Annual Management Report for the 2012 Southeast Alaska/Yakutat Salmon Troll Fisheries

by

Pattie Skannes

Grant Hagerman

and

Leon Shaul

March 2013

Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



Symbols and Abbreviations

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

Weights and measures (metric)		General		Mathematics, statistics	
centimeter	cm	Alaska Administrative		all standard mathematical	
deciliter	dL	Code	AAC	signs, symbols and	
gram	g	all commonly accepted		abbreviations	
hectare	ha	abbreviations	e.g., Mr., Mrs.,	alternate hypothesis	H_A
kilogram	kg		AM, PM, etc.	base of natural logarithm	e
kilometer	km	all commonly accepted		catch per unit effort	CPUE
liter	L	professional titles	e.g., Dr., Ph.D.,	coefficient of variation	CV
meter	m		R.N., etc.	common test statistics	$(F, t, \chi^2, etc.)$
milliliter	mL	at	@	confidence interval	CI
millimeter	mm	compass directions:		correlation coefficient	
		east	E	(multiple)	R
Weights and measures (English)		north	N	correlation coefficient	
cubic feet per second	ft ³ /s	south	S	(simple)	r
foot	ft	west	W	covariance	cov
gallon	gal	copyright	©	degree (angular)	٥
inch	in	corporate suffixes:		degrees of freedom	df
mile	mi	Company	Co.	expected value	E
nautical mile	nmi	Corporation	Corp.	greater than	>
ounce	OZ	Incorporated	Inc.	greater than or equal to	≥
pound	lb	Limited	Ltd.	harvest per unit effort	HPUE
quart	qt	District of Columbia	D.C.	less than	<
yard	yd	et alii (and others)	et al.	less than or equal to	≤
<i>y</i>	,-	et cetera (and so forth)	etc.	logarithm (natural)	ln
Time and temperature		exempli gratia		logarithm (base 10)	log
day	d	(for example)	e.g.	logarithm (specify base)	log _{2.} etc.
degrees Celsius	°C	Federal Information	•	minute (angular)	1
degrees Fahrenheit	°F	Code	FIC	not significant	NS
degrees kelvin	K	id est (that is)	i.e.	null hypothesis	H_{O}
hour	h	latitude or longitude	lat. or long.	percent	%
minute	min	monetary symbols		probability	P
second	S	(U.S.)	\$, ¢	probability of a type I error	
		months (tables and		(rejection of the null	
Physics and chemistry		figures): first three		hypothesis when true)	α
all atomic symbols		letters	Jan,,Dec	probability of a type II error	
alternating current	AC	registered trademark	®	(acceptance of the null	
ampere	Α	trademark	TM	hypothesis when false)	β
calorie	cal	United States		second (angular)	"
direct current	DC	(adjective)	U.S.	standard deviation	SD
hertz	Hz	United States of		standard error	SE
horsepower	hp	America (noun)	USA	variance	
hydrogen ion activity	pН	U.S.C.	United States	population	Var
(negative log of)	r		Code	sample	var
parts per million	ppm	U.S. state	use two-letter	1	
parts per thousand	ppt,		abbreviations		
r r	%°		(e.g., AK, WA)		
volts	V				
watts	W				

FISHERY MANAGEMENT REPORT NO. 13-06

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

By
Pattie Skannes and Grant Hagerman
Alaska Department of Fish and Game, Division of Commercial Fisheries, Sitka

and

Leon Shaul Alaska Department of Fish and Game, Division of Commercial Fisheries, Douglas

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

> > March 2013

The Fishery Management Reports series was established in 1989 by the Division of Sport Fish for the publication of an overview of management activities and goals in a specific geographic area, and became a joint divisional series in 2004 with the Division of Commercial Fisheries. Fishery Management Reports are intended for fishery and other technical professionals, as well as lay persons. Fishery Management Reports are available through the Alaska State Library and on the Internet: http://www.adfg.alaska.gov/sf/publications/. This publication has undergone regional peer review.

Pattie Skannes and Grant Hagerman, Alaska Department of Fish and Game, Division of Commercial Fisheries, 304 Lake Street, room 103, Sitka, Alaska 99835

Leon Shaul, Alaska Department of Fish and Game, Division of Commercial Fisheries 802 3rd Street, Douglas, Alaska 99824-5412

This document should be cited as:

Skannes, P., G. Hagerman, and L. Shaul. 2013. Annual management report for the 2012 Southeast/Yakutat salmon troll fisheries. Alaska Department of Fish and Game, Fishery Management Report No. 13-06, Anchorage.

The Alaska Department of Fish and Game (ADF&G) administers all programs and activities free from discrimination based on race, color, national origin, age, sex, religion, marital status, pregnancy, parenthood, or disability. The department administers all programs and activities in compliance with Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act (ADA) of 1990, the Age Discrimination Act of 1975, and Title IX of the Education Amendments of 1972.

If you believe you have been discriminated against in any program, activity, or facility please write:

ADF&G ADA Coordinator, P.O. Box 115526, Juneau, AK 99811-5526

U.S. Fish and Wildlife Service, 4401 N. Fairfax Drive, MS 2042, Arlington, VA 22203

Office of Equal Opportunity, U.S. Department of the Interior, 1849 C Street NW MS 5230, Washington DC 20240

The department's ADA Coordinator can be reached via phone at the following numbers: (VOICE) 907-465-6077, (Statewide Telecommunication Device for the Deaf) 1-800-478-3648,

(Juneau TDD) 907-465-3646, or (FAX) 907-465-6078

For information on alternative formats and questions on this publication, please contact:

ADF&G Division of Sport Fish, Research and Technical Services, 333 Raspberry Road, Anchorage AK 99518 (907) 267-2375

TABLE OF CONTENTS

	Page
LIST OF TABLES	ii
LIST OF FIGURES	iii
ABSTRACT	1
INTRODUCTION	1
OBJECTIVES	1
CHINOOK SALMON AND COHO SALMON STOCK DESCRIPTION AND STATUS	1
Chinook Salmon Stocks	1
Coho Salmon Stocks	
DESCRIPTION OF THE TROLL FISHERY	2
Chinook Salmon Fishery	3
Chinook Salmon Management Methods	4
Coho Salmon Fishery	6
Coho Salmon Management Methods	6
Effort in the Troll Fishery	7
SUMMARY OF THE 2012 SEASON	8
New Troll Fishery Regulations	8
Chinook Salmon Fishery	9
Winter Fishery	
Spring Fishery	
Districts 8 And 11 Transboundary Rivers Directed Chinook Salmon Fisheries	
District 8	
Yakutat Spring Troll Fishery	
General Summer Chinook Fishery	11
Coho Salmon Fishery	13
Chum Salmon Fishery	15
Other Species	16
Exclusive Economic Zone Harvests	16
ALASKA HATCHERY PRODUCTION	16
WILD STOCK ESCAPEMENT	17
Chinook Salmon Escapement	
Coho Salmon Escapement	17
Coho Salmon Exploitation Rates	19

LIST OF TABLES

Table	P	age
1.	All-gear and Troll Treaty Chinook salmon harvest, hatchery add-on, total harvest, Treaty quota,	
	terminal exclusion harvest and the number of fish over or under the quota, 1985–2012	22
2.	Estimated survival rate of coho salmon smolts and pre-smolts from wild and hatchery stocks in	
	Southeast Alaska, 1980–2012.	23
3.	Harvest and percent of commercially harvested coho salmon by gear type in Southeast Alaska, 1989–	
	2012	
4.	Southeast Alaska commercial troll permits renewed and fished, 1975 to 2012.	
5.	Number of permits fished, by gear type and fishery, 1980–2012	26
6.	Number of days and dates the summer troll salmon fishery was open to Chinook retention, closed to	27
7	Chinook retention, closed to all salmon species and effort during CR and CNR periods, 1985–2012	
7. 8.	Annual commercial troll salmon harvest in numbers of fish by species, 1960–2012	
٥.	the 2012 troll season.	
9.	Average troll coho salmon dressed weight by week and weighted annual average, 1996–2012	
10.	Southeast Alaska annual commercial hand troll salmon harvest in numbers of fish by species, 1975–	54
10.	2012	35
11.	Southeast Alaska annual commercial power troll salmon harvest in numbers of fish by species, 1975–	33
11.	2012.	36
12.	Southeast Alaska Chinook Salmon harvests by gear and troll harvest by fishery, 2012	
13.	Annual Southeast Alaska commercial and recreational Chinook salmon harvests and Alaska hatchery	
	contribution, in thousands of fish, 1965–2012.	38
14.	Southeast Alaska winter troll fishery Chinook salmon harvest, vessel landings, catch per landing, and	
	Alaska hatchery percent of harvest by troll accounting year, 1985–2012	39
15.	The number of Chinook salmon harvested and permits fished in the 2012 spring troll fisheries by	
	statistical week, including spring fishery areas as well as terminal harvest areas	40
16.	Spring troll Chinook salmon fishery harvest, effort, and Alaska hatchery contributions, 1986–2012	45
17.	Southeast Alaska troll Chinook salmon catch-per-fleet-day during the general summer fishery, 1985–	
	2012	
18.	Coho salmon mid-season closure dates and extensions, 1980–2012	49
19.	Weekly troll Chum salmon harvest and effort in Icy Straits/Homeshore, Neets Bay/West Behm Canal,	
	and Sitka Sound, 2010–2012.	
20.	Total Chinook salmon harvest and Alaska hatchery harvest by gear, 1985–2012.	
21.	Total Southeast Alaska troll coho salmon harvest and estimated wild and hatchery contributions, 1960–2012.	
22.	Estimates of total escapements of Chinook salmon to escapement indicator systems and to Southeast Alaska and transboundary rivers, 1975–2012.	53
23.	Escapement goal performance for indicator coho salmon streams in Southeast Alaska.	
24.	Escapement estimates for four Southeast Alaska coho salmon indicator stocks, 1980–2012.	
25.	Northern Inside area coho salmon escapements, 1981–2012.	
26.	Sitka area coho salmon escapement index, 1982–2012.	
27.	Southern inside area coho salmon escapement index, 1987–2012.	
28.	Overall coho salmon percentage exploitation rates by indicator stock for the Alaska troll fishery, 1982–	
	2012	
29.	Overall coho salmon percentage exploitation rates by indicator stock for the all fisheries combined,	
	1982–2012	61

LIST OF FIGURES

Figure		Page
1.	Map of Southeast Alaska commercial troll fishing and Big Six management areas, Cape Suckling to	O
	Dixon Entrance.	62
2.	All-gear harvests of Chinook salmon in common property fisheries, 1891–2012.	63
3.	Average weekly coho harvest timing of the Southeast Alaska commercial troll and drift gillnet	
	fisheries, and the average weekly coho salmon escapement timing of the Hugh Smith Lake, Ford Arm	1
	Lake and Auke Creek weirs.	64
4.	Commercial all-gear harvests of coho salmon in common property fisheries, 1890–2012	65
5.	Southeast Alaska troll coho salmon harvest in the outside districts, the inside districts and the	
	percentage of the harvest taken in the outside districts, 1970–2012	66
6.	Number of troll permits fished by gear type, 1975–2012.	67
7.	Number of troll permits fished in the general summer, winter, and spring fisheries, 1980–2012	68
8.	General summer troll fishery boat-days of effort during Chinook salmon retention and Chinook non-	
	retention fishing periods, 1981–2012.	
9.	Southeast Alaska winter troll fishery Chinook salmon harvests and landings, 1980–2012	
10.	Southeast Alaska winter troll harvest and Alaska hatchery percent for troll gear, 1985–2012	
11.	Map of Spring troll areas.	
12.	Map of Areas of High King Salmon Abundance, which close during part of the summer fishery	73
13.	Average power troll coho salmon harvest per boat day comparing 2012 results with the 1992–2011	
	average, for Southeast Alaska, regionwide, Northern Outside, and Central Outside	74
14.	Average power troll coho salmon harvest per boat day comparing 2012 results with the 1992–2011	
	average, for Southeast Alaska, Southern Outside, Northern Inside, and Central Inside	75
15.	Average power troll coho salmon harvest per boat day comparing 2012 results with the 1992–2011	
	average, for Southeast Alaska, Southern Inside.	76
16.	Cumulative coho salmon catch-per-boat-day comparing 2012 to the 1971–1980 average, for the four	
	indicator drift gillnet fisheries.	
17.	Cumulative and weekly coho salmon hours-per-unit-effort comparing 2012 to the 1971–1980 average	
	and the 1991–2011 average, for the Juneau marine sport fishery harvest	
18.	Cumulative mark-recapture abundance estimate for Taku River coho salmon from Canyon Island fish	
	wheels, for 2012 and the 1987–2011 average.	
19.	Cumulative weekly catch of coho salmon in the Chilkat River fish wheels, for 2012 and the 2002–201	
	average	80
20.	Icy Strait troll harvest and weekly permits targeting chum 2010–2012, annual harvest and number of	
	permits targeting chum, Neets Bay/West Behm Canal and Sitka Sound, 2001–2012	
21.	Alaska hatchery Chinook salmon contributions to the Southeast Alaska troll fishery, 1980–2012	82
22.	Hatchery contributions of coho salmon from all sources to the Southeast Alaska troll fishery, 1980–	
	2012	
23.	Total run size, catch, escapement and biological escapement goal range for four wild Southeast Alask	
2.4	coho salmon indicator stocks, 1982–2012	84
24.	Coho salmon escapement counts and estimates in index streams in five areas of Southeast Alaska,	
2.5	1981–2012	
25.	Estimated exploitation rates by the Alaskan troll fishery for four coded wire tagged Southeast Alaska	
2.5	coho salmon stocks, 1982–2012	86
26.	Estimated total exploitation rates by all fisheries for four coded wire tagged Southeast Alaska coho	0.7
	salmon stocks, 1982–2012.	87

ABSTRACT

Approximately 2.1 million salmon were harvested in the 2012 Southeast Alaska troll fishery. The harvest included 209,366 Chinook (*Oncorhynchus tshawytscha*), 3,224 sockeye (*O. nerka*), 1.2 million coho (*O. kisutch*), 168,583 pink (*O. gorbuscha*), and 476,469 chum (*O. keta*) salmon landed by 752 power troll and 357 hand troll permit holders during the calendar year. Of this, 114,592 salmon (5%) were taken by hand troll gear and 1.9 million salmon (94%) by power troll gear. The Chinook salmon harvest ranked the 14th lowest since statehood, while the coho salmon harvest ranked 26th highest, and the chum salmon harvest ranked the 4th highest. The preliminary estimated Alaska hatchery contribution of Chinook salmon to the troll fishery, including hatchery terminal harvest, was 21,237 fish (10%). A total of 308,466 coho salmon produced by Alaska hatcheries were harvested by the troll fleet, which accounted for 26% of the total troll coho salmon harvest. Chinook escapements for five out of eleven Southeast Alaska rivers were within the desired escapement goal ranges, while coho salmon escapements for were generally within the desired escapement goal ranges.

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

INTRODUCTION

This report describes the Southeast Alaska salmon troll fishery, management methods and actions taken by the Alaska Department of Fish and Game (ADF&G) from October 1, 2011, through September 30, 2012. Troll harvest and effort statistics since statehood (1960 fishing season) are included, as well as all-gear harvest of Chinook and coho salmon. Status of wild coho (*Oncorhynchus kisutch*) and Chinook salmon (*O. tshawytscha*) stocks of Southeast Alaska and Yakutat, as well as hatchery production and contributions to the troll fishery are presented. Wild coho and Chinook salmon escapements are included, along with wild coho salmon exploitation rates. Troll harvest of Alaska hatchery-produced chum salmon (*O. keta*) and associated effort is also included. New regulations adopted by the Alaska Board of Fisheries in 2012 are described.

OBJECTIVES

This report will review and discuss the 2012 commercial salmon troll fishery and compare it to previous years.

CHINOOK SALMON AND COHO SALMON STOCK DESCRIPTION AND STATUS

CHINOOK SALMON STOCKS

Native Chinook salmon stocks occur throughout Southeast Alaska and Yakutat, primarily in the large mainland rivers and their tributaries. In total, 34 rivers in the region are known to produce runs of Chinook salmon. The most important are the Alsek, Taku, Stikine, Chilkat, and the Behm Canal rivers (i.e., Unuk, Chickamin, Blossom, and Keta rivers). The three major river systems (Alsek, Taku, and Stikine rivers), as well as several mid-sized systems (Unuk, Chickamin and Chilkat rivers) are transboundary rivers, originating in Canada and flowing through Alaska to the Pacific Ocean. The Pacific Salmon Commission, under the terms of the Pacific Salmon Treaty (PST), addresses shared ownership and coordinated management of the Alsek, Taku, and Stikine rivers.

Southeast Alaska Chinook salmon stocks are all "spring type," entering spawning streams during spring and early summer months. Fry emerge the following spring and most remain in freshwater

for at least one year before migrating seaward. Ocean residency ranges from two to four years for most Chinook salmon originating in Southeast Alaska. Trollers harvest several age classes of mature spawners and immature Chinook salmon during the fishing season.

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

COHO SALMON STOCKS

Coho salmon occur in more than 2,000 streams in Southeast Alaska. Most coho salmon streams are small, with the number of spawners typically ranging up to 1,000 fish. Because of the large number of these systems, they collectively contribute substantially to overall production. Lake systems are also important and typically produce returns between 1,000 and 10,000 fish. Large populations occur in the Taku, Chilkat, Berners, Stikine, Unuk, and Chickamin rivers and in most Yakutat area systems. Spawning takes place during the fall and early winter months. 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. Most coho salmon harvested by Southeast Alaska trollers are three-year-old and four-year-old fish of Alaska origin and are harvested in the year of spawning.

DESCRIPTION OF THE TROLL FISHERY

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

The commercial troll fleet is comprised of hand and power troll gear types. Vessels using hand troll gear are limited to two lines on two hand-operated gurdies or four fishing rods, except that following the closure of the initial summer Chinook retention period and prior to the winter troll fishery, four hand troll gurdies or four fishing rods may be onboard and operated within the EEZ north of the latitude of the southernmost tip of Cape Spencer [5 AAC 29.120(b) (2) (C)]. Another exception permits two hand troll gurdies or hand-powered downriggers to be used in conjunction with two fishing rods during the winter troll season only. Vessels using power troll gear are generally larger than those using hand troll gear. Power trollers are limited to four lines on poweroperated gurdies, except within the EEZ north of the latitude of the southernmost tip of Cape Spencer, where six lines may be used [5 AAC 29.120 (b)(1)(A) and (B)]. While the majority of the troll fleet sells their catch to processing plants onshore, the fleet does include some catcherprocessors, or "freezer boats," which harvest and freeze their catch at sea. The number of freezer boats has declined slightly in recent years. In 2012, a total of 51 freezer boats made landings, compared to 57 in 2011. One reason for the decline in 2012 is that some out-of-state permit holders chose not to fish in Southeast Alaska, in favor of participating in fisheries off the coast of Washington, Oregon or California.

The commercial troll fishery harvests primarily Chinook and coho salmon. Historically, the troll fishery harvested about 85% to 90% of the Chinook salmon taken in Southeast Alaska. Since 1980, the percentage of the Chinook salmon harvest taken by the troll fishery has declined due to

harvest ceilings imposed as part of the PST coastwide rebuilding program, as well as allocation guidelines established by the Alaska Board of Fisheries (BOF). Since 1989, the troll fleet has been managed to harvest an average of 61% of the commercial coho salmon harvest over the long-term [5 AAC 29.065], though the actual troll harvest has averaged 64% of the commercial harvest, with a range of 53% to 74%.

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

CHINOOK SALMON FISHERY

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

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

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

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

based on preseason and inseason abundance estimates. In 1999, a new set of Pacific Salmon Treaty Agreements (PSTA) was signed under the PST, including an agreement for Chinook salmon. The new Chinook salmon agreement was similar to the abundance-based management of the LOA, with quotas based on preseason and postseason abundance estimates. However, under the PSTA, Alaska agreed to lower Chinook salmon harvests at lower abundance levels than had been implemented in either the PST or the LOA. In 2008, a new PSTA was signed, which will remain in effect through 2018, with a five-year review scheduled for 2014.

Over the past 28 years, since 1985, the all-gear harvest of treaty¹ Chinook salmon has exceeded the preseason quota 18 times. Since 1987, the troll harvest of treaty Chinook salmon has exceeded the preseason treaty quota 14 times (Table 1).

Chinook Salmon Management Methods

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

The winter troll fishery is managed to not exceed the guideline harvest level (GHL) of 45,000 Chinook salmon plus the number of non-Alaska hatchery-produced Chinook salmon. Fish tickets provide inseason information on harvest and effort throughout the fishery. In years when the winter fishery closed prior to April 30 because the GHL was reached (2003–2006, 2011 and 2012), daily tallies from regional processors were an important tool in tracking harvest during the final weeks of the fishery. During these years several spring fishery areas opened prior to May 1.

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

Spring troll and terminal troll fisheries target Alaska hatchery Chinook salmon, though non-Alaska hatchery (treaty) Chinook are also harvested. While there is no ceiling on the number of Chinook salmon harvested in the spring fisheries, the take of treaty Chinook salmon is limited according to the percentage of the Alaskan hatchery fish taken in the fishery. Non-Alaska hatchery 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.

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

The 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

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

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

If the preseason Abundance Index is 1.15 or above (commercial troll allocation of 120,833 Chinook salmon) and the number of Chinook remaining on the winter GHL to be harvested is between 10,000 and 15,000 fish, then an additional 250 non-Alaska hatchery-produced Chinook salmon will be added to the treaty caps under each tier. If the number of Chinook salmon remaining on the winter GHL is greater than 15,000 fish, then an additional 500 Chinook salmon will be added to the treaty cap tiers [29.090(d)(3)]. These regulations did not go into effect during 2012, since the winter fishery harvest of 47,902 was 2,902 fish above the GHL of 45,000 fish.

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

large king salmon. The prior escapement goal range was 30,000 to 55,000 fish with a point goal of 36,000 large king salmon.

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

COHO SALMON FISHERY

The regulatory period for coho retention in the troll fishery is June 15 through September 20, with a potential extension through September 30 in years when wild coho salmon abundance is projected to meet escapement needs after harvest and effort are considered [5 AAC 29.110(a)]. Troll harvests of coho salmon peak between mid-July and early September, while harvests in the inside gillnet fisheries peak between late August and early October (Figure 3). Escapements into streams generally peak in late September through early October, though escapement timing into some systems is earlier. Figure 3 presents combined run timing for three coho index lake systems which have relatively early escapement timing, with peak returns in late August.

All-gear harvests of coho salmon averaged 2.0 million fish during the 1940s (Figure 4). A decline in average harvest occurred during the next three decades, with a low decade average of 1.0 million fish in the 1970s. The BOF adopted a coho salmon fishery management plan in response to increasing effort and efficiency in the hand troll fleet, increased capitalization and efficiency in the power troll fleet, and increased troll harvest in outside waters (Figure 5). This plan, adopted in 1980, provides for conservation and allocation of coho salmon stocks in Southeast Alaska. The initial plan set the precedent for a mid-season troll closure to provide for adequate distribution of coho salmon escapement and for allocation to other gear groups.

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

Coho Salmon Management Methods

The coho salmon fisheries are managed to comply with the Southeastern Alaska/Yakutat Area coho salmon fishery management plan [5 AAC 29.110]. Inseason run strength is used to achieve ADF&G conservation objectives and BOF allocation objectives adopted in the management plan (Table 3). The current coho management plan calls for a troll closure for up to seven day in late

July if the total projected commercial harvest of wild coho salmon is less than 1.1 million fish [5 AAC 29.110 (b)(1)]. A troll closure for up to ten days typically occurs in mid-August and is required to be a minimum of two days by regulation for a fair start prior to the second Chinook salmon opening. The actual length of that closure is determined in early August, when an assessment determines whether the number of coho reaching inside areas is adequate to provide for spawning requirements, given usual or restricted inside fisheries on coho and other species [5 AAC 29.110 (b)(2)(A)]; or the proportional share of coho salmon harvest by the troll fishery is larger than that of inside gillnet and recreational fisheries compared to average 1971–1980 levels [5 AAC 29.110 (b)(2)(B)]. If the department has concerns for coho escapement or allocation, the closure would be longer than two days and could last as many as ten.

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

Long-term wild stock and hatchery stock CWT programs, dockside sampling programs to sample the harvest for CWTs, escapement monitoring, and the troll FPD collection program all began in the early 1980s and continue through the present day. As years of data were gathered from each program, more information and understanding of stock movement, stock timing, and stock harvest were accumulated. As a result, a model was developed in 1989 to accurately estimate the end of season all-gear coho salmon commercial harvest by late July using the salmon troll FPD. In the mid-1990s, escapement goals were established for several stocks in Southeast Alaska based on spawner-recruit relationships from long-term databases of harvest rate, harvest, age composition, and escapement information. These long-term monitoring programs have provided the backbone for successful conservation of coho salmon in Southeast Alaska.

EFFORT IN THE TROLL FISHERY

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

After the power troll fleet came under limited entry, the hand troll fleet, which was not yet limited, increased dramatically. In the late 1970s, limited entry for the hand troll fleet was under consideration by the Commercial Fisheries Entry Commission (CFEC), and the number of hand troll permits fished doubled from 1,100 permits in 1975 to a high of 2,644 permits in 1978. Due to this increased effort, the CFEC initiated a selective limited entry regime for the hand troll fishery in 1980 and the first permits were issued in 1982. The number of hand troll permits fished declined steadily from 1979 through 2002, when hand troll participation reached a low point of 254 permits. From 2003–2008, the number of hand troll permits fished increased to 376, and has since declined to 357 permits fished in 2012. The percentage of active hand troll permits in the fleet declined from 76% in 1978 to a low of 28% in 2002, followed by an increasing trend through 2008. The percentage has remained relatively stable at 31% to 33% since then (Table 4).

Historically, the number of fishing days in the Chinook salmon general summer fishery dropped from a high of 169 days in 1978 and 1979 to a low of 4.5 days in 1992. Prior to 1980, there were no regional closures during the summer season, April 15–September 30. Summer fishery boat-days of effort have ranged from a high of 35,646 in 1986 to a low of 3,878 boat-days in 1992.

SUMMARY OF THE 2012 SEASON

In 2012, a total of 752 power troll permits were fished and 357 hand troll permits were fished during the calendar year (Table 4; Figure 6). Power troll effort has been relatively stable when compared to hand troll effort. Both hand and power troll effort for all fisheries decreased when compared to 2011. Effort increased by 43 permits during the winter fishery, decreased by 17 permits during the spring fishery and decreased by 16 permits during the summer fishery when compared to effort in 2011 (Table 5; Figure 7). The decrease in hand troll effort compared to the 2011 season was around 4%, while power troll effort decreased by 2%.

Fluctuations in effort relate strongly to salmon prices and, to a lesser degree, to the availability of alternate commercial troll opportunities in the Pacific Northwest. The number of boat-days of effort in 2012 during Chinook retention periods was 13,024, up 138% from 5,479 boat-days in 2011(Table 6; Figure 8). Effort data was derived from dockside interviews of trolling vessels in conjunction with harvest and effort data from troll fish tickets.

The troll fleet harvested approximately 2.1 million salmon during the 2012 season, which is below both last year and the recent 10-year average. The harvest of each species was lower than that in 2011, though the chum salmon harvest was the fourth highest since statehood (Table 7). The majority of the Chinook salmon harvest occurred during the summer openings July 1–9 and August 11–September 8. The coho salmon harvest peaked during the week of August 19–25 (Table 8). Regional coho salmon harvest rates were average to below-average for most of the season. The average weight of coho salmon, at 5.8 lbs, was slightly higher than it was in 2011, but was below the 5-year and 10-year averages (Table 9).

In 2012, hand troll vessels harvested 114,592 salmon and power troll vessels harvested 1.9 million salmon. The proportion of the commercial troll harvest taken by the hand troll fleet has decreased from a peak of 32% in 1978 to 6% in 2012 (Tables 10 and 11).

The winter troll fishery was open from October 11, 2011–April 27, 2012, and harvested 47,888 Chinook salmon. The spring fishery harvested 25,549 Chinook salmon during May and June. The summer troll fishery harvested 135,927 Chinook salmon during two retention periods, July 1–9 and August 11–September 8 (Table 12).

NEW TROLL FISHERY REGULATIONS

During the BOF meeting held in Ketchikan from February 24–March 4, 2012, new regulations were adopted that affect the management of the troll fishery, though the new regulations did not go into effect until July 13, when they were signed into law.

- 1. A plan was adopted providing for the orderly development of an enhanced chum salmon fishery in Cross Sound, Icy Strait, and Northern Chatham Strait, while providing for conservation of wild stocks.
 - a. Spring fishery areas in District 14 will be managed to minimize the harvest of wild chum salmon while adhering to 5 AAC 29.090. MANAGEMENT OF THE SPRING SALMON TROLL FISHERIES, with the exception of the Port Althorp Fishery Area, which will be managed to maximize the harvest of Alaska hatchery Chinook salmon as it has been in the past.

- b. The Northern Chatham Strait Fishery Area in District 12 may be opened by emergency order for up to four weekdays per week beginning the second Monday in June through the last week of June for pink and chum salmon retention only.
- 2. Coho retention will begin on June 1 rather than June 15.
- 3. The Situk-Ahrnklin Inlet and Lost River King Salmon Management Plan was revised to remove the projected Situk River king salmon run strength as a trigger for a potential spring troll fishery in Yakutat Bay and to use "escapement" instead of "inriver run" as the criteria for triggering management actions. The fishery may open by emergency order one day per week during May and June, with a maximum harvest of 1,000 king salmon.
- 4. The number of fishing rods that may be onboard a hand troll vessel year-round is no longer limited to four, in order to allow spare rods in case of breakage. However, the number of fishing rods that may be operated from a hand troll vessel has not changed.
- 5. A portion of Bear Cove in the Silver Bay Special Harvest Area is closed to troll gear to protect broodstock and provide safety, as has been done by emergency order in recent years.
- 6. The western boundary of the Deep Inlet Terminal Harvest Area was modified, increasing the area open to trolling from the beginning of the rotational fishery May 27 through June 16, to increase the harvest of enhanced Chinook salmon.
- 7. The Hidden Falls Terminal Harvest Area will be open to troll coho retention from June 1 through September 20 and will remain open during any troll coho closures.
- 8. Troll area boundaries were modified in West Behm Canal (Section 1-E) from July 1-September 20, as has been done by Emergency Order during the past two years.
- 9. Regulations stating when portions of Section 1-F are open to trolling during summer fishery were revised and clarified.
- 10. The criteria for extending the coho fishery after September 20 was modified as follows: the regulatory period for coho retention in the troll fishery is June 15 through September 20, with a potential extension through September 30 in years when wild coho salmon abundance is projected to meet escapement needs after harvest and effort are considered.

CHINOOK SALMON FISHERY

During the 2012 season, the troll harvest of Chinook salmon was managed to: 1) comply with the 2008 PSTA, 2) continue the Southeast Alaska natural Chinook conservation program, 3) provide maximum harvest of Alaska hatchery-produced Chinook, 4) minimize incidental mortality during Chinook non-retention periods by closing areas of high Chinook salmon abundance, and 5) to comply with terms of the incidental take permit issued by the National Marine Fisheries Service. The 2012 Chinook fishery was managed to achieve an all-gear harvest of 266,800 treaty Chinook salmon. The all-gear treaty harvest was 241,118 fish, which was 10% under the all-gear quota. The troll treaty harvest was 191,839 fish, which was 3% under the troll treaty allocation (Table 1).

The 2012 total all-gear (troll, purse seine, drift gillnet, set gillnet, Annette Island, and recreational fisheries) Chinook salmon harvest was 295,542 fish, of which 241,118 were treaty fish. A total of 60,433 fish were of Alaska hatchery origin. The all-gear Alaska hatchery add-on

was calculated by subtracting the pre-treaty base hatchery harvest and risk adjustment from the Alaska hatchery contribution (Tables 12 and 13). Trollers harvested 209,366 Chinook salmon of which 191,839 were treaty fish. Purse seiners harvested 21,107 Chinook salmon of which 5,994 were treaty fish. The drift gillnet fleet harvested 18,309 Chinook salmon, of which 6,591 were treaty fish. (Troll, purse seine and drift gillnet harvests include terminal area and Annette Island harvests). The Yakutat set gillnet fleet harvested 968 Chinook salmon, all of which were treaty fish. Recreational fisheries (including anglers and charters) harvested 46,520 Chinook salmon, of which 36,454 were treaty fish.

Winter Fishery

The 2012 winter troll fishery began October 11, 2011 and continued through April 27, 2012. A total of 507 vessels participated in the 2012 winter fishery, with a harvest total of 47,902 Chinook salmon, which represents 23% of the 2012 total troll Chinook salmon harvest (Tables 5, 12 and 14; Figure 9). The harvest decreased by 6% and the catch per landing decreased by 9% when compared to the 2011 season. The 2012 harvest was 18% above the five-year average and 16% above the 10-year average harvest (Table 14; Figure 10). The Alaska hatchery contribution, at 12%, was slightly higher than in recent years (Table 14). This was the second consecutive year that the winter season was closed prior to April 30 due to the harvest reaching the 45,000 fish GHL. While the regional harvest during the early portion of the fishery was fairly low, weekly harvests were relatively high during the later weeks of the fishery. While effort was similar to the 5-year average, it was significantly higher than in 2011, with an additional 43 permits fished.

Spring Fishery

A total of 584 vessels participated in the 2012 non-terminal spring fisheries, with a harvest of 24,764 Chinook salmon. The largest Chinook salmon harvests were taken in the Sitka Sound, Tebenkof Bay and Ketchikan spring troll areas (Table 15). The Chinook salmon harvest was 14,176 fish less than the 2011 non-terminal harvest and the lowest since 2000 (Table 16). The Alaska hatchery contribution, at 40%, was slightly higher than that in 2011 and equal to the five-year average (Table 16). Effort was the 7% lower than it was in 2011, when spring troll effort was the highest on record and yet was equal to the five-year average effort (Table 16). Terminal area harvests taken in the spring and summer fisheries included 769 Chinook, 15 sockeye, 995 coho, 5,808 pink salmon and 61,259 chum salmon (Table 8). Close to half of the Chinook were caught in the Hidden Falls Terminal Harvest Area. A total of 31 spring areas and six terminal fisheries were open during 2012 (Figure 11). Other species harvested during the spring season, including Annette Island troll, were 374 sockeye, 3,369 coho, 2,625 pink and 24,153 chum salmon (Table 8).

Districts 8 And 11 Transboundary Rivers Directed Chinook Salmon Fisheries

District 8

The 2012 preseason terminal run forecast for large Stikine River king salmon was 40,800 fish. The resulting U.S. Allowable Catch (AC) was 5,890 large Stikine Kings. An AC of 5,890 fish allowed for limited directed commercial fisheries to occur in District 8, beginning May 7. The 2012 preseason forecast marked the first forecast since 2008 that allows for directed commercial fisheries in District 8.

Though directed Chinook salmon fisheries in District 8 were conducted initially in May, the first inseason forecast projected a terminal run size of 29,300 Stikine River Chinook salmon. That

forecast was below the preseason forecast and resulted in an AC below levels that would allow further directed commercial fisheries in District 8. Spring troll fisheries targeting Alaska hatchery-produced Chinook salmon were opened on a limited basis in District 8, according to the *Spring Troll Management Plan*.

District 11

The 2012 pre-season terminal run forecast for large Taku River king salmon was 48,036 fish. The resulting U.S. Allowable Catch (AC) was 6,703 large Taku Kings. An AC of this size allowed for limited directed commercial fisheries to occur in District 11, beginning in May. Taking into consideration recent trends in forecasts and forecast confidence intervals, department management of this fishery was conservative, with significant time and area restrictions. Though directed Chinook salmon fisheries in District 11 were conducted initially in May, inseason run projections for the Taku River declined to a level that did not allow those fisheries to continue.

Yakutat Spring Troll Fishery

The BOF at its January, 2006 meeting established regulations that allow the department to open, by Emergency Order, a spring salmon troll fishery for one day per week during the months of May and June in the Yakutat Bay area east of a line from Point Manby to Ocean Cape. The maximum harvest is 1,000 king salmon and is not based on the composition of Alaska hatchery fish. This fishery may be open only if the projected inriver run of three-ocean age and older king salmon to the Situk River weir is greater than 1,050 fish [5 AAC 30.365(c)(5)].

In 2012, a spring fishery did not open in Yakutat Bay due to the low projected return forecast to the Situk weir of approximately 500 large king salmon. This was an improvement over 2011 but still too low to allow a commercial fishery. The actual return was 322 large king salmon. This was the sixth consecutive year that a spring troll fishery has not taken place in Yakutat Bay since the regulations went into effect in 2006.

General Summer Chinook Fishery

In 2012, ADF&G received the preseason abundance index of 1.52 at the end of March, which translated to an all-gear quota under the PSTA of 266,800 treaty Chinook salmon (Table 1). Under the current BOF commercial fisheries plan, the purse seine fleet was allocated 11,472 (4.3%) fish, the drift gillnet fleet 7,737 (2.9%) fish, and the set gillnet fleet 1,000 fish. The remainder of 246,591 fish was then divided between the troll and sport fisheries in an 80/20 split, which translated to 197,272 fish to the troll fishery and 49,318 fish to the sport fishery [5 AAC 29.060(b)].

The summer troll Chinook quota is calculated by subtracting the pre-summer treaty harvest, as estimated on June 22, from the troll treaty allocation. The pre-summer harvest is the sum of the winter treaty harvest (41,914 fish), the projected spring treaty harvest (14,671 fish), the pre-Treaty Alaska hatchery harvest (3,700 fish), a statistical risk factor related to the Alaska hatchery contribution estimate (1,000 fish), and the Transboundary River directed harvest (above the base period harvest), which was zero in 2012. The resultant sum (61,285) is then subtracted from the troll allocation, yielding an initial estimate of 135,988 treaty Chinook 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 announced as 98,135 fish, which included an estimated 3% Alaska hatchery fish component and 95,191 treaty fish.

The first summer troll Chinook salmon fishery was projected to last 8–10 days, based on average July catch rates in recent years as well as past fishery performance at similar abundance indices. The opening was managed inseason rather than for a pre-determined number of days. Aerial vessel count surveys were conducted the first week of July, with a total of 548 vessels counted, an increase of approximately 100 vessels compared to survey counts done at the same week last year. At the same time, effort in West Behm Canal targeting hatchery-produced chum salmon increased steadily, thereby reducing the number of permits targeting Chinook salmon. Stormy weather July 6-7 also reduced effort, especially on the outer coast where the majority of Chinook salmon are typically harvested. On July 8, the department estimated, based on inseason fishery performance data, that approximately 68,000 Chinook had been harvested during the first week of the fishery, with regional average catch rates of approximately 20 Chinook/boat/day and the catch/fleet/day of approximately 10,400 Chinook per day. The department projected that the harvest target would soon be reached and a news release was issued that day, announcing the closure of the first summer Chinook salmon retention period at 11:59 p.m., July 9. Following this announcement, harvest rates and effort targeting Chinook decreased significantly compared to prior estimates. The fleet (748 permits) actually harvested 61,667 fish during the nine-day opening, at an average of 6,852 fish per day (Table 17), of which 60,210 were counted as treaty fish (Table 12). Effort directed at chum salmon in West Behm Canal increased from 50 boats on July 5 to 125 boats on July 9, with a total of 146 boats during the Chinook retention period. As a result, Chinook effort was overestimated. Following the first opening, the areas of high Chinook salmon abundance (5 AAC 29.050) were closed (Figure 12).

At the time the harvest target for the second Chinook salmon opening was announced (August 3), the total July catch was estimated to be 61,417 fish, leaving approximately 79,900 (including a 3% Alaska hatchery component) fish left on the troll allocation. The results of the second coho run strength assessment during the first week of August determined that an August coho closure of four days was appropriate. The second Chinook salmon opening began on August 11 and was managed in season, with no pre-determined length, to target approximately 77,000 treaty fish. Regional catch rates were lower in August than in July and averaged 10 Chinook/boat/day over the entire four-week opening. On August 22, the department estimated that just over 1/3 of the target harvest had been taken during the first 11 days of the opening, at an average catch/fleet/day of 2,764. Catch rates declined by 46% since the opening began, from an average of 11 Chinook/boat/day during the first week to six Chinook/boat/day during the second week. Aerial survey data indicated that effort declined by 48%, from 476 boats the first week to 248 boats the second week of the retention period. On August 22, the department announced that the areas of high king salmon abundance would reopen the next day, consistent with 5 AAC 29.100 (c)(2)(A), and that approximately 49,900 Chinook remained on the troll allocation. This was the first time such action has been taken since 2005, when these areas were opened during a 6-day third retention period in late September. During both years, there was concern that the troll allocation might not be taken by September 20 without reopening the areas of high king salmon abundance. Aerial survey data from August 30 indicated that with the opening of the high king salmon abundance areas, effort had increased, from 248 boats to 350 during the third week of the fishery. Based on fishery performance data and reports from trollers, the Chinook/boat/day harvest had also increased to 16 during the fourth week of the retention period. With the

increased effort and harvest rates, the department estimated that the second Chinook salmon retention period target harvest would be reached by the end of the fourth week of the fishery. On September 7, the department announced that the second Chinook salmon retention period, along with the areas of high king salmon abundance, would close on September 8.

The fleet harvested 74,249 fish during the 29-day opening, at a catch rate of 2,560 Chinook/day (Table 17). The Alaska hatchery composition of the harvest was 4%, resulting in an Alaska hatchery add-on, not counted against the treaty quota, of 2,545 Chinook.

The total summer fishery Chinook salmon harvest was 135,927 fish, of which 4,983 fish, or 4%, were of Alaska hatchery origin. Approximately 4,002 of these were counted as hatchery add-on (Table 12). A total of 131,839 treaty Chinook salmon were harvested in the summer fishery, which was 4,149 (3%) less than the pre-summer harvest target of fish.

COHO SALMON FISHERY

Coho salmon retention began by regulation [5 AAC 29.110 (a)] on June 15, during the spring troll fisheries, when 3,369 coho were harvested outside terminal harvest areas. This harvest was 2,501 fewer than the 10-year average, and ranked 10th largest since spring troll began in 1986. A big factor in the decreased coho harvest in the spring of 2012 was the reduced coho bycatch in the Homeshore (formerly Icy Strait) spring troll fishery. Vessels targeting chum in this area had decreased success this spring, consequently reducing effort and coho bycatch, when compared to 2011. The majority of the troll coho salmon harvest occurred after July 1 during the general summer season. Effort directed at targeting coho salmon was affected by the large number of trollers who targeted hatchery-produced chum salmon as well as the unusually long opening for Chinook salmon in August and September.

The late-July run strength assessment indicated a total commercial harvest forecast of 2.09 million wild coho, well above the 1.1 million fish conservation threshold for an early season closure [5 AAC 29.110 (b) (1)]. The assessment also projected the total wild coho abundance at 3.83 million fish, which was 3.5% above the 1982–2011 average of 3.70 million fish. Run strength initially appeared to be well-above the 1992–2011 average, based on power troll catch/boat/day (CPUE) of 52 through statistical week 29 (Figures 13 to 15), which also included the first Chinook retention period. Regional catch rates dropped from average to below average during weeks 30–32. The Southern Outside and Central Inside areas were the exception, in that CPUE's remained at average levels or better during that time period.

The second run strength assessment in early August concluded that the 2012 coho salmon run strength appeared to be similar to long-term averages and better than the past two years, with no significant conservation concerns at that time. The assessment forecast a total commercial harvest of 2.01 million wild coho and a total wild return of 3.66 million fish, based on the statistical weeks 28–31 power troll CPUE. The projected commercial harvest was 5% below average, while the projected wild return was similar to the 1982–2011 average. Both projections were slightly lower than projections made in late July. The preliminary troll fishery harvest through August 4 (week 31) was estimated at 396,552 coho salmon, which is 51% above the 1971–1980 average, 47% below the 1992–2011 average and 27% below the 2007–2011 average. It should be noted that troll coho harvest was negatively affected by the fact that a significant portion of the fleet chose to target hatchery-produced chum salmon in West Behm Canal instead of targeting coho salmon. Regional troll catch rates (CPUE) had dropped below average, though

CPUE's in the Southern Outside, Northern Inside and Central Inside areas were at or above average in early August (Figures 13 to 15).

As part of the August assessment, the strength of the returns to inside areas was evaluated by assessing the performance of the drift gillnet and inside sport fisheries. One of the best measures of coho run strength is the cumulative catch-per-boat-day (CPBD) in the four major drift gillnet fisheries. The 2012 cumulative CPBD for the Tree Point and Prince of Wales fisheries exceeded the 1971–1980 average, while the CPBD in the Taku/Snettisham and Lynn Canal fisheries was below the 1971–1980 average (Figure 16). The coho salmon management plan is directed toward achieving adequate escapements in wild systems, so it is necessary to look at the CPBD of wild coho salmon in the drift gillnet fisheries. Only the District 6 fishery shows substantial numbers of hatchery fish in the catch through late July/early August, so the strength of the District 6 wild component is of particular interest. The cumulative wild CPBD in District 6 was above the 1971–1980 average. The Juneau marine sport fishery, as the primary indicator of inside sport fishery performance, had cumulative catch rates (HPUE) similar to the 1991–2011 average through the week of July 16, but fell below average the following week (Figure 17). The cumulative Taku River fishwheel count as of August 1 was estimated to be below the 10-year average through that date. The return did not appear to be strong at that point (Figure 18).

A four-day closure of the troll fishery was implemented from August 7–10, in order to provide for adequate escapement and transition to inside water fisheries. Regional power troll catch rates were below the 1992–2012 average following the coho closure, which coincided with the second Chinook retention period, but increased to near-average levels the following week. Coho returns to the Taku and Chilkat River fish wheels were below-average (Figure 19).

The regulatory period for coho retention in the troll fishery is June 15 through September 20, with a potential extension through September 30 in years when wild coho salmon abundance is projected to meet escapement needs after harvest and effort are considered. The criteria used for the decision on a potential extension of the coho salmon fishery were modified by the Alaska Board of Fisheries in 2012. Based on power troll CPUE for weeks 29-36, the wild coho abundance was projected to be 3.55 million, which is slightly below the 1982-2011 average and a slight decrease from early-August projections. The regional troll CPUE had increased slightly compared to the previous five weeks. Early escapements in the Yakutat area and most systems in Southeast were near or within their escapement goal ranges. Catch rates for the combined drift gillnet fisheries, a primary indicator for inside abundance, were average to above average during recent weeks. On September 14, the department issued a news release announcing that the fishery would be extended through September 30, with the exception of a portion of Districts 12 and 14 and all of District 15. Those areas were not extended due to relatively weak coho returns. The only system projected to come in below goal at that time was the Chilkat River. The department projected that escapement goals in other portions of the region would be met after considering harvest and effort.

During the past 18 years (1994–2011), the coho salmon season has been extended 11 times (Table 18). Prior to 1994, extensions after September 20 were not allowed. The final 2012 estimated wild coho salmon abundance of 3.52 million fish was 10% below the recent 20-year (1992–2011) average. The total troll coho salmon harvest of 1,200,896 fish was the 26th highest in the 53 years since statehood, ranking just above the median catch of 1.17 million fish in 1997 (Table 7). The average dressed weight of troll-caught coho salmon of 5.8 pounds was the smallest on record for an even year, and 16% below average for all years since 1970. Size of

coho salmon returning to the region has exhibited a prominent two-year cycle in recent years, with odd-year dressed weights averaging nearly a pound lighter compared with the average weight in even years. In addition, dressed weight of both coho and Chinook salmon is positively correlated with the Pacific Decadal Oscillation, which has recently entered a negative (cold) phase.

CHUM SALMON FISHERY

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 Hidden Falls hatchery, located on eastern Baranof Island and operated by the Northern Southeast Regional Aquaculture Association. In 1993, the Northern Southeast Aquaculture Association Medvejie/Deep Inlet facility near Sitka saw a return of over 1.0 million chum and the troll chum salmon harvest increased to over 500,000 fish. Since that time, trollers have targeted chum and, with the exception of 1999 and 2008, the annual troll harvest of chum salmon outside of terminal harvest areas has been consistently greater than 100,000 fish (Table 7). Effort directed at targeting hatchery-produced chum salmon has increased in recent years (Figure 20), as has the price paid for them. Some trollers have chosen to target chum salmon during the summer Chinook salmon openings or during weeks when they would normally target coho salmon. Though the troll fishery is not managed for chum salmon, the redirection of effort away from Chinook and coho salmon, which are managed in season, has some effect on the total harvest and catch rates of those species.

In 2012, trollers harvested a total of 24,487 chum salmon in Sitka Sound from a total return of 630,554 fish. Although this was a 71% increase in total return from 2011, and 86% of the 2012 forecasted return, troll chum harvest declined by approximately 3,000 fish. The majority (12,858) were harvested in a specific portion of Sitka Sound/Eastern Channel during the August 7–10 troll closure [5 AAC 29.112]. Trollers also harvested a total of 11,603 chum salmon during the general summer fishery in Sitka Sound/Eastern Channel, with peak harvests occurring in mid-August, when as many as 52 permits targeted chum during the second Chinook salmon retention period (Table 19).

The Southern Southeast Regional Aquaculture Associatio allows the troll fleet to target chum salmon in the Neets Bay Terminal Harvest Areas (THA) only in years in which a surplus above broodstock and cost recovery needs is identified. In 2012, both effort and harvest within the THA increased substantially, with 142 permits, the highest annual effort to date, harvesting a total of 48,068 chum salmon. Similar to effort in the Neets Bay THA, the number of troll permits targeting chum in the West Behm Canal area peaked in 2012. A total of 268 permits harvested 363,005 chum salmon during the spring and summer troll fisheries. Although effort in West Behm Canal increased by 49%, the harvest of chum salmon decreased by 17% when compared to 2011. The total troll chum salmon harvest for Neets Bay and all of West Behm canal combined was 411,073, which was 86% of the regionwide troll chum harvest in 2012 (Table 19). During the first Chinook salmon retention period, 146 permits harvested 56,432 chum in Neets Bay/West Behm Canal, indicating that a large number trollers chose to forego the nine-day opportunity to target Chinook salmon in favor of targeting chum salmon.

Trollers also fished for chum salmon in the Homeshore spring troll fishery, from early June through mid-July, to target returns to the Macaulay Hatchery in Juneau, operated by DIPAC (Douglas Island Pink and Chum, Inc.). Trollers began to target chum at Homeshore in 2010, and had increased success through 2011, however, both harvest and effort declined in 2012. A total of 26,095 chum salmon were harvested by approximately 135 trollers in 2012 (Table 19). Compared to 2011, this is an 85% and 40% decrease in harvest and effort, respectively. The majority of the harvest was taken in late June, with both harvest and effort declining with the start of the general summer fishery, July 1. Primarily due to decreased harvest success, most trollers targeting chum in the Homeshore area relocated south to the West Behm Canal/Neets Bay THA fisheries by statistical week 27 (July 1–7).

OTHER SPECIES

A total of 3,224 sockeye, 168,583 pink and 476,469 chum salmon were harvested during the general 2012 troll seasons (Table 7). The sockeye salmon harvest was below average when compared to 10–year averages from 1980–2009, but above average for the 1960–1979 period. Pink salmon harvests exceeded the recent 10-year averages from 1960–1969 and 2000–2009, but fell below the averages from 1970–1999. Although the 2012 chum salmon harvest declined by 32% from 2011, it did exceed all 10-year averages from 1960–2009, and was the fourth highest since statehood.

EXCLUSIVE ECONOMIC ZONE (EEZ) HARVESTS

In 2012, approximately 9% of the Chinook (19,502 fish) and 3% of the coho salmon (34,742 fish) harvested by the troll fishery (Figure 5) was reported as taken outside of State waters in the EEZ (Districts 150, 152, 154, 156, 157, and 189). In addition, 104 sockeye, 1,591 pink, and 529 chum salmon were taken in the EEZ. When all species are combined, 3% of the troll harvest was reported to be taken outside State waters, a 1% increase when compared to 2011. That increase was primarily due to the early season coho abundance in offshore areas of the northern outside, shifting both effort and harvest to those outside waters. In addition, District 157 in the EEZ (Fairweather Grounds), typically closed to fishing after the first Chinook retention period, reopened as part of the Areas of High King Salmon Abundance from August 23 through September 8. The additional 17 day opening in those offshore waters, and a much reduced chum salmon harvest in inside waters were also factors of the increased percentage of salmon harvested in the EEZ in 2012.

ALASKA HATCHERY PRODUCTION

Private non-profit and federal hatcheries in Southeast Alaska produce both Chinook and coho salmon that are harvested by the troll, drift gillnet, and purse seine fleets. Hatchery-produced Chinook salmon began appearing in significant numbers in troll harvests in 1980, when an estimated 5,900 fish were harvested. Alaska hatchery contributions are generally greatest during the spring fisheries, followed by the winter and summer fisheries (Tables 14, 16, and 17). The peak harvest of Alaska hatchery fish to the troll fishery occurred in 1996, when trollers harvested 38,365 Alaska hatchery Chinook, or 27% of the total troll Chinook salmon harvest. The all-gear Alaska hatchery Chinook harvest peaked in 2001, when 85,404 fish, or approximately 32% of the total harvest, were caught (Table 20; Figure 21). In 2012, the combined Alaska hatchery harvest contributed about 60,434 Chinook salmon to the commercial and sport fisheries, with 21,237 fish harvested in the troll fishery and 11,700 fish in the sport fishery (Table 20).

Hatchery-produced coho salmon were first documented in the troll harvest in 1980. The hatchery contribution to the total coho salmon harvest has increased from less than 1% in 1980 to 26% in 2002, 2011, and 2012, with Alaska hatcheries producing approximately 98% of these fish. In 2012, the hatchery coho salmon contribution was 26% of the harvest, tying 2002 and 2011 for the highest seasonal contribution since 1980, and had a total contribution of 309,363 fish (Table 21; Figure 22).

WILD STOCK ESCAPEMENT

CHINOOK SALMON ESCAPEMENT

Since a 15-year Chinook salmon rebuilding program began in 1981, ADF&G has annually estimated Chinook salmon escapements on 11 indicator systems. These escapements were initially measured against interim goals established prior to 1985, which in general were set as the largest escapements seen prior to 1981. As a part of the rebuilding program, ADF&G conducted CWT studies and improved escapement estimation methods. The department also sampled age and sex data in the escapement in order to collect data that would, when included with escapement data, allow the use of spawner-recruit analytical methods to set Biological Escapement Goals (BEG) to achieve maximum sustained yield.

Establishment of BEG goals indicated that the Alsek, Situk, Unuk, and Keta rivers were within the ranges of desired escapement prior to the rebuilding program while only the Blossom River was below desired escapements. Prior to 2012, the four indicator systems in Behm Canal, the Unuk, Chickamin, Blossom, and Keta, had consistently been above or within escapement goal ranges dating back to 1985. Escapements to both the Blossom and Keta continued this trend, and with the new BEGs established, both systems exceeded upper MSY goals in 2012. Unlike the previous two Behm Canal indicator systems, the escapements to the Unuk and Chickamin fell below lower limits, and were the lowest on record, dating back to 1975. Escapement values for indicator stocks in the Wrangell vicinity, the Stikine River and Andrew Creek, have been above or within their escapement goal ranges for 26 of the last 27 years and 24 of the last 27 years, respectively. While the escapement to the Stikine was within the desired goal range, Andrew Creek escapement, similar to the Unuk and the Chickamin, fell well below historic averages in 2012, and was one of the lowest returns since the Chinook rebuilding program began. With the exception of 2007, Taku River Chinook escapements have been above or within the desired ranges since 1991, with 2012 escapement surpassing the lower limit goal. For only the second time in the last 22 years, escapement to the Chilkat River was below the lower BEG, when an estimated 1,627 spawners returned in 2012. Prior to 2005, the Alsek River, one of two indicator systems near Yakutat, was consistently above or within the BEG range. Since then, the Alsek escapement values have been below the lower end goal in five of the last eight years. Although the escapement to the Situk River, the second indicator system near Yakutat, was an improvement over the record lows of 2010 and 2011, the 2012 returns still fell below the lower limit of the BEG range. In 2012, escapements generally decreased from those in 2011, with 5 of the 11 index counts above the 2011 escapement values. In summary, 5 of the 11 systems had escapements above or within the escapement goal range (Table 22).

COHO SALMON ESCAPEMENT

Only a small percentage of the coho salmon escapements in Southeast Alaska are enumerated or surveyed because of the extremely scattered distribution of stocks and difficult conditions for observation of spawners during the fall months (Table 23). In 2012, weirs were operated on three systems, while foot or aerial surveys were conducted on another 27 streams. An adult tagging and recovery program has been in operation since 1987 to estimate the escapement of coho salmon to the Taku River.

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

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 23). 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 23–27; Figure 23). In 2012, escapements to systems in the northern inside areas were within or above goal for all stocks, with the exception of Montana Creek where the peak count of 394 spawners was slightly below the goal of 400-1,200 spawners (Table 25). The estimated escapement to the Taku River above Canyon Island (70,742 spawners) was about double the threshold goal (35,000 spawners). Despite the smallest estimated total return to the Berners River on record (8,479 adults; Figure 23), the escapement count of 5,480 spawners was well within the goal range (4,000-9,200 spawners) because of a record low troll and all-gear exploitation rate estimate of only 43% (Tables 28 and 29; Figure 26). After a period of relatively strong coho salmon returns averaging 35,200 adults annually from 1990-2004, returns to the Berners River plunged by 63% to an average of only 12,900 adults during 2005–2012. The decline in total adult abundance was nearly equally attributed to a decrease in average smolt production (-39%) and a decrease in average marine survival (-40%). The Chilkat River has shown a similar decrease in adult abundance with a 89% correlation with the Berners River over the 13-year period since the Chilkat assessment project was initiated in 2000. Although the estimated total return to the Chilkat River (65,375 adults) was the second smallest return on record, the goal of 30,00070,000 spawners was achieved with an escapement estimated at 36,961 spawners. Of the three index streams on the Juneau road system the escapement count was above-goal for Auke Creek, within goal for Peterson Creek and slightly below-goal for Montana Creek (Table 25).

The escapement count of 1,157 spawners for five small streams on Baranof and Kruzof Islands was just below-average (1,276 spawners) but well above the goal of 400–800 spawners. The overall escapement index of 3,439 spawners in all six monitored streams in the Sitka area, including Ford Arm Creek on Chichagof Island was below the historical (1982–2011) average of 4,630 spawners (Table 26; Figure 24). The total escapement of 2,282 spawners to Ford Arm Creek, was well within the goal range of 1,300–2,900 spawners but below the long-term average of 3,357 spawners. The escapement resulted from an all-gear exploitation rate of 63% (Table 28; Figure 26) on a return estimated at 6,187 adults that was 28% below average (8,546 adults; Figure 23). Although the troll exploitation rate (47%) was below average (52%), the purse seine exploitation rate 14% was the third highest on record. Marine sport fisheries accounted for an estimated 2% of the return. Although purse seining was limited in 2012, this was the second consecutive year in which the Ford Arm Creek stock showed a pattern of early entry into Khaz Bay and a high purse seine exploitation rate.

The overall index of 13,858 spawners for 15 streams in the Ketchikan (Southern Inside) area was above the 1987–2011 average of 9,473 spawners (Table 27; Figure 24). The total escapement of 1,908 spawners to Hugh Smith Lake was well above goal range (500–1,600 spawners) for the fifth year in a row. The aggregate survey index count for the other 14 streams (11,950 spawners) was well-above the goal range of 4,250–8,500 spawners, due in part to excellent survey conditions.

COHO SALMON EXPLOITATION RATES

The 2012 average troll fishery exploitation rate of 28% for the four primary indicator stocks (Berners River, Auke Creek, Ford Arm Lake, and Hugh Smith Lake) was well-below the 1982–2011 average of 38% (Table 28; Figure 25). Extensive targeting of chum salmon by trollers and unusual coho salmon migration patterns were probably both contributing factors. The troll exploitation rate for the Hugh Smith Lake stock (20%) remained low for the fifth consecutive year within a range of 19–24%, compared with a prior average of 37%. The troll exploitation rate on the Auke Creek stock was estimated at only 20%, compared with a long-term average of 30%, while the estimate of 47% for Ford Arm Creek was below the long-term average of 52%..

The average 2012 total exploitation rate by all fisheries on the four stocks was 43%, compared with the 1982–2011 average of 57%, with only 2002 (41%) being lower (Table 29; Figure 26). The total exploitation rate of 53% for the Hugh Smith Lake stock continued a recent trend toward lower all-fishery exploitation rates for that stock beginning in 2000. The 2000–2012 average Hugh Smith Lake all-fishery exploitation rate of 52% was far below the 1990s average of 75%, with the decrease being spread broadly across all fisheries.

TABLES AND FIGURES

Table 1.—All-gear and Troll Treaty Chinook salmon harvest, hatchery add-on, total harvest, Treaty quota, terminal exclusion harvest and the number of fish over or under the quota, 1985–2012.

				ALL-GEAR					TR	OLL	
Year	Treaty Harvest	Hatchery Add–on	Terminal Exclusion	Total Harvest	Pre-Season Treaty Quota	Post-Season Treaty Quota	Over/Under Pre-Season Quota	Treaty Harvest	Total Harvest	Preseason Treaty Quota	Over/Under Preseason Quota
1985	268,293	6,246	0	274,539	263,000	263,000	5,293	211,933	215,811	_	_
1986	271,262	11,091	0	282,353	263,000	263,000	8,262	231,649	237,703	_	_
1987	265,323	17,095	0	282,418	263,000	263,000	2,323	231,051	242562	218,000	13,051
1988	256,787	22,525	0	279,312	263,000	263,000	-6,213	217,088	231364	218,000	-912
1989	269,522	21,510	0	291,032	263,000	263,000	6,522	224,182	235716	218,000	6,182
1990	320,996	45,873	0	366,869	302,000	302,000	18,996	263,528	287939	257,000	6,528
1991	297,986	61,476	0	359,462	273,000	273,000	24,986	231,803	264106	228,000	3,803
1992	221,980	36,811	0	258,791	243,000	243,000	-21,020	162,617	183759	167,790	-5,173
1993	271,193	32,910	0	304,103	263,000	263,000	8,193	212,350	226866	201,690	10,660
1994	235,165	29,185	0	264,350	240,000	240,000	-4,835	177,146	186331	180,400	-3,254
1995	176,939	58,800	0	235,739	175,000	202,500	1,939	115,072	138117	_	_
1996	154,997	72,599	8,663	236,259	146,700	147,500	8,297	107,581	141,452	102,000	5581
1997	286,696	46,463	9,843	343,002	277,200	289,500	9,496	221,944	246,409	214,761	7183
1998	243,152	25,021	2,420	270,593	261,700	260,000	-18,548	183,489	192,066	192,176	-8,687
1999	198,842	47,725	4,453	251,020	192,800	184,200	6,042	132,741	146,219	140,728	-7,986
2000	186,493	74,316	2,481	263,290	189,900	178,500	-3,407	133,963	158,717	138,507	-4,545
2001	186,919	77,287	1,528	265,734	189,900	250,300	-2,981	128,692	153,280	138,507	-9,816
2002	357,133	68,164	1,237	426,534	356,500	371,900	633	298,132	325,308	266,056	32,075
2003	380,152	57,228	2,056	439,436	366,100	439,600	14,052	307,380	330,692	273,406	33,973
2004	417,019	75,955	6,295	499,268	383,500	418,300	33,519	321,876	354,658	286,728	35,148
2005	390,089	65,282	36,265	491,636	416,400	387,400	-26,311	304,424	338,451	311,916	-7,257
2006	360,812	48,975	25,413	435,200	346,800	354,500	14,012	264,181	282,315	256,664	7,560
2007	327,568	69,225	7,696	404,490	329,400	259,200	-1,832	240,402	268,146	243,747	-3,348
2008	171,690	66,237	5,968	243,895	170,000	152,900	1,690	126,798	151,936	125,408	953
2009	227,352	62,604	3,589	293,545	218,800	176,000	8,552	159,006	175,644	161,637	-2,633
2010	229,329	54,174	928	284,431	221,800	215,800	7,529	177,323	195,495	163,864	13,944
2011	291,990	64,495	512	356,997	294,800	283,300	-2,810	220,952	242,193	218,060	2,702
2012	241,118	53,113	1,311	295,542	266,800	_	-25,682	191,839	209,366	197,272	-5,433
					1985–2011 C	umulative Total	66,694	1	985–2011 Cı	imulative Total	125,733

Note: 2012 quota is based on the preseason Abundance Index. The final quota is based on the first postseason calibration of the Abundance Index.

Table 2.–Estimated survival rate (percent) of coho salmon smolts and pre-smolts from wild and hatchery stocks in Southeast Alaska, 1980–2012.

-			Wild	Stock			Lake H	latchery			Hatchery			Hatchery-Remote Release					
				Ford	Hugh														Earl
	Auke	ъ	D.	Arm	Smith	Taku	Deer	Neck	Hidden	M 1 "	DIDAG	Witman	Neets			Shamrock		Nakat	West
D	Creek	Pre-	s River	Lake Pre-	Lake	River	Lake	Lake	Falls	Medvejie	DIPAC	Lake ^a	Bay ^a	Inlet	Bay	Bay	Inlet	Inlet	Cove
Return Year	Smolts	smolts	Smolts		Smolte	Smolts	Smolte	Smolts	Smolts	Smolts	Smolts	Smolts	Smolts	Smolts	Smolte	Smolts	Smolte	Smolts	Smolte
1980	10	SHIOITS	Silions	SHIOITS	Silloits	SHIORS	Silions	Silions	Silloits	Silions	Silions	Silloits	Silions	Sillotts	Silions	Silions	Silions	Silions	Silloits
1981	9	_	_	_	_	_	_	_	_	_	_	4	8	_	_	_	_	_	_
1982	11	3		6								3	10						
1983	18	7		10	13							9	13						
1984	16		_	_	8	_	_	_	_	_	_	3	9	_	_	_	_	9	_
1985	25	6	_	12	8	_	_	_	_	_	_	13	12	_	_	_	_	_	_
1986	17	5	_	9	19	_	_	_	_	_	_	17	11	_	_	_	_	_	_
1987	21	3	_	5	10	_	6	_	_	_	_	3	4	_	_	_	_	5	10
1988	17	5	_	7	4	_	_	_	_	_	_	5	1	_	_	_	_	6	5
1989	14	4	_	12	9	_	7	_	_	_	_	2	1	_	_	_	_	3	2
1990	21	9	21	10	18	_	17	_	_	_	_	7	14	_	_	_	_	7	14
1991	23	_	25	11	17	_	24	_	16	_	24	12	13	_	_	_	10	14	12
1992	33	_	24	15	21	20	20	_	29	_	18	9	17	_	_	_	8	17	16
1993	24	_	15	22	13	14	13	_	20	20	10	5	11	_	_	_	16	11	12
1994	35	_	29	14	20	23	23	_	23	14	17	9	7	_	_	15	14	8	16
1995	11	_	16	5	14	12	13	_	14	12	6	4	6	_	_	14	16	10	7
1996	23	_	12	6	18	10	11	_	13	9	6	5	7	_	_	5	8	10	7
1997	19	_	12	15	8	7	6	_	6	3	5	8	5	_	_	1	_	6	5
1998	23	_	17	20	12	14	5	16	12	15	10	5	7	_	_	8	_	5	5
1999	19	_	13	8	14	10	17	4	16	14	15	10	8	6	_	7	_	8	10
2000	19	_	12	13	7	6	1	5	10	11	10	4	6	2	_	_	_	5	4
2001	28	_	12 19	8 15	13	9	15 30	5 5	12 24	7 10	9 14	6 9	8 13	14		2	_	5 4	5
2002 2003	27 25	_	19 19	15 17	15 14	11 10	30 6	5 6	24 10	10 14	14	9 8	10	15 13	8 9	3 2	_	8	_
2003	20	_	18	17	14	8	22	4	10	5	8	0 1	7	3	3	5	_	4	_
2004	16	_	9	8	9	6	13	2	9	6	7	6	5	2	8	6	3	6	_
2006	21		13	10	7	11	13	2	10	3	6	4	2	2	11	2	_	6	
2007	12	_	7	10	9	4	8	3	2	4	4	8	5	7	8	_	4	9	_
2008	24	_	16	15	13	5	4	2	10	2	8	11	7	12	9	_	2	8	_
2009	16	_	9	7	18	8	8	6	5	0	5	14	4	21	12	_	0	7	_
2010	16	_	13	7	21	11	5	7	7	_	8	8	8	11	9		0	8	_
2011	13	_	9	13	10	8	7	7	10	_	10	6	2	9	1	_	_	2	_
2012	10	_	8	7	12	8	6	7	1	2	4	5	9	10	5	_	3	6	_
Average	19	5	15	11	13	10	12	5	12	8	10	7	8	9	8	6	7	7	9

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

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

Table 3.-Harvest and percent of commercially harvested coho salmon by gear type in Southeast Alaska, 1989–2012.

	•		•		• • • • • • • • • • • • • • • • • • • •					
	Commerci	ial Troll	Purse	Seine	Drift (Gillnet	Set C	Gillnet	All–Gear	Total
Year	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1989	1,415,517	64.9%	333,116	15.3%	255,689	11.7%	176,816	8.1%	2,181,138	100%
1990	1,832,604	66.9%	379,334	13.9%	377,803	13.8%	148,891	5.4%	2,738,632	100%
1991	1,719,082	59.3%	411,854	14.2%	601,179	20.7%	166,731	5.8%	2,898,846	100%
1992	1,929,945	56.4%	505,135	14.7%	699,448	20.4%	290,149	8.5%	3,424,677	100%
1993	2,395,887	67.4%	477,006	13.4%	445,880	12.5%	237,446	6.7%	3,556,219	100%
1994	3,467,599	62.7%	970,100	17.6%	744,558	13.5%	343,903	6.2%	5,526,160	100%
1995	1,750,262	55.9%	627,472	20.0%	456,820	14.6%	295,030	9.4%	3,129,584	100%
1996	1,906,769	63.9%	447,005	15.0%	404,627	13.5%	227,802	7.6%	2,986,203	100%
1997	1,170,534	63.6%	189,036	10.3%	156,725	8.5%	322,776	17.6%	1,839,071	100%
1998	1,636,711	59.5%	475,232	17.3%	441,458	16.0%	197,669	7.2%	2,751,070	100%
1999	2,272,653	69.4%	422,926	12.9%	394,260	12.0%	187,186	5.7%	3,277,025	100%
2000	1,125,219	66.6%	210,528	12.5%	181,796	10.8%	170,948	10.1%	1,688,491	100%
2001	1,845,627	62.7%	556,193	18.9%	338,083	11.5%	205,344	7.0%	2,945,247	100%
2002	1,315,062	52.9%	479,489	19.3%	491,683	19.8%	200,888	8.1%	2,487,122	100%
2003	1,223,458	56.5%	400,988	18.5%	467,337	21.6%	74,343	3.4%	2,166,126	100%
2004	1,916,675	67.1%	405,151	14.2%	339,466	11.9%	196,930	6.9%	2,858,222	100%
2005	2,038,296	73.7%	348,072	12.6%	297,878	10.8%	82,887	3.0%	2,767,133	100%
2006	1,362,983	74.0%	114,313	6.2%	277,853	15.1%	86,085	4.7%	1,841,234	100%
2007	1,378,062	72.1%	252,575	13.2%	204,081	10.7%	76,550	4.0%	1,911,268	100%
2008	1,293,030	63.4%	215,648	10.6%	377,469	18.5%	153,712	7.5%	2,039,859	100%
2009	1,591,547	67.0%	298,614	12.6%	351,367	14.8%	133,808	5.6%	2,375,336	100%
2010	1,343,151	58.8%	202,873	8.9%	578,303	25.3%	161,584	7.1%	2,285,911	100%
2011	1,314,018	63.2%	351,994	16.9%	285,951	13.8%	126,215	6.1%	2,078,178	100%
2012	1,200,896	63.8%	280,142	14.9%	303,047	16.1%	98,677	5.2%	1,882,762	100%
1989–2012 Average:	1,685,233	63.8%	389,783	14.3%	394,698	14.9%	181,765	7.0%	2,651,480	100%
Board of Fisheries Alloc	cations									
(Established 1989)		61%		19%		13%		7%		
89–12 Deviation from A	Allocations	2.8%		-4.7%		1.9%		0%		
2012 Deviation from Al	llocations	2.8%		-4.1%		3.1%		-1.8%		

Note: Annette Island and terminal harvests are included.

Table 4.–Southeast Alaska commercial troll permits renewed and fished, 1975 to 2012.

	Hand Trol	ll Permits	Power Tro	ll Permits	_ Total	HT/total
Year	Reneweda	Fished	Reneweda	Fished	Fished	Fished
1975	2,087	1,100	1,078	760	1,860	59%
1976	2,082	1,242	998	742	1,984	63%
1977	2,951	1,852	970	746	2,598	71%
1978	3,922	2,644	976	817	3,461	76%
1979	3,700	2,195	978	813	3,008	73%
1980	2,436	1,713	973	848	2,561	67%
1981	2,048	1,172	969	797	1,969	60%
1982	1,906	1,185	967	819	2,004	59%
1983	2,031	1,016	967	820	1,836	55%
1984	1,983	875	961	799	1,674	52%
1985	1,954	917	959	835	1,752	52%
1986	1,893	809	957	827	1,636	49%
1987	1,825	767	956	829	1,596	48%
1988	1,788	795	956	843	1,638	49%
1989	1,747	699	955	843	1,542	45%
1990	1,702	700	956	840	1,540	45%
1991	1,644	703	958	852	1,555	45%
1992	1,596	646	957	842	1,488	43%
1993	1,552	603	956	841	1,444	42%
1994	1,514	561	954	808	1,369	41%
1995	1,479	461	954	819	1,280	36%
1996	1,423	414	965	739	1,153	36%
1997	1,384	387	964	744	1,131	34%
1998	1,338	305	965	733	1,038	29%
1999	1,305	339	965	722	1,061	32%
2000	1,257	316	962	714	1,030	31%
2001	1,212	307	964	703	1,010	30%
2002	1,158	254	962	666	920	28%
2003	1,120	266	961	641	907	29%
2004	1,101	325	960	692	1,017	32%
2005	1,084	353	961	718	1,071	33%
2006	1,068	371	961	741	1,112	33%
2007	1,051	376	961	744	1,120	34%
2008	1,044	376	961	747	1,123	33%
2009	1,034	367	961	748	1,115	33%
2010	1,018	332	961	731	1,063	31%
2011	952	372	943	759	1,131	33%
2012	903	357	933	752	1,109	32%

^a Permits renewed from CFEC, both renewed and fished based on calendar year from 1985–2012.

Table 5.-Number of permits fished, by gear type and fishery, 1980–2012.

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

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

Table 6.–Number of days and dates the summer troll salmon fishery was open to Chinook retention (CR), closed to Chinook retention (Chinook non-retention or CNR), closed to all salmon species (all) and effort during CR and CNR periods, 1985–2012.

Year	Days Open	Days Closed	Open Dates	CR Days	CR Effort (Boat– days)	Closed Dates	Days Closed	CNR Days	CNR Effort (Boat Days)
1985	10	18	6/3–6/12	10	(Boat– days)	6/13–6/30	18 (all)	Days	(Boat Days)
1703	23.6	68.4	7/1–7/22	22		7/23–8/14	23		
	23.0	00.4	8/25-8/26	1.6	31,197	8/15–8/24	10 (all)		
			8/23-8/20	1.0	31,197	8/26–9/20	25.4		
						9/21–9/30	23.4 10 (all)	48.4	30,567
)/21-//30	10 (all)	40.4	30,307
1986	41	62	6/20-7/15	26		7/16-8/10	26		
						8/11-8/20	10 (all)		
						8/27-8/31	5		
			8/21-8/26	6		9/10-9/20	11		
			9/1–9/9	9	35,646	9/21–9/30	10 (all)	42	29,901
1987	17	2	6/1-6/17	17		6/18–6/19	2 (all)		
1707	23	80	6/20–7/12	23	21,819	7/13–8/2	21		
	23	00	0,20 7,12	23	21,019	8/3–8/12	10 (all)		
						8/13–9/20	39		
						9/21–9/30	10 (all)	60	34,604
1988	23	2	6/6–6/28	23		6/29–6/30	2 (all)		
	12	80	7/1–7/12	12	11,357	7/13–7/25	13		
						7/26–8/4	10 (all)		
						8/5-8/14	10		
						8/15-8/24	10 (all)		
						8/25–8/31	7		
						9/1–9/3	3 (all)		
						9/4–9/20	17 ^a	47	22.920
						9/21–9/30	10 (all)	47	22,820
1989	25	0	6/6-6/30	25		none	0		
	13	79	7/1–7/13	13	10,507	7/14-8/13	31		
						8/14-8/23	10 (all)		
						8/24-9/20	28		
						9/21–9/30	10 (all)	59	33,278
1990	26	0	6/5-6/30	26		none	0		
	24	68	7/1–7/22	22		7/23–8/12	21		
	۷.	30				8/13-8/22	10 (all)		
			8/23-8/24	2	17,988	8/25–9/20	27		
			55 5, _ .	-	,,,	9/21–9/30	10 (all)	48	27,742

-continued-

Table 6.-Page 2 of 4.

Year	Days Open	Days Closed	Open Dates	CR Days	CR Effort (Boat– days)	Closed Dates	Days Closed	CNR Days	CNR Effort (Boat Days)
1991	24	5	6/2-6/25	24	, , , , , , , , , , , , , , , , , , ,	6/26-6/30	5 (all)		<u>, , , , , , , , , , , , , , , , , , , </u>
	7.5	84.5	7/1-7/8	7.5	6,898	7/8-8/15	38.5		
						8/16-8/25	10 (all)		
						8/26-9/20	26		
						9/21–9/30	10 (all)	64.5	30,720
1992	36	0	5/26-6/30	36		none	0		
	4.5	87.5	7/1-7/4	3.5		7/4-8/12	39.5		
						8/13-8/22	10 (all)		
			8/23	1	3,878	8/24-9/20	28		
						9/21–9/30	10 (all)	67.5	34,367
1993	38	0	5/24-6/30	38		none	0		
	20	72	7/1–7/6	6		7/7–7/11	5 (all)		
						7/12-8/12	32		
						8/13-8/20	8 (all)		
			8/21-8/25	5		8/26-9/11	17		
			9/12–9/20	9	12,094	9/21–9/30	10 (all)	49	27,009
1994	38	1	5/23-6/29	38		6/30	1 (all)		
	12	80	7/1–7/7	7		7/8-8/26	50		
						8/27-8/28	2 (all)		
			8/29–9/2	5	7,489	9/3–9/30	28	78	34,216
1995	38	2	5/22-6/28	38		6/29-6/30	2 (all)		
	17	75	7/1-7/10	10		7/11–7/29	19		
			7/30-8/5	7	9,013	8/6-8/12	7		
						8/13-8/22	10 (all)		
						8/23-9/30	39	65	19,963
1996	54	2	5/6-6/28	54		6/29-6/30	2 (all)		
	12	80	7/1-7/10	10		7/11-8/13	34		
						8/14-8/18	5 (all)		
			8/19-8/20	2	5,446	8/21-9/20	31		
						9/21–9/30	10 (all)	65	20,489
1997	52	5	5/5-6/25	52		6/26-6/30	5 (all)		
	21	71	7/1–7/7	7		7/8-8/7	31		
						8/8-8/17	10 (all)		
			8/18-8/24	7		8/25-8/29	5		
			8/30-9/5	7	9,161	9/6–9/20	15 ^b		
					continued.	9/21–9/30	10 (all)	51	14,054

-continued-

Table 6.–Page 3 of 4.

Year	Days Open	Days Closed	Open Dates	CR Days	CR Effort (Boat– days)	Closed Dates	Days Closed	CNR Days	CNR Effort (Boat Days)
1998	57	1	5/4–6/29	57		6/30	1 (all)	-	
	53	39	7/1-7/11	11		7/12-8/11	31		
			8/20-9/30	42	12,068	8/12-8/19	8 (all)	31	11,091
1999	59	0	5/3-6/30	59		none	0		
1,,,,	11	81	7/1–7/6	6		7/7–8/12	37		
	11	01	7/1 7/0	O		8/13–8/17	5 (all)		
			8/18-8/22	5	4,328	8/23–9/30	39	76	22,037
2000	74	1	4/17–6/29	74		6/30	1 (all)		
2000	24	68	7/1–7/5	5		7/6–8/10	36		
	24	00	8/11–8/12	2		8/13-8/22	10 (all)		
			8/23–8/30	8		8/31–9/11	10 (all)		
			9/12–9/20	9	6,237	9/21–9/30	10 (all)	48	13,399
2001	76	0	4/16–6/30	76			0		
2001						none			
	25	67	7/1–7/6	6		7/7–8/12	37		
			0/10 0/5	10	7.450	8/13-8/17	5(all)		
			8/18–9/5	19	7,458	9/6–9/20	15		
						9/21–9/24 9/25–9/30	4(all) 6	58	13,438
••••			4/4.7 - 4/20						
2002	77	0	4/15–6/30	77		none	0		
	40	52	7/1–7/18	18		7/19–8/9	22		
			8/12-9/2	22	11,104	8/10–8/11 9/3–9/30	2(all) 28	50	8,072
					,				,
2003	72	0	4/20–6/30	72		none	0		
	39	53	7/1–8/8	39	10,811	8/9–9/30	53	53	8,422
2004	70	0	4/22-6/30	70		none	0		
	19	73	7/1–7/15	15		7/16-8/9	25		
						8/10-8/11	2(all)		
			8/12-8/15	4	7,353	8/16–9/30	46	71	14,665
2005	77	0	4/15-6/30	77		none	0		
	29.5	62.5	7/1-7/17	17		7/18-8/9	23		
						8/10-8/13	4(all)		
			8/14-8/20	6.5		8/20-9/14	25.5		
			9/15-9/20	6	10,083	9/21-9/30	10(all)	48.5	12,688

Table 6.-Page 4 of 4.

Year	Days Open	Days Closed	Open Dates	CR Days	CR Effort (Boat– days)	Closed Dates	Days Closed	CNR Days	CNR Effort (Boat Days)
2006	69	0	4/23–6/30	69	(Doal- days)	none	0	Days	(Duai Days)
2000	22	70	7/1–7/12	12		7/13–8/8	27		
	22	70	//1-//12	12		8/9–8/12	4(all)		
			8/13-8/22	10	9,821	8/23-8/27	5(all)		
			8/13-8/22	10	9,021	8/28–9/30	34	61	13,486
						0/20-9/30	34	01	13,400
2007	61	0	5/1-6/30	61		none	0		
	26	66	7/1-7/20	20		7/21-8/10	21		
						8/11-8/15	5(all)		
			8/16-8/21	6	10,628	8/22-9/20	30		
						9/21–9/30	10(all)	51	12,819
2008	61	0	5/1-6/30	61		none	0		
	11	81	7/1–7/5	5		7/6-8/10	36		
						8/11-8/15	5(all)		
						8/22-9/20	30		
			8/16-8/21	6	5,745	9/21-9/30	10(all)	66	15,855
2009	61	0	5/1-6/30	61		none	0		
	19	73	7/1-7/10	10		7/11-8/11	32		
			8/17-25	9	7,589	8/12-8/16	5(all)		
						8/26-9/30	36	68	15,307
2010	61	0	5/1-6/30	61		none	0		
	13	79	7/1–7/8	8		7/9-8/10	33		
			8/15-8/19	5	5,549	8/11-8/14	4(all)		
					- ,	8/20-9/20	32		
						9/21-9/30	10(all)	65	16,641
2011	66	0	4/25-6/30	66		none	0		
	15	77	7/1–7/12	12		7/13–8/10	29		
		• •	8/15-8/17	3	5,479	8/11–8/14	4(all)		
				-	-,	8/18–9/20	34		
						9/21–9/30	10(all)	63	12,611
2012	61	0	5/1-6/30	61		none	0		
	38	54	7/1–7/9	9		7/10-8/6	28		
			8/11-9/8	29	13,024	8/7-8/10	4 (all)		
			5. == 7.0			9/9-9/30	22	50	8,495

Note: Spring fishery date ranges indicate only the first and last date that fisheries were open prior to July 1, when the general summer troll season began."Days Open" indicates the actual number of days open prior to July 1. "Days Closed" indicates days not open between the start of the spring fisheries through June 30.

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

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

Table 7.-Annual commercial troll salmon harvest in numbers of fish by species, 1960-2012.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1960	282,404	939	396,211	25,563	2,453	707,570
1961	204,289	1,264	399,932	19,303	2,679	627,467
1962	173,597	1,181	643,740	75,083	2,676	896,277
1963	243,679	2,014	693,050	106,939	6,230	1,051,912
1964	329,461	1,004	730,766	124,566	2,576	1,188,373
1965	258,902	1,872	695,887	81,127	6,359	1,044,147
1966	282,083	679	528,621	63,623	5,203	880,209
1967	274,678	157	443,677	57,372	7,051	782,935
1968	304,455	574	779,500	126,271	2,791	1,213,591
1969	290,168	444	388,443	83,727	1,708	764,490
1970	304,602	477	267,647	70,072	3,235	646,033
1971	311,439	929	391,279	104,557	7,602	815,806
1972	242,282	1,060	791,941	166,771	11,634	1,213,688
1973	307,806	1,222	540,125	134,586	10,460	994,199
1974	322,101	2,603	845,109	263,083	13,818	1,446,714
1975	287,342	584	214,219	76,844	2,784	582,276
1976	231,239	1,241	525,270	194,370	4,251	955,304
1977	271,735	5,713	506,432	281,009	11,621	1,077,142
1978	375,433	2,804	1,100,902	617,633	26,193	2,122,965
1979	334,317	7,018	918,835	629,117	24,661	1,913,968
1980	303,643	2,921	697,181	267,213	12,168	1,281,888
1981	248,782	7,476	861,146	579,436	8,680	1,705,254
1982	241,938	2,459	1,315,871	503,306	5,639	2,069,700
1983	269,821	7,973	1,276,380	498,530	20,308	2,072,756
1984	235,622	9,658	1,133,366	573,004	28,060	1,978,455
1985	215,811	7,724	1,600,230	963,719	52,793	2,839,930
1986	237,703	6,884	2,128,003	181,900	51,398	2,604,994
1987	242,562	9,722	1,041,055	486,385	12,848	1,793,327
1988	231,364	9,341	500,227	519,390	88,264	1,348,572
1989	235,716	20,171	1,415,517	1,771,409	68,986	3,511,643
1990	287,939	9,176	1,832,604	771,674	62,817	2,963,990
1991	264,106	9,805	1,719,082	427,348	28,438	2,447,994
1992	183,759	22,854	1,929,945	673,851	85,030	2,894,420
1993	226,866	25,337	2,395,887	902,872	525,160	4,075,603
1994	186,331	21,777	3,467,599	942,783	330,375	4,942,822
1995	138,117	27,323	1,750,262	714,312	277,455	2,907,329
1996	141,452	11,024	1,906,769	812,899	406,260	3,278,309
1997	246,409	39,431	1,170,534	545,309	312,042	2,313,649
1998	192,066	6,474	1,636,711	261,104	117,642	2,213,767
1999	146,219	5,730	2,272,653	540,859	74,704	3,039,905
2000	158,717	4,467	1,125,219	187,364	478,144	1,953,546
2001	153,280	8,992	1,845,627	258,943	467,837	2,733,039
2002	325,308	1,247	1,315,062	86,399	117,672	1,840,686
2003	330,692	4,596	1,223,458	159,643	286,410	2,001,850
2004	354,658	5,010	1,916,675	57,323	171,326	2,493,066
2005	338,446	13,277	2,038,296	109,640	174,599	2,662,529
2006	282,315	8,084	1,362,983	60,323	153,545	1,867,250
2007	268,149	6,440	1,378,062	104,440	191,685	1,948,776
2008	151,936	1,253	1,293,030	28,183	60,829	1,535,231
2009	175,644	2,929	1,591,547	75,843	342,998	2,188,961
2010	195,494	1,923	1,343,151	87,640	394,695	2,022,903
2011	242,121	5,190	1,313,594	496,171	702,769	2,759,845
2012	209,366	3,224	1,200,896	168,583	476,469	2,058,538
1960–69 Avg	264,372	1,013	569,983	76,357	3,973	915,697
1970–79 Avg	298,830	2,365	610,176	253,804	11,626	1,176,810
1980–89 Avg	246,296	8,433	1,196,898	634,429	34,914	2,120,652
1990–99 Avg	201,326	17,893	2,008,205	659,301	221,992	3,107,779
2000–09 Avg	253,914	5,630	1,508,996	112,810	244,505	2,122,493

Note: Harvest data for all species includes terminal and Annette Island harvest. Data is by calendar year from 1960 to 1978, from January 1 to September 30 for 1979, and by troll season (October 1–September 30) from 1980 to 2012.

Table 8.–Southeast Alaska commercial troll salmon harvest in numbers of fish by species by statistical week, for the 2012 troll season.

Year	Week	Week Of	Chinook	Sockeye	Coho	Pink	Chum	Total
2011	42	9-Oct	2,923	0	0	0	0	2,923
	43	16-Oct	2,209	0	0	0	0	2,209
	44	23-Oct	1,165	0	0	0	0	1,165
	45	30-Oct	461	0	0	0	0	461
	46	6-Nov	1,473	0	0	0	0	1,473
	47	13-Nov	658	0	0	0	0	658
	48	20-Nov	208	0	0	0	0	208
	49	27-Nov	596	0	0	0	0	596
	50	4-Dec	498	0	0	0	0	498
	51	11-Dec	299	0	0	0	0	299
	52	18-Dec	150	0	0	0	0	150
	53	25-Dec	45	0	0	0	0	45
2012	1	1-Jan	61	0	0	0	0	61
	2	8-Jan	144	0	0	0	0	144
	3	15-Jan	117	0	0	0	0	117
	4	22-Jan	108	0	0	0	0	108
	5	29-Jan	538	0	0	0	0	538
	6	5-Feb	640	0	0	0	0	640
	7	12-Feb	523	0	0	0	0	523
	8	19-Feb	664	0	0	0	0	664
	9	26-Feb	647	0	0	0	0	647
	10	4-Mar	830	0	0	0	0	830
	11	11-Mar	1,648	0	0	0	0	1,648
	12	18-Mar	1,731	0	0	0	0	1,731
	13	25-Mar	1,769	0	0	0	0	1,769
	14	1-Apr	3,645	0	0	0	1	3,646
	15	8-Apr	4,756	0	0	0	3	4,759
	16	15-Apr	7,359	0	0	0	1	7,360
	17	22-Apr	12,037	0	0	0	23	12,060
	18	29-Apr	401	0	0	0	1	402
	19	6-May	414	0	0	0	0	414
	20	13-May	1,917	0	0	0	0	1,917
	21	20-May	1,957	0	0	0	3	1,960
	22	27-May	3,069	3	0	0	33	3,105
	23	3-Jun	3,696	1	0	1	28	3,726
	24	10-Jun	4,829	5	32	106	589	5,561
	25	17-Jun	5,202	201	1,571	751	8,392	16,117
	26	24-Jun	3,286	164	1,766	1,767	15,107	22,090
	27	1-Jul	48,853	631	50,932	5,488	40,995	146,899
	28	8-Jul	12,816	423	77,785	8,886	77,231	177,141
	29	15-Jul	0	482	140,130	19,121	88,050	247,783
	30	22-Jul	0	465	141,303	37,733	66,653	246,154

Table 8.–Page 2 of 2.

Year	Week	Week Of	Chinook	Sockeye	Coho	Pink	Chum	Total
	31	29-Jul	0	270	117,495	39,059	18,918	175,742
	32	5-Aug	652	81	53,638	22,637	3,980	80,988
	33	12-Aug	28,185	200	147,165	17,874	18,197	211,621
	34	19-Aug	18,186	125	156,267	7,559	15,427	197,564
	35	26-Aug	16,196	78	127,701	1,438	27,024	172,437
	36	2-Sep	11,036	59	92,988	299	28,558	132,940
	37	9-Sep	0	14	50,962	9	4,524	55,509
	38	16-Sep	0	7	32,148	2	1,332	33,489
	39	23-Sep	0	0	7,081	0	135	7,216
	40	30-Sep	0	0	937	0	5	942
		Winter fishery subtotal:	47,902				28	47,930
		Spring fishery subtotal:	24,771	374	3,369	2,625	24,153	55,292
		Summer fishery subtotal:	135,924	2,835	1,196,532	160,150	391,029	1,886,470
		Hatchery terminal area subtotal:	769	15	995	5,808	61,259	68,846
		Grand Total:	209,366	3,224	1,200,896	168,583	476,469	2,058,538

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

Table 9.-Average troll coho salmon dressed weight by week and weighted annual average, 1996–2012.

						A	Average	Weekly	Dressed	Weight	, by Yea	r						Ave	rages
Week of	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2007–2011	2002–2011
1-Jul	5.9	5.3	6.6	4.7	5.7	5.7	5.9	5.5	5.7	5.2	5.3	4.9	6.3	5.4	5.9	5.3	4.9	5.6	5.5
8-Jul	5.9	5.2	6.8	4.7	5.7	5.6	6.2	5.5	6.1	5.2	5.6	5.1	6.5	5.4	6	5.3	4.9	5.7	5.7
15-Jul	6	5.4	6.8	4.8	6	5.6	6.5	5.6	6.1	5.2	5.6	5.3	6.7	5.3	6.2	5.4	5.0	5.8	5.8
22-Jul	6.3	5.6	6.9	5	6.1	5.7	6.4	5.8	6.1	5.3	5.6	5.3	6.9	5.4	6.4	5.1	5.1	5.8	5.8
29-Jul	6.5	5.8	7	5.2	6.3	6	6.5	6	6	5.2	5.7	5.4	6.9	5.7	6.6	5.2	5.2	6.0	5.9
5-Aug	6.7	6	7.1	5.4	6.5	6.1	6.8	6.2	6.2	5.3	5.9	5.5	7.1	5.8	6.6	5.3	5.4	6.1	6.1
12-Aug	6.8	_	7.2	5.4	6.6	6.2	7	6.3	6.4	5.5	6.1	5.9	7.4	5.8	6.8	5.3	6.2	6.2	6.2
19-Aug	7.3	7	7.7	5.8	_	6.6	7.1	6.6	6.8	6	6.6	5.9	8.2	6.3	7.1	5.5	6.2	6.6	6.6
26-Aug	7.5	7.6	7.8	6	7.5	6.6	7.6	6.9	7	6.2	6.8	6.2	8.4	6.3	7.2	5.3	6.5	6.7	6.8
2-Sep	7.8	8.2	8.5	6.1	8	6.8	7.8	7.2	7.4	6.3	7.4	6.7	8.8	6.4	7.5	5.4	6.6	7.0	7.1
9-Sep	8.1	8.8	8.8	6.4	8.2	7.2	8	7.4	7.7	6.7	7.7	7.2	9	6.5	7.8	5.5	6.8	7.2	7.4
16-Sep	8	8.9	9.2	6.6	8.4	7.7	8.1	7.6	7.8	6.9	7.9	7.4	9.1	6.6	8.1	5.6	6.8	7.4	7.5
23-Sep	-	_	9.4	6.4	8.5	7.1	8	7.8	7.8	6.7	7.8	_	-	6.6	8.3	5.9	7.6	7.0	7.4
30-Sep	-	_	9.5	6.6	7.8	7.7	8.1	7.7	8.5	-	-	_	-	6.9	-	-	7.8	6.9	7.8
Weighted Average: Troll	6.8	6.5	7.4	5.4	6.5	6.1	6.9	6.5	6.6	5.7	6.4	5.8	7.6	5.9	6.9	5.4	5.8	6.3	6.4
Harvest (Millions)	1.9	1.2	1.6	2.3	1.1	1.8	1.3	1.2	1.9	2.0	1.4	1.4	1.3	1.6	1.3	1.3	1.2	1.4	1.5

Table 10.-Southeast Alaska annual commercial hand troll salmon harvest in numbers of fish by species, 1975-2012.

Year ^a	Chinook ^b	Sockeye ^b	Coho ^b	Pink ^b	Chum ^b	Total
1975	28,000	95	40,920	28,815	541	98,371
1976	26,324	507	88,859	44,406	2,061	162,157
1977	33,136	1,751	155,731	116,763	4,146	311,527
1978	54,377	1,155	378,927	243,469	9,573	687,501
1979	57,722	2,448	244,805	281,684	7,926	594,585
1980	52,415	1,257	179,912	111,666	4,652	349,902
1981	34,583	2,171	181,466	173,517	2,582	394,319
1982	37584	518	260,610	132,097	1,127	431,936
1983	38,625	1,530	235,692	136,646	2,777	415,270
1984	35,357	1,982	178,414	151,278	4,894	371,925
1985	33,985	1,696	260,737	251,652	9,748	557,818
1986	30912	809	339,393	40,098	6,697	417,909
1987	30,173	2,126	183,220	134,354	3,015	352,888
1988	33,889	1,894	92,341	147,609	14,534	290,267
1989	30,306	2,441	220,262	301,413	6,576	560,998
1990	40,158	1,245	273,546	154,800	6,489	476,238
1991	41,309	1,073	239,019	72,365	3,840	357,606
1992	26,154	1,905	249,506	95,481	6,027	379,073
1993	26,726	1,669	315,590	101,754	34,449	480,188
1994	14,897	1,878	436,323	56,958	32,062	542,118
1995	13,968	1,822	145,189	63,877	21,284	246,140
1996	12,569	694	197,939	31,747	53,485	296,434
1997	15,280	1,208	104,602	35,104	20,042	176,236
1998	9,305	271	119,576	11,782	2,051	142,985
1999	6,466	286	180,119	12,214	583	199,668
2000	8,697	126	67,499	5,386	6,427	88,135
2001	9,819	301	111,472	6,267	12,480	140,339
2002	11,481	34	77,961	2,753	579	92,808
2003	13,840	135	80,893	3,627	4,800	103,295
2004	18,871	148	108,629	2,403	861	130,912
2005	16,856	340	143,278	6,203	418	167,095
2006	16,366	242	74,414	3,429	437	94,888
2007	18,258	220	91,499	4,196	1,389	115,562
2008	15,416	155	83,430	1,593	863	101,457
2009	13,638	171	104,212	5,074	5,427	128,522
2010	13,030	63	88,975	5,681	9,861	117,610
2011	18,166	205	98,968	26,025	13,500	156,864
2012	13,207	226	81,929	11,037	8,193	114,592
Average 1975–2011	25,369	988	173,890	81,194	8,600	290,042
Average 2002–2011	15,592	181	96,476	4,123	3,712	122,668

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

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

Table 11.-Southeast Alaska annual commercial power troll salmon harvest in numbers of fish by species, 1975–2012.

1975 1976 1977 1978	259,646 203,777	489	173,299	48,029	2,243	102.000
1977			,	10,027	2,243	483,869
	225 550	734	436,411	149,964	2,190	793,646
1978	237,578	3,962	350,701	164,246	7,475	765,494
1770	321,050	1,649	721,975	374,164	16,620	1,435,458
1979	277,274	4,570	674,030	347,433	16,735	1,319,574
1980	251,137	1,664	517,269	155,547	7,516	933,635
1981	214,923	5,305	679,680	405,919	6,098	1,311,679
1982	205,286	1,941	1,055,261	371,209	4,512	1,638,818
1983	231,144	6,443	1,040,688	361,884	17,531	1,657,398
1984	202,768	7,676	954,952	421,726	23,166	1,607,731
1985	182,576	6,026	1,339,493	712,067	43,045	2,283,392
1986	208,048	6,075	1,788,610	141,802	44,701	2,189,591
1987	213,342	7,596	857,835	352,031	9,831	1,440,632
1988	197,197	7,446	407,886	371,781	73,728	1,058,921
1989	211,417	17,730	1,195,255	1,469,996	62,410	2,952,174
1990	248,976	7,931	1,559,058	616,874	56,328	2,488,081
1991	221,442	8,732	1,480,063	354,983	24,598	2,091,281
1992	154,465	20,949	1,680,439	578,370	79,003	2,515,572
1993	202,807	23,668	2,080,297	801,118	490,711	3,598,021
1994	171,434	19,899	3,031,276	885,825	298,313	4,400,941
1995	124,705	25,501	1,605,073	650,435	256,171	2,661,840
1996	129,857	10,330	1,708,830	781,152	352,775	2,982,486
1997	231,562	38,223	1,065,932	510,205	292,000	2,137,929
1998	183,052	6,203	1,517,135	249,322	115,591	2,071,073
1999	140,157	5,444	2,092,534	528,645	74,121	2,840,376
2000	150,101	4,341	1,057,720	181,978	471,717	1,865,794
2001	143,462	8,691	1,734,155	252,676	455,357	2,594,217
2002	313,913	1,213	1,237,101	83,646	117,093	1,753,034
2003	317,213	4,461	1,142,565	156,016	281,610	1,805,391
2004	335,789	4,862	1,808,046	54,920	170,465	2,362,166
2005	321,595	12,937	1,895,018	103,437	174,181	2,495,626
2006	265,949	7,842	1,288,569	56,894	153,108	1,759,469
2007	249,890	6,220	1,286,563	100,244	190,296	1,833,213
2008	136,653	1,098	1,209,600	26,590	59,966	1,433,907
2009	162,006	2,758	1,487,335	70,769	337,571	2,060,439
2010	182,465	1,860	1,254,161	81,959	384,834	1,905,279
2011	223,957	4,985	1,214,626	470,146	689,269	2,602,983
2012	196,159	2,998	1,118,967	157,546	468,276	1,943,946
Average 1975–2011	216,990	8,310	1,260,255	363,351	158,456	2,003,544
Average 2002–2011	250,943	4,824	1,382,358	120,462	255,839	2,001,151

 ^a Prior to 1975, hand and power troll harvests were not reported separately. Troll harvests prior to 1980 are reported by calendar year. From 1980 –present, harvests are by season, Oct.1 –Sept.30. Harvest for 1979 Jan 1–Sept.30.
 ^b Harvest for all species includes Annette Island Reserve and terminal fisheries.

Table 12.-Southeast Alaska Chinook Salmon harvests by gear and troll harvest by fishery, 2012.

	Total	Alaska Hatchery	Alaska Hatchery	Terminal Exclusion	Total Term. Exclusion/ Alaska Hatchery	Treaty
Gear/Fishery	Harvest	Harvest	Add-on	Harvest	Add-on	Harvest
Winter Troll	47,888	5,897	4,736	0	4,736	43,153
Spring Troll ^a	25,549	10,358	8,446	343	8,789	16,760
Summer Troll						
First Period	61,667	1,814	1,457	0	1,457	60,210
Second Period	74,249	3,169	2,545	0	2,545	71,704
Summer Total ^b	135,927	4,983	4,002	0	4,002	131,839
Total Traditional Troll	209,364	21,237	17,184	343	17,527	191,837
Annette Is. Troll	2	0	0	0	0	2
Total Troll Harvest	209,366	21,237	17,184	343	17,527	191,839
Purse Seine	21,107	15,264	15,113	0	15,113	5,994
Drift Gillnet	18,309	12,232	10,750	968	11,718	6,591
Setnet	240			0	0	240
Total Net ^c	39,656	27,496	25,863	968	26,831	12,825
Sport ^c	46,520	11,700	10,066	0	10,066	36,454
All Gear Total	295,542	60,433	53,113	1,311	54,424	241,118

Spring troll harvest includes all HC 12 and wild terminal exclusion harvests for year.
 Total summer harvest includes confiscated harvest for year.

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

Table 13.–Annual Southeast Alaska commercial and recreational Chinook salmon harvests and Alaska hatchery contribution, in thousands of fish, 1965–2012.

Year	Troll ^a	Net ^b	Subtotal	Sport ^c	Total	Alaska hatchery contribution	Total less Alaska hatchery contribution
1965	309	28	337	13	350	-	-
1966	282	26	308	13	321	-	-
1967	275	26	301	13	314	-	-
1968	304	27	331	14	345	-	-
1969	290	24	314	14	328	-	-
1970	305	18	323	14	337	-	-
1971	311	23	334	15	349	-	-
1972	242	44	286	15	301	-	-
1973	308	36	344	16	360	-	-
1974	322	24	346	17	363	-	-
1975	287	13	300	17	317	-	-
1976	231	10	241	17	258	-	-
1977	272	13	285	17	302	-	-
1978	375	25	400	17	417	-	-
1979	338	28	366	17	383	-	-
1980	304	20	324	20	344	6	338
1981	249	19	268	21	289	2	287
1982	242	47	289	26	315	1	314
1983	270	20	289	22	312	3	309
1984	236	32	268	22	290	6	284
1985	216	34	250	25	275	13	262
1986	238	22	260	23	282	17	265
1987	243	16	258	24	282	24	258
1988	231	22	253	26	279	29	250
1989	236	24	260	31	291	29	262
1990	288	28	316	51	367	54	313
1991	264	35	299	60	359	70	289
1992	184	32	216	43	259	44	215
1993	227	28	255	49	304	40	264
1994	186	36	222	42	264	36	228
1995	138	48	186	50	236	69	167
1996	141	37	179	58	237	89	148
1997	246	25	271	72	340	63	277
1998	192	24	216	55	271	34	237
1999	146	33	179	72	251	59	192
2000	159	41	200	63	252	85	167
2001	153	40	193	72	266	87	179
2002	325	32	357	70	427	78	349
2003	331	39	370	69	439	68	371
2004	355	64	419	81	499	91	408
2005	338	67	405	87	492	74	418
2006	282	67	349	86	435	57	378
2007	268	53	322	83	404	77	327
2008	152	43	195	49	244	74	170
2009	176	48	224	70	294	72	222
2010	195	30	226	59	281	62	219
2011	242	48	290	67	358	73	285
2012	209	40	249	47	302	60	242

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

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

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

Estimates of sport catches for 1965–1976 based on 1977–1980 average catch per capita data. Sport catches for 1977–1999 based on statewide postal harvest surveys. Sport harvest for 2012 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, catch per landing, and Alaska hatchery percent of harvest by troll accounting year (October 1–September 30), 1985–2012.

	Early \	Winter (Oct.	–Dec.)	Late V	Winter (Jan	Apr.)	Total V	Winter (Oct	Apr.)			
			Catch/			Catch/			Catch/	Annual	Winter % of	Alaskan Hatchery
Year	Chinook	Landings	Landing	Chinook	Landings	Landing	Chinook	Landings	Landing	Total	Annual Total	% of Catch
1985	14,235	869	16	8,590	1,148	7	22,825	2,017	11	215,811	11%	6%
1986	16,779	1,049	16	6,147	832	7	22,926	1,881	12	237,703	10%	6%
1987	18,453	1,235	15	10,075	996	10	28,528	2,231	13	242,562	12%	10%
1988	44,765	2,404	19	15,684	1,785	9	60,449	4,189	14	231,364	26%	14%
1989	24,425	2,239	11	9,872	1,403	7	34,297	3,642	9	235,716	15%	14%
1990	17,617	868	20	15,513	1,477	11	33,130	2,345	14	287,939	12%	13%
1991	19,920	787	25	22,719	2,037	11	42,639	2,824	15	264,106	16%	24%
1992	28,277	1,653	17	43,554	2,679	16	71,831	4,332	17	183,759	39%	10%
1993	20,275	1,194	17	42,447	2,366	18	62,722	3,560	18	226,866	28%	6%
1994	35,193	1,106	32	21,175	1,499	14	56,368	2,605	22	186,331	30%	4%
1995	10,382	627	17	7,486	871	9	17,868	1,498	12	138,117	13%	12%
1996	6,008	427	14	3,393	447	8	9,401	874	11	141,452	7%	18%
1997	13,252	626	21	7,705	514	15	20,957	1,151	18	246,409	9%	8%
1998	9,810	534	18	23,008	1,372	17	32,818	2,001	16	192,066	17%	7%
1999	13,989	579	24	16,988	1,435	12	30,977	2,026	15	146,219	21%	7%
2000	17,494	783	22	18,561	1,508	12	36,055	2,291	16	158,717	23%	9%
2001	11,198	907	12	11,388	1,382	8	22,586	2,298	10	153,280	15%	12%
2002	17,152	754	23	12,237	1,351	9	29,389	2,116	14	325,308	9%	7%
2003	18,672	725	26	32,182	2,365	14	50,854	3,090	16	330,692	15%	9%
2004	12,686	982	13	40,200	2,595	15	52,886	3,577	15	354,658	15%	12%
2005	12,991	1,103	12	37,479	2,955	13	50,470	4,058	12	338,446	15%	11%
2006	13,952	1,418	10	34,970	3,102	11	48,922	4,520	11	282,315	17%	8%
2007	7,642	1,092	7	39,230	2,808	14	46,872	3,900	12	268,149	17%	10%
2008	5,169	950	5	16,655	2,347	7	21,824	3,297	7	151,926	14%	13%
2009	5,511	770	7	19,378	1,983	10	24,889	2,753	9	175,644	14%	11%
2010	8,715	1,061	8	33,821	2,677	13	42,536	3,738	11	195,492	22%	13%
2011	12,867	1,339	10	37,959	2,437	16	50,826	3,776	13	242,123	21%	7%
2012	10,683	1,246	9	37,219	2,670	14	47,902	3,916	12	209,366	23%	12%
2007-11 avg	7,981	1,042	7	29,409	2,450	12	37,389	3,493	11	206,667	18%	11%
2002-11 avg	11,536	1,019	12	30,411	2,462	12	41,947	3,483	12	266,475	16%	10%

Table 15.—The number of Chinook salmon harvested and permits fished in the 2012 spring troll fisheries by statistical week, including spring fishery areas as well as terminal harvest areas.

Stat Area	Fishery Name	Stat Week	Open	Close	Days	Permits	Chinook	AK%
101-21	West Rock	20	5/16	5/17	2	a	a	a
		21	5/23	5/24	2	a	a	а
		23	6/4	6/6	3	3	15	68%
		24	6/11	6/13	3	a	a	а
		25	6/18	6/20	3	4	69	16%
		26	6/24	6/30	7	3	45	28%
	West Rock Tota	al			22	7	140	25%
101-29	Ketchikan Area	18	5/1	5/5	5	6	24	0%
		19	5/6	5/12	7	4	8	0%
		20	5/13	5/19	7	17	179	19%
		21	5/20	5/26	7	14	148	31%
		22	5/27	6/2	7	18	122	49%
		23	6/3	6/9	7	37	452	100%
		24	6/10	6/16	7	50	625	45%
		25	6/17	6/23	7	69	1,158	60%
		26	6/24	6/30	7	44	743	58%
	Ketchikan Area Total				61	97	3,459	63%
101-41	Point Alava	20	5/18	5/19	2	a	a	a
		23	6/7	6/8	2	a	a	a
		26	6/24	6/30	7	3	24	100%
	Cape Alava Shore Total				21	5	29	100%
101-90	West Behm Canal	22	5/27	6/2	7	a	a	a
		23	6/3	6/9	7	4	14	b
		24	6/10	6/16	7	a	a	a
		25	6/17	6/23	7	4	20	100%
		26	6/24	6/30	7	25	67	0%
	West Behm Canal Total				61	30	219	27%
102-10	Kendrick Bay	20	5/13	5/15	3	4	36	15%
		21	5/20	5/22	3	6	97	39%
		22	5/27	5/29	3	5	65	71%
		23	6/3	6/6	4	10	206	81%
		24	6/13	6/16	4	3	179	28%
		25	6/18	6/23	6	7	171	20%
		26	6/24	6/30	7	6	30	100%
	Kendrick Bay Total	-			30	21	784	48%
105-41	Sumner Strait	18	5/1	5/2	2	7	24	0%
100 .1	20111101 202010	19	5/7	5/8	2	a	a	a
		20	5/13	5/15	3	11	81	0%
		21	5/20	5/22	3	10	82	20%
		22	5/27	5/29	3	8	38	0%
		23	6/3	6/5	3	9	35	0%
		24	6/10	6/12	3	5	28	b
		25	6/17	6/19	3	12	89	0%
		26	6/24	6/27	4	12	84	0%
	Sumner Strait Total	20	0, 27	0,21	26	24	465	4%
106-20	Clarence Strait	20	5/13	5/19	7	24 a	a a	4/0 a
100-20	Clarence Strait	20	5/20	5/26	7	a	a	a
	Clarence Stait Total	۷1	5/20	3/20	61	a	a	a
	Ciarence Statt Total		continuo	1	01			

Table 15.-Page 2 of 5.

	5.–Page 2 of 5.							
Stat Area	Fishery Name	Stat Week	Open	Close	Days	Permits	Chinook	AK%
106-30	Steamer Point	18	5/1	5/5	5	a a	a a	a
		20	5/13	5/19	7			
		22	5/27	6/2	7	a	a	a
		23	6/3	6/9	7	3	32	36%
		24	6/10	6/16	7	8	129	45%
		25	6/17	6/23	7	13	229	82%
		26	6/24	6/30	7	11	128	12%
	Steamer Point Total				61	26	565	50%
106-41	Snow Pass	18	5/3	5/5	3	a	a	a
		22	5/30	6/1	3	a	a	a
		24	6/13	6/15	3	4	26	81%
		25	6/20	6/22	3	3	22	0%
		26	6/24	6/30	7	3	2	0%
	Snow Pass Total				31	9	66	32%
107-10	Ernest Sound	19	5/6	5/12	7	a	a	a
		20	5/13	5/19	7	a	a	a
		21	5/20	5/26	7	5	46	0%
		22	5/27	6/2	7	10	148	71%
		23	6/3	6/9	7	5	81	20%
		24	6/10	6/16	7	9	104	21%
		25	6/17	6/23	7	a	a	a
		26	6/24	6/30	7	a	a	a
	Ernest Sound Total				61	20	441	32%
108-10	Chichagof Pass	22	5/29	5/31	3	9	54	79%
		23	6/4	6/5	2	19	167	31%
		24	6/11	6/13	3	11	57	19%
		25	6/18	6/22	5	6	42	36%
		26	6/25	6/30	6	10	112	81%
	Chichagof Pass Total		0,20	0,00	19	32	432	49%
108-30	Baht Harbor	22	5/29	5/30	2	a	a a	a
100 50	Bant Harbor	23	6/4	6/4	1	5	33	0%
		24	6/11	6/11	1	10	33	0%
		25	6/18	6/11	1	8	51	27%
		26	6/25	6/27	3	10	64	24%
	Baht Harbor Total	20	0/23	0/21	8	20	185	16%
108-40	Craig Point	22	5/29	5/30	2	20 a	a a	1070 a
106-40	Craig Follit	23	5/29 6/4	5/30 6/4	1	a	a	a
-	Craig Point Total	23	0/4	0/4	3	a	a	a
100 41		10	<i>5 7</i>	<i>5</i> /O		12	<i>C</i> 1	00/
108-41	District 8 Directed	19	5/7	5/9	3	13	61	0%
		20	5/14	5/16	3	18	79	25%
	D:	21	5/21	5/23	3	22	90	27%
100.10	District 8 Directed Total	10	F 10		9	33	230	19%
109-10	Little Port Walter	18	5/2	5/4	3	3 a	98 a	1% a
		19	5/9	5/11	3			
		20	5/16	5/18	3	18	300	36%
		21	5/23	5/25	3	20	162	43%
		22	5/30	6/1	3	6	35	16%
		23	6/6	6/8	3	7	59	27%
		24	6/13	6/15	3	7	155	76%
		25	6/19	6/23	5	10	167	44%
		26	6/24	6/30	7	7	149	b
	Little Port Walter Total				33	36	1,188	33%
			-continued					

Table 15.–Page 3 of 5.

Stat Area	Fishery Name	Stat Week	Open	Close	Days	Permits	Chinook	AK%
109-62	Tebenkof Bay	19	5/7	5/9	3	9	148	23%
		20	5/14	5/16	3	23	530	34%
		21	5/21	5/23	3	33	347	27%
		22	5/28	5/30	3	22	473	42%
		23	6/4	6/6	3	34	857	36%
		24	6/11	6/13	3	30	704	44%
		25	6/18	6/21	4	23	338	31%
	T 1 1 CD T 1	26	6/25	6/27	3	10	104	75%
110.21	Tebenkof Bay Total	10	F /1	5/5	25	83 a	3,501	37% a
110-31	Frederick Sound	18	5/1	5/5 5/12	5	a	a	a
		19 20	5/6 5/13	5/12 5/19	7 7	5		17%
		20	5/15	5/26	7	3 a	64 a	1 / % a
		22	5/20 5/27	6/2	7	8	54	57%
		23	6/3	6/9	7	17	67	50%
		24	6/10	6/16	7	11	85	49%
		25	6/17	6/23	7	6	27	0%
		26	6/24	6/30	7	4	27	52%
	Frederick Sound Total			5, 5 5	61	34	342	38%
111-40	District 11 Directed	19	5/7	5/9	3	a	a a	a
111 .0	District II Directed	20	5/14	5/16	3	a	a	a
	District 11 Directed	-			6	a	a	a
112-12	Chatham Strait	18	5/1	5/5	5	7	78	22%
		19	5/6	5/12	7	a	a	a
		20	5/13	5/19	7	15	276	26%
		21	5/20	5/26	7	21	259	15%
		22	5/27	6/2	7	13	100	30%
		23	6/3	6/9	7	17	133	22%
		24	6/10	6/16	7	4	49	23%
		25	6/17	6/23	7	15	157	8%
		26	6/24	6/30	7	8	66	23%
	Chatham Strait Total				61	62	1,142	21%
112-65	Hawk Inlet	21	5/20	5/26	7	a	a	a
		22	5/27	6/2	7	a	a	a
		23	6/3	6/9	7	a	a	a
		24	6/10	6/16	7	a	a	a b
		25	6/17	6/23	7	3	27	
	Hawk Inlet Total				61	4	100	3%
113-01	Western Channel	20	5/14	5/14	1	9	39	0%
		21	5/21	5/21	1	7	45	0%
		22	5/29	5/29	1	7	69	109%
		23	6/4	6/5	2	28	187	125%
		24 25	6/11	6/14	4	33	498	49%
		25 26	6/18 6/25	6/21 6/30	4 6	22 12	186 93	46% 45%
	Western Channel Total	20	0/23	0/30	19	72	1,117	61%
113-30	Redoubt Bay	18	5/1	5/2	2	17	82	14%
115-50	Kedoubi Day	18 19	5/1 5/7	5/2 5/8	2	5	82 10	14% 0%
		20	5/14	5/8 5/15	2	12	92	29%
		21	5/21	5/22	$\overset{2}{2}$	13	84	16%
			5/29	5/30	2	17	207	6%
					_	1 /	207	
		22 23				10	81	25%
		23	6/4	6/5	2	10 16	81 228	25% 25%
		23 24	6/4 6/11	6/5 6/12	2 2	16	228	25%
		23	6/4	6/5	2			

Table 15.–Page 4 of 5.

Stat Area	Fishery Name	Stat Week	Open	Close	Days	Permits	Chinook	AK%
113-31	Biorka Island	21	5/21	5/21	1	15	45	0%
		22	5/29	5/29	1	25	605	6%
		23	6/4	6/4	1	32	306	0%
		24	6/11	6/11	1	42	568	57%
	Biorka Island Total				4	63	1,524	23%
113-32	Goddard	21	5/21	5/21	1	a	a	a
		23	6/4	6/6	3	5	42	100%
		24	6/11	6/14	4	a	a	a
		25	6/18	6/23	6	8	314	15%
		26	6/24	6/30	7	9	149	0%
	Goddard Total				22	19	507	95%
113-41	Sitka Sound	18	5/1	5/5	5	9	32	0%
		19	5/6	5/12	7	6	9	0%
		20	5/13	5/19	7	22	120	44%
		21	5/20	5/26	7	34	361	32%
		22	5/27	6/2	7	53	839	25%
		23	6/3	6/9	7	61	735	41%
		24	6/10	6/16	7	78	945	72%
		25	6/17	6/23	7	94	1,494	55%
		26	6/24	6/30	7	71	898	37%
	Sitka Sound Total				61	166	5,433	46%
113-62	Salisbury Sound	19	5/7	5/9	3	3	6	0%
	~ · · · · · · · · · · · · · · · · · · ·	20	5/14	5/16	3	3	12	0%
		21	5/21	5/23	3	7	54	0%
		22	5/29	5/31	3	7	61	30%
		23	6/4	6/6	3	3	47	43%
		24	6/11	6/13	3	3	90	0%
		25	6/18	6/21	4	6	184	19%
		26	6/25	6/30	6	12	150	1%
	Salisbury Sound Total		0, =0	0.00	28	23	604	12%
113-95	Lisianski Inlet	19	5/7	5/9	3	3	14	52%
/-		20	5/14	5/16	3	a	a	a
		21	5/21	5/23	3	a	a	a
		22	5/28	5/30	3	a	a	a
		23	6/4	6/7	4	3	6	b
		24	6/11	6/15	5	6	27	b
		25	6/18	6/22	5	3	41	22%
		26	6/24	6/30	7	4	17	0%
	Lisianski Inlet Total				36	12	124	13%
113-97	Stag Bay	20	5/13	5/19	7	a	a	a a
110 / 1	Sing Duj	21	5/20	5/26	7	3	17	b
		22	5/27	6/2	7	a	a	a
		23	6/3	6/9	7	4	39	0%
		24	6/10	6/16	7	a	a	0 /0 a
		25	6/17	6/23	7	a	a	a
		26	6/24	6/30	7	a	a	a
	Stag Bay Total	20	0/24	0/30	61	6	102	0%
	Siag Bay Total		continu		01	U	102	0/0

Table 15.–Page 5 of 5.

Stat Area	Fishery Name	Stat Week	Open	Close	Days	Permits	Chinook	AK%
114-21	Cross Sound	18	5/1	5/5	5	a	a	a
		19	5/6	5/12	7	3	34	b
		21	5/20	5/26	7	a	a	a
		22	5/27	6/2	7	3	25	b
		23	6/3	6/9	7	a	a	a
		24	6/10	6/16	7	5	28	0%
		25	6/17	6/23	7	6	32	b
		26	6/24	6/30	7	3	4	b
	Cross Sound Total				61	17	155	0%
114-23	South Passage	18	5/1	5/5	5	a	a	a
		20	5/13	5/19	7	a	a	a
		21	5/20	5/26	7	a	a	a
		24	6/10	6/16	7	a	a	a
		25	6/17	6/23	7	5	3	0%
		26	6/24	6/30	7	a	a	a
	South Passage Total				61	10	31	0%
114-25	Homeshore	18	5/1	5/5	5	a	a	a
		19	5/6	5/12	7	a	a	a
		20	5/13	5/19	7	3	7	b
		21	5/20	5/26	7	a	a	a
		22	5/27	6/2	7	9	51	b
		23	6/3	6/9	7	8	23	b
		24	6/10	6/16	7	26	49	0%
		25	6/17	6/23	7	92	135	0%
		26	6/24	6/30	7	84	59	0%
	Icy Strait Area Total				61	132	347	0%
114-27	Point Sophia	18	5/1	5/5	5	a	a	a
		19	5/6	5/12	7	a	a	a
		20	5/13	5/19	7	a	a	b
		21	5/20	5/26	7	a	a	a
		22	5/27	6/2	7	4	9	b
		23	6/3	6/9	7	a	a	a
		24	6/10	6/16	7	a	a	a b
		25	6/17	6/23	7	4	2	
		26	6/24	6/30	7	4	12	b
	Point Sophia Total				61	15	37	0%
114-50	Port Althorp	18	5/1	5/3	3	3	20	0%
		19	5/7	5/9	3	a	a	a
		20	5/14	5/16	3	a	a	a
		21	5/21	5/23	3	4	21	0%
		22	5/28	5/30	3	5	43	0%
		23	6/4	6/7	4	7	50	0%
		24	6/11	6/15	5	8	89	66%
		25	6/18	6/22	5	10	99	0%
		26	6/24	6/30	7	5	35	0%
	Port Althorp Total				36	22	388	15%
Spring Fish						584	24,764	40%
Terminal A						61	708	100%
Spring Seas	son Total					588	25,479	42%

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

Note: Totals do not include Annette Island harvests or summer terminal harvest and effort.

Weekly and total permits fished inludes effort for both Chinook and Chum salmon.

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

Table 16.-Spring troll Chinook salmon fishery harvest, effort, and Alaska hatchery contributions, 1986-2012.

	Non-			Number of					
	Terminal			Non-		Number of		Total	
	Area	Alaska	Alaska	Terminal	Terminal	Terminal		Alaska	Total
X 7	Spring	Hatchery	Hatchery	Areas	Area	Areas	Total	Hatchery	Permits
Year	Harvest	Harvest	%	Open	Harvest	Open	Harvest	%	Fished
986	776	240	31%	3	0	0	776	31%	70
1987	4,488	1,548	34%	7	0	0	4,488	34%	105
1988	8,505	2,931	34%	9	100	2	8,605	35%	382
1989	2,366	922	39%	11	913	4	3,279	56%	161
1990	7,052	4,255	60%	9	16	2	7,068	60%	258
1991	13,984	6,129	44%	10	5,863	1	19,847	60%	559
1992	11,229	5,604	50%	11	4,118	2	15,347	63%	454
1993	15,826	6,525	41%	13	2,853	3	18,679	50%	442
1994	11,269	4,939	44%	12	100	4	11,369	44%	283
1995	21,750	13,990	64%	15	1,333	4	23,083	66%	377
1996	30,963	15,672	51%	16	16,416	5	47,379	68%	461
1997	32,791	13,556	41%	17	9,931	6	42,722	55%	476
1998	19,195	5,012	26%	21	1,313	4	20,508	31%	361
1999	18,351	8,766	48%	23	2,367	5	20,718	54%	339
2000	20,990	11,217	53%	25	7,966	4	28,956	66%	392
2001	28,250	13,726	49%	26	7,081	5	35,331	59%	435
2002	37,610	17,398	46%	31	6,040	4	43,650	54%	433
2003	35,452	11,949	34%	26	3,840	4	39,292	40%	382
2004	55,186	19,863	36%	31	1,610	5	56,796	38%	445
2005	58,421	18,195	31%	30	2,280	4	60,701	34%	498
2006	36,918	9,430	26%	24	1,018	5	37,936	28%	511
2007	48,479	18,263	38%	25	1,310	4	49,789	39%	539
2008	36,638	17,769	49%	22	4,494	5	41,132	54%	591
2009	32,581	12,374	38%	27	278	5	32,859	39%	557
2010	28,614	11,161	39%	27	1,123	5	29,737	41%	546
2011	38,940	14,948	38%	28	2,144	5	41,084	42%	592
2012	24,764	9,943	40%	33	769	5	25,533	42%	552
	4 -197 UT	79770	70 / 0		, 07		20,000	T# / U	

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

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

Table 17.–Southeast Alaska troll Chinook salmon catch-per-fleet-day during the general summer fishery, 1985–2012.

•			Chinook	Catch/Fleet	First Post Season Chinook Abundance	AK Hatchery	AK Hatchery
Year	Fishing Period	Days	Harvest	Day	Index ^a	Harvest	Percent
1985	June 3–12	10	65,377	6,538		3,644	6%
	July 1–22	22	114,372	5,199		2,733	2%
	August 25–26	2	13,229	8,268		407	3%
		34	192,978	5,743	1.68	6,784	4%
1986	June 20–July 15	26	154,623	5,947		5,789	4%
	August 21–26	6	31,878	5,313		1,346	4%
	September 1–9	9	27,496	3,055		1,203	4%
		41	213,997	5,219	1.37	8,338	4%
1987	June 20-July 12	23	209,513	9,109	1.60	11,712	6%
1988	July 1–12	12	162,047	13,504	1.93	8,141	5%
1989	July 1–13	13	167,492	12,884	1.79	5,831	3%
1990	July 1–22	22	200,090	9,095		13,037	7%
	August 23–24	2	11,858	5,929		1,250	11%
	J	24	211,948	8,831	1.78	14,287	7%
1991	July 1–8	8	154,020	20,536	1.66	6,605	4%
1992	July 1–4	4	65,627	18,751		2,268	3%
	August 23	1	6,941	6,941		189	3%
	C	5	72,568	16,126	1.63	2,457	3%
1993	July 1–6	6	101,164	16,861		3,189	3%
	August 21–25	5	24,865	4,973		446	2%
	September 12–20	9	19,131	2,126		1,300	7%
	1	20	145,160	7,258	1.92	4,935	3%
1994	July 1–7	7	98,338	14,048		4,252	4%
	August 29–September 2	5	20,224	4,045		1,100	5%
	6	12	118,562	9,880	1.67	5,352	5%
1995	July 1–10	10	75,889	7,589		8,139	11%
	July 30–August 5	7	21,277	3,040		1,581	7%
	, 6	17	97,166	5,716	0.91	9,720	10%

Table 17.–Page 2 of 3.

Year	Fishing Period	Days	Chinook Harvest	Catch/Fleet Day	First Post Season Chinook Abundance Index ^a	AK Hatchery Harvest	AK Hatchery Percent
1996	July 1–10	10	76,392	7,639	muex	4,639	6%
1990	August 19–20	2	8,275	4,138		203	2%
	August 17–20	12	84,667	7,056	0.90	4,842	6%
1997	July 1–7	7	122,482	17,497		3,532	3%
	August 18–24	7	49,632	7,090		657	1%
	August 30-September 5	7	10,601	1,514		118	1%
		21	182,715	8,701	1.37	4,307	2%
1998	July 1–11	11	102,773	9,343		2,699	3%
	August 20–Sept. 30	42	35,967	856		1,090	3%
		53	138,740	2,618	1.27	3,789	3%
1999	July 1–6	6	78,126	13,021		3,007	4%
	August 18–22	5	16,397	3,279		698	4%
		11	94,523	8,593	1.12	3,705	4%
2000	July 1–5	5	50,768	10,154		2,608	5%
	August 11–12	2	12,423	6,212		853	7%
	August 23–30	8	24,895	3,112		2,594	10%
	September 12–20	9	5,679	631		792	14%
		24	93,765	3,907	1.10	6,847	7%
2001	July 1–6	6	64,854	10,809		3,700	6%
	August 18–September 5	19	30,509	1,606		1,327	4%
		25	95,363	3,815	1.29	5,027	5%
2002	July 1-18	18	187,003	10,389		4,866	3%
	August 12–September 2	22	65,266	2,967		1,563	2%
		40	252,269	6,307	1.82	6,429	3%
2003	July 1–August 8	39	240,573	6,169	2.17	7,677	3%
2004	July 1–15	15	193,992	12,933		8,670	4%
	August 12–15	4	50,933	12,733		1,258	2%
	C	19	244,925	12,891	2.06	9,928	4%
2005	July 1–17	17	151,128	8,890		7,078	5%
	August 14–20	6.5	70,422	10,834		2,735	4%
	September 15–20	6	5,303	884		507	10%
		29.5	226,853	7,690	1.90	10,320	5%
2006	July 1–12	12	129,810	10,818		3,331	3%
	August 13–22	10	65,590	6,559		2,865	4%
		22	195,400	8,882	1.73	6,196	3%

Table 17.-Page 3 of 3.

					First Post Season	AK	AK
			Chinook	Catch/Fleet	Chinook Abundance	Hatchery	Hatchery
Year	Fishing Period	Days	Harvest	Day	Index ^b	Harvest	Percent
2007	July 1–20	20	140,450	7,023		5,392	4%
	August 16–21	6	30,778	5,130		888	3%
		26	171,228	6,586	1.34	6,280	4%
2008	July 1–5	5	59,907	11,981		3,451	6%
	August 16–21	6	28,983	4,831		416	1%
		11	88,890	8,081	1.01	3,867	4%
2009	July 1-10	10	84,571	8,457		3,375	4%
	August 17–25	9	33,012	3,668		1,848	6%
		19	117,583	6,189	1.20	5,223	4%
2010	July 1–8	8	74,575	9,322		2,914	4%
	August 15–19	5	48,512	9,702		1,443	3%
		13	123,087	9,468	1.31	4,357	4%
2011	July 1–12	12	120,523	10,044		3,333	3%
	August 15–17	3	29,736	9,912		923	3%
		15	150,259	10,017	1.62	4,256	3%
2012	July 1–9	9	61,667	6,852		1,814	3%
	August 11-September 8	29	74,249	2,560		3,169	4%
	-	38	135,916	3,577	1.52	4,983	4%

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

b The abundance index given for 1985–2011 is the first post season index and for 2012 is the preseason index. The AI's are estimated by the Chinook technical committee of the Pacific Salmon Commission.

Table 18.—Coho salmon mid-season closure dates and extensions, 1980–2012.

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

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

Table 19.—Weekly troll Chum salmon harvest and effort in Icy Straits/Homeshore, Neets Bay/West Behm Canal, and Sitka Sound, 2010-2012.

Icy Strait/Homeshore											
	20	10	20	11	20	2012					
Week	Harvest	Permits	Harvest	Permits	Harvest	Permits					
24	_	_	5,613	27	553	23					
25	a	_	23,649	102	7,732	92					
26	16,608	32	83,541	145	9,178	83					
27	14,974	39	40,380	113	7,000	36					
28	15,915	34	10,801	49	1,367	17					
Total	50,185	68	172,212	224	26,095	135					

Neets Bay/V	Vest Behm Can	al					
	20	10	20	11	2012		
Week	Harvest	Permits	Harvest	Permits	Harvest	Permits	
26	6	3	205	5	13,862	45	
27	3,969	11	1,225	17	32,113	107	
28	37,631	48	35,576	78	77,877	210	
29	116,466	106	129,494	140	99,623	247	
30	45,857	82	122,343	153	78,851	183	
31	394	5	47,642	97	19,071	111	
32	a	a	24,528	46	2,181	22	
33	a	a	6,389	22	9,051	31	
34	_	_	7,656	16	14,114	35	
35	_	_	16,281	37	29,897	55	
36	620	5	20,601	53	28,261	73	
37	3,537	11	10,502	38	4,493	63	
38	6,773	15	16,739	29	1,307	32	
Total	216,651	125	439,220	180	411,073	272	

Sitka Sound							
	2010		20	11	2012		
Week	Harvest	Permits	Harvest	Permits	Harvest	Permits	
29	160	15	390	46	13	5	
30	110	23	859	34	87	25	
31	18,668	66	3,872	48	471	18	
32	35,864	103	14,627	96	15,548	43	
33	30,238	93	5,544	83	6,849	52	
34	23,345	74	535	61	1,258	27	
35	1,322	31	56	9	89	20	
Total	111,728	205	26,215	212	24,487	144	

a confidential data

Table 20.-Total Chinook salmon harvest and Alaska hatchery harvest by gear, 1985-2012.

		Seine	Dri	ft Gillnet	Se	et Gillnet	Troll			Sport	All Gear	
Year	Total	AK Hatchery	Total	AK Hatchery	Total	AK Hatchery	Total	AK Hatchery	Total	AK Hatchery	Total	AK Hatchery
1985	21,593	150	10,679	976	1,232	0	215,811	8,071	24,858	3,365	274,539	12,562
1986	12,132	813	8,539	1,437	1,428	0	237,703	8,338	22,551	5,239	282,353	15,827
1987	4,503	162	8,957	1,846	2,072	4	242,562	16,195	24,324	5,336	282,418	23,539
1988	11,142	320	9,658	4,474	894	0	231,364	19,503	26,160	5,112	279,312	29,410
1989	13,171	2,298	9,948	4,106	798	0	235,716	16,366	31,071	5,859	291,032	28,629
1990	11,389	2,529	15,217	9,240	663	3	287,939	29,834	51,218	11,546	366,869	53,149
1991	13,793	2,618	19,254	11,849	1,747	40	264,106	37,498	60,492	18,022	359,462	69,987
1992	18,339	1,224	11,740	7,484	2,025	10	183,759	25,738	42,892	9,464	258,791	43,910
1993	8,364	1,751	18,280	11,378	1,311	0	226,866	18,226	49,246	8,321	304,103	39,676
1994	14,839	3,201	16,918	11,767	3,897	2	186,331	12,389	42,365	9,083	264,350	36,440
1995	25,117	17,319	13,464	7,504	9,374	0	138,117	27,174	49,667	16,524	235,739	68,521
1996	22,225	20,692	10,219	5,793	4,854	0	141,452	38,365	57,509	15,229	236,259	80,079
1997	10,338	6,223	11,467	4,538	3,264	0	246,409	28,795	71,524	13,914	343,002	53,470
1998	14,503	6,054	6,207	3,903	2,804	0	192,066	12,397	55,013	8,933	270,593	31,287
1999	17,900	11,933	9,712	5,255	5,108	0	146,219	16,935	72,081	20,824	251,020	54,947
2000	22,905	18,401	16,035	11,902	2,460	0	158,717	28,963	63,173	22,910	263,290	82,176
2001	20,439	14,991	17,091	11,968	2,633	0	153,280	28,480	72,291	29,965	265,734	85,404
2002	17,695	11,717	11,484	6,508	2,510	0	325,308	31,647	69,537	26,871	426,534	76,742
2003	24,134	6,911	11,398	8,080	3,842	0	330,692	27,614	69,370		439,436	
2004	39,633	11,848	21,671	8,482	2,734	0	354,658	37,512	80,572		499,268	
2005	19,867	7,292	46,154	5,453	589	0	338,451	36,171	86,575		491,636	
2006	24,969	10,019	41,541	7,792	581	0	282,315	20,724	85,794	18,168	435,200	
2007	27,267	10,977	25,063	13,081	1,166	0	268,146	30,544	82,848	22,822	404,490	,
2008	15,540	12,204	26,770	15,075	384	0	151,936	28,401	49,265		243,895	
2009	29,012	15,973	18,857	10,156	467	0	175,644	20,590	69,565		293,545	
2010	15,876	13,421	14,271	10,700	286	0	195,495	21,701	58,503		284,431	
2011	26,404	17,665	21,375	15,800	450	0	242,193	24,945	66,575	12,047	356,997	
2012	21,107	15,264	18,309	12,232	240	0	209,366	21,237	46,520	11,700	295,542	60,434

Note: Data includes Terminal area and Annette Island harvests.2012 sport fish data are inseason estimates. Final estimates pending analyses of mail—in survey data.

Table 21.–Total Southeast Alaska troll coho salmon harvest and estimated wild and hatchery contributions, 1960-2012.

Year	Total Harvest	Wild Contribution	Alaska Hatchery	Other Hatchery	Total Hatchery	Percent Hatchery
1960	396,211	396,211	_	_	_	_
1961	399,932	399,932	_	_	_	_
1962	643,740	643,740	_	_	_	_
1963	693,050	693,050	_	_	_	_
1964	730,766	730,766	_	_	_	_
1965	695,887	695,887	_	_	_	_
1966	528,621	528,621	_	_	_	_
1967	443,677	443,677	_	_	_	_
1968	779,500	779,500	_	_	_	_
1969	388,443	388,443	_	_	_	_
1970	267,647	267,647	_	_	_	_
1971	391,279	391,279	_	_	_	_
1972	791,941	791,941	_	_	_	_
1973	540,125	540,125	_	_	_	_
1974	845,109	845,109	_	_	_	_
1975	214,219	214,170	_	_	_	_
1976	525,270	524,762	_	_	_	_
1977	506,432	506,845	_	_	_	_
1978	1,100,902	1,100,902	_	_	_	_
1979	918,835	918,845	_	_	_	_
1980	697,181	704,297	2,881	281	3,162	<1%
1981	861,146	846,088	15,920	218	16,139	2%
1982	1,315,871	1,285,969	35,486	435	35,921	3%
1983	1,276,380	1,227,242	51,882	940	52,822	4%
1984	1,133,366	1,062,327	69,480	2,147	71,627	4% 6%
1985	1,600,230	1,499,661	106,575	179	106,754	7%
1986	2,128,003		269,396	8,881	278,277	
		1,850,004				13%
1987	1,041,055	950,757	87,882	3,493	91,375	9%
1988	500,147	472,334	25,795	1,948	27,743	6%
1989	1,415,512	1,248,491	116,906	4,759	121,665	9%
1990	1,832,604	1,559,530	278,996	11,573	290,568	16%
1991	1,719,060	1,336,889	368,824	15,866	384,690	22%
1992	1,929,899	1,509,115	403,208	17,636	420,843	22%
1993	2,395,711	2,013,913	382,645	13,369	396,014	17%
1994	3,467,597	2,946,740	503,675	13,441	517,115	15%
1995	1,750,221	1,414,052	325,827	8,060	333,887	19%
1996	1,906,753	1,456,794	440,086	9,558	449,644	24%
1997	1,170,460	927,301	240,545	2,504	243,049	21%
1998	1,636,707	1,306,516	322,071	7,592	329,663	20%
1999	2,271,769	1,772,608	500,550	13,484	514,034	23%
2000	1,124,854	876,142	244,111	6,862	250,973	22%
2001	1,843,997	1,472,073	367,654	3,637	371,291	20%
2002	1,310,060	973,893	332,963	895	333,857	25%
2003	1,220,782	936,969	282,425	2,768	285,192	23%
2004	1,915,066	1,602,879	307,481	4,706	312,187	16%
2005	2,036,104	1,703,464	328,028	4,612	332,640	16%
2006	1,360,267	1,144,707	214,694	866	215,560	16%
2007	1,376,753	1,071,709	304,193	851	305,044	22%
2008	1,273,716	1,011,201	261,558	957	262,515	21%
2009	1,590,259	1,343,471	245,347	1,440	246,788	16%
2010	1,342,211	1,056,713	284,591	907	285,498	21%
2011	1,302,734	964,365	337,843	526	338,369	26%
2012	1,199,901	890,538	308,466	897	309,363	26%
Avg. 1982–1991	1,396,223	1,249,320	141,122	5,022	146,144	9%
Avg. 1992–2011	1,711,296	1,375,231	331,475	5,734	337,208	20%

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

Table 22.-Estimates of total escapements of Chinook salmon to escapement indicator systems and to Southeast Alaska and transboundary rivers, 1975–2012.

		MAJOR		MEDIUM SYSTEMS								SMALL SYSTEMS		
				Major								Medium		Total
Year	Alsek	Taku	Stikine	Subtotal	Situk	Chilkat	Andrew	Unuk	Chickamin	Blossom	Keta	Subtotal	King Salmon	All Systems
1975	-	12,917	7,571	-	_	-	508	-	1,758	439	611	-	64	_
1976	5,765	24,575	5,723	36,063	1,421	-	404	-	745	205	253	-	99	_
1977	10,496	29,489	11,445	51,430	1,732	_	456	4,739	1,722	337	692	9,679	204	61,313
1978	11,754	17,118	6,835	35,707	808	_	388	5,382	1,465	430	1,180	9,653	87	45,447
1979	18,670	21,611	12,610	52,891	1,284	-	327	2,803	1,133	162	1,283	6,992	134	60,016
77–79 Avg	13,640	22,740	10,297	46,676	1,275	-	390	4,308	1,440	310	1,052	8,775	141	55,592
1980	8,077	39,229	30,573	77,879	905	_	282	4,944	2,112	268	578	9,089	106	87,074
1981	8,327	49,546	36,057	93,929	702	_	536	3,557	1,824	478	990	8,088	153	102,170
1982	9,174	23,842	40,488	73,504	434	_	672	6,574	2,712	1,038	2,270	13,700	393	87,597
1983	11,028	9,792	6,424	27,243	592	-	366	5,474	2,847	1,772	2,475	13,526	245	41,014
1984	7,494	20,774	13,995	42,263	1,726	_	389	8,939	5,235	1,528	1,836	19,653	265	62,181
1985	5,758	35,906	16,672	58,336	1,521	_	625	5,761	4,541	2,133	1,879	16,460	175	74,970
1986	9,981	38,100	15,478	63,559	2,067	_	1,383	10,345	8,289	3,844	2,077	28,006	255	91,820
1987	11,395	28,928	25,607	65,929	1,379	_	1,540	9,601	4,631	4,058	2,312	23,520	196	89,645
1988	8,227	44,512	39,040	91,778	868	_	1,102	8,496	3,734	1,155	1,731	17,086	208	109,072
1989	9,105	40,329	25,243	74,676	637	-	1,036	5,591	4,437	1,035	3,477	16,212	240	91,129
80–89 Avg	8,856	33,096	24,958	66,910	1,083	-	793	6,928	4,036	1,731	1,963	16,534	224	83,667
1990	8,794	52,142	23,514	84,449	628	_	1,298	2,876	2,679	773	1,824	10,078	179	94,706
1991	12,722	51,645	24,124	88,491	889	5,897	782	3,187	2,313	719	819	14,606	134	103,231
1992	5,519	55,889	35,479	96,887	1,595	5,284	1,520	4,253	1,644	451	653	15,400	99	112,386
1993	12,688	66,125	61,295	140,108	952	4,472	2,071	5,197	1,848	911	1,090	16,541	266	156,915
1994	12,312	48,368	34,403	95,083	1,271	6,795	1,118	4,623	1,843	484	921	17,055	213	112,351
1995	25,322	33,805	17,448	76,575	4,330	3,790	670	3,757	2,309	653	527	16,035	147	92,758
1996	14,443	79,019	28,949	122,411	1,800	4,920	655	5,679	1,587	662	894	16,196	292	138,899
1997	12,697	114,938	26,996	154,631	1,878	8,100	478	2,970	1,292	397	741	15,856	361	170,848
1998	4,969	31,039	25,968	61,976	924	3,675	952	4,132	1,857	364	446	12,350	134	74,460
1999	13,617	19,734	19,947	53,298	1,461	2,271	1,182	3,914	2,337	638	968	12,771	304	66,373
90-99 Avg	12,308	55,270	29,812	97,391	1,573	5,023	1,073	4,059	1,971	605	888	14,689	213	112,293

Table 22.—Page 2 of 2.

		MAJOR S	YSTEMS					MEDIUI	M SYSTEMS				SMALL SYSTEMS	
Year	Alsek	Taku	Stikine	Major Subtotal	Situk	Chilkat	Andrew	Unuk	Chickamin	Blossom	Keta	Medium Subtotal	King Salmon	Total All Systems
2000	6,835	30,529	27,531	64,895	1,785	2,035	1,348	5,872	3,805	695	913	16,453	138	81,486
2001	6,111	42,980	63,523	112,614	656	4,517	2,060	10,541	5,177	614	1,033	24,597	149	137,360
2002	5,396	52,409	50,875	108,680	1,000	4,050	1,712	6,988	5,007	674	1,237	20,668	155	129,503
2003	4,782	36,435	46,824	88,041	2,117	5,657	1,163	5,546	4,579	611	969	20,642	118	108,801
2004	6,995	68,199	48,900	124,094	755	3,422	2,998	3,963	4,268	734	1,132	17,272	135	141,501
2005	4,462	38,806	39,833	83,101	613	3,366	1,979	4,742	4,257	926	1,496	17,379	143	100,623
2006	1,883	41,831	24,400	68,114	749	3,039	2,124	5,645	6,318	1,270	2,248	21,393	150	89,657
2007	2,618	17,516	15,916	36,050	677	1,452	1,736	5,718	4,242	406	936	15,167	181	51,398
2008	1,337	24,121	18,843	44,301	453	2,833	981	3,104	5,277	774	1,093	14,515	120	58,936
2009	6,095	22,806	11,086	39,987	902	4,429	628	3,157	2,902	370	614	12,982	109	53,078
00-09 Avg	4,651	37,563	34,773	76,988	971	3,480	1,673	5,528	4,583	707	1,167	18,107	140	95,234
2010	9,428	29,307	15,177	53,912	167	1,852	1,205	4,290	4,859	542	1,430	14,345	158	68,415
2011	6,668	19,682	14,569	40,919	240	2,803	936	3,272	4,052	569	671	12,543	192	53,654
2012	2,660	19,538	25,939	48,137	322	1,627	589	956	444	793	725	5,456	236	53,829
10–12 Avg	6,252	22,842	18,562	47,656	243	2,094	910	2,839	3,118	635	942	10,781	195	58,633
Goals: abc														
Lower	5,500	19,000	14,000	38,500	450	1,850	650	1,800	2,326	150	175	8,476	120	
Point	8,500	27,500	17,500	53,500	730	2,300	750	2,800	3,490	_	_	10,070	150	
Upper	11,500	36,000	28,000	75,500	1,050	3,600	1,500	3,800	4,653	300	400	17,503	240	

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.

^a Total Escapement goals for Alsek, Unuk, and Chickamin have not been finalized. Numbers for those three are just expanded index goals for comparison.

b New BEGs established for Blossom and Keta river Chinook salmon in 2012.

^c Goals are for large (≥660 mm MEF, or fish age 1.3 and older) Chinook salmon, except the Alsek River goal, which is germane to fish age 1.2 and older and can include fish <660 mm MEF.

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

Table 24.-Escapement estimates for four Southeast Alaska coho salmon indicator stocks, 1980-2012.

Year	Auke Creek	Berners River	Ford Arm Lake	Hugh Smith Lake
1980	698	N/A	N/A	N/A
1981	646	N/A	N/A	N/A
1982	447	7,505	2,655	2,144
1983	694	9,840	1,931	1,487
1984	651	2,825	N/A	1,407
1985	942	6,169	2,324	903
1986	454	1,752	1,552	1,782
1987	668	3,260	1,694	1,117
1988	756	2,724	3,119	513
1989	502	7,509	2,176	433
1990	697	11,050	2,192	870
1991	808	11,530	2,761	1,836
1992	1,020	15,300	3,866	1,426
1993	859	15,670	4,202	832
1994	1,437	15,920	3,227	1,753
1995	460	4,945	2,446	1,781
1996	515	6,050	2,500	950
1997	609	10,050	4,718	732
1998	862	6,802	7,049	983
1999	845	9,920	3,800	1,246
2000	683	10,650	2,304	600
2001	842	19,290	2,209	1,580
2002	1,112	27,700	7,109	3,291
2003	585	10,110	6,789	1,510
2004	416	14,450	3,539	840
2005	450	5,220	4,257	1,732
2006	582	5,470	4,737	891
2007	352	3,915	2,567	1,244
2008	600	6,870	5,173	1,741
2009	360	4,230	2,181	2,281
2010	417	7,520	1,610	2,878
2011	517	6,050	1,908	2,137
2012	837	5,480	2,282	1,908
1980 –2011				
Average:	671	9,010	3,331	1,431
Escapement Go	oal Range:			
•	200–500	4,000-9,200	1,300-2,900	500-1,600

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

Table 25.-Northern Inside area coho salmon escapements, 1981-2012.

	Auke Creek	Montana	Peterson	Total Roadside	Berners	Chilkat	
Year	(Weir)	Creek	Creek	Index	River	River	Taku River ^a
1981	646	227	219	1,092	_	_	_
1982	447	545	320	1,312	7,505	_	_
1983	694	636	219	1,549	9,840	_	_
1984	651	581	189	1,421	2,825	_	_
1985	942	810	276	2,028	6,169	_	_
1986	454	60	363	877	1,752	_	_
1987	668	314	204	1,186	3,260	37,432	55,457
1988	756	164	542	1,462	2,724	29,495	39,450
1989	502	566	242	1,310	7,509	48,833	56,808
1990	697	1,711	324	2,732	11,050	79,807	72,196
1991	808	1,415	410	2,633	11,530	84,517	127,484
1992	1,020	2,512	403	3,935	15,300	77,588	84,853
1993	859	1,352	112	2,323	15,670	58,217	109,457
1994	1,437	1,829	318	3,584	15,920	194,425	96,343
1995	460	600	277	1,337	4,945	56,737	55,710
1996	511	798	263	1,572	6,050	37,331	44,635
1997	609	1,018	186	1,813	10,050	43,519	32,345
1998	862	1,160	102	2,124	6,802	50,758	61,382
1999	845	1,000	272	2,117	9,920	57,140	60,844
2000	683	961	202	1,846	10,650	88,620	64,700
2001	842	1,119	106	2,067	19,290	108,698	104,460
2002	1,112	2,448	195	3,755	27,700	205,429	219,360
2003	585	808	203	1,596	10,110	134,340	183,038
2004	416	364	284	1,064	14,450	67,465	132,153
2005	450	351	139	940	5,220	38,589	91,552
2006	582	1,110	439	2,131	5,470	80,683	140,022
2007	352	324	226	902	3,915	25,493	49,632
2008	600	405	660	1,665	6,870	57,376	95,360
2009	360	698	123	1,181	4,230	47,911	104,321
2010	417	630	467	1,514	7,520	87,381	126,830
2011	517	709	138	1,364	6,050	64,511	70,887
2012	837	394	190	1,421	5,480	38,677	70,742
1981–2011							
Average	670	878	272	1,820	9,010	74,492	91,171
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	. ,
		•		threshold of 38 000			Salmon Troots

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

Table 26.-Sitka area coho salmon escapement index, 1982-2012.

**	Starrigavan	Sinitsin	St. John's	Nakwasina	Eagle	Ford Arm Lake	Total
Year	Creek	Creek	Creek	River	River	(Weir)	Indexa
1982	317	46	116	577	482	2,662	4,201
1983	45	31	20	217	143	1,938	2,394
1984	385	160	154	715	645	4,232	6,291
1985	193	144	109	408	<i>390</i>	2,324	3,568
1986	57	73	53	275	245	1,546	2,249
1987	36	21	22	47	167	1,694	1,987
1988	45	56	71	104	<i>126</i>	3,028	3,430
1989	101	76	89	129	180	2,177	2,752
1990	39	80	38	195	214	2,190	2,756
1991	142	186	107	621	454	2,761	4,271
1992	241	265	110	654	629	3,847	5,746
1993	256	213	90	644	513	4,202	5,918
1994	304	313	227	404	717	3,228	5,193
1995	274	152	99	626	336	2,445	3,932
1996	59	150	201	553	488	2,500	3,951
1997	55	90	68	300	296	4,965	5,774
1998	123	109	57	653	300	7,049	8,291
1999	167	48	27	291	<i>243</i>	3,598	4,374
2000	144	62	30	459	108	2,287	3,090
2001	133	132	80	703	417	2,178	3,643
2002	227	169	100	713	659	7,109	8,977
2003	95	102	91	440	373	6,789	7,890
2004	143	112	79	399	391	3,539	4,663
2005	76	67	173	892	460	4,257	5,925
2006	386	152	121	996	992	4,737	7,384
2007	130	39	86	385	426	2,567	3,633
2008	96	73	43	839	66	5,173	6,290
2009	128	160	140	335	393	2,164	3,320
2010	70	171	85	307	640	1,610	2,883
2011	230	392	163	636	801	1,908	4,130
2012	59	133	144	296	525	2,282	3,439
1982–2011						,	
Average	157	128	95	484	410	3,357	4,630

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

Table 27.-Southern inside (Ketchikan) area coho salmon escapement index, 1987-2012.

Year	Herman Creek	Grant Creek	Eulachon River	Klahini River	Indian River	Barrier Creek	King Creek	Choca Creek	Carroll River	Blossum River	Keta River	Marten River	Hugh Smith L. (Weir)	Humpback Creek	Tombstone River	Total Index ^a
1987	92	88		62	387	98	304	145	180	700	800	740	1,118	650	532	6,051
1988	72	150		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		150	282	72	35	105	139	800	550	575	870	135	275	4,403
1991	245	50		50	550	100	300	220	375	725	800	575	1,826	671	775	7,547
1992	115	270		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		200	560	175	325	225	475	775	1,100	2,205	1,753	560	850	10,443
1995	250	94		165	600	220	415	180	400	800	1,155	1,385	1,781	82	2,446	10,408
1996	94	92		40	570	230	457	220	240	829	1,506	1,924	958	440	1,806	9,789
1997	75	85		60	371	94	292	175	140	1,143	571	759	732	32	847	5,795
1998	94	130	460	120	304	50	411	190	255	1,004	1,169	1,961	983	256	666	8,053
1999	75	127	657	150	356	25	627	225	425	598	1,895	1,518	1,246	520	840	9,284
2000	135	94	600	110	380	72	620	180	275	1,354	1,619	1,421	600	102	1,672	9,234
2001	80	110	929	151	1,140	212	891	450	173	1,561	1,612	1,956	1,580	506	1,704	13,055
2002	88	138	1,105	20	940	70	700	220	270	1,359	1,368	2,302	3,291	2,004	1,639	15,514
2003	242	197	875	39	690	57	1,140	380	427	1,940	1,934	1,980	1,510	214	1,745	13,369
2004	150	230	801	170	935	250	640	180	455	1,005	1,200	1,835	840	1,230	823	10,744
2005	510	300	1,240	360	890	190	810	270	500	3,680	3,290	1,130	1,732	500	1,170	16,572
2006	165	124	190	176	280	30	405	130	272	2,300	645	335	891	260	1,600	7,803
2007	134	75	298	35	245	15	290	210	171	990	970	351	1,224	3	701	5,712
2008	115	55	570	25	1,250	23	420	100	613	7,100	2,524	925	1,741	2,600	360	18,421
2009	160	330	330	340	750	110	1,050	100	1,100	1,041	315	1,675	2,282	700	225	10,508
2010	85	102	370	0	880	90	570	190	209	350	550	350	2,878	200	710	7,534
2011	100	94	350	75	175	87	110	85	225	1,235	739	350	2,137	850	726	7,338
2012	25	60	400	175	170	40	680	110	330	2,400	3,300	2,650	1,908	360	1,250	13,858
1987–2011																
Average	146	138	530	107	596	128	474	199	330	1,383	1,167	1,233	1,407	563	1,071	9,473

Note: Interpolated values are shown in italic print.

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

Table 28.—Overall coho salmon percentage exploitation rates by indicator stock for the Alaska troll fishery, 1982–2012.

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

Table 29.—Overall coho salmon percentage exploitation rates by indicator stock for the all fisheries combined, 1982–2012.

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

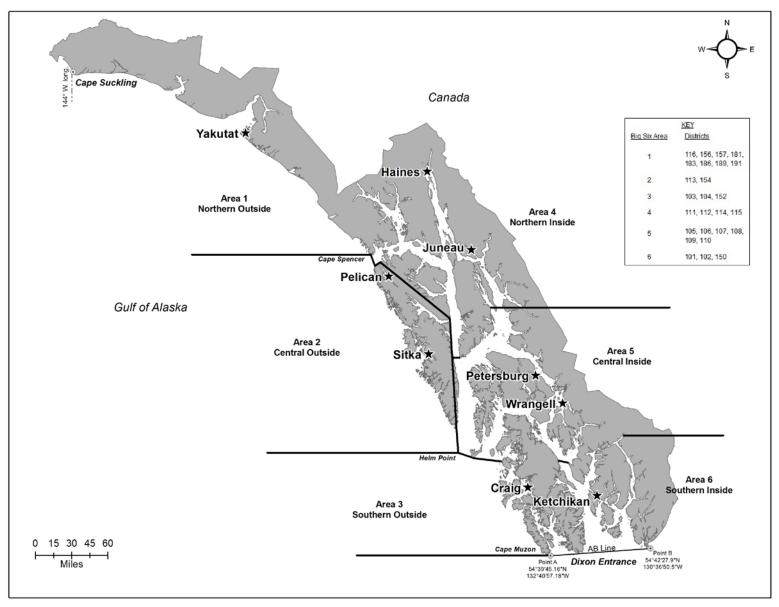


Figure 1.–Map of Southeast Alaska commercial troll fishing and Big Six management areas, Cape Suckling to Dixon Entrance.

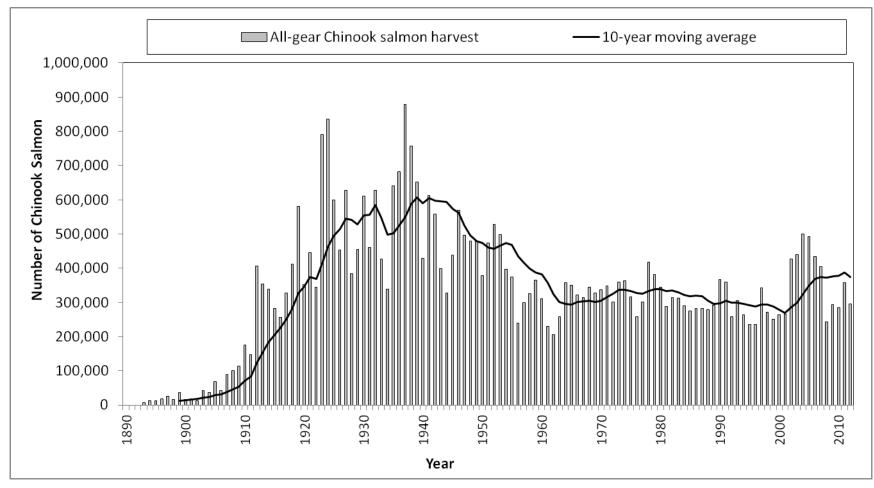


Figure 2.-All-gear harvests of Chinook salmon in common property fisheries, 1891–2012.

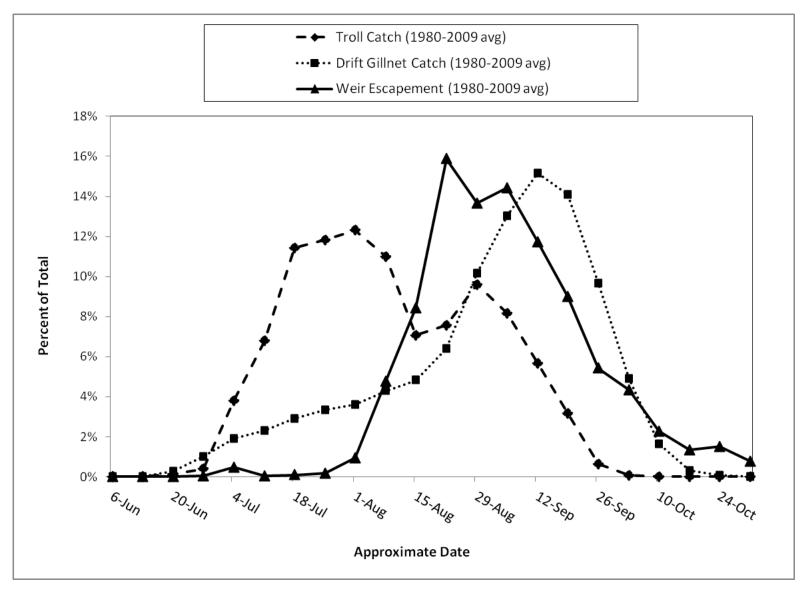


Figure 3.—Average weekly coho harvest timing of the Southeast Alaska commercial troll and drift gillnet fisheries (1980–2009), and the average weekly coho salmon escapement timing of the Hugh Smith Lake, Ford Arm Lake and Auke Creek weirs (1980–2009).

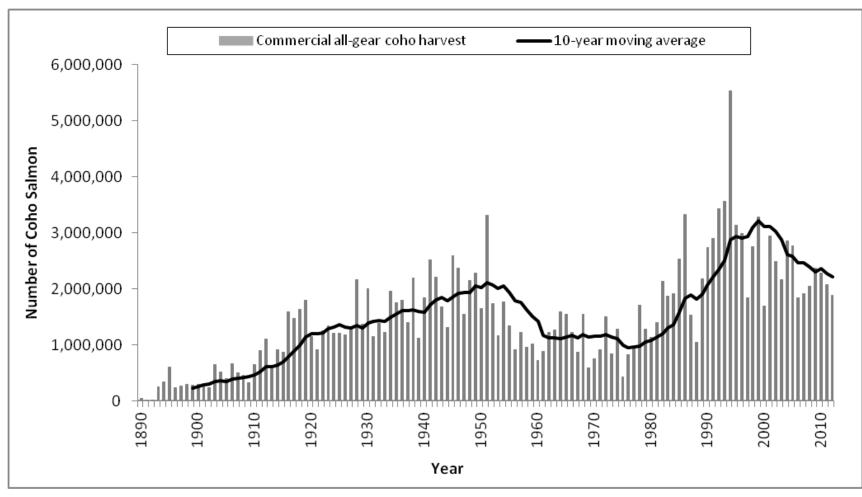


Figure 4.—Commercial all-gear harvests of coho salmon in common property fisheries, 1890–2012.

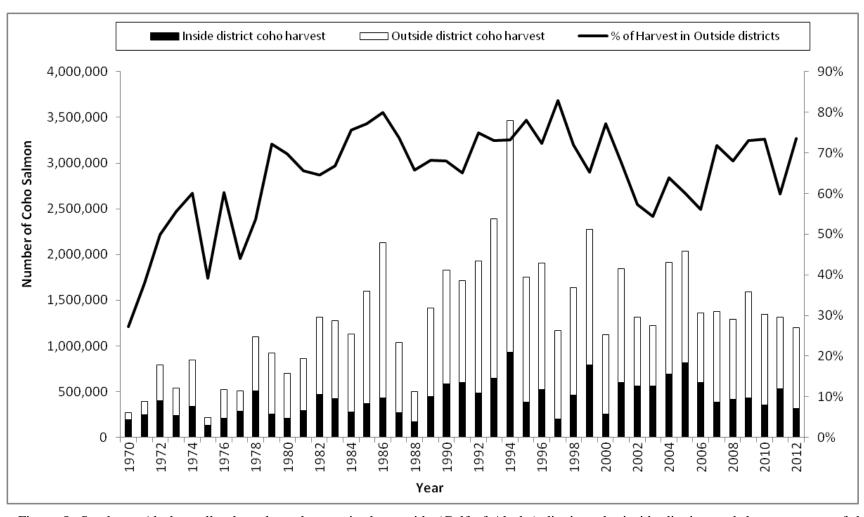


Figure 5.—Southeast Alaska troll coho salmon harvest in the outside (Gulf of Alaska) districts, the inside districts and the percentage of the harvest taken in the outside districts, 1970–2012.

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

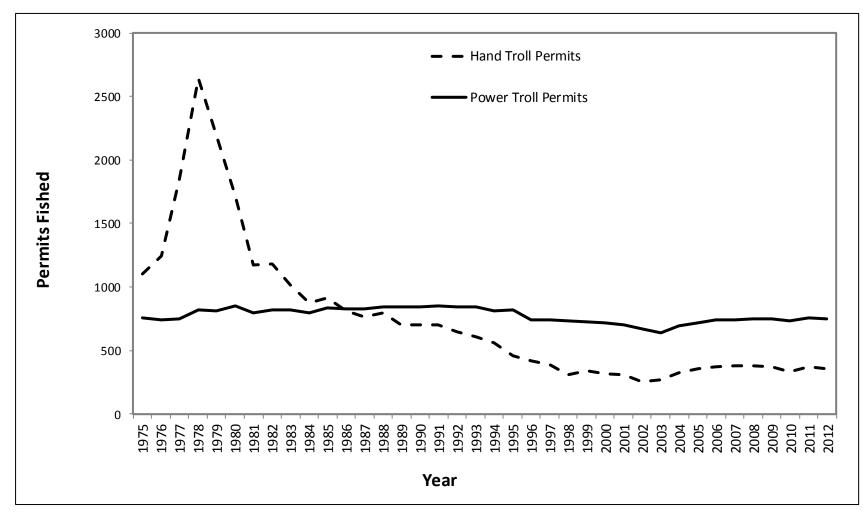


Figure 6.–Number of troll permits fished by gear type, 1975–2012.

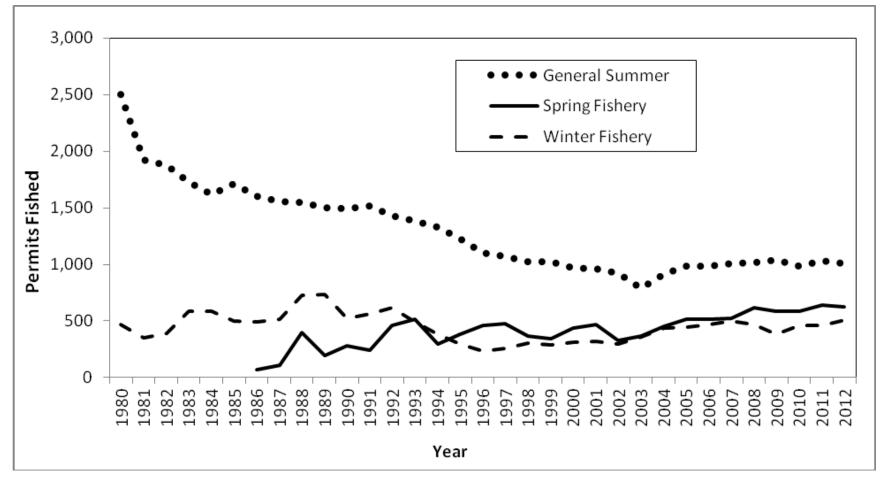


Figure 7.-Number of troll permits fished in the general summer, winter, and spring fisheries, 1980–2012.

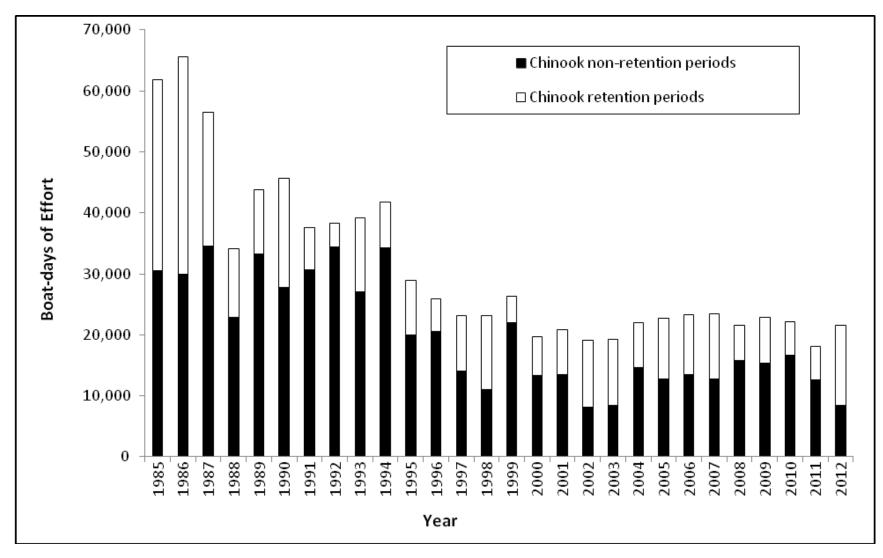


Figure 8.–General summer troll fishery boat-days of effort during Chinook salmon retention and Chinook non-retention fishing periods, 1981–2012.

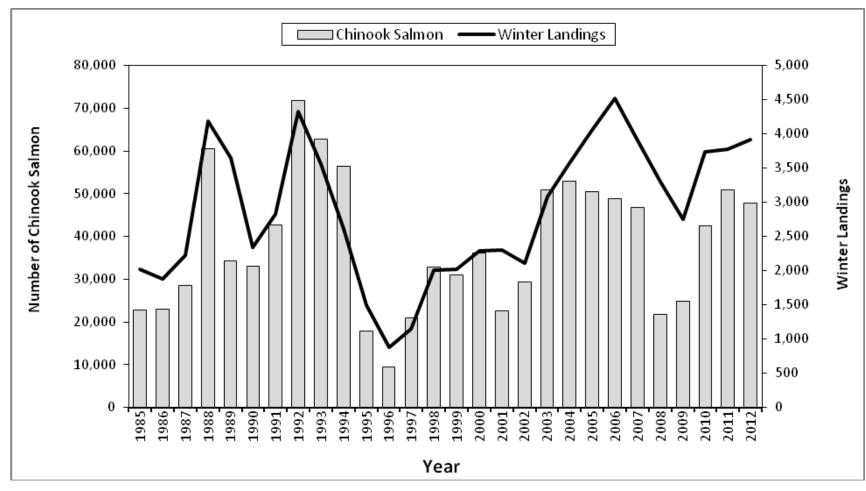


Figure 9.-Southeast Alaska winter troll fishery Chinook salmon harvests and landings, 1980-2012.

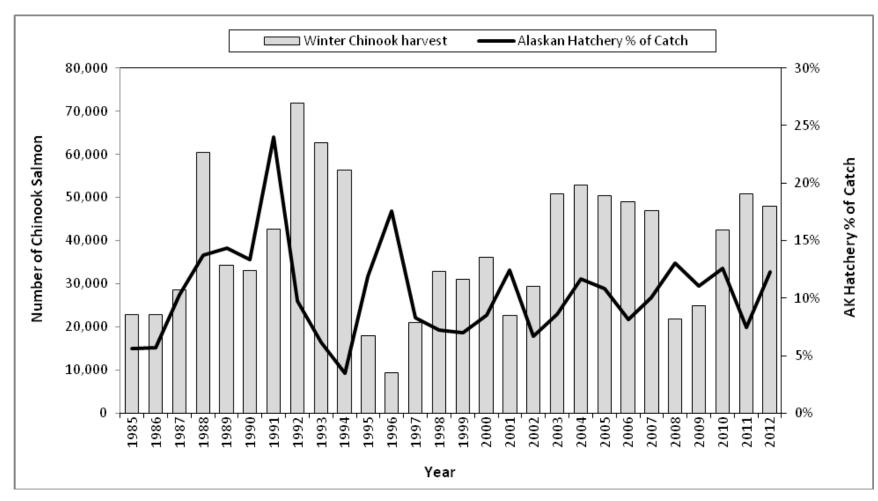


Figure 10.-Southeast Alaska winter troll harvest and Alaska hatchery percent for troll gear, 1985-2012.

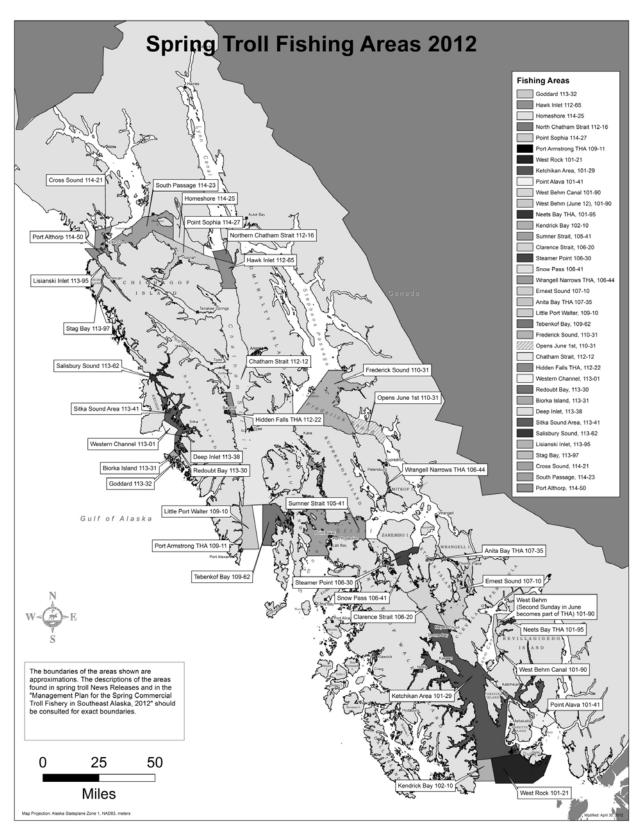


Figure 11.-Map of Spring troll areas. Shaded areas were open in 2012.

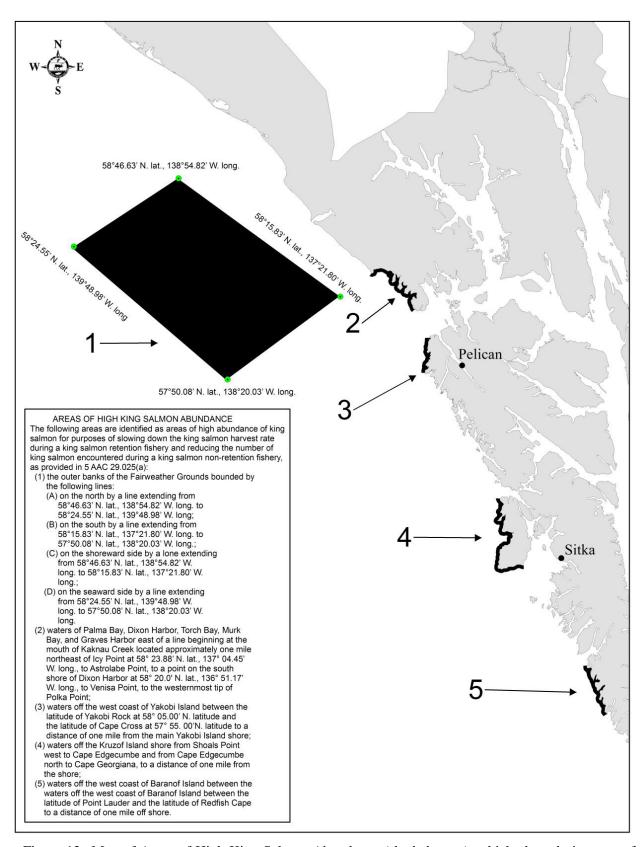


Figure 12.—Map of Areas of High King Salmon Abundance (shaded areas), which close during part of the summer fishery.

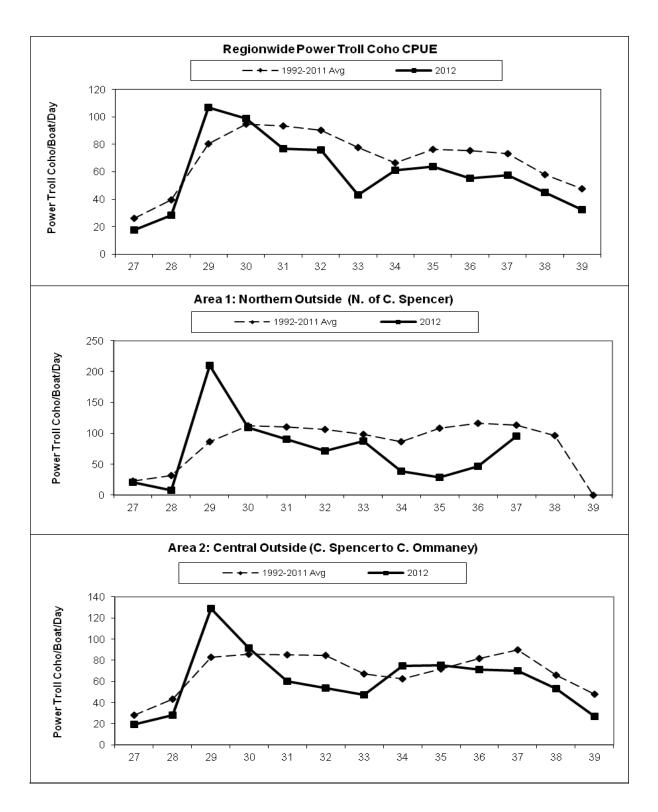


Figure 13.—Average power troll coho salmon harvest per boat day (CPUE) comparing 2012 results with the 1992–2011 average, for Southeast Alaska, regionwide, Northern Outside, and Central Outside (Areas 1 and 2).

Note: Declines in CPUE for weeks 27–28 and 33–36 are influenced by vessels targeting Chinook instead of coho salmon.

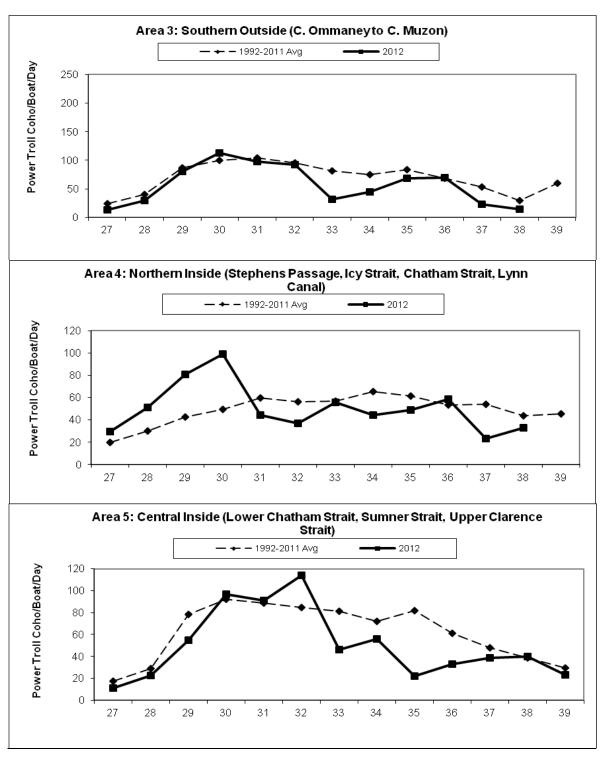


Figure 14.—Average power troll coho salmon harvest per boat day (CPUE) comparing 2012 results with the 1992–2011 average, for Southeast Alaska, Southern Outside, Northern Inside, and Central Inside (Areas 3, 4, and 5).

Note: Declines in CPUE's for weeks 27–28 and 33–36 are influenced by vessels targeting Chinook instead of coho salmon. Weeks with less than three permits interviewed are confidential, and have been omitted.

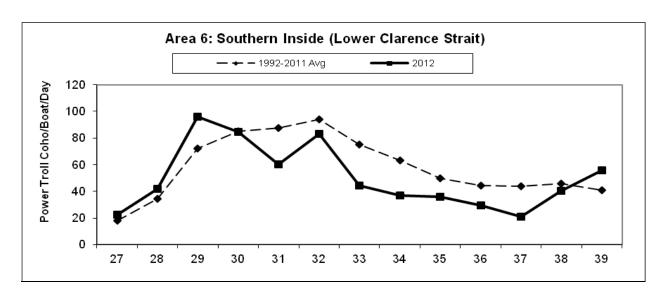


Figure 15.—Average power troll coho salmon harvest per boat day (CPUE) comparing 2012 results with the 1992–2011 average, for Southeast Alaska, Southern Inside (Area 6).

Note: Declines in CPUE's for weeks 27–28 and 33–36 are influenced by vessels targeting Chinook instead of coho salmon. Weeks with less than three permits interviewed are confidential, and have been omitted.

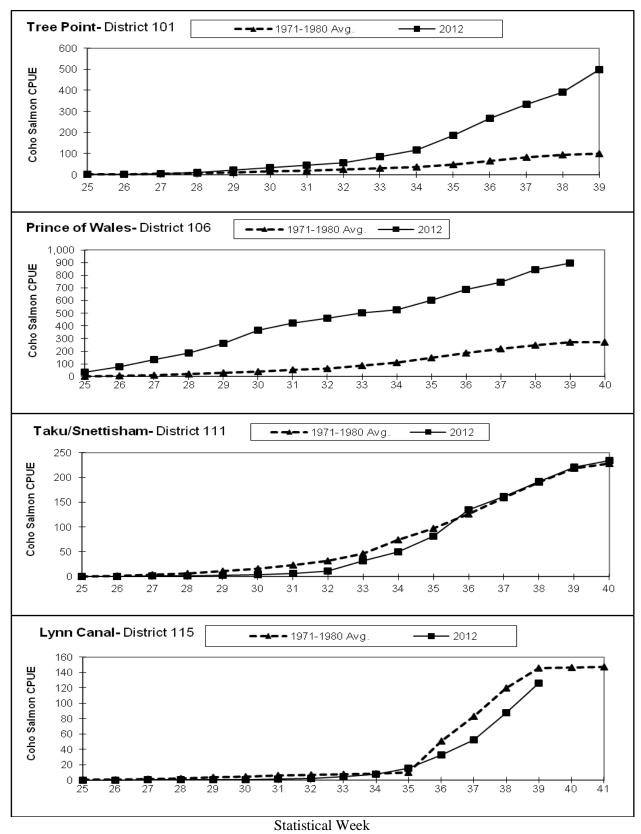


Figure 16.—Cumulative coho salmon catch-per-boat-day comparing 2012 to the 1971–1980 average, for the four indicator drift gillnet fisheries.

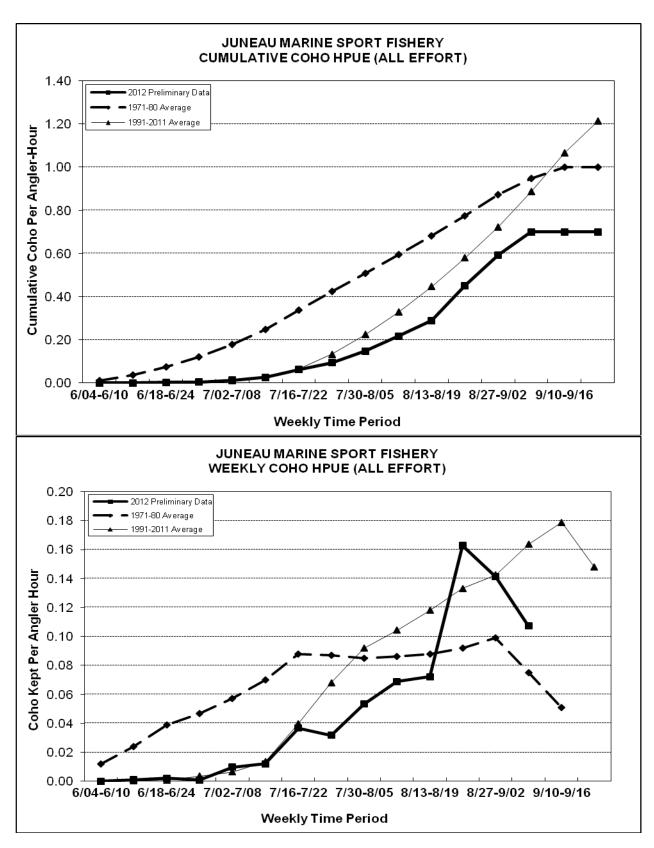


Figure 17.–Cumulative and weekly coho salmon hours-per-unit-effort (HPUE) comparing 2012 to the 1971–1980 average and the 1991–2011 average, for the Juneau marine sport fishery harvest.

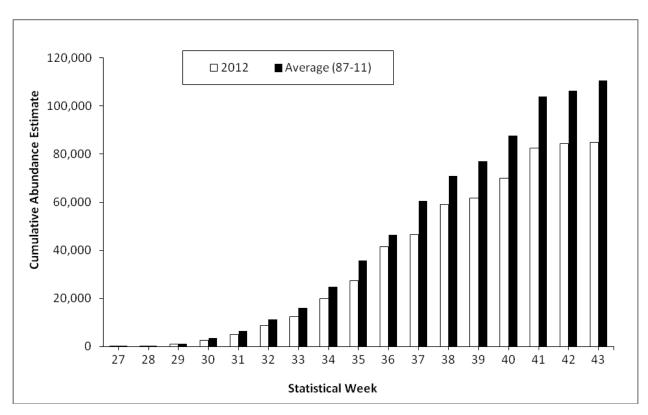


Figure 18.—Cumulative mark—recapture abundance estimate for Taku River coho salmon from Canyon Island fish wheels, for 2012 and the 1987–2011 average.

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

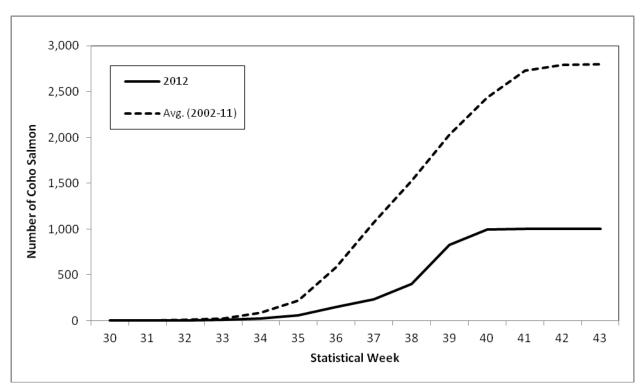


Figure 19.—Cumulative weekly catch of coho salmon in the Chilkat River fish wheels, for 2012 and the 2002-2011 average

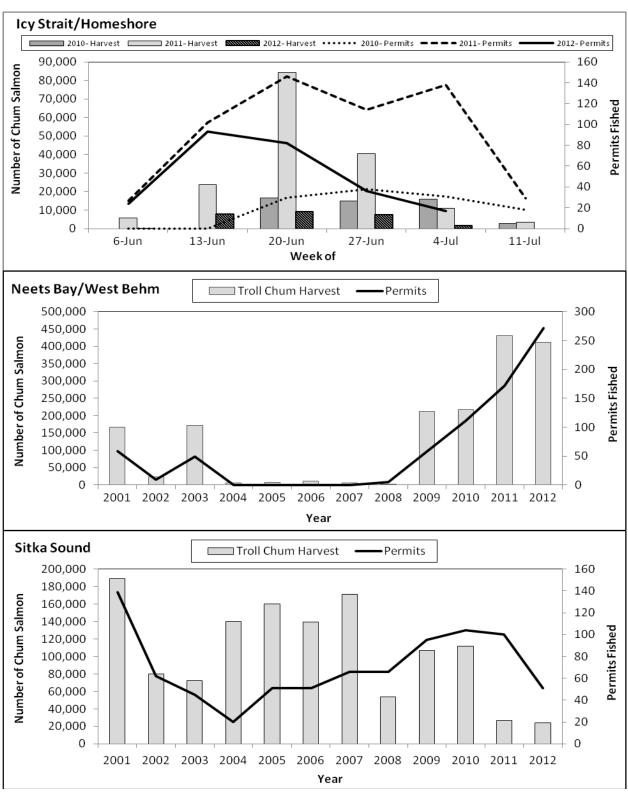


Figure 20.—Icy Strait (Homeshore and Point Sophia) troll harvest and weekly permits targeting chum 2010–2012, annual harvest and number of permits targeting chum, Neets Bay/West Behm Canal and Sitka Sound 2001–2012.

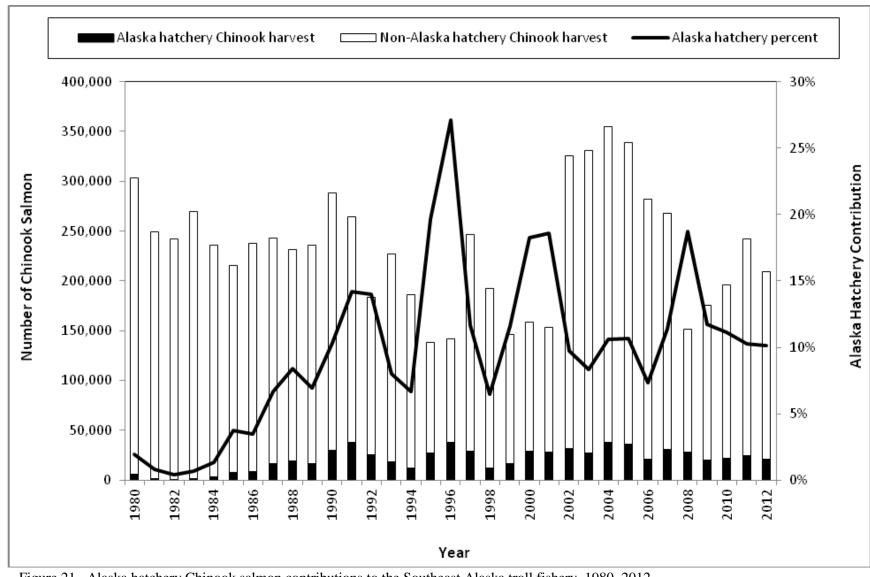


Figure 21.-Alaska hatchery Chinook salmon contributions to the Southeast Alaska troll fishery, 1980-2012.

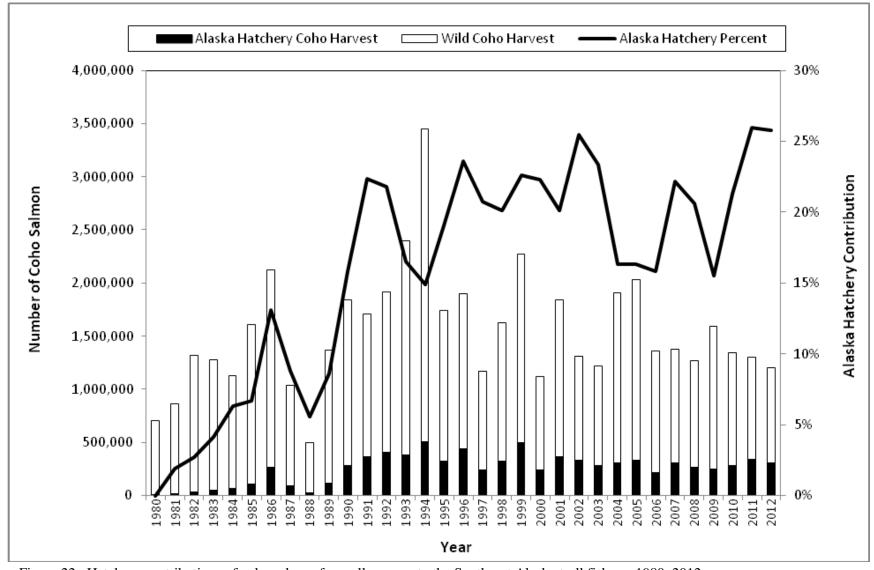


Figure 22.—Hatchery contributions of coho salmon from all sources to the Southeast Alaska troll fishery, 1980–2012.

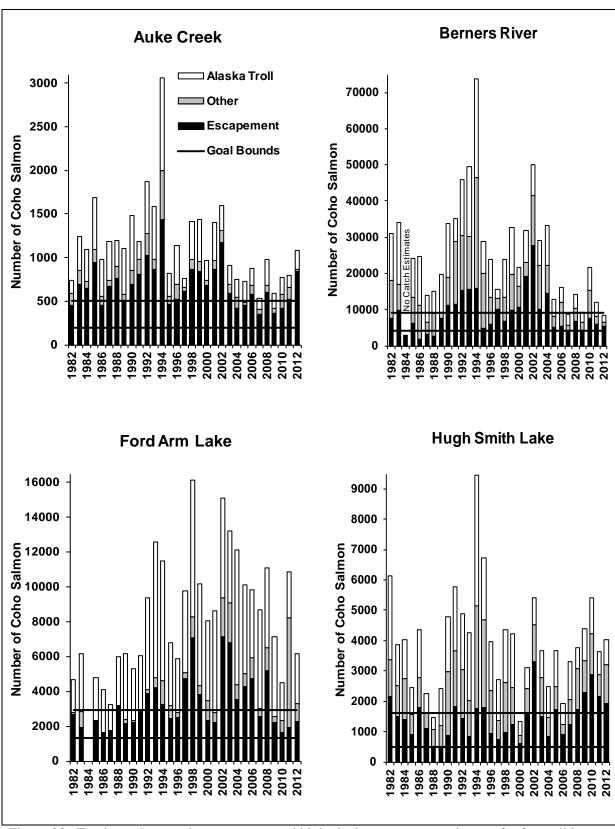


Figure 23.—Total run size, catch, escapement and biological escapement goal range for four wild Southeast Alaska coho salmon indicator stocks, 1982–2012.

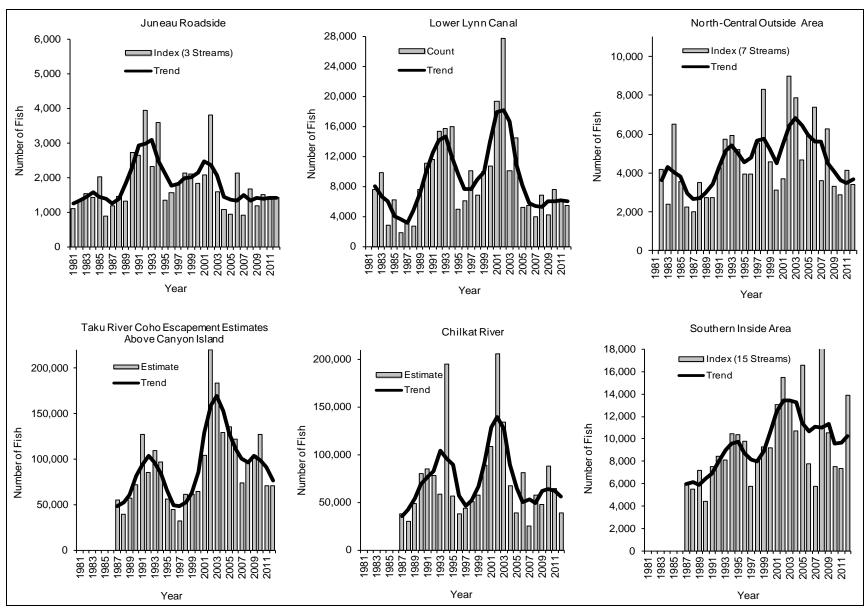


Figure 24.—Coho salmon escapement counts and estimates in index streams in five areas of Southeast Alaska, 1981–2012.

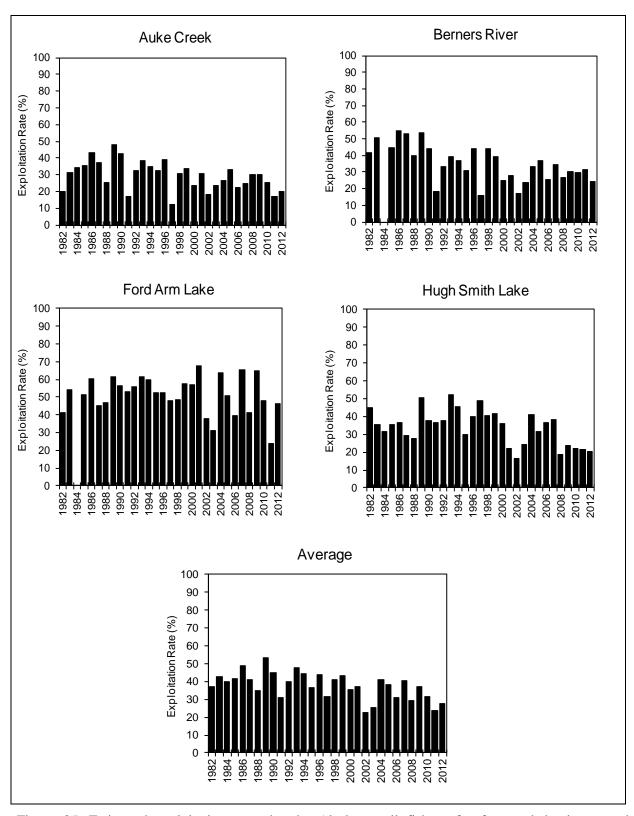


Figure 25.–Estimated exploitation rates by the Alaskan troll fishery for four coded wire tagged Southeast Alaska coho salmon stocks, 1982–2012.

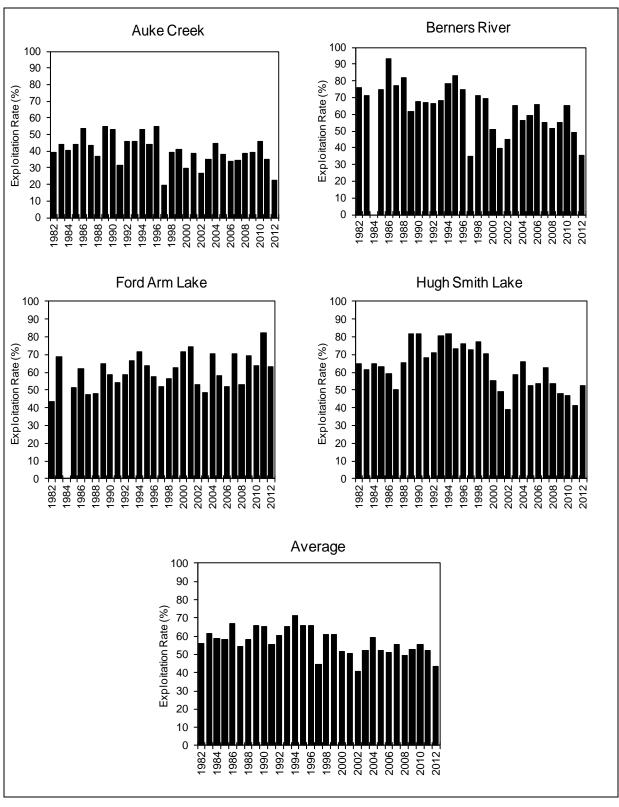


Figure 26.–Estimated total exploitation rates by all fisheries for four coded wire tagged Southeast Alaska coho salmon stocks, 1982–2012.