

Fishery Management Report No. 08-69

**Annual Management Report for the 2008 Southeast
Alaska/Yakutat Salmon Troll Fisheries**

by

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and

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December 2008

Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



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Weights and measures (metric)		General		Measures (fisheries)	
centimeter	cm	Alaska Administrative Code	AAC	fork length	FL
deciliter	dL	all commonly accepted abbreviations	e.g., Mr., Mrs., AM, PM, etc.	mid-eye to fork	MEF
gram	g	all commonly accepted professional titles	e.g., Dr., Ph.D., R.N., etc.	mid-eye-to-tail-fork	METF
hectare	ha	at	@	standard length	SL
kilogram	kg	compass directions:		total length	TL
kilometer	km	east	E		
liter	L	north	N	Mathematics, statistics	
meter	m	south	S	<i>all standard mathematical signs, symbols and abbreviations</i>	
milliliter	mL	west	W	alternate hypothesis	H _A
millimeter	mm	copyright	©	base of natural logarithm	<i>e</i>
		corporate suffixes:		catch per unit effort	CPUE
Weights and measures (English)		Company	Co.	coefficient of variation	CV
cubic feet per second	ft ³ /s	Corporation	Corp.	common test statistics	(F, t, χ^2 , etc.)
foot	ft	Incorporated	Inc.	confidence interval	CI
gallon	gal	Limited	Ltd.	correlation coefficient (multiple)	R
inch	in	District of Columbia	D.C.	correlation coefficient (simple)	r
mile	mi	et alii (and others)	et al.	covariance	cov
nautical mile	nmi	et cetera (and so forth)	etc.	degree (angular)	°
ounce	oz	exempli gratia	e.g.	degrees of freedom	df
pound	lb	(for example)		expected value	<i>E</i>
quart	qt	Federal Information Code	FIC	greater than	>
yard	yd	id est (that is)	i.e.	greater than or equal to	≥
		latitude or longitude	lat. or long.	harvest per unit effort	HPUE
		monetary symbols		less than	<
		(U.S.)	\$, ¢	less than or equal to	≤
		months (tables and figures): first three letters	Jan..., Dec	logarithm (natural)	ln
Time and temperature		registered trademark	®	logarithm (base 10)	log
day	d	trademark	™	logarithm (specify base)	log ₂ , etc.
degrees Celsius	°C	United States (adjective)	U.S.	minute (angular)	'
degrees Fahrenheit	°F	United States of America (noun)	USA	not significant	NS
degrees kelvin	K	U.S.C.	United States Code	null hypothesis	H ₀
hour	h	U.S. state	use two-letter abbreviations (e.g., AK, WA)	percent	%
minute	min			probability	P
second	s			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
Physics and chemistry				second (angular)	"
all atomic symbols				standard deviation	SD
alternating current	AC			standard error	SE
ampere	A			variance	
calorie	cal			population	Var
direct current	DC			sample	var
hertz	Hz				
horsepower	hp				
hydrogen ion activity (negative log of)	pH				
parts per million	ppm				
parts per thousand	ppt, ‰				
volts	V				
watts	W				

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ALASKA/YAKUTAT SALMON TROLL FISHERIES**

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ABSTRACT

Approximately 1.54 million salmon were harvested in the 2008 Southeast Alaska troll fishery (common property + terminal areas). The harvest included 151,900 Chinook, 1,250 sockeye, 1,293,000 coho, 29,200 pink salmon, and 60,800 chum salmon landed by 750 power troll and 379 hand troll permit holders. Of this, 100,200 salmon (5%) were taken by hand troll gear and 1.42 million salmon (95%) by power troll gear. The Chinook salmon harvest ranked the 44th highest since statehood and the coho salmon harvest ranked 21st highest. The preliminary estimated Alaska hatchery contribution of Chinook salmon to the troll fishery, including hatchery terminal harvest was 29,000 fish (19%). A total of 252,300 coho produced by Alaska hatcheries were harvested by the troll fleet, which accounted for 20% of the total troll coho salmon harvest. Chinook and coho salmon escapements for Southeast Alaska rivers were generally within the desired escapement goals.

Key words: Troll, Southeast Alaska, Chinook, Coho, Salmon, Commercial Fisheries, Alaska Department of Fish and Game, Annual Management Report, Pacific Salmon Treaty, Pacific Salmon Commission

INTRODUCTION

This report describes the Southeast Alaska troll fishery, actions taken by the Alaska Department of Fish and Game (ADF&G) in management of the fishery from October 1, 2007, through September 30, 2008, and salmon harvest and effort statistics since statehood (1960 fishing season). Status of wild coho and Chinook salmon stocks of Southeast Alaska rivers, as well as hatchery contributions to the troll fishery, are also presented. Harvest statistics for all species include Annette Island harvests. Only Chinook salmon harvest statistics include hatchery terminal area harvests, unless otherwise noted.

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 Asek, Taku, Stikine, and Chilkat rivers, and the Behm Canal rivers (i.e., Unuk, Chickamin, Blossom, and Keta). The 3 major river systems (Asek, 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 transboundary stocks of the Taku, Stikine, and Asek 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 2 to 4 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 is 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. Most coho salmon rear in freshwater for one or 2 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 3-year-old and 4-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 2 lines on hand-operated gurdies or 4 fishing rods [5 AAC 29.120(b)(2)(C)]. Vessels using power troll gear are generally larger than those using hand troll gear. Power trollers are limited to 4 lines on power-operated gurdies, except within the EEZ north of the latitude of the southernmost tip of Cape Spencer, where 6 lines may be used [5 AAC 29.120 (b)(1)(A) and (B)]. Resident Alaska troll permit holders make up 86% of the active participants of the troll fishery. While the majority of the troll fleet sells their catch to processing plants onshore, the fleet does include approximately 55 catcher-processors, who harvest and freeze their catch at sea.

The commercial troll fishery primarily harvests Chinook and coho salmon. Historically, the troll fishery harvested about 85 to 90% of the Chinook salmon taken in 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). The troll fleet historically harvested 50 to 75% of the Southeast Alaska commercial coho salmon. Since 1989, the troll fleet has been managed to harvest an average of 61% of the commercial coho salmon harvest [5 AAC 29.065]. The actual 1989–2008 average is 64%.

Other species are harvested incidentally, although pink and chum salmon are targeted in Cross Sound, where a special fishery is open in June. In addition, hatchery chum salmon are targeted in Sitka Sound and Neets Bay. The troll fleet also incidentally harvests Pacific halibut under federal Individual Fishing Quota (IFQ) regulations, and 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 Chinook salmon are harvested, followed by the summer season from May 1 (or the end of the winter season) to September 30.

By regulation, the open area during the winter fishery is restricted to those areas of 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 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 by the Southeast Alaska fisheries has generally increased since the rebuilding programs began, with peak abundance approximately twice the average 1979–1982 base period abundance.

In 1996, after 3 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. Annual Chinook salmon troll harvests since 1997 have averaged about 245,700 fish.

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.

Over the past 23 years, since 1985, the harvest of treaty Chinook salmon has exceeded the quota 14 times and has been less than the quota in 8 of the last 23 years through 2007 (the 1996 and 1997 quotas were ranges). In 2007, fisheries were managed to not exceed the preseason all-gear Chinook quota of 329,400 and the final harvest was within 0.3% of that quota. When the first postseason Chinook model calibration was announced the following April, the all-gear quota dropped to 259,200 fish, resulting in an overage of more than 70,000 fish. The final 2008 quota is based on the first postseason calibration of the CTC Coastwide Chinook model (which occurs in early spring) and has not yet been finalized (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. 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, daily tallies from regional processors were an important tool in tracking harvest during the final weeks of the fishery.

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 Alaskan hatchery fish taken in the fishery. 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.

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 surveys are conducted to obtain an immediate estimate of effort. Total harvest to date is estimated by multiplying vessel counts observed during weekly overflights with the CPBD data obtained from the interviews. Daily tallies from regional processors are an important tool in tracking harvest during the final days of each summer Chinook opening, similar to the winter fishery.

COHO SALMON FISHERY

The regulatory period for coho retention in the troll fishery is June 15 through September 20, with an extension to September 30 in years of high coho salmon abundance [5 AAC 29.110(a)]. Troll harvests of coho salmon peak between late July and mid-August, while harvests in the inside gillnet fisheries peak during the first 2 weeks in September. Escapements into streams generally peak in late September through early October. Figure 3 presents combined run timing for 3 coho index lake systems showing somewhat earlier escapements 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 3 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 and to 3.2 million fish in the 1990s, with a record 5.5 million fish harvested in 1994 (Figure 4).

Factors contributing to the increased harvests over the past 2 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). Increased harvests were also attributed to more intensive fishing in highly mixed stock areas, increased targeting of coho salmon during Chinook salmon non-retention periods, and increasing contributions from Alaska hatchery production.

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 adopted in the management plan (Table 3). The current coho management plan calls for a troll closure 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 may occur in August if either the number of coho reaching inside areas may be inadequate 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)].

There are no harvest ceilings for Southeast Alaska coho salmon fisheries. However, under the 1999 PSTA, the area near the U.S./Canada border will close if the harvest rates by Alaska trollers fishing in the border area fall below specified thresholds.

Coho Salmon Assessments and Management Tools

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.

Historical Effort in the Troll Fishery

Since the power troll fishery came under limited entry in 1975, the number of power troll permits fished increased to over 800 permits during the late 1970s and remained relatively constant through the mid 1990s. Effort was highest in 1989, when 853 permits were fished. Since 1996, the number of power troll permits fished has been between 13% and 25% below the high level in 1989. The number of power troll permits fished has increased since the low level in 2003 to 750 permits fished in 2008 (Table 4; Figure 6). Fluctuations in effort relate strongly to salmon prices.

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 1982. Of the 2,162 permits issued that year, 1,096 hand troll permits have been revoked due to non–

renewal. The number of hand troll permits fished declined steadily from 1979 through 2002, when hand troll participation reached a low point of 251 permits. Since then, hand troll effort has been increasing each year, with 382 permits fished in 2007 and 379 fished in 2008. The percentage of hand troll permits fished compared to total troll permits fished has declined as well, from 76% in 1978 to a low of 27% in 2002 and to 34% from 2006 to 2008 (Table 4). Compared to 2007, both power and hand troll effort decreased during the winter season and increased during the spring fishery. During the summer fishery, hand troll and overall effort increased compared to 2007, while power troll effort did not change (Table 5; Figure 7).

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. As a result, effort in number of boat-days fished declined during Chinook salmon retention (CR) periods from 76,700 boat-days in 1981 to a low of 2,900 boat-days in 1992. During Chinook salmon non-retention (CNR) periods, effort has increased from 3,500 boat-days in 1981 to a high of 38,400 in 1989 (Table 6; Figure 8).

SUMMARY OF THE 2008 SEASON

The troll fleet harvested 1.52 million salmon during the 2008 season (Table 7). The majority of the Chinook salmon harvest occurred during the general summer openings of July 1–5 and August 16–21 (Table 8). The coho salmon harvest was at generally lower than average levels throughout the summer season. The regionwide coho salmon harvests and harvest rates were at average levels at the beginning of the season, dropped to lower than average levels until early September, when catch rates rebounded to slightly above average levels, and ended up near average at the end of the season. The average 2008 coho weight was over a pound heavier than the 2007 and both the 5-year and 20-year averages (Table 9).

In 2008, hand troll vessels harvested 100,239 fish and power troll vessels harvested 1.42 million fish. The proportion of the commercial troll harvest taken by the hand troll fleet has decreased from 32% in 1978 to 5% in 2008 (Tables 10 and 11). The CFEC renewed 934 power troll permits and 944 hand troll permits, which was 7 more power troll permit and 33 more hand troll permit renewed than in 2007. Preliminary estimates indicate that 750 power troll permits and 379 hand troll permits were actually fished (Table 4). This represents a less than 1% increase in power troll effort and a 0.8% decrease in hand troll effort when compared to the 2007 season. Power troll participation did not change (Table 4) overall but the winter fishery participation decreased by 17 permits fished when compared to 2007 (Table 5).

The Chinook salmon general summer fishery was open for 11 days, with 5,299 boat-days of Chinook salmon retention. The Chinook salmon non-retention effort was estimated at 16,095 boat days (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.

CHINOOK SALMON FISHERY

For the 2008 season, the troll harvest of Chinook salmon was managed to: 1) comply with the June 1999 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 (NMFS). Alaska's all-gear quota was set at a harvest rate based on a

preseason abundance estimate. The 2008 Chinook fishery was managed to achieve an all-gear harvest of 169,950 treaty¹ Chinook salmon.

The 2008 total all-gear (troll, purse seine, drift gillnet, and set gillnet, Annette Island, and recreational fisheries) Chinook salmon harvest was 236,439 fish, of which 164,108 were treaty fish. Trollers harvested 151,906 Chinook salmon of which 125,772 were treaty fish. Purse seiners harvested 15,554 Chinook salmon of which 3,451 were treaty fish. The drift gillnet fleet harvested 29,764 Chinook salmon, of which 8,379 were treaty fish. (Troll, purse seine and drift gillnet harvests include terminal and Annette Island harvests). The Yakutat set gillnet fleet harvested 844 Chinook salmon, all of which were treaty fish. Recreational fisheries (including charter fishers) harvested 38,371 Chinook salmon, of which 25,662 were treaty fish. The combined Alaska hatchery Chinook salmon and wild terminal exclusion contribution to all the fisheries was estimated at 82,258 of which 9,927 counted towards the treaty quota (Tables 12 and 13).

Winter Fishery

The 2008 winter troll fishery began October 11, 2007 and continued through April 30, 2008. A total of 467 vessels participated in the 2008 winter fishery, with a harvest total of 21,825 Chinook salmon which represents 15% of the 2008 total troll Chinook salmon harvest (Tables 5 and 14, Figure 9). The harvest decreased by 53.5% and the catch per landing decreased by 45% when compared to the 2007 season. The 2008 harvest was also 42% below the 1985 to 2007 average (Table 14; Figure 10). This was the second time out of the past 5 years that the winter season was not closed due to the harvest reaching the GHF prior to April 30. The low harvest and catch rate was likely due to both reduced non-Alaska hatchery abundance, as compared to the past several years, as well as significant bad weather conditions that kept vessels tied up for much of the season. This was reflected in the 7.2% drop in vessels fishing compared to the 2007 season.

Spring Fishery

A total of 575 vessels participated in the 2008 spring fisheries (non-terminal), with a harvest of 36,620 Chinook, 24 sockeye, 1,663 coho, 524 pink and 329 chum salmon (Tables 5 and 15). The Chinook salmon harvest was approximately 11,900 fish fewer than the 2007 harvest, but the Alaska hatchery contribution increased from 38% to 48% (Table 16). The 2008 total Spring Fishery harvest was the 6th highest on record, while the Alaska hatchery harvest was the 4th highest on record. The largest Chinook salmon harvests were in the Sitka Sound, Tebenkof Bay, Chatham Strait and Ketchikan areas (Table 15). Terminal area harvests taken in the spring and summer fisheries included 4,492 Chinook, 1 sockeye, 19,303 coho, 1,043 pink salmon and 538 chum salmon. The majority (60%) of the Chinook were caught in the Silver Bay Special Harvest Area. A total of 24 spring areas and 5 terminal fisheries targeting Chinook salmon were open during 2008 (Figure 11).

¹ Under the terms of the PST, the number of PST (or quota) 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 Spring Fishery targets Alaska hatchery Chinook salmon, except for the Cross Sound fishery, which targets chum and pink salmon. Spring fisheries occur near the Little Port Walter Hatchery (NMFS), Whitman Lake Hatchery, Crystal Lake Hatchery, and Anita Bay release sites (Southern Southeast Regional Aquaculture Association (SSRAA)), Medvejie and Hidden Falls Hatcheries (Northern Southeast Aquaculture Association, (NSRAA)).

The general spring troll fisheries (formerly referred to as experimental fisheries) were opened on May 1, and terminal areas were opened in accordance with the fishing schedules provided for in the Terminal Harvest Area (THA) management plans and to provide for private non-profit hatchery (PNP) cost recovery harvests. In general, spring fishing areas were initially opened by emergency order for 2 days per week (Monday–Tuesday). Some of the more remote areas were initially opened for slightly longer periods in order to attract trollers to these areas so that larger samples could be obtained and more precise estimates made of Alaska hatchery contributions to these areas. ADF&G personnel examined fish deliveries, and the heads of adipose fin-clipped fish were shipped to the state tag lab in Juneau. The Spring Fishery areas that opened on May 1 “Until Further Notice”, rather than on a weekly schedule, were areas that had historically high Alaska hatchery contribution. Coded wire tag data, provided by the tag lab, was used in season to estimate the Alaska hatchery contribution to the harvest in each area. Fishing time for the following week was determined using this information in combination with historic harvest timing information in each area. Fishing time was extended or curtailed during the week by emergency order as more tag data and harvest information became available.

Non-Alaska hatchery fish (Treaty fish) are counted towards the season Treaty quota of Chinook salmon under the Pacific Salmon Treaty, but most of the Alaska hatchery fish are not. The spring troll and terminal troll fisheries target Alaska hatchery Chinook salmon, but Treaty Chinook salmon are also harvested. The guideline limits of Treaty fish that may be harvested in each spring fishing area 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

Districts 8 And 11 Transboundary Rivers Directed Chinook Salmon Fisheries

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. As a result of this agreement and new management plans adopted by the Alaska Board of Fisheries in January of 2006, troll fisheries were allowed in Districts 8 and 11 as follows:

District 8

The preseason Chinook salmon return forecast for the Stikine River was 46,100 large fish. The resulting U.S. allowable commercial catch in District 8 (troll + drift gillnet + sport fish) at this level is 12,040 large ($\geq 28''$) Stikine king salmon. Whenever a directed Stikine River Chinook salmon fishery is allowed, the provisions of 5 AAC 29.090 MANAGEMENT OF THE SPRING SALMON TROLL FISHERIES are not in effect and District 8 will be managed based on the

abundance of Stikine River Chinook salmon, in accordance with the provisions of 5 AAC 29.095. DISTRICT 8 CHINOOK SALMON MANAGEMENT PLAN.

In 2008, 92 trollers caught 1,697 Chinook salmon; approximately 1,295 of the Chinook salmon were of Stikine River origin.

District 11

No directed Chinook salmon troll fishery was allowed District 11 this season. The preseason Chinook salmon return forecast for the Taku River was 39,400 large fish ($\geq 28''$). At this level of return, no fish are available for a U.S. allowable catch.

General Summer Chinook Fishery

The all-gear harvest quota for Southeast Alaska was set at 169,950 Treaty Chinook salmon for the 2008 season. Under the current BOF commercial fisheries plan, the troll and sport fisheries divide the treaty quota in an 80/20 split, after 1,000, plus 7.2% of the treaty Chinook salmon quota are subtracted from the quota for the commercial net fisheries [5 AAC 29.060(b)].

In 2008, ADF&G received the preseason abundance index of 1.07 at the end of March, which translated to an all-gear quota under the PSTA of 169,950 fish. The purse seine fleet was allocated 7,310 (4.3%) fish, the drift gillnet fleet 4,930 (2.9%) fish, and the set gillnet fleet 1,000 fish. The remainder of 156,720 fish was then initially divided between the troll and sport fisheries in an 80/20 split, which translated to 125,370 fish to the troll fishery, and 31,350 fish to the sport fishery.

The summer troll quota is calculated by adding the winter Treaty harvest (estimated on June 20 at 18,884 fish), the spring Treaty harvest (estimated on June 20 at 18,300 fish), the pre-Treaty Alaska hatchery harvest (3,700 fish), and a statistical risk factor surrounding the Alaska hatchery contribution estimate of 1,000 fish, and subtracting the catch of Transboundary River fish above the base period catch (estimated on June 20 at 1,000 fish). The resultant sum is then subtracted from the troll allocation. This resulted in an initial estimate of 84,500 Treaty fish for the general summer quota.

According to 5 AAC 29.100, MANAGEMENT OF THE SUMMER SALMON TROLL FISHERIES, 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 of 5 days was set at 61,000 fish, which included 3% Alaska hatchery fish.

Based on past fishery performance at similar abundance indices, the first summer troll Chinook salmon fishery was projected to last 5 days. At this low of a harvest target, effective inseason management is not possible because the data necessary for inseason management only starts becoming useable beginning on the fifth day of the fishery. Therefore, the fishery opening length was announced on June 20 to be 5 days from July 1 through July 5. On July 4, fishing effort was estimated to be similar to the first 2007 Chinook opening at 750 vessels (and tied with 2007 for the highest since 1999). The fleet catch rate was estimated to be approximately 11,500 fish/day and the weather was good so no extension of the fishery was necessary to achieve the target harvest. The fishery was open for 5 days, from July 1 to July 5, and the fleet harvest averaged 11,981 fish per day (Table 17). The total harvest during the first summer Chinook retention period was 59,903 Chinook salmon, of which 56,941 were counted as Treaty fish (Table 12).

The first Chinook retention period closed on July 5 at 11:59 p.m. as previously announced. The actual harvest during the first Chinook opening was 59,903 Chinook (56,941 Treaty Chinook) or 68% of the final summer troll Treaty Chinook salmon quota. The actual fleet harvest rate was 11,981 Chinook/day, (Table 17).

Following the first opening, the areas of high Chinook salmon abundance (5 AAC 29.050) were closed for the remainder of the season (Figure 12). The results of the second coho assessment made on August 6, determined that an August coho closure of 5 days was necessary. Although the actual first Chinook opening harvest was 56,941 Treaty fish, at the time the harvest target for the second opening was announced, the Treaty catch was estimated to be 57,300 fish and the troll fishery was assumed to have approximately 27,200 fish left on the Treaty allocation of 125,400 Chinook salmon. Assuming a 3% Alaska hatchery component, (5.8% in the first retention period) the target harvest in the second opening was 28,000 Chinook salmon. The second Chinook salmon opening was announced on August 6 as 5 days, from August 16 through August 20. Due to the low target harvest for the second Chinook opening, as was also the case for the first opening, a fixed number of days for the opening was announced. On August 20, the fleet harvest rate was estimated to be between 4,600 and 4,800 Chinook per day, and that an additional day would be required to reach actual harvest target of 28,000 fish. On August 20, a news release was issued at 10:30 a.m., announcing an extension of opening for 24 hours and delaying the closure of the second Chinook salmon opening until 11:59 p.m., August 21. The actual harvest rate for the second opening was 4,831 Chinook/day (Table 17) and the Alaska hatchery composition was 1.4% so that the actual Treaty catch was 2,000 fish greater than the harvest target.

The total summer fishery Chinook salmon harvest was approximately 88,970 fish, of which approximately 3,900 fish, or 4.4%, were of Alaska hatchery origin. Approximately 3,320 of these or 3.7% were counted as hatchery add-on and not counted against the Treaty quota (Table 12). The total summer Treaty harvest of Chinook was 85,650 fish, near the summer target harvest of 84,500 fish.

COHO SALMON FISHERY

Coho salmon retention began by regulation [5 AAC 29.110 (a)] on June 15, during the spring fisheries, but few were harvested until the general summer season opened on July 1. The late-July assessment indicated that the run was projected to be greater than the conservation threshold of 1.1 million wild coho salmon [5 AAC 29.110 (b) (1)]. Run strength initially appeared to be about average, based on power troll catch/boat/day (CPUE) through statistical week 29, which also included the first Chinook retention period. The regionwide CPUE and the CPUE in all areas except Cross Sound generally remained below average throughout the season (Figure 13).

A 5-day closure of the troll fishery was implemented from August 11 to August 15 in order to provide for adequate escapement to inside waters and to allocate between user groups. After a second assessment in early August, ADF&G considered that additional conservation measures might be needed if catch rates remained low and few coho were reaching inside waters. The preliminary troll fishery harvest through week 31 was estimated at 550,500 coho salmon, which is above the 1971–1980 average, but below the 1987–2006 average.

The regional drift gillnet coho salmon harvest of approximately 58,300 fish through week 31 was also above both the 1971–1980 and 1987–2006 averages but below the 5-year and 10-year averages. The Tree Point (District 1) and the Prince of Wales (District 6) drift gillnet fisheries

both exceeded the cumulative CPUE for all averages and both exceeded the catches for the 71–80 and 20–year averages, with the Prince of Wales catch being slightly below the 5–year average. Both the Taku and Lynn Canal fisheries were below all averages for catch and CPUE.

The Juneau sport fishery was below both the 1971–1980 and 1988–2007 averages throughout the season (Figure 14). The District 6 gillnet cumulative wild CPUE through week 31 is also above the 1971–1980 average, as well as the 5-year, 10-year and 20–year averages. Following a troll fishery closure from August 11 to August 15, the second Chinook salmon opening began on August 16.

Regionwide coho power troll catch rates remained below the 1988–2007 average for the next 4 weeks following the coho closure. The wild coho abundance, based on the statistical weeks 27–31 power troll CPUE, was projected to be 2.62 million fish and was the 5th lowest abundance estimate since 1988. Coho returns to the Taku and Chilkat River fish wheels were above average (Figures 15 and 16) as were returns to the Stikine River. The escapements to the Yakutat area systems were generally good but with some weakness in the Lost River. Regardless of the relatively good gillnet catches and escapements, based on the below average regionwide power troll CPUE and low inside sport fishery catches throughout the season, ADF&G determined that 2008 was not a high coho abundance year. A News Release was issued on September 12 announcing that the summer season would close by regulation (5 AAC 29.110(a)) on September 20. During the past 15 years (1994–2008), the coho salmon season has been extended 8 times (Table 18). The final inseason 2008 estimated wild coho salmon abundance of 2.62 million fish ranked 21st out of the past 25 years (1982–2007) and was 29% below average. The troll coho salmon harvest of 1,273,710 fish was the 21st highest in the 49 years since statehood (Table 7).

OTHER SPECIES

A total of 1,252 sockeye, 28,151 pink, and 60,291 chum salmon were harvested during the general 2008 troll seasons (Table 7). This was the 14th lowest sockeye harvest, the 3rd lowest pink harvest, and the lowest chum salmon harvest in the since 1991, not including harvests in hatchery terminal areas.

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 significantly in 1992, when for the first time over 1 million chum salmon returned to the NSRAA Hidden Falls hatchery, located on eastern Baranof Island. In 1993, the NSRAA 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 outside of terminal harvest areas has been consistently greater than 100,000 fish (Table 7).

In 2008, trollers harvested 42,400 chum salmon in Sitka Sound in the Eastern Channel area, with peak harvests occurring during the first 2 weeks of August. Only 538 chum salmon were harvested in the Neets Bay THA due to the THA being closed to trolling from July 1 to September 30.

EXCLUSIVE ECONOMIC ZONE (EEZ) HARVESTS

In 2008, approximately 13% of the Chinook (19,796 fish) and 3.3% of the coho salmon (43,047 fish) harvested by the troll fishery was reported taken outside of State waters in the EEZ (Districts 150, 152, 154, 156, 157, and 189). In addition, 24 sockeye, 278 pink, and 273 chum salmon were taken in the EEZ.

ALASKA HATCHERY PRODUCTION

CHINOOK SALMON

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. The peak harvest of Alaska hatchery fish occurred in 1996, when contributions were over 38,600 Chinook to the troll harvest (37% of the total troll Chinook salmon harvest), and over 89,000 fish to the all-gear harvest (Figure 17). Alaska hatchery contributions are generally greatest during the spring fisheries, followed by the winter and summer fisheries (Table 19). In 2008, the combined Alaska hatchery harvest and wild terminal exclusion harvest contributed about 72,331 Chinook salmon to the commercial and sport fisheries, with 31,164 fish harvested in the troll fishery and 15,556 fish in the sport fishery (Tables 12 and 20).

COHO SALMON

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 26% in 2002, with Alaska hatcheries producing approximately 98% of these fish. In 2008, the hatchery coho salmon contribution was 20% of the harvest for a total contribution of 258,290 fish (Table 21; Figure 18).

WILD STOCK ESCAPEMENT

CHINOOK SALMON ESCAPEMENT

A 15-year Chinook salmon rebuilding program began in 1981. Since 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 also 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 Maximum Sustained Yield (MSY) escapement goals.

Establishment of MSY goals indicated that the Alsek, Situk, Unuk, and Keta rivers were within the ranges of desired escapement prior to the rebuilding program while only the Blossom River was below desired escapements. Since 1985, the Situk, Unuk, Alsek, and Stikine rivers have consistently been above the lower escapement goal range (Table 22). Of the 4 indicator systems in Behm Canal, escapements to the Unuk River have consistently been above the lower range, while Chickamin River was below the lower range for 7 years prior to 1999. The Blossom River

has been below the lower escapement goal range for 14 of the last 20 years, and the Keta River has been below for 3 of the last 20 years. The escapement goals for all of the Behm Canal stocks are now under review and may be revised within the coming year. In 2008, escapements generally increased from 2007 with only 2 of the 11 index counts below the 2007 escapement values. In summary, 10 out of the 11 systems had escapements above or within goals, with the Blossom Rivers being below goal by 5 fish.

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 2008, weirs were operated on 4 systems, while foot or aerial surveys were conducted on another 28 streams. An adult tagging program has been in use since 1987 to estimate the escapement of coho salmon to the Taku River (Figure 15).

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 seasons when numerous protracted freshets occur in October that bring fish to the spawning areas and then flush out the 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 those for the Juneau roadside streams, but is more difficult and expensive for remote streams such as the major coho salmon producing systems in southern Southeast Alaska.

Coded wire tagging (CWT) studies conducted since the early 1980s have provided annual harvest rate estimates for 4 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 19). Fish are tagged in these systems and their contribution to the fisheries is estimated through ADF&G's harvest sampling and CWT processing programs. Weirs are operated on the 3 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 to 27; Figure 20). In 2008, escapements to systems in the northern inside areas were all within or above goal (Table 25).

The estimated total run of just over 14,000 fish to the Berners River was the 4th smallest run in 26 years. However, a below-average exploitation rate of only 51% (Table 28; Figure 21) resulted in an escapement of 6,870 spawners (Figure 19) that was well within the goal range (4,000–

9,200 spawners). Although the marine survival rate of about 16% was about average (Table 2), freshwater production of only about 89,000 smolts was the lowest recorded and continued a downward trend from an average of 202,000 smolts between 1990 and 2004. Early indications are that smolt production associated with the 2009 return was even lower at about 59,000 fish.

The estimated escapement to the Chilkat River (57,376 spawners) was also within the goal range of 30,000–70,000 spawners. The estimated 2008 escapement of 85,575 coho salmon to the Taku River above Canyon Island was well above the U.S. management objective threshold of 38,000 fish. Escapement counts in 3 Juneau roadside systems were within goal for Montana and Peterson Creeks and exceeded the goal for Auke Creek (Table 24).

The escapement count for 5 small streams on Baranof and Kruzof Islands totaled 1,118 spawners compared with a goal of 400 to 800 spawners. The overall escapement index of 6,790 spawners in all 7 monitored streams in the Sitka area (North-Central Outside Area), including 2 streams on Chichagof Island (Ford Arm Lake and Black River), was well above the historical (1982–2007) average of about 5,485 spawners (Table 26; Figure 20). The total escapement of 5,173 spawners to Ford Arm Lake was well above the goal range of 1,300 to 2,900 spawners.

The overall index of 18,421 spawners for 15 streams in the Ketchikan (Southern Inside) area was the highest count on record and over double the 1987–2007 average of about 9,192 spawners (Table 27; Figure 20). The total escapement of 1,741 spawners to Hugh Smith Lake was above the goal range of 500 to 1,600 spawners while the aggregate count for the other 14 streams (16,680 spawners) was far above the goal range of 4,250–8,500 spawners.

COHO SALMON EXPLOITATION RATES

Troll fishery exploitation rates estimates for 2008 were below average, overall. The 2008 average troll fishery exploitation rate of 29% for the 4 primary indicator stocks (Berners River, Auke Creek, Ford Arm Lake, and Hugh Smith Lake) was far below the long-term average of 39%. (Table 28; Figure 22). Only the Auke Creek stock had a troll exploitation that was near average (30%). The troll exploitation rate estimate for Hugh Smith Lake (19%) was only slightly over half the long-term average of 37% and was the second lowest rate on record next to 17% in 2002.

The average 2008 total exploitation rate by all fisheries on the 4 stocks was only 49%, compared with the 1982–2007 average of 58% (Table 28; Figure 21). In the northern inside area, the Auke Creek stock was exploited at an estimated 39%, down slightly from the historical average of 41%. The Berners River stock was exploited at an estimated rate of 51%, the 5th lowest exploitation rate in 26 years and well below the historical average of 66%. The total exploitation rate of 52% for the Hugh Smith Lake stock was also well below the 1982–2007 average of 66%, which helped explain the record aggregate count of coho salmon spawners in the Ketchikan area. The all-gear exploitation rate estimate of 53% for Ford Arm Lake was below the average of 60% for that system.

TABLES

Table 1.—All-gear Treaty Chinook salmon harvest, hatchery add-on, total harvest, Treaty quota, terminal exclusion harvest and the number of fish over or under the quota, 1985–2008.

Year	Treaty Harvest	Hatchery Add-on	Terminal Exclusion	Total Harvest	Treaty Quota	Over/Under Quota
1985	268,293	6,246	0	274,539	263,000	5,293
1986	271,262	11,091	0	282,353	263,000	8,262
1987	265,323	17,095	0	282,418	263,000	2,323
1988	256,787	22,525	0	279,312	263,000	-6,213
1989	269,522	21,510	0	291,032	263,000	6,522
1990	320,996	45,873	0	366,869	302,000	18,996
1991	297,986	61,476	0	359,462	273,000	24,986
1992	221,980	36,811	0	258,791	243,000	-21,020
1993	271,193	32,910	0	304,103	263,000	8,193
1994	235,165	29,185	0	264,350	240,000	-4,835
1995	176,939	58,800	0	235,739	175,000	1,939
1996	154,997	72,599	8,663	236,259	140,000–155,000	0
1997	286,696	46,463	9,843	343,002	277,000–302,000	0
1998	243,152	25,021	2,420	270,593	260,000	-16,848
1999	198,842	47,725	4,453	251,020	184,200	14,642
2000	186,493	74,316	2,481	263,290	178,500	7,993
2001	186,919	77,287	1,528	265,734	250,300	-63,381
2002	357,133	68,164	1,237	426,534	371,900	-14,767
2003	383,299	57,470	2,446	443,216	439,613	-56,314
2004	420,799	75,955	6,295	503,048	418,342	2,457
2005	396,634	65,843	40,280	502,756	387,400	9,234
2006	363,037	49,354	31,462	443,852	354,500	8,537
2007	330,411	70,187	9,556	410,154	259,184	71,227
2008	164,108	65,490	6,841	236,439	169,950	-5,842
1999–2008 Sum:						-26,215

Table 2.—Estimated marine survival rate (percent) of coho salmon smolts and pre-smolts from wild and hatchery stocks in Southeast Alaska, 1980–2008.

Return Year	Wild Stocks					Lakes			Hatchery Releases				Hatchery Remote Releases							
	Auke Creek	Berners River	Berners River	Ford Arm Lake	Hugh Smith Lake	Taku River	Deer Lake	Neck Lake	Hidden Falls	Medvejie	DIPAC	Whitman Lake ^a	Neets Bay ^a	Burnett Inlet	Anita Bay	Shamrock Bay	Deep Inlet	Nakat Inlet	Earl West Cove	
	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								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		4	11		6					3	4					5	10	
1988	17	5		7	4							5	1					6	5	
1989	14	4		13	10		7					2	1					3	2	
1990	21	9		9	17		17					7	14					7	14	
1991	23			25	11	17		24		16		24	13				10	14	12	
1992	33			24	15	21	20	20		29		18	17				8	17	16	
1993	24			15	22	13	14	13		20	20	10	11				16	11	12	
1994	35			29	14	19	23	23		23	14	17	7			15	14	8	16	
1995	11			16	6	14	12	13		14	12	6	6			14	16	10	7	
1996	23			12	6	18	10	11		13	9	6	7			5	8	10	7	
1997	19			12	15	8	7	6		6	3	5	5			1		6	5	
1998	23			17	20	11	14	5	16	12	15	10	7			8		5	5	
1999	19			13	7	14	10	17	4	16	14	15	8	6		7		8	10	
2000	18			12	13	7	8	1	5	10	11	10	6	2				5	4	
2001	28			12	8	13	9	15	5	12	7	9	8	14		2		5	5	
2002	27			19	15	14	13	30	5	24	10	14	13	15	8	3		4		
2003	25			19	17	14	9	6	6	10	14	10	8	10	13	9	2	8		
2004	21			18	12	10	8	22	4	10	5	8	7	3	3	5		4		
2005	16			8	8	9	8	13	2	9	6	7	6	5	2	8	6	2	6	
2006	17			10	10	7	10	12	2	10	3	6	4	2	2	11	2		6	
2007	12			10	8	7	4	8	3	2	4	4	8	6	6	8		4	9	
2008	24			16	15	10	8	4	2	10	2	8	11	7	12	9		2	8	
Average	20	5		16	11	12	11	13	5	14	9	10	7	8	8	8	6	9	8	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, 1989–2008.

Year	Commercial Troll		Purse Seine		Drift Gillnet		Set Gillnet		All-Gear Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1989	1,415,512	65%	331,684	15%	252,516	12%	176,816	8%	2,181,092	100%
1990	1,832,604	67%	377,844	14%	372,645	14%	148,891	5%	2,738,632	100%
1991	1,719,060	59%	408,872	14%	595,719	21%	166,731	6%	2,898,846	100%
1992	1,929,899	56%	499,792	15%	696,767	20%	290,149	8%	3,424,623	100%
1993	2,395,711	67%	464,524	13%	431,543	13%	237,446	7%	3,556,219	100%
1994	3,466,782	63%	954,415	18%	735,465	13%	343,903	6%	5,525,285	100%
1995	1,750,221	56%	595,039	20%	446,730	15%	295,030	9%	3,129,584	100%
1996	1,906,740	64%	440,235	15%	398,103	14%	227,802	8%	2,986,172	100%
1997	1,170,460	64%	184,729	10%	149,835	9%	322,776	18%	1,838,904	100%
1998	1,636,707	59%	460,885	17%	436,352	16%	197,669	7%	2,750,969	100%
1999	2,272,619	69%	403,597	13%	391,480	12%	187,186	6%	3,276,855	100%
2000	1,124,854	67%	206,601	12%	176,726	11%	170,948	10%	1,688,378	100%
2001	1,843,997	63%	549,730	19%	335,301	11%	205,344	7%	2,934,372	100%
2002	1,310,060	55%	423,903	18%	453,622	19%	200,888	8%	2,388,473	100%
2003	1,220,782	58%	384,425	18%	430,902	20%	74,343	4%	2,110,452	100%
2004	1,915,007	68%	386,663	14%	316,589	11%	196,930	7%	2,815,188	100%
2005	2,036,104	75%	339,661	12%	281,418	10%	82,887	3%	2,708,296	100%
2006	1,361,267	75%	103,447	6%	272,112	15%	86,085	5%	1,820,657	100%
2007	1,376,753	72%	247,463	13%	197,083	10%	76,550	7%	1,897,833	100%
2008	1,273,710	64%	219,655	11%	358,657	18%	153,712	8%	2,005,734	100%
1989–2008 Average:	1,747,942	64%	399,158	14%	386,478	14%	192,104	7%	2,734,722	100%
Board of Fisheries Allocations (Established 1989)		61%		19%		13%		7%		100%

Note: Includes Annette Island harvests.

Table 4.–Southeast Alaska commercial troll permits renewed and fished, 1980 to 2008.

Year	Hand Troll Permits		Power Troll Permits		Total Fished
	Renewed	Fished	Renewed	Fished	
1975	2,087	1,100	1,078	760	1,860
1976	2,082	1,242	998	742	1,984
1977	2,951	1,852	970	746	2,598
1978	3,922	2,644	976	817	3,461
1979	3,700	2,195	978	813	3,008
1980	2,436	1,713	973	848	2,561
1981	2,048	1,172	969	797	1,969
1982	1,906	1,185	967	819	2,004
1983	2,031	1,016	967	820	1,836
1984	1,983	875	961	799	1,674
1985	1,952	930	959	840	1,770
1986	1,887	820	957	834	1,654
1987	1,820	777	956	832	1,609
1988	1,783	801	956	844	1,645
1989	1,747	725	955	853	1,578
1990	1,699	708	956	841	1,549
1991	1,643	703	958	855	1,558
1992	1,595	660	957	848	1,508
1993	1,550	605	956	842	1,447
1994	1,513	551	954	809	1,360
1995	1,479	461	954	820	1,281
1996	1,420	414	965	739	1,153
1997	1,380	387	964	748	1,135
1998	1,331	305	962	737	1,042
1999	1,155	332	927	724	1,056
2000	1,006	318	899	717	1,035
2001	1,039	329	927	737	1,066
2002	1,017	251	915	671	922
2003	909	257	883	639	896
2004	934	319	905	693	1,012
2005	937	349	922	720	1,069
2006	914	375	926	742	1,117
2007	911	382	927	747	1,129
2008	944	379	934	750	1,129

Table 5.–Number of permits fished, by gear type and fishery, 1980–2008.

Year	Winter Fishery			Spring Fishery ^a			Summer Fishery		
	Troll Gear Type		Total Winter	Troll Gear Type		Total Spring	Troll Gear Type		Total Summer
	Hand	Power		Hand	Power		Hand	Power	
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	76	169	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	336	481	338	734	1,072
1998	53	253	306	81	273	354	284	740	1,024
1999	53	233	286	83	253	336	307	718	1,025
2000	67	244	311	111	287	398	255	714	969
2001	80	242	322	122	321	443	252	711	963
2002	72	228	300	94	236	330	251	671	922
2003	96	264	360	79	289	368	187	605	792
2004	129	310	439	111	332	443	238	675	913
2005	142	302	444	125	374	499	283	702	985
2006	152	317	469	151	366	517	270	718	988
2007	153	350	503	158	365	523	284	726	1,010
2008	134	333	467	170	405	575	291	726	1,017

^a Includes experimental and terminal fisheries; does not include permits fished in the hatchery access fisheries 1989 through 1992.

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, 1985–2008.

Year	Days Open	Days Closed	Open Dates	CR Days	CR Effort (Boat– days)	Closed Dates	Days Closed	CNR Days	CNR Effort (Boat Days)
1985	33.6	135.4	6/3–6/12	10	30,628	4/15–6/2	49 (all)	48.4	35,725
			7/1–7/22	22		6/13–6/30	18 (all)		
			8/25–8/26	1.6		7/23–8/14	23		
						8/15–8/24	10 (all)		
						8/26–9/20	25.4		
9/21–9/30	10 (all)								
1986	41	128	6/20–7/15	26	33,079	4/15–6/19	66 (all)	42	34,173
			8/21–8/26	6		7/16–8/10	26		
						8/11–8/20	10 (all)		
						8/27–8/31	5		
			9/1–9/9	9		9/10–9/20	11		
9/21–9/30	10 (all)								
1987	23	146	6/20–7/12	23	19,077	4/15–6/19	66 (all)	60	37,214
			8/13–9/20	39		7/13–8/2	21		
						8/3–8/12	10 (all)		
						8/13–9/20	39		
						9/21–9/30	10 (all)		
1988	12	157	7/1–7/12	12	9,507	4/15–6/30	77 (all)	47	27,275
			8/25–8/31	7		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)		
						1989	13		
8/24–9/20	28	7/14–8/13	31						
		8/14–8/23	10 (all)						
		8/24–9/20	28						
		9/21–9/30	10 (all)						
1990	24	145	7/1–7/22	22	17,172	4/15–6/30	77 (all)	48	29,525
			8/23–8/24	2		7/23–8/12	21		
						8/13–8/22	10 (all)		
						8/25–9/20	27		
						9/21–9/30	10 (all)		
1991	7.5	161.5	7/1–7/8	7.5	4,718	4/15–6/30	77 (all)	64.5	32,565
			8/26–9/20	26		7/8–8/15	38.5		
						8/16–8/25	10 (all)		
						8/26–9/20	26		
						9/21–9/30	10 (all)		

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Table 6.–Page 2 of 3.

Year	Days Open	Days Closed	Open Dates	CR Days	CR Effort (Boat– days)	Closed Dates	Days Closed	CNR Days	CNR Effort (Boat Days)
1992	4.5	164.5	7/1–7/4	3.5		4/15–6/30	77 (all)		
						7/4–8/12	39.5		
						8/13–8/22	10 (all)		
			8/23	1	2,881	8/24–9/20	28		
						9/21–9/30	10 (all)	67.5	36,306
1993	20	149	7/1–7/6	6		4/15–6/30	77 (all)		
						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	12,036	9/21–9/30	10 (all)	49	30,502
1994	12	157	7/1–7/7	7		4/15–6/30	77 (all)		
						7/8–8/26	50		
						8/27–8/28	2 (all)		
			8/29–9/2	5	6,434	9/3–9/30	28	78	35,716
1995	17	152	7/1–7/10	10		4/15–6/30	77 (all)		
						7/11–7/29	19		
						8/6–8/12	7		
			7/30–8/5	7	8,420	8/13–8/22	10 (all)		
						8/23–9/30	39	65	23,435
1996	12	157	7/1–7/10	10		4/15–6/30	77 (all)		
						7/11–8/13	34		
						8/14–8/18	5 (all)		
			8/19–8/20	2	5,282	8/21–9/20	31		
						9/21–9/30	10 (all)	65	23,167
1997	21	148	7/1–7/7	7		4/15–6/30	77 (all)		
						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	9,126	9/6–9/20	15 ^b		
						9/21–9/30	10 (all)	51	17,653
1998	53	116	7/1–7/11	11		4/15–6/30	77 (all)		
						7/12–8/11	31		
						8/12–8/19	8 (all)	31	11,928
			8/20–9/30	42	12,517				
1999	11	158	7/1–7/6	6		4/15–6/30	77 (all)		
						7/7–8/12	37		
						8/13–8/17	5 (all)		
			8/18–8/22	5	4,678	8/23–9/30	39	76	21,879

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Year	Days Open	Days Closed	Open Dates	CR Days	CR Effort (Boat– days)	Closed Dates	Days Closed	CNR Days	CNR Effort (Boat Days)
2000	24	145	7/1–7/5	5	6,784	4/15–6/30	77 (all)	48	15,422
			8/11–8/12	2		7/6–8/10	36		
						8/13–8/22	10 (all)		
			8/23–8/30	8		8/31–9/11	12		
			9/12–9/20	9		9/21–9/30	10 (all)		
2001	25	144	7/1–7/6	6	7,364	4/15–6/30	77 (all)	58	15,434
						7/7–8/12	37		
						8/13–8/17	5 (all)		
			8/18–9/5	19		9/6–9/20	15		
						9/21–9/24	4 (all)		
				9/25–9/30	6				
2002	40	129	7/1–7/18	18	10,482	4/15–6/30	77 (all)	50	10,214
						7/19–8/9	22		
			8/12–9/2	22		8/10–8/11	2 (all)		
2003	39	130	7/1–8/8	39	10,743	4/15–6/30	77 (all)	53	9,228
						8/9–9/30	53		
2004	19	150	7/1–7/15	15	5,888	4/15–6/30	77 (all)	71	17,434
						7/16–8/9	25		
			8/12–8/15	4		8/10–8/11	2 (all)		
				8/16–9/30	46				
2005	29.5	144.5	7/1–7/17	17	9,715	4/10–6/30	82 (all)	48.5	13,379
						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		9/21–9/30	10 (all)		
2006	22	140	7/1–7/12	12	9,001	4/22–6/30	70 (all)	61	14,536
						7/13–8/8	27		
						8/9–8/12	4 (all)		
			8/13–8/22	10		8/23–8/27	5 (all)		
						8/28–9/30	34		
2007	26	127	7/1–7/20	20	9,218	5/1–6/30	61 (all)	51	14,360
						7/21–8/10	21		
						8/11–8/15	5 (all)		
			8/16–8/21	6		8/22–9/20	30		
						9/21–9/30	10 (all)		
2008	11	142	7/1–7/5	5	5,299	5/1–6/30	61 (all)	66	16,095
						7/6–8/10	36		
						8/11–8/15	5 (all)		
			8/16–21	6		8/22–9/20	30		
						9/21–9/30	10 (all)		

^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.—Southeast Alaska annual commercial troll salmon harvest in numbers of fish by species, 1960–2008.

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	1,098	214,170	76,882	2,784	582,276
1976	231,239	1,266	524,762	193,786	4,251	955,304
1977	271,735	5,701	506,845	281,244	11,617	1,077,142
1978	375,433	2,804	1,100,902	617,633	26,193	2,122,965
1979	334,317	7,018	918,842	629,130	24,661	1,913,968
1980	303,643	2,921	696,391	266,885	12,048	1,281,888
1981	248,782	7,476	860,792	579,524	8,680	1,705,254
1982	241,938	2,365	1,316,119	503,578	5,700	2,069,700
1983	269,821	8,018	1,276,363	498,245	20,309	2,072,756
1984	235,622	9,559	1,132,644	572,578	28,052	1,978,455
1985	215,811	7,818	1,599,777	963,737	52,787	2,839,930
1986	237,703	6,891	2,127,334	181,677	51,389	2,604,994
1987	242,562	9,727	1,041,059	487,133	12,846	1,793,327
1988	231,364	9,339	500,218	519,390	88,261	1,348,572
1989	235,716	20,173	1,415,517	1,771,249	68,988	3,511,643
1990	287,939	9,175	1,832,393	771,665	62,818	2,963,990
1991	264,106	9,806	1,718,318	427,326	28,438	2,447,994
1992	183,759	22,830	1,929,013	673,805	85,013	2,894,420
1993	226,866	25,336	2,395,505	902,758	525,138	4,075,603
1994	186,331	21,761	3,461,607	942,747	330,376	4,942,822
1995	138,117	27,323	1,750,124	714,312	277,453	2,907,329
1996	141,452	11,024	1,906,690	812,899	406,244	3,278,309
1997	246,409	39,428	1,170,462	545,308	312,042	2,313,649
1998	192,066	6,487	1,636,479	261,093	117,642	2,213,767
1999	146,219	5,725	2,272,619	540,670	74,672	3,039,905
2000	158,717	4,467	1,124,854	187,364	478,144	1,953,546
2001	153,280	8,989	1,843,997	258,943	467,830	2,733,039
2002	325,308	1,247	1,310,060	86,399	117,672	1,840,686
2003	330,692	4,572	1,220,782	159,394	286,410	2,001,850
2004	354,664	5,010	1,915,007	57,315	161,070	2,493,066
2005	338,442	13,276	2,035,783	109,635	165,393	2,662,529
2006	282,307	8,004	1,360,256	60,114	143,030	1,853,711
2007	268,147	6,440	1,376,737	104,377	185,800	1,941,517
2008	151,906	1,252	1,273,710	28,151	60,291	1,515,310
1960–69 Average	264,372	1,013	569,983	76,357	3,973	915,697
1970–79 Average	298,830	2,418	610,162	253,774	11,626	1,176,810
1980–89 Average	246,296	8,429	1,196,621	634,400	34,906	2,120,652
1990–99 Average	201,326	17,890	2,008,163	659,258	221,984	3,107,779
2002–08 Average	262,607	5,917	1,495,732	116,855	229,516	2,110,584

Note: Only Chinook salmon statistics include hatchery terminal area harvest. Harvest data for all species includes 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 2008.

Table 8.—Southeast Alaska commercial troll salmon harvest in numbers of fish by species, by statistical week, for the 2008 troll season.

Year	Week	Week of	King	Sockeye	Coho	Pink	Chum	Total
2007	41	7-Oct	224	0	0	0	0	224
	42	14-Oct	1,902	0	0	0	0	1,902
	43	21-Oct	546	0	0	0	0	546
	44	28-Oct	292	0	0	0	0	292
	45	4-Nov	645	0	0	0	0	645
	46	11-Nov	376	0	0	0	0	376
	47	18-Nov	360	0	0	0	0	360
	48	25-Nov	324	0	0	0	0	324
	49	2-Dec	182	0	0	0	0	182
	50	9-Dec	155	0	0	0	0	155
	51	16-Dec	102	0	0	0	0	102
	52	23-Dec	29	0	0	0	0	29
	53	30-Dec	32	0	0	0	0	32
2008	1	1-Jan	94	0	0	0	0	94
	2	6-Jan	256	0	0	0	0	256
	3	13-Jan	191	0	0	0	0	191
	4	20-Jan	430	0	0	0	0	430
	5	27-Jan	85	0	0	0	0	85
	6	3-Feb	174	0	0	0	0	174
	7	10-Feb	149	0	0	0	0	149
	8	17-Feb	174	0	0	0	0	174
	9	24-Feb	595	0	0	0	0	595
	10	2-Mar	262	0	0	0	0	262
	11	9-Mar	716	0	0	0	0	716
	12	16-Mar	437	0	0	0	0	437
	13	23-Mar	1,297	0	0	0	0	1,297
	14	30-Mar	1,694	0	0	0	0	1,694
	15	6-Apr	1,526	0	0	0	0	1,526
	16	13-Apr	2,141	0	0	0	6	2,147
	17	20-Apr	4,311	0	0	0	6	4,317
	18	27-Apr	2,240	0	0	0	0	2,240
	19	4-May	1,224	0	0	0	0	1,224
	20	11-May	1,516	0	0	0	0	1,516
	21	18-May	4,081	0	0	0	1	4,082
	22	25-May	4,184	0	0	0	4	4,188
	23	1-Jun	5,213	0	0	0	6	5,219
	24	8-Jun	7,595	0	0	4	2	7,601
	25	15-Jun	8,070	12	421	321	122	8,946
	26	22-Jun	3,858	12	980	197	176	5,223
	27	29-Jun	60,707	221	45,256	1,673	797	108,654
	28	6-Jul	12	70	25,849	1,831	383	28,145
	29	13-Jul	8	138	117,875	2,837	268	121,126
	30	20-Jul	0	155	137,080	2,434	1,511	141,180
	31	27-Jul	1	89	177,303	3,770	5,063	186,226
	32	3-Aug	0	78	185,184	8,556	37,354	231,172
	33	10-Aug	600	26	61,416	2,447	7,527	72,016
	34	17-Aug	28,403	351	162,681	2,699	6,297	200,431
	35	24-Aug	0	44	103,422	1,012	116	104,594
	36	31-Aug	0	32	118,252	261	207	118,752
	37	7-Sep	0	15	94,147	95	403	94,660
	38	14-Sep	0	9	43,844	12	54	43,919
Winter fishery subtotal			21,825	0	0	0	0	21,825
Spring fishery subtotal			36,620	24	1,663	524	329	39,160
Summer fishery subtotal			88,969	1,228	1,272,047	27,627	59,962	1,449,833
Hatchery terminal area subtotal			4,492	1	19,303	1,043	538	25,377
Grand Total:			151,906	1,253	1,293,013	29,194	60,829	1,536,195

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

Table 9.—Average troll coho salmon dressed weight by week and weighted annual average, 1994–2008.

Week of	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2003–2007 Average	1998–2007 Average
July 1	6.3	5.6	5.9	5.3	6.6	4.7	5.7	5.7	5.9	5.5	5.7	5.2	5.3	4.9	6.3	5.3	5.5
July 8	6.2	5.6	5.9	5.2	6.8	4.7	5.7	5.6	6.2	5.5	6.1	5.2	5.6	5.1	6.5	5.5	5.6
July 15	6.3	6.0	6.0	5.4	6.8	4.8	6.0	5.6	6.5	5.6	6.1	5.2	5.6	5.3	6.7	5.6	5.8
July 22	6.4	6.4	6.3	5.6	6.9	5.0	6.1	5.7	6.4	5.8	6.1	5.3	5.6	5.3	6.9	5.6	5.8
July 29	6.6	6.6	6.5	5.8	7.0	5.2	6.3	6.0	6.5	6.0	6.0	5.2	5.7	5.4	6.9	5.7	5.9
Aug 5	7.0	7.0	6.7	6.0	7.1	5.4	6.5	6.1	6.8	6.2	6.2	5.3	5.9	5.5	7.1	5.8	6.1
Aug 12	7.3	7.1	6.8		7.2	5.4	6.6	6.2	7.0	6.3	6.4	5.5	6.1	5.9	7.4	6.0	6.3
Aug 19	7.7	7.7	7.3	7.0	7.7	5.8		6.6	7.1	6.6	6.8	6.0	6.6	5.9	8.2	6.4	6.6
Aug 26	7.9	7.8	7.5	7.6	7.8	6.0	7.5	6.6	7.6	6.9	7.0	6.2	6.8	6.2	8.4	6.6	6.9
Sept 2	8.3	8.2	7.8	8.2	8.5	6.1	8.0	6.8	7.8	7.2	7.4	6.3	7.4	6.7	8.8	7.0	7.2
Sept 9	8.6	8.4	8.1	8.8	8.8	6.4	8.2	7.2	8.0	7.4	7.7	6.7	7.7	7.2	9.0	7.3	7.5
Sept 16	8.6	8.7	8.0	8.9	9.2	6.6	8.4	7.7	8.1	7.6	7.8	6.9	7.9	7.4	9.1	7.5	7.8
Weighted Average:	7.2	7.0	6.8	6.5	7.4	5.4	6.5	6.1	6.9	6.5	6.6	5.7	6.4	5.8	7.6	6.2	6.3
Troll Harvest (millions)	3.5	1.8	1.9	1.2	1.6	2.3	1.1	1.8	1.3	1.2	1.9	2.1	1.3	1.4	1.3	1.6	1.6

Table 10.—Southeast Alaska annual commercial hand troll salmon harvest in numbers of fish by species, 1975–2008.

Year	Chinook^a	Sockeye	Coho	Pink	Chum	Total
1975	27,995	96	40,922	28,853	541	98,407
1976	26,294	516	88,733	44,054	2,061	161,658
1977	33,176	1,740	155,813	116,776	4,143	311,648
1978	54,383	1,155	378,927	243,469	9,573	687,507
1979	57,494	2,448	244,815	281,711	7,926	594,394
1980	52,025	1,257	179,122	111,548	4,532	348,484
1981	33,892	2,171	181,422	173,517	2,582	393,584
1982	36,677	513	260,747	132,135	1,187	431,259
1983	38,635	1,574	235,685	136,656	2,777	415,327
1984	34,287	1,982	178,407	151,231	4,894	370,801
1985	33,136	1,697	260,592	251,645	9,746	556,816
1986	29,714	810	338,312	39,875	6,687	415,398
1987	29,217	2,131	183,229	135,102	3,016	352,695
1988	33,107	1,894	92,326	147,609	14,536	289,472
1989	28,667	2,442	220,262	301,413	6,578	559,362
1990	39,179	1,245	273,359	154,798	6,489	475,070
1991	39,987	1,073	238,456	72,343	3,839	355,698
1992	25,548	1,904	249,487	95,481	6,023	378,443
1993	23,887	1,668	315,521	101,752	34,449	477,277
1994	14,873	1,878	435,947	56,958	32,061	541,717
1995	13,412	1,822	145,094	63,877	21,282	245,487
1996	11,581	698	201,376	31,748	53,646	299,049
1997	14,850	1,207	104,527	35,104	20,042	175,730
1998	9,014	271	119,576	11,782	2,051	142,694
1999	6,010	286	180,072	12,214	583	199,165
2000	8,678	126	67,499	5,386	6,427	88,116
2001	9,811	301	111,059	6,267	12,480	139,918
2002	11,460	33	77,811	2,753	578	92,635
2003	13,510	134	80,882	3,562	3,095	101,183
2004	18,864	148	108,624	2,403	861	130,900
2005	16,847	340	143,095	6,203	418	166,903
2006	16,366	242	74,412	3,429	437	94,242
2007	18,258	220	91,499	4,196	1,385	115,558
Average 1975–2007	26,086	1,092	183,564	89,874	8,695	309,291
2008	15,280	155	82,722	1,571	511	100,239

Note: Data by calendar year from 1975 to 1978, from Jan. 1 to Sept. 30 for 1979, and by troll season (Oct. 1 – Sept. 30) from 1980 to 2008.

Note: Beginning in 1975 hand and power troll harvest were reported separately.

Note: Harvest for all species includes Annette Island Reserve.

^a Only Chinook salmon catch statistics include hatchery terminal area catches.

Table 11.—Southeast Alaska annual commercial power troll salmon harvest in numbers of fish by species, 1975–2008.

Year	Chinook^a	Sockeye	Coho	Pink	Chum	Total
1975	259,347	1,002	173,248	48,029	2,243	483,869
1976	204,945	750	436,029	149,732	2,190	793,646
1977	238,559	3,961	351,032	164,468	7,474	765,494
1978	321,050	1,649	721,975	374,164	16,620	1,435,458
1979	276,823	4,570	674,027	347,419	16,735	1,319,574
1980	251,849	1,664	517,269	155,337	7,516	933,635
1981	214,899	5,305	679,370	406,007	6,098	1,311,679
1982	205,638	1,852	1,055,372	371,443	4,513	1,638,818
1983	231,155	6,444	1,040,678	361,589	17,532	1,657,398
1984	201,412	7,577	954,237	421,347	23,158	1,607,731
1985	182,953	6,121	1,339,185	712,092	43,041	2,283,392
1986	207,984	6,081	1,789,022	141,802	44,702	2,189,591
1987	213,345	7,596	857,830	352,031	9,830	1,440,632
1988	198,078	7,445	407,892	371,781	73,725	1,058,921
1989	206,942	17,731	1,195,255	1,469,836	62,410	2,952,174
1990	247,921	7,930	1,559,034	616,867	56,329	2,488,081
1991	223,104	8,733	1,479,862	354,983	24,599	2,091,281
1992	157,806	20,926	1,679,526	578,324	78,990	2,515,572
1993	202,674	23,668	2,079,984	801,006	490,689	3,598,021
1994	171,294	19,883	3,025,660	885,789	298,315	4,400,941
1995	124,703	25,501	1,605,030	650,435	256,171	2,661,840
1996	129,827	10,329	1,708,420	781,152	352,758	2,982,486
1997	231,569	38,221	1,065,935	510,204	292,000	2,137,929
1998	183,052	6,216	1,516,903	249,311	115,591	2,071,073
1999	139,890	5,439	2,092,502	528,456	74,089	2,840,376
2000	150,098	4,341	1,057,660	181,978	471,717	1,865,794
2001	143,408	8,688	1,734,095	252,676	455,350	2,594,217
2002	313,875	1,214	1,237,205	83,646	117,094	1,753,034
2003	317,172	4,441	1,139,901	155,829	188,048	1,805,391
2004	335,800	4,862	1,806,383	54,912	160,209	2,362,166
2005	321,595	12,936	1,892,688	103,432	164,975	2,495,626
2006	265,941	7,762	1,285,844	56,685	142,593	1,759,469
2007	249,889	6,220	1,285,283	100,181	184,415	1,825,943
Average 1975–2007	221,957	9,002	1,255,888	387,665	129,143	2,003,674
2008	136,626	1,097	1,190,988	26,578	59,780	1,415,069

Note: Data by calendar year from 1975 to 1978, from January 1 to September 30 for 1979, and by troll season from 1980 to 2008.

Note: Beginning in 1975 hand and power troll harvest were reported separately.

Note: Harvest for all species includes Annette Island Reserve.

^a Only Chinook salmon harvest statistics include hatchery terminal area harvest.

Table 12.–2008 Southeast Alaska Chinook salmon total harvest and treaty harvest by gear type, showing troll harvest by fishery.

Gear/Fishery	Total Harvest	Alaska Hatchery Harvest	Alaska Hatchery Add-on	Terminal Exclusion Harvest	Term. Exclusion/Alaska Hatchery Add-on	Treaty Harvest
Winter Troll	21,825	2,865	2,455	0	2,455	19,370
Spring Troll	41,112	22,128	19,223	1,137	20,360	20,752
Summer Troll	88,969	3,897	3,319	0	3,319	85,650
Total Troll	151,906	30,027	24,997	1,137	26,134	125,772
Seine	15,554	12,165	12,103	0	12,103	3,451
Gillnet	29,764	17,669	15,681	5,704	21,385	8,379
Setnet	844	0		0	0	844
Sport	38,371	14,204	11,357	1,352	12,709	25,662
All Gear Total	236,439	74,065	64,138	8,193	72,331	164,108

Note: Harvests shown include hatchery terminal area and Annette Island catches.

Table 13.—Annual Southeast Alaska commercial and recreational Chinook salmon harvests and Alaska hatchery contribution, in thousands of fish, 1965–2008.

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	48	290	26	316	1	315
1983	270	19	289	22	311	3	308
1984	236	32	268	22	290	6	284
1985	216	33	249	25	274	13	261
1986	238	22	260	23	283	17	266
1987	243	16	259	24	283	24	259
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	178	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	38	191	68	259	87	172
2002	325	32	357	85	442	78	364
2003	331	39	370	73	443	68	375
2004	355	64	419	84	503	83	420
2005	338	71	409	93	502	73	429
2006	282	70	352	91	443	89	354
2007	268	56	324	86	410	76	334
2008	152	46	198	38	236	80	156

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 harvest prior to 1980 is reported by calendar year. From 1980 to present, harvest is by season, October 1 to September 30.

^b Purse seine harvest from 1986 to the present do not include Chinook less than 5 pounds reported on fish tickets.

^c Estimates of sport catches for 1965–76 based on 1977–80 average catch per capita data. Sport catches for 1977–2007 based on statewide postal harvest surveys. Sport harvest for 2008 is based on preliminary creel survey data, pending completion of statewide postal harvest surveys.

Table 14.—Southeast Alaska winter troll fishery Chinook salmon harvest, vessel landings, and catch per landing, by troll accounting year (October 1–September 30), 1980–2008.

Year	Early Winter (Oct.–Dec.)			Late Winter (Jan.–April)			Total Winter (Oct.–April)			Annual Total	Winter % of Annual Total
	Chinook	Landings	Catch/ Landing	Chinook	Landings	Catch/ Landing	Chinook	Landings	Catch/ Landing		
1980	4,002	528	8	3,608	406	9	7,610	934	8	303,643	3%
1981	1,737	279	6	7,027	744	9	8,764	1,023	9	248,782	4%
1982	4,865	535	9	6,857	764	9	11,722	1,299	9	241,938	5%
1983	12,517	926	14	17,340	1,424	12	29,857	2,350	13	269,821	11%
1984	14,223	1,217	12	17,153	1,980	9	31,376	3,197	10	235,622	13%
1985	14,235	869	16	7,234	1,148	6	21,469	2,017	11	215,811	10%
1986	16,779	1,049	16	6,147	832	7	22,926	1,881	12	237,703	10%
1987	18,453	1,235	15	10,075	996	10	28,528	2,231	13	242,562	12%
1988	44,774	2,404	19	15,684	1,785	9	60,458	4,189	14	231,364	26%
1989	24,426	2,239	11	9,872	1,403	7	34,298	3,642	9	235,716	15%
1990	17,617	868	20	15,513	1,477	11	33,130	2,345	14	287,939	12%
1991	19,920	787	25	20,622	2,037	10	40,542	2,824	14	264,106	15%
1992	28,277	1,653	17	43,554	2,679	16	71,831	4,332	17	183,759	39%
1993	20,275	1,194	17	42,447	2,366	18	62,722	3,560	18	226,866	28%
1994	35,193	1,106	32	21,175	1,499	14	56,368	2,605	22	186,331	30%
1995	10,382	627	17	7,486	871	9	17,868	1,498	12	138,117	13%
1996	6,008	427	14	3,393	447	8	9,401	874	11	141,452	7%
1997	13,252	626	21	7,705	514	15	20,957	1,151	18	246,409	9%
1998	9,810	534	18	23,008	1,372	17	32,804	2,001	16	192,066	17%
1999	13,989	579	24	16,988	1,435	12	30,977	2,026	15	146,219	21%
2000	17,494	783	22	18,561	1,508	12	36,055	2,291	16	158,717	23%
2001	11,198	907	12	11,388	1,382	8	22,586	2,298	10	153,280	15%
2002	17,152	754	23	12,237	1,351	9	29,415	2,116	14	325,308	9%
2003	18,672	725	26	32,182	2,365	14	50,854	3,090	16	330,692	15%
2004	12,686	982	13	40,200	2,595	15	52,886	3,577	15	354,636	15%
2005	12,982	1,103	12	37,482	2,955	13	50,464	4,058	12	336,153	15%
2006	13,952	1,418	10	34,967	3,102	11	48,919	4,520	11	284,830	17%
2007	7,642	1,092	7	39,233	2,808	14	46,872	3,900	12	266,837	18%
2008	5,170	950	5	16,655	2,347	7	21,825	3,297	7	147,367	15%

Note: Data includes Annette Island troll harvest.

Table 15.—The number of Chinook salmon harvested and permits fished in the 2008 spring troll fisheries by statistical week, including experimental and terminal areas.

Stat Area	Fishery Name	Stat Week	Open	Close	Permits	Chinook	AK %
101-29	Ketchikan Area	19	4-May	10-May	3	13	
		20	11-May	17-May	7	17	
		21	18-May	24-May	19	194	23%
		22	25-May	31-May	14	134	20%
		23	1-Jun	7-Jun	23	343	57%
		24	8-Jun	14-Jun	22	265	23%
		25	15-Jun	21-Jun	48	690	41%
		26	22-Jun	28-Jun	38	645	66%
		27	29-Jun	30-Jun	10	126	82%
<i>Ketchikan Area Total</i>				<i>61 days</i>	<i>78</i>	<i>2,427</i>	<i>51%</i>
101-90	West Behm Canal	24	8-Jun	14-Jun	4	40	19%
		25	15-Jun	21-Jun	3	14	0
		26	22-Jun	28-Jun	2	16	0
		27	29-Jun	30-Jun	1	24	0
<i>West Behm Canal Total</i>				<i>54 days</i>	<i>6</i>	<i>94</i>	<i>8%</i>
101-95	Neets Bay Terminal Area	24	8-Jun	14-Jun	*	*	
		25	15-Jun	21-Jun	*	*	
		28	6-Jul	12-Jul	7	190	
<i>Neets Bay Term. Total</i>				<i>73 days</i>	<i>8</i>	<i>227</i>	<i>100%</i>
105-41	Sumner Strait	18	1-May	2-May	11	62	
		19	5-May	6-May	13	98	13%
		20	12-May	13-May	14	77	43%
		21	19-May	20-May	18	138	2%
		22	26-May	27-May	15	138	57%
		23	2-Jun	5-Jun	16	217	29%
		24	9-Jun	11-Jun	18	185	8%
		25	16-Jun	18-Jun	17	229	81%
		26	23-Jun	28-Jun	15	93	
27	29-Jun	30-Jun	5	26			
<i>Sumner Strait Total</i>				<i>25 days</i>	<i>46</i>	<i>1,263</i>	<i>31%</i>
106-20	Clarence Strait	23	1-Jun	7-Jun	3	41	153%
		24	8-Jun	14-Jun	*	*	
		25	15-Jun	21-Jun	*	*	
<i>Clarence Strait Total</i>				<i>61 days</i>	<i>5</i>	<i>61</i>	<i>100%</i>
106-30	Steamer Point	20	12-May	16-May	*	*	
		22	26-May	31-May	4	20	
		23	2-Jun	7-Jun	6	78	
		24	8-Jun	14-Jun	7	43	100%
		25	15-Jun	21-Jun	6	79	100%
		26	22-Jun	28-Jun	9	107	
		27	29-Jun	30-Jun	*	*	60%
<i>Steamer Point Total</i>				<i>54 days</i>	<i>21</i>	<i>336</i>	<i>84%</i>

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Stat Area	Fishery Name	Stat Week	Open	Close	Permits	Chinook	AK %
106-44	Wrangell Narrows	23	2-Jun	7-Jun	21	157	
		24	8-Jun	14-Jun	18	159	
		25	15-Jun	21-Jun	16	104	
		26	22-Jun	28-Jun	12	193	
		27	29-Jun	30-Jun	9	54	
<i>Wrangell Narrows Term.</i>				<i>29 days</i>	27	667	100%
107-10	Ernest Sound	23	1-Jun	7-Jun	*	*	
		24	8-Jun	14-Jun	*	*	37%
		25	15-Jun	21-Jun	*	*	
		26	22-Jun	28-Jun	*	*	
<i>Ernest Sound Total</i>				<i>61 days</i>	5	68	55%
107-20	Deer Island	22	25-May	31-May	*	*	
		23	1-Jun	7-Jun	4	46	100%
		24	8-Jun	14-Jun	5	48	100%
		25	15-Jun	21-Jun	*	*	
		26	22-Jun	28-Jun	5	49	
<i>Deer Island Total</i>				<i>61 days</i>	5	170	100%
107-30	Zimovia Strait	20	12-May	16-May	*	*	
		21	19-May	23-May	*	*	
		25	15-Jun	21-Jun	*	*	100%
<i>Zimovia Strait Total</i>				<i>54 days</i>	3	7	100%
108-41	District 8	19	5-May	9-May	19	72	
		20	12-May	16-May	28	193	17%
		21	19-May	23-May	49	360	13%
		22	27-May	29-May	34	185	17%
		23	2-Jun	4-Jun	28	241	40%
		24	9-Jun	13-Jun	36	331	60%
		25	16-Jun	20-Jun	23	236	100%
		26	23-Jun	27-Jun	11	79	
		27	30-Jun	30-Jun	*	*	
<i>District 8 Total</i>				<i>40 Days</i>	92	1,697	40%
109-10	Little Port Walter	19	7-May	9-May	*	*	
		20	14-May	16-May	*	*	14%
		21	20-May	23-May	14	191	89%
		22	27-May	31-May	10	217	40%
		23	2-Jun	7-Jun	11	282	56%
		24	8-Jun	14-Jun	11	279	63%
		25	15-Jun	21-Jun	14	350	76%
		26	22-Jun	28-Jun	4	19	227%
27	29-Jun	30-Jun	*	*	51%		
<i>Little Port Walter Total</i>				<i>47 days</i>	31	1,359	66%

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Stat Area	Fishery Name	Stat Week	Open	Close	Permits	Chinook	AK %
109-62	Tebenkof Bay	19	5-May	7-May	11	116	39%
		20	12-May	14-May	3	47	40%
		21	19-May	22-May	22	698	41%
		22	26-May	29-May	24	919	63%
		23	2-Jun	5-Jun	38	1090	41%
		24	9-Jun	12-Jun	38	1835	60%
		25	16-Jun	21-Jun	55	1987	44%
		26	22-Jun	28-Jun	27	643	43%
		27	29-Jun	30-Jun	4	73	9%
<i>Tebenkof Bay Total</i>				<i>36 days</i>	<i>91</i>	<i>7,408</i>	<i>49%</i>
110-31	Frederick Sound	18	1-May	3-May			
		19	4-May	10-May	3	9	
		20	11-May	17-May	3	8	
		21	18-May	24-May	*	*	
		22	25-May	31-May	4	23	68%
		23	1-Jun	7-Jun	6	68	
		24	8-Jun	14-Jun	4	49	
		25	15-Jun	21-Jun	10	96	27%
		26	22-Jun	28-Jun	3	8	
27	29-Jun	30-Jun					
<i>Frederick Sound Total</i>				<i>61 days</i>	<i>25</i>	<i>261</i>	<i>16%</i>
112-12	Chatham Strait	18	1-May	3-May	3	21	92%
		19	4-May	10-May	20	356	17%
		20	11-May	17-May	12	176	50%
		21	18-May	24-May	33	496	36%
		22	25-May	31-May	24	298	63%
		23	1-Jun	7-Jun	15	299	35%
		24	8-Jun	14-Jun	31	1140	65%
		25	15-Jun	21-Jun	33	832	68%
		26	22-Jun	28-Jun	13	71	184%
27	29-Jun	30-Jun	*	*	99%		
<i>Chatham Strait Total</i>				<i>61 days</i>	<i>80</i>	<i>3,689</i>	<i>57%</i>
112-22	Hidden Falls Term. Area	22	25-May	31-May	4	65	
		23	1-Jun	7-Jun	*	*	
		24	8-Jun	14-Jun	5	76	
		25	15-Jun	21-Jun	5	49	
		26	22-Jun	28-Jun	10	378	
		27	29-Jun	30-Jun	4	192	
		28	6-Jul	7-Jul	*	*	
		33	10-Aug	11-Aug	*	*	
		34	17-Aug	18-Aug	6	77	
35	24-Aug	25-Aug	*	*			
<i>Hidden Falls Term. Total</i>					<i>27</i>	<i>845</i>	<i>100%</i>

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Stat Area	Fishery Name	Stat Week	Open	Close	Permits	Chinook	AK %
113-01	Western Channel	21	19-May	19-May	14	75	65%
		22	27-May	27-May	11	78	69%
		23	2-Jun	3-Jun	21	301	66%
		24	9-Jun	12-Jun	47	958	51%
		25	14-Jun	21-Jun	70	1288	62%
		26	22-Jun	28-Jun	20	387	57%
		27	29-Jun	30-Jun	6	220	
<i>Western Channel Total</i>				<i>25 days</i>	<i>109</i>	<i>3,307</i>	<i>55%</i>
113-30	Redoubt Bay	19	5-May	6-May	6	24	
		20	12-May	13-May	*	*	
		21	19-May	21-May	15	145	2%
		22	27-May	29-May	14	156	22%
		23	2-Jun	4-Jun	5	38	
		24	9-Jun	11-Jun	10	92	
25	16-Jun	17-Jun	*	*			
<i>Redoubt Bay Total</i>				<i>21 days</i>	<i>37</i>	<i>489</i>	<i>8%</i>
113-31	Biorka Island	21	19-May	19-May	43	559	20%
		22	27-May	27-May	28	174	22%
		23	2-Jun	2-Jun	14	100	0%
		24	9-Jun	9-Jun	10	67	58%
		25	16-Jun	16-Jun	7	46	48%
		26	23-Jun	23-Jun	5	17	
		27	30-Jun	30-Jun	*	*	
<i>Biorka Island Total</i>				<i>7 days</i>	<i>65</i>	<i>963</i>	<i>21%</i>
113-35	Silver Bay Special Harvest	28	7-Jul	13-Jul	24	608	
		29	14-Jul	20-Jul	20	1,049	
		30	21-Jul	27-Jul	15	601	
		31	28-Jul	30-Jul	11	457	
		<i>Silver Bay SHA Total</i>					<i>36</i>
113-38	Deep Inlet Terminal Area	19	5-May	6-May	2	4	
		23	2-Jun	2-Jun	*	*	
		24	9-Jun	9-Jun	*	*	
		28	7-Jul	7-Jul	4	16	
<i>Deep Inlet Term. Total</i>					<i>7</i>	<i>37</i>	<i>100%</i>

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Stat Area	Fishery Name	Stat Week	Open	Close	Permits	Chinook	AK %
113-41	Sitka Sound	18	1-May	3-May	6	33	
		19	4-May	10-May	46	298	35%
		20	11-May	17-May	54	441	31%
		21	18-May	24-May	72	632	4%
		22	25-May	31-May	84	1,082	73%
		23	1-Jun	7-Jun	119	1,549	69%
		24	8-Jun	14-Jun	116	1,619	53%
		25	15-Jun	21-Jun	103	1,393	64%
		26	22-Jun	28-Jun	88	1,143	77%
		27	29-Jun	30-Jun	21	275	
<i>Sitka Sound Total</i>				<i>61 days</i>	<i>219</i>	<i>8,465</i>	<i>56%</i>
113-62	Salisbury Sound	20	12-May	14-May	11	128	54%
		21	19-May	22-May	8	92	8%
		22	27-May	29-May	15	485	27%
		23	2-Jun	5-Jun	11	78	
		24	9-Jun	13-Jun	13	105	25%
		25	16-Jun	20-Jun	15	462	52%
		26	21-Jun	28-Jun	24	331	71%
<i>Salisbury Sound Total</i>				<i>34 days</i>	<i>52</i>	<i>1,681</i>	<i>42%</i>
113-95	Lisianski Inlet	19	5-May	6-May	*	*	
		20	12-May	13-May	5	75	3%
		21	19-May	20-May	9	157	24%
		22	26-May	27-May	6	51	17%
		23	2-Jun	3-Jun	9	72	3%
		24	9-Jun	10-Jun	6	49	
		25	16-Jun	19-Jun	6	110	
		26	23-Jun	24-Jun	4	27	
<i>Lisianski Inlet Total</i>				<i>19 days</i>	<i>21</i>	<i>541</i>	<i>9%</i>
113-97	Stag Bay	21	18-May	24-May	*	*	
		22	25-May	31-May	*	*	
		24	8-Jun	14-Jun	*	7	
<i>Stag Bay Total</i>				<i>61 days</i>	<i>3</i>	<i>11</i>	<i>0%</i>
114-21	Cross Sound	25	16-Jun	20-Jun	4	12	
		26	23-Jun	27-Jun	3	8	
<i>Cross Sound Total</i>				<i>15 days</i>	<i>6</i>	<i>20</i>	<i>0%</i>
114-23	South Passage	21	18-May	24-May	*	*	
		23	1-Jun	7-Jun	3	17	
		24	8-Jun	14-Jun	*	*	
<i>South Passage Total</i>					<i>5</i>	<i>25</i>	<i>0%</i>

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Stat Area	Fishery Name	Stat Week	Open	Close	Permits	Chinook	AK %
114-25	Icy Strait	18	1-May	3-May	*	*	
		19	4-May	10-May	6	25	
		20	11-May	17-May	4	8	
		21	18-May	24-May	11	62	
		22	25-May	31-May	14	53	
		23	1-Jun	7-Jun	9	37	60%
		24	8-Jun	14-Jun	14	73	120%
		25	15-Jun	21-Jun	10	49	
		26	22-Jun	28-Jun	9	37	4%
<i>Icy Strait Total</i>				<i>61 days</i>	<i>40</i>	<i>344</i>	<i>32%</i>
114-50	Port Althorp	19	5-May	6-May	11	183	5%
		20	12-May	13-May	24	301	40%
		21	19-May	20-May	23	269	17%
		22	26-May	27-May	16	119	0%
		23	2-Jun	3-Jun	26	300	59%
		24	9-Jun	10-Jun	22	185	28%
		25	16-Jun	21-Jun	22	292	53%
		26	22-Jun	28-Jun	20	220	57%
		27	29-Jun	30-Jun	*	*	
<i>Port Althorp Total</i>				<i>26 days</i>	<i>53</i>	<i>1,869</i>	<i>36%</i>
Spring Experimental Total					573	36,620	49%
Terminal Total					100	4,492	100%
Spring Season Total						41,112	55%

^a Totals do not include Annette Island harvests

* Denotes confidential data. Totals given may or may not include individual weeks confidential data.

Table 16.—Spring troll fishery Chinook salmon harvests and Alaska hatchery contributions, 1986–2008.

Year	Non-Terminal Spring Harvest	Alaska Hatchery Harvest	Alaska Hatchery %	Terminal Harvest
1986	776	240	31%	0
1987	4,488	1,548	34%	0
1988	8,505	2,931	34%	100
1989	2,366	922	39%	913
1990	7,052	4,255	60%	16
1991	13,984	6,129	44%	5,863
1992	11,229	5,604	50%	4,118
1993	15,826	6,525	41%	2,853
1994	11,269	4,939	44%	100
1995	21,750	13,990	64%	1,333
1996	30,963	15,672	51%	16,416
1997	32,791	13,556	41%	9,931
1998	19,195	5,012	26%	1,313
1999	18,351	8,766	48%	2,367
2000	20,990	11,217	53%	7,966
2001	28,250	13,726	49%	7,081
2002	37,610	17,398	46%	6,040
2003	35,452	11,949	34%	3,840
2004	55,186	19,863	36%	1,610
2005	58,665	18,195	31%	2,280
2006	36,951	9,430	26%	1,016
2007	48,596	18,518	38%	1,310
2008	36,620	17,769	49%	4,492

Note: Data does not include Hatchery Access fishery harvest, which occurred in 1989–1992.

Table 17.—Southeast Alaska troll Chinook salmon catch-per-fleet-day during the general summer fishery, 1984–2008.

Year	Fishing Period	Days	Chinook Harvest	Catch/Fleet Day	Chinook Abundance Index ^a
1984	June 5–30	26	127,300	4,896	1.34
	July 11–29	19	75,000	3,947	
		45	202,300	4,496	
1985	June 3–12	10	65,400	6,540	1.27
	July 1–22	22	114,400	5,200	
	August 25–26	2	13,200	8,250	
		34	193,000	5,744	
1986	June 20–July 15	26	154,600	5,946	1.48
	August 21–26	6	31,900	5,317	
	September 1–9	9	27,500	3,056	
		41	214,000	5,220	
1987	June 20–July 12	23	209,500	9,109	1.78
1988	July 1–12	12	162,000	13,500	2.04
1989	July 1–13	13	167,500	12,885	1.85
1990	July 1–22	22	200,000	9,091	1.78
	August 23–24	2	11,900	5,950	
		24	211,900	8,829	
1991	July 1–8	8	154,000	20,533	1.66
1992	July 1– 4	4	65,600	18,743	1.77
	August 23	1	6,900	6,900	
		5	72,500	16,111	
1993	July 1–6	6	101,100	16,850	1.92
	August 21–25	5	24,900	4,980	
	September 12–20	9	19,100	2,122	
		20	145,100	7,255	
1994	July 1–7	7	98,300	14,043	1.67
	August 29 –	5	20,200	4,040	
		12	118,500	9,875	
1995	July 1–10	10	75,900	7,590	0.91
	July 30– August 5	7	21,300	3,043	
		17	97,200	5,718	

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Year	Fishing Period	Days	Chinook Harvest	Catch/Fleet Day	Chinook Abundance Index^a
1996	July 1 – 10	10	76,400	7,640	0.90
	August 19 – 20	2	8,300	4,150	
		12	84,700	7,058	
1997	July 1–7	7	122,500	17,500	1.37
	August 18– 24	7	49,600	7,086	
	August 30–	7	10,600	1,514	
		21	182,700	8,700	
1998	July 1 – 11	11	102,800	9,345	1.27
	August 20 – Sept.	42	36,000	857	
		53	138,800	2,619	
1999	July 1 – 6	6	78,100	13,017	1.12
	August 18 – 22	5	16,400	3,280	
		11	94,500	8,591	
2000	July 1–5	5	50,768	10,154	1.10
	August 11–12	2	12,423	6,212	
	August 23–30	8	24,895	3,112	
	September 12–20	9	5,679	631	
		24	93,765	3,907	
2001	July 1–6	6	64,854	10,809	1.14
	August 18 –	19	30,509	1,606	
		25	95,363	3,815	
2002	July 1–18	18	187,003	10,389	1.74
	August 12 –	22	65,266	2,967	
		40	252,269	6,307	
2003	July 1–August 8	39	240,573	6,169	2.17
2004	July 1–15	15	193,992	12,933	2.06
	August 12–15	4	50,933	12,733	
		19	244,925	12,891	

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Year	Fishing Period	Days	Chinook Harvest	Catch/Fleet Day	Chinook Abundance Index ^a
2005	July 1–17	17	151,128	8,890	1.90
	August 14–20	6.5	70,424	10,834	
	September 15–20	6	5,307	885	
		29.5	226,859	7,690	
2006	July 1–12	12	129,809	10,817	1.73
	August 13–22	10	65,588	6,559	
		22	195,397	8,882	
2007	July 1–20	20	140,547	7,027	1.60
	August 16–21	6	30,885	5,148	
		26	171,432	6,594	
2008	July 1–5	5	59,903	11,981	1.07
	August 16–21	6	28,983	4,831	
	Total	11	88,886	8,081	

Note: The general summer fishery does not include experimental, terminal, or hatchery access fisheries, which target Alaska hatchery stocks.

Note: These harvest numbers do not include Annette Island harvest.

^a The Abundance Indices given for 1984–2008 are the first postseason estimates and for 2008 the preseason AI is used. The AI's are estimated by the Chinook Technical Committee of the Pacific Salmon Commission.

Table 18.—Coho salmon mid-season closure dates and extensions, 1980–2008.

Year	Closure dates	Days closed	Extension	Area 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 some restrictions
1995	August 13–22	10	9/21–9/30	Districts 1–16 open with some 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 some restrictions
1999	August 13–17	5	9/21–9/30	Districts 1–16 open with some 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)* Entire region open except portion of Sitka
2002	August 10–11	2	9/21–9/30	Sound*
2003	No closure	0	9/21–9/30	Entire region open*
2004	August 10–11	2	9/21–9/30	Entire region open*
2005	August 10–13	4	None	
2006	August 9–12	4	9/21–9/30	Districts 10, 12, 14, 15, 181, 183, 191, Sect. 11– C
	August 23–27	5		and portions of Districts 9 and 13
2007	August 11–15	5	None	
2008	August 11–15	5	None	

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

Table 19.—Contribution in numbers and percent of Chinook salmon produced by Alaskan hatcheries in the winter, experimental, terminal, hatchery access and general summer troll fisheries, 1989–2008. Note: Data includes Annette Island troll harvests.

Fishery	Year	Total Harvest	Alaskan Hatcheries	
			Number	Percent
Winter	1985	22,825	1,288	6%
	1986	22,928	1,308	6%
	1987	28,528	2,935	10%
	1988	60,449	8,316	14%
	1989	34,300	4,900	14%
	1990	33,100	4,400	13%
	1991	42,600	10,200	24%
	1992	71,800	7,000	10%
	1993	62,700	3,900	6%
	1994	56,400	2,000	4%
	1995	17,900	2,100	12%
	1996	9,400	1,700	18%
	1997	21,000	1,700	8%
	1998	32,800	2,400	7%
	1999	31,000	2,200	7%
	2000	36,100	3,100	9%
	2001	22,600	2,800	12%
	2002	29,400	2,000	7%
	2003	50,854	4,380	9%
	2004	52,886	6,176	12%
	2005	50,464	5,474	11%
2006	48,919	3,993	8%	
2007	46,872	4,712	10%	
	2008	21,824	2,940	13%
	1985–2008 Averages	37,819	3,830	10%
Spring	1985	NA	NA	NA
	1986	776	240	31%
	1987	4,488	1,548	34%
	1988	8,505	2,931	34%
	1989	2,500	900	36%
	1990	7,100	4,300	61%
	1991	14,000	6,200	44%
	1992	11,200	5,600	50%
	1993	15,800	6,500	41%
	1994	11,300	4,900	43%
	1995	21,700	14,000	65%
	1996	31,000	15,700	51%
	1997	33,200	13,600	41%
1998	19,200	5,000	26%	
1999	21,000	8,800	42%	
2000	21,005	11,300	54%	
2001	28,200	13,700	49%	
2002	37,600	17,400	46%	

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Fishery	Year	Total Harvest	Alaskan Hatcheries	
			Number	Percent
Spring (cont.)	2003	35,429	11,949	34%
	2004	55,169	19,894	36%
	2005	58,665	18,065	31%
	2006	36,918	9,423	26%
	2007	48,596	18,518	38%
	2008	36,620	17,769	48%
1985–2008 Averages		24,348	9,923	42%
Terminal	1985	NA	NA	NA
	1986	NA	NA	NA
	1987	NA	NA	NA
	1988	NA	NA	NA
	1989	900	900	100%
	1990	16	16	100%
	1991	5,900	5,900	100%
	1992	4,100	4,100	100%
	1993	2,800	2,800	100%
	1994	100	100	100%
	1995	1,300	1,300	100%
	1996	16,400	16,400	100%
	1997	9,500	9,500	100%
	1998	1,300	1,300	100%
	1999	2,400	2,400	100%
	2000	8,000	8,000	100%
	2001	7,100	7,100	100%
	2002	6,000	6,000	100%
	2003	3,826	3,826	100%
	2004	1,603	1,603	100%
2005	2,280	2,280	100%	
2006	1,016	1,016	100%	
2007	1,310	1,310	100%	
2008	4,492	4,492	100%	
1985–2007 Averages		4,017	4,017	100%
Hatchery Access	1989	30,500	3,800	12%
	1990	35,000	6,800	19%
	1991	46,500	8,600	18%
	1992	23,600	6,500	28%
1989–1992 Averages		33,900	6,425	19%
General Summer	1985	192,978	6,783	3.5%
	1986	213,997	8,338	3.9%
	1987	209,513	11,712	5.6%
	1988	162,047	8,141	5.0%
	1989	167,500	5,800	3.5%

(Note: Data includes Annette Island troll harvests).

–continued–

Table 19.–Page 3 of 3.

Fishery	Year	Total Harvest	Alaskan Hatcheries	
			Number	Percent
General Summer	1990	211,900	14,300	6.7%
	1991	154,000	6,600	4.3%
	1992	72,600	2,500	3.4%
	1993	145,200	4,900	3.4%
	1994	118,400	5,300	4.5%
	1995	97,200	9,700	10.0%
	1996	84,600	4,800	5.7%
	1997	182,700	4,300	2.4%
	1998	138,700	3,800	2.7%
	1999	94,500	3,700	3.9%
	2000	93,800	6,900	7.4%
	2001	95,400	5,000	5.2%
	2002	252,300	6,400	2.5%
	2003	240,577	7,692	3.2%
	2004	244,978	9,934	4.1%
	2005	227,033	10,294	4.5%
	2006	195,146	6,466	3.3%
	2007	171,475	6,314	3.7%
	2008	88,969	3,897	3.7%
1985–2007 Averages				%
Total	1985	215,803	8,071	4%
	1986	237,701	9,886	4%
	1987	242,529	16,195	7%
	1988	231,001	19,388	8%
	1989	235,716	16,300	7%
	1990	287,939	29,816	10%
	1991	264,106	37,500	14%
	1992	183,759	25,700	14%
	1993	226,866	24,525	11%
	1994	186,331	12,300	7%
	1995	138,117	32,900	24%
	1996	141,452	52,900	37%
	1997	246,409	35,700	14%
	1998	192,066	15,000	8%
	1999	146,219	22,000	15%
	2000	158,717	34,600	22%
	2001	153,280	38,300	25%
	2002	325,308	36,600	11%
2003	330,692	32,147	10%	
2004	354,664	37,607	11%	
2005	338,442	36,113	11%	
2006	281,999	20,898	7%	
2007	268,253	30,854	12%	
	2008	151,906	29,693	44%
1985–2008 Averages		230,803	27,291	13%

Note: Data includes Annette Island troll harvests

Table 20.—Total Chinook salmon harvest and Alaska hatchery harvest by gear, 1985–2007.

Year	Purse Seine		Drift Gillnet		Set Gillnet		Troll		Sport Fish		All Gear	
	Total	Alaska Hatchery	Total	Alaska Hatchery	Total	Alaska Hatchery	Total	Alaska Hatchery	Total	Alaska Hatchery	Total	Alaska Hatchery
1985	21,593	150	10,679	976	1,232	0	215,811	8,071	24,858	3,365	274,173	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	23,543
1988	11,142	320	9,658	4,474	894	0	231,364	19,503	26,160	5,112	279,218	29,409
1989	13,171	2,298	9,948	4,106	798	0	235,716	16,366	31,071	5,859	290,704	28,629
1990	11,389	2,529	15,217	9,240	663	3	287,939	29,834	51,218	11,546	366,426	53,152
1991	13,793	2,618	19,254	11,849	1,747	40	264,106	37,498	60,492	18,022	359,392	70,027
1992	18,339	1,224	11,740	7,484	2,025	10	183,759	25,738	42,892	9,464	258,755	43,920
1993	8,364	1,751	18,280	11,378	1,311	0	226,866	18,226	49,246	8,321	304,067	39,676
1994	14,839	3,201	16,918	11,767	3,897	2	186,331	12,389	42,365	9,083	264,350	36,442
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	20,586	236,259	85,436
1997	10,338	6,223	11,467	4,538	3,264	0	246,409	28,795	71,524	20,275	343,002	59,831
1998	14,503	6,504	6,207	3,903	2,804	0	192,066	12,397	55,013	10,549	270,593	33,353
1999	17,900	11,933	9,712	5,255	5,108	0	146,219	16,935	72,081	22,169	251,020	56,292
2000	22,905	18,401	16,035	11,902	2,460	0	158,717	28,963	63,173	24,510	263,290	83,776
2001	20,439	14,991	17,091	11,968	2,633	0	153,280	28,480	72,291	30,862	265,734	86,301
2002	17,695	11,717	11,484	6,508	2,510	0	325,308	31,647	69,537	27,598	426,534	77,470
2003	24,134	6,911	11,398	8,080	3,842	0	330,692	27,614	69,370	23,547	439,436	66,152
2004	39,633	11,742	21,671	8,482	2,734	0	354,664	37,512	84,581	23,692	503,283	81,428
2005	19,867	6,867	52,481	5,927	717	0	338,442	40,749	84,581	25,081	497,882	119,982
2006	24,967	10,019	46,419	8,918	1,195	0	282,307	22,522	85,794	17,755	431,667	56,692
2007	27,268	12,454	29,146	9,159	1,726	0	268,253	30,854	71,546 ^a	18,210 ^a	397,939	70,677
2008	15,554	12,165	29,764	17,669	844	0	151,906	30,027	38,371	14,204	236,439	74,065

Note: Data includes Terminal area and Annette Island harvests.

^a 2007 sport fish harvest numbers 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, 1960–2008.

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	214,170	214,170	—	—	—	—
1976	524,762	524,762	—	—	—	—
1977	506,845	506,845	—	—	—	—
1978	1,100,902	1,100,902	—	—	—	—
1979	918,845	918,845	—	—	—	—
1980	707,360	704,297	2,876	187	3,063	<1%
1981	862,177	846,088	15,918	171	16,089	2%
1982	1,321,546	1,285,969	35,400	177	35,577	3%
1983	1,279,518	1,227,242	51,709	567	52,276	4%
1984	1,131,936	1,062,327	68,594	1,015	69,609	6%
1985	1,605,953	1,499,661	106,111	181	106,292	7%
1986	2,126,159	1,850,004	268,215	7,940	276,155	13%
1987	1,041,175	950,757	87,074	3,344	90,418	9%
1988	499,819	472,334	25,885	1,600	27,485	5%
1989	1,417,966	1,248,491	165,516	3,959	169,475	12%
1990	1,832,393	1,559,530	249,598	11,913	261,511	14%
1991	1,718,318	1,336,889	366,850	16,002	382,852	22%
1992	1,929,013	1,509,115	402,445	17,552	419,997	22%
1993	2,395,505	2,013,913	365,786	13,545	379,331	16%
1994	3,461,607	2,946,740	501,188	13,331	514,519	15%
1995	1,750,124	1,414,052	328,150	7,864	336,014	19%
1996	1,906,690	1,456,794	438,808	9,360	448,168	24%
1997	1,170,462	927,301	240,590	2,571	243,161	21%
1998	1,636,479	1,306,516	321,821	8,142	329,963	20%
1999	2,272,619	1,772,608	499,966	13,521	513,487	23%
2000	1,124,854	876,142	241,844	6,868	248,712	22%
2001	1,843,997	1,472,073	368,538	3,386	371,924	20%
2002	1,310,060	973,893	339,962	1,161	341,123	26%
2003	1,220,782	936,969	282,939	2,759	285,526	23%
2004	1,915,007	1,606,041	304,337	4,629	308,966	16%
2005	2,035,783	1,703,640	327,908	4,235	332,143	16%
2006	1,360,256	1,144,770	214,654	832	215,486	16%
2007	1,376,737	1,072,328	303,582	827	304,409	22%
2008	1,273,710	1,014,460	258,293	957	259,250	20%
Avg. 1980–1989	1,199,361	1,114,717	82,730	1,914	84,644	7%
Avg. 1989–2008	1,747,619	1,414,614	326,139	7,171	333,301	19%

Note: Data includes Annette Island troll harvest.

Table 22.—Estimates of total escapements of Chinook salmon to escapement indicator systems and to Southeast Alaska and transboundary rivers, 1975–2008.

Year	MAJOR SYSTEMS				MEDIUM SYSTEMS								SMALL SYSTEMS	TOTAL ALL SYSTEMS	Expanded Region Total
	Elsek	Taku	Stikine	Major Subtotal	Situk	Chilkat	Andrew	Unuk	Chickamin	Blossom	Keta	Medium Subtotal	King Salmon		
1975		12,917	7,571				508		1,758	439	611		64		
1976	5,765	24,575	5,723	36,063	1,421		404		745	205	253		99		
1977	10,496	29,489	11,445	51,430	1,732		456	4,870	1,722	337	692	9,810	204	61,444	73,147
1978	11,754	17,118	6,835	35,707	808		388	5,530	1,465	430	1,180	9,801	87	45,595	54,280
1979	18,670	21,611	12,610	52,891	1,284		327	2,880	1,133	162	1,283	7,069	134	60,093	71,540
77–79 Avg.	13,640	22,740	10,297	46,676	1,275		390	4,427	1,440	310	1,052	8,893	141	55,711	66,322
1980	8,077	39,229	30,573	77,879	905		282	5,080	2,112	268	578	9,225	106	87,210	103,821
1981	8,327	49,546	36,057	93,929	702		536	3,655	1,824	478	990	8,186	153	102,268	121,748
1982	9,174	23,842	40,488	73,504	434		672	6,755	2,712	1,038	2,270	13,881	393	87,778	104,498
1983	11,028	9,792	6,424	27,243	592		366	5,625	2,847	1,772	2,475	13,676	245	41,165	49,006
1984	7,494	20,774	13,995	42,263	1,726		389	9,185	5,235	1,528	1,836	19,899	265	62,427	74,318
1985	5,758	35,906	16,672	58,336	1,521		625	5,920	4,541	2,133	1,879	16,618	175	75,129	89,439
1986	9,981	38,100	15,478	63,559	2,067		1,383	10,630	8,289	3,844	2,077	28,291	255	92,105	109,649
1987	11,395	28,928	25,607	65,929	1,379		1,540	9,865	4,631	4,058	2,312	23,785	196	89,910	107,036
1988	8,227	44,512	39,040	91,778	868		1,102	8,730	3,734	1,155	1,731	17,320	208	109,306	130,126
1989	9,105	40,329	25,243	74,676	637		1,036	5,745	4,437	1,035	3,477	16,366	240	91,283	108,670
80–89 Avg	8,856	33,096	24,958	66,910	1,083		793	7,119	4,036	1,731	1,963	16,725	224	83,858	99,831
1990	8,794	52,142	23,514	84,449	628		1,298	2,955	2,679	773	1,824	10,157	179	94,785	112,839
1991	12,722	51,645	24,124	88,491	889	5,897	782	3,275	2,313	719	819	14,694	134	103,319	114,798
1992	5,519	55,889	35,479	96,887	1,595	5,284	1,520	4,370	1,644	451	653	15,517	99	112,503	125,004
1993	12,688	66,125	61,295	140,108	952	4,472	2,071	5,340	1,848	911	1,090	16,684	266	157,058	174,509
1994	12,312	48,368	34,403	95,083	1,271	6,795	1,118	4,623	1,843	484	921	17,055	213	112,351	124,834
1995	25,322	33,805	17,448	76,575	4,330	3,790	670	3,860	2,309	653	527	16,139	147	92,861	103,179
1996	14,443	79,019	28,949	122,411	1,800	4,920	655	5,835	1,587	662	894	16,352	292	139,055	154,506
1997	12,697	114,938	26,996	154,631	1,878	8,100	478	2,970	1,292	397	741	15,856	361	170,848	189,831
1998	4,969	31,039	25,968	61,976	924	3,675	952	4,132	1,857	364	446	12,350	134	74,460	82,733
1999	13,617	19,734	19,947	53,298	1,461	2,271	1,182	3,914	2,337	638	968	12,771	304	66,373	73,747
90–99 Avg	12,308	55,270	29,812	97,391	1,573	5,023	1,073	4,127	1,971	605	888	14,758	213	112,361	125,598

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Table 22.–Page 2 of 2.

Year	MAJOR SYSTEMS				MEDIUM SYSTEMS								SMALL SYSTEMS	TOTAL ALL SYSTEMS	Expanded Region Total
	Alsek	Taku	Stikine	Major Subtotal	Situk	Chilkat	Andrew	Unuk	Chickamin	Blossom	Keta	Medium Subtotal	King Salmon		
2000	6,835	30,529	27,531	64,895	1,785	2,035	1,348	5,872	3,805	695	913	16,453	138	81,486	90,540
2001	6,111	42,980	63,523	112,614	656	4,517	2,060	10,541	5,177	614	1,033	24,597	149	137,360	152,622
2002	5,396	52,409	50,875	108,680	1,000	4,050	1,712	6,988	5,007	674	1,237	20,668	155	129,503	143,892
2003	4,782	36,435	46,824	88,041	2,117	5,657	1,163	5,546	4,579	611	969	20,642	118	108,801	120,890
2004	6,995	68,199	48,900	124,094	755	3,422	2,998	3,963	4,268	734	1,132	17,272	135	141,501	157,223
2005	4,462	38,806	40,501	83,769	613	3,366	1,979	4,742	4,257	926	1,496	17,379	143	101,291	112,546
2006	1,883	41,831	24,400	68,114	749	3,039	2,124	5,645	6,318	1,270	2,248	21,393	150	89,657	99,618
2007	2,618	17,516	16,038	36,172	677	1,378	1,736	5,718	4,242	406	936	15,093	181	51,446	57,162
2008	1,939	24,121	21,900	47,960	413	3,233	981	3,053	5,159	774	1,093	14,706	120	62,786	69,762
00–07 Ave	4,885	39,203	37,832	81,593	974	3,411	1,789	5,785	4,707	745	1,229	18,689	143	100,426	111,584
Change from 2007 to 2008															
Number	-679	6,605	5,862	11,788	-264	1,855	-755	-2,665	917	368	157	-387	-61	11,340	12,600
Percent	-36%	16%	24%	17%	-35%	61%	-36%	-47%	15%	29%	7%	-2%	-41%	13%	13%
Goals^a:															
Lower	5,500	30,000	14,000	49,500	450	1,750	650	3,250	2,326	750	750	9,926	120	59,546	66,162
Point	8,500	36,000	17,500	62,000	730	2,200	750	4,000	3,490	1,125	1,125	13,420	150	75,570	83,967
Upper	11,500	55,000	28,000	94,500	1,050	3,500	1,500	7,000	4,653	1,500	1,500	20,703	240	115,443	128,270

Note: Bold numbers in table are weir counts or mark–recapture estimates. Other numbers are index escapements expanded for survey counting rates and unsurveyed tributaries.

^aTotal Escapement goals for Alsek, Unuk, Chickamin, Blossom and Keta have not been agreed on. Numbers for those 5 are just expanded index goals for comparison.

Table 23.—Escapement goal performance for indicator coho salmon streams in Southeast Alaska. E = exceeded goal, U = under goal, I = within goal, NA = no escapement estimate available.

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<u>Southeast Alaska Area</u>																	
Auke Cr.	E	E	E	I	E	E	E	E	E	E	E	E	I	I	E	I	E
Berners R.	E	E	E	I	I	E	I	E	E	E	E	E	E	I	I	U	I
Ford Arm L.	E	E	E	I	I	E	E	E	I	I	E	E	E	E	E	I	E
Hugh Smith L.	E	I	E	E	I	I	I	E	I	E	E	E	I	E	I	E	E
Chilkat River	E	E	E	E	I	I	I	E	E	E	E	E	E	I	E	U	I
Montana Cr.	E	E	E	I	I	I	I	I	I	I	E	I	U	U	I	U	I
Petersen Cr.	E	I	E	E	E	I	I	E	I	I	I	I	E	I	E	I	E
Sitka Index	E	E	E	E	E	E	E	I	E	E	E	E	E	E	E	E	E
Ketchikan Index	I	I	E	E	E	I	I	I	E	E	E	E	E	E	I	I	E
<u>Yakutat Area</u>																	
Lost R.	I	I	E	I	I	I	NA	NA	NA	NA	E	E	I	U	I	I	NA
Situk R.	E	E	E	I	I	I	NA	NA	NA	NA	E	I	E	U	I	I	NA
Tsiu/Tsivat R.	E	I	E	I	I	I	NA	NA	I	NA	E	NA	NA	I	I	I	I
All-Gear Commercial Harvest (in Millions)	3.4	3.6	5.5	3.1	3.0	1.8	2.8	3.3	1.7	3.0	2.5	2.2	2.9	2.8	1.8	1.9	2.1

Table 24.—Escapement estimates for 4 Southeast Alaska coho salmon indicator stocks, 1980–2008.

Year	Auke Creek	Berners River	Ford Arm Lake	Hugh Smith Lake
1980 ^a	698	N/A	N/A	N/A
1981 ^a	646	N/A	N/A	N/A
1982	447	7,505	2,662	2,144
1983	694	9,840	1,938	1,490
1984	651	2,825	N/A	1,408
1985	942	6,169	2,324	903
1986	454	1,752	1,546	1,783
1987	668	3,260	1,694	1,118
1988	756	2,724	3,028	513
1989	502	7,509	2,177	433
1990	697	11,050	2,190	870
1991	808	11,530	2,761	1,826
1992	1,020	15,300	3,847	1,426
1993	859	15,670	4,202	830
1994	1,437	15,920	3,228	1,753
1995	460	4,945	2,445	1,781
1996	515	6,050	2,500	950
1997	609	10,050	4,965	732
1998	862	6,802	7,049	983
1999	845	9,920	3,598	1,246
2000	683	10,650	2,287	600
2001	842	19,290	2,178	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	1,224
2008	600	6,870	5,173	1,741
Average 1980–2007	700	9,447	3,425	1,302
Escapement Goal				
Range:	200–500	4,000–9,200	1,300–2,900	500–1,100

^a Years when no escapement assessment occurred are indicated by "N/A".

Table 25.—Northern Inside area coho salmon escapements, 1981–2008.

Year	Auke Creek (Weir)	Montana Creek	Peterson Creek	Total Roadside Index	Berners River	Chilkat River	Taku River
1981	646	227	219	2,198			
1982	447	545	320	1,992	7,505		
1983	694	636	219	1,981	9,840		
1984	651	581	189	1,963	2,825		
1985	942	810	276	2,408	6,169		
1986	454	60	363	1,341	1,752		
1987	668	314	204	1,613	3,260	37,237	55,457
1988	756	164	542	1,883	2,724	29,341	39,450
1989	502	566	242	1,743	7,509	48,578	56,808
1990	697	1,711	324	3,215	11,050	79,807	72,196
1991	808	1,415	410	3,449	11,530	84,076	127,484
1992	1,020	2,512	403	5,425	15,300	77,184	84,853
1993	859	1,352	112	3,210	15,670	57,913	109,457
1994	1,437	1,829	318	4,353	15,920	193,411	96,343
1995	460	600	277	1,865	4,945	56,441	55,710
1996	511	798	263	1,802	6,050	37,136	44,635
1997	609	1,018	186	2,080	10,050	43,292	32,345
1998	862	1,160	102	2,378	6,802	50,758	61,382
1999	845	1,000	272	2,607	9,920	56,842	60,844
2000	683	961	202	2,038	10,650	88,157	64,700
2001	842	1,119	106	2,602	19,290	108,131	104,460
2002	1,112	2,448	195	5,655	27,700	205,429	219,360
2003	585	808	203	2,174	10,110	134,340	183,038
2004	416	364	284	1,253	14,450	67,113	132,405
2005	450	351	139	1,177	5,220	38,504	91,830
2006	582	1,110	439	2,131	5,470	80,658	140,028
2007	352	324	226	902	3,915	25,149	49,632
Average	700	918	261	1,878	9,447	57,376	85,575
2008	600	405	660	1,665	6,870	57,376	49,632
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	

Table 26.—Sitka area coho salmon escapement index, 1982–2008.

Year	Starrigavan Creek	Sinitzin Creek	St. John's Creek	Nakwasina River	Eagle River	Black River	Ford Arm Lake (Weir)	Total Index
1982	317	46	<i>116</i>	<i>577</i>	<i>482</i>	<i>749</i>	2,662	4,950
1983	45	31	20	217	<i>143</i>	<i>427</i>	1,938	2,821
1984	385	160	154	715	<i>645</i>	425	4,232	6,716
1985	193	144	109	408	<i>390</i>	1,628	2,324	5,196
1986	57	<i>73</i>	<i>53</i>	275	245	312	1,546	2,561
1987	36	21	<i>22</i>	47	167	262	1,694	2,249
1988	45	56	71	104	<i>126</i>	280	3,028	3,710
1989	101	76	89	129	<i>180</i>	181	2,177	2,933
1990	39	80	38	195	214	842	2,190	3,598
1991	142	186	107	621	454	690	2,761	4,961
1992	241	265	110	654	629	866	3,847	6,612
1993	256	213	90	<i>644</i>	513	764	4,202	6,682
1994	304	313	227	404	717	758	3,228	5,951
1995	274	152	99	626	336	1,265	2,445	5,197
1996	59	150	201	553	488	500	2,500	4,451
1997	55	90	68	300	296	686	4,965	6,460
1998	123	109	57	653	300	1,520	7,049	9,811
1999	167	48	27	291	<i>243</i>	1,590	3,598	5,964
2000	144	62	30	459	108	880	2,287	3,970
2001	133	132	80	703	417	1,080	2,178	4,723
2002	227	169	100	713	659	1,194	7,109	10,171
2003	95	102	91	440	373	1,055	6,789	8,945
2004	143	112	79	399	391	380	3,539	5,043
2005	76	67	173	892	460	160	4,257	6,085
2006	386	152	121	996	992	1,100	4,737	8,484
2007	130	39	86	385	426	745	2,567	4,378
Average	161	117	93	477	400	782	3,456	5,485
2008	96	73	43	839	66	500	5,173	6,790

Note: 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, 1987–2008.

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
1987	92	<i>88</i>	154	<i>62</i>	<i>387</i>	<i>98</i>	<i>304</i>	<i>145</i>	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	<i>282</i>	<i>72</i>	<i>35</i>	<i>105</i>	<i>139</i>	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	<i>85</i>	420	60	<i>371</i>	<i>94</i>	<i>292</i>	175	140	1,143	571	759	732	32	847	5,795
1998	94	130	460	120	304	50	411	190	<i>255</i>	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	<i>212</i>	891	450	173	1,561	<i>1,612</i>	1,956	1,580	506	<i>1,704</i>	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	<i>197</i>	875	39	690	57	1,140	380	<i>427</i>	1,940	1,934	1,980	1,615	214	1,745	13,474
2004	150	<i>230</i>	801	170	935	250	640	180	<i>455</i>	1,005	1,200	1,835	840	1,230	823	10,744
2005	510	<i>300</i>	1,240	360	890	190	810	270	<i>500</i>	3,680	3,290	1,130	1,732	500	1,170	16,572
2006	165	<i>124</i>	190	176	280	30	405	130	<i>272</i>	2,300	645	335	891	260	1,600	7,803
2007	134	<i>75</i>	298	35	245	15	290	210	<i>171</i>	990	970	351	1,224	3	<i>701</i>	5,712
Average	152	137	554	106	565	137	462	215	291	1,183	1,192	1,311	1,245	463	1,179	9,192
2008	115	55	570	25	1,250	23	420	100	613	7,100	2,524	925	1,741	2,600	360	18,421

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

Table 28.—Overall coho salmon percentage exploitation rates by indicator stock for the Alaska troll fishery and all fisheries combined, 1982–2008.

Year	Auke Lake	Berners River	Ford Arm Lake	Hugh Smith Lake	Weighted Average
Troll Fishery:					
1982	20	42	41	46	37
1983	31	50	54	35	43
1984	34			31	39
1985	35	45	51	36	42
1986	43	55	61	35	49
1987	37	53	45	28	41
1988	25	40	48	27	35
1989	48	53	62	50	53
1990	43	44	56	39	46
1991	17	18	53	37	31
1992	32	33	56	38	40
1993	38	39	62	53	48
1994	35	37	60	46	44
1995	32	31	48	30	35
1996	39	44	53	40	44
1997	12	16	48	48	31
1998	31	44	49	41	41
1999	34	40	59	42	44
2000	24	25	57	36	35
2001	31	28	68	22	37
2002	18	17	38	17	22
2003	23	24	31	24	26
2004	27	32	64	41	41
2005	33	37	51	32	38
2006	22	26	40	37	31
2007	25	34	66	40	41
2008	30	27	41	19	29
1982–2007 Avg.	30	36	53	37	39
All Fisheries:					
1982	40	76	44	65	56
1983	44	71	69	62	61
1984	41			65	58
1985	44	75	51	63	58
1986	53	93	62	60	67
1987	43	77	48	52	55
1988	37	82	49	66	59
1989	55	62	65	82	66
1990	53	67	58	81	65
1991	31	67	54	68	55

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Table 28.–Page 2 of 2.

Year	Auke Lake	Berners River	Ford Arm Lake	Hugh Smith Lake	Weighted Average
1992	46	67	59	71	60
1993	46	68	67	81	65
1994	53	78	72	81	71
1995	44	83	67	74	67
1996	55	75	58	76	66
1997	20	35	51	72	45
1998	39	71	56	77	61
1999	41	70	64	70	61
2000	30	51	72	55	52
2001	38	40	75	49	51
2002	27	45	53	39	41
2003	35	65	49	59	52
2004	44	56	71	66	59
2005	37	59	58	53	52
2006	33	66	52	53	51
2007	34	54	71	61	55
2008	39	51	53	52	49
1982–2007 Avg.	41	66	60	66	58

FIGURES

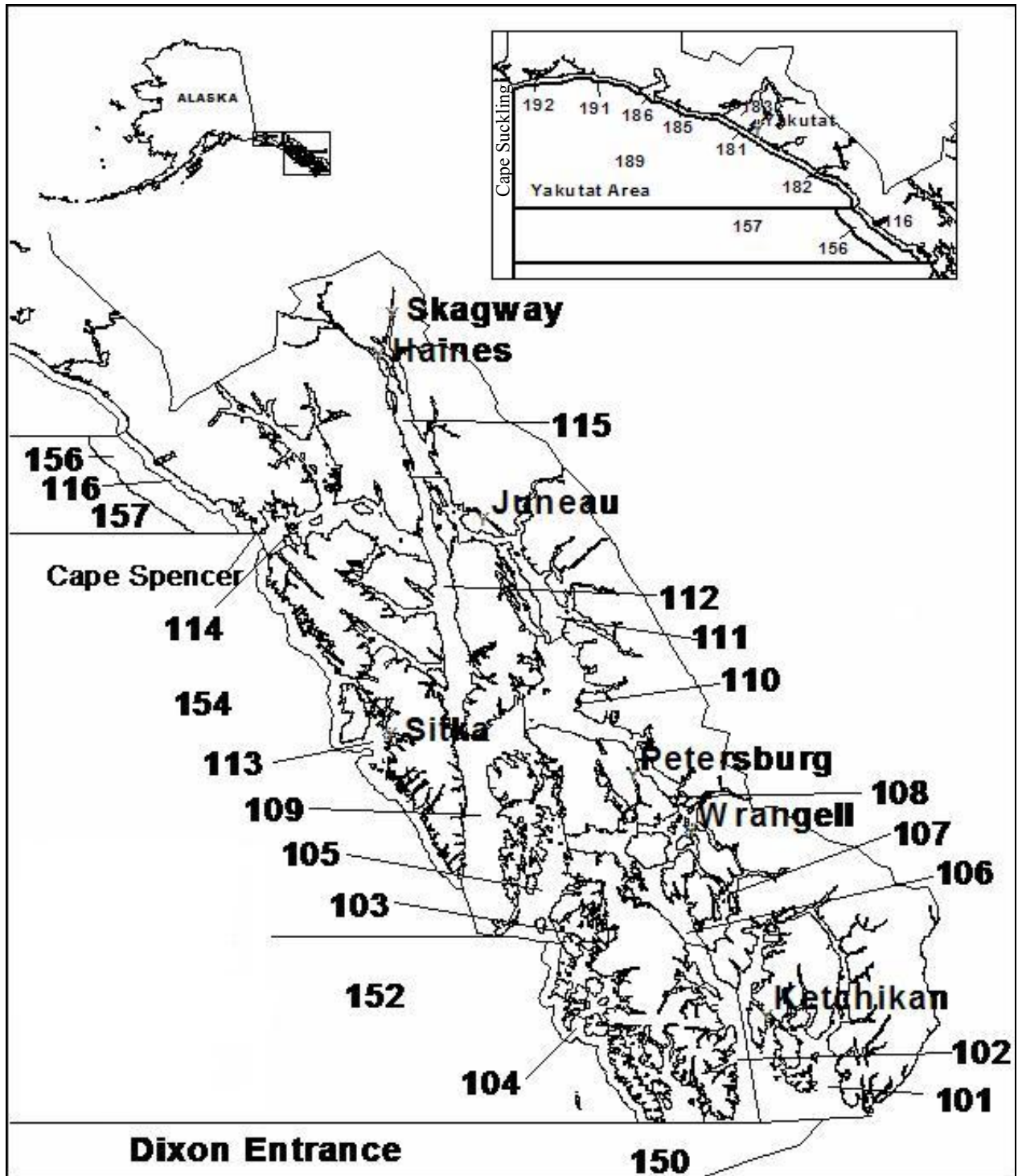


Figure 1.—Map of Southeast Alaska Region 1 commercial troll fishing districts.

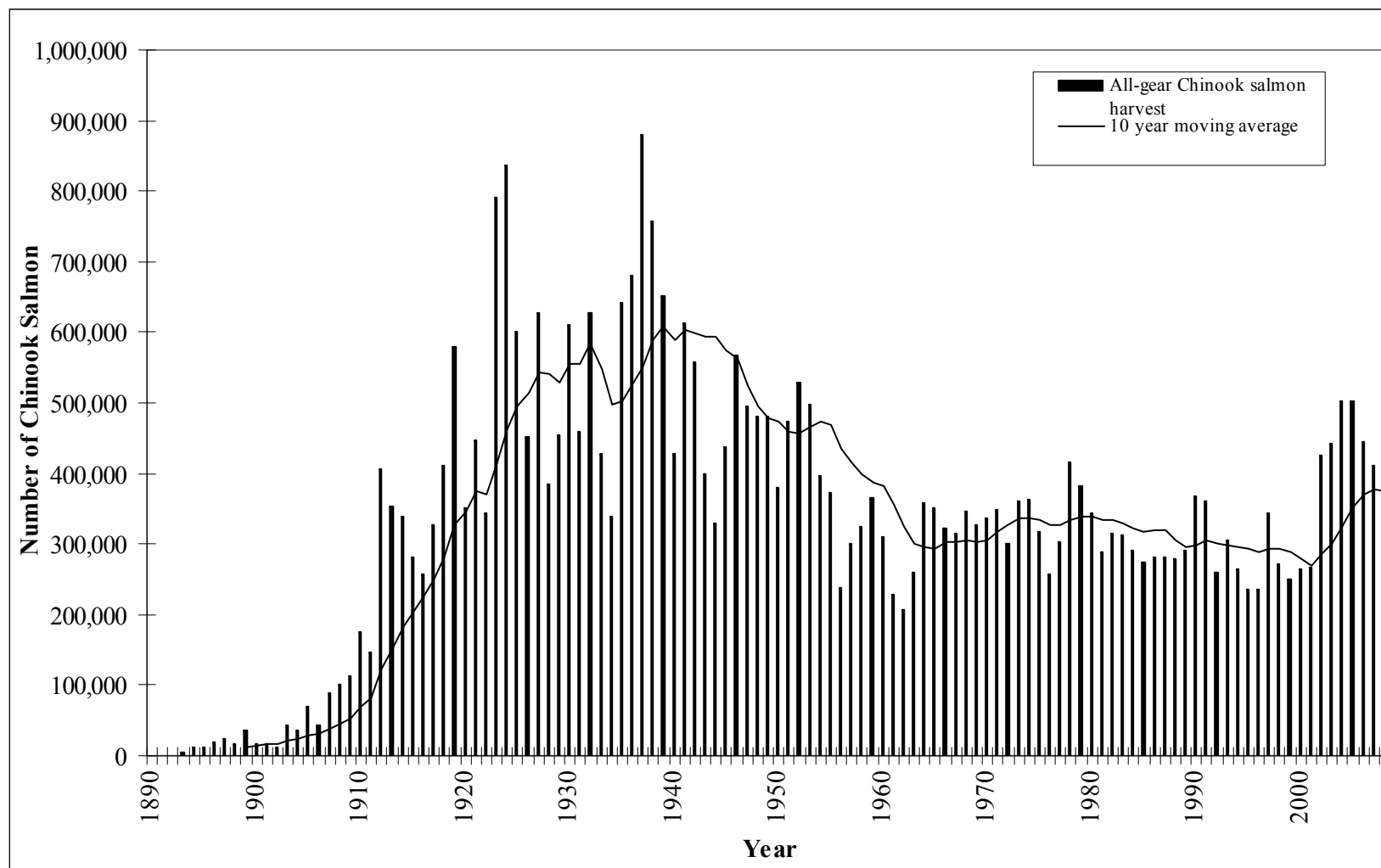


Figure 2.—All-gear harvests of Chinook salmon in common property fisheries, 1890–2008.

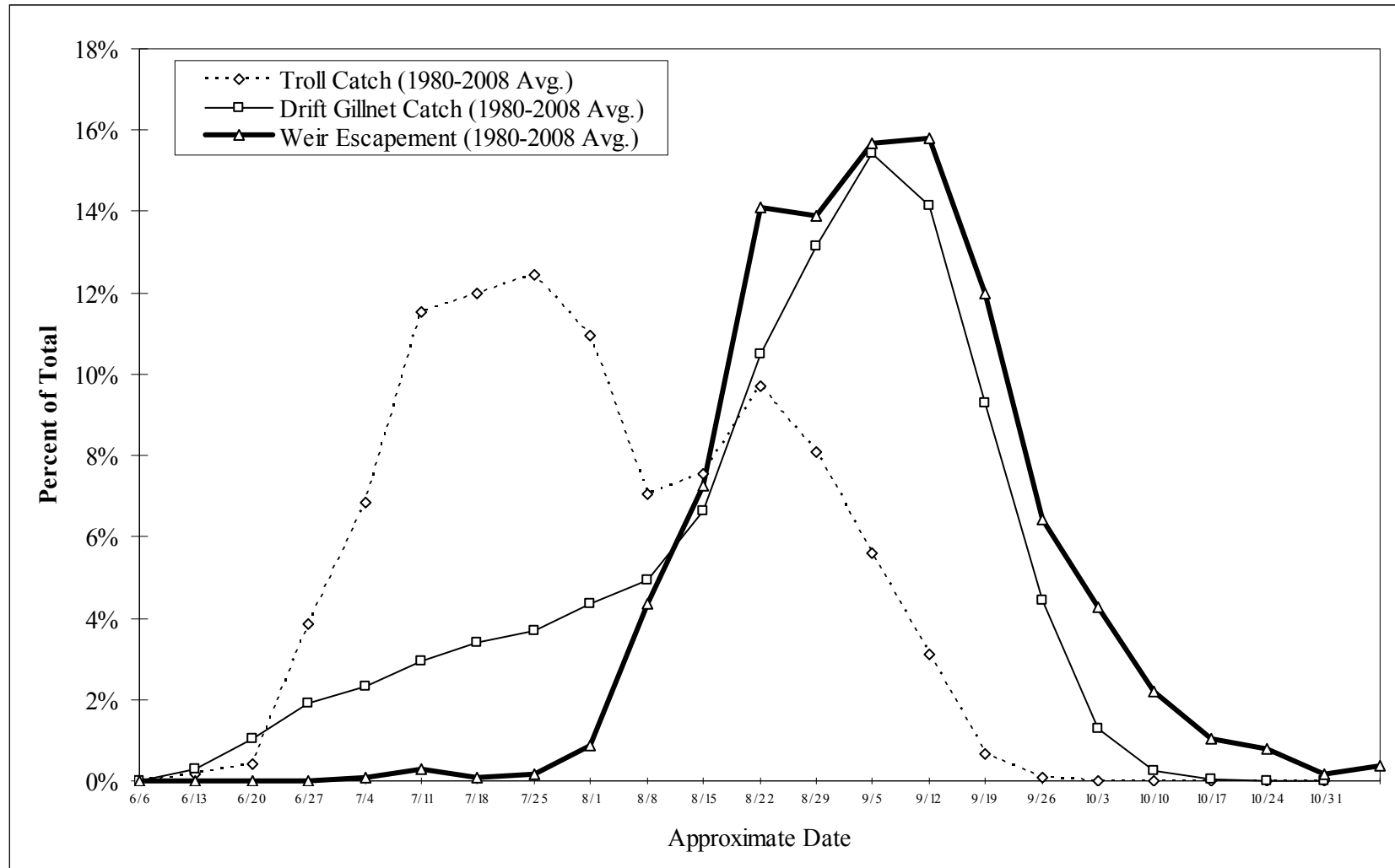


Figure 3.—Average weekly coho harvest timing of the Southeast Alaska commercial troll and drift gillnet fisheries (1980–2008), and the average weekly coho salmon escapement timing of the Hugh Smith Lake, Ford Arm Lake and Auke Creek weirs (1980–2008).

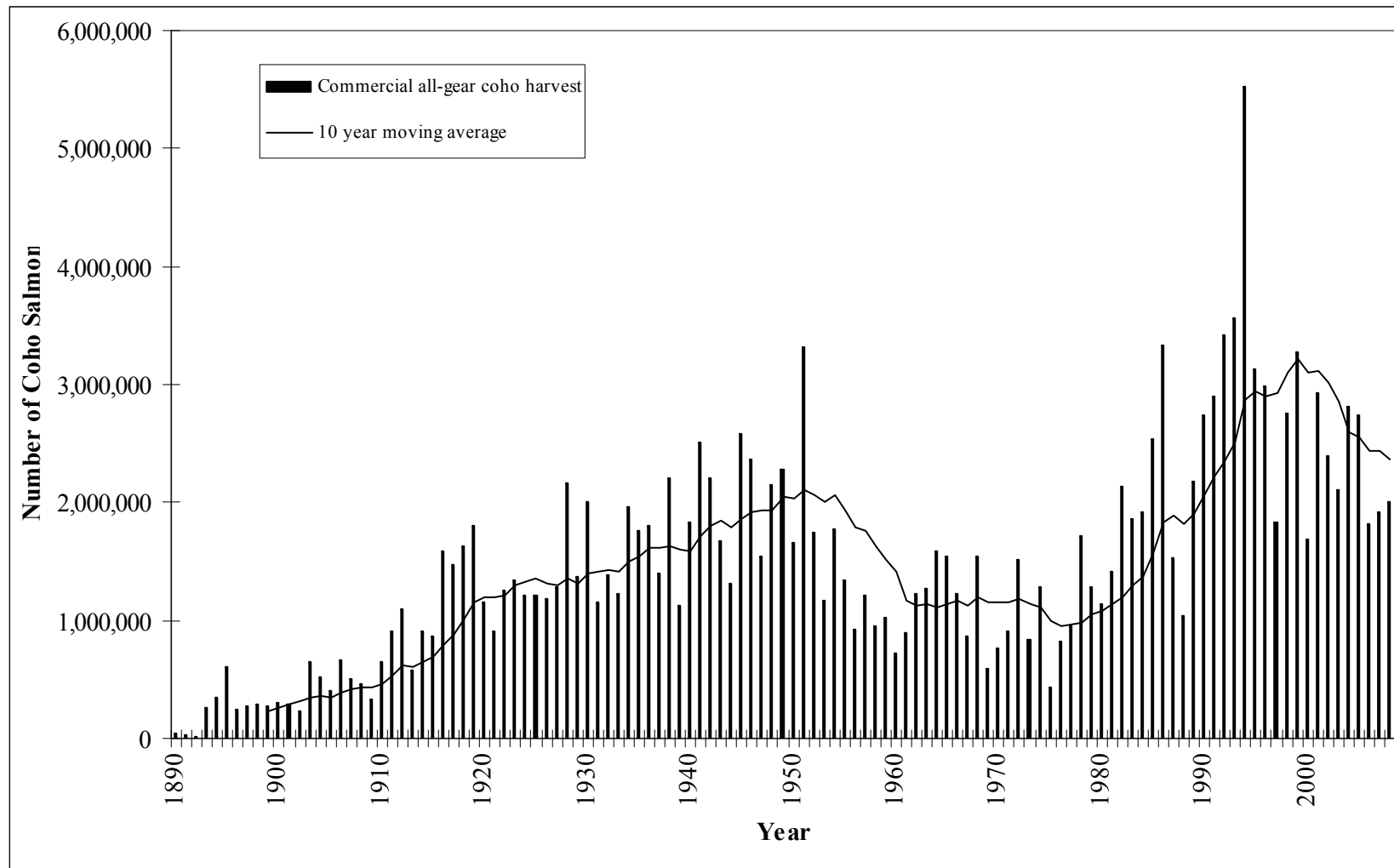


Figure 4.—Commercial all-gear harvests of coho salmon in common property fisheries, 1890–2008.

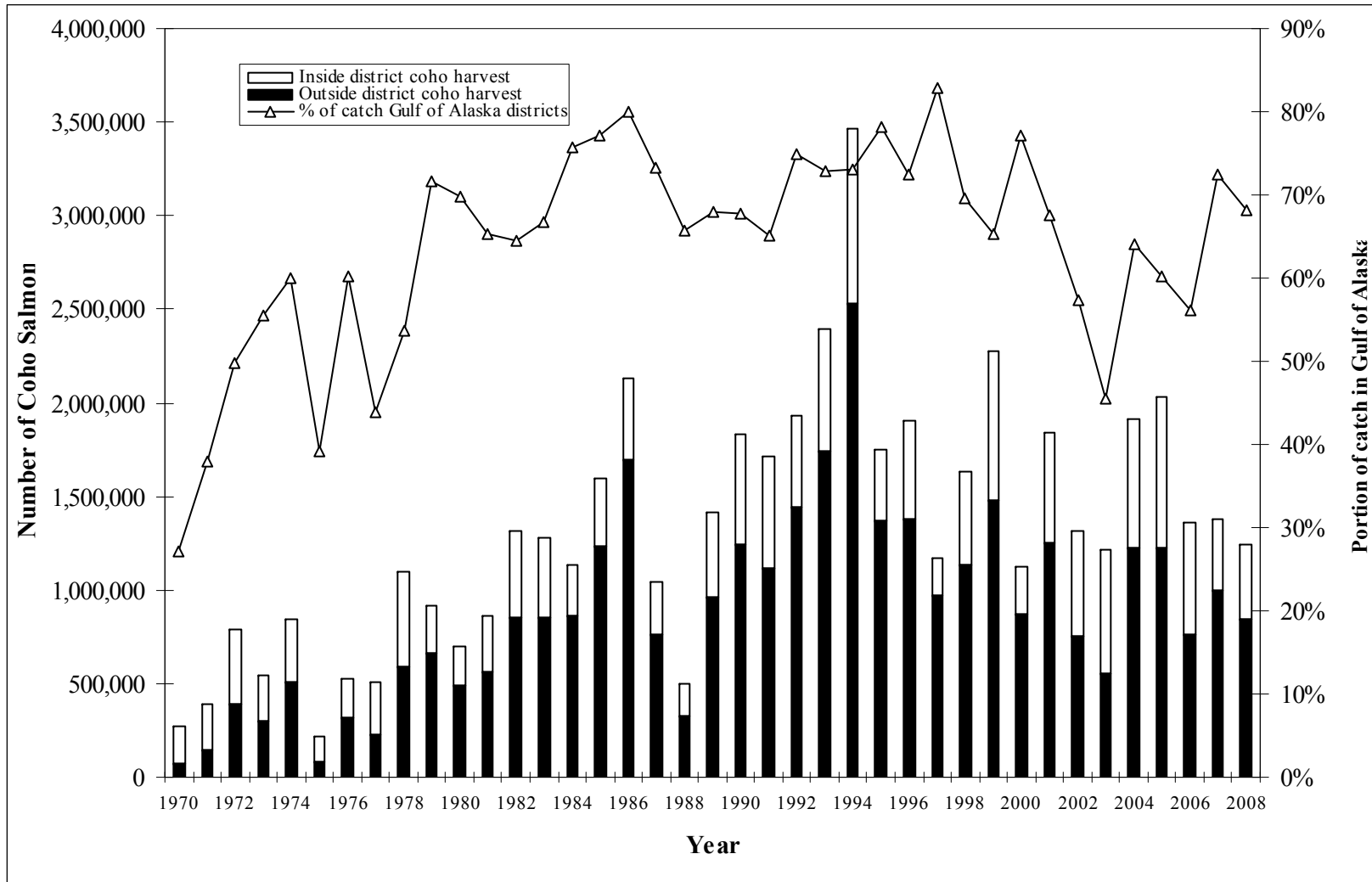


Figure 5.—Southeast Alaska troll coho salmon harvest in the outside (Gulf of Alaska) districts, the inside districts and the percentage of harvest taken in the outside districts, 1970–2008.

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.

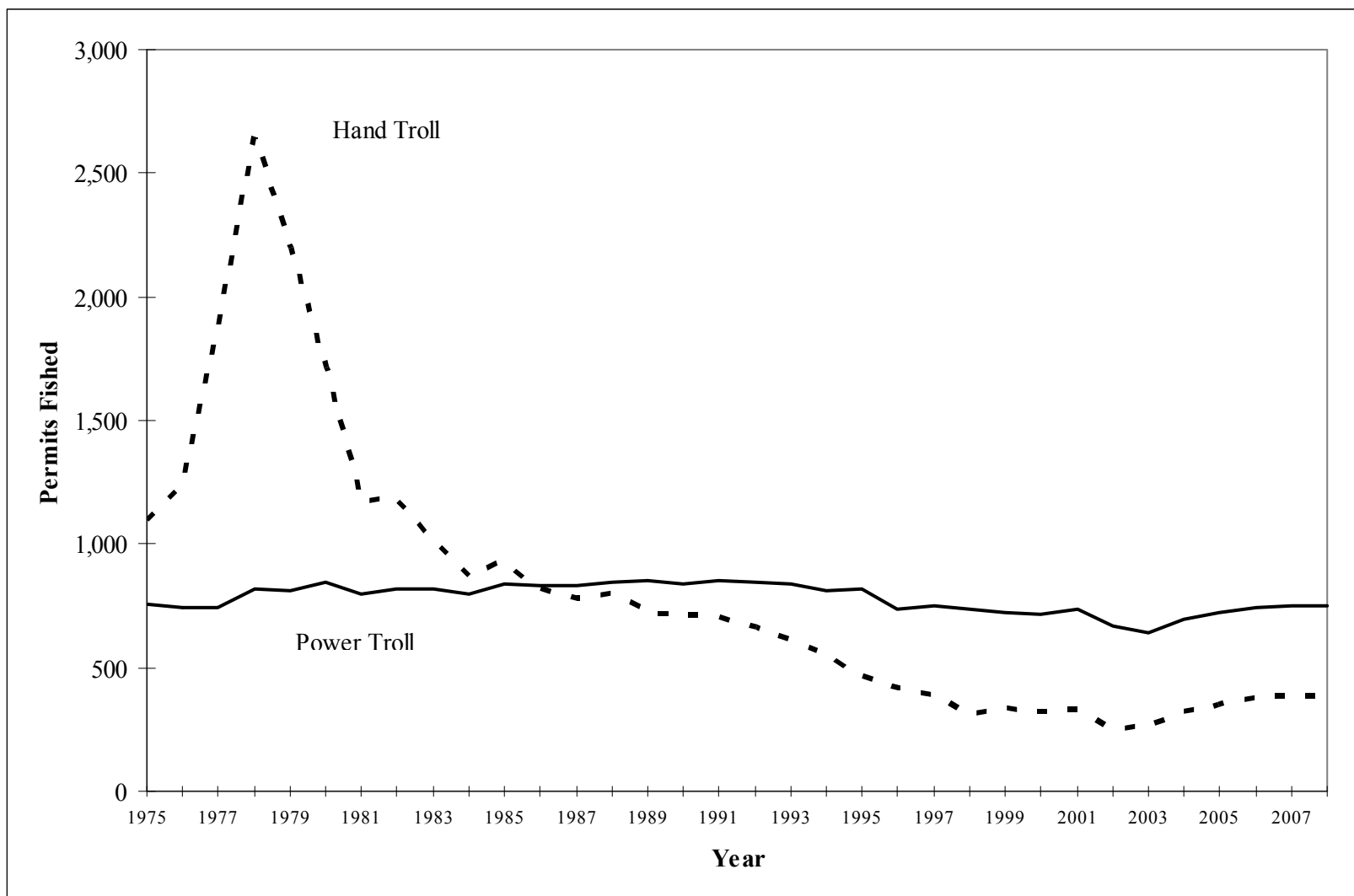


Figure 6.—Number of troll permits fished by gear type, 1975–2008.

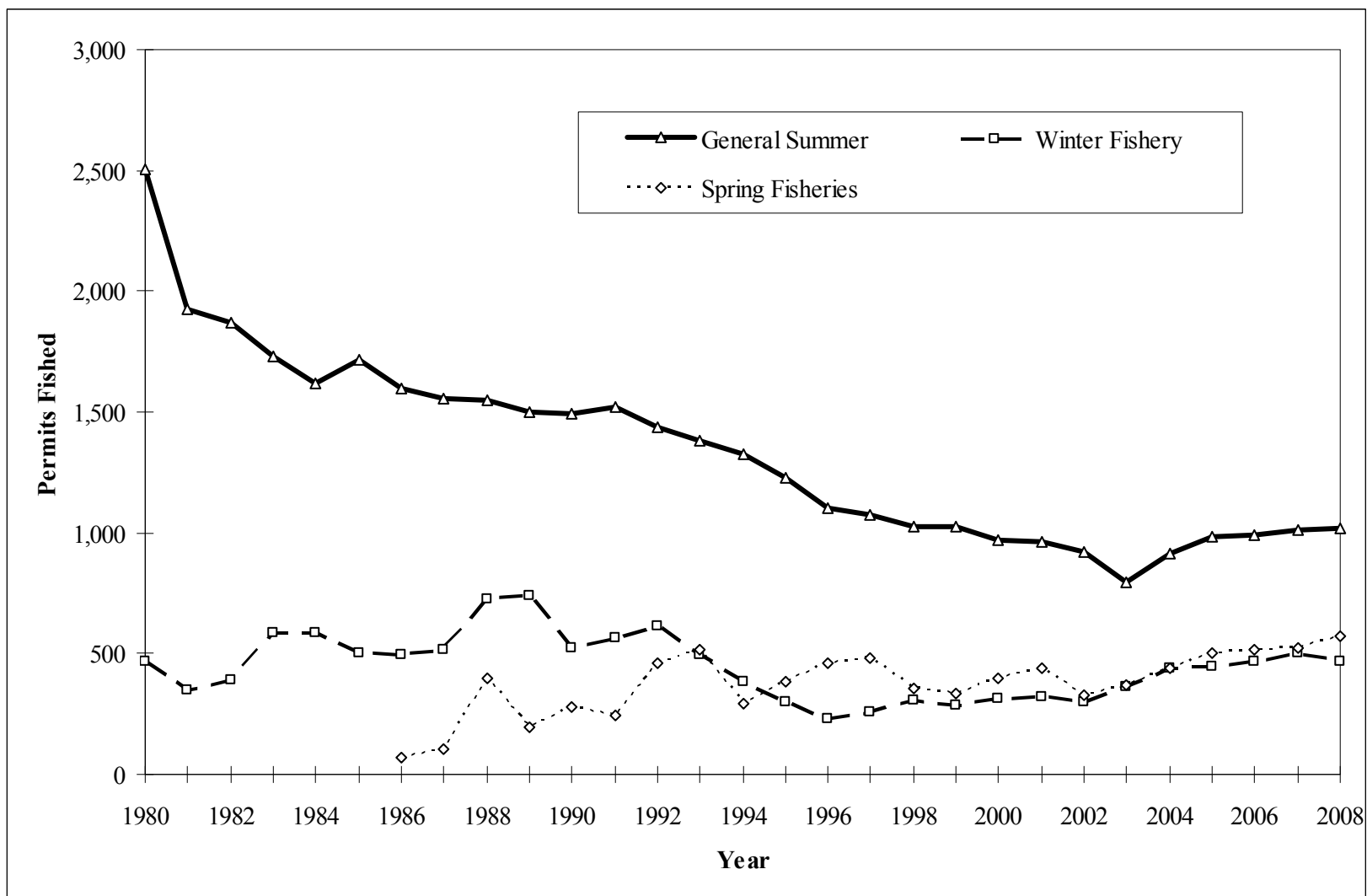


Figure 7.—Number of troll permits fished in the general summer, winter, and spring fisheries, 1980–2008.

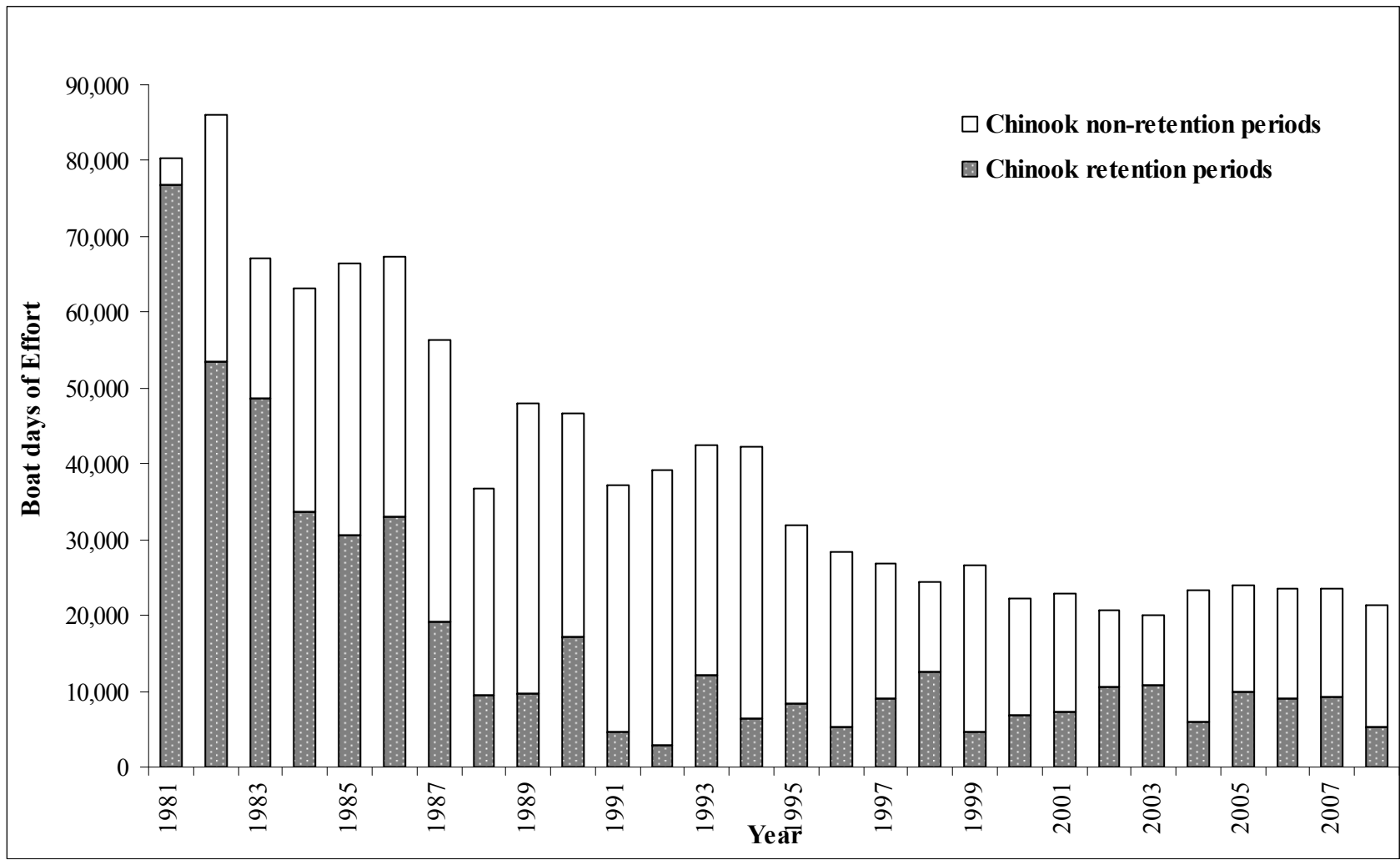


Figure 8.—General summer troll fishery boat-days of effort during Chinook retention and Chinook non-retention fishing periods, 1981–2008.

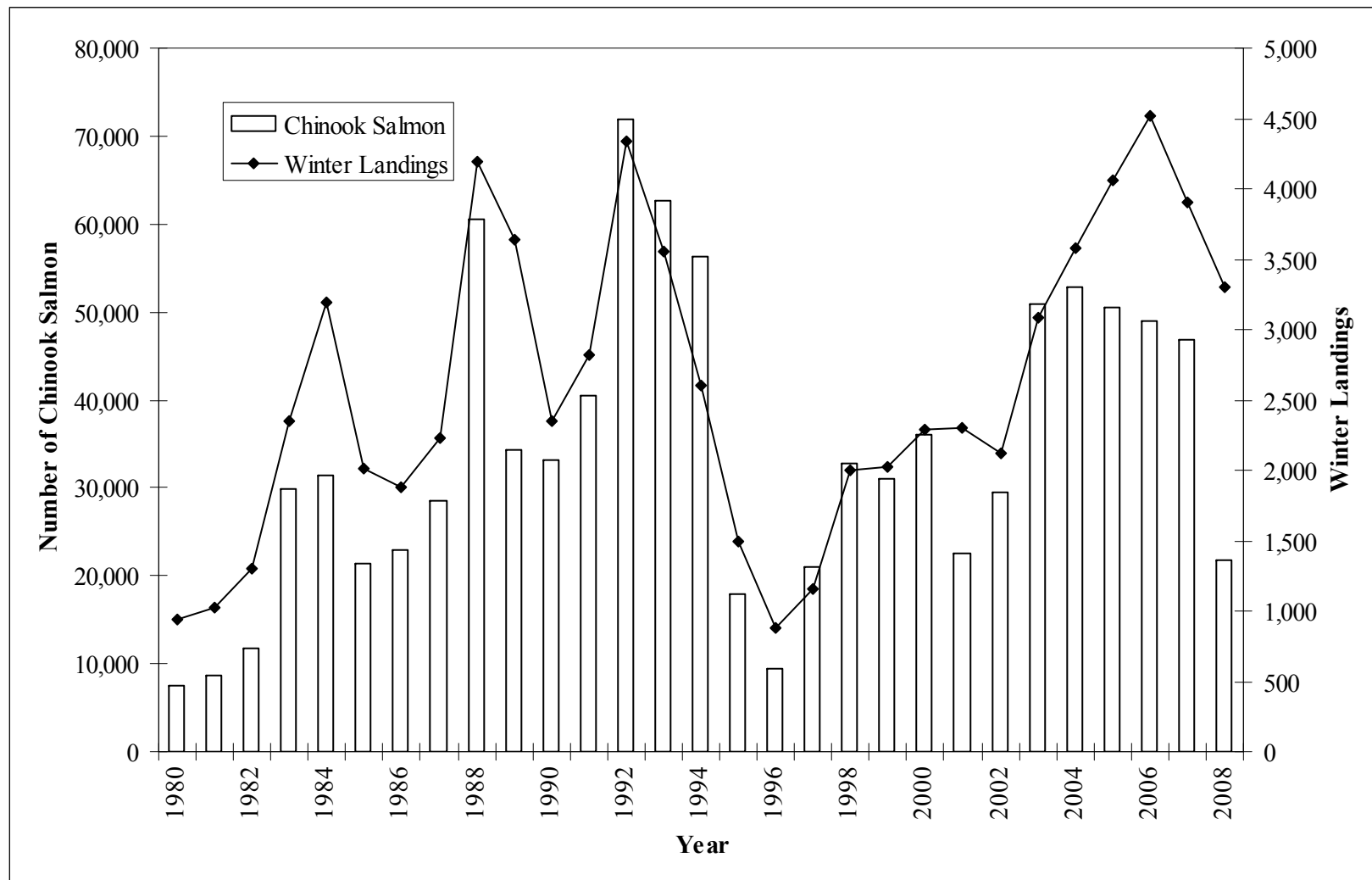


Figure 9.—Southeast Alaska winter troll fishery Chinook salmon harvests and landings, 1980–2008.

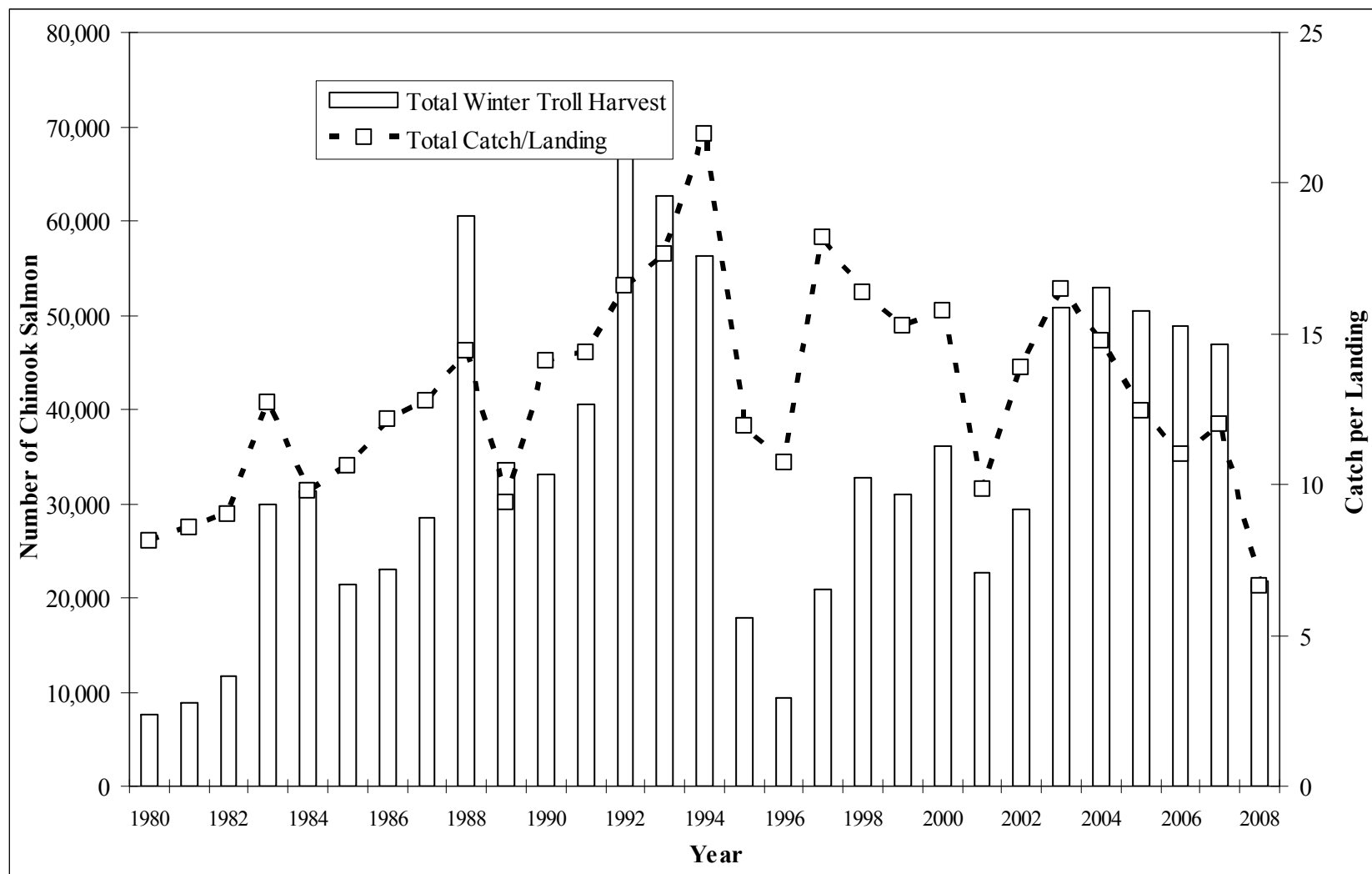


Figure 10.—Southeast Alaska winter troll harvest and catch per landing for troll gear, 1980–2008.

Spring Troll Fishing Areas 2008

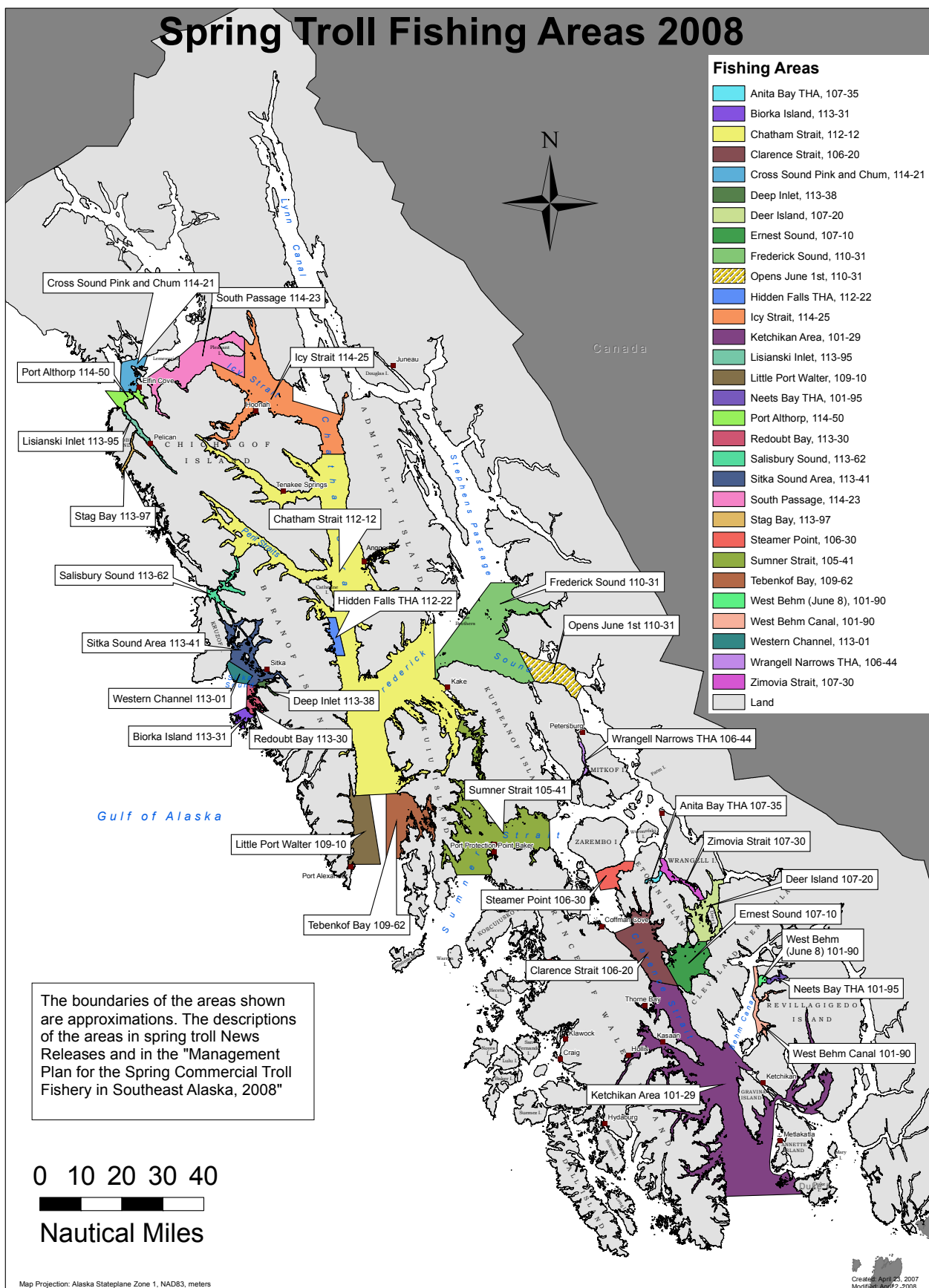


Figure 11.—Map of spring troll areas. Shaded areas were open in 2008.

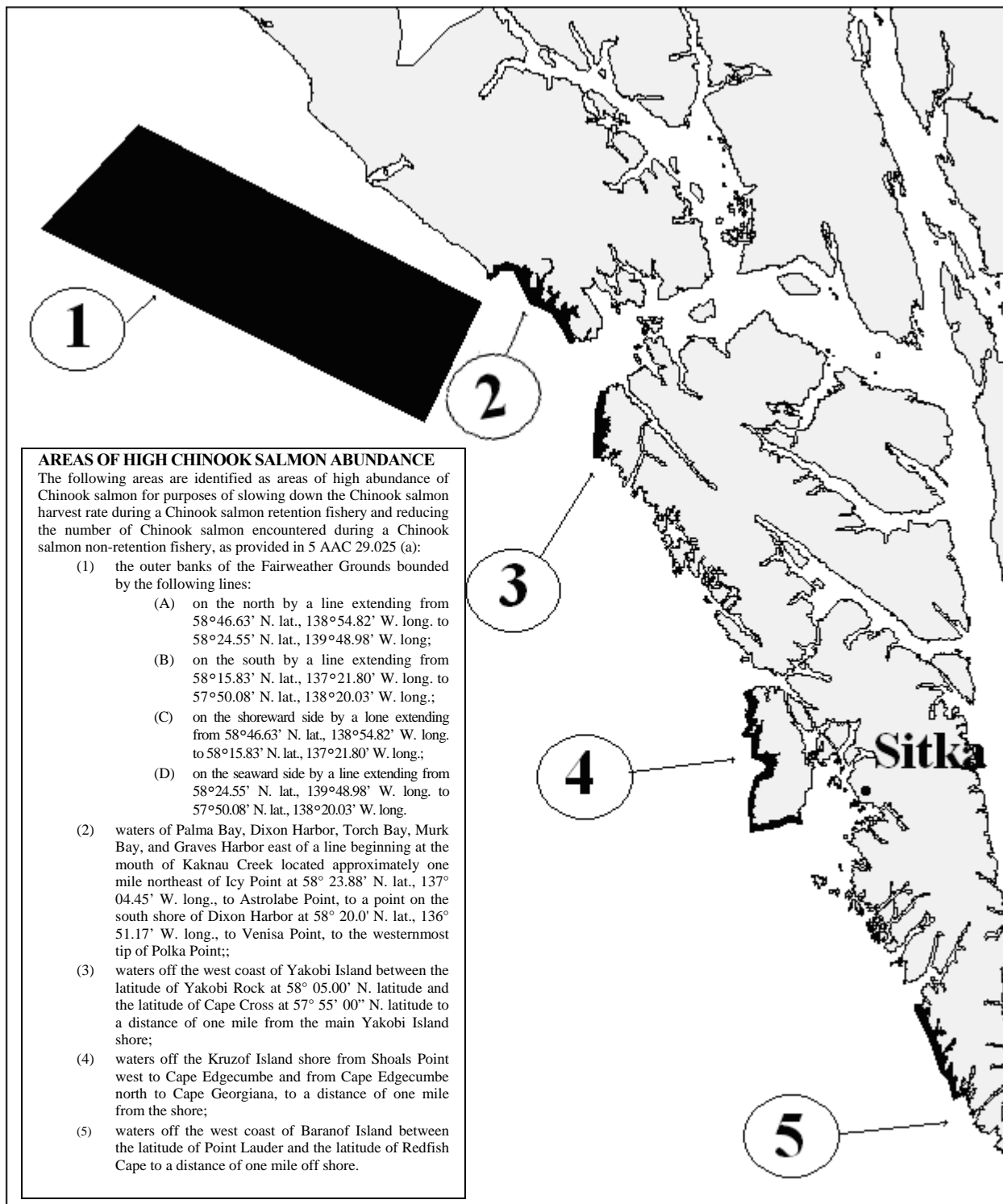


Figure 12.—Map of closed areas of high Chinook salmon abundance (shaded areas).

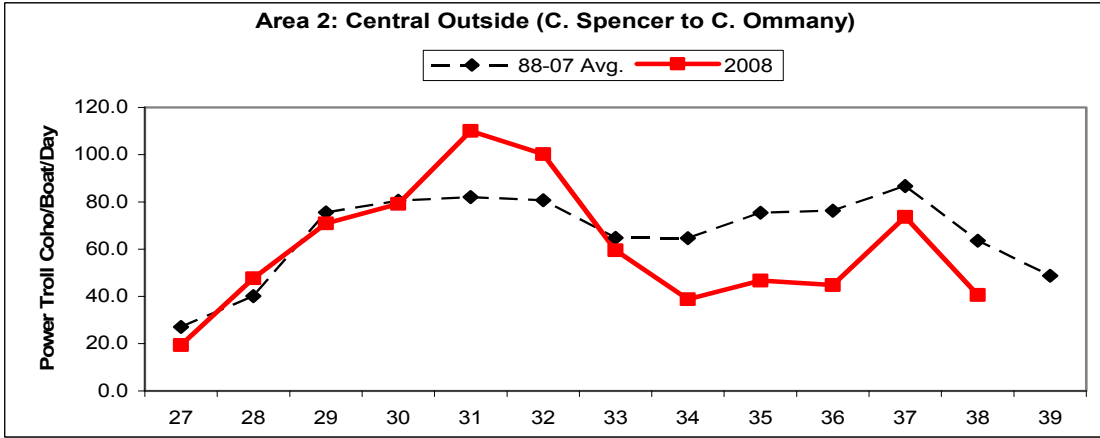
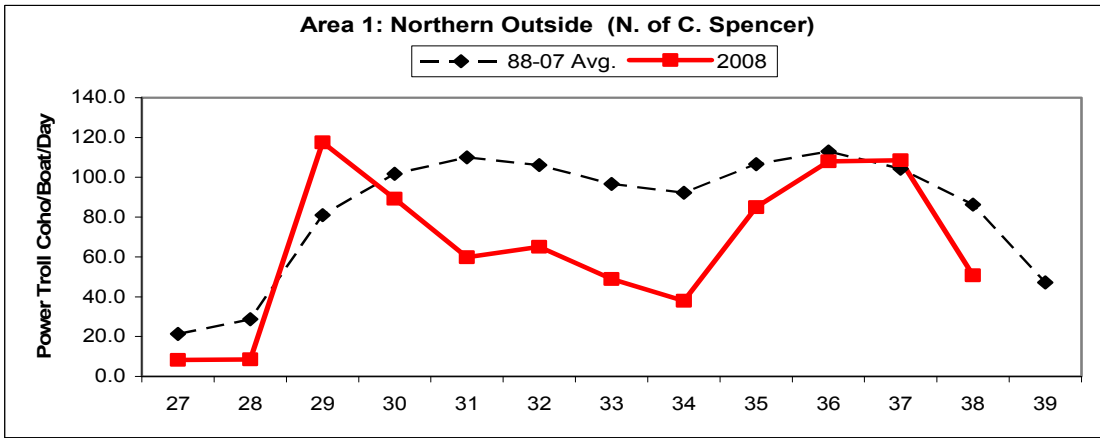
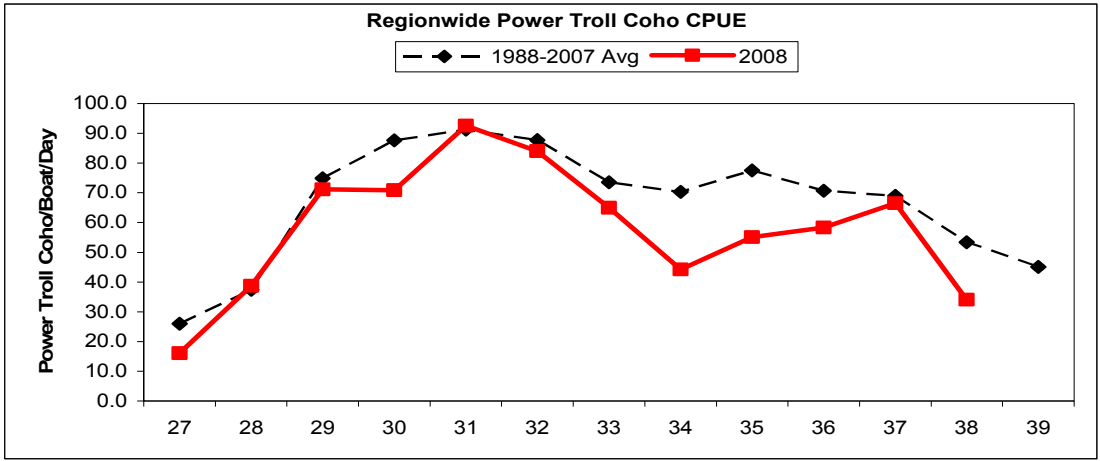


Figure 13.—Average power troll coho salmon harvest per boat day for Southeast Alaska, by area, for 2008 and the 1988–2007 average.

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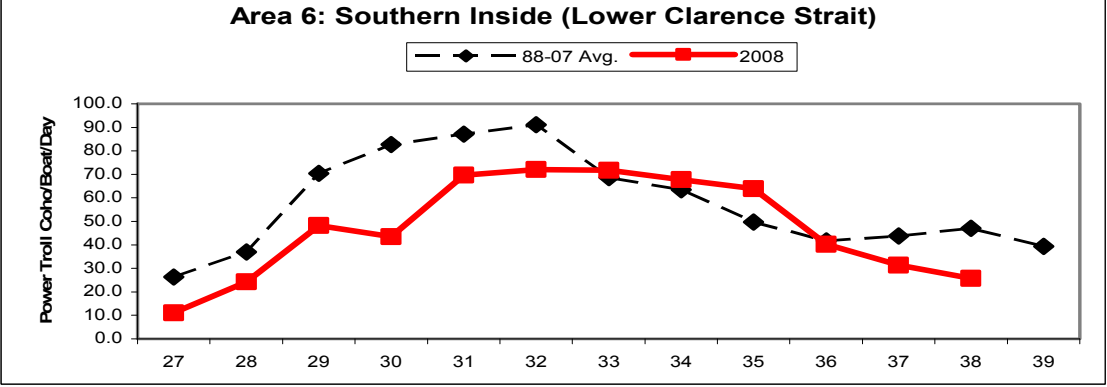
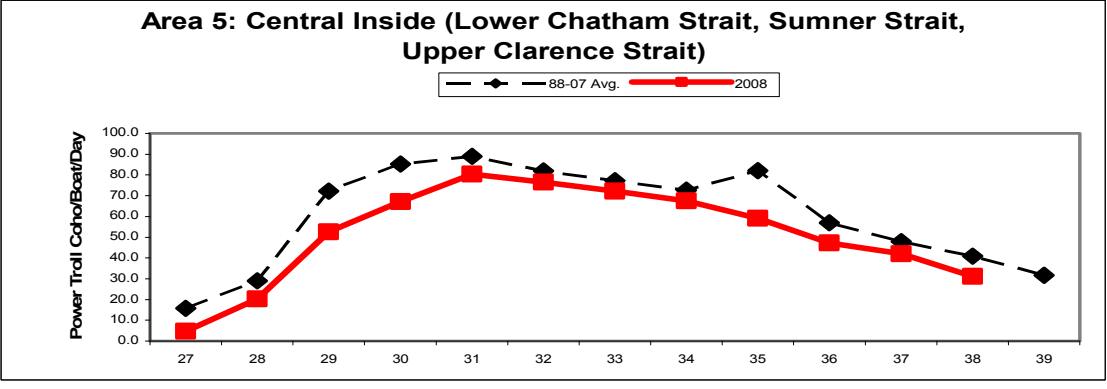
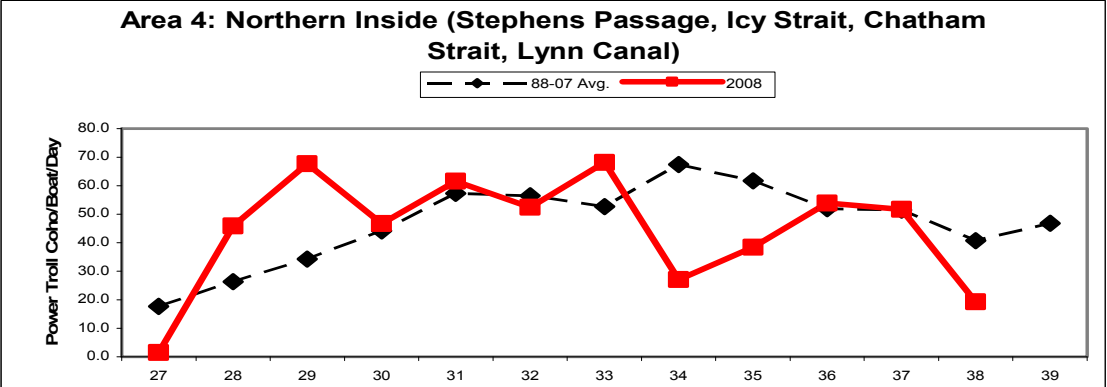
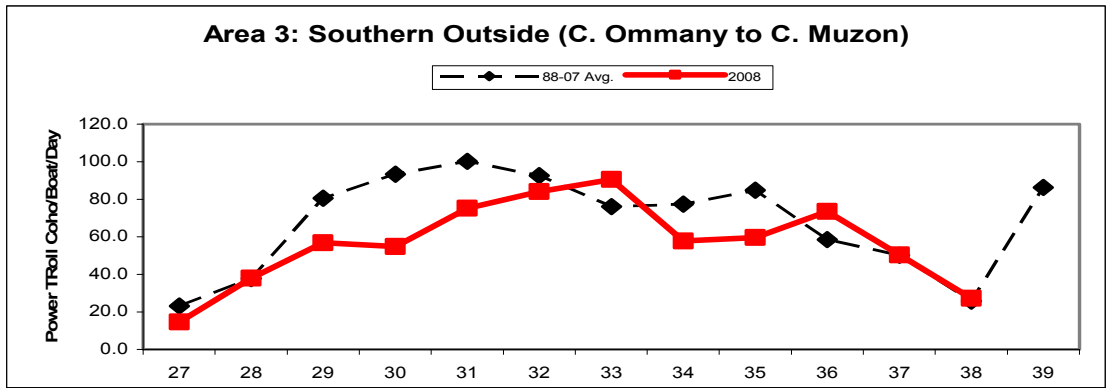
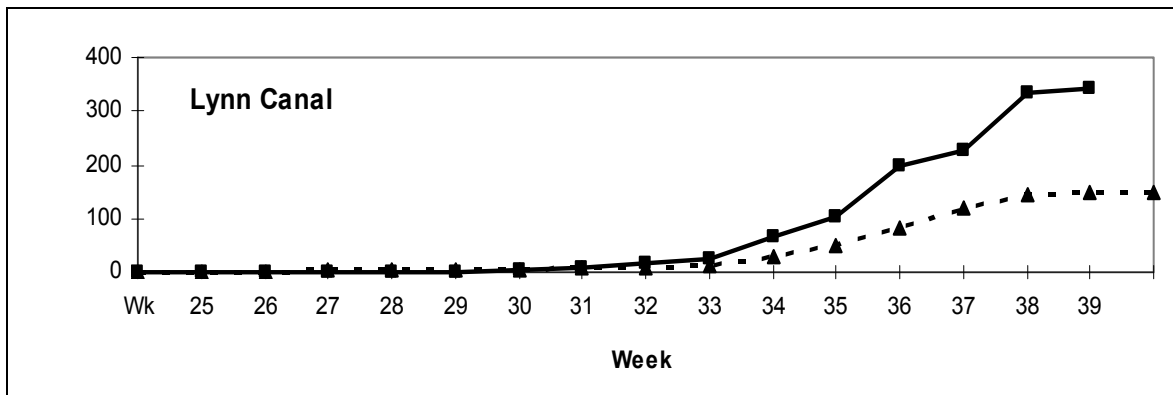
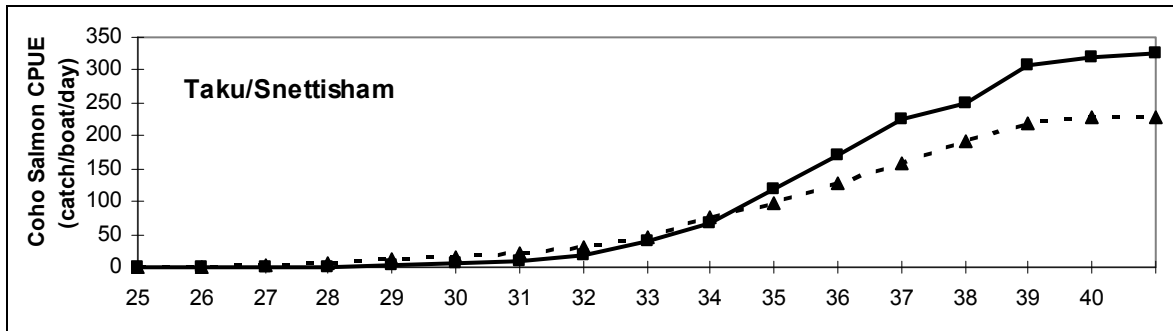
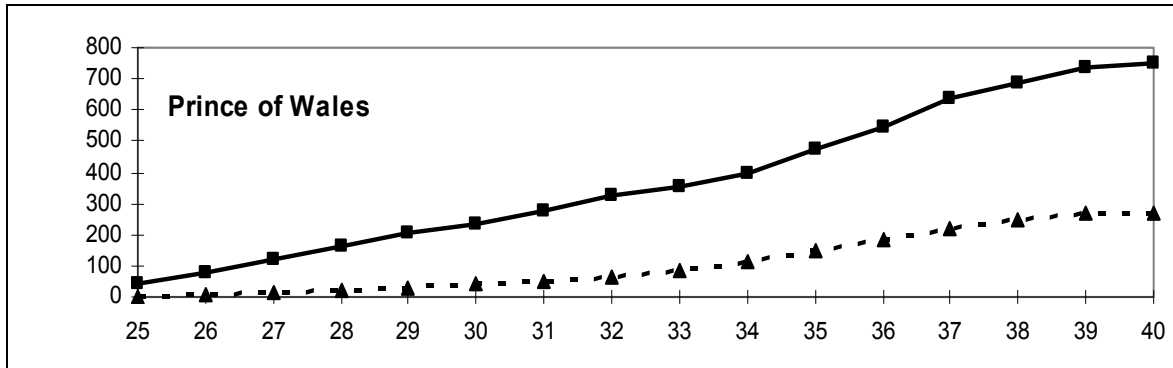
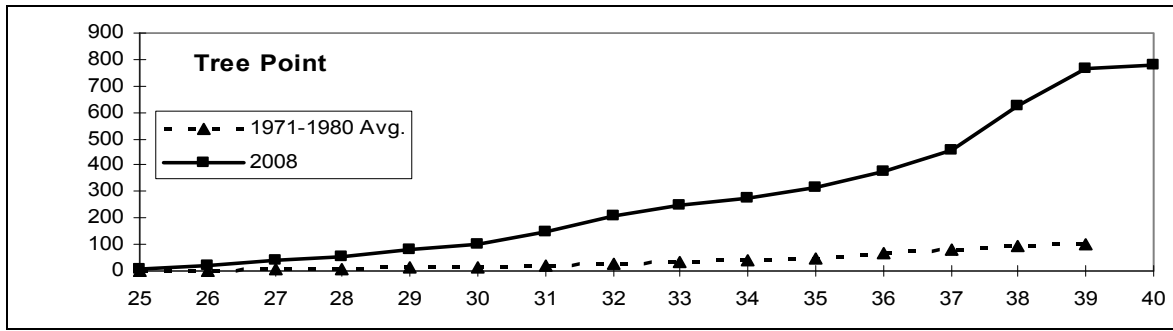


Figure 13.—Page 2 of 2.



Statistical Week

Figure 14.—Cumulative coho salmon harvest-per-boat-day for the 4 indicator drift gillnet fisheries and the Juneau marine sport fishery, for 2008 and the 1971–1980 average.

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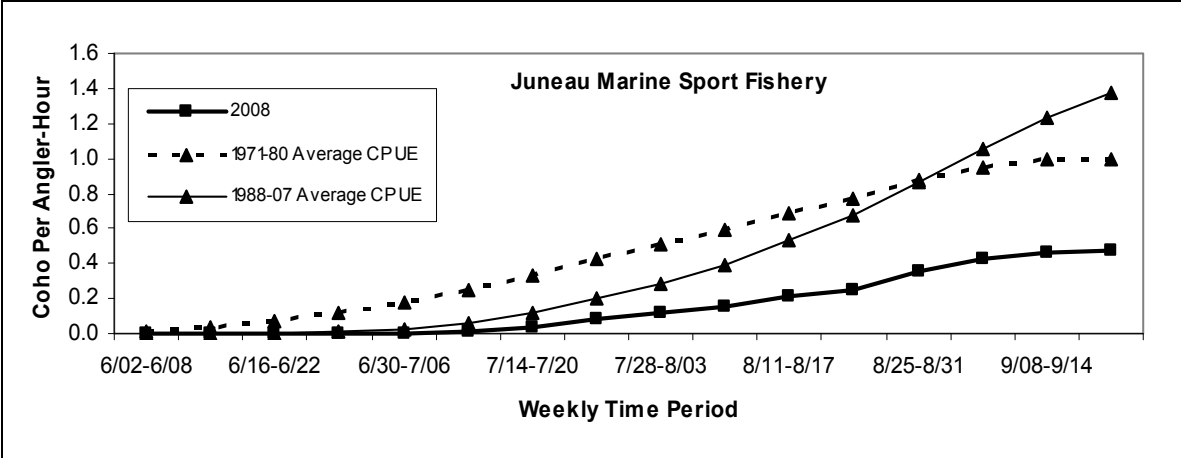


Figure 14.–Page 2 of 2.

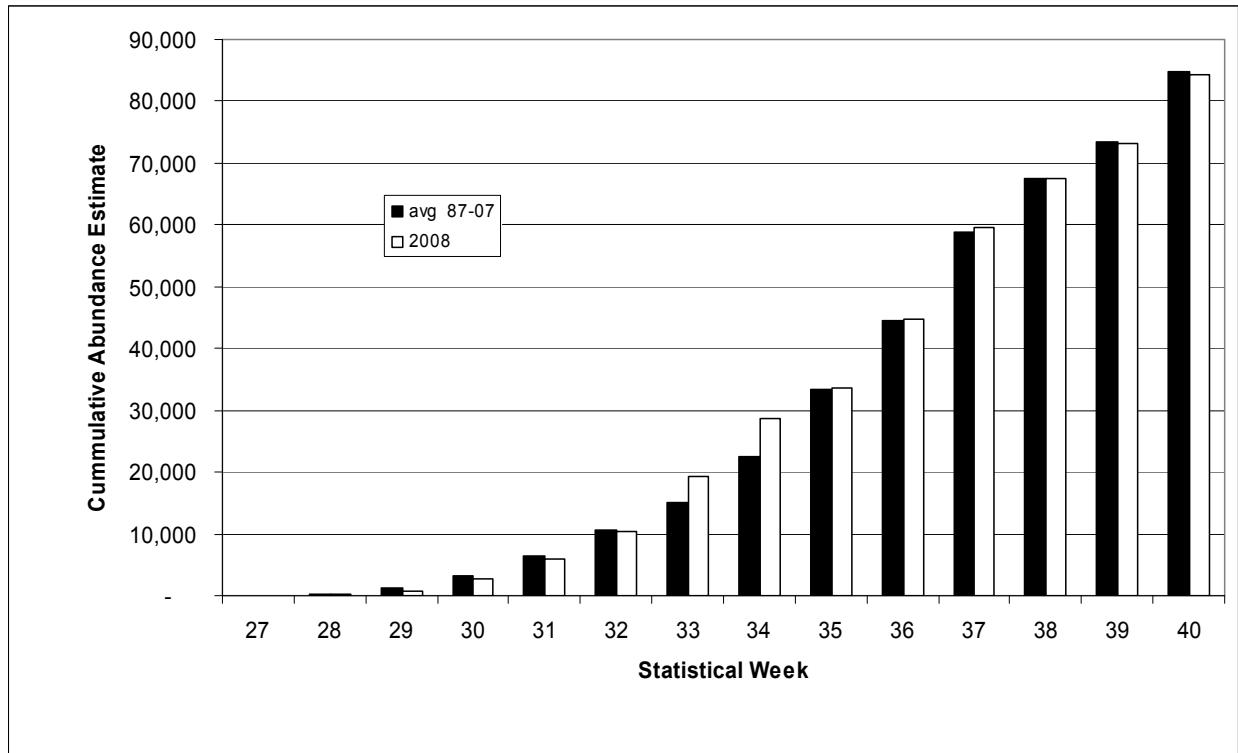


Figure 15.—Cumulative mark-recapture abundance estimate for Taku River coho salmon from Canyon Island fish wheels, for 2008 and the 1987–2007 average.

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

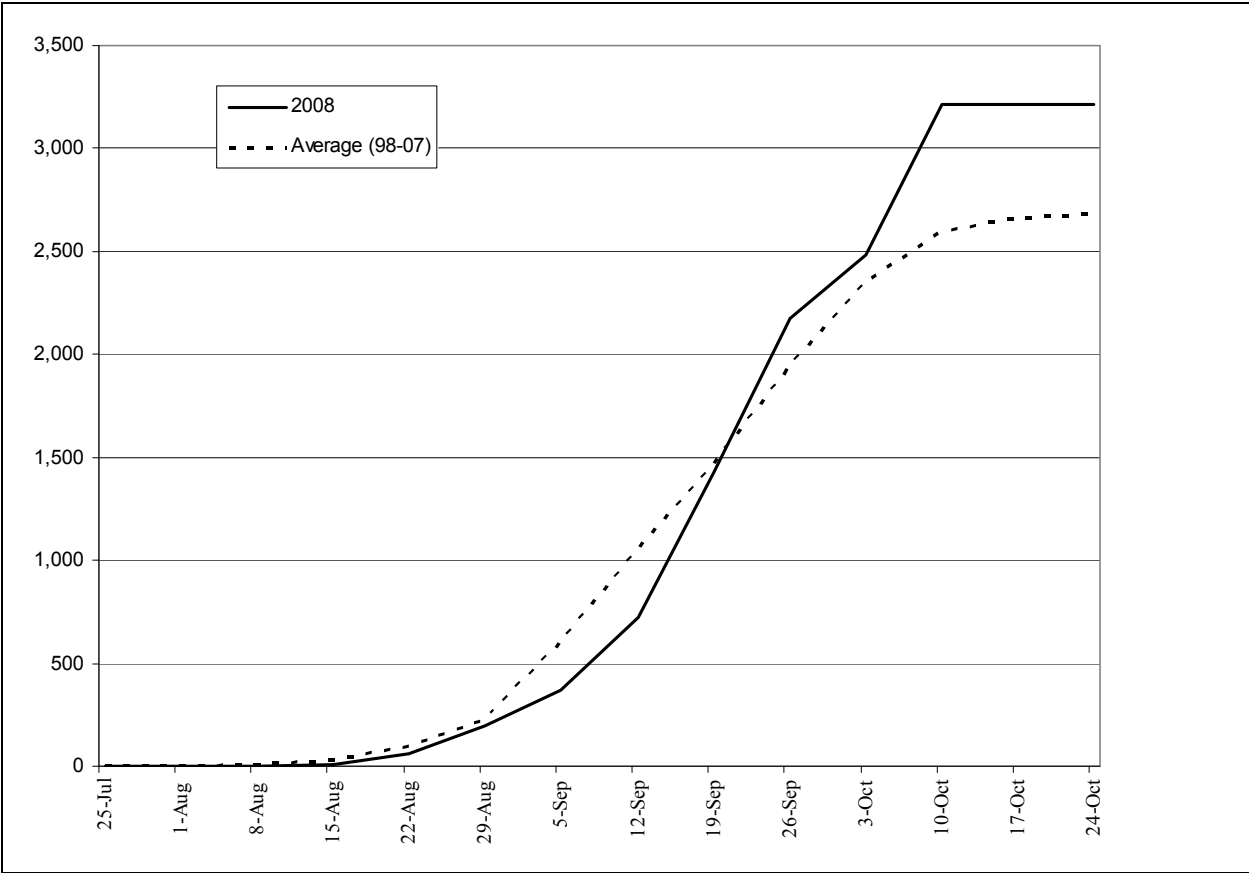


Figure 16.—Cumulative weekly catch of coho salmon in the Chilkat River fish wheels, for 2008 and the 1998–2007 average.

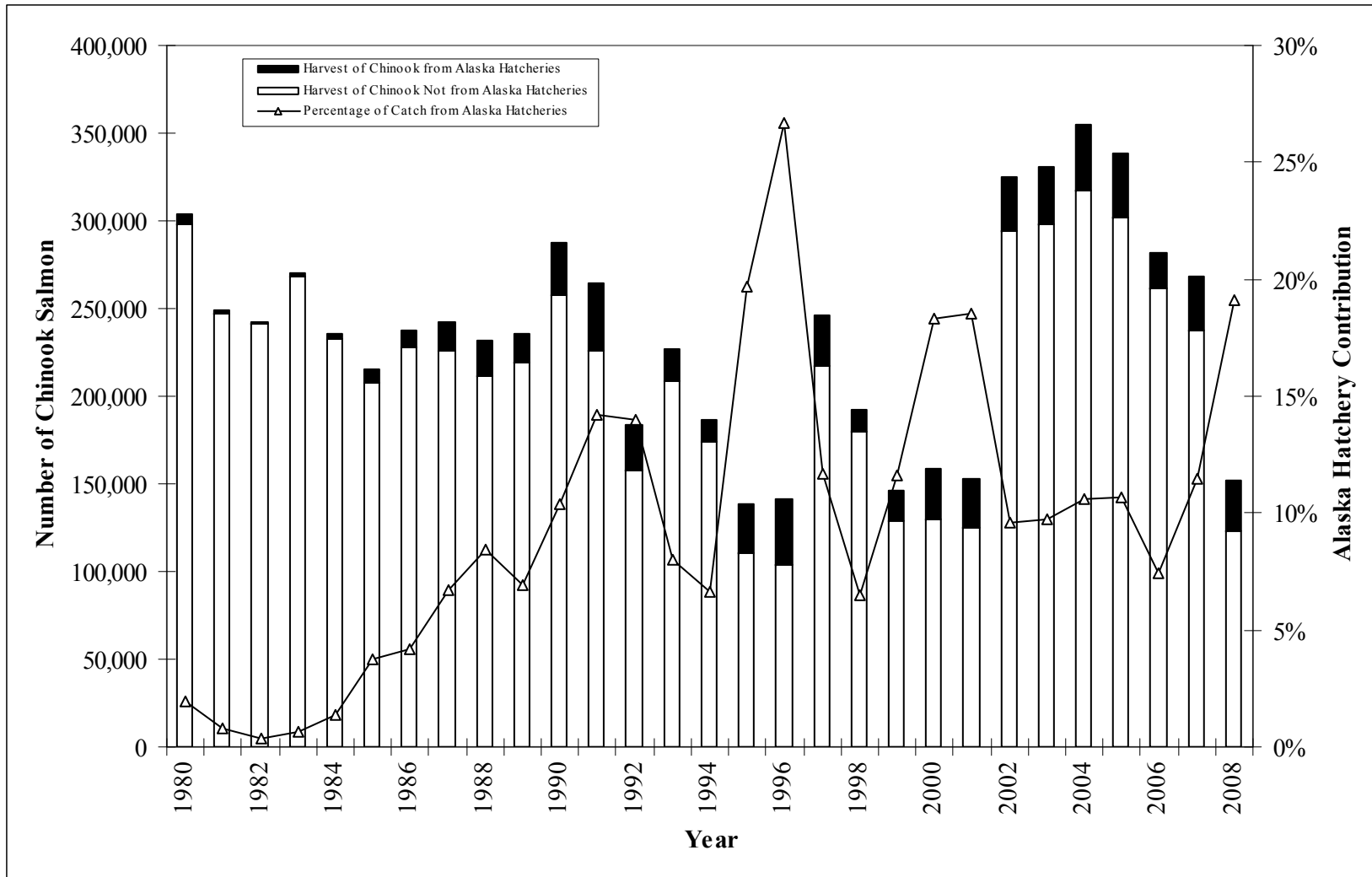


Figure 17.—Alaska hatchery Chinook salmon contributions to the Southeast Alaska troll fishery, 1980–2008.

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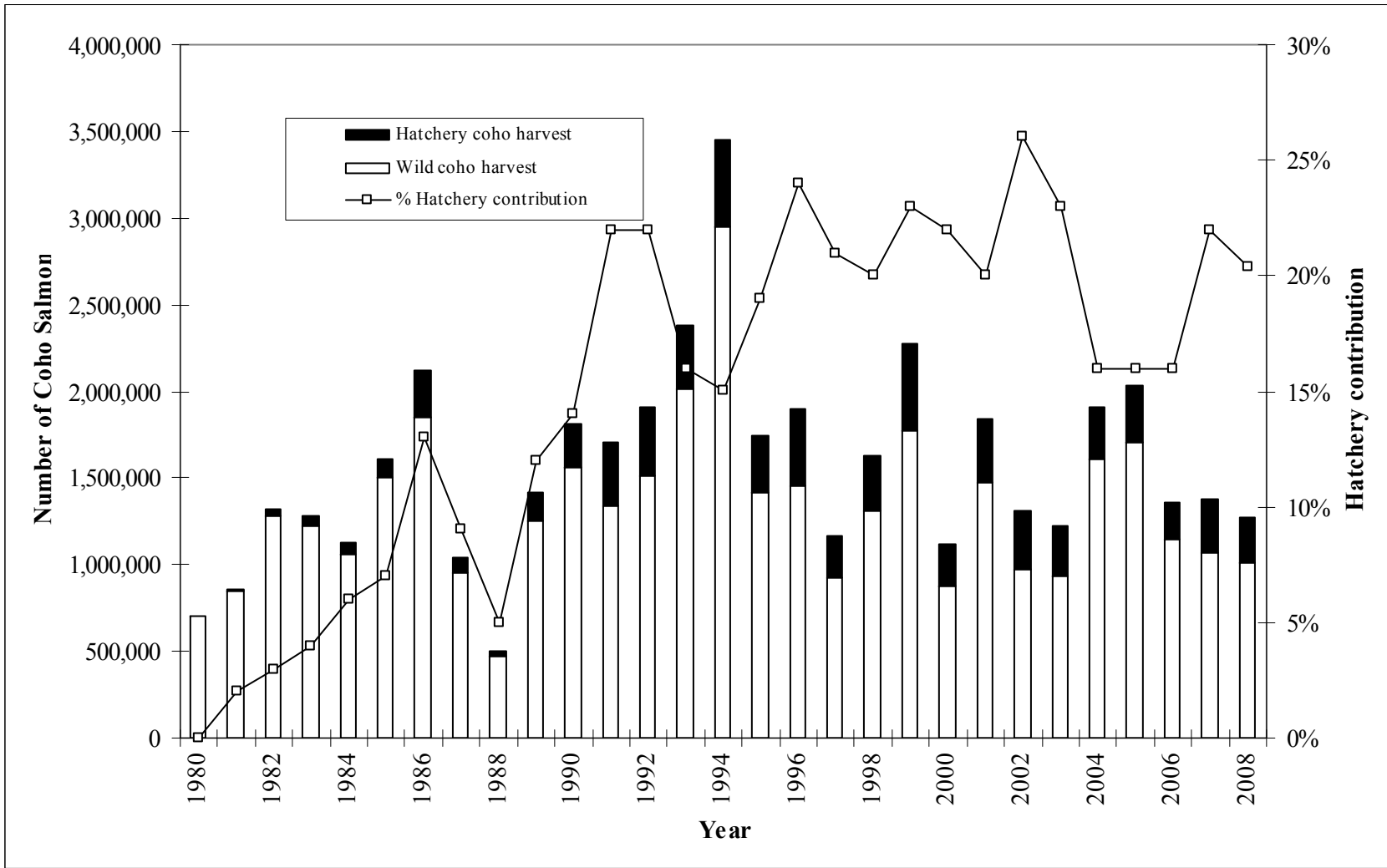


Figure 18.—Hatchery contributions of coho salmon to the Southeast Alaska troll fishery, 1980–2008.

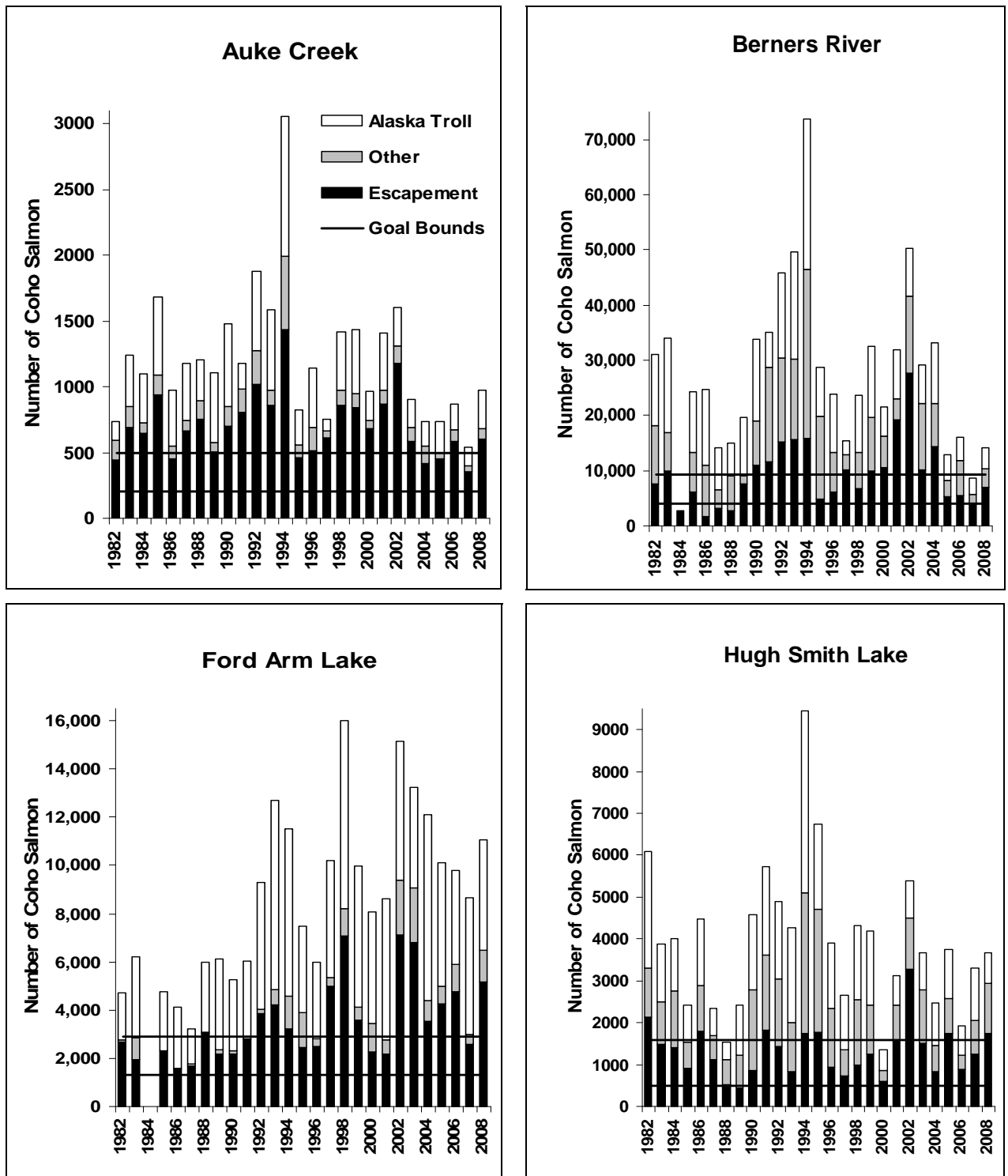


Figure 19.—Total run size, catch, escapement and biological escapement goal range for 4 wild Southeast Alaska coho salmon stocks, 1982–2008.

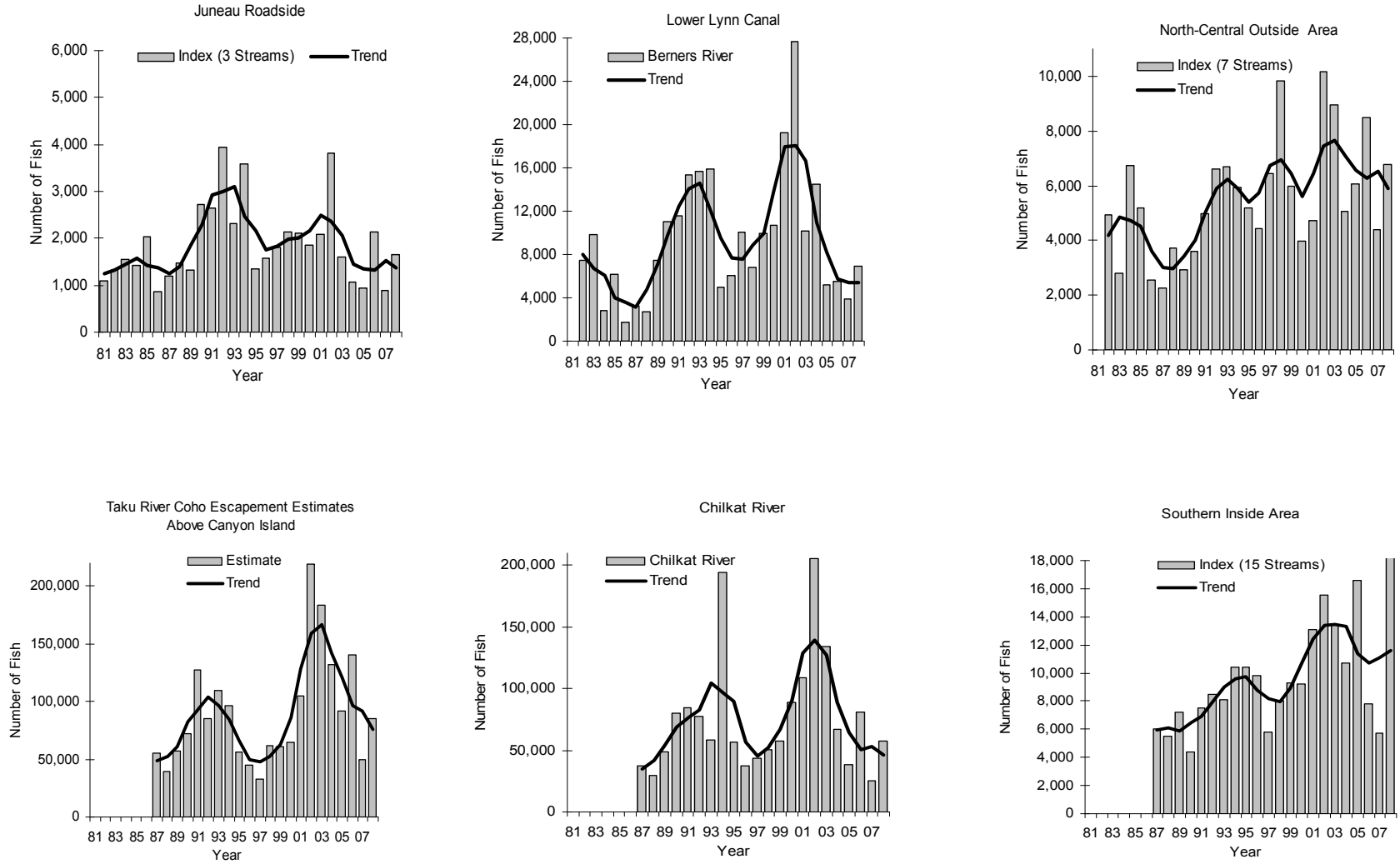


Figure 20.—Coho salmon escapement counts and estimates in index streams in 6 areas of Southeast Alaska, 1981–2008.

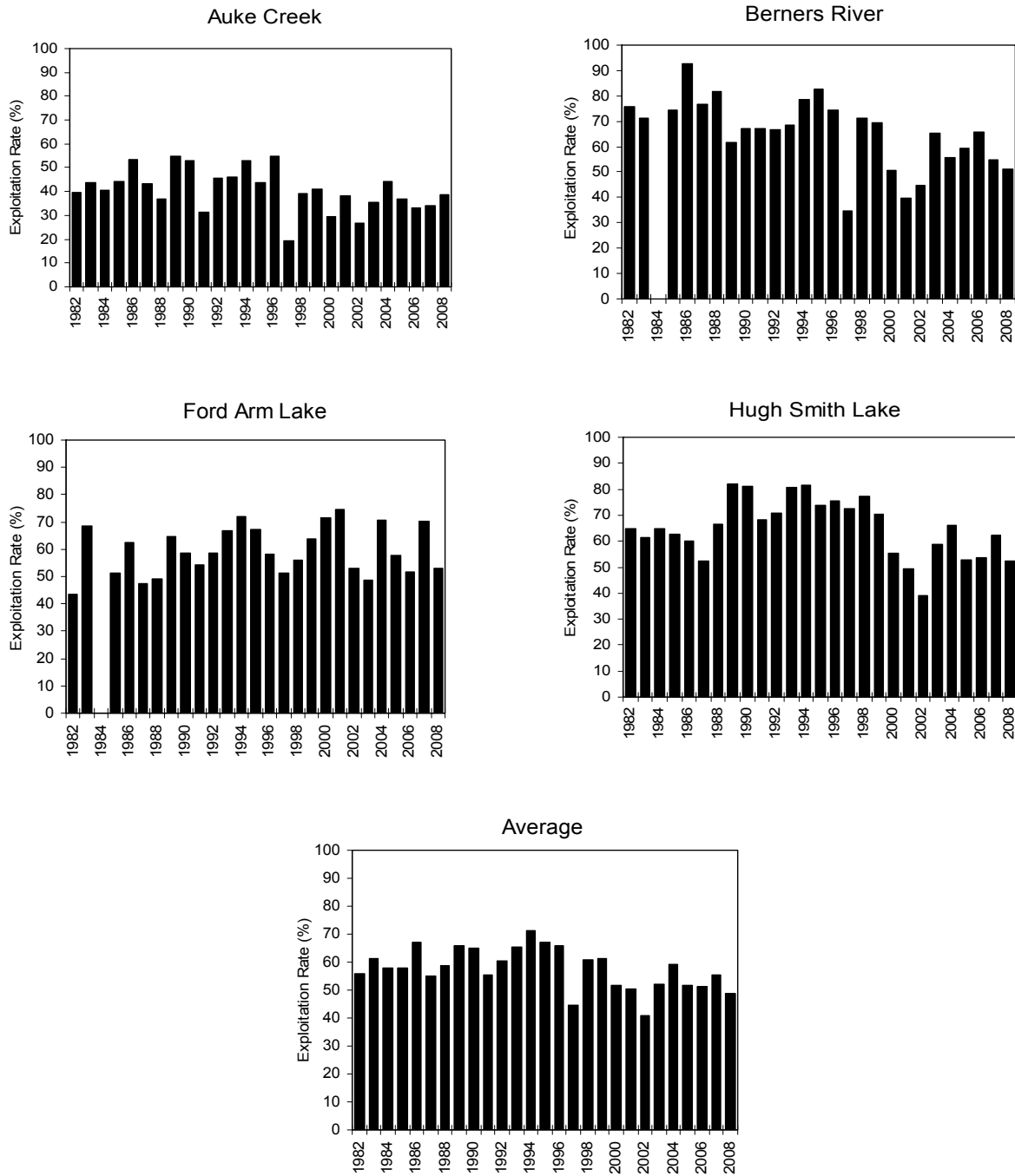


Figure 21.—Estimated total exploitation rates by all fisheries for 4 coded-wire tagged Southeast Alaska coho salmon stocks, 1982–2008.

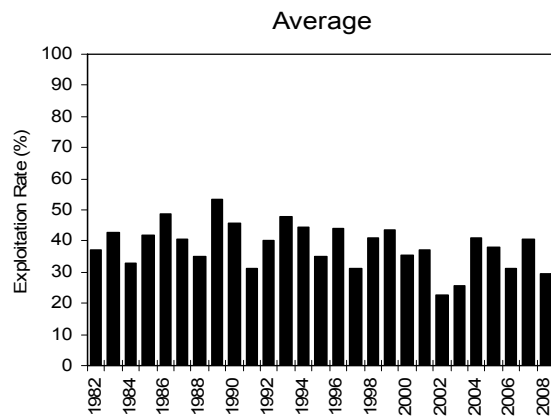
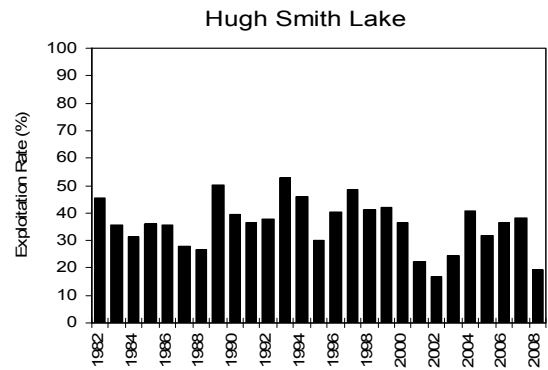
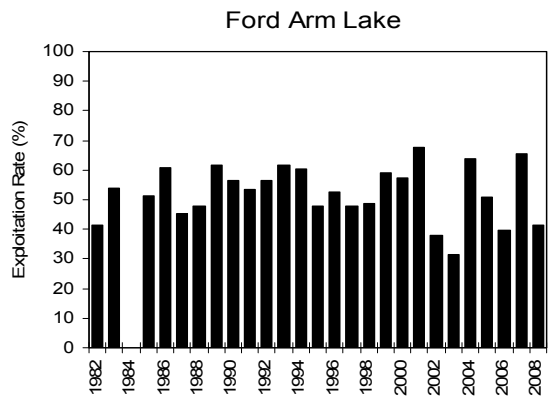
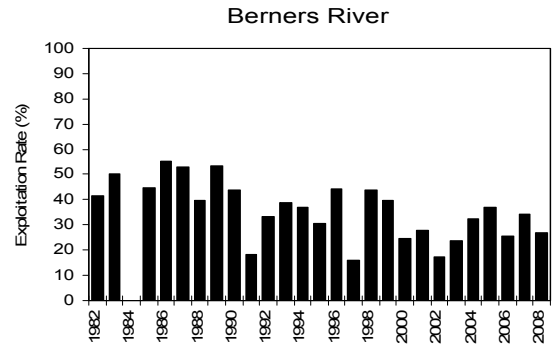
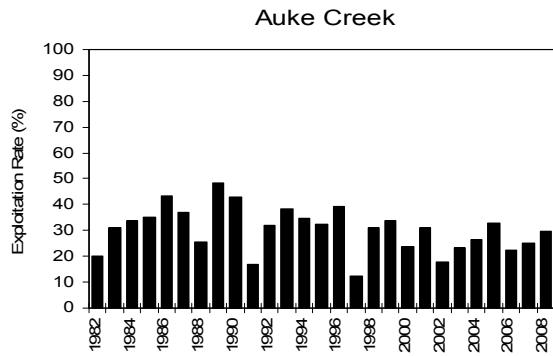


Figure 22.—Estimated exploitation rates by the Alaskan troll fishery for 4 coded-wire tagged Southeast Alaska coho salmon stocks, 1982–2008.