

Fishery Management Report No. 07-46

**Annual Management Report for the 2006 Southeast
Alaska/Yakutat Salmon Troll Fisheries**

by

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and

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September 2007

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
Time and temperature		monetary symbols		less than	<
day	d	(U.S.)	\$, ¢	less than or equal to	≤
degrees Celsius	°C	months (tables and figures): first three letters	Jan, ..., Dec	logarithm (natural)	ln
degrees Fahrenheit	°F	registered trademark	®	logarithm (base 10)	log
degrees kelvin	K	trademark	™	logarithm (specify base)	log ₂ , etc.
hour	h	United States (adjective)	U.S.	minute (angular)	'
minute	min	United States of America (noun)	USA	not significant	NS
second	s	U.S.C.	United States Code	null hypothesis	H ₀
		U.S. state	use two-letter abbreviations (e.g., AK, WA)	percent	%
Physics and chemistry				probability	P
all atomic symbols				probability of a type I error (rejection of the null hypothesis when true)	α
alternating current	AC			probability of a type II error (acceptance of the null hypothesis when false)	β
ampere	A			second (angular)	"
calorie	cal			standard deviation	SD
direct current	DC			standard error	SE
hertz	Hz			variance	
horsepower	hp			population	Var
hydrogen ion activity (negative log of)	pH			sample	var
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 1.85 million salmon were harvested in the 2006 Southeast Alaska troll fishery (common property + terminal areas). The harvest included 282,300 Chinook, 8,000 sockeye, 1.36 million coho, 60,100 pink, and 143,500 chum salmon landed by 720 power troll and 349 hand troll permit holders. Of this, 98,700 salmon (5%) were taken by hand troll gear and 1.76 million salmon (95%) by power troll gear. The Chinook salmon harvest ranked the 19th highest since statehood and the coho salmon harvest ranked 16th highest. The preliminary estimated Alaska hatchery contribution of Chinook salmon to the troll fishery, including hatchery terminal harvest was 19,600 fish (7.4%). A total of 214,600 coho produced by Alaska hatcheries were harvested by the troll fleet, which accounted for 16% of the total troll coho salmon harvest. Chinook and coho salmon escapements for Southeast Alaska rivers were generally above escapement goals.

Key words: Troll, Southeast Alaska, Chinook, Coho, Salmon, Commercial Fisheries, Alaska Department of Fish and Game, Annual Management Report (AMR)

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, 2005, through September 30, 2006, 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, Chilkat, and the Behm Canal rivers (i.e., Unuk, Chickamin, Blossom, and Keta). The three major systems, the Asek, Taku, and Stikine Rivers, as well as the Unuk, Chickamin, and Chilkat Rivers, are transboundary rivers, originating in Canada and flowing through Alaska to the Pacific Ocean. The Pacific Salmon Commission (PSC), 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 two to four years for most Chinook salmon originating in Southeast Alaska. Trollers harvest several age classes of mature spawners and immature Chinook salmon during the fishing season.

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

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 from several 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 two years, and spend no more than one winter in the ocean before returning to spawn as adults. The majority of coho salmon harvested by Southeast Alaska trollers are three- and four-year-old fish of Alaska origin and are harvested in the year of spawning.

DESCRIPTION OF THE TROLL FISHERY

The commercial troll fishery in Southeast Alaska and Yakutat (Region 1) occurs in State of Alaska waters and in the Federal Exclusive Economic Zone (EEZ) east of the longitude of Cape Suckling [5 AAC 29.010 and 5 AAC 29.020] (Figure 1). All other waters of Alaska are closed to commercial trolling.

The commercial troll fleet is comprised of hand and power troll gear types. Vessels using hand troll gear are limited to two lines on hand-operated gurdies or four 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 four lines on power-operated gurdies, except within the EEZ north of the latitude of the southernmost tip of Cape Spencer, where six lines may be used [5 AAC 29.120 (b)(1)(A) and (B)]. Although most Alaska troll permit holders are residents of the state, approximately 16% are from out-of-state. While the majority of the troll fleet sells their catch to processing plants onshore, the fleet does include approximately 35 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 1989–2006 average is 63%.

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 Southeast Alaska 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, due to the harvest cap of 45,000 Chinook salmon being 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 over-fishing 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. Annual Chinook salmon troll harvests since 1997 have averaged about 252,800 fish.

In 1996, after three years without a Chinook salmon annex fishing agreement between the U.S. and Canada, the “Letter of Agreement Regarding an Abundance-Based Approach to Managing Chinook Fisheries in Southeast Alaska” (LOA) was signed among the U.S. members of the PST. This agreement, which was in effect from 1996 through 1998, established an annual treaty quota based on pre-season and in-season abundance estimates.

In 1999, a new set of Pacific Salmon Treaty Agreements (PSTA) was signed under the PST, including an agreement for Chinook salmon. The new Chinook salmon agreement was similar to the abundance-based management of the LOA, with quotas based on pre-season and post-season 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.

Since 1985, the harvest of treaty Chinook salmon has exceeded the quota eleven times and has been less than the quota in eight of the last 20 years through 2005 (the 1996 and 1997 quotas were ranges). The final 2006 quota is based on the first post-season calibration of the CTC Coast-wide 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 recent years when the winter fishery closed due to the GHL being reached, daily tallies from regional processors have been 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)) in season 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 over-flights 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 two weeks in September. Escapements into streams generally peak in late September through early October. Figure 3 presents combined run timing for three 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 three decades, with a low decade average of 1.0 million fish in the 1970s. The BOF adopted a coho salmon fishery management plan in response to increasing effort and efficiency in the hand troll fleet, increased capitalization and efficiency in the power troll fleet, and increased troll harvest in outside waters (Figure 5). This plan, adopted in 1980, provides for conservation and allocation of coho salmon stocks in Southeast Alaska. The initial plan set the precedent for a mid-season troll closure to provide for adequate 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 two 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 from the late 1970's and remained relatively constant through the mid 1990's. 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 742 permits fished in 2006 (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 1980. Of the 2,163 permits issued that year, 963 hand troll permits had 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 375 permits fished in 2006 (Table 4). The percentage of hand troll

permits fished compared to total troll permits fished has declined as well, from 76% in 1978 to 34% in 2006. The proportion of the commercial troll harvest currently harvested by the hand troll fleet has decreased from 32% in 1978 to 5% in 2006. Compared to 2005, both power troll and hand troll participation increased during most 2006 fisheries except power troll in spring and hand troll in summer (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 2006 SEASON

The troll fleet harvested 1.85 million salmon during the 2006 season (Table 7). The majority of the Chinook salmon harvest occurred during the general summer openings of July 1–12 and August 13–22 (Table 8). The coho salmon harvest was at generally lower than average levels throughout the summer season. The region-wide coho salmon harvests and harvest rates were high at the beginning of the season, dropped to lower than average levels until late August, when catch rates rebounded to slightly above average levels, and ended up below average near the end of the season. The average 2006 coho weight was slightly greater than the 2005 average weight, but nearly identical to the 5-year and 20-year averages (Table 9).

Hand troll vessels harvested 98,700 fish and power troll vessels harvested 1.76 million fish (Tables 10 and 11). The number of renewed hand troll permits decreased and the number of renewed power troll permits increased from 2005, while the total number of troll permits renewed and fished was the highest since 1997 (Table 4).

CHINOOK SALMON FISHERY

For the 2006 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 2006 Chinook fishery was managed to achieve an all-gear harvest of 346,800 treaty¹ Chinook salmon.

The 2006 total all-gear (troll, purse seine, drift gillnet, and set gillnet, Annette Island, and recreational fisheries) Chinook salmon harvest was 431,700 fish, of which 350,600 were treaty fish. The trollers harvested 282,300 Chinook salmon of which 263,300 were treaty fish. The purse seiners harvested 25,000 Chinook salmon of which 15,200 were treaty fish. The drift

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.

gillnet fleet harvested 46,400 Chinook salmon of which 7,400 were treaty fish. (Troll, purse seine and drift gillnet harvests include terminal and Annette Island harvests). The Yakutat set gillnet fleet harvested 1,195 Chinook salmon of which 1,195 were treaty fish. The recreational fisheries (including charter fishers) harvested 76,800 Chinook salmon, of which 63,500 were treaty fish. The combined Alaska hatchery Chinook salmon and wild terminal exclusion contribution to all the fisheries was estimated at 82,300, of which 7,050 counted towards the treaty quota (Tables 11–13).

Winter Fishery

The 2006 winter troll fishery began October 11, 2005 and continued through April 21, 2006. A total of 469 vessels participated in the 2006 winter fishery, with a harvest total of 48,919 Chinook salmon, 17% of the 2006 total troll Chinook salmon harvest (Tables 5 and 14, Figure 9). The harvest decreased by 3% but the harvest per landing decreased by 13% when compared to the 2005 season. (Table 14; Figure 10). This was the fourth consecutive winter season that was closed due to the harvest reaching the GHL.

Spring Fishery

A total of 515 vessels participated in the 2006 spring fisheries, with a harvest of 36,951 Chinook, 77 sockeye, 3,929 coho, 3,791 pink, and 168 chum salmon (totals include Annette Island harvest). The Chinook salmon harvest was approximately 21,700 fewer fish than the 2005 harvest, and the Alaska hatchery contribution decreased from 31% to 26% (Table 15). The 2006 total Spring Fishery harvest was the 4th highest on record while the Alaska hatchery harvest was the 10th highest. The largest Chinook salmon harvests were in the Chatham Strait, Ketchikan and Sitka Sound areas (Table 16). Terminal area harvests included 1,016 Chinook, 3 sockeye, 2,716 coho, 209 pink salmon and 10,515 chum salmon. The majority of the Chinook were caught in the Wrangell Narrows/Blind Slough Terminal Area and the majority of the chum salmon were harvested in the Deep Inlet/Silver Bay Terminal Area. A total of 23 spring areas and five terminal fisheries were open during 2006 (Figure 11).

The Spring Fishery targets Alaska–origin 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 April 23, 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 2003, the BOF approved regulations that allowed the Spring Fishery to open immediately following the closure of the Winter Fishery if the closure was due to the GHL being reached prior to April 30. The Spring Fishery areas that opened on April 23 were areas that had historically high Alaska hatchery contribution and were opened “Until Further Notice” rather than on a weekly schedule. In general, spring fishing areas were initially opened by emergency order for two 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. 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.

Changes In The 2006 Spring Troll Fisheries

During its January meeting in Ketchikan, the Board of Fisheries adopted the following new regulations that affected the management of the 2006 spring troll fisheries:

1. Established management plans in regulation for fisheries in Districts 8 and 11 directed at harvesting Chinook salmon returning to the Stikine and Taku Rivers;
2. Established criteria that allows ADF&G to combine both adjacent spring troll areas and their associated Treaty Chinook harvest caps into single, larger areas;
3. Established new Treaty Chinook harvest caps and an additional harvest cap tier under the spring fishery harvest guidelines in 5 AAC 29.060(d)(1)(D);
4. Established a 1–day per week spring Chinook salmon troll fishery in Yakutat Bay.

ADF&G, by Emergency Order, may now combine adjacent spring troll fishery areas and their associated treaty harvest caps if each of the areas have Alaska hatchery compositions of 25 percent or greater for three or more consecutive seasons. Prior to this action by BOF, if spring areas were combined, the Treaty caps were not combined and troll harvest opportunities would be lost. The new regulation allows the department to reduce the complexity of managing the large number of spring areas while maintaining existing harvest opportunities. This change also achieves a major initial objective of the experimental fisheries in the establishment of permanent spring troll corridors to harvest returning Alaska hatchery kings while minimizing the harvest of wild Chinook salmon stocks. This objective was established to mitigate losses resulting from spring closures to rebuild depleted Southeast Alaska Chinook salmon stocks.

The following spring areas were combined for the 2006 season:

The Gravina Island, Mountain Point and West Clarence Strait areas were combined to form the **Ketchikan Area** and had Treaty fish limits of 3 times the allowable catch for each Alaska hatchery composition tier as provided for in 5 AAC 29.090(d)(1)(D).

The Kingsmill Point and Chatham Strait (112–12) areas were combined to form a new **Chatham Strait Area** that had Treaty fish limits of 2 times the allowable catch for each Alaska hatchery composition tier as provided for in 5 AAC 29.090(d)(1)(D).

The Homeshore and Point Sophia areas were combined to form the **Icy Strait Area** that had Treaty fish limits of 2 times the allowable catch for each Alaska hatchery composition tier as provided for in 5 AAC 29.090(d)(1)(D).

The Middle Island , Eastern Channel and Inner Silver Bay were combined to form the **Sitka Sound Area** and had Treaty fish limits that were 3 times the allowable catch for each Alaska hatchery composition tier as provided for in 5 AAC 29.090(d)(1)(D).

In 2006, four new large areas were created from ten smaller, pre-existing areas. One new area (Clarence Strait) opened, boundaries of the South Passage area in Icy Strait were expanded and the Redoubt Bay Area in Sitka Sound was separated from the Biorika Island area, as it was in

2002. Five spring troll areas including the four new combined areas, Frederick Sound and two terminal areas were opened April 23 and remained open throughout the Spring season.

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. In 2006, the Board of Fisheries also established new 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 this year, troll fisheries were allowed in Districts 8 and 11 as follows:

District 8

The preseason Chinook salmon return forecast for the Stikine River was 60,600 large fish. The resulting U.S. allowable commercial catch in District 8 (troll + drift gillnet + sport fish) at this level is 14,500 large ($\geq 28''$) Stikine kings. 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 new provisions of 5 AAC 29.095. DISTRICT 8 CHINOOK SALMON MANAGEMENT PLAN.

District 11

No directed Chinook salmon troll fishery was initially planned for District 11 this season. The preseason Chinook salmon return forecast for the Taku River was 64,500 large fish ($\geq 28''$). At this level of return, no fish are available for a U.S. allowable catch. However, the inseason forecast finalized on May 17 showed that the return was large enough at 64,700 fish to implement a Chinook salmon fishery in District 11 with an all gear US Allowable Catch of 7,900 fish.

Whenever a directed Taku River Chinook salmon fishery is allowed, the District 11 spring troll fishery will be managed based on the abundance of Taku River Chinook salmon in accordance with the new provisions of 5 AAC 29.097. DISTRICT 11 CHINOOK SALMON MANAGEMENT PLAN. No spring troll fisheries are allowed in District 11 if the abundance of Taku River Chinook salmon is less than necessary for a directed fishery.

In District 8, ninety-one trollers caught 2,913 Chinook salmon of which approximately 1,900 were of Stikine River origin. In the District 11 fishery, only 11 Chinook salmon were landed by 3 vessels (Table 16).

General Summer Fishery

The all-gear harvest quota for Southeast Alaska was set at 346,800 treaty Chinook salmon for the 2006 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 2006, ADF&G received the preseason abundance index of 1.69 at the end of March, which translated to an all-gear quota under the PSTA of 346,800 fish. The purse seine fleet was allocated 14,912 (4.3%) fish, the drift gillnet fleet 10,057 (2.9%) fish, and the set gillnet fleet 1,000 fish. The remainder of 320,831 fish was then initially divided between the troll and sport fisheries in an 80/20 split, which translated to 256,664 fish to the troll fishery, and 64,166 fish to the sport fishery.

Based on past fishery performance at similar abundance indices, the first summer troll Chinook salmon fishery was estimated to last from 8 to 12 days. The fishery was managed in season using the FPD program because the projected fishery length was based on historical effort levels and the actual effort and harvest rates can be highly variable. Fishing effort in the first opening was the highest since 1999 for statistical weeks 26–29. The fishery was open for 12 days, from July 1 – 12 and the harvest per fleet day averaged 10,817 fish per day (Table 17). The total summer harvest was 195,500 Chinook salmon, of which 190,400 were counted as Treaty fish (Table 12).

The summer troll quota is calculated by adding the winter Treaty harvest (45,600 fish), the spring Treaty harvest (estimated on June 23 at 22,500 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 23 at 1,700 fish). The resultant sum is then subtracted from the troll allocation. This resulted in an initial estimate of 186,200 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 was set at 134,300 fish, which included 3% Alaska hatchery fish. Fishing effort was approximately 1.5% greater during the first opening than the 2005 effort. On July 10, the fleet harvest rate was estimated at approximately 11,000 Chinook salmon per day, with the projected harvest at this time of approximately 110,000 fish. At this harvest and harvest rate, the first opening target harvest was projected to be taken by midnight, July 12. A News Release announcing the closure of the first Chinook salmon opening at midnight, July 12 was issued at 12:00 noon on July 11. The harvest during the first Chinook opening was approximately 129,800 Chinook (125,600 Treaty Chinook) or 69.3% of the final summer troll Chinook salmon quota. The actual fleet harvest rate was 10,817 Chinook/day, which was only 183 Chinook/day lower than what was estimated on July 10 (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 3, determined that an August coho closure of 4 days was necessary. At the time

of the second opening, the troll fishery had approximately 55,000 fish left on the Treaty allocation of 256,664 Chinook salmon. Assuming a 3% Alaska hatchery component, (2.7% in the first retention period) the target harvest in the second opening was roughly 56,700 Chinook salmon. The second Chinook salmon opening began on August 13 and was managed in season. On August 21 the harvest rate was estimated to be between 6,300 and 6,500 per day, and the target harvest was projected to be taken by midnight, August 22. A News Release announcing the closure of the second Chinook salmon opening at midnight, August 22 was issued at 3:00 p.m. August 21. The actual harvest rate for the second opening was 6,559 Chinook/day (Table 17) and the Alaska hatchery composition was 4.9% so that the actual Treaty catch was 7,350 fish greater than the harvest target.

The total summer fishery Chinook salmon harvest was approximately 195,450 fish, of which approximately 6,200 fish or 3.2% were of Alaska hatchery origin. Approximately 5,100 of these or 2.6% were counted as hatchery add-on and not counted against the Treaty quota (Table 12).

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 strong, based on power troll catch/boat/day (CPUE) through statistical week 29. The CPUE was following an early pattern nearly identical to 1994, when the troll coho harvest was the largest since statehood. However, the CPUE declined after week 29 to a level below the 1986–2005 average and remained below average for the next 5 weeks (Figure 13).

A 4-day closure of the troll fishery was implemented in order to provide for adequate escapement to inside waters and for allocation after a second assessment in early August (statistical week 32). ADF&G concluded 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 30 was estimated at 490,000 coho salmon, which is above the 1971–1980 average but below the 1986–2005 average. The regional drift gillnet coho salmon harvest of approximately 31,500 fish through week 30 was above the 1971–1980 average but below the 1986–2005 average. The Taku fishery was the only gillnet fishery where catches exceeded the 1971–1980, 1986–2005 and 2001–2005 averages. The cumulative CPUEs through week 30 were above the 1971–1980 average in all fisheries except Lynn Canal (Figure 14). Tree Point was the only gillnet fishery in which the current CPUE was above the 1986–2005 average. The CPUEs for Tree Point, District 6 and Taku were all below the 2001–2005 averages. The Juneau sport fishery was above the 1971–1980 average and nearly three times the 1986–2005 average. The District 6 gillnet cumulative wild CPUE through week 30 was also above the 1971–1980 average level, slightly below the recent 20-year average, and significantly below the 10-year and 5-year averages. Following a troll fishery closure August 9–12, the second Chinook salmon opening began on August 13.

ADF&G announced a second troll closure to begin at midnight on August 22, which coincided with the closure of the Chinook salmon fishery. The coho fishery was closed for 5 days and was implemented as a conservation measure to ensure that enough coho salmon were reaching inside waters to meet escapement goals. Regionwide coho catch rates had declined during the season to less than one-half of the 1986–2005 average. On September 5, ADF&G announced that no

further conservation closures were anticipated, though it was unlikely that the fishery would be extended beyond September 20. However, catch rates in the northern and central inside portions of the region improved significantly during the week following the closure to above-average levels. In addition, strong early escapements were observed in northern and central Southeast, prompting ADF&G to announce that portions of the region would be extended through September 30. The extensions were announced on September 12, based on the above-average troll coho catch rates in the northern Southeast areas and the above-average coho returns to the Stikine, Taku (Figure 15) and Chilkat Rivers (Figure 16) and local Yakutat area systems. The remainder of the region was closed based on continued weak fishery performance to provide protection for stocks in southern Southeast, where wild and hatchery run strength was lower than in the north. During the past 13 years (1994–2006), the coho salmon season has been extended 9 times (Table 18). The 2006 estimated wild coho salmon abundance of 3.20 million fish ranked 19th out of the past 25 years (1982–2006) and was 14% below average. The troll coho salmon harvest of 1,360,000 fish was the 16th highest in the 47 years since statehood (Table 7).

OTHER SPECIES

A total of 8,004 sockeye, 60,114 pink, and 143,030 chum salmon were harvested during the general 2006 troll seasons (Tables 7 and 8). This was the fifteenth largest sockeye harvest, the fifth smallest pink harvest, and the eleventh largest chum salmon harvest since statehood (harvests do not include 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, the annual troll harvest of chum salmon outside of terminal harvest areas has been consistently greater than 100,000 fish (Table 7).

In 2006, trollers harvested 139,500 chum salmon in Sitka Sound in the Eastern Channel area, with peak harvests occurring from late-July to late-August. The numbers of chum salmon that were harvested in the Neets Bay THA is confidential (fewer than 3 permits).

EXCLUSIVE ECONOMIC ZONE (EEZ) HARVESTS

In 2006, approximately 12.9% of the Chinook (36,384 fish) and 5.8% of the coho salmon (78,937 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, 614 sockeye, 721 pink, and 227 chum salmon were taken in the EEZ.

NUMBER OF TROLL PERMITS FISHED AND BOAT DAYS OF EFFORT

In 2006, the CFEC renewed 926 power troll permits and 914 hand troll permits, which was a 0.4% increase in power troll permit renewals and a 2.5% decrease in hand troll permit renewals compared to 2005. Preliminary estimates indicate that 742 power troll permits and 375 hand troll permits were actually fished (Table 4). This represents a 4% increase in power troll effort and a 7.4% increase in hand troll effort when compared to the 2005 season. Power troll participation increased during the 2006 winter and summer fisheries but decreased during the spring fishery when compared to 2005.

The 2006 hand troll participation increased during the winter and spring fisheries but decreased during the summer fishery when compared to the 2005 participation (Table 5).

In 2006, the Chinook salmon general summer fishery was open for 22 days, with 9,359 boat-days of Chinook salmon retention. The Chinook salmon non-retention effort was estimated at 15,076 boat days (Table 5; Figure 8). Effort data was derived from dockside interviews of trolling vessels in conjunction with harvest and effort data from troll fish tickets.

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. Alaska hatchery contributions are generally greatest during the spring fisheries, followed by the winter and summer fisheries (Table 19; Figure 17). In 2006, the combined Alaska hatchery harvest and wild terminal exclusion harvest contributed about 89,300 Chinook salmon to the commercial and sport fisheries, with about 22,500 fish harvested in the troll fishery and 15,700 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 2006, the hatchery coho salmon contribution was 16% of the harvest for a total contribution of 215,500 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 Asek, 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. Over the last 11 years, the Situk, Unuk, Asek, and Stikine rivers have consistently been above the lower escapement goal range (Table 22). Of the four 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 seven years until 1999. The Blossom River has been below the lower escapement goal range for nine of the last ten

years, and the Keta River has been below for three of the last ten years. The escapement goals for all of the Behm Canal stocks are now under review and may be revised within the coming year. In 2006, escapements generally continued to increase from the low counts in 1998 and 1999, with seven of eleven index counts above the 2005 escapement values. In summary, 10 out of the 11 systems had escapements above or within goals, with the Alsek River being 2,695 fish below goal. The revised MSY escapement goals indicate that all Southeast Alaska and Transboundary River stocks are healthy and stable.

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 2006, weirs were operated on five systems, while foot or aerial surveys were conducted on another 40 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 four coho salmon stocks. These stocks include Auke Creek near Juneau, the Berners River in lower Lynn Canal, Ford Arm Lake on the outer coast north of Sitka, and Hugh Smith Lake on the mainland southeast of Ketchikan (Figure 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 three lake systems to enumerate coho salmon escapements and to estimate the fraction of the returning population marked with CWTs. The Berners River escapement is intensively surveyed on foot. Samples for estimating the fraction of the returning population marked with CWTs are collected with beach seines. Escapement estimates for the Berners River are conservative, since a lower river weir is not employed, resulting in harvest rate estimates that are likely to be biased upward (Table 24).

Migrations into spawning streams generally peak in late September. Escapement goals of indicator streams are usually met, and have been exceeded in many cases in recent years (Tables 23, 24, 25; Figure 19). The 2006 escapements to systems in the northern inside areas were similar to recent years' escapements (Table 25; Figure 20).

The escapement count in the Berners River in Lynn Canal of 5,470 spawners (Figure 19) was within the goal range (4,000–9,200 spawners) and the preliminary estimate of escapement to the

Chilkat River was well above the upper bound of the newly established goal range. The total run to the Berners River was one of the smallest on record while the all-gear exploitation rate of 66% was very near average (67%). The troll fishery exploitation rate on the Berners River stock (26%) was well below the average of 37%. The estimated 2006 escapement of 140,000 coho salmon to the Taku River above Canyon Island was the third highest on record (1987) and well above the threshold U.S. management objective of 38,000 fish. Escapement counts in Juneau roadside systems (Jordan, Montana, Peterson, Steep, Switzer, and Auke creeks) were mixed with 50% below average and 50% above average but were above goal for the systems with established escapement goals. The sum of counts in these systems (2,545 spawners) was also above the average count of 2,496 spawners. The Auke Creek weir count of 582 adults was above the goal range of 200 to 500 spawners. Auke Creek smolt production has been trending lower for over two decades despite strong brood year escapements resulting from high marine survival rates combined with low exploitation rates (Table 24).

Indicators for the Sitka area (North Central Outside area) were all above average. The overall escapement index of about 8,400 spawners (seven streams) was well above the historical average of about 5,400 spawners (Table 26; Figure 20). The total escapement of 4,737 spawners to Ford Arm Lake was well above the average of about 3,400 spawners and the goal range of 1,300 to 2,900 spawners. Counts for five streams surveyed by foot around Sitka Sound also totaled well above average.

The overall index of over 7,000 spawners for 15 streams in the Ketchikan (Southern Inside) area was the lowest since 1997 on record and well below the 1987–2005 average of about 9,450 spawners (Table 27; Figure 20). The low escapements were somewhat expected due to the very hot weather and low water conditions in 2004 when this year's return were rearing fry. The total escapement of 891 spawners to Hugh Smith Lake was the eighth lowest estimate in 24 years but still within the goal range of 500 to 1,100 spawners.

COHO SALMON EXPLOITATION RATES

Troll fishery exploitation rates in 2006 were below average but still showed signs of a sustained rebound from very low levels in 2002 and 2003 that were due in part to low ex-vessel prices. The 2006 average troll fishery exploitation rate of 31% for the four primary indicator stocks (Berners River, Auke Creek, Ford Arm Lake, and Hugh Smith Lake) was below the long-term average of 39%. The troll fishery exploitation rate for Hugh Smith Lake of 37% was the only stock that was above its average rate of 36% (Table 28; Figure 21).

The average total exploitation rate by all fisheries on the four stocks in 2006 of 51% was below the 1982–2005 average of 58% (Table 28; Figure 22). Estimates for all but the Berners River stock were well below average. In the northern inside area, the Auke Creek stock was exploited at an estimated 33%, down from the historical average of 41%. The total exploitation rate of 53% for the Hugh Smith Lake stock was well under average (66%) but was identical to the 2005 rate. The all-gear exploitation rate estimate of 52% for Ford Arm Lake was also well below its average of 60% and well below 58% in 2005. The low all-gear exploitation rate was likely due to reduced purse seine openings for pink salmon in 2006. Coho salmon are caught incidentally in the pink salmon seine fisheries.

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, 1985–2006.

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	380,152	57,228	2,056	439,436	439,613	-59,461
2004	428,773	72,025	5,409	506,207	418,342	10,431
2005	386,684	63,709	47,455	497,885	387,400	-716
2006	350,578	47,325	33,764	431,667	346,800	3,778
					1985–2005 Sum:	-77,661

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

Return Year	WILD STOCKS					LAKES		HATCHERY RELEASES					HATCHERY REMOTE RELEASES					
	Auke Creek	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	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		6								3	10						
1983	18		10								9	13						
1984	16			8							3	9					9	
1985	25		12	8							13	12						
1986	17		9	19							17	11						
1987	21		4	11		6					3	4					5	10
1988	17		7	4							5	1					6	5
1989	14		13	10		7					2	1					3	2
1990	21	21	9	17		17					7	14					7	14
1991	23	25	11	17		24		16		24	12	13			10	14	12	
1992	33	24	15	21	20	20		29		18	9	17			8	17	16	
1993	24	15	22	13	14	13		20	20	10	5	11			16	11	12	
1994	35	29	14	19	23	23		23	14	17	9	7		15	14	8	16	
1995	11	16	6	14	12	13		14	12	6	4	6		14	16	10	7	
1996	23	12	6	18	10	11		13	9	6	5	7		5	8	10	7	
1997	19	12	15	8	7	6		6	3	5	8	5		1		6	5	
1998	23	17	20	11	14	5	16	12	15	10	5	7		8		5	5	
1999	19	13	7	14	10	17	4	16	14	15	10	8	6	7		8	10	
2000	18	12	13	7	8	1	5	10	11	10	4	6	2			5	4	
2001	28	12	8	13	9	15	5	12	7	9	6	8	14		2	5	5	
2002	27	19	15	14	13	30	5	24	10	14	9	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	4	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	13	10	7	10	12	2	10	3	6	4	2	2	11	2	6		
Average	20	17	11	12	12	14	5	15	10	11	7	8	7	8	6	11	7	9

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

^aWhitman Lake and Neets Bay returns from 1981–1983 represent hatchery-raised releases from wild broodstock.

Table 3.—Harvest and percent of commercially harvested coho salmon by gear type in Southeast Alaska, 1989–2006.

Year	<u>Commercial Troll</u>		<u>Purse Seine</u>		<u>Drift Gillnet</u>		<u>Set Gillnet</u>		<u>Total</u>	
	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%	386,664	14%	316,589	11%	196,928	7%	2,815,188	100%
2005	2,035,783	75%	334,876	12%	257,329	10%	80,308	3%	2,708,296	100%
2006	1,360,256	75%	103,447	6%	270,869	15%	86,085	5%	1,820,657	100%
1989–2006 Average:	1,794,836	64%	417,292	15%	397,139	14%	200,514	7%	2,820,722	100%
BOF Allocations (Established 1989)		61%		19%		13%		7%		100%

Note: Includes Annette Island harvests.

Table 4.—Southeast Alaska commercial troll permits renewed and fished by calendar year from 1975–1978, from January 1 to September 30 for 1979, and by troll season (October 1 to September 30) for 1980 to 2006.

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

Table 5.—Number of permits fished, by gear type and fishery, 1980–2006.

Year	<u>Winter Fishery</u>			<u>Spring^a (Experimental/Terminal)</u>			<u>General Summer</u>		
	<u>Troll Gear Type</u>		Total	<u>Troll Gear Type</u>		Total	<u>Troll Gear Type</u>		Total
	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

^a Does not include permits fished in the hatchery access fisheries in 1989 through 1992.

Table 6.—Number of days, effort (boat days) and dates the Southeast Alaska troll fishery was open to Chinook fishing (Chinook retention (CR)), closed to Chinook salmon retention (Chinook non-retention (CNR)), and closed to all salmon species (all) during the general summer season (April 15–September 30 from 1978–2003; May 1–September 30 beginning 2003).

Year	Days Open	Days Closed	Dates open	CR Days	CR Effort (Boat days)	Closed Dates	Days Closed	CNR Days	CNR Effort (Boat Days)		
1978	169	0	4/15–9/30	169		None	0				
1979	169	0	4/15–9/31	169		None	0				
1980	149	20	4/15–7/14	91		7/15–7/24	10 (all)				
			7/25–9/20	58		9/21–9/30	10 (all)				
1981	101	69	5/15–6/25	42		4/15–5/14	30 (all)				
						6/26–7/4	9 (all)				
						7/5–8/9	36		8/10–8/19	10 (all)	
						8/20–9/3	15		9/4–9/12	9	
						9/13–9/20	8	76,691	9/21–9/30	10 (all)	9
1982	65	104	5/15–6/6	23		4/15–5–14	30 (all)				
						6/7–6/16	10 (all)				
						6/17–7/28	42	53,371	7/29–8/7	10 (all)	
									8/8–9/20	44	
						9/21–9/30	10 (all)	44	32,727		
1983	60	109	5/15–6/8	25		4/15–5/14	30 (all)				
						6/9–6/30	22 (all)				
						7/1–8/4	35	48,734	8/5–8/14	10 (all)	
									8/15–9/20	37	
						9/21–9/30	10 (all)	37	18,385		
1984	45	124	6/5–6/30	26		4/15–6/4	51 (all)				
						7/1–7/10	10 (all)				
						7/11–7/29	19	33,641	7/30–8/14	16	
									8/15–8/24	10 (all)	
									8/25–9/20	27	
						9/21–9/30	10 (all)	43	29,583		
1985	33.6	135.4	6/3–6/12	10		4/15–6/2	49 (all)				
						6/13–6/30	18 (all)				
						7/1–7/22	22		7/23–8/14	23	
									8/15–8/24	10 (all)	
						8/25–8/26	1.6	30,628	8/26–9/20	25.4	
						9/21–9/30	10 (all)	48.4	35,725		

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Table 6.—Page 2 of 4.

Year	Days Open	Days Closed	Dates open	CR Days	CR Effort (Boat days)	Closed Dates	Days Closed	CNR Days	CNR Effort (Boat Days)
1986	41	128	6/20–7/15	26	33,079	4/15–6/19	66 (all)	42	34,173
						7/16–8/10	26		
						8/11–8/20	10 (all)		
						8/21–8/26	6		
						8/27–8/31	5		
9/1–9/9	9								
1987	23	146	6/20–7/12	23	19,077	4/15–6/19	66 (all)	60	37,214
						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
						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		
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
						7/23–8/12	21		
						8/13–8/22	10 (all)		
						8/23–8/24	2		
1991	7.5	161.5	7/1–7/8	7.5	4,718	4/15–6/30	77 (all)	64.5	32,565
						7/8–8/15	38.5		
						8/16–8/24	10 (all)		
						8/25–9/20	26		
						9/21–9/30	10 (all)		

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Table 6.—Page 3 of 4.

Year	Days Open	Days Closed	Dates open	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)					
						8/24–9/20	28					
			23–Aug	1	2,881	8/21–9/30	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					
						7/30–8/5	7			8,420	8/6–8/12	7
						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	30
			9/21–9/30	10 (all)	64	23,167						
1997	21	148	7/1–7/7	7		4/15–6/30	77 (all)					
						7/8–8/7	30					
						8/8–8/17	10 (all)					
						8/18–8/24	7					
			8/30–9/5	7	9,126	8/25–8/29	5					
9/6–9/20	14 ^b	49	17,653									
1998	53	116	7/1–7/11	11		4/15–6/30	77 (all)					
						7/12–8/11	30					
			8/20–9/30	42	12,517	8/12–8/19	8 (all)	30	11,928			

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Table 6.—Page 4 of 4.

Year	Days Open	Days Closed	Dates open	CR Days	CR Effort (Boat days)	Closed Dates	Days Closed	CNR Days	CNR Effort (Boat Days)
1999	11	158	7/1–7/6	6		4/15–6/30 7/7–8/12 8/13–8/17	77 (all) 36 5 (all)		
			8/18–8/22	5	4,678	8/23–9/30	39	75	21,879
2000	24	68	7/1–7/5	5		4/15–6/30	77 (all)		
			8/11–8/12	2		7/6–8/10	36		
			8/23–8/30	8		8/13–8/22	10 (all)		
			9/12–9/20	9	6,784	8/31–9/11	12	48	15,422
2001	25	67	7/1–7/6	6		4/15–6/30 7/7–8/12 8/13–8/17	77 (all) 37 5(all)		
			8/18–9/5	19	7,364	9/6–9/30 9/21–9/24	25 4(all)	62	15,434
2002	40	52	7/1–7/18	18		4/15–6/30 7/19–8/9 8/10–8/11	77 (all) 22 2(all)		
			8/12–9/2	22	10,482	9/3–9/30	28	50	10,214
2003	39	53	7/1–8/8	39	10,743	4/15–6/30 8/9–9/30	77 (all) 53	53	9,228
2004	19		7/1–7/15	15		4/15–6/30 7/16–8/9 8/10–8/11	77 (all) 25 2(all)		
			8/12–8/15	4	5,888	8/16–9/30	46	71	17,434
2005	29.5		7/1–7/17	17		4/10–6/30 7/18–8/13 8/10–8/13	82(all) 27 4(all)		
			8/14–8/20	6.5		8/20–9/14	29.5		
			9/15–9/20	6	9,882	9/21–9/30	10(all)	56.5	14,082
2006			7/1–7/12	12		4/22–6/30 7/13–8/8 8/9–8/12	70(all) 26 4(all)		
			8/13–8/22	10	9,359	8/23–8/27 8/28–9/30	5(all) 34	60	15,076

^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 by calendar year from 1960 to 1978, from Jan. 1 to Sept. 30 for 1979, and by troll season (October 1–September 30) from 1980 to 2006.

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
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	2,007,321	659,258	221,984	3,107,779
2001–05 Average	300,477	6,619	1,665,126	134,337	239,675	2,346,234

Note: Only Chinook salmon catch statistics include hatchery terminal area catches. Catches for all species include Annette Island catches.

Table 8.—Southeast Alaska commercial troll salmon harvest in numbers of fish by species by statistical week, for the 2006 troll season (October 11, 2005–September 30, 2006).

Year	Week	Week of	King	Sockeye	Coho	Pink	Chum	Total
2005	42	9–Oct	3,142	0	0	0	0	3,142
	43	16–Oct	1,583	0	0	0	0	1,583
	44	23–Oct	2,505	0	0	0	0	2,505
	45	30–Oct	2,436	0	0	0	0	2,436
	46	6–Nov	773	0	0	0	0	773
	47	13–Nov	699	0	0	0	0	699
	48	20–Nov	190	0	0	0	0	190
	49	27–Nov	746	0	0	0	0	746
	50	4–Dec	483	0	0	0	0	483
	51	11–Dec	594	0	0	0	0	594
	52	18–Dec	456	0	0	0	0	456
	53	25–Dec	345	0	0	0	0	345
2006	1	1–Jan	467	0	0	0	0	467
	2	8–Jan	637	0	0	0	0	637
	3	15–Jan	774	0	0	0	0	774
	4	22–Jan	389	0	0	0	0	389
	5	29–Jan	533	0	0	0	0	533
	6	5–Feb	205	0	0	0	0	205
	7	12–Feb	939	0	0	0	0	939
	8	19–Feb	1,109	0	0	0	0	1,109
	9	26–Feb	1,121	0	0	0	0	1,121
	10	5–Mar	1,228	0	0	0	0	1,228
	11	12–Mar	913	0	0	0	0	913
	12	19–Mar	2,323	0	0	0	0	2,323
	13	26–Mar	3,716	0	0	0	0	3,716
	14	2–Apr	6,949	0	0	0	0	6,949
	15	9–Apr	7,336	0	0	0	0	7,336
	16	16–Apr	6,328	0	0	0	0	6,328
	17	23–Apr	225	0	0	0	0	225
	18	30–Apr	1,120	0	0	0	1	1,121
	19	7–May	3,349	0	0	0	4	3,353
	20	14–May	3,378	0	0	0	0	3,378
	21	21–May	3,831	0	0	0	0	3,831
	22	28–May	3,718	0	0	0	0	3,718
	23	4–Jun	5,929	0	0	0	4	5,933
	24	11–Jun	4,737	4	0	0	3	4,744
	25	18–Jun	7,391	34	327	73	69	7,894
	26	25–Jun	5,082	39	2,959	724	95	8,899
	27	2–Jul	78,684	407	93,278	1,796	838	175,003
	28	9–Jul	49,316	436	116,243	3,571	403	169,969
	29	16–Jul	13	615	194,669	6,838	389	202,524
	30	23–Jul	0	624	155,268	14,870	16,847	187,609
	31	30–Jul	10	537	129,717	15,255	30,386	175,905
	32	6–Aug	1	355	78,539	11,345	30,532	120,772
	33	13–Aug	43,585	1,965	127,018	3,625	33,230	209,423
	34	20–Aug	22,003	1,412	84,426	1,553	28,801	138,195
	35	27–Aug	0	910	122,818	367	1,246	125,341
	36	3–Sep	0	449	104,643	53	118	105,263
	37	10–Sep	0	225	102,750	18	38	103,031

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Year	Week	Week of	King	Sockeye	Coho	Pink	Chum	Total
	38	17–Sep	0	41	32,996	0	12	33,049
	39	24–Sep	0	10	3,599	0	1	3,610
		Winter fishery subtotal	48,919	0	0	0	0	48,919
		Spring fishery subtotal	36,951	77	3,929	3,791	168	44,916
		Summer fishery subtotal	195,421	8,004	1,356,327	56,323	117,802	1,733,877
		Hatchery terminal area subtotal	1,016	3	2,716	209	10,515	14,459
		Grand Total:	282,307	8,084	1,362,972	60,323	128,485	1,842,171

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

Table 9.—Average troll coho salmon dresses weight by week and weighted annual average, 1980–2006. Annual average is the quotient of the total number of troll coho landed divided by the total weight of troll coho salmon landed.

Week of	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2001–2005 Avg.	1996–2005 Avg.
July 1	5.1	5.2	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	5.6	5.6
July 8	5.7	5.2	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	5.7	5.7
July 15	5.9	5.1	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	5.8	5.8
July 22	6.2	5.2	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	5.9	5.9
July 29	6.4	5.4	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	5.9	6.0
Aug 5	6.7	5.6	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	6.1	6.2
Aug 12	6.7	5.7	7.3	7.1	6.8		7.2	5.4	6.6	6.2	7.0	6.3	6.4	5.5	6.1	6.3	6.4
Aug 19		5.9	7.7	7.7	7.3	7.0	7.7	5.8		6.6	7.1	6.6	6.8	6.0	6.6	6.6	6.8
Aug 26	7.4	6.0	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	6.9	7.1
Sept 2	7.8	6.1	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	7.1	7.4
Sept 9	8.2	6.0	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	7.4	7.7
Sept 16	8.5	6.2	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	7.6	7.9
Weighted Average:	6.6	5.6	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	6.4	6.4
Troll Harvest (millions)	1.9	2.4	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	1.7	1.6

Note: Includes Annette Island troll harvests.

Table 10.—Southeast Alaska annual commercial hand troll salmon harvest in numbers of fish by species 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 2006.

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
Average 1975–2005	26,652	1,147	190,055	95,427	9,197	322,477
2006	16,361	242	78,170	3,455	442	98,670

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 by calendar year from 1975 to 1978, from January 1 to September 30 for 1979, and by troll season (October 1–September 30) from 1980 to 2006.

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	335,772	4,862	1,806,383	54,912	168,498	2,370,427
2005	321,595	12,936	1,892,688	103,432	164,975	2,495,626
Average 1975–2005	219,637	9,131	1,253,974	407,615	127,194	2,017,552
2006	265,946	7,762	1,282,086	56,659	142,588	1,755,041

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 12.—2006 Southeast Alaska Chinook salmon harvests by gear and troll harvest by fishery.

Gear/Fishery	Total Harvest	Alaska Hatchery Harvest	Alaska Hatchery Add-on	Terminal Exclusion Harvest	Total Term. Exclusion/Alaska Hatchery Add-on	Treaty Harvest
Winter Troll	48,919	3,993	3,279		3,279	45,640
Spring Troll	37,934	10,446	8,788	1,835	10,623	27,311
Summer Troll	195,454	6,199	5,087		5,087	190,367
Total Troll	282,307	20,638	17,154	1,835	18,989	263,318
Seine	24,967	11,507	9,781	0	9,781	15,186
Gillnet	46,419	9,204	7,511	31,510	39,021	7,398
Setnet	1,195	0	1,195	0	1,195	1,195
Sport	76,779	15,233	12,879	419	13,298	63,481
All Gear Total	431,667	55,571	48,520	33,764	82,284	350,578

Note: Harvests 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, 1965–2006.

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	69	439	68	371
2004	355	64	419	81	500	83	417
2005	338	73	411	84	495	73	422
2006	282	73	355	77	432	56	376

Note: Years 1985–01 were updated in 2001, based on Add-on tables for BOF reports. All subsequent years also based on Add-on tables.

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

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

^c Estimates of sport catches for 1965–76 based on 1977–80 average catch per capita data. Sport catches for 1977–1999 based on statewide postal harvest surveys. Sport harvest for 2003 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), 1980–2006.

Year	<u>Early Winter (Oct.–Dec.)</u>			<u>Late Winter (Jan.–April)</u>			<u>Total Winter (Oct.–April)</u>			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%

Note: Data Includes Annette Island troll harvest.

Table 15.—Spring troll fishery (Experimental and Terminal fisheries) Chinook salmon harvests and Alaska hatchery contributions, 1986–2006. Data does not include Hatchery Access fisheries in 1989–1992.

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

Note: Data includes Annette Island troll harvests.

Table 16.—The number of Chinook salmon harvested and permits fished in the 2006 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	17	23–Apr	29–Apr	4	19	
		18	30–Apr	6–May	*	*	
		19	7–May	13–May	5	36	
		20	14–May	20–May	11	171	20%
		21	21–May	27–May	23	625	22%
		22	28–May	3–Jun	30	424	33%
		23	4–Jun	10–Jun	47	1,132	37%
		24	11–Jun	17–Jun	37	794	66%
		25	18–Jun	24–Jun	44	1,523	48%
		26	25–Jun	30–Jun	23	481	29%
Ketchikan Area Total					74	5,227	41%
101–90	West Behm Canal	19	8–May	12–May	*	*	
		21	22–May	26–May	*	*	
		22	29–May	2–Jun	*	*	
		23	5–Jun	9–Jun	*	*	
		24	12–Jun	16–Jun	4	147	47%
		25	19–Jun	23–Jun	*	*	
		26	26–Jun	30–Jun	4	45	
West Behm Canal Total					7	298	30%
101–95	Neets Bay Term. Area	23	5–Jun	7–Jun	*	*	
		25	12–Jun	13–Jun	*	*	
		27	19–Jun	20–Jun	*	*	
		28	26–Jun	27–Jun	*	*	
		29	3–Jul	9–Jul	*	*	
		30	10–Jul	16–Jul	*	*	
		31	17–Jul	23–Jul	*	*	
		32	24–Jul	30–Jul	*	*	
Neets Bay Term. Area Total					*	*	100%
105–41	Sumner Strait	18	1–May	2–May	5	15	
		19	8–May	9–May	9	49	4%
		20	15–May	16–May	13	81	2%
		21	22–May	24–May	10	218	13%
		22	29–May	31–May	10	170	15%
		23	5–Jun	7–Jun	9	160	
		24	12–Jun	13–Jun	7	99	
		25	19–Jun	20–Jun	9	27	
		26	26–Jun	27–Jun	*	*	
Sumner Strait Total					23	820	7%
106–20	Clarence Strait	23	5–Jun	9–Jun	*	*	
		24	12–Jun	16–Jun	*	*	
		25	19–Jun	23–Jun			

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Stat Area	Stat Area	Stat Area	Stat Area	Stat Area	Stat Area	Stat Area	Stat Area
	Clarence Strait Total				*	*	
106–30	Steamer Point	20	15–May	19–May	*	*	
		22	29–May	2–Jun	5	68	
		23	5–Jun	9–Jun	8	294	14%
		24	12–Jun	16–Jun	6	66	98%
		25	19–Jun	23–Jun	9	275	35%
		26	26–Jun	30–Jun	5	164	
	Steamer Point Total				17	885	23%
106–44	Wrangell Narrows Term. Area	22	29–May	2–Jun	5	28	
		23	5–Jun	9–Jun	11	65	
		24	12–Jun	16–Jun	10	119	
		25	19–Jun	23–Jun	12	203	
		26	26–Jun	28–Jun	10	224	
					24	639	100%
107–10	Ernest Sound	20	15–May	19–May	*	*	
		22	29–May	2–Jun	*	*	
		24	12–Jun	16–Jun	*	*	
		25	19–Jun	23–Jun	*	*	
	Ernest Sound Total				3	145	
107–30	Zimovia Strait	20	15–May	19–May	*	*	
		22	29–May	2–Jun	*	*	
		23	5–Jun	9–Jun	*	*	
	Zimovia Strait Total				3	45	23%
107–35	Anita Bay Term. Area	24	12–Jun	16–Jun	*	*	
	Anita Bay Term. Area Total				*	*	100%
108–41	District 8	18	1–May	5–May	18	106	
		19	8–May	12–May	28	278	8%
		20	15–May	19–May	40	235	40%
		21	22–May	26–May	37	370	10%
		22	30–May	2–Jun	38	516	21%
		23	5–Jun	9–Jun	34	661	29%
		24	12–Jun	16–Jun	11	178	59%
		25	19–Jun	23–Jun	11	176	
		26	26–Jun	30–Jun	17	395	85%
	District 8 Total				90	2,915	31%
109–10	Little Port Walter	20	16–May	19–May	3	70	
		22	29–May	2–Jun	4	67	144%
		23	5–Jun	9–Jun	8	215	52%
		24	12–Jun	17–Jun	*	*	

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Stat Area	Stat Area	Stat Area	Stat Area	Stat Area	Stat Area	Stat Area	Stat Area
		25	18–Jun	24–Jun	*	*	
		26	25–Jun	30–Jun	*	*	
	Little Port Walter Total				16	537	46%
109–62	Tebenkof Bay	18	1–May	3–May	3	81	2%
		19	7–May	9–May	11	1,030	11%
	Tebenkof Bay Total				12	1,111	11%
110–31	Frederick Sound	17	23–Apr	29–Apr	*	*	
		18	30–Apr	6–May	*	*	
		20	14–May	20–May	3	9	14%
		21	21–May	27–May	*	*	
		22	28–May	3–Jun	*	*	
		23	4–Jun	10–Jun	*	*	
		24	11–Jun	17–Jun	3	28	51%
		25	18–Jun	24–Jun	*	*	
		26	25–Jun	30–Jun	4	56	
	Frederick Sound Total				14	183	19%
111–40	District 11	21	22–May	26–May	*	*	
		23	5–Jun	9–Jun	*	*	
		21	22–May	26–May	*	*	
		22	29–May	2–Jun	*	*	
	District 11 Total				3	11	
112–12	Chatham Strait	17	23–Apr	29–Apr	6	157	10%
		18	30–Apr	6–May	15	519	16%
		19	7–May	13–May	23	782	3%
		20	14–May	20–May	36	1,435	22%
		21	21–May	27–May	41	818	30%
		22	28–May	3–Jun	41	351	70%
		23	4–Jun	10–Jun	36	1,028	36%
		24	11–Jun	17–Jun	18	547	30%
		25	18–Jun	24–Jun	26	1,705	36%
		26	25–Jun	30–Jun	21	1,116	59%
	Chatham Strait Total				104	8,458	32%
112–22	Hidden Falls Term. Area	21	21–May	27–May	3	9	
		22	28–May	3–Jun	4	35	
		23	4–Jun	10–Jun	6	111	
		24	11–Jun	17–Jun	*	*	
		25	18–Jun	24–Jun	*	*	
		26	25–Jun	30–Jun	4	83	
	Hidden Falls Term. Area Total				16	312	100%

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Table 16.—Page 4 of 6.

Stat Area	Stat Area	Stat Area	Stat Area	Stat Area	Stat Area	Stat Area	Stat Area
113-01	Western Channel	21	22-May	22-May	18	105	3%
		22	30-May	31-May	33	171	3%
		23	5-Jun	6-Jun	19	90	
		24	12-Jun	13-Jun	11	75	
		25	19-Jun	22-Jun	17	175	22%
		26	26-Jun	27-Jun	9	46	
Western Channel Total					64	662	7%
113-30	Redoubt Bay	19	8-May	9-May	*	*	
		20	15-May	16-May	3	33	
		21	22-May	25-May	8	93	
		22	30-May	2-Jun	20	380	13%
		23	5-Jun	9-Jun	24	760	16%
		24	12-Jun	12-Jun	4	22	
Redoubt Bay Total					38	1,290	13%
113-31	Biorka Island	21	22-May	22-May	45	661	7%
		24	12-Jun	12-Jun	70	978	14%
Biorka Island Total					88	1,639	11%
113-38	Deep Inlet Term. Area	18	30-Apr	6-May	*	*	
		19	7-May	13-May	*	*	
		20	14-May	20-May	*	*	
		21	21-May	27-May	*	*	
		22	28-May	3-Jun	*	*	
		23	4-Jun	10-Jun	*	*	
		24	11-Jun	17-Jun	*	*	
Deep Inlet Term. Area Total					4	39	100%
113-41	Sitka Sound	17	23-Apr	29-Apr	7	29	—
		18	30-Apr	6-May	18	254	—
		19	7-May	13-May	51	953	34%
		20	14-May	20-May	59	796	8%
		21	21-May	27-May	60	328	6%
		22	28-May	3-Jun	47	351	20%
		23	4-Jun	10-Jun	52	436	32%
		24	11-Jun	17-Jun	69	889	31%
		25	18-Jun	24-Jun	83	1,236	12%
		26	25-Jun	30-Jun	62	552	44%

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Stat Area	Stat Area	Stat Area	Stat Area	Stat Area	Stat Area	Stat Area	Stat Area
	Sitka Sound Total				166	5,824	22%
113-62	Salisbury Sound	20	15-May	16-May	13	103	72%
		21	22-May	24-May	10	84	53%
		22	30-May	1-Jun	19	332	21%
		23	5-Jun	8-Jun	24	278	1%
		24	12-Jun	15-Jun	20	195	39%
		25	19-Jun	22-Jun	35	1,167	5%
	Salisbury Sound Total				72	2,159	15%
113-95	Lisianski Inlet	19	8-May	9-May	8	75	49%
		20	15-May	16-May	14	155	33%
		21	22-May	24-May	9	146	-
		22	29-May	31-May	17	324	45%
		23	5-Jun	8-Jun	10	218	35%
		24	12-Jun	15-Jun	15	357	28%
		25	19-Jun	23-Jun	23	423	15%
		26	25-Jun	30-Jun	15	139	9%
	Lisianski Inlet Total				49	1,837	26%
113-97	Stag Bay	18	1-May	4-May	*	*	
		19	8-May	11-May	*	*	
		20	15-May	18-May	*	*	
		21	22-May	25-May	*	*	
		22	29-May	2-Jun	3	26	
		23	5-Jun	9-Jun	*	*	
		24	12-Jun	16-Jun	*	*	
	Stag Bay Total				8	72	2%
114-21	Cross Sound	24	12-Jun	16-Jun	*	*	
		25	19-Jun	23-Jun	3	53	
		26	26-Jun	30-Jun	5	13	
	Cross Sound Total				9	85	
114-23	South Passage	18	1-May	4-May	*	*	
		19	8-May	12-May	*	*	
		20	15-May	19-May	4	16	
		21	22-May	26-May	*	*	
		22	29-May	2-Jun	*	*	
		24	12-Jun	17-Jun	*	*	
	South Passage Total				8	106	
114-25	Icy Strait	17	23-Apr	29-Apr	4	14	
		18	30-Apr	6-May	6	63	4%
		19	7-May	13-May	12	59	

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Table 16.—Page 6 of 6.

Stat Area	Stat Area	Stat Area	Stat Area	Stat Area	Stat Area	Stat Area	Stat Area
		20	14–May	20–May	9	29	
		21	21–May	27–May	15	94	9%
		22	28–May	3–Jun	15	172	4%
		23	4–Jun	10–Jun	17	171	6%
		24	11–Jun	17–Jun	4	24	6%
		25	18–Jun	24–Jun	4	12	
		26	25–Jun	30–Jun	10	47	30%
	Icy Strait Total				38	685	6%
114–50	Port Althorp	19	8–May	9–May	*	*	
		20	15–May	16–May	9	204	10%
		21	22–May	24–May	17	248	19%
		22	29–May	31–May	15	265	30%
		23	5–Jun	8–Jun	20	396	27%
		24	12–Jun	15–Jun	13	207	39%
		25	19–Jun	23–Jun	20	449	5%
		26	25–Jun	30–Jun	9	106	3%
	Port Althorp Total				50	1,905	19%
Stat Area	Fishery Name	Stat Week	Open	Close	Permits	Chinook	
Spring Experimental Subtotal					36,951 ^a	25%	
Spring Terminal Subtotal					1,016	100%	
Total Spring Troll					37,967	28%	

Note: Due to confidentiality policy, harvests are omitted where less than 3 permits made landings, therefore totals may not reflect the sum of weekly values.

^a Data includes Annette Island harvests.

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

(–) Indicates that harvest was not sampled for coded–wire tags.

Table 17.—Southeast Alaska troll Chinook salmon catch per fleet day during the general summer fishery, 1984–2006.

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	1.84
	August 23–24	2	11,900	5,950	
		24	211,900	8,829	
1991	July 1–8	8	154,000	20,533	1.82
1992	July 1–4	4	65,600	18,743	1.65
	August 23	1	6,900	6,900	
		5	72,500	16,111	
1993	July 1–6	6	101,100	16,850	1.71
	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	1.55
	August 29 – September 2	5	20,200	4,040	
		12	118,500	9,875	
1995	July 1–10	10	75,900	7,590	0.99
	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– September 5	7	10,600	1,514	
		21	182,700	8,700	
1998	July 1 – 11	11	102,800	9,345	1.25
	August 20 – Sept. 30	42	36,000	857	
		53	138,800	2,619	
1999	July 1 – 6	6	78,100	13,017	1.16
	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 – September 5	19	30,509	1,606	
		25	95,363	3,815	
2002	July 1–18	18	187,003	10,389	1.74
	August 12 – September 2	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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Table 17.—Page 3 of 3.

Year	Fishing Period	Days	Chinook Harvest	Catch/Fleet Day	Chinook Abundance Index^a
2005	July 1–17	17	151,128	8,890	
	August 14–20	6.5	70,424	10,834	
	September 15–20	6	5,307	885	
		29.5	226,859	7,690	1.90
2006	July 1–12	12	129,809	10,817	
	August 13–22	10	65,588	6,559	
		22	195,397	8,882	1.69

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

Note: These catch numbers do not include Annette Island catches.

^a Abundance index is estimated by the Chinook Technical Committee of the Pacific Salmon Commission.

Table 18.—Coho salmon mid-season closure dates and extensions, 1980–2006. During the years listed, coho season opened on June 15 and closed on September 20, unless noted.

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)*
2002	August 10–11	2	9/21–9/30	Entire region open except portion of Sitka 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

* 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, 1989–2006.

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%	
1989–2006 Averages		39,124	3,912	11%
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
	2003	35,429	11,949	34%
	2004	55,169	19,894	36%
	2005	58,665	18,065	31%
	2006	36,918	9,423	26%
	1989–2006 Averages	25,610	10,402	43%
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
	2004	1,603	1,603	100%
	2005	2,280	2,280	100%
	2006	1,016	1,016	100%
	1989–2006 Averages	4,141	4,141	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%
	1990	211,900	14,300	6.7%
	1991	154,000	6,600	4.3%

-continued-

Table 19.—Page 3 of 3.

Fishery	Year	Total Harvest	Alaskan Hatcheries	
			Number	Percent
	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%
	1989–2006 Averages	154,199	6,584	4.6%
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%
	1989–2006 Averages	230,005	30,050	14%

Note: Data includes Annette Island troll harvests.

Table 20.—Total Chinook salmon harvest and Alaska hatchery harvest by gear, 1985–2006.

Year	<u>Purse Seine</u>		<u>Drift Gillnet</u>		<u>Set Gillnet</u>		<u>Troll</u>		<u>Sport</u>		<u>All Gear</u>	
	Total	AK Hatchery	Total	AK Hatchery	Total	AK Hatchery	Total	AK Hatchery	Total	AK Hatchery	Total	AK Hatchery
1985	21,593	150	10,679	976	1,232	0	215,811	8,071	24,858	3,365	274,173	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	76,779 ^a	15,233 ^a	431,667	56,692

Note: Data includes Hatchery Terminal and Annette Island harvests.

^a 2006 sport fish catches 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, 1960–2006.

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%
Avg. 1980–1989	1,199,361	1,114,717	82,730	1,914	84,644	7%
Avg. 1989–2005	1,820,098	1,474,159	338,014	8,282	346,287	19%

Note: Data includes Annette Island troll harvests.

Table 22.—Estimates of total escapements of Chinook salmon to escapement indicator systems and to Southeast Alaska and transboundary rivers, 1975–2006. [See note below regarding bolded numbers]

Year	MAJOR SYSTEMS				MEDIUM SYSTEMS							SMALL	TOTAL All Systems	Expanded Region Total	
	Alsek	Taku	Stikine	Major Subt.	Situk	Chilkat	Andrew	Unuk	Chickamin	Blossom	Keta	Medium Subt			King Salmon
1975		12,920	7,571				520		1,914	584	609		63		
1976	5,320	24,582	5,723	35,625	1,421		404		810	272	252		98		
1977	13,490	29,496	11,445	54,431	1,732		456	4,870	1,875	448	690	10,071	201	64,703	77,027
1978	12,650	17,124	6,835	36,609	808		388	5,530	1,594	572	1,176	10,068	86	46,763	55,670
1979	15,520	21,617	12,610	49,747	1,284		327	2,880	1,233	216	1,278	7,218	113	57,078	67,950
77–79 Avg.	13,887	22,746	10,297	46,929	1,275		390	4,427	1,567	412	1,048	9,119	133	56,181	66,883
1980	12,435	39,239	30,573	82,247	905		282	5,080	2,299	356	576	9,498	104	91,849	109,344
1981	9,815	49,559	36,057	95,431	702		536	3,655	1,985	636	987	8,501	139	104,071	123,894
1982	9,845	23,847	40,488	74,180	434		672	6,755	2,952	1,380	2,262	14,455	354	88,989	105,939
1983	11,185	9,795	6,424	27,404	592		366	5,625	3,099	2,356	2,466	14,504	245	42,153	50,182
1984	7,860	20,778	13,995	42,633	1,726		389	9,185	5,697	2,032	1,830	20,859	265	63,757	75,901
1985	6,415	35,916	16,037	58,368	1,521		640	5,920	4,943	2,836	1,872	17,732	175	76,275	90,804
1986	13,035	38,110	14,889	66,034	2,067		1,414	10,630	9,022	5,112	2,070	30,315	255	96,604	115,004
1987	12,455	28,935	24,632	66,022	1,379		1,576	9,865	5,041	5,396	2,304	25,561	196	91,779	109,261
1988	9,970	44,524	37,554	92,048	868		1,128	8,730	4,064	1,536	1,725	18,051	208	110,307	131,318
1989	11,010	40,329	24,282	75,621	637		1,060	5,745	4,829	1,376	3,465	17,112	240	92,973	110,682
Average	10,403	33,103	24,493	67,999	1,083		806	7,119	4,393	2,302	1,956	17,659	218	85,876	102,233
1990	8,490	52,142	22,619	83,251	628		1,328	2,955	2,916	1,028	1,818	10,673	179	94,103	112,027
1991	11,115	51,645	23,206	85,966	889	5,897	800	3,275	2,518	956	816	15,151	134	101,251	112,501
1992	6,215	55,889	34,129	96,233	1,595	5,284	1,556	4,370	1,789	600	651	15,845	99	112,177	124,641
1993	16,105	66,125	58,962	141,192	952	4,472	2,120	5,340	2,011	1,212	1,086	17,193	263	158,648	176,276
1994	18,100	48,368	33,094	99,562	1,271	6,795	1,144	4,623	2,006	644	918	17,401	210	117,173	130,192
1995	26,985	33,805	16,784	77,574	4,330	3,790	686	3,860	2,309	868	525	16,368	146	94,088	104,542
1996	17,995	79,019	28,949	125,963	1,800	4,920	670	5,835	1,587	880	891	16,583	288	142,834	158,704
1997	14,145	114,938	26,996	156,079	1,878	8,100	586	2,970	1,406	528	738	16,206	357	172,642	191,824
1998	4,621	31,039	25,968	61,628	924	3,675	974	4,132	2,021	364	446	12,536	132	74,296	82,551
1999	11,597	20,545	19,947	52,089	1,461	2,271	1,210	3,914	2,544	848	968	13,216	300	65,605	72,894
Average	13,537	55,352	29,065	97,954	1,573	5,023	1,107	4,127	2,111	793	886	15,117	211	113,282	126,615
2000	8,295	30,529	27,531	66,355	1,785	2,035	1,380	5,872	4,141	924	913	17,050	137	83,542	92,824
2001	11,022	41,179	63,523	115,724	656	4,517	2,108	10,541	5,177	816	1,029	24,844	147	140,715	156,350

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Table 22.–Page 2 of 2.

Year	MAJOR SYSTEMS				MEDIUM SYSTEMS							SMALL	TOTAL ALL	Expanded Region Total	
	Alsek	Taku	Stikine	Major Subt.	Situk	Chilkat	Andrew	Unuk	Chickamin	Blossom	Keta	Medium Subt.	King Salmon		SYSTEMS
2002	8,504	52,409	50,875	111,788	1,000	4,050	1,752	6,988	5,007	896	1,233	20,926	153	132,867	147,630
2003	4,932	36,435	46,824	88,191	2,117	5,657	1,190	5,546	4,579	812	966	20,867	117	109,175	121,306
2004	7,343	68,199	48,900	124,442	755	3,422	3,068	3,963	4,126	734	1,128	17,196	134	141,772	157,524
2005	5,350	39,820	38,043	83,213	613	3,470	2,030	4,645	4,777	1,780	1,491	18,806	141	102,160	113,511
2006	2,805	41,831	28,000	72,636	749	3,027	2,178	5,890	6,876	1,356	2,241	22,317	149	95,102	105,669
00–06 Ave	6,893	44,343	43,385	94,621	1,096	3,740	1,958	6,206	4,955	1,045	1,286	20,287	140	115,048	127,831
CHANGE FROM 2005 to 2006															
Number	-2,545	2,011	10,043	-10,577	136	-443	148	1,245	2,099	-424	750	3,511	7	-39,612	-44,013
Percent	-48%	5%	-26%	-13%	22%	-13%	7%	27%	44%	-24%	50%	19%	5%	-39%	-39%
Goals^a:															
Lower	5,500	30,000	14,000	49,500	450	1,750	650	3,250	2,326	1,000	750	10,176	120	59,796	66,440
Point	8,500	36,000	17,500	62,000	730	2,200	750	4,000	3,490	1,500	1,125	13,795	150	75,945	84,383
Upper	11,500	55,000	28,000	94,500	1,050	3,500	1,500	7,000	4,653	2,000	1,500	21,203	240	115,943	128,826

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 five 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
<u>SOUTHEAST ALASKA AREA</u>															
Auke Cr.	E	E	E	I	E	E	E	E	E	E	E	E	I	I	E
Berners R.	E	E	E	I	I	E	I	E	E	E	E	E	E	I	I
Ford Arm L.	E	E	E	I	I	E	E	E	I	I	E	E	E	E	E
Hugh Smith L.	E	I	E	E	I	I	I	E	I	E	E	E	I	E	I
Chilkat River	E	E	E	E	I	I	I	E	E	E	E	E	E	I	E
Montana Cr.	E	E	E	I	I	I	I	I	I	I	E	I	U	U	I
Petersen Cr.	E	I	E	E	E	I	I	E	I	I	I	I	E	I	E
Sitka Index	E	E	E	E	E	E	E	I	E	E	E	E	E	E	E
Ketchikan Index	I	I	E	E	E	I	I	I	E	E	E	E	E	E	I
<u>YAKUTAT AREA</u>															
Lost R.	I	I	E	I	I	I	NA	NA	NA	NA	E	E	I	U	I
Situk R.	E	E	E	I	I	I	NA	NA	NA	NA	E	I	E	U	I
Tsiu/Tsivat R.	E	I	E	I	I	I	NA	NA	I	NA	E	NA	NA	I	I
All-Gear Commercial Harvest (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

Table 24.—Escapement estimates for four Southeast Alaska coho salmon indicator stocks, 1980–2006.

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
Average 1980–2005	718	9,843	3,405	1,323
2006	582	5,470	4,737	891
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, 1981–2006.

Year	Auke Creek (Weir)	Montana Creek	Steep Creek	Jordan Creek	Switzer Creek	Peterson Creek	Small Stream Index	Berners River	Chilkat River	Taku River
1981	646	227	515	482	109	219	2,198			
1982	447	545	232	368	80	320	1,992	7,505		
1983	694	636	171	184	77	219	1,981	9,840		
1984	651	581	168	251	123	189	1,963	2,825		
1985	942	810	186	72	122	276	2,408	6,169		
1986	454	60	247	163	54	363	1,341	1,752		
1987	668	314	128	251	48	204	1,613	3,260	35,800	55,457
1988	756	164	155	215	51	542	1,883	2,724	28,209	39,450
1989	502	566	222	133	78	242	1,743	7,509	46,704	56,808
1990	697	1,711	185	216	82	324	3,215	11,050	79,807	72,196
1991	808	1,415	267	322	227	410	3,449	11,530	80,831	127,484
1992	1,020	2,512	612	785	93	403	5,425	15,300	74,205	84,853
1993	859	1,352	471	322	94	112	3,210	15,670	55,678	109,457
1994	1,437	1,829	200	371	198	318	4,353	15,920	185,948	96,343
1995	460	600	409	77	42	277	1,865	4,945	54,263	55,710
1996	511	798	134	54	42	263	1,802	6,050	35,704	44,635
1997	609	1,018	182	18	67	186	2,080	10,050	41,622	32,345
1998	862	1,160	149	63	42	102	2,378	6,802	50,758	61,382
1999	845	1,000	392	47	51	272	2,607	9,920	54,649	60,844
2000	683	961	88	30	74	202	2,038	10,650	84,756	64,700
2001	842	1,119	366	119	50	106	2,602	19,290	103,958	104,460
2002	1,112	2,448	380	1,396	124	195	5,655	27,700	205,429	219,360
2003	585	808	400	78	100	203	2,174	10,110	134,340	183,038
2004	416	364	82	38	69	284	1,253	14,450	64,524	132,405
2005	450	351	107	94	36	139	1,177	5,220	32,069	91,830
Average 1981– 2005	718	934	258	246	85	255	2,496	9,843	76,277	89,092
2006	582	1,110	294	76	44	439	2,545	5,470	80,262	140,028
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, 1982–2006.

Year	Starrigavan Creek	Sinitzin Creek	St. John's Creek	Nakwasina River	Eagle River	Black River	Ford Arm Lake (Weir)	Total Index
1982	317	46	116	577	482	749	2,662	4,950
1983	45	31	20	217	143	427	1,938	2,821
1984	385	160	154	715	645	425	4,232	6,716
1985	193	144	109	408	390	1,628	2,324	5,196
1986	57	73	53	275	245	312	1,546	2,561
1987	36	21	22	47	167	262	1,694	2,249
1988	45	56	71	104	126	280	3,028	3,710
1989	101	76	89	129	180	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	644	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	243	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
Avg. 1981–05	152	119	92	459	374	771	3,439	5,407
2006	386	152	121	936	992	1,100	4,737	8,424

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, 1987–2006.

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	88	154	62	387	98	304	145	180	700	800	740	1,118	650	532	6,051
1988	72	150	205	20	300	50	175	150	193	790	850	600	513	52	1,400	5,520
1989	75	101	290	15	925	450	510	200	70	1,000	650	1,175	433	350	950	7,194
1990	150	30	235	150	282	72	35	105	139	800	550	575	870	135	275	4,403
1991	245	50	285	50	550	100	300	220	375	725	800	575	1,826	671	775	7,547
1992	115	270	860	90	675	100	250	150	360	650	627	1,285	1,426	550	1,035	8,443
1993	90	175	460	50	475	325	110	300	310	850	725	1,525	830	600	1,275	8,100
1994	265	220	755	200	560	175	325	225	475	775	1,100	2,205	1,753	560	850	10,443
1995	250	94	435	165	600	220	415	180	400	800	1,155	1,385	1,781	82	2,446	10,408
1996	94	92	383	40	570	230	457	220	240	829	1,506	1,924	958	440	1,806	9,789
1997	75	85	420	60	371	94	292	175	140	1,143	571	759	732	32	847	5,795
1998	94	130	460	120	304	50	411	190	255	1,004	1,169	1,961	983	256	666	8,053
1999	75	127	657	150	356	25	627	225	425	598	1,895	1,518	1,246	520	840	9,284
2000	135	94	600	110	380	72	620	180	275	1,354	1,619	1,421	600	102	1,672	9,234
2001	80	110	929	151	1,140	212	891	450	173	1,561	1,612	1,956	1,580	506	1,704	13,055
2002	88	138	1,105	20	940	70	700	220	270	1,359	1,368	2,302	3,291	2,004	1,639	15,514
2003	242	197	875	39	690	57	1,140	380	427	1,940	1,934	1,980	1,615	214	1,745	13,474
2004	150	230	801	170	935	250	640	180	455	1,005	1,200	1,835	840	1,230	823	10,744
2005	510	300	1,240	360	890	190	810	270	500	3,680	3,290	1,130	1,732	500	1,170	16,572
Average																
1987–2005	152	141	587	106	596	149	474	219	298	1,135	1,233	1,413	1,270	498	1,182	9,454
2006	165	124	190	176	280	30	405	130	272	2,300	645	335	891	260	1,600	7,803

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, 1982–2006.

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
Average 1982–2005	31	37	53	36	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

–continued–

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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
1982–2005 Average	41	67	60	66	58
2006	33	66	52	53	51

FIGURES

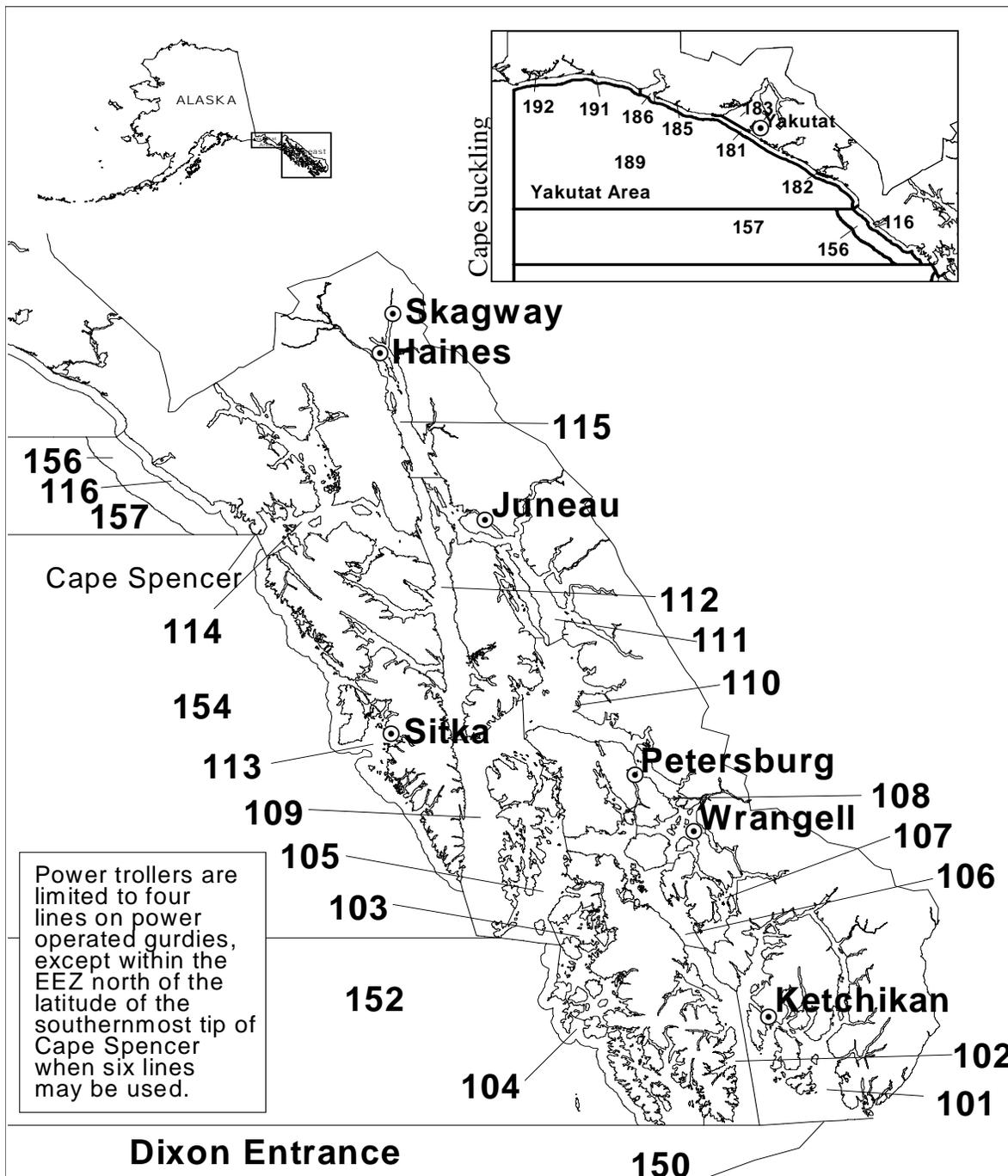


Figure 1.—Map of Southeast Alaska Region 1 commercial troll fishing districts.

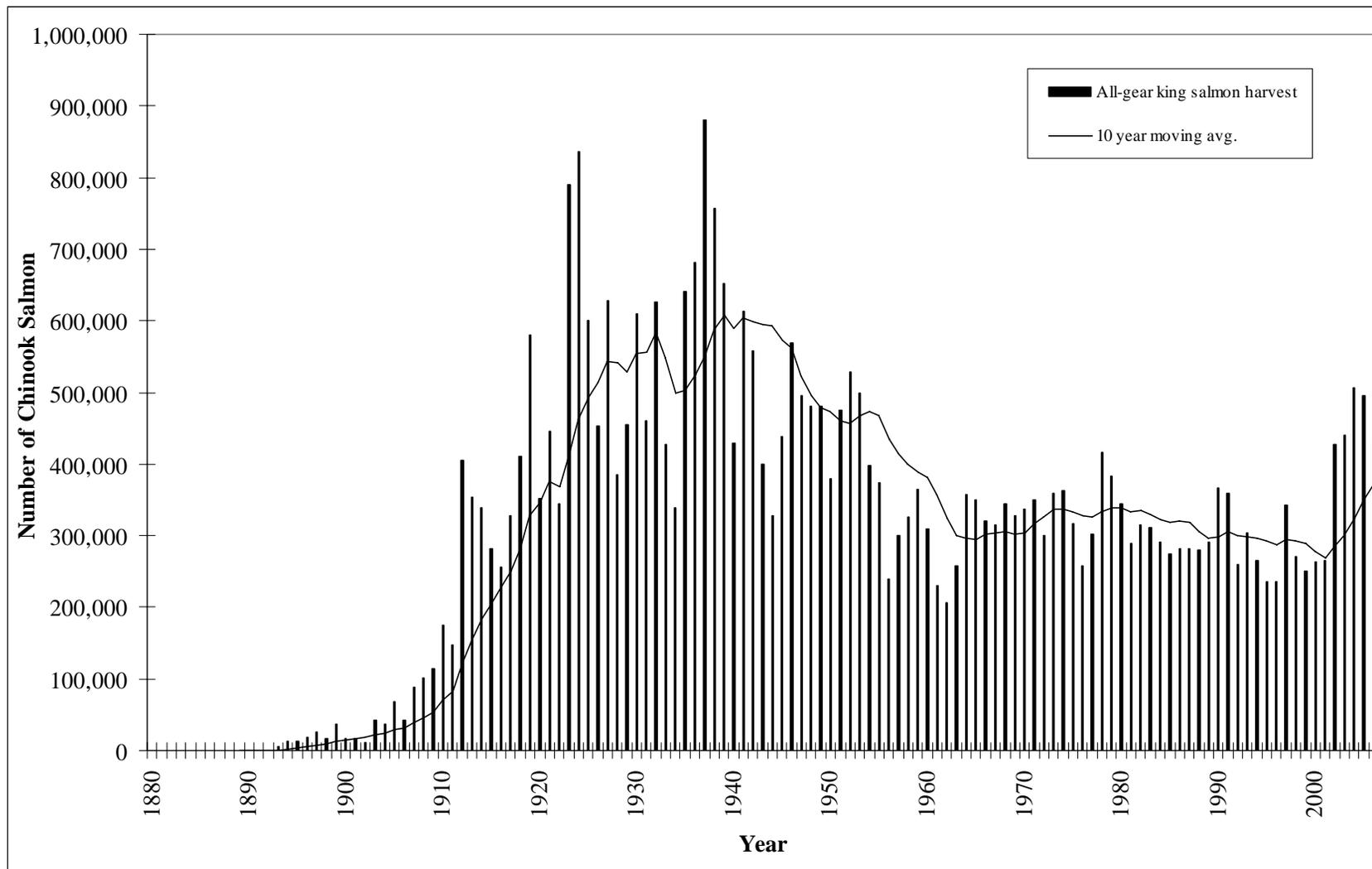


Figure 2.—All-gear harvests of Chinook salmon in common property fisheries, 1890–2006.

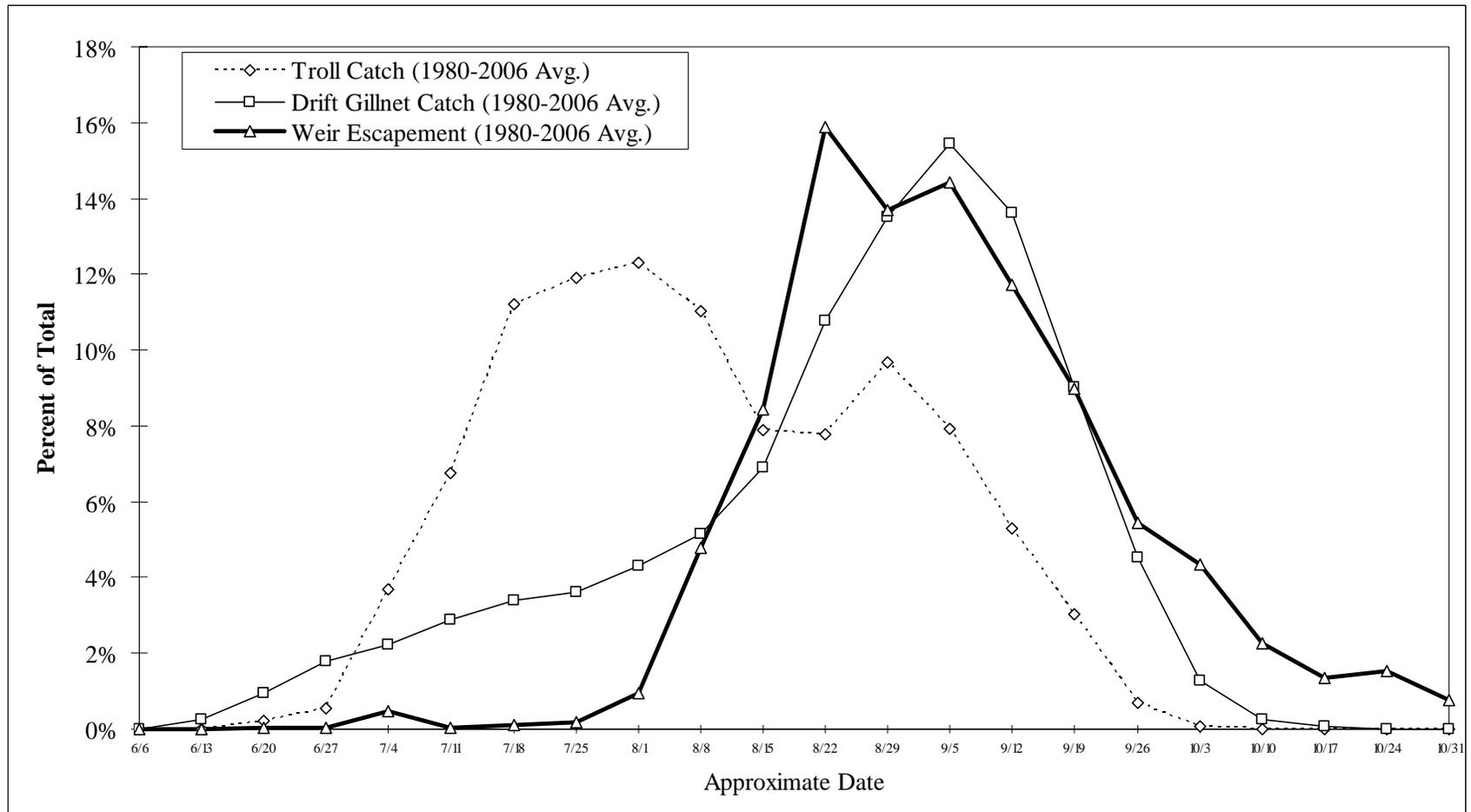


Figure 3.—Average weekly coho harvest timing of the Southeast Alaska commercial troll and drift gillnet fisheries (1980–2006), and the average weekly coho salmon escapement timing of the Hugh Smith Lake, Ford Arm Lake and Auke Creek weirs (1980–2006).

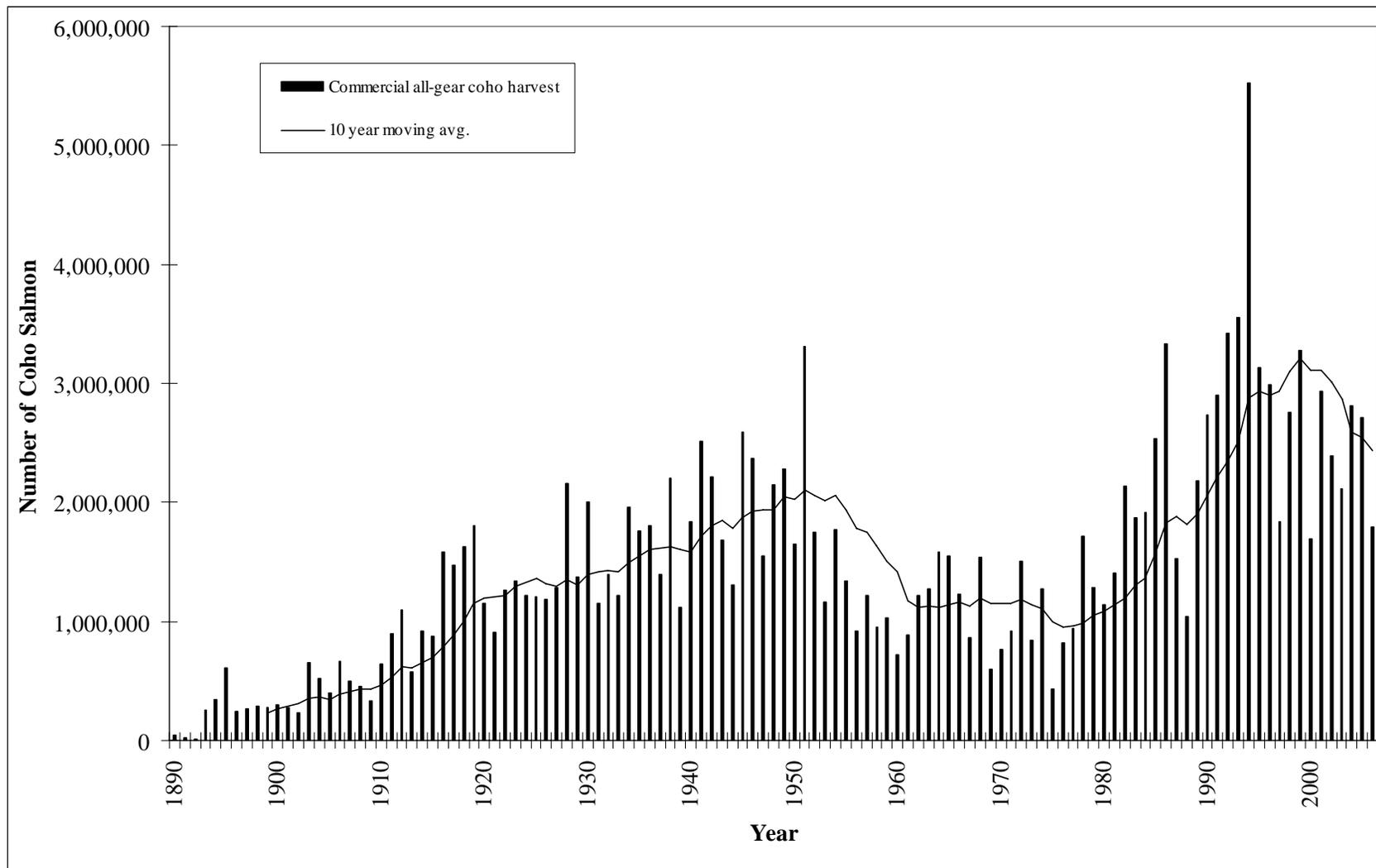


Figure 4.—Commercial all-gear harvests of coho salmon in common property fisheries, 1890–2006.

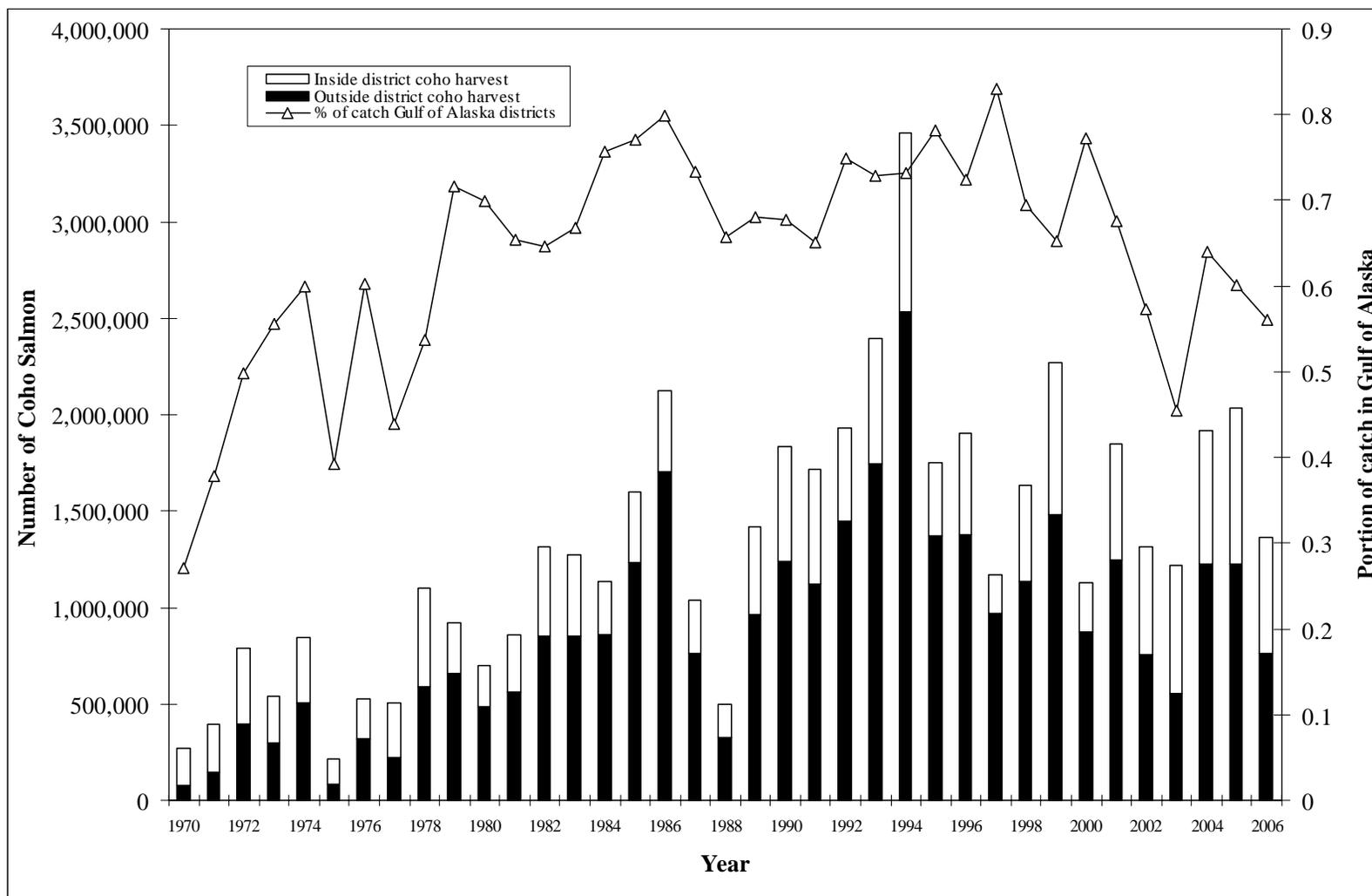


Figure 5.—Southeast Alaska troll coho salmon harvest in the outside (Gulf of Alaska) districts (103, 104, 113, 116, 152, 154, 156, 157, 181, 183, 189, 191) and the inside districts (101, 102, 105, 106, 107, 108, 109, 110, 111, 112, 114), and the percentage of the harvest the outside districts, 1970–2006.

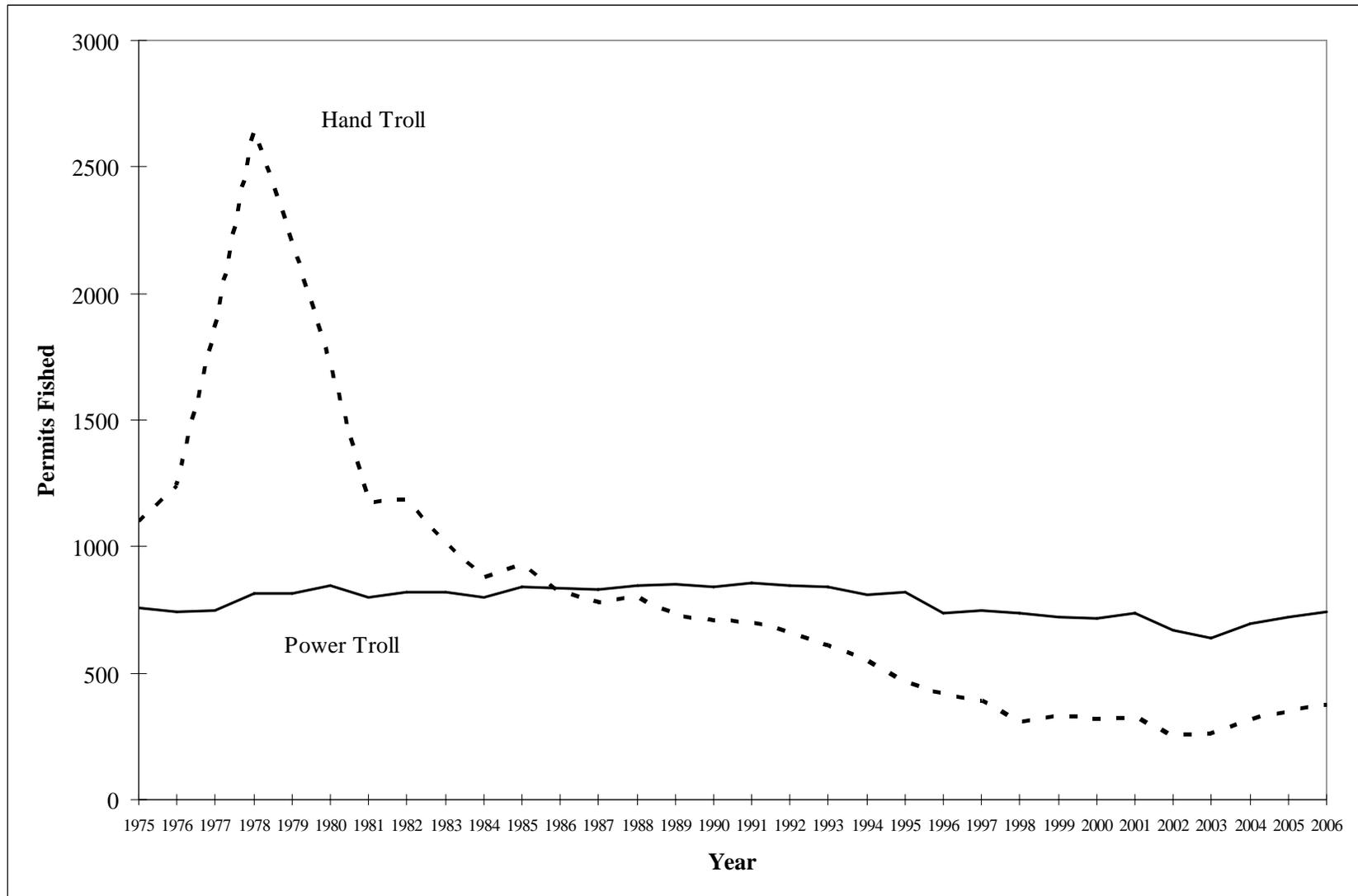


Figure 6.—Number of troll permits fished by gear type, 1975–2006.

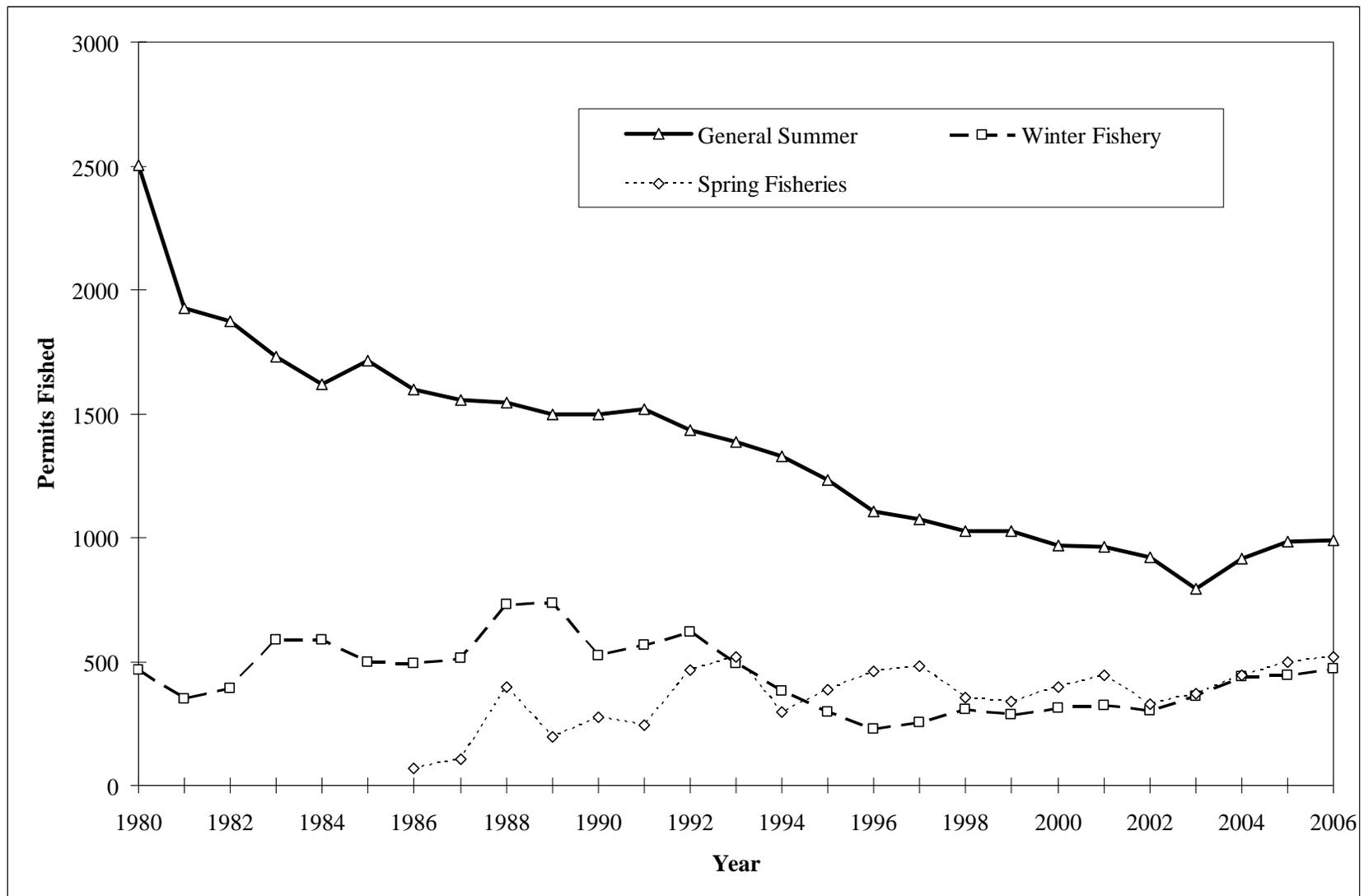


Figure 7.—Number of troll permits fished in the general summer, winter, and spring fisheries, 1980–2006.

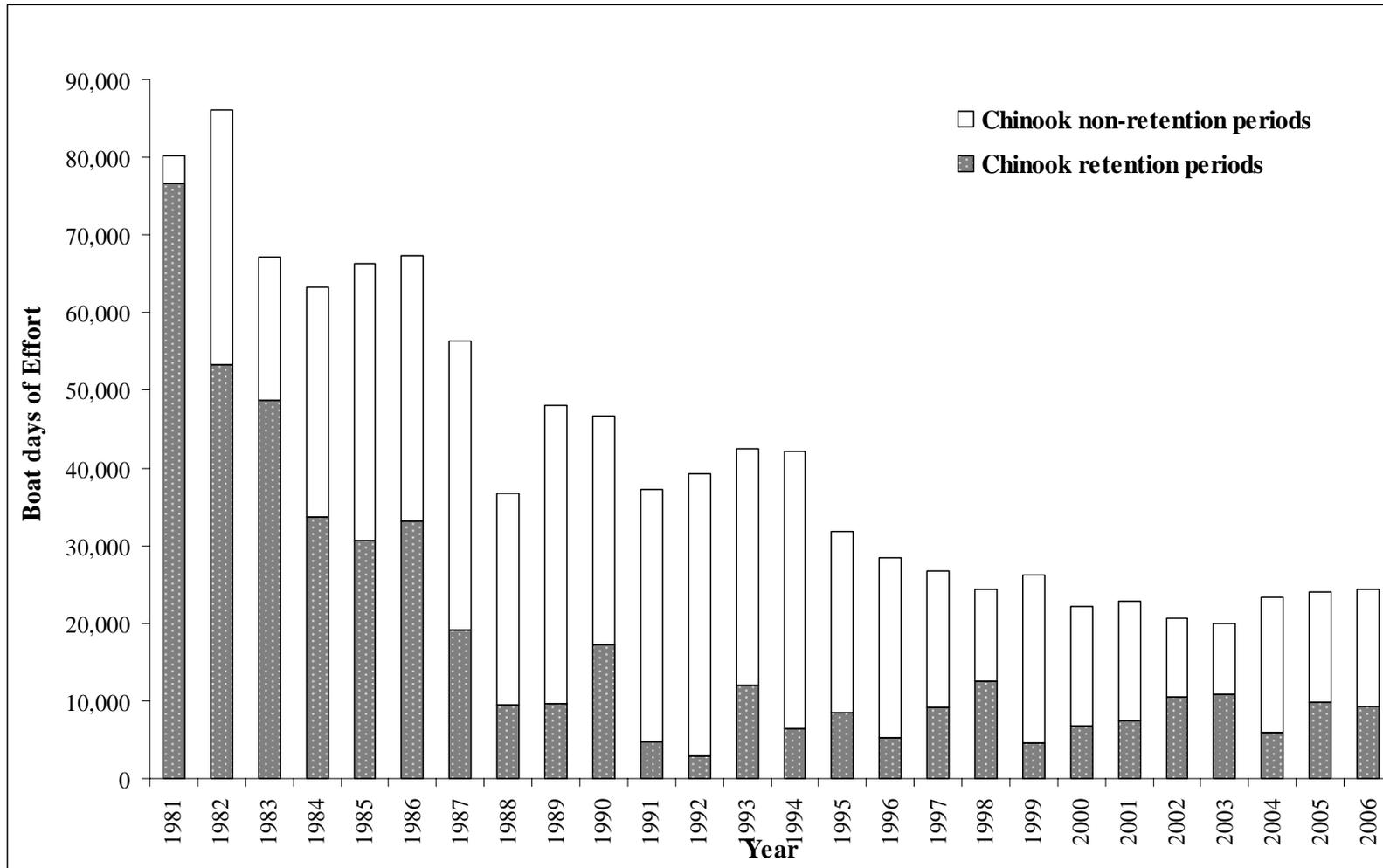


Figure 8.—General summer troll fishery boat days of effort during Chinook retention and Chinook non-retention fishing periods, 1981–2005.

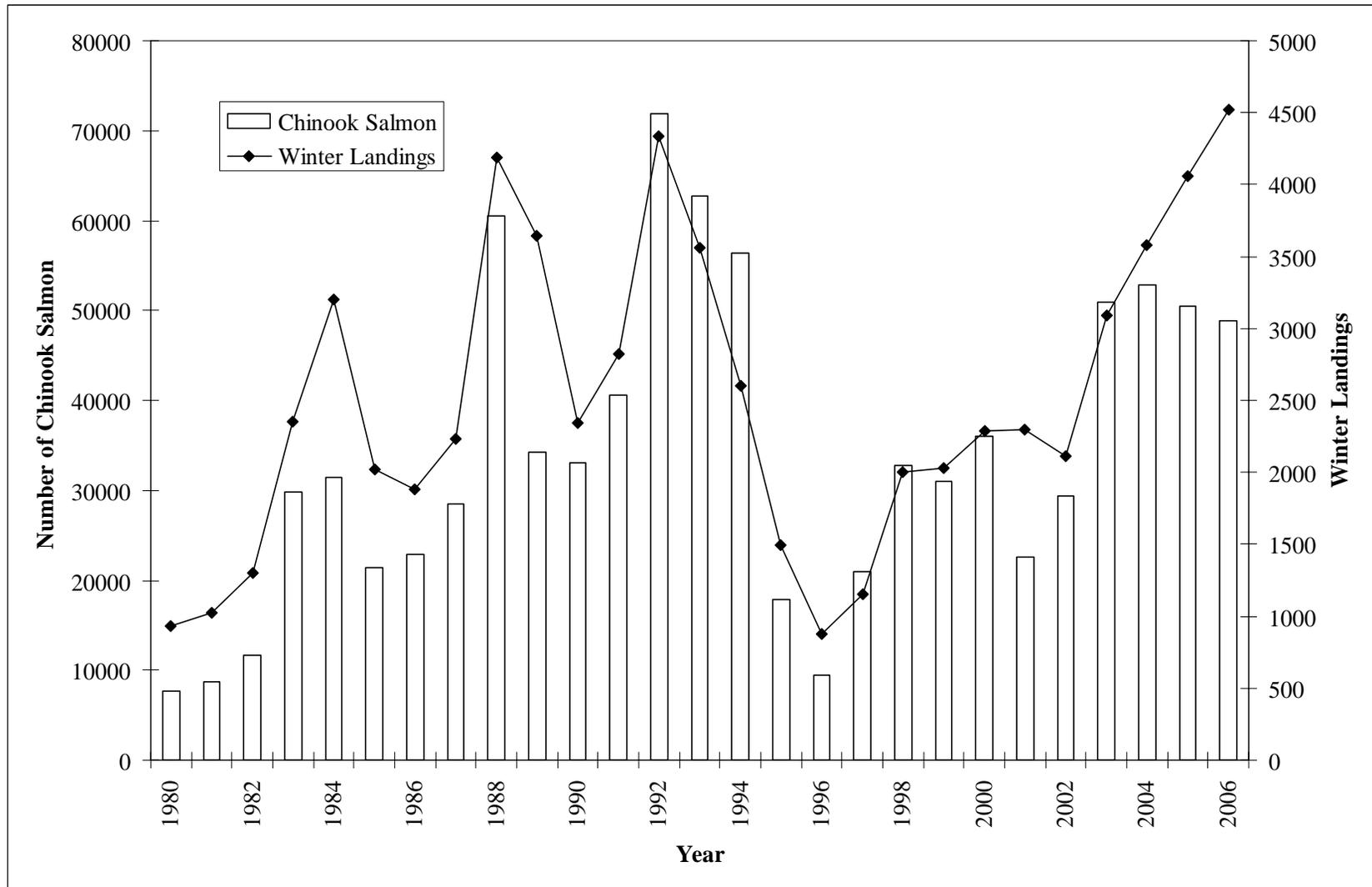


Figure 9.—Southeast Alaska winter troll fishery Chinook salmon harvests and landings, 1980–2006.

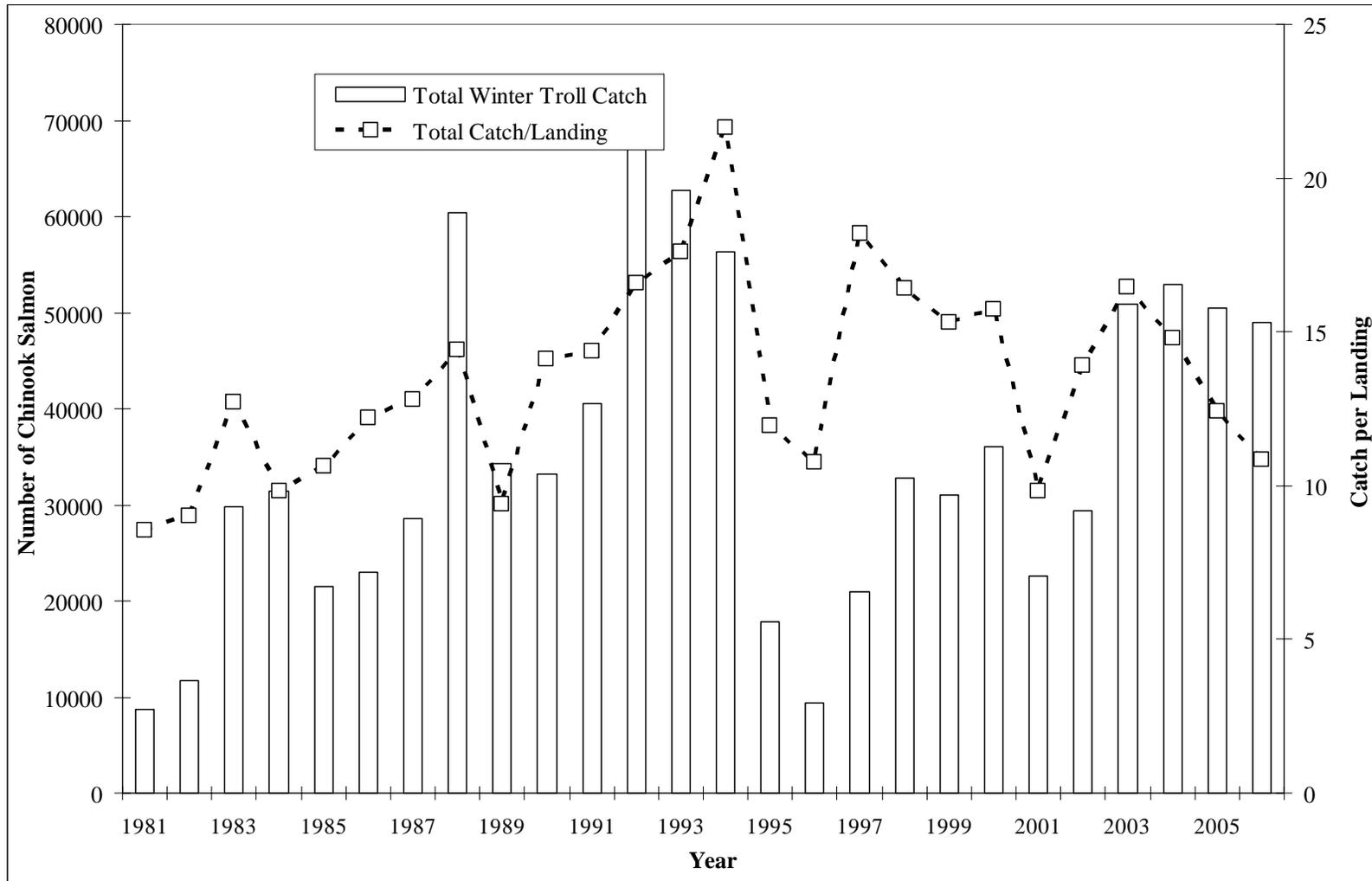


Figure 10.—Southeast Alaska winter troll harvest and catch per landing for troll gear, 1980–2006.

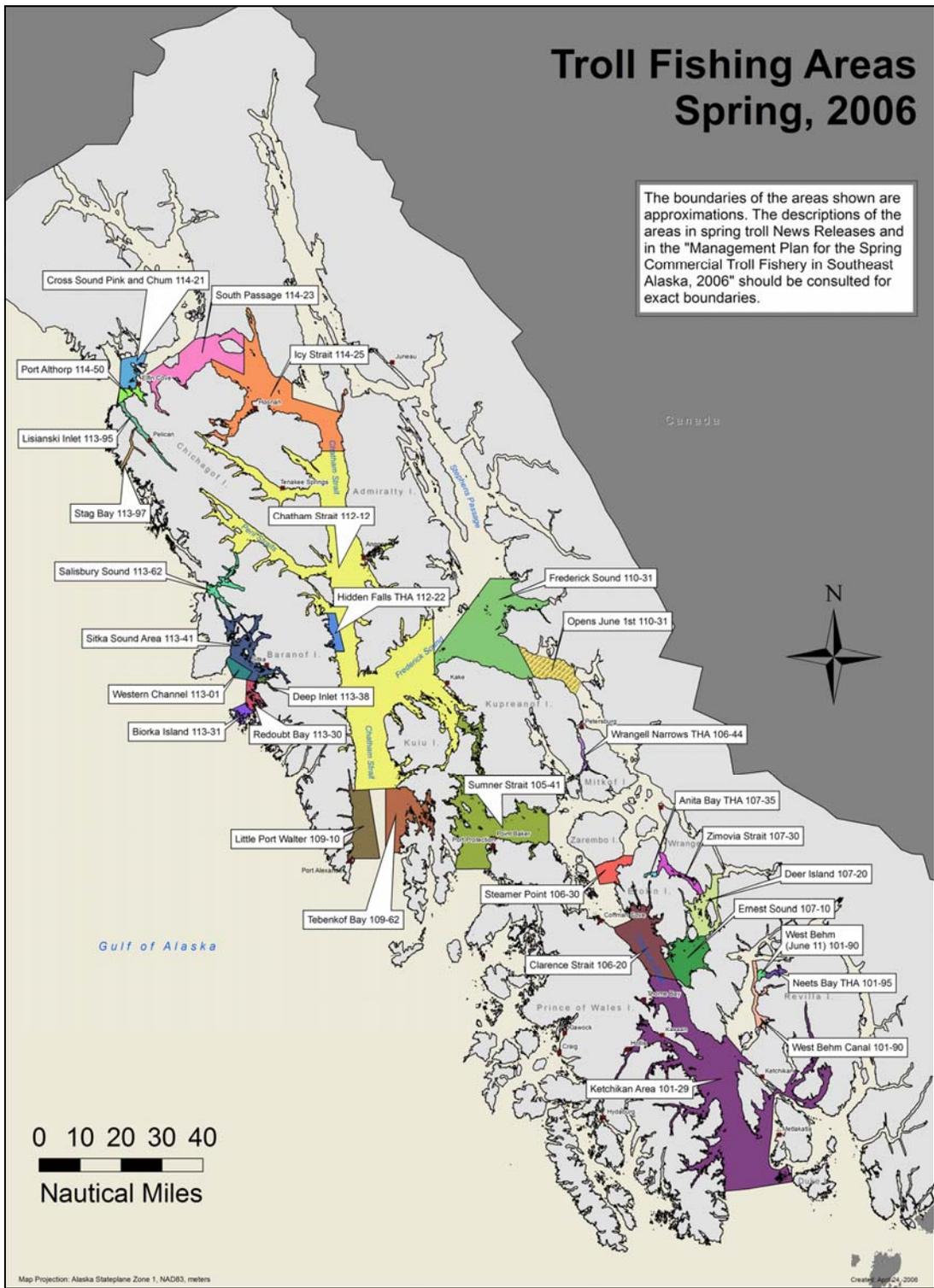


Figure 11.—Map of spring troll areas. Shaded areas were open in 2006.

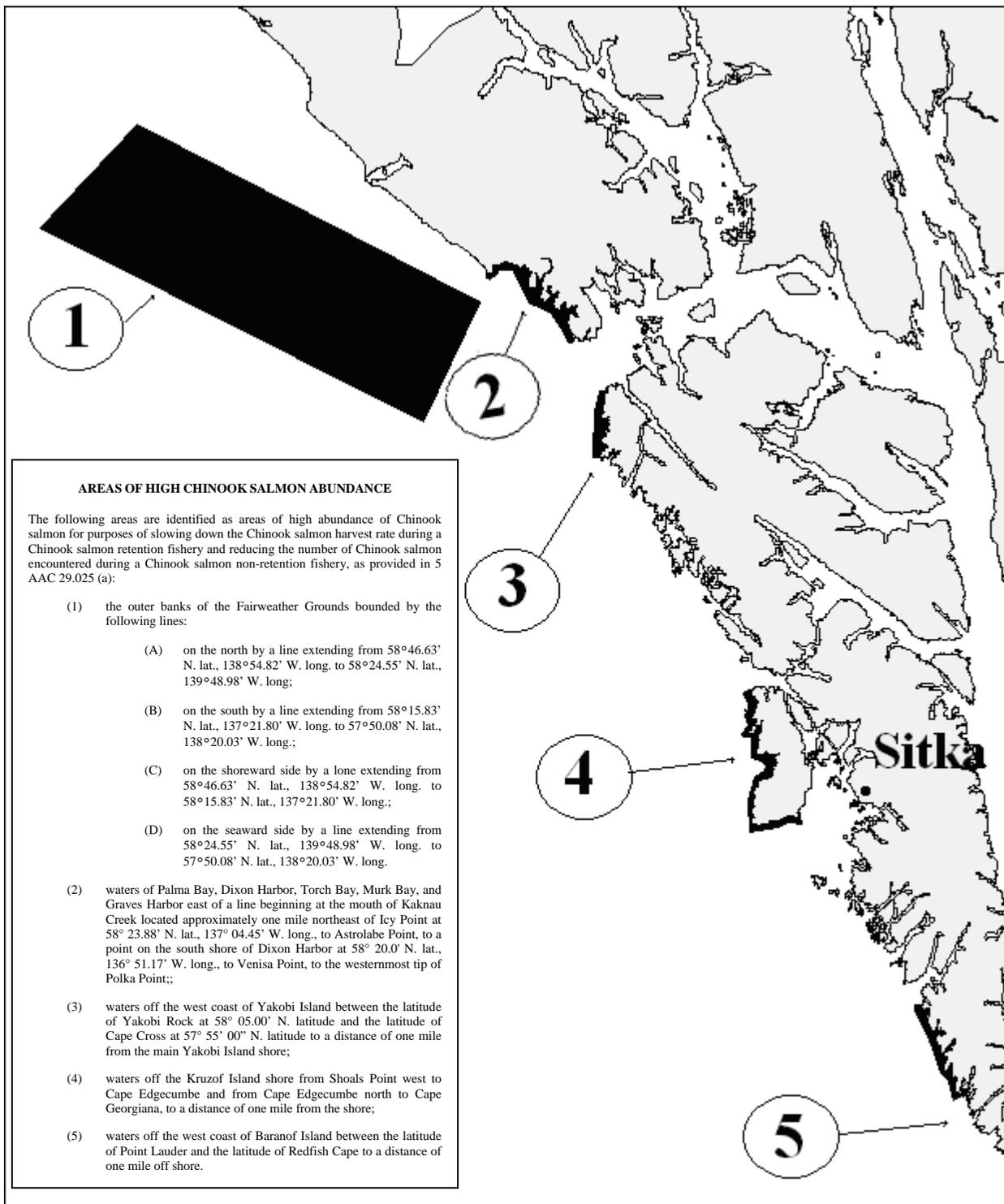


Figure 12.—Map of closed areas of high Chinook salmon abundance (shaded areas).

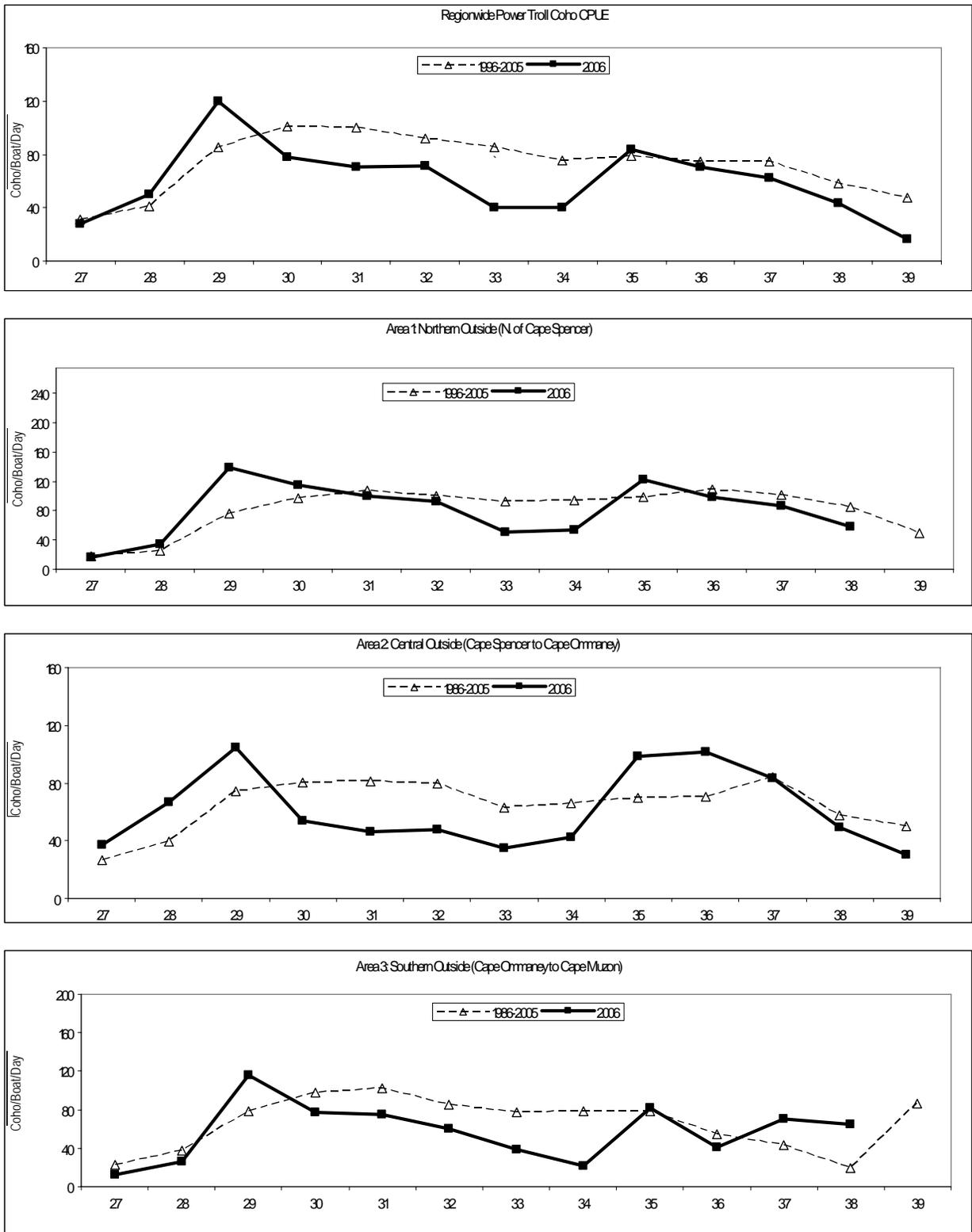


Figure 13.—Average power troll coho salmon harvest per boat day for Southeast Alaska by area for 2006 and the 1986–2005 average.

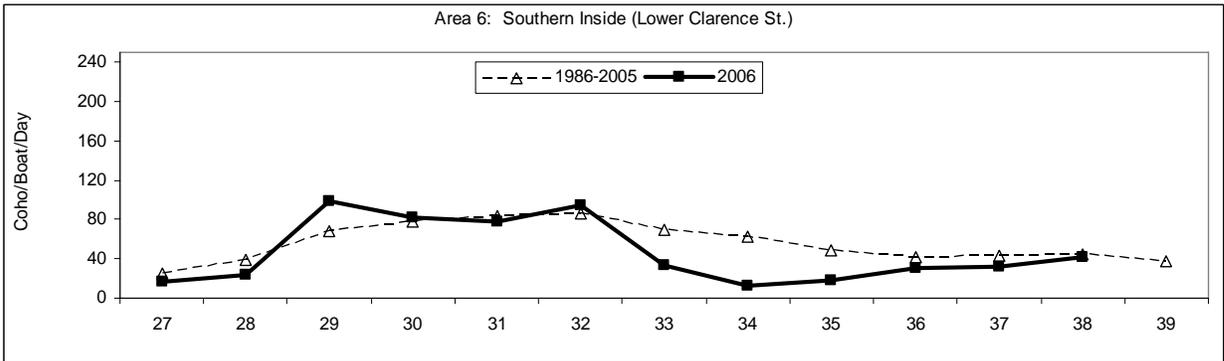
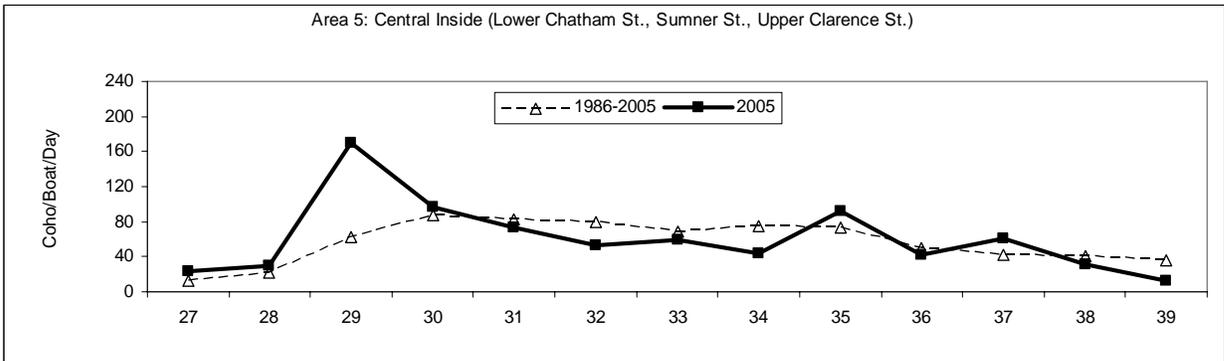
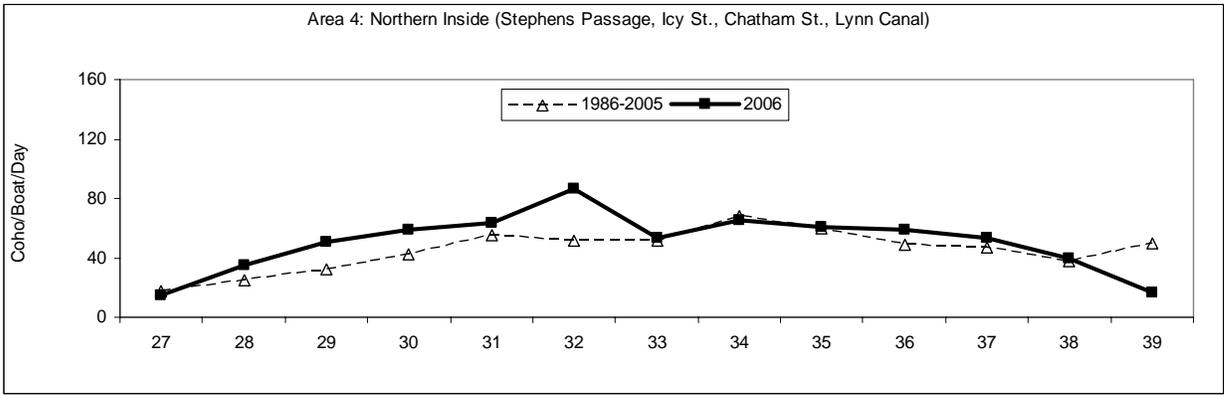


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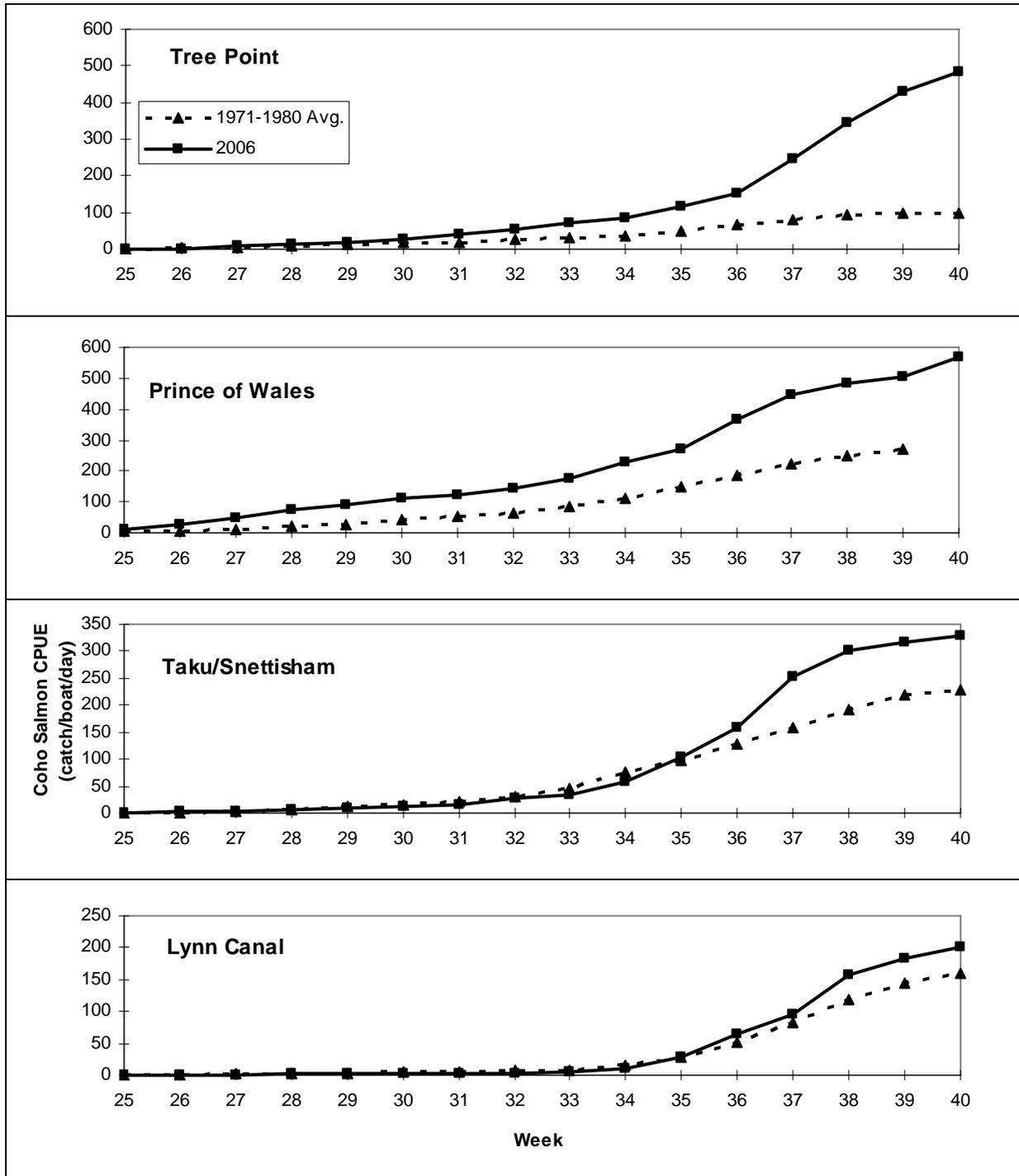


Figure 14.-Cumulative coho salmon harvest per boat day for the four indicator drift gillnet fisheries and the Juneau marine sport fishery, 1971–80 Average and 2006 season.

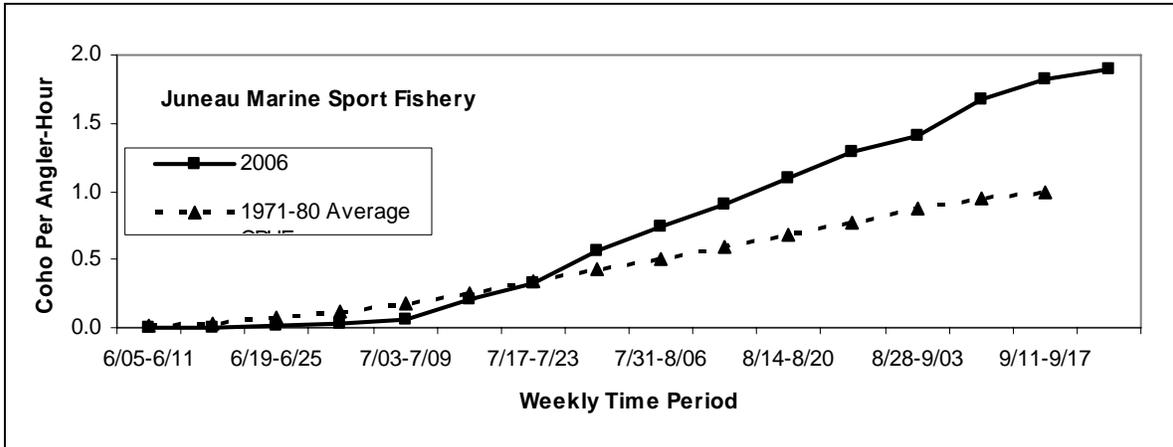


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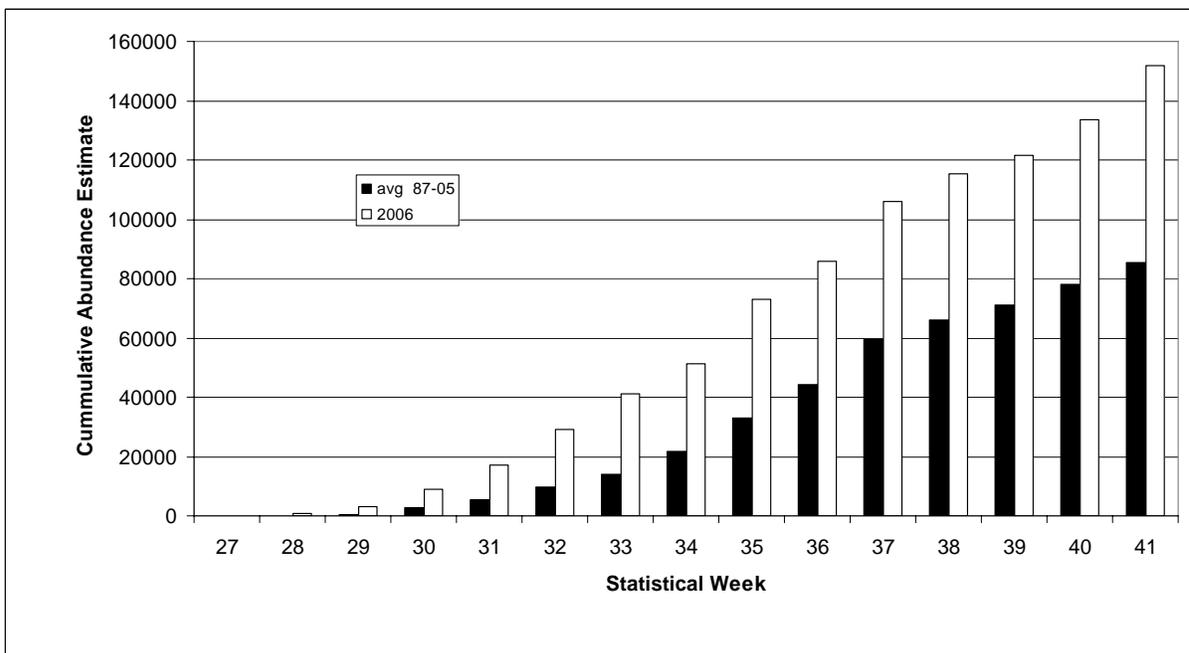


Figure 15.—Cumulative mark-recapture abundance estimate for Taku River coho salmon from Canyon Island fish wheels, 2006 vs 1987–2005.

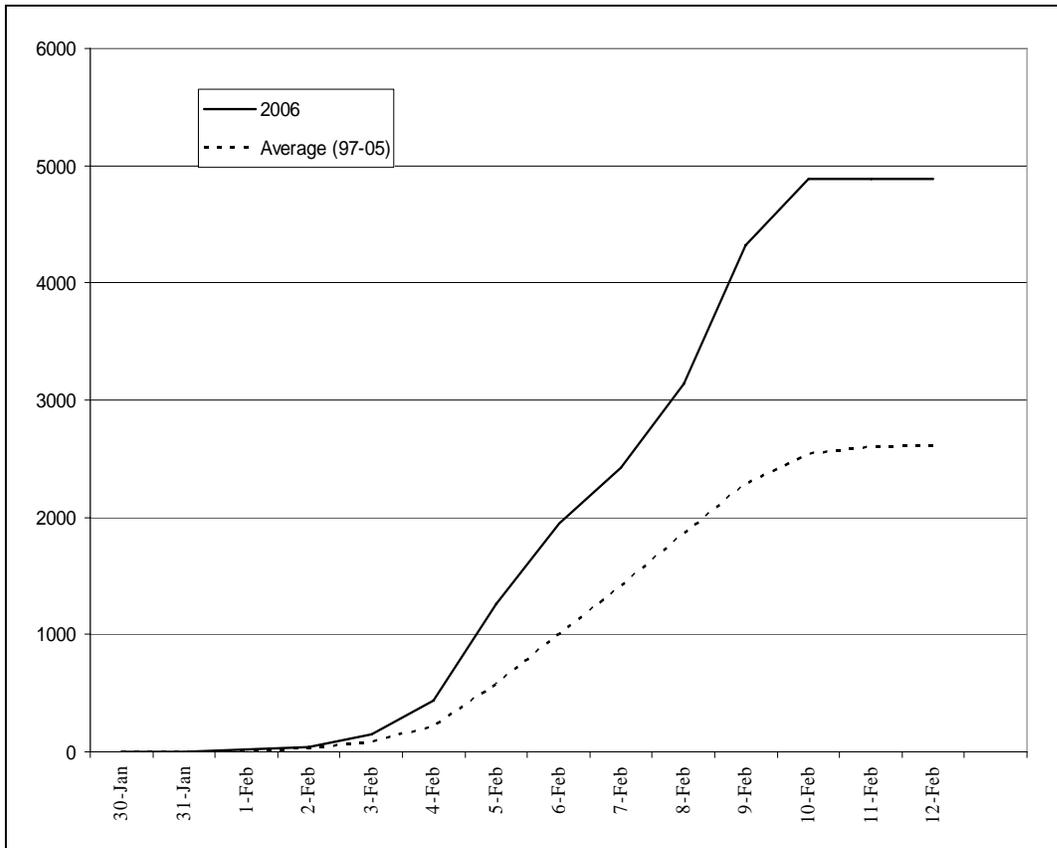


Figure 16.—Cumulative weekly catch of coho salmon in the Chilkat River fish wheels, average 1997–2005, and 2006.

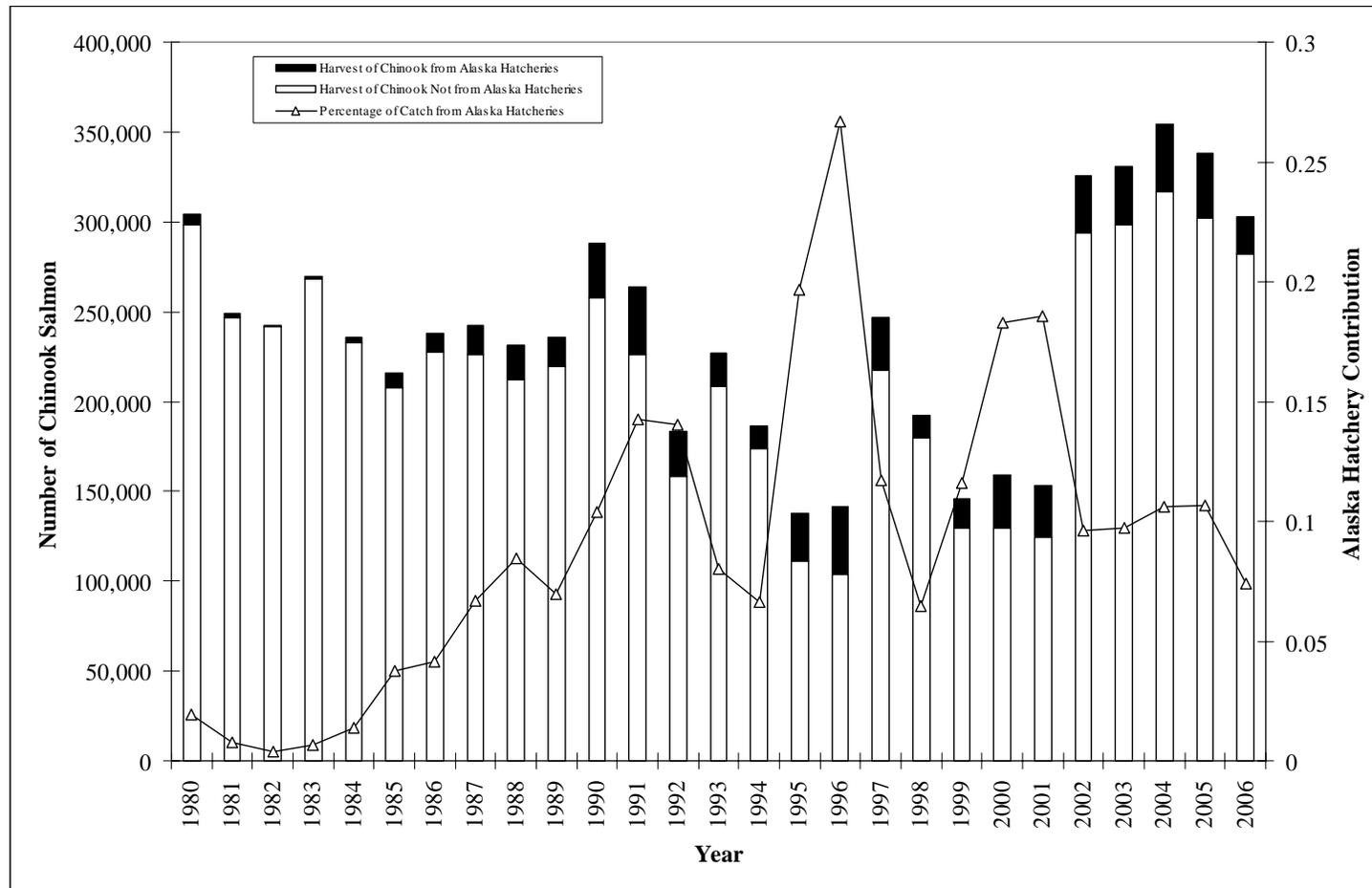


Figure 17.—Alaska hatchery Chinook salmon contributions to the Southeast Alaska troll fishery, 1980–2006.

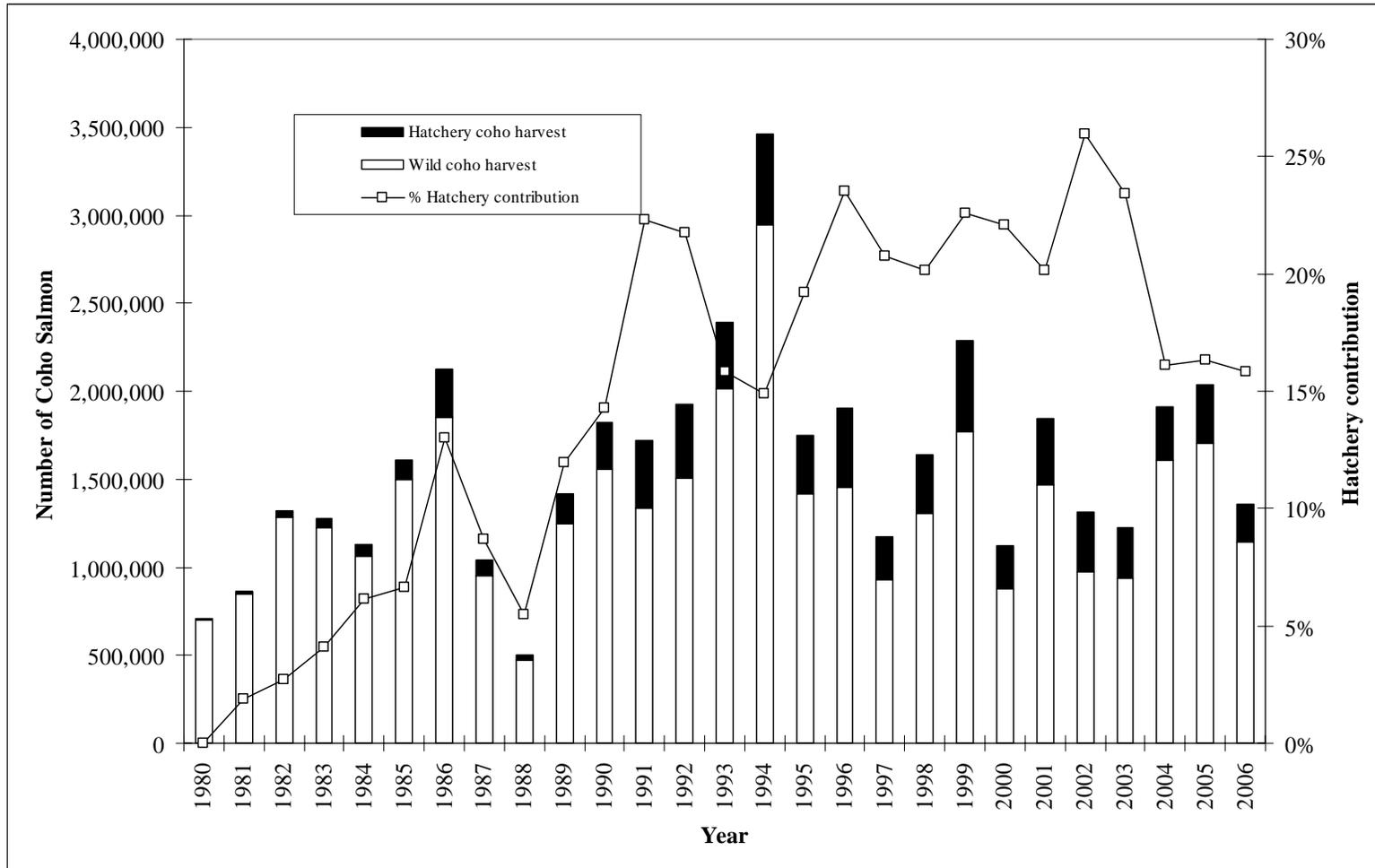


Figure 18.—Hatchery contributions of coho salmon from all sources to the Southeast Alaska troll fishery, 1980–2006.

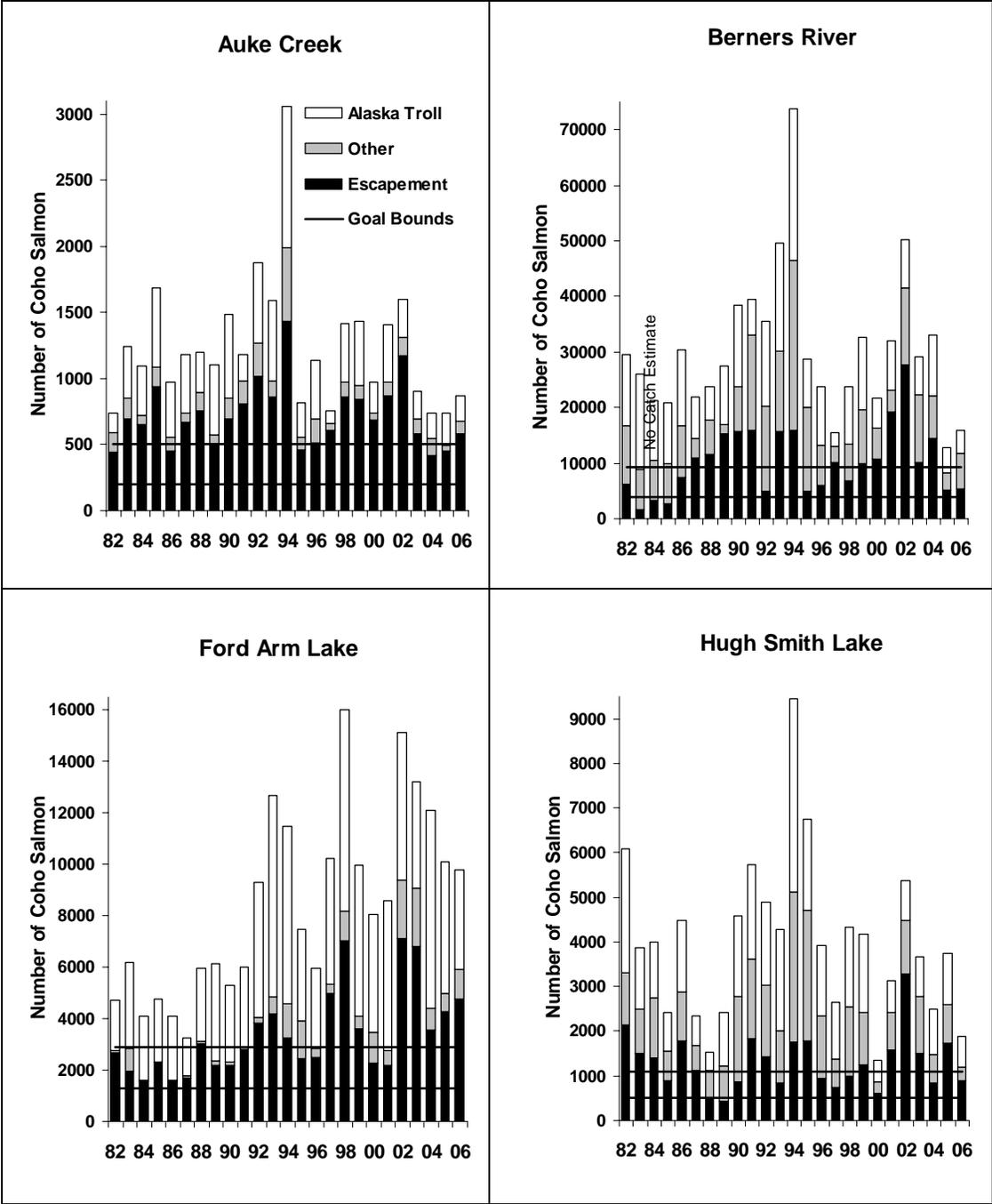


Figure 19.—Total run size, catch, escapement and biological escapement goal range for four wild Southeast Total run size, catch, escapement and biological escapement goal range for four wild Southeast.

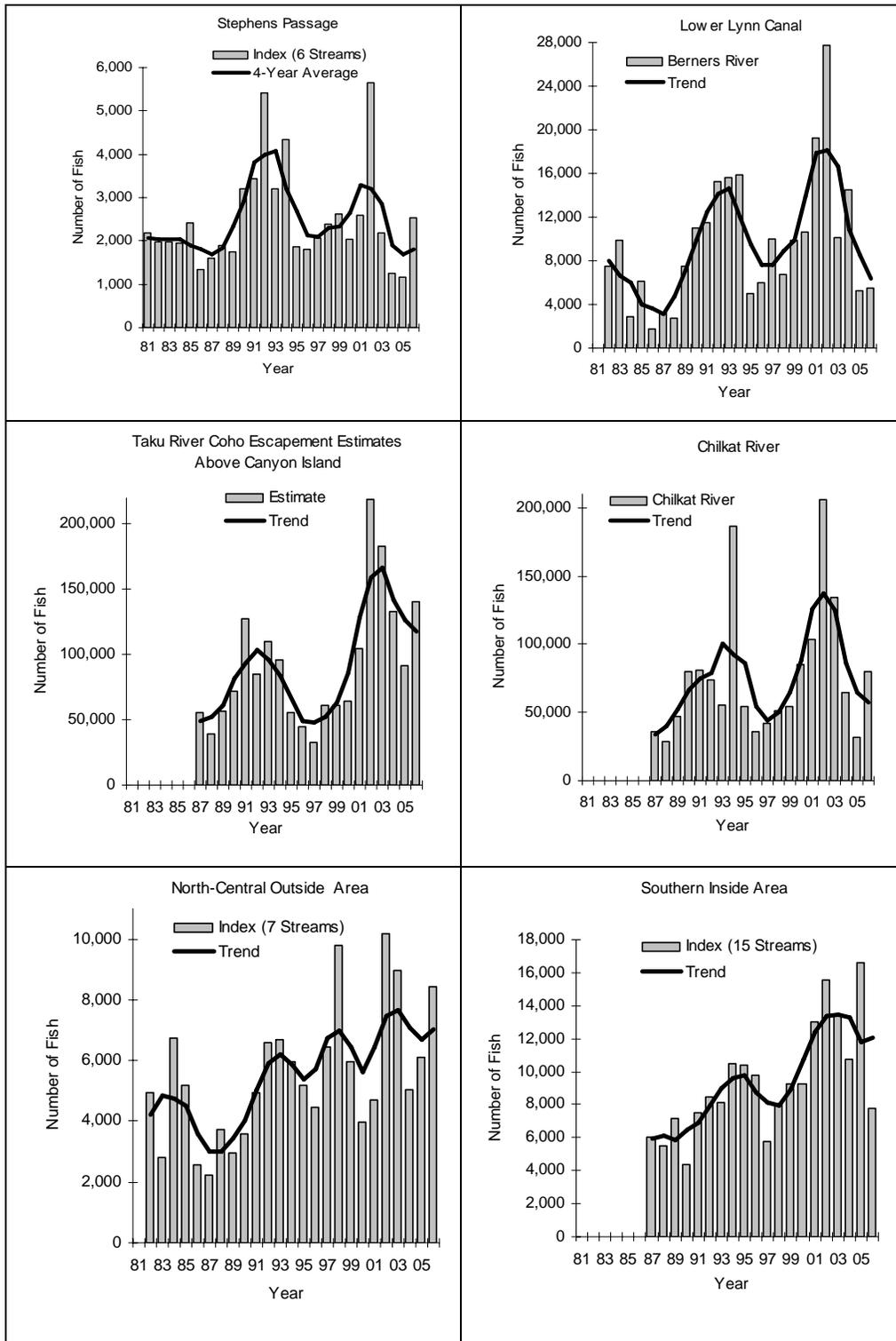


Figure 20.—Coho salmon escapement counts and estimates in index streams in five areas of Southeast Alaska, 1981–2006.

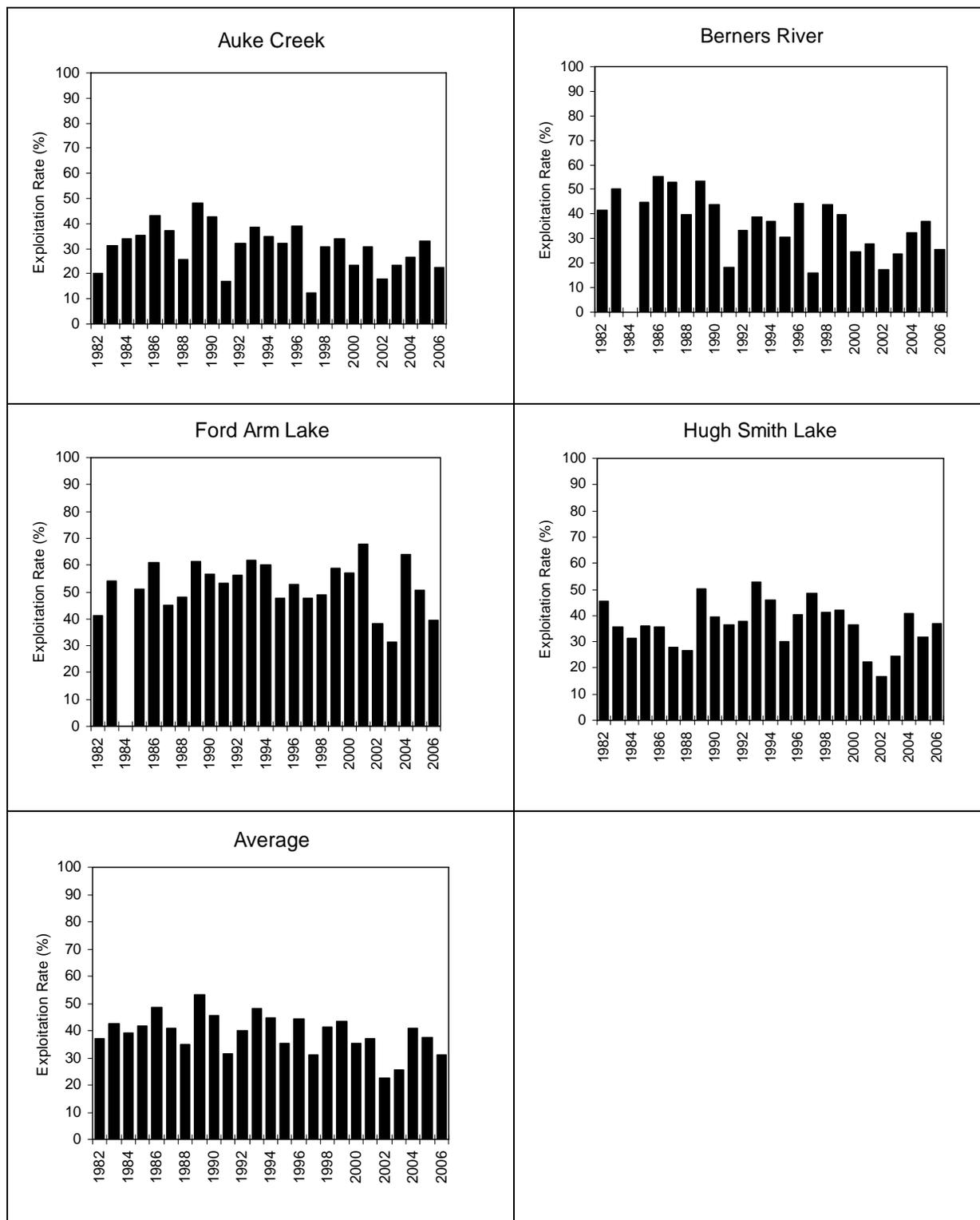


Figure 21.—Estimated exploitation rates by the Alaskan troll fishery for four coded-wire tagged Southeast Alaska coho salmon stocks, 1982–2006.

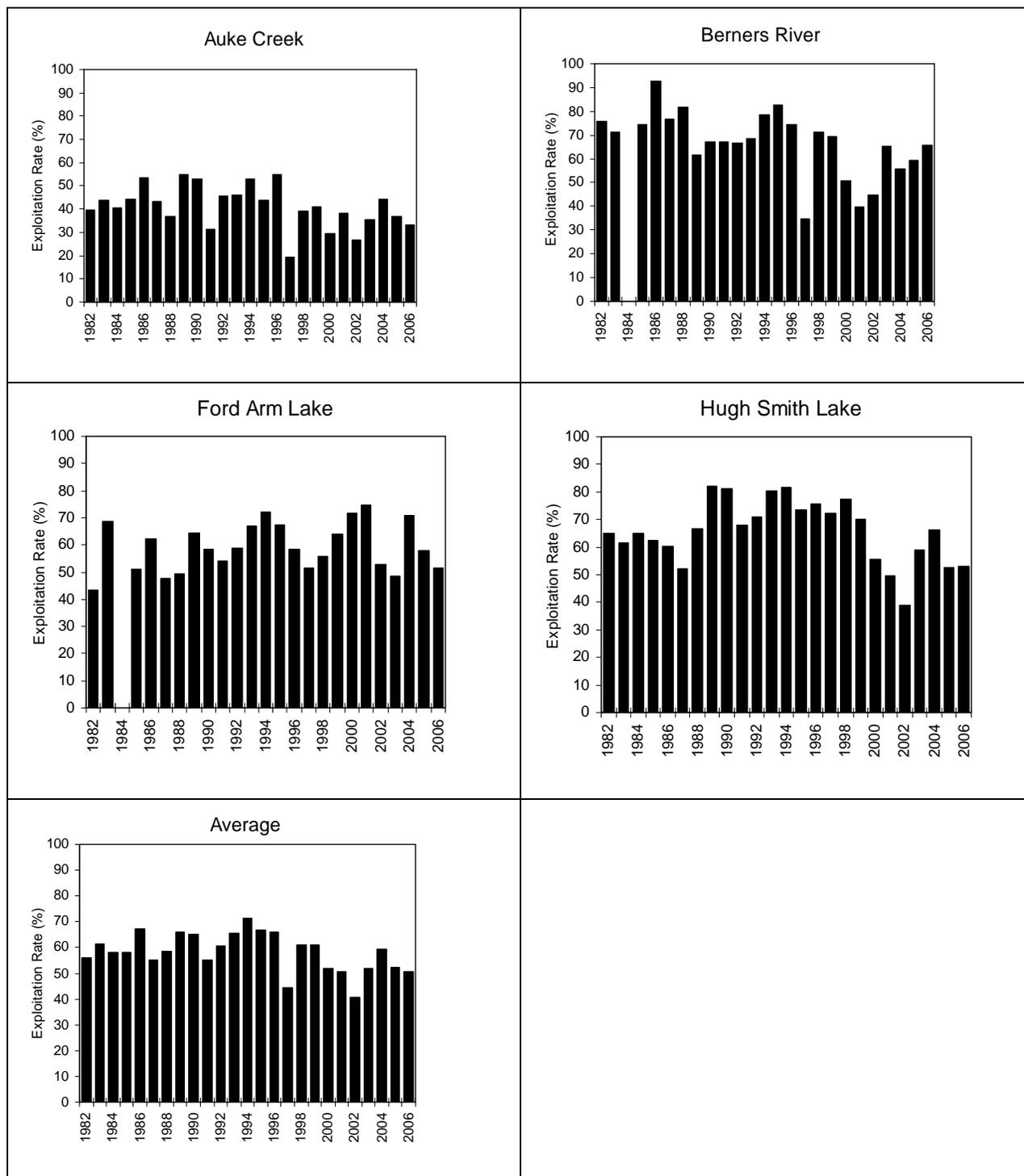


Figure 22.—Estimated total exploitation rates by all fisheries for four coded–wire tagged Southeast Alaska coho salmon stocks, 1982–2006.