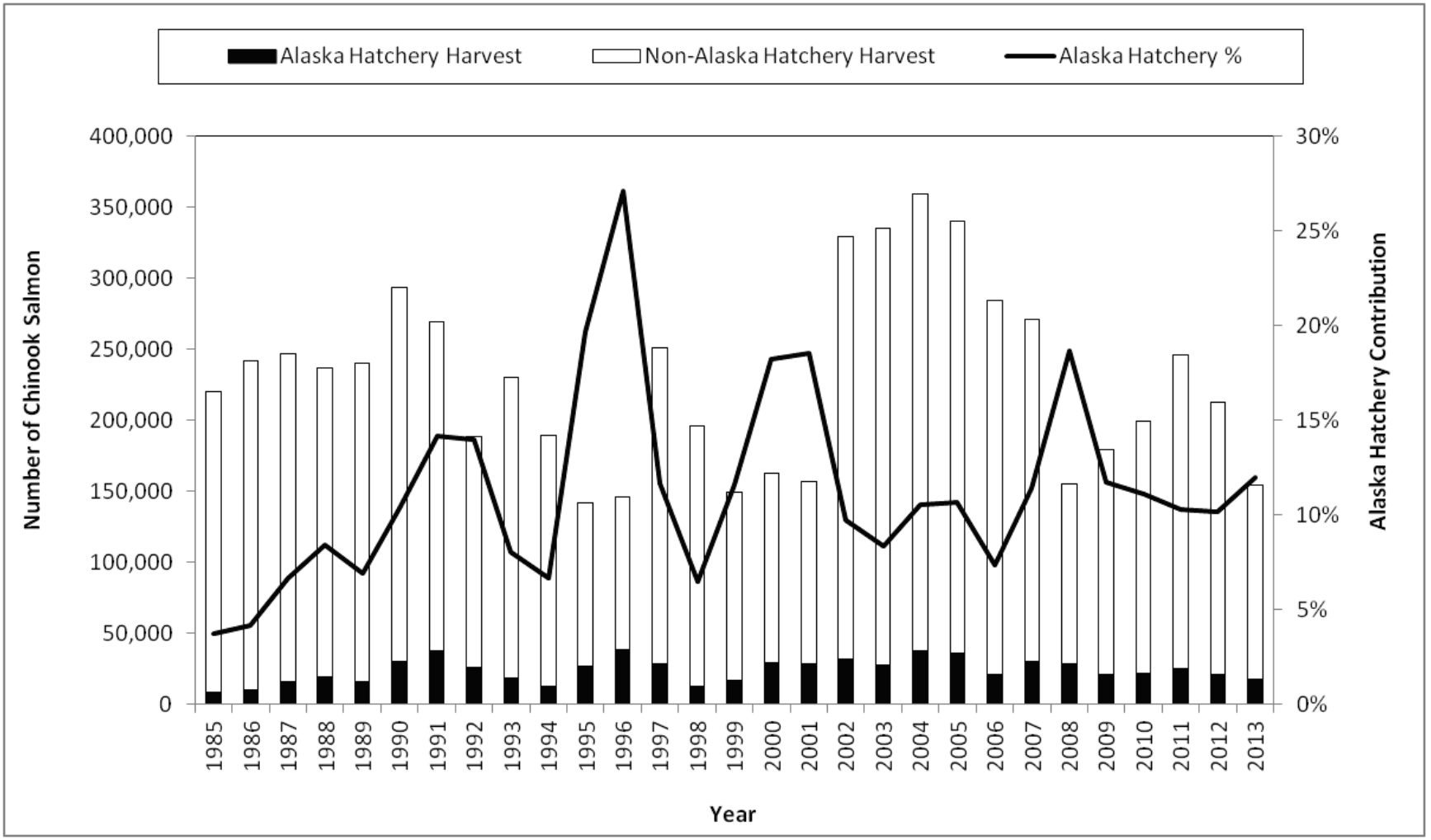

Figure 19.–Alaska hatchery Chinook salmon contributions to the Southeast Alaska troll fishery, 1985–2013.

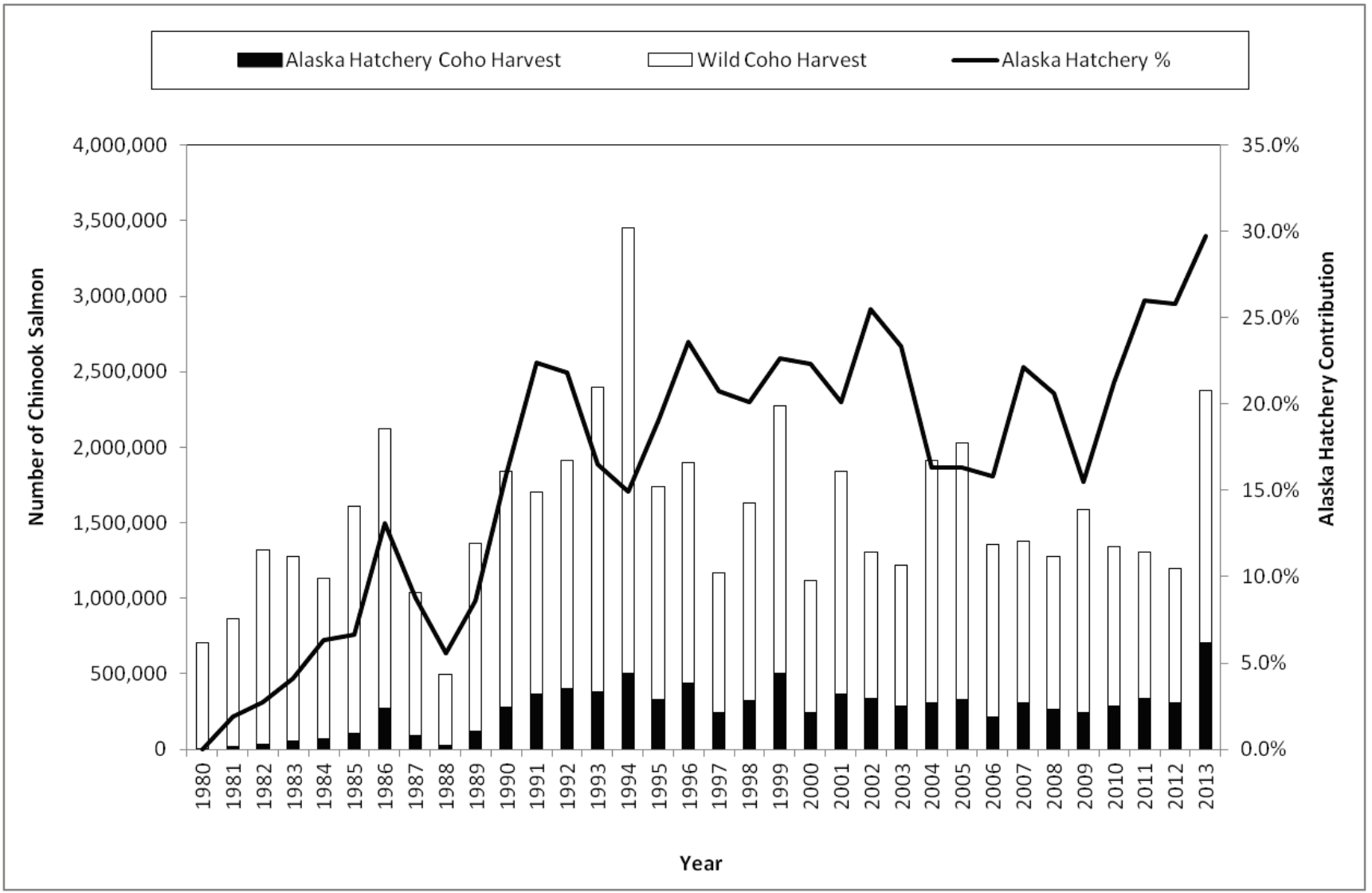

Figure 20.–Hatchery contributions of coho salmon from all sources to the Southeast Alaska troll fishery, 1980–2013.

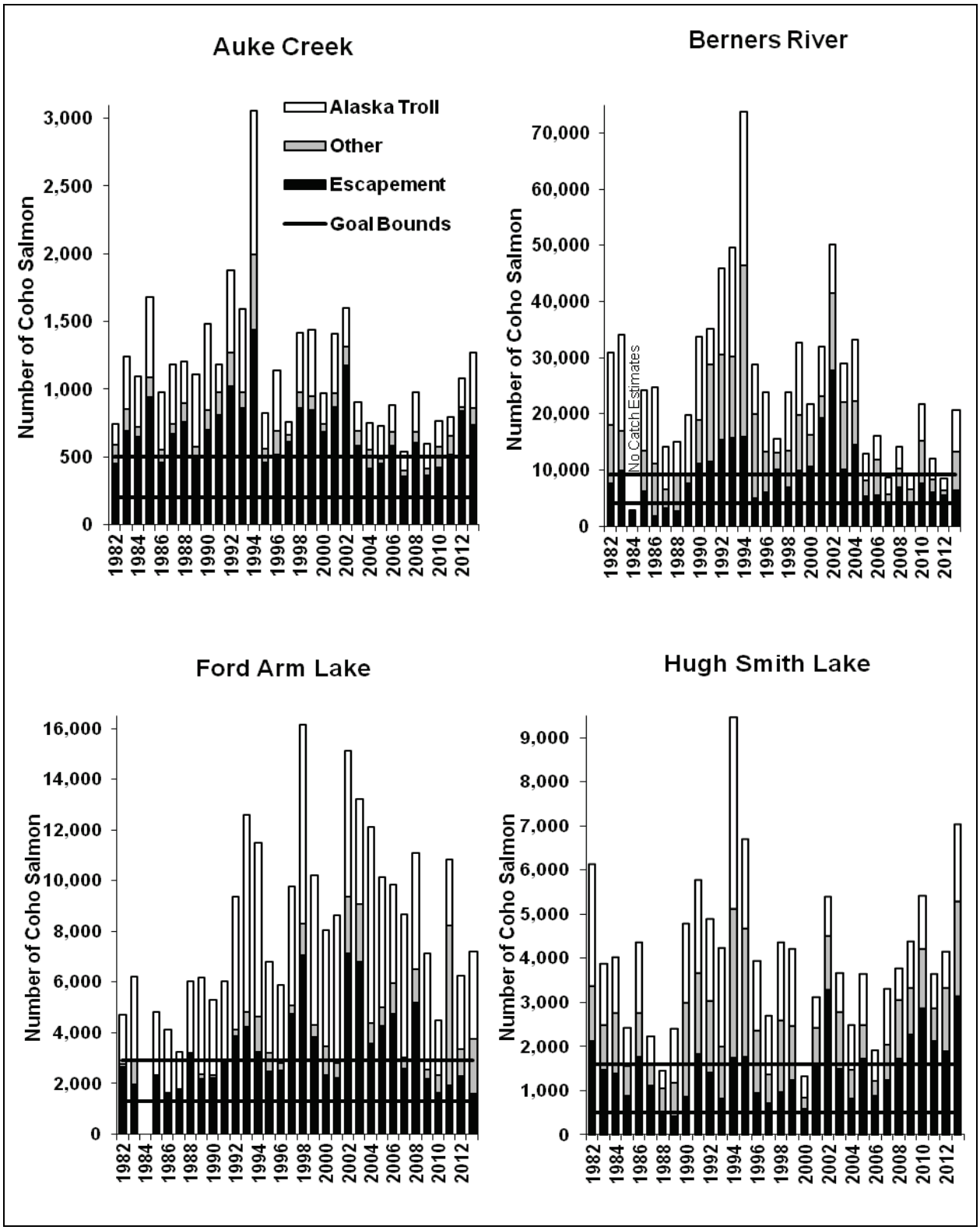

Figure 21.–Total run size, catch, escapement and biological escapement goal range for four wild Southeast Alaska coho salmon indicator stocks, 1982–2013.

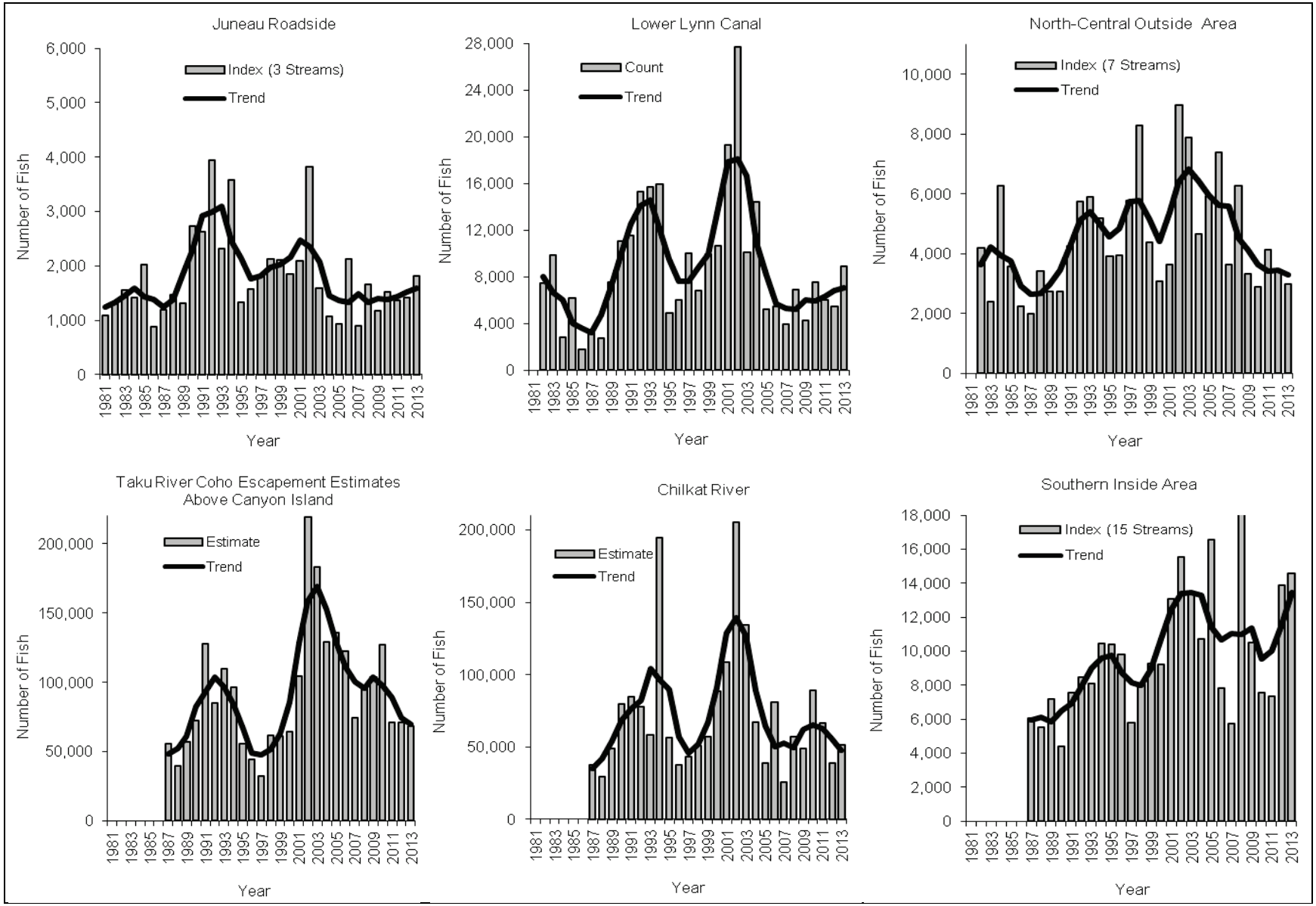

Figure 22.–Coho salmon escapement counts and estimates in index streams in five areas of Southeast Alaska, 1981–2013.

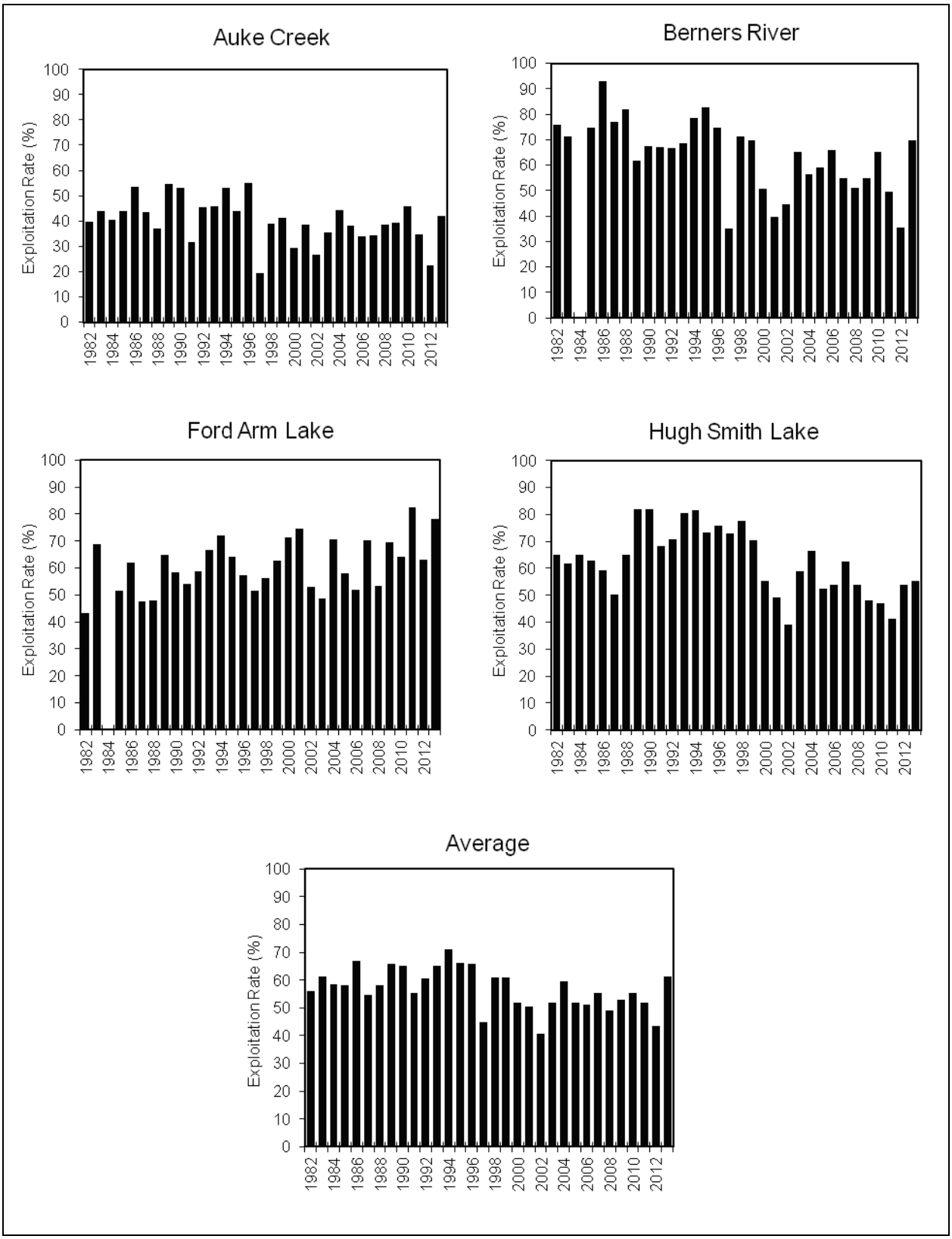

Figure 23.–Estimated total exploitation rates by all fisheries for four coded wire tagged Southeast Alaska coho salmon stocks, 1982–2013.

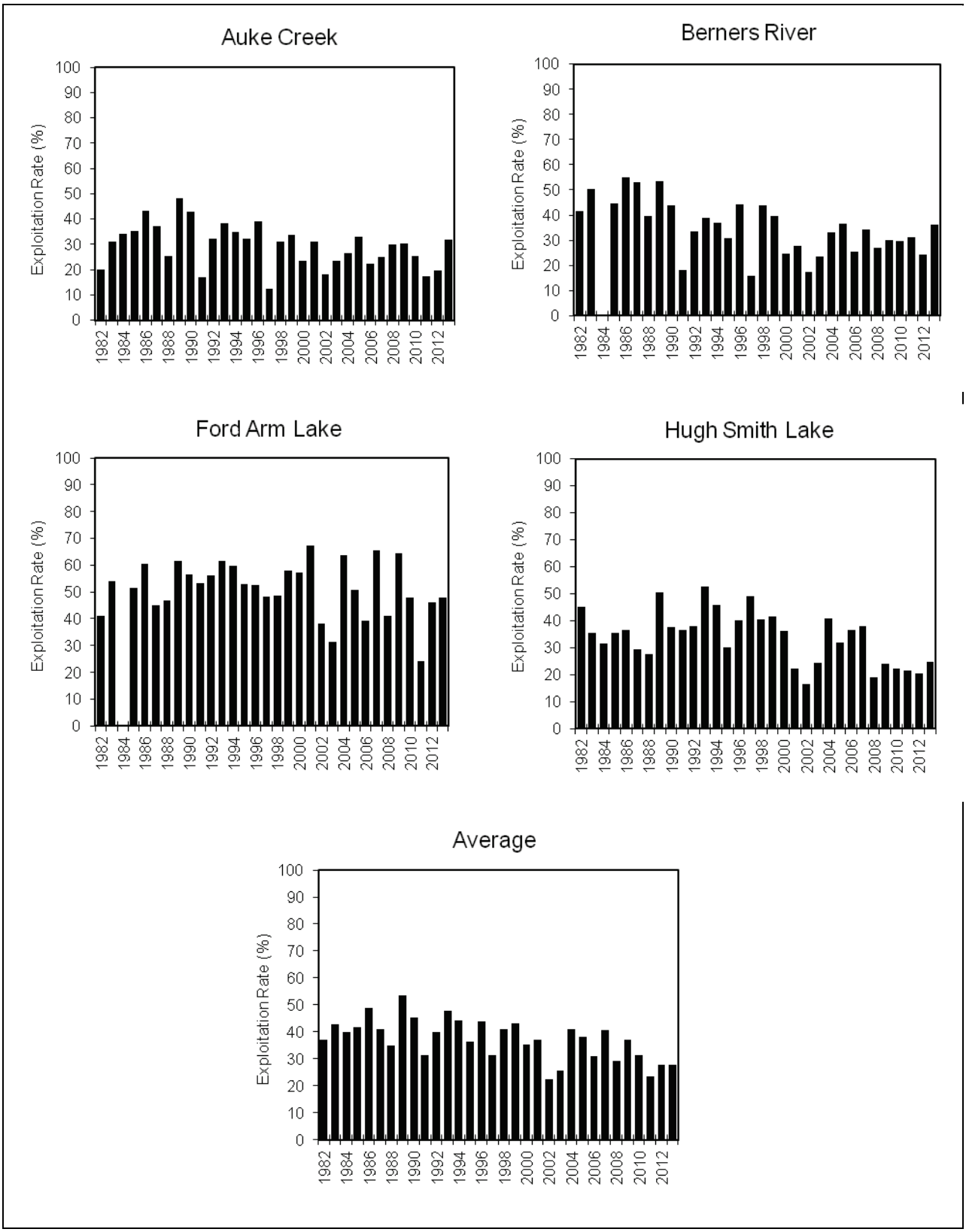

Figure 24.–Estimated exploitation rates by the Alaskan troll fishery for four coded wire tagged Southeast Alaska coho salmon stocks, 1982–2013.