# Annual Management Report of the 2011 Southeast Alaska Commercial Purse Seine and Drift Gillnet Fisheries

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February 2012

Alaska Department of Fish and Game

**Divisions of Sport Fish and Commercial Fisheries** 



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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 <sup>3</sup> /s	south	S	(simple)	r
foot	ft	west	W	covariance	cov
gallon	gal	copyright	©	degree (angular )	0
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	≤
<b>3</b>	<b>J</b>	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 <sub>2</sub> 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	$H_0$
hour	h	latitude or longitude	lat. or long.	percent	%
minute	min	monetary symbols	C	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	A	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	рH	U.S.C.	United States	population	Var
(negative log of)	r		Code	sample	var
parts per million	ppm	U.S. state	use two-letter	P.20	
parts per thousand	ppin ppt,		abbreviations		
r Per monomin	% %		(e.g., AK, WA)		
volts	V				
watts	W				

# FISHERY MANAGEMENT REPORT NO.12-03

# ANNUAL MANAGEMENT REPORT OF THE 2011 SOUTHEAST ALASKA COMMERCIAL PURSE SEINE AND DRIFT GILLNET FISHERIES

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This document should be cited as:

Davidson, W., R. Bachman, D. Gordon, A. Piston, K. Jensen, K. Monagle, T. Thynes and S. Walker. 2012. Annual management report of the 2011 Southeast Alaska commercial purse seine and drift gillnet fisheries. Alaska Department of Fish and Game, Fishery Management Report No 12-03, Anchorage.

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# **TABLE OF CONTENTS**

LIST OF TABLES	Page
LIST OF TABLESLIST OF FIGURES	
ABSTRACT	
INTRODUCTION	1
PURSE SEINE FISHERIES	1
Purse Seine Chinook Salmon Harvest	3
Northern Southeast Alaska Purse Seine Fisheries	4
Northern Southeast Alaska Inside Fisheries	5
District 9	5
District 10	
District 11	
District 12	
Section 13-C	
District 14	
Northern Southeast Alaska Outside Fisheries	
Section 13-A	
Northern Southeast Alaska Fall Chum Salmon Fishery	
Southern Southeast Alaska Purse Seine Fisheries	
Southern Southeast Alaska Outside Fishery	
District 4	
Southern Southeast Alaska Inside Fisheries	
District 1	
District 2	
District 3	
District 5	
District 6	24
District 7	
Southern Southeast Alaska Fall Chum Salmon Fishery	
SOUTHEAST ALASKA SALMON ESCAPEMENTS	26
Pink Salmon	
Southern Southeast Sub-region	
Northern Southeast Inside Sub-region	
Northern Southeast Outside Sub-region	27
Chum Salmon	27
Southern Southeast Sub-region	27
Northern Southeast Inside Sub-region	
Northern Southeast Outside Sub-region	
Fall-Run Chum Salmon	27
Sockeye Salmon	28
DRIFT GILLNET FISHERIES	28
Drift Gillnet Chinook Salmon Harvests	29
District 1: Tree Point	30
Districts 6 and 8: Prince of Wales and Stikine	31
Fishery Overview	
Chinook Salmon Fishery	

# **TABLE OF CONTENTS (Continued)**

	Page
Sockeye Salmon Fishery	
Coho Salmon Fishery	
District 11: Taku/Snettisham	
Fishery Overview	
Sockeye Fishery	
Coho Fishery	
Harvest and Escapement Summary	
District 15: Lynn Canal	43
Fishery Overview	43
Section 15-A Sockeye Fishery	44
Section 15-A Fall Chum and Coho Fishery	
Section 15-B and 15-C Fisheries	
Section 15-C Fall Chum and Coho Fishery	
HATCHERY HARVESTS	
Traditional Common Property Harvests	
Terminal Harvest Area Common Property Harvests	
Neets Bay	
Nakat Inlet	
Anita Bay	
Speel Arm	
Hidden Falls	
Medvejie/Deep Inlet	
Boat Harbor	
Hatchery Cost Recovery Harvests	
CANADIAN TRANSBOUNDARY RIVER FISHERIES	56
Introduction	56
Stikine River	56
Taku River	58
ANNETTE ISLAND FISHERIES	60
ACKNOWLEDGEMENTS	61
REFERENCES CITED	61
TABLES	63
FIGURES	113

# LIST OF TABLES

Table	Pag	ge
1.	Southeast Alaska annual commercial, common property, purse seine salmon harvest (from traditional and terminal areas), in numbers of salmon, by species, 1980–2011.	
2.	2011 Southeast Alaska commercial purse seine salmon harvest by district, fishery, and species	
3.	2011 Fishery Exvessel Value by area gear type and species, estimated by prices reported on fish tickets.	
4.	Northern Southeast annual commercial, common property, purse seine salmon harvest (from traditional and terminal areas), in numbers, by species, 1980–2011	67
5.	Southern Southeast Alaska annual commercial, common property, purse seine salmon harvest from traditional and terminal areas), in numbers, by species, 1980–2011.	
6.	Commercial purse seine fishing time, in hours open per day and statistical week by district and section, for Northern Southeast Alaska in 2011.	
7.	Commercial purse seine fishing time, in hours open per day and statistical week by district and section, for Southern Southeast Alaska in 2011.	
8.	Commercial purse seine fishing time, in hours open per day and statistical week for Neets Bay, Kendrick Bay, Anita Bay, Hidden Falls, and Deep Inlet Terminal Harvest Areas (THA) in Southeast Alaska in 2011.	
9.	2011 Southeast Alaska pink salmon escapement indices and biological escapement goals by sub-region	
10.	Southeast Alaska pink salmon spawning escapement target ranges by district, for which the escapement index for each district and year was within, above, or below the management target range, from 2002 to 2011.	
11.	Southeast Alaska pink salmon spawning escapement target ranges by stock group (in millions), and years for which the escapement index for each stock group was within, above, or below the management target range, 2002–2011.	
12.	Sustainable escapement goals and escapement indices for Southeast Alaska chum salmon, 1980–2011 (in thousands).	
13.	Escapement estimates for Southeast Alaska sockeye salmon stocks in 2011, compared to escapement goals.	
14.	Commercial drift gillnet fishing time, in hours open per day and statistical week by district and section, for Southeast Alaska in 2011.	
15.	Commercial drift gillnet fishing time, in hours open per day and statistical week for Nakat Inlet, Boat Harbor, Deep Inlet, Speel Arm, Neets Bay, and Anita Bay Terminal Harvest Areas (THA) in Southeast Alaska in 2011.	89
16.	Alaska total commercial, common property, drift gillnet salmon harvest (from traditional and terminal areas), in numbers, by species, 1980–2011.	93
17.	Southeast Alaska 2011 commercial drift gillnet salmon harvest, in numbers, by area, harvest type, and species.	
18.	Southeast Alaska annual Portland Canal / Tree Point (District 1) traditional and terminal harvest area drift gillnet salmon harvest, in numbers, by species, 1980–2011	
19.	Southeast Alaska annual Prince of Wales (District 6) traditional and terminal harvest area drift gillnet salmon harvest, in numbers, by species, 1980–2011	
20.	Southeast Alaska annual Stikine (District 8) traditional and terminal harvest area drift gillnet salmon harvest, in numbers, by species, 1980–2011.	
21.	Southeast Alaska annual Taku/Snettisham (District 11) traditional and terminal harvest area drift gillnet salmon harvest, in numbers, by species, 1960–2011	
22.	Southeast Alaska annual Lynn Canal (District 15) traditional and terminal harvest area drift gillnet salmon harvest, in numbers, by species, 1980–2011	
23.	Annual common property purse seine harvests from terminal harvest areas (THA) in Southeast Alaska, 1990–2011.	
24.	Annual common property drift gillnet harvests from terminal harvest areas (THA) in Southeast Alaska, 1990–2011.	
25.	Southeast Alaska region 2011 private hatchery cost recovery salmon harvest by district, organization, special harvest area, and species.	

# **LIST OF TABLES (Continued)**

Table	P	age
26.	Southeast Alaska region private hatchery cost recovery harvest in numbers by species, 1977–2011	
27.	Annual Canadian Stikine River commercial and food fisheries harvests, 1972–2011.	
28.	Annual Canadian Taku River commercial and food fisheries harvests, 1979–2011	
29.	Annette Island Reserve annual commercial drift gillnet salmon harvest in numbers by species, 1980–	
	2011	.110
30.	Annette Island Reserve annual commercial purse seine salmon harvest in numbers by species, 1980–	
	2011	.111
	LIST OF FIGURES	
Figure	a P	age
1.	Southeast Alaska purse seine fishing areas. Fishing periods areas are determined by emergency order	0
2.	Locations of terminal harvests in Southeast Alaska showing common property Terminal Harvest Areas	
	(THAs), private hatchery cost recovery Special Harvest Areas (SHAs), and areas with both harvest	
	types.	.115
3.	Southeast Alaska purse seine fishery exvessel value in dollars (common property harvest), from 1975	
	to 2011	.116
4.	Southeast Alaska Region annual common property purse seine salmon harvest (traditional and terminal	
	harvest areas), in numbers of fish, by species, from 1960 to 2011	.117
5.	Trends of pink salmon harvest and pink salmon escapement index for Southeast Alaska, all subregions	
	combined, from 1960 to 2011.	.118
6.	Annual pink salmon escapement index for the Southern Southeast sub-region, 1960–2011 (Districts	
	101-108)	.119
7.	Annual pink salmon harvest and escapement index for the Northern Southeast Inside sub-region,	
	1960–2011 (Districts 109–112, 114–115, and 113 subdistricts 51–59).	.120
8.	Annual pink salmon escapement index for the Northern Southeast Outside subregion, 1960-2011	
	(District 113, subdistricts 22–44 and 62–96)	.121
9.	Wild summer-run chum salmon escapement indices for the Southern Southeast stock group (1980–	
	2011), Northern Southeast Inside stock group (1982–2011), and Northern Southeast Outside stock	
	group (1982–2011)	
10.	Traditional drift gillnet fishing areas in Southeast Alaska.	.123
11.	Southeast Alaska annual total commercial drift gillnet salmon harvest from traditional and terminal	
	harvest areas harvests, in numbers, by species, 1961 to 2011.	.124
12.	Southeast Alaska drift gillnet fishery exvessel value in dollars (common property harvests) from 1975	
	to 2011	125

## **ABSTRACT**

A total of 73.6 million salmon were harvested in the commercial salmon fisheries in the Southeast Alaska and Yakutat Region in 2011. The harvest by purse seine gear of 64.0 million fish included by harvest type: traditional fisheries (58.0 million); hatchery terminal area harvest (0.8 million); hatchery cost recovery (4.5 million); Annette Island (0.7 million) and miscellaneous (<0.1 million). Common property seine harvests of 58.8 million salmon were 39% above the most recent 10-year average harvest of 42.2 million, and ranked as 8<sup>th</sup> highest since statehood. The drift gillnet gear harvest of 5.8 million fish by harvest type included: traditional fisheries (4.3 million); hatchery terminal harvest (1.0 million); and Annette Island (0.5 million). Common property drift gillnet harvests of 5.2 million salmon were 30% above the recent10-year average harvest of 4.0 million, and were a record since statehood.

Key words: Commercial fisheries, Alaska Department of Fish and Game, Annual Management Report, purse seine, drift gillnet, Southeast Alaska, Chinook salmon, sockeye salmon, coho salmon, pink salmon, chum salmon, traditional harvests, common property harvests, terminal harvest area, cost recovery harvests, Annual Management Report, AMR

## INTRODUCTION

This report describes the 2011 Southeast Alaska salmon net fisheries including the purse seine, drift gillnet, terminal harvest area, hatchery cost recovery, Canadian Transboundary River, and Annette Island fisheries. A summary discussion of fishery management actions and outcomes is presented along with landing estimates compared to historical production. This annual report was formerly part of a report that summarized the Region 1 commercial, personal use, and subsistence fisheries as a report to the Alaska Board of Fisheries (BOF). An overview summary of the 2011 Southeast Alaska regional salmon fisheries (Pontius and Davidson 2011), as well as summaries of the 2011 Southeast Alaska regional troll fisheries (Skannes and Hagerman 2012), and the 2011 Yakutat Area set gillnet fisheries (Woods and Zeiser 2012) are published as separate reports and together describe the 2011 salmon season.

## PURSE SEINE FISHERIES

During the 52-year period since the time of statehood (1960–2011) the purse seine fishery has accounted for approximately 77% of the total commercial salmon harvest in the Southeast Alaska region. Pink salmon is the primary species targeted by the purse seine fleet and therefore most management actions are based on inseason assessments of the abundance of pink salmon. Other salmon species are harvested incidental to the pink salmon purse seine fishery. On average, by species, the common property purse seine harvests since 1962 account for 6% of Chinook, 43% of sockeye, 17% of coho, 89% of pink, and 59% of chum salmon harvests in the region (Pontius and Davidson 2011). Long term average species composition of the common property purse seine fishery harvest as percentages of the numbers of fish harvested includes: <0.1% Chinook, 2.0% sockeye, 1.1% coho, 87.4% pink, and 9.5% chum salmon (Table 1).

Commercial salmon fishing regulation [5 AAC 33.310(a)] allows traditional purse seine fishing in Districts 1 (Sections 1-C, 1-D, 1-E, and 1-F only), 2, 3, 4, 5, 6 (Sections 6-C and 6-D only), 7, 9, 10, 11 (Sections 11-A and 11-D only), 12, 13, and 14 (Figure 1). Although these specified areas are traditionally open to purse seine fishing, regulations mandate that specific open areas and fishing periods be established by emergency order. Purse seining took place in five Terminal Harvest Areas (THA) and nine hatchery cost recovery locations (Figure 2) as well as in the Annette Island Reserve in 2011. Traditional purse seine fisheries, fisheries in THAs, hatchery

cost recovery fisheries, Canadian Transboundary River fisheries, and the Annette Island Reserve are discussed in separate sections of this report.

Districts 1 through 7 (Southern Southeast) and Districts 9 through 14 (Northern Southeast) are grouped for purposes of forecasting, harvest tabulation, and management. However, because both the northern and southern portions are included in the same salmon registration area, purse seine fishermen can move freely between districts based on run timing and abundance. Efforts are made to coordinate management actions regionally to account for seine effort distribution and strength of returns. Inseason assessments of pink salmon run strengths are determined from a combination of spawning escapement information from aerial surveys, foot surveys, observations from vessels, and from fishery performance data (i.e., catch per unit effort (CPUE)). In addition, the Alaska Department of Fish and Game (ADF&G) charters purse seine vessels to conduct test-fishing assessments to determine run strength in selected areas, and conducts dockside sampling to determine pink salmon sex ratios to help assess run timing. Inseason run strength evaluations are made by comparing inseason information with historic data.

In 2011 the total harvest by purse seine gear was 64.0 million salmon, and the total common property purse seine harvest was 58.8 million salmon (Table 2). Common property fisheries include traditional wild stock fisheries and terminal area fisheries where fishermen compete to harvest surplus returns. The total common property purse seine harvest included approximately 27,800 Chinook, 499,000 sockeye, 347,000 coho, 55.2 million pink, and 2.7 million chum salmon. Historical common property purse seine harvests in traditional plus THA fisheries from 1980 to 2011 are presented in Table 1 for comparisons with long-term averages from 1960 to 2010, and during the recent 10-year period from 2001 to 2010. The 2011 season is 39% above the recent 10-year average of 42.2 million fish and ranks as the 8<sup>th</sup> largest common property purse seine harvest in the 52-year period since Alaska statehood.

Initial exvessel values based on prices reported on fish tickets are presented for the purse seine fishery as well as other fisheries in the region for comparison in Table 3. At \$112.5 million exvessel value the purse seine fishery is the highest value salmon fishery in Southeast Alaska. Figure 3 presents recent trends in value. Values for the purse seine fishery have increased from a low point in 2002 to a record high value in 2011. The total value includes \$27.3 million for Southern Southeast Alaska (Districts 1–7), \$80.1 million for Northern Southeast Alaska (Districts 9–14), and \$5.1 million for seine fisheries in Terminal Harvest Areas (THA). Initial estimates for the value of purse seine harvests by species based on prices from fish tickets indicates that pink salmon harvests were worth \$87.9 million, chum salmon were worth \$18.4 million, sockeye salmon were worth \$4.3 million, Chinook salmon were worth \$0.8 million, and coho salmon were worth \$1.1 million.

Total common property harvests in northern districts in 2011 were 47.2 million fish which set a new record since statehood and surpassed the previous high harvest by 5.5 million fish (Table 4). Harvests in southern districts of 11.6 million fish, ranked 33<sup>rd</sup> since statehood and were about half of the recent 10-year average (Table 5). The regional harvest forecast going into the 2011 season was 55 million pink salmon and the all-gear harvest was fairly close at 59 million. The great disparity of pink salmon run strength between northern and southern Southeast areas was not anticipated. Charts showing long-term harvest trends for pink, chum, sockeye, and coho salmon for the region are presented in Figure 4. Regional harvests of chum salmon of 2.7 million were below the long term average and well below the recent 10-year average. Harvests of sockeye salmon of 500,000 fish were below both long term and recent-year averages, but showed continued

improvement since low harvests in 2008. Harvests of coho salmon of 347,000 were somewhat above both long-term and recent-year averages. Harvests for Chinook salmon were greater than both long term and the recent 10-year averages. Compared with the recent 10-year average harvest by species, Chinook were 114% of the average, sockeye were 88%, coho were 108%, pink were 148%, and chum salmon were 69% (Table 1).

Table 2 presents a detailed breakdown of the 2011 purse seine harvests by species, fishery type, and district. Common property harvests include 58.0 million fish in traditional areas and 0.8 million fish in hatchery terminal areas. Cost recovery seine harvests to support privately operated salmon enhancement programs totaled 4.5 million salmon, of which 79% were chum salmon. Seine harvests reported by the Annette Island Reservation totaled 0.7 million salmon. Miscellaneous harvests of 63,000 salmon include test fisheries authorized by the department or illegally harvested fish, later confiscated by the Alaska Wildlife Troopers. Of the 58.0 million salmon harvested in traditional seine fisheries, 11.1 million were harvested in Southern Southeast districts and 46.9 million were harvested in Northern Southeast districts. At the district level, the largest harvests took place in districts 12, 13, 9, 14 and 10 which together accounted for 80 percent of traditional harvests in the region. Districts 12 and 13 were record harvests since statehood. District 10 ranked second since statehood, District 14 ranked third since statehood, and Districts 5 and 9 ranked fifth since statehood. Except for District 5, other districts in the region and southern districts in general produced below the recent 10-year average returns.

The 2011 the purse seine fishery began on Sunday, June 19 in Districts 2 and 12 and included the Kendrick Bay THA, District 2 shoreline outside Kendrick Bay, Tenakee Inlet, the Hidden Falls THA, and the Point Augusta index fishery. Following the season opener traditional seine fisheries were generally managed inseason. Summaries of the 2011 purse seine fisheries dates and times are shown for northern Southeast, southern Southeast, and for THAs in Tables 6, 7, and 8. Concurrent purse seine fishery openings began May 1–June 10 in Neets Bay THA and May 1–June 12 in Anita Bay THA. Rotational gear seine fisheries began June 14 in the Neets Bay THA, June 13 in the Anita Bay THA, and May 29 in the Deep Inlet THA. Exclusive seine gear fisheries began on June 15 in the Kendrick Bay THA. The traditional summer pink salmon season ran through the September 5–6 fishing period in most districts. Openings targeting fall chum salmon took place in District 2 between September 8 and October 8, and September 11 in Section 9-B and on September 1 and 11 in Section 14-C. Concurrent gear openings resumed late in the season at Neets Bay THA and Anita Bay THA through November 10 with minimal harvest and effort.

During the 2011 purse seine fishery 379 permits were issued and 270 permits were fished (Pontius and Davidson 2011). Effort in 2011 increased by 35 permits compared with 2010 due to a higher forecast combined with good expected prices. In the 2008 season 35 permits were purchased in a buy-back program to initiate effort consolidation in the fishery.

Summary information for pink salmon escapements by subregion and district is presented in Tables 9, 10, and 11. Summary information for chum and sockeye salmon escapements is presented in Tables 12 and 13. Escapement information is described further in a later section of this report.

#### PURSE SEINE CHINOOK SALMON HARVEST

Regulation [5AAC 33.392(a)] states that unless otherwise specified, Chinook salmon taken and retained must measure at least 28 inches from the tip of snout to tip of tail. This regulation

applies to all purse seine, troll, and recreational fisheries, but not to the gillnet fisheries. Further, regulation [5ACC 29.060 (b)(1)] establishes a purse seine harvest allocation for Chinook salmon 28 inches or larger of 4.3% of the annual harvest ceiling established by the Pacific Salmon Treaty (PST). For the 2011 season, based on a coastwide Abundance Index of 1.69 derived by the Chinook Technical Committee, the Alaska annual harvest ceiling was 294,800 fish and resulted in a purse seine harvest allocation of 12,676 *Treaty* Chinook salmon. The Alaska Board of Fisheries (BOF) adopted the Chinook salmon harvest guidelines as part of an overall allocation scheme among commercial and sport users resulting from implementation of the PST. Regulation [5ACC 33.392(b)] states that a purse seine permit holder may take but may not sell Chinook salmon between the sizes of greater than 21 inches and less than 28 inches. Chinook salmon less than 28 inches do not count against the Chinook harvest quota. In addition, it is specified in regulation [5ACC 29.060(c)] that Chinook salmon produced by Alaska hatcheries do not count against the seasonal harvest guideline, minus adjustments for pre-treaty hatchery production and estimation error.

The primary management tool used to limit purse seine harvests within the Chinook salmon harvest allocation is to establish fishing periods, by emergency order, when large Chinook salmon cannot be retained. When non-retention is implemented, such action is preferable either early or late in the season when the total salmon harvest rate is low. This allows for a more efficient release of large Chinook and minimizes the impact of incidental mortality. Retention of Chinook salmon 28 inches or larger is permitted as long as possible during the period when harvest rates for other species are high. Once the Chinook salmon seine allocation is harvested, non-retention is required. The total 2011 common property purse seine harvest (traditional and THA) of Chinook salmon was 27,770 fish, of which 25,983 were reported as 28 inches or larger and 1,787 as less than 28 inches (Table 1). Subsequent accounting for treaty purposes is based on a purse seine harvest of large Chinook salmon of 26,404. The seine harvest of Alaska hatchery Chinook salmon is estimated at 17,901 (Skannes, et al. 2012). Of these Alaska hatchery fish, 17,264 were designated as "hatchery add-on" Chinook salmon that did not count against the seasonal harvest guideline. For all districts 8,036 large Chinook salmon were caught in traditional fisheries and 17,947 were caught in hatchery terminal area fisheries. The total large Chinook harvest of 26,404 minus the add-on Chinook harvest translates into a Treaty Chinook salmon harvest of 9,140. As a result, the total purse seine harvest was 3,536 fish below the Chinook salmon treaty allocation for purse seine gear. The all-gear U.S. harvest of Treaty Chinook harvest of 289,980 was 1.6% below the allgear quota of 294,800 Chinook salmon.

# NORTHERN SOUTHEAST ALASKA PURSE SEINE FISHERIES

Purse seine fishing in Northern Southeast Alaska includes the fisheries that occur in Districts 9 through 14. Fishery management is driven primarily by pink salmon stock abundance, but also includes fisheries in hatchery terminal harvest areas. In 2011 traditional and THA purse seine harvests in Northern Southeast Alaska totaled 47.2 million fish, and included 9,700 Chinook, 212,000 sockeye, 229,000 coho, 45.6 million pink, and 1.2 million chum salmon (Tables 2 and 4). Common property harvests in Northern Southeast Alaska set a new record over the 52-year period since Alaska statehood. The previous highest harvest was 41.7 million fish in 1999. The 2011 harvest greatly exceeded the recent 10-year average harvest of 17.6 million and the average since statehood of 10.9 million salmon. The harvests of Chinook, sockeye and coho salmon were above the recent 10-year average and long term average harvests. The harvests of chum salmon

were below both of these averages. Hatchery chum salmon returns to the two facilities operated by NSRAA were weak in 2011.

#### **Northern Southeast Alaska Inside Fisheries**

#### District 9

Section 9-A is comprised of two separate stock groups with separate management approaches. The northern (upper) portion of Section 9-A is managed for early to mid-run pink salmon returning to Red Bluff Bay, and the southern (lower) portion of Section 9-A is managed for laterun pink salmon returning to streams from Patterson Bay to Little Port Walter. This season, twelve fishing periods were provided in upper Section 9-A from July 14 through September 6, based on strong returns of pink salmon to Red Bluff Bay. After a strong beginning, pink salmon escapements were lagging in late-July and early August and the fishery was closed for a period of 10 days. After the first week of August pink salmon escapements began to build again and the fishery was opened on August 12 and remained on a 2-day on/2-off fishing schedule for the remainder of the season. Earlier openings were restricted to north of the southern entrance of Red Bluff Bay in consideration of the Falls Lake subsistence sockeye fishery. On August 12, Section 9-A was opened north of Armstrong Point, except that the Chatham Strait shoreline approximately one mile either side of Red Bluff Bay remained closed to increase escapement to Red Bluff Bay. The closure around Red Bluff Bay area remained in effect until August 20 when that shoreline was re-opened. The total harvest in Upper Section 9-A was 924,000 pink salmon with effort ranging from 2 to 11 boats. Lower Section 9-A was open for seven 39-hour periods with a total harvest of 147,000 pink salmon. Pink salmon escapement to upper Section 9-A was at the upper range of the escapement target and lower Section 9-A escapement was well above the target range, largely due to exceptional escapement at Sashin Creek.

Major commercial fishing areas in Section 9-B include the waters adjacent to Admiralty Island between Eliza Harbor and Point Gardner and the waters adjacent to the western side of Kuiu Island from Kingsmill Point to Tebenkof Bay. Based on the parent-year's escapement, the 2011 overall return to Section 9-B was expected to be good to the Kuiu Island portion and mediocre to the Eliza Harbor area. The parent-year escapement to the Eliza Harbor area was just below the escapement target range. The first opening in Section 9-B occurred on July 22 for 39-hours. Section 9-B was open north of Swaine Point with area restrictions closing off inner bays, Keku Straits and Point Gardner. The harvest was good with approximately 523,000 pink salmon harvested. The next opening for many areas in northern Southeast was a 4-day, 87-hour opening. Section 9-B was open for 39-hours during the first 2 of the 4 days starting July 26 with the same open area as the previous opening. More time was not given due to concerns for run strengths of some stocks in the area and high fishing pressure in northern Chatham. Effort increased and harvests remained good with approximately 446,000 pink salmon harvested. The next regional opening was for 39 hours. Section 9-B was open north of Point Cosmos for the full 39-hours starting on July 31. The Bay of Pillars area restrictions were relaxed for this opening. The number of boats fishing was similar to the previous opening with 23 boats, however, harvest fell substantially to 194,500 pink salmon. The following 39-hour opening on August 4 and 5 had the same area open. Effort dropped to 13 boats and 195,500 pink salmon were harvested. Due to lagging escapements in Rowan and Tebenkof Bays, the next two 39-hour openings included restrictions to limit harvest in those bays. The fishing area for the opening starting August 8 restricted fishing to north of Point Sullivan. Starting August 12, Section 9-B opened in its entirety with restrictions to fishing areas only in Keku Strait, and Eliza, Rowan, and Tebenkof Bays. The harvest was very good for these two openings with 567,000 and 736,000 pink salmon harvested. The next opening on August 16 was for 39-hours and Tebenkof and Rowan Bay restrictions were removed because escapements in these areas showed marked improvements from the previous weeks. In addition, the area immediately adjacent to Point Gardner was open for the first time. This opening was the largest opening of the year for Section 9-B, with 1,033,000 pink salmon harvested. Section 9-B continued on a 2-day on/2-day off rotation for 5 more openings, with the final opening occurring on September 5 and 6. Area restrictions for this final opening limited fishing to the shoreline south of Kingsmill Point and north of Point Cosmos. Security Bay was open for one 12-hour opening on September 11 to access fall chum salmon; however, there was no reported harvest from this fishing period.

The 2011 Section 9-B salmon harvest was well above average for all species with the exception of chum salmon. The pink salmon harvest of 5,912,300 fish was well above the average annual harvest since statehood of 1,784,500 fish and was the fifth highest harvest on record. The Section 9-B sockeye salmon harvest of 20,600 fish was well above the average of 7,900 fish; the coho salmon harvest of 47,600 fish was above the average of 21,100 fish; and the chum salmon harvest of 63,400 fish was well below the average of 123,100 fish.

Pink salmon returns to Section 9-B were good with all stock groups within their respective escapement index goal ranges. Section 9-B indexed escapement of 890,000 pink salmon was within the target goal range of 480,000 to 1,130,000 fish.

The return of fall chum salmon to Section 9-B was mediocre in terms of escapement. The indexed chum salmon escapement to Security Bay was within the target range; however, chum salmon escapement to Port Camden was below the target ranges for both Port Camden chum salmon runs.

#### District 10

District 10 encompasses much of the waters of Frederick Sound and the southern portion of Stephens Passage. Its eastern boundary is about 15 miles northwest of Petersburg. Major fishing areas include the waters in and adjacent to Port Houghton, Windham Bay, and the waters adjacent to the southeast side of Admiralty Island including: Gambier Bay, Pybus Bay, and the Big Bend at the mouth of Seymour Canal.

The 2011 pink salmon return to District 10 was expected to be fair based on parent year escapements. The Point Gardner test fishery has proven to be a very good indicator of pink salmon returns to District 10. The first test fishery at the end of June was below average but the next test fishery during the first week of July was very good. Overall, the 4 test fishing periods at Point Gardner indicated an above average return to District 10. The first opening in District 10 was for 15 hours on June 26 along mainland portion of District 10. Effort and harvest was minimal. The next 15-hour opening occurred on July 3. Effort increased and harvest was average for the time of year. The third opening was also a 15-hour opening on July 7. Effort dropped to 9 boats fishing and harvest increased slightly. Escapements were starting to build at this time. On July 10, the same area opened again for 15 hours. Effort remained low with only 7 boats fishing but harvest increased substantially. The following opening starting on July 14 was the first 39-hour opening of the season. Open area expanded to include the Admiralty Island portion of District 10 with restrictions in place that closed off Gambier and Pybus Bays. Effort increased to 27 boats and pink salmon harvest was good with 393,000 fish harvested. The next opening was again a 39-hour opening occurring on July 18 and 19 with the same area restrictions as the

previous openings. Effort and harvest both increased in District 10 with 45 boats harvesting 874,000 pink salmon. The following opening was a 39-hour opening starting on July 22. A line closing off more of Gambier Bay was implemented and the lines were pulled in at Pybus Bay. Effort remained the same with 45 boats fishing and harvest increased to 1,039,000 pink salmon. By this time it was very apparent that District 10 had a much better than expected return of pink salmon. Harvest was good and escapements to all but the Gambier Bay systems were progressing nicely. The next opening was a 4-day opening on the mainland side of District 10 and a 39-hour opening on the Admiralty side starting July 26. Forty-two boats participated in this opening, harvesting nearly 600,000 pink salmon. After this opening, District 10 reverted back to a 2-day on/2-day off schedule for the remainder of the season with the final opening occurring on August 20 and 21. For the opening occurring on August 8 and 9, lines were pulled inside normal markers in Sandborn Canal and Windham Bay in efforts to harvest pink salmon in excess to escapement needs. The lines returned to normal makers for the remainder of the season.

The 2011 District 10 harvest and escapement of pink salmon was very good. The pink salmon harvest of 3,721,200 fish was well above the 823,000 fish average and the 2<sup>nd</sup> largest since statehood (Table 2). The pink salmon escapement index of 940,000 fish was within the target range of 590,000 to 1,410,000 fish (Table 10). The escapement indexes of all District 10 stock groups were within or above their goal ranges. The sockeye, coho, and chum salmon harvests were above average.

#### District 11

District 11, Section 11-A and 11-D are designated in regulation as areas that may be opened to purse seining by emergency order. Section 11-A has not been opened since statehood and Section 11-D, Seymour Canal, has opened infrequently. In 2011 record numbers of pink salmon were harvested in District 12, the Chatham Strait corridor area, and District 10, including the approach areas to Seymour Canal. No purse seine openings were provided in District 11 in 2011. It is assumed that Seymour Canal pink and chum salmon stocks are intercepted in these purse seine fisheries. Consistent with northern southeast Alaska pink salmon stock group performance, the two District 11 stock groups were strong in 2011. Seymour Canal, with an escapement index of 198,000 fish, was within the management target range of 160,000 to 400,000 fish. The Stephens Passage stock group, with an escapement index of 367,000 fish, was well above the upper bound of the 110,000 to 250,000 management target range.

#### District 12

Many separate purse seine fisheries operate in the waters of District 12 due to its large size. Areas opened to purse seining in 2011 included Tenakee Inlet, Freshwater Bay, Point Augusta index area, Howard Bay, West Admiralty Island shoreline, Southwest Admiralty Island shoreline, Chichagof Island shoreline, Catherine Island/Kelp Bay shoreline, and the Hidden Falls THA. The District 12 common property commercial purse seine fishery harvested a record 19.9 million pink salmon and 547,000 chum salmon. The pink salmon harvest was 345% of the 10-year average harvest of 5.7 million fish while the chum salmon harvest was 37% of the 10-year average harvest of 1.5 million fish. Management of the 2011 District 12 purse seine fishery was controversial because the incidental harvest of sockeye salmon was twice the 10-year average and one of the 4 inside sockeye stock groups, for which the department has formal escapement goals, fell short of obtaining the lower bound of its escapement goal range.

## Point Augusta, Howard Bay, Tenakee Inlet, and Basket Bay

The District 12 traditional purse seine fishery in upper Chatham Strait opened on Sunday June 19 with Point Augusta and Tenakee Inlet areas open for 15 hours. Early Tenakee Inlet openings target wild summer chum salmon returns. The Point Augusta openings are intended to provide information on pink salmon run strength and timing.

The Point Augusta index fishery takes place along a one-mile stretch of the Chatham Strait shoreline on northeast Chichagof Island, and has been opened annually between late June and mid-July since 1992 to monitor pink salmon run strength to northern inside waters. In 2011 there were four 15-hour openings from June 19 to July 7 that served as index fisheries. These openings were followed by 15 additional openings which incorporated adjacent shoreline area into common property seining. There were a total of 19 openings, most of which were 39-hours in length, from June 19 to September 6. Pink salmon harvest for the first four 15-hour index area openings through July 7 varied from four to almost seven times the recent 10-year average. Purse seine effort for these early index area openings was three times the average and catch per unit of effort was 160% of average. These harvest rates and effort levels were some of the highest ever recorded for this index area. Starting with the July 10 (stat week 29) fishery, the Point Augusta index area was opened in conjunction with other adjoining shoreline areas. At this time it had become clear to fishery managers that the pink salmon return to northern southeast Alaska inside waters was early and unusually strong. Escapement observations for early run fish to terminal areas in Tenakee Inlet and Port Fredrick were also very good and ahead of schedule. The Point Augusta seine harvest totaled a record high 1.4 million pink salmon, 292% of average, and 47,000 chum salmon, 95% of average. Stock composition was 99.0% pink and chum salmon, 0.5% sockeye salmon, and 0.5% coho salmon. The area was open for a total of 591 hours or 129% of the 10-year average 457 hours.

Howard Bay, statistical area 112-61, on the mainland shoreline north of Point Couverden was open six times in August due to the large return of pink and chum salmon to the local streams. No seine effort was drawn to these openings. The lack of participation was likely a combination of the challenging bottom topography of the bay, the poor quality of terminal fish, and the excellent harvest rates in nearby open areas. Howard Bay streams experienced some of the highest escapement index counts since statehood.

Tenakee Inlet pink salmon returns were very strong in 2011. Accordingly the inlet was open to normal markers for most of the season and closed September 6. The initial opening for 15-hours occurred June 19 in conjunction with Point Augusta and Hidden Falls Hatchery. Pink salmon harvest rates were well above average throughout most of July. Purse seine effort peaked July 7 with 49 vessels landing 494,000 salmon. For the remainder of the season no more than 16 vessels made landings in any given fishing period and only a few boats fished in Tenakee Inlet in August. Overall, a record 2.0 million pink salmon were harvested representing 286% of the 10-year average harvest. Chum salmon were less abundant and the total harvest of 43,000 fish was 68% of average. Stock composition was 99.6% pink and chum salmon, 0.3% coho salmon, and 0.1% sockeye salmon. Fishery openings totaled 591 hours, 210% of the 10-year average of 282 hours. The 2011 pink salmon escapement index for this stock, at 343,000 fish, is above the 10-year average and near the mid-point of the management target range of 210,000 to 510,000 fish.

The Chichagof Island shoreline north of Tenakee Inlet, including Freshwater Bay and extending north to Point Augusta, is known as the Freshwater Bay fishery. This area is open infrequently

because pink salmon production from local area streams is often not distributed evenly and significant harvestable surpluses are seldom identified. Since the 2000 season, the department has opened this area in only two other years, 2005 and 2009. In 2011, early season aerial surveys indicated this area, similar to Tenakee Inlet, was highly productive. Streams that comprise this stock group were observed to have an abundance of pink salmon and numbers of fish continued to build throughout July. In response, the department opened the area July 7, followed by 15 additional purse seine openings through September 6. The initial 15-hour opening received the highest effort of the season with 26 boats landing 288,000 salmon, 99.5% of which were pink and chum salmon. Peak harvest occurred during the three openings from July 18 to July 29 when 815,000 pink salmon were landed. No more than 18 vessels fished any one of these three openings. Overall, a record 1.6 million pink salmon were landed in this fishery and 36,000 chum salmon. Stock composition for the fishery was comprised of 99.2% pink and chum salmon, 0.4% sockeye salmon, and 0.4% coho salmon. There were a total of 16 openings totaling 507 hours, 265% of the average of 191 hours. Pink salmon returning to streams in this area experienced good escapements with an index count for this stock group of 177,000 fish, near the upper bound of the management target range of 80,000 to 180,000 fish.

Chichagof Island shoreline south of Tenakee Inlet, that provides the Basket Bay fishery, was initially opened July 14 coinciding with the first 39-hour fishing period of the 2011 season. This fishery was opened 2 weeks earlier than the average opening date of July 28 reflecting the early and very strong pink salmon return to the inside waters of northern southeast Alaska. A total of 14 seine openings occurred between July 14 and September 6. Peak harvest occurred during the three openings between July 18 and July 29 with 1.1 million salmon landed. Fishing effort peaked during the one and only 4-day fishery of the season from July 26 through July 29 with 23 seine vessels reporting landings. Overall, a total of 1.8 million salmon were landed in this fishery, 99.1% of which were pink and chum, 0.5% coho, and 0.4% sockeye salmon. This harvest is the 2<sup>nd</sup> highest salmon harvest for this fishery since statehood. Local area streams are grouped with the Freshwater Bay stock group which experienced very good escapements with an index count of 177,000 fish, near the upper bound of the management target range of 80,000 to 180,000 fish.

A subsistence sockeye fishery occurs in this area at the outlet stream to Kook Lake in Basket Bay. Not all the permits have been returned to date but as of this writing 248 sockeye salmon have been reported from 18 permits fished. Sockeye escapement to Kook Lake has been monitored by a weir project funded and operated through the USFWS 2005–2007, 2010, and again in 2011. The preliminary escapement for 2011 as counted by video camera through a net weir is estimated at 2,700 sockeye salmon. Compared to the limited time series of escapement data on record, this escapement is well below the average escapement of approximately 4,600 sockeye salmon.

#### **Hawk Inlet Shoreline**

The western shoreline of Admiralty Island between Point Marsden and Funter Bay is known as the Hawk Inlet shoreline. Salmon stocks returning to their natal streams in Lynn Canal, Stephens Passage, Seymour Canal, Frederick Sound, and Chatham Strait pass through this area after entering from the ocean through Icy Strait, and turn north or south depending on their ultimate destination. Purse seining along the Hawk Inlet shoreline has been controversial due to the abundance of sockeye salmon, many of which are destined to inside drift gillnet areas (Districts 11 and 15). The Hawk Inlet shoreline was closed during July between 1984 and 1988 by Board

of Fisheries regulations. In 1989 the Board of Fisheries adopted the Northern southeast seine salmon fishery management plan [5 AAC 33.366] that restored seining along the Hawk Inlet shore and placed a harvest limit of 15,000 sockeye salmon for the fishery during July. The board authorized the department to manage the Hawk Inlet fishery in July such that any portion of District 12 north of Point Marsden may be opened when a harvestable surplus of pink salmon is observed. The board also specified that open area and time must take into consideration conservation concerns for all species in the area. In January 2006, the Board further clarified that the sockeye harvest limit applied to only wild fish. The fishery has been opened in 1989, 1992-1994, 1999, 2001, 2003–2006 and 2009. A variety of factors and run strength assessments have been used by ADF&G to help determine whether prosecuting a July purse seine fishery on this shoreline is warranted, and if so, how the fishery will be structured. The assessment methods used by the Department to determine if a harvestable surplus of pink salmon exists are as follows:

- 1) Parent year pink salmon escapements: The 2009 Taku River fish wheel pink salmon catch was 60% of average. The lower Lynn Canal pink salmon escapement index of 85,000 was above the upper end of the management target range of 20,000 to 60,000 fish. Districts 11, 12, 14, and 15 parent year escapement indices were within or above management target ranges.
- 2) Test fishing was conducted along the Hawk Inlet shoreline June 24, June 30, and July 8, 2011. Pink salmon harvest was well above average in all 3 fisheries. Normally a fourth test fishery is conducted mid July but conflicts arose with ADF&G staffing and since the department had sufficient run strength information, the last test fishery was cancelled. Three common property seine openings for the Point Augusta index fishery June 19, June 26, and July 3 resulted in pink salmon CPUE of 140%, 180%, and 180%, respectively, of 10-year average CPUE. Effort levels were well above average so total harvest is likely a better indicator of fishery performance. The total number of pink salmon harvested at Point Augusta varied between 5 to 7 times the average harvests for those same dates given above.
- 3) Aerial surveys of the Hawk Inlet shoreline between June 26 and July 7 indicated a high abundance of pink salmon in upper Chatham Strait, particularly along the Hawk Inlet shoreline. Local area pink salmon streams such as Wheeler Creek and Greens Creek were developing well for the timing. All other areas surveyed (Tenakee, Port Fredrick, Hawk Inlet, Icy Straits, and Seymour Canal) were also developing well and ahead of schedule for achieving pink salmon escapement targets.
- 4) Pink salmon harvest in the District 115 drift gillnet fishery for statistical week 27 & 28 (26 June–9 July) was 3,000% (over 30 times average) and 177% of average. Noteworthy is that these pink harvests occurred with a 6" mesh restriction in place, less than average fishing time, and well above average effort. The District 11 gillnet pink salmon harvest for the same time frame was 90% and 193% of average with only 50% of average effort.
- 5) Taku River Canyon Island fish wheel cumulative catch of pink salmon through July 6 was 160% of average. Aerial surveys in D15 indicated a high abundance of pink salmon in the marine waters of Lynn Canal.
- 6) Many anglers participating in the Juneau area sport fishery release rather than keep their pink salmon, nevertheless the pink salmon harvest rate for June 27–July 3, was 6 rod hours per pink salmon, well below the 5-year average of 21 rod hours per pink salmon.

Overall assessment indicated pink salmon abundance was more than sufficient to justify opening the Hawk Inlet shoreline to common property purse seine fishing. Other salmon stocks, specifically sockeye salmon, were taken into consideration according to the northern southeast seine fishery management plan. Sockeye salmon stocks transiting the Hawk Inlet shoreline during July include Chilkat River and Lake, Chilkoot Lake, Berners Bay, Taku River, Snettisham wild, Snettisham hatchery, and local Chatham and Icy Strait stocks. The largest production comes from the Taku, Chilkat, Chilkoot, and Port Snettisham sockeye salmon stock groups. Early to mid-July stock assessment of Taku River sockeye salmon indicated average run strength. Terminal run projections were on track throughout the season to achieve the formal escapement goal of 71,000 to 80,000 fish. Taku River sockeye salmon run performance improved throughout the month of July and the final escapement estimate was approximately 112,000 fish. Expectations for adult sockeye salmon returning to Chilkat and Chilkoot Lakes were formally announced to be below or well below average in the 2011 Lynn Canal Management Plan. Early inseason stock assessment and harvest data supported below average stock performance by these two groups. However, escapement projections improved and by mid July Chilkoot Lake sockeye salmon were on track for achieving the escapement goal objective. At the same time, Chilkat River fish wheel and Chilkat Lake sonar counts of sockeye salmon were average for the timing. Final sockeye salmon escapement data indicate escapement objectives were met for Chilkoot Lake sockeye salmon. Chilkat Lake final escapement was 64,000 sockeye salmon or 91% of the 70,000 fish lower bound of its escapement goal range. Chilkat River mainstem sockeye salmon finished the season with above average escapement. The Berners Bay sockeye salmon index counts were well above average, and Taku River sockeye salmon escapement at 112,000 fish exceeded escapement objectives by 32,000 fish. Port Snettisham enhanced sockeye stocks performed better in 2011 than the previous 4 years. DIPAC's estimated 78,000 enhanced fish contribution represents 48% of the total District 11 commercial drift gillnet fishery harvest of 164,000 sockeye salmon. Wild Port Snettisham sockeye salmon originating from Speel Lake performed better than many recent years, resulting in one of the better escapements documented over the past 4 seasons.

Due to the average to below average sockeye fishery performance for districts 11 & 15 gillnet fisheries, and given some uncertainty early in the season regarding sockeye escapements to these districts, the department did not open large areas of District 14, Section 12-B, and/or parts of Section 11-A to purse seining in 2011 in spite of historic high pink salmon abundance to northern inside waters.

Initially Hawk Inlet was open to purse seining July 7, 2011. The fishery was limited to 12 hours and restricted within 2 nautical miles of the Admiralty Island shoreline from Point Marsden to the latitude of Point Couverden. Based on post season analysis of fish ticket data, pink salmon harvest was the largest on record for a 12 hour opening with 439,606 pink salmon landed from 40 vessels. There were 3,384 sockeye salmon landed of which 20% or 677 were identified as enhanced fish and 2,707 were identified as wild fish by ADF&G otolith lab analysis. Stock composition of the July 7 harvest was 99.2% pink and chum salmon and 0.69% sockeye salmon. Inseason harvest estimates were approximately 20% lower for all species. Other openings on this date included a small area of Section 14-B in front of Port Fredrick and the Chichagof Island shoreline from South Passage Point (including Tenakee Inlet and Freshwater Bay) to Point Augusta for 15 hours.

Hawk Inlet opened again July 10, 2011, and was again limited to 12 hours and restricted within 2 nautical miles of the Admiralty Island shoreline from Point Marsden to the latitude of Point Couverden. A harvest of 471,419 pink salmon from 51 vessels exceeded the July 7 record harvest. For the second time in two openings a new pink salmon harvest record was established for this fishery. There were 6,488 sockeye salmon landed of which 19% or 1,233 were identified as enhanced fish placing the wild sockeye harvest at 5,255 fish for this opening. Cumulative wild sockeye salmon harvest now totaled 7,962 fish. Inseason harvest estimates were again 20% lower than actual harvest for all species. Stock composition of the harvest for this opening was 98.4% pink and chum salmon and 1.2% sockeye salmon. Other nearby areas open on this date included 14-C on the Chichagof shoreline from Point Augusta to Point Sophia, a small area of Section 14-B in front of Port Fredrick, and the Chichagof Island shoreline from South Passage Point (including Tenakee Inlet and Freshwater Bay) to Point Augusta for 15 hours.

The third Hawk Inlet purse seine opening occurred July 14, 2011. The fishery was limited to 12 hours and restricted within 2 nautical miles of the Admiralty Island shoreline from Point Marsden to the latitude of Point Couverden. Harvest from the 35 boats identified as fishing the Hawk Inlet shoreline, was 355,284 pink and 3,836 sockeye salmon. Harvest rates declined significantly after several hours of good fishing and many boats relocated to other nearby open areas. Based on the post season analysis of sockeye salmon otolith samples collected from the fishery, 22%, or 844 were enhanced fish resulting in a wild sockeye salmon harvest of 2,992 fish. Cumulative wild sockeye harvest was now 10,954 fish. Harvest estimates inseason were lower because some vessels did not offload their harvest after their first day of fishing. A partial read of otolith samples inseason indicated the harvest was composed of 30% enhanced sockeye salmon. Therefore the inseason total harvest of wild sockeye salmon was estimated at 8,300 fish. Once all the otoliths were examined, weeks later, the result revealed 22% of the harvest was composed of enhanced fish. Stock composition of the harvest was 98.7% pink and chum salmon and 1.0% sockeye salmon. Other nearby areas open on this date included adjacent shoreline from Point Marsden to Point Hepburn, Section 14-C on the Chichagof shoreline from Point Augusta to Point Sophia, a small area of Section 14-B in front of Port Fredrick, and the Chichagof Island shoreline from Point Hayes to Point Augusta (including Tenakee Inlet and Freshwater Bay).

Hawk Inlet opened again July 18 for 39 hours marking the fourth and final fishery in July. The fishery was again constrained within 2 nautical miles of the Admiralty Island shoreline from Point Marsden to the latitude of Point Couverden. Fish ticket harvest data, from the 42 boats identified by the department as fishing the Hawk Inlet shoreline, was 1,243,091 pink and 11,607 sockeye salmon. This opening established a new record pink salmon harvest for this fishery and doubles the previous high harvest number. Based on the analysis of sockeye otolith samples collected from the fishery, 20% or 2,321 were enhanced fish resulting in a wild sockeye salmon harvest of 9,286 fish bringing the cumulative wild sockeye harvest to 20,240 fish. Inseason harvest estimates and sampling data indicated only 55% or approximately 8,300 wild sockeye salmon of the 15,000 harvest limit in July were taken prior to this opening. Based on this and with expectations the enhanced sockeye salmon component would continue to increase throughout the month of July, the Hawk Inlet fishery was opened for 39 hours concurrent with other fishery openings. In hindsight and based on post season data, the fishery should have been opened for no more than 15 hours to keep within the 15,000 wild sockeye salmon harvest limit in July. Stock composition of the harvest was 98.9% pink and chum salmon and 0.9% sockeye salmon. Other nearby areas open on this date included adjacent shoreline from Point Marsden to Point Hepburn, Section 14-C on the Chichagof shoreline from Point Augusta to Point Sophia, a

small area of Section 14-B in front of Port Fredrick, and the Chichagof Island shoreline from Point Hayes to Point Augusta (including Tenakee Inlet and Freshwater Bay).

All boats participating in the Hawk Inlet fishery are identified and recorded, including any boats that may move to or from adjacent open fishing areas. All sockeye salmon harvested by any seine vessel identified as fishing north of Point Marsden during any opening are counted against the 15,000 sockeye salmon harvest limit, per the catch accounting regulation adopted by the Board of Fish in 2003.

Stock assessment of the Hawk Inlet fishery is sampled at Ocean Beauty's Excursion Inlet facility. Otolith samples from test fisheries and common property openings are taken from sockeye salmon to estimate contribution of hatchery stocks to the catch. Sockeye salmon harvested in the test fishery are also sampled for scales; these samples provide a qualitative assessment of the contribution of Chilkoot and Chilkat Lake sockeye salmon to the catch. In 2011 scale pattern analysis indicated 13% of the sockeye harvested in the Hawk Inlet fishery were of Chilkoot Lake origin, 17% were of Chilkat Lake origin, and 70% were from origins other than Chilkat or Chilkoot Lake.

Total harvest for the Hawk Inlet fishery in 2011 was 25,315 sockeye salmon, 2,509,400 pink salmon, and 157,632 chum salmon. The sockeye salmon total harvest was the highest since 1989 and consisted of 20,240 wild and 5,075 enhanced fish. This is the first time the wild sockeye salmon harvest limit has been exceeded for this fishery. Stock composition of the fishery was 99.1% pink and chum salmon and 0.9% sockeye salmon. The Hawk Inlet shoreline was closed July 19 for the remainder of the month as required by the northern seine fishery management plan in regulation. ADF&G management re-opened this fishery in August based on the continued abundance of north migrating pink salmon.

## **West and Southwest Admiralty**

The west Admiralty shoreline south of Hawk Inlet initially opened from Point Marsden south to Point Hepburn July 14 coinciding with the first 39-hour fishing period of the 2011 season. This fishing area opens, on average, July 20. However, given the early and strong pink salmon fishery performance in 2011 coupled with strong developing escapements, the department opened this area early and expanded the southern boundary to Fishery Point on July 22 and then again expanded the southern boundary to Parker Point July 26. The July 26–29 opening was the one and only 4-day fishery of the season. Department concerns with continuation of the 4-day on/1day off fishing schedule were; 1) observed seine effort was twice the average with 116 boats observed July 26, 2) recognition that processing capacity is no longer limiting, 3) some pink salmon stock groups such as SW Admiralty, SE Admiralty, and Seymour Canal were still in need of additional escapement to reach management targets, and 4) sockeye returns to district 15 and district 11, although improving throughout July, were lagging based on in-season stock assessment data. Therefore ADF&G management decided not to continue with the aggressive 4day on/1-day off fishing schedule. All other openings were 39-hour openings (2-day on/2-day off fishing regime). A total of 14 seine openings occurred for this fishery from July 14 to September 6. Peak effort occurred during the four openings July 14 through July 29, with 61 to 79 boats landing just shy of 6 million salmon. Worth noting, this harvest from 4 openings, in a relatively small area, is equivalent to the combined District 12 and District 14 10-year average harvest for the entire season. Total pink salmon harvest for the west Admiralty fishery including Hawk Inlet was a record high 10.3 million fish, representing 325% of the 10-year average harvest of 3.1

million fish. Chum salmon harvest was also above average at 225,000 fish representing 132% of the 10-year average 170,000 fish. Stock composition of the harvest was 99.0% pink and chum, 0.7% sockeye, and 0.3% coho salmon. Fishery openings totaled 618 hours, 128% of the 10-year average 482 hours. Although the total time allowed for fishing was slightly above average, the time allowed in August was below average primarily due to the large seine effort attracted to northern waters. Escapement for the West Admiralty stock group was very good with an index count of 119,000 fish, near the upper bound of the management target range of 50,000 to 120,000 fish.

Southwest Admiralty seine fisheries occur south of Angoon in statistical areas 112-18 and 112-19 and often include openings inside some of the bays. In 2011 the southwest Admiralty fishery initially opened from Point Samuel to Wilson Point July 26 for 39-hours. At this time all other fishing areas in Chatham Strait were open for 4 days or 87 hours. Pink salmon returns to southwest Admiralty streams were not as strong as areas to the north so this fishing area was managed a bit more conservatively. It wasn't until August 16 that the southern boundary of this fishery was expanded south to Point Gardner. Peak fishing effort occurred August 8-9 with 23 vessels landing 375,000 salmon. Overall, a total of 1.2 million pink salmon and 14,000 chum salmon were harvested from the 11 openings that occurred from July 26 to September 6. The 2011 pink salmon harvest is equal to the 10-year average harvest while the chum salmon harvest is only 34% of the 10-year average. Stock composition of the harvest was 99% pink and chum, 0.7% coho, and 0.3% sockeye salmon. Fishery openings totaled 429 hours, 106% of the 10-year average 404 hours. Escapement for the southwest Admiralty stock group was good at 215,000 fish, within the management target range of 100,000 to 250,000 fish.

Subsistence sockeye and coho fisheries occur in this area close to Angoon in Kanalku Bay and near the outlet of the Hasselborg River in Salt Lake. ADF&G management, in recognition of the importance of this subsistence fishery to Angoon residents, closed approximately 10 miles of shoreline from Parker Point to Point Samuel to provide additional protection for sockeye returning to Mitchell Bay. Closing these waters has been a standard management action for many years. In 2011 sockeye salmon escapement to Kanalku Lake was monitored by a weir project funded through the USFWS and operated by ADF&G. This is the 5<sup>th</sup> year for this weir project and 11<sup>th</sup> year of escapement estimates for this lake by a mark/recapture project (2001–2011). Escapement as counted through a metal picket weir in 2011 is estimated to be 733 sockeye salmon, 56% of the average escapement of 1,307 fish. ADF&G expectations for 2011 were not good due to the low parent year escapement weir count of only 461 sockeye salmon. The subsistence fishery in Kanalku Bay this year has a reported harvest of 252 sockeye salmon from 19 permits fished. Not all the permits have been returned to date.

## **Catherine Island and Kelp Bay**

Section 12-A south of Point Hayes along the Catherine Island and Baranof Island shorelines is managed from the Sitka office. Within this area is the Hidden Falls Hatchery THA as well as several productive pink and chum salmon systems in Kelp Bay. In early to mid-July, Ralph's Creek in Middle Arm is monitored for summer chum salmon returns. The South Arm also produces summer chum however recent escapements to the South Arm have been at historically low levels. If the chum salmon escapement is adequate in the Middle Arm then Kelp Bay and the Catherine Island shoreline are normally opened south of the Point Lull Light providing additional area to harvest Hidden Falls Hatchery as well as harvest of wild stock chum salmon. This season, both Kelp Bay wild stock and Hidden Falls Hatchery chum salmon returns were

weak and no chum salmon openings occurred in Kelp Bay. Pink salmon returns to Kelp Bay streams were earlier than normal and very strong, with restrictions inside of normal markers from the initial opening on July 10. For the first 39-hour period, the fishery was opened only inside of Kelp Bay due to broodstock concerns at Hidden Falls Hatchery. For the following period Kelp Bay and the Catherine Island shoreline were opened north of South Point and remained open commensurate with regional openings through September 6. By July 26, Hidden Falls Hatchery broodstock goals were considered secure and the Hidden Falls Hatchery THA was opened to harvest abundant pink salmon as well as surplus hatchery chum salmon. As an extension of the Kelp Bay traditional fishery, portions of the Hidden Falls THA were opened with the regional seine schedule through September 6. In the Kelp Bay fishery, the total harvest was 1,682,000 pink salmon, the second largest pink salmon harvest since statehood. Approximately 71,000 chum salmon were also harvested in the traditional fishery of which 50,000 were estimated to be hatchery origin. Approximately 70% of the pink salmon harvest occurred prior August 1. The pink salmon escapement count index for the Kelp Bay stock group was 60% above the upper range of the management target. The chum salmon peak escapement count to Ralph's Creek in Middle Arm Kelp was 3,350, well below the 10-year average of 10,000.

#### Section 13-C

In Section 13-C, which includes Hoonah Sound and outer Peril Strait, the first 15-hour opening was scheduled for June 26. Very strong pink salmon returns in 2011 allowed for openings in Section 13-C through August 25. Peak harvest occurred during the July 14–15 period when 502,000 pink salmon were harvest by 33 boats. Pink salmon returns were exceptionally strong in the North Arm of Hoonah Sound. High fishing effort and general exposure of the north shoreline Peril Strait streams to fishing required closing most of this shoreline beginning July 18 to ensure adequate escapements. The North Arm remained open with the regional seine schedule through August 9. The total harvest for the season was 1,646,000 pink salmon and 38,000 chum salmon. This was the second highest pink salmon harvest on record. Pink salmon escapements to Section 13-C were very good with the escapement index at the upper end of the management target range. Chum salmon escapements were generally weak.

### District 14

Several separate purse seine fisheries occur in District 14 due to the large size of Icy Strait. Fishing areas open in District 14 in 2011 included the Whitestone shoreline, Excursion Inlet, Homeshore, Idaho Inlet, and Port Althorp.

The Whitestone fishery, located along the northeast Chichagof Island shoreline, typically opens mid to late July to target middle run pink salmon stocks returning to Icy Strait, Chatham Strait, Lower Lynn Canal, and Stephens Passage. In 2011 a small portion of the Whitestone shoreline, at the entrance to Port Fredrick, initially opened July 7 for 15 hours to target the strong developing return of pink and chum salmon to this area. Only one seine vessel participated in this opening. On July 10 the entire Whitestone shoreline was opened for 15-hours from Point Augusta to Crist Point near the entrance to Port Fredrick. This shoreline opened approximately 10 days earlier than normal in response to the early and extraordinarily strong pink salmon return to northern southeast Alaska. Seine effort increased significantly to 44 vessels. A series of 14 additional openings followed from July 14 to September 6 and all but one were 39-hour fisheries (part of a 2-day on/2-day off fishing regime). Peak effort and harvest occurred during the one

and only 4-day fishery of the season, July 26–29, with 49 vessels landing 905,000 pink salmon. Overall a total of 5.3 million salmon were harvested, the second highest harvest historically from this fishery. There were 16 openings totaling 585 hours, 123% of the average 475 hours. Stock composition of the harvest was 99.0% pink and chum, 0.5% sockeye, and 0.4% coho salmon. Pink salmon escapement for the north Chichagof stock group was exceptional with an index count of 415,000 fish, well above the management target range of 120,000 to 280,000 fish.

The Homeshore fishery (statistical area 114-25) takes place along all or part of the mainland shoreline from the mouth of Excursion Inlet to Point Couverden. ADF&G has opened some part of the Homeshore fishery in 11 of the last 21 years or approximately 50% of the time. In 2011 this fishery was opened on seven different occasions to target pink salmon throughout the month of August. These openings caused considerable angst with the Lynn Canal gillnet fleet due to a perception that all or most of the sockeye intercepted in this fishery are Chilkat Lake stock fish. ADF&G opened this fishery in 2011 based on the strength of pink salmon returning to the 10 local area streams that comprise the Homeshore stock group. By middle to late July it was evident escapements to this area were very strong for the timing and continuing to build. Peak escapement index surveys were expected to occur in mid to late August, as they normally do, for this stock group. Some streams were already full of fish with tens of thousands building at the stream mouths. Discussions ensued between area and regional management staff and included: 1) review of the current status for inside sockeye salmon stocks, primarily Chilkat, Chilkoot, and Taku River, 2) recognition of the above average seine effort in the area, and 3) potential opportunity in other areas. ADF&G, aware of the controversy that might arise with opening this shoreline, proceeded very conservatively in providing for seine opportunity in this area. Based on the abundance of pink salmon returning to the Homeshore streams, and with the intention of minimizing the exploitation of passing fish, the department opened a portion of the Homeshore area August 1. Earlier openings were not considered because that would have been inconsistent with the intent of the northern seine management plan that restricts the incidental harvest of sockeye salmon in July for Hawk Inlet. The August 1 opening for 15-hours was restricted north of the latitude of the Homeshore log transfer facility dock. Only 8 permit holders participated in this fishery landing 108,000 pink, 800 chum, and 2,300 sockeye salmon. All other common property seine areas in Icy Strait and Chatham Strait were open for 39-hours. The second Homeshore seine opening occurred August 8, after a seven day closure, allowing additional aerial surveys of Homeshore to take place and time to analyze harvest data from the initial opening. The August 8 opening was allotted more shoreline area, from Excursion Inlet to Swanson Creek, but restricted in time to only six hours and to within half a nautical mile from the mainland shoreline. The usual seine openings in the Icy Strait and Chatham Strait areas are within two nautical miles of the shoreline. The August 8 fishery drew seven participants landing 108,000 pink, 600 chum, and 1,600 sockeye salmon. Given the consistently strong pink salmon harvest and the decreased sockeye harvest, the same area was open again August 12 but expanded in time to 15-hours. Seine participation increased to 18 vessels, landing 388,000 pink, 3,200 chum, and 5,200 sockeye salmon. Although the numbers of sockeye salmon increased, the 1.3% sockeye salmon stock composition of the harvest remained similar to the prior opening. Therefore a fourth opening was announced for August 16 in the same area for 15 hours. Effort decreased to 13 vessels harvesting 101,000 pink, 4,300 chum, and 400 sockeye salmon. Primarily due to the low sockeye by-catch, three additional openings followed through August 28 with strong pink salmon harvests while sockeye salmon consistently decreased in the harvest. Each opening was 15 hours in length followed by closures of 3.5 days. In total the Homeshore

fishery was open for 96 hours or 13% of the total available hours in August. Just over 1 million pink, 15,000 chum, 4,000 coho, and 11,000 sockeye salmon were harvested by 35 permit holders. Escapement for the Homeshore stock group was excellent at 138,000 fish, the third highest index count since statehood and almost two times the upper bound of the 30,000 to 70,000 fish management target range.

Idaho Inlet and Port Althorp opened off-cycle July 21 for 3 days and then opened continuously July 25 through August 29. Less than 3 boats participated in these fisheries so the harvest is confidential. The department often provides for off-cycle fishing in this area to attract effort in years of strong salmon returns when harvestable surpluses are identified.

#### Northern Southeast Alaska Outside Fisheries

#### Section 13-A

In Section 13-A, separate fisheries occurred in Lisianski Inlet, Portlock Harbor, Slocum Arm and Salisbury Sound. Pink salmon returns to Section 13-A streams were very strong for all stock groups. Lisianski Inlet was first opened on July 10 for 39 hours and subsequently was opened with extended hours for the remainder of the season due to limited effort. Lisianski was opened continuously from July 21 through August 29. For the period August 4-August 21, Lisianski Inlet was opened inside of normal markers to 57°52.73' N. latitude to harvest surplus pink salmon accumulated at the head of Lisianski Inlet. Beginning August 16, Stag Bay was opened to a line near mid-bay due to building escapement. The total harvest in the Lisianski Fishery was 1,662,000 pink salmon, the largest harvest since statehood. The escapement index for the Lisianski stock group exceeded the upper management target range by 42%. Salisbury Sound was first opened July 18 and remained on the regional seine schedule through August 29. Harvest peaked during the August 12–13, 39-hour period, when 12 boats harvested 303,000 pink salmon. The total harvest was 1,556,000 pink salmon, the third highest harvest on record. The escapement index count for the Salisbury stock group was near the midpoint of the management target range. Portlock Harbor and Slocum Arm were first opened July 22 with opening commensurate with regional openings through September 6. Excessive escapements in Ford Arm required opening Ford Arm with no closed waters in effect for a six-hour period on September 1. This season 253,000 pink salmon were harvested in the Portlock Harbor fishery and 1,913,000 pink salmon were harvested Slocum Arm. For both areas, these were the second highest pink salmon harvests on record.

The escapement index count for the Portlock stock group was well above the upper management target range for pink salmon. The chum salmon peak escapement count to Black River was 5,000 fish, approximately 35% of the of the recent 10-year average. The pink salmon escapement index for the Slocum Arm stock group was at the midpoint of the management target range. Chum salmon escapement counts to Slocum Arm area streams were well below the recent 10-year average.

#### Section 13-B

Openings in Section 13-B may occur in six separate locations including Sitka Sound, Redoubt Bay, West Crawfish Inlet, Necker Bay, Whale Bay, and Redfish Bay. Sitka Sound, West Crawfish Inlet, and Whale Bay provide for directed harvest of wild pink and chum salmon, and Redoubt Bay, Necker Bay, and Redfish Bay for directed harvest of sockeye salmon.

Sitka Sound has two distinct purse seining areas which have different management considerations due to hatchery production. The southern portion of Sitka Sound includes the Eastern Channel/Silver Bay corridor with several productive pink salmon streams as well as very large returns of hatchery produced chum salmon returning to Medvejie Hatchery in Silver Bay and the Deep Inlet THA. Though there is no specific management plan for Eastern Channel purse seine fisheries, hatchery chum salmon allocation considerations are incorporated in providing traditional purse seine openings for pink salmon. Sitka Sound opened for directed pink salmon harvest beginning July 18 with openings continuing through September 6 synchronous with regional openings. The total harvest was 1,491,000 pink salmon and 119,000 chum salmon. This harvest ranks as the sixth highest since statehood and about 50% higher than the recent 10-year average harvest. Approximately, 50% of the 119,000 chum salmon were harvested in southern Sitka Sound and assumed to be hatchery fish. Pink salmon escapements were very good with the escapement index for the Sitka Sound stock group 34% greater than the upper range of the management target.

Both pink and chum salmon returns to Whale Bay were inadequate to provide for seine openings in 2011. The pink salmon escapement index for the Whale Bay stock group was near the middle of the management target range. The peak count of chum salmon to the Great Arm head stream was 8,550 fish, slightly below the recent 10-year average escapement. West Crawfish Inlet was opened for four periods beginning August 12 and ending August 25. West Crawfish received minimal fishing effort. The pink salmon escapement index count was near the upper end of the management target range for this stock group. The chum salmon peak count was 4,350 fish, about half the recent 10-year average count.

The Redoubt Bay and Lake Sockeye Salmon Management Plan [5 AAC 01.760] calls for commercial purse seine openings when the projected total escapement will exceed 40,000. This season the sockeye return was not adequate to provide seine openings and the total weir count for the season was 21,644 sockeye salmon. This compares to the recent ten-year average escapement of 44,736 sockeye salmon. The optimum escapement goal for Redoubt Lake is 7,000–25,000 sockeye salmon.

With a good accumulation of sockeye salmon in the terminal area, Redfish Bay was opened for two consecutive 14-hour days on August 12 and August 13. Less than three vessels participated and the harvest is confidential. Sockeye salmon returns to Necker Bay were insufficient to support commercial harvests.

## Northern Southeast Alaska Fall Chum Salmon Fishery

Excursion Inlet was open in conjunction with the Homeshore fishery throughout August to directed pink salmon fishing. Directed fall chum fisheries occurred north of the Porpoise Islands on September 1 for 15 hours, and again September 11 for 12 hours. Approximately 5,000 fall chum salmon were landed in these two openings. Aerial surveys of the Excursion Inlet area in late August and early September did not indicate an abundance of fish in the area so the department closed this fall chum fishery after September 11. The peak escapement index count of 3,000 fish is below the 10-year average count of 6,300 fish and below the lower bound of the management target range of 4,000 to 18,000 fish.

The southwest Admiralty Island fall chum salmon fishery was not open in 2011 as no harvestable surplus was identified. Poor weather hampered aerial surveys in late August and early September. The last survey of Chaik River, the primary fall chum salmon producer in the

area, occurred August 25 with a count of 1,300 chum salmon. The department has not developed a formal fall chum salmon escapement goal for any streams in this area.

## SOUTHERN SOUTHEAST ALASKA PURSE SEINE FISHERIES

Purse seine fishing in southern Southeast Alaska occurs in Districts 1 through 7. As in northern Southeast Alaska, fishery management is driven primarily by pink salmon stock abundance. However, during the early portion of the season, Pacific Salmon Treaty (PST) harvest sharing provisions, and the need to limit the harvest of Nass and Skeena River sockeye salmon in accordance with the PST dictate management decisions in District 4.

Purse seine fishing opportunities targeting species other than pink salmon do occur in southern Southeast Alaska. In lower District 2 early season openings target Southern Southeast Regional Aquaculture Association's (SSRAA) Kendrick Bay summer chum. Late season openings targeting wild stock fall chum salmon occur in the Cholmondeley Sound area of District 2 and in some years, areas of Section 3-A.

In 2011 the common property purse seine harvest total (traditional and THA) in southern Southeast Alaska was 11.6 million fish which is below the average harvest of 18.7 million since 1960, and less than half of the 10-year average harvest of 24.6 million. The harvest included 18,000 Chinook, 287,000 sockeye, 118,000 coho, 9.6 million pink, and 1.5 million chum salmon (Table 5, Figure6).

## Southern Southeast Alaska Outside Fishery

#### District 4

District 4 includes all waters north of Cape Muzon, west of District 3, and south of a line from Helm Point on Coronation Island to Cape Lynch. District 4 is a mixed stock fishery and harvests salmon bound for both southeast Alaska streams and salmon bound for Canadian streams.

The 2009 PST agreement calls for abundance based management of the District 4 purse seine fishery. The agreement allows the District 4 purse seine fishery to harvest 2.45 percent of the annual allowable harvest (AAH) of Nass and Skeena sockeye prior to ADF&G statistical week 31 (referred to as the treaty period). The AAH is calculated as the total run of Nass and Skeena sockeye salmon minus either the escapement requirement of 1.1 million (200,000 Nass and 900,000 Skeena) or the actual in-river escapement, whichever is less.

The District 4 purse seine fishery opens the first Sunday in July; in 2011 the initial opening was July 3 during statistical week 28 (Table 7). The fishing plan for District 4 before statistical week 31 was based on the preseason Canadian Department of Fisheries and Oceans (DFO) sockeye salmon return forecast of approximately 523,000 for the Nass and 1.6 million for the Skeena. Management actions took into account the low pre-season forecast and the "underage" of sockeye salmon harvested by the United States in the District 4 fishery from the 1999 through the 2010 seasons.

In the 2011, week 28–30 treaty period, 25,280 sockeye were harvested in the following: two 12-hour openings in statistical week 28; two 15-hour openings in statistical week 29; and two 15-hour opening in statistical week 30 (Table 7). Sockeye catch during the treaty period is the sixth lowest in District 104 since the treaty was signed in 1985. A total of 29 purse seine vessels fished in the district during the treaty period. In past years 60% to 80% of treaty-period sockeye have been of Nass and Skeena origin. Thus, we would anticipate that between 15,200 and 20,200 Nass

and Skeena sockeye may have been harvested in the District 4 purse seine fishery during the treaty period. The final number of Nass and Skeena sockeye harvested, and the actual catch by stock, will not be available until catch, escapement, and stock composition estimates are finalized for the year.

The average numbers of hours, boats and boat-days fished pre-Week 31 in District 4 since the Pacific Salmon Treaty was signed in 1985 are down 58%, 53% and 80% respectively compared to the 1980–1984 period. The total pre-week 31 Treaty-period sockeye harvest is also down 42% despite a 290% increase in the average sockeye catch-per-boat-day since 1984. The seine fleet moves freely between districts as various species are harvested, so seining opportunities elsewhere affect the effort and catch in District 4.

Fishing periods occurred more regularly after the Treaty period ended (Table 7) with a 39 hour opening in statistical week 31 and two 39 hour openings in statistical week 32. In statistical week 33, there was one 15 hour opening, and then the season concluded with seven 39 hour openings, following a 2-days-on/2-days-off fishing schedule. Effort peaked during statistical week 32 with 47 vessels and then declined the rest of the season. Harvest rates for all species remained below the 1985 to 2010 averages. Effort in District 4 was concentrated around Cape Chirikof, Cape Bartolome and the south side of Cape Addington.

In the 2011 season the District 4 purse seine fishery harvested 2.4 million pink salmon, 202,504 sockeye, 28,285 coho salmon, 137,116 chum salmon, and 4,289 Chinook salmon (Table 2). During the 2011 season 72 purse seine vessels fished in District 4. This is below the 1985–2009 average of 169. In the 2011 District 4 purse seine fishery the harvest of all salmon species were below the 1985–2010 averages.

## **Southern Southeast Alaska Inside Fisheries**

#### District 1

District 1 encompasses all waters east and north of a line from the southernmost tip of Caamano Point to 54°40' N. latitude 131° 45' W. longitude and north of the US/Canada border in Dixon Entrance. Purse seining primarily takes place in the waters of Revillagigedo Channel, which is immediately south of Ketchikan, and on the Gravina Island shoreline as the season progresses and escapements begin to improve. The run timing to Revillagigedo Channel is generally early and provides some of the first opportunity in the Ketchikan area for harvest of returning wild stock pink salmon.

The District 1 purse seine fishery opened on July 3 (Table 7) for 15 hours with normal early season lines, which included all waters of section 1-F south of a line from Cone Island to Point Davison, then due west to the District 2 boundary. There was moderate effort with 30 vessels averaging 650 pinks per vessel. Due to low harvest rates for a second 15-hour opening in statistical week 28, and another 15-hour opening in statistical week 29, District 1 remained closed for the remainder of statistical week 29. Low effort allowed for two 15-hour openings in statistical week 30, and one 39-hour opening in statistical week 31, however continued low harvest rates limited openings to two 15-hour openings in statistical week 32, and only one 15-hour opening each week until the season closed in statistical week 34.

In District 1 the effort level was highest during the first opening of the season. After that first opening, there was an average of 15 vessels per opening for the rest of the season, with a high vessel count of 23 in statistical week 30, down to less than three by the last statistical week of the

season. Harvests of chum salmon climbed above average for statistical weeks 28 and 30, but remained below average for all other fish species for the entire season. The District 1 purse seine chum salmon harvest of 102,710 was one third of the 1985–2010 average, the coho salmon harvest of 6,375 was 16% of the 1985–2010 average, the sockeye harvest of 20,582 was 20% of the 1985–2010 average, and the Chinook salmon harvest of 424 was 75% of the 1985–2010 harvest.

Escapements into the early District 1 systems were generally poor, prompting conservative open periods. The low effort level in District 1, allowed for some expansion of open harvest periods however, aerial surveys and harvest rates continued to indicate poor pink salmon returns to District 1. This drove the department to limit harvest periods in District 1 dramatically for the rest of the season. By the end of the season District 1 was only open for 11 days over 10 openings for a total of 174 hours. This is the second lowest number of hours since 1985, and less than half of the average of 504 hours since 1985. Due to this extremely limited harvest, District 1 met escapement goals despite the poor pink salmon return in 2011. The indexed escapement to the district was 2.08 million pink salmon and was within the management target range of 1.02 to 2.71 million fish (Table 10). The total District 1 pink salmon harvest was the lowest since 1985 at only 535,000 fish and less than one tenth the average yearly harvest of 5.9 million fish since 1985.

The McDonald Lake action plan dictates that the northern portion of the Gravina Island shore remain closed through statistical week 31, but the early conservative management due to the poor pink salmon return kept the Gravina Island shore closed throughout the action plan period. The estimated escapement into McDonald Lake in 2011 is 113,000 sockeye salmon (Table 13). This is within the sustainable escapement goal range. The biological escapement goal of 65,000-85,000 was changed during the 2006 board of fisheries cycle to a sustainable escapement goal of 70,000–100,000 and was then changed again to a sustainable escapement goal of 55,000–120,000 during the 2009 board of fisheries cycle. The District 1 purse seine sockeye salmon harvest of 20,582 was 20% of the 1985–2009 average of 103,870.

Likewise there were no management actions taken during the 2011 season due to Hugh Smith sockeye conservation. During the 2006 Board of Fisheries meetings in Ketchikan the board delisted Hugh Smith Lake sockeye salmon as a stock of concern, however the department still maintains the option to enact closures if the forecasting falls short of projecting the necessary escapement. At no point in the season did the Hugh Smith Lake projected sockeye run size fall below the minimum escapement goal range, therefore no sockeye management closures were taken. Escapement into Hugh Smith Lake was approximately 22,000 sockeye salmon, above the escapement goal range of 8,000–18,000 (Table 13).

#### District 2

District 2 includes all waters south of a line from Narrow Point to Lemesurier Point, west of District 1 and east of a line from Point Marsh Light to 54° 40' N. latitude, 132° 17.50' W. longitude. Fishing primarily takes place in Clarence Strait and does not usually occur in the 4 major inlets, which include Kasaan Bay, Cholmondeley Sound, Moira Sound and Thorne Bay, where productive salmon streams are located. The run timing for pink salmon entering District 2 is generally later than District 1. Hatchery chum salmon returning to the Kendrick Bay THA have been entering the district in large enough numbers to warrant early fishing time, as early as mid-June, for the seine fleet.

The waters of Kendrick Bay were open by regulation, continuously to purse seine harvest beginning Wednesday, June 15, in statistical week 25. A limited portion of District 2 was opened beginning on June 19 in statistical week 26 and June 26 in statistical week 27 to access returns of SSRAA enhanced summer chum salmon to Kendrick Bay (Table 7). The open area for this fishery consists of those waters in District 2 north of 54° 47.10' N. latitude (approximately ½ nautical mile south of McLean Point Light) and south of the northern tip of Polk Island. These openings outside Kendrick Bay were 87 hours, or 4 days, in duration occurring on Sunday through Wednesday each week. The openings target Kendrick Bay summer chum salmon at a time when few wild stock salmon are available, and are managed to maximize the quality of those chum salmon. Nine purse seine vessels fished the first opening and 32 fished the second with harvests for both weeks totaling 70,824 chum salmon.

The traditional fishery in District 2 targeting local stocks of pink salmon opened Sunday, July 3, statistical week 28 for 15 hours (Table 7). After the traditional Sunday fishery closed, portions of District 2 re-opened for 63 hours, or 3 days, to target Kendrick Bay chum salmon. A second traditional fishery opening occurred on Thursday, July 7, for 15 hours. This allowed 5 days of fishing in the district to target Kendrick Bay hatchery chum since the interception of pink salmon was low. Effort increased to 38 boats with the fleet landing 161,461 chum salmon for the week.

During the traditional fishing period there were 15 openings ranging from 15 to 39 hours in duration following earlier extended openings targeting enhanced summer chum returns (Table 7). Pink salmon escapements into District 2 were slow to build throughout the month of July and catch rates remained below average throughout the season. Escapements into the District 2 systems built sufficiently throughout the season allowing for continued harvest. There were three 15-hour openings and one 39-hour opening, during statistical weeks 28 and 29, pink salmon harvests were below average. Two additional 15-hour openings occurred in statistical week 30 before the fishery moved into 39-hour openings in statistical week 31 when the fishing area was also expanded from the northernmost tip of Polk Island to Windy Point due to increased escapements in District 2. Fishing periods continued with two 39-hour openings in statistical week 32 and one 39-hour opening in statistical week 33. During this time effort began to drop as the pink and chum salmon harvest rates in District 2 began to drop with less than three vessels participating in the fishery during statistical week 33. There were two 15-hour openings during statistical week 34, with 5 vessels participating in the first opening and no effort during the second opening. After statistical week 34, harvest rates of pink and chum salmon began to increase for a 15 hour opening in statistical week 35 and another in statistical week 36. The traditional fishing period ended with a 39 hour opening in statistical week 36. Effort levels peaked during statistical week 29 with 38 vessels participating, however, the overall pink salmon harvest peaked at 146,032 during statistical week 36. A total of 91 seine vessels fished District 2, below the 1985-2010 treaty period average of 152. The district was open for purse seine harvest for a total of 582 hours.

The District 2 purse seine harvest of 737,000 pink salmon (Table 2) was 18% of the 1985–2010 average of 4.08 million. Chum salmon harvests in the District 2 purse seine fishery were well above average in the early portion of the season but below average after statistical week 33. The chum salmon harvests grew to above average once again after statistical week 36. The total season harvest of 792,000 chum salmon was 192% of the 1985–2009 average of 413,345. Limited portions of District 2 reopened to target fall chum salmon in statistical weeks 37, 38 and 39 before closing for the season (see Southern Southeast Alaska Fall Chum Salmon Fishery

section). The District 2 sockeye harvest of 39,000 was 93% of the 1985–2009 average of 42,000, and the coho harvest of 33,000 was 70% of the average of 48,000. The Chinook salmon harvest of 717 fish was 174% of the average of 413. There was non-retention of Chinook salmon for most of the season. Indexed escapement to the district of 800,000 pink salmon was slightly above the upper end of the management target range of 0.29–0.77 million (Table 10).

#### District 3

District 3 encompasses all of the inside waters off of the west coast of Prince of Wales, from Point Marsh light on the south end to Aneskett Point on the north end. It has a large and diverse geographical range and is a very productive pink salmon producing area. Some of the main fishing areas include the waters of Cordova Bay, intercepting fish bound for Hetta, Nutkwa and Klakas Inlets in Section 3-A, the waters of Boca De Finas and San Christoval Channel in Section 3-B, and the outside waters of Sea Otter Sound in Section 3-C. The timing of District 3 is generally later and historically opens in statistical week 29 or 30.

The District 3 purse seine fishery initially opened Monday, July 18 in statistical week 30 (Table 7). There were 12 openings, ranging from 15 to 39 hours each; however in some of the later 39hour openings the northern portions of the district were only open for 15 hours. There was no effort during the first two 15-hour openings on July 18 and 22. Early escapements in portions of District 3 were much better than the other Ketchikan area districts, however, no one participated in the first 39-hour opening on Tuesday, July 26. During this opening the northern part of District 3 remained closed due to weak escapements. Eleven vessels made landings in the next opening on August 1, and 25 vessels made landings during a second 39-hour opening in statistical week 32. Statistical week 33 opened with a 15-hour opening due to concerns about escapements to some northern District 3 systems. This concern continued throughout the season with the north end of District 3 remaining on 15-hour openings for the next three openings. After statistical week 34, the north end of District 3 remained closed for the season. Escapements in the rest of District 3 allowed for a series of six 39-hour openings starting in the second half of statistical week 33 and continuing through the end of the season in statistical week 37. A total of 111 purse seine vessels fished in District 3, below the 1985–2009 Treaty period average of 126. The district was open for a total of 396 hours.

The District 3 purse seine pink salmon harvest of 4.1 million fish (Table 2) was 104% of the 1985–2010 average of 4.0 million. The seasonal harvest of sockeye salmon was approximately 19,000 or 85% of the 1985–2009 average of 23,000. The coho salmon harvest of 33,000 was above the average of 31,000. Chum salmon harvests were below average all season; the total season chum salmon harvest of 79,000 was 64% of the average of 122,000. The Chinook salmon harvest of 330 was near the 1985–2009 average of 300. There was non-retention of Chinook for most of the season. Indexed escapement to the district of 1.51 million pink salmon was within the management target range of 0.95–2.54 million (Table 10).

#### District 5

District 5 encompasses the waters of western Sumner Strait, approximately 50 miles southwest of the community of Petersburg. Fisheries occur either inside the major bays, which include: Affleck Canal, Port Beauclerc, Shakan Bay, and Shipley Bay, or in the more exposed waters along the eastern side of District 5 between Cape Pole and Point Baker.

The 2011 returns to District 5 were expected to be good based on parent year escapement. The first opening in District 5 occurred started on July 31 for 39-hours on both the east and west sides of District 5 with Rocky Pass, the shoreline above Shakan Bay, and Warren Channel being closed. District 5 continued on a 2-day on/2-day off rotation with the same area restrictions in place until the final opening in District 5 on September 1 and 2. Effort during the first opening was minimal with eight boats fishing. Harvest was decent for the time of year with 63,000 pink salmon harvested. Effort dropped to five boats for the next opening and harvest also decreased to 45,000 pink salmon. For the third opening on August 8 and 9, effort increased to 26 boats fishing and harvest increased to 210,000 pink salmon. For the next opening, the harvest increased to 439,000 pink salmon from 20 boats fishing in District 5. Escapements to all District 5 systems were progressing nicely at this time. The following opening occurred on August 16 and 17 and the number of boats decreased substantially to 11 boats fishing and the harvest dropped to 258,000 pink salmon, however, the corresponding catch per boat increased. The opening beginning on August 20 had the largest harvest and highest catch per boat for the year with 18 boats harvesting 460,000 pink salmon. Pink salmon harvest after this opening started to fall dramatically with almost no harvest taking place during the last two openings in District 5.

The 2011 District 5 pink salmon harvest of 1,779,600 pink salmon was well above the average harvest of 408,500 fish and the 4<sup>th</sup> largest harvest since statehood (Table 2). Harvest from Affleck Canal this year was exceptional with 1,629,000 pink salmon harvested. This was the highest harvest on record from this area and exceeded the previous record by almost 500,000 fish. Chum salmon harvest of 17,000 fish was below the average of 22,300 fish. Coho and sockeye salmon harvests were minimal, which is the historical trend. Escapements to District 5 were very good. The indexed pink salmon escapement of 580,000 was near the upper end of the target range of 250,000 to 660,000 fish (Table 10).

#### District 6

District 6 is divided into 4 sections for management purposes. Purse seining in District 6 is limited to Sections 6-C and 6-D. These purse seine portions of the district are between 15 and 30 miles southwest of Wrangell. Section 6-D includes most of the waters of northern Clarence Strait and the southern portion of Stikine Strait. Section 6-C is a small diamond shaped area adjacent to Screen Island and Lincoln Rock. Section 6-C together with the adjacent Screen Island shoreline of Section 6-D are the only waters in Southeast that may be fished simultaneously by the purse seine and drift gillnet fleets.

District 6 was expected to have a good return of pink salmon to seine fishing areas of the district based on parent year escapements. The pink salmon return did not return as well as expected. Returns of pink salmon in 2011 to District 6 were spotty with areas of mediocre escapement intermingled with areas of lackluster escapements. Escapement was largely comprised of escapements from two of the larger systems in the district. Confounding management of District 6 was escapement to these systems was slow and came in later than normal. There were no areas in District 6 with enough harvestable surplus of pink salmon to warrant directed pink salmon openings for the seine fleet.

The 2011 District 6 purse seine harvest of all salmon was obviously well below average due to the area remaining closed for the season to the seine fleet (Table 2). The indexed pink salmon escapement in District 6 was 300,000 fish and was within the target escapement range of

210,000 to 570,000 fish (Table 10). One of the three District 6 stock groups was below the target escapement range for that stock group.

#### District 7

District 7 encompasses the waters of Ernest Sound, Bradfield Canal, Zimovia Strait, and Eastern Passage. Purse seining primarily takes place in the waters of Ernest Sound, 20 to 40 miles south of the community of Wrangell. District 7 is divided into two sections for management purposes, Section 7-A (northern) and 7-B (southern). Streams in Section 7-A have early and middle returns of pink salmon; and Section 7-B stream's are comprised largely of middle to late returns of pink salmon. The Section 7-A fishery is known as the Anan fishery since management actions in 7-A are primarily based on the abundance of pink salmon returning to Anan Creek. Historically, the District 7 purse seine fishery has primarily harvested pink salmon. Beginning in 1997, chum salmon from enhancement facilities entered the district in large enough numbers to attract additional purse seiners to the area.

The 2011 return of pink salmon was expected to be good. However, the return did not materialize as expected. Fishing time in Section 7-A was limited with only two openings occurring and Section 7-B did not open due to poor pink salmon returns. The Anan fishery (Section 7-A) opened for purse seining on July 3 for 15 hours (Table 7). Effort was light and harvest was poor with 13 boats harvesting 6,500 pink salmon. The Anan fishery opened for the second and last time for 15 hours on July 10. Effort dropped to only 3 boats fishing and harvest remained poor with 22,800 pink salmon harvested. Escapement to Anan at this point was well behind what it should be for this time of year and escapements to other systems were lagging as well. District 7 remained closed to seine fishing for the remainder of the 2011 season.

The 2011 harvest of all salmon species was poor in District 7. A total of 29,300 pink salmon were harvested in the 2011 (Table 2). This harvest was well below the average annual harvest of 854,700 fish since statehood and was the 5<sup>th</sup> lowest harvest on record. The indexed pink salmon escapement in the district of 200,000 fish was below the target range of 260,000 to 690,000 fish (Table 10). Indexed escapement to Anan Creek was poor and the Anan stock group was well below its goal range. The Union Bay stock group indexed escapement was within its goal range.

# Southern Southeast Alaska Fall Chum Salmon Fishery

Directed purse seine fishing on wild stock fall chum salmon returns was limited to District 2 in 2011, although in recent years there has been a fall chum fishery in Section 3-A. The District 2 fishery targets chum salmon returning to watersheds in Cholmondeley Sound and the Section 3-A fishery targets chum salmon returning to Cordova Bay.

Directed fall chum salmon fishing began in District 2 on September 8 consisting of three 12-hour openings followed by four 36-hour openings (Table 7). Approximately 80,796 fall chum salmon were harvested in District 2. Estimated chum salmon escapement into Disappearance and Lagoon Creek were at or above desired escapement levels (Table 12).

Chum harvest rates during the last directed summer pink salmon fisheries and aerial surveys conducted in early September in Cholmondeley Sound indicated a strong return of chum salmon in Cholmondeley Sound. High chum salmon counts from aerial surveys allowed for the first fishery to be opened into Cholmondeley Sound, which has not been the case during recent years. The second opening in statistical week 38 was conservative, closing Cholmondeley Sound, however continued good chum salmon escapement counts from aerial surveys allowed more

liberal openings inside Cholmondeley Sound. There was good effort in Cholmondeley Sound with a peak of 25 vessels early in the season and 12 vessels fishing through statistical week 40. The last opening occurred in statistical week 41. Total harvest and effort was above average for the fall fishery.

In recent years there has been fishing opportunity in the Hetta Inlet area of Section 3-A to target excess fall chum salmon. In 2011 there were no excess fall chum salmon in Section 3-A and the area remained closed.

## SOUTHEAST ALASKA SALMON ESCAPEMENTS

This section provides a regional review of pink, chum, and sockeye salmon escapements. A summary discussion of Chinook and coho salmon escapements is included in the Annual Management Report for the 2011 Southeast Alaska/Yakutat Salmon Troll Fisheries (Skannes et al. 2012).

## PINK SALMON

Southeast Alaska pink salmon index streams are grouped into three stock groups that comprise aggregates of index streams across broad sub-regions: Southern Southeast, Northern Southeast Inside, and Northern Southeast Outside (Heinl et al. 2008). Escapement goals established for each of these sub-regions were further divided into "management targets" for the 15 management districts and 46 stock groups where pink salmon are monitored, as an aid to assessing the spatial distribution of the pink salmon escapement across Southeast Alaska (Zadina et al. 2004).

The total 2011 pink salmon escapement index of 14.3 million ranked 12<sup>th</sup> since 1960 and was 94% of the recent 10-year average of 15.2 million. Biological escapement goals were met for all three sub-regions in Southeast Alaska (Table 9; Figure 5). Management targets for pink salmon were met for 14 of 15 districts with management targets (Table 10) and, at a finer scale, for 44 of the 46 pink salmon stock groups (Table 11).

# **Southern Southeast Sub-region**

The Southern Southeast sub-region includes all of the area from Sumner Strait south to Dixon Entrance (Districts 1–8). The 2011 pink salmon all-gear harvest of 11.2 million was only 46% of the recent 10-year average (Figure 6). The escapement index value of 5.5 million, however, fell within the escapement goal range of 3.0 to 8.0 million index fish (Figure 6). Escapement indices were within or exceeded management targets for 6 of 7 districts (Table 10) and for 16 of 18 pink salmon stock groups within this sub-region (Table 11).

## **Northern Southeast Inside Sub-region**

The Northern Southeast Inside sub-region includes all of the area on the inside waters north of Sumner Strait (Districts 9–12, 13 inside, 14, and 15). The 2011 all-gear pink salmon harvest of 40.6 million was the largest since Statehood and 300% of the recent 10-year average (Figure 7). The escapement index value of 6.0 million was just above the escapement goal range of 2.5 to 6.0 million index fish (Figure 7). Escapement indices were within or above management targets for all districts (Table 10) and for all 21 pink salmon stock groups within this sub-region (Table 11).

## **Northern Southeast Outside Sub-region**

The Northern Southeast Outside sub-region includes all of the outer coasts of Chichagof and Baranof islands (District 13 outside). The pink salmon all-gear harvest of 7.1 million was the largest since Statehood and 250% of the recent 10-year average (Figure 8). The escapement index value of 2.7 million exceeded the escapement goal range of 0.75 to 2.50 million index fish, and escapement indices were within or exceeded management targets for all 7 pink salmon stock groups within this sub-region (Tables 10 and 11).

## **CHUM SALMON**

Southeast Alaska summer-run chum salmon index streams are grouped into three stock groups that comprise aggregates of index streams across broad sub-regions: Southern Southeast, Northern Southeast Inside, and Northern Southeast Outside (Eggers and Heinl 2008). Southeast Alaska fall-run chum salmon index streams were grouped into stocks that support, or have supported, terminal commercial fisheries in the past. These stocks include Cholmondeley Sound, Security Bay, Port Camden, Excursion Inlet, and the Chilkat River.

## **Southern Southeast Sub-region**

The Southern Southeast Subregion includes 13 index streams located primarily on inner islands and the mainland of southern Southeast Alaska from Sumner Strait south to Dixon Entrance (Districts 1–7). Following three years of poor escapements, the 2011 escapement index was the highest since 1996 and the third highest since 1980 (Table 12; Figure 9). The index count of 157,000 chum salmon was more than double the lower bound sustainable escapement goal of 68,000 fish.

## **Northern Southeast Inside Sub-region**

The Northern Southeast Inside Subregion includes 63 index streams located on inside waters of northern Southeast Alaska north of Sumner Strait (Districts 8–12, 14–15, and District 13 subdistricts 51–59). Escapements were generally weak in this sub-region, and the index value of 125,000 was below the lower bound sustainable escapement goal of 149,000 for the fourth consecutive year (Table 12; Figure 9). Peak survey counts were below average at most streams, with the notable exception of the Endicott River in Lynn Canal. The peak aerial survey of 23,000 chum salmon was the largest count ever for this stream, and accounted for approximately 20% of the entire index.

## Northern Southeast Outside Sub-region

The Northern Southeast Outside Subregion includes five index streams located on the outside waters of Chichagof and Baranof islands in northern Southeast Alaska (District 13, excluding Peril Straits and Hoonah Sound subdistricts 51–59). Escapements were below average for four of the five index streams in 2011, but the escapement index of 23,000 was above the lower bound sustainable escapement goal of 19,000 (Table 12; Figure 9). The escapement goal has been met in this sub-region in nine of the past ten years

## **Fall-Run Chum Salmon**

Fall chum salmon returns were mixed and escapement targets were below goal for two of five fall-run stocks with formal escapement goals (Table 12; Port Camden and Excursion River). The escapement index for Cholmondeley Sound fall chum salmon was the second highest of the time

series (1980–2011). The purse seine harvest of approximately 80,000 chum salmon inside of Cholmondeley Sound was the highest since 2003 and was above the average harvest of the previous thirty years. Chilkat River fall chum salmon met the formal escapement goal for the 15th consecutive year and the escapement of 368,000 fish was well above the recent ten-year average. The harvest of 65,000 fall chum salmon in Lynn Canal was near the 1990–2010 average.

## SOCKEYE SALMON

In 2011, sockeye salmon escapement targets were met for 12 of the 13 sockeye salmon systems in the region that currently have escapement goals (Table 13). The Chilkat Lake sockeye salmon run was the only stock below goal in 2011. The McDonald Lake sockeye salmon run was listed as a "stock of management concern" at the 2009 Board of Fisheries meeting and a new escapement goal range of 55,000 to 120,000 sockeye salmon was adopted at that time. The escapement at McDonald Lake in 2011 was the largest in a decade and was within this new goal for the second consecutive year.

## **Drift Gillnet Fisheries**

Drift gillnet fishing is allowed by regulation [5AAC 33.310(c)] in District 1 (Sections 1-A and 1-B), District 6 (Sections 6-A, 6-B, 6-C, and 6-D), District 8 (Sections 8-A and 8-B), District 11 (Sections 11-B and 11-C), and District 15 (Sections 15-A, 15-B, and 15-C) (Figure 10). Regulations mandate that the specific open areas and fishing periods within these districts and sections be established by emergency order. Drift gillnet openings are also provided in Terminal Harvest Areas (THA) in Nakat Inlet, Neets Bay, Anita Bay, Boat Harbor and Deep Inlet (Figure 2). This section summarizes common property traditional drift gillnet fisheries during the 2011 season. THA, hatchery cost recovery, and Annette Island fisheries are discussed in separate sections.

The 2011 drift gillnet fishery opened Monday, June 13 in District 6, Sunday, June 19 in Section 1-B, Section 11-B, and in Sections 15-A and 15-C, and Monday, June 20 in District 8 (Table 14). These traditional drift gillnet fisheries targeted sockeye salmon harvests since there were no directed drift gillnet fisheries to harvest Stikine River or Taku River Chinook salmon in 2011. THA fisheries began with continuous, concurrent gear harvest periods in Neets Bay and in Anita Bay on May 1. Continuous gillnet openings began in Nakat Inlet on June 1 and in Boat Harbor on June 19 (Table 15). Traditional fisheries management emphasis shifted to pink salmon in Section 1-B on July 17 and in Districts 6 and 8 in August. Management emphasis in Section 1-B and Districts 6 and 8 switched to coho salmon beginning August 28. Section 11-B and District 15 management shifted to fall species August 14 in statistical week 34. Traditional seasons ran through September 20 in District 1, through September 27 in Districts 6 and 8, through September 28 in District 11 and through October 5 in District 15.

The 2011 drift gillnet common property fisheries (traditional and THA) harvested 5.2 million salmon. The total common property drift gillnet harvest consisted of around 31,000 Chinook, 518,000 sockeye, 238,000 coho, 1,641,000 pink, and 2,801,000 chum salmon (Tables 16 and 17). Harvest of 31,000 Chinook salmon (including jacks) was 117% of the recent 10-year average of 26,500. Harvest of 518,000 sockeye was equal to the recent 10-year average harvest of 520,000. Harvest of 238,000 coho was 71% of the recent 10-year average harvest of 334,000. Pink salmon harvest of 2.8 million was 158% of the recent 10-year average harvest of 1.0 million. Chum

salmon harvest of 2.8 million was 133% of the recent 10-year average harvest of 2.1 million. The common property gillnet harvest composition by species included: 0.6% Chinook, 10% sockeye, 4.6% coho, 31% pink, and 54% chum salmon. Historical drift gillnet traditional and THA harvests for each species are presented in Table 16. Figure 11 shows historical trends since 1960. The most notable recent trend is the large component of chum salmon in drift gillnet fishery harvests since 1992. These harvests are attributable to hatchery production. 2011 total drift gillnet harvests set a record since statehood, exceeding 5 million fish for the first time. 2011 harvests of 2.8 million chum salmon were the second highest since statehood after the 2006 record harvest of 3.1 million.

A breakdown of 2011 drift gillnet harvests by species, harvest type, and district is presented in Table 17. Common property harvests of 5.2 million include 4.2 million in traditional fisheries and 1.0 million in hatchery terminal areas. There were no cost recovery harvests by drift gillnet gear in 2011. Drift gillnet harvests from the Annette Island Reservation were 534,000 salmon. Traditional drift gillnet harvests by district included 794,000 from District 1, 762,000 from District 6, 285,000 from District 8, 1,137,000 from District 11, and 1,276,000 from District 15. Total harvests from Districts 11 and 15 were records since statehood. The chum salmon harvest from district 15 was a new record. The chum harvest from District 11 ranked fourth highest since statehood.

The drift gillnet fishery exvessel value was \$30.4 million in 2011 based on fish tickets (Table 3). Because the 2011 exvessel value is still based on fish tickets and therefore is conservative, the 2011 value could potentially set a record after post season analysis by CFEC based on processors' post season reports (Figure 12). The 2011 value includes \$19.0 million of chum salmon, \$5.4 million of sockeye salmon, \$2.2 million of coho salmon, \$1.1 million of Chinook salmon, and \$2.6 million of pink salmon. Recent trends of value have been trending upward since a low point in 2002.

# DRIFT GILLNET CHINOOK SALMON HARVESTS

Regulations [5AAC 29.060(b)(2)] was modified at the 2006 BOF meeting to allocate 2.9% of the annual harvest ceiling for Chinook salmon for the drift gillnet fishery. The new regulation changed the gillnet allocation for Chinook from a fixed number of 7,600 to a percentage of the fluctuating annual all gear quota, excluding directed fisheries in Districts 8 and 11 and Alaska hatchery harvests above the pre-treaty 5,000 fish baseline and a risk factor apportioned between fisheries. The BOF adopted this harvest limit approach as an allocation measure to ensure that all user groups share in the Chinook salmon harvest limit specified by the Pacific Salmon Treaty (PST). The BOF has specified that inseason management measures for maintaining the harvest levels, if needed, may include early-season area closures for the protection of mature wild Chinook salmon and nighttime fishing restrictions to minimize the harvest of immature fish.

The drift gillnet fishery share of the 2011 all-gear Chinook salmon quota of 294,800 was determined to be 8,549 fish. The 2011 drift gillnet harvest of Chinook salmon totaled 30,976 fish (Table 16). Of these 4,093 were small (under 28 inches) and 26,883 were over 28 inches. Subsequent accounting for treaty purposes are based on large Chinook drift gillnet harvest of 28,166. Total gillnet harvest of large Chinook salmon included an estimated 19,786 Alaska Hatchery fish, and 630 terminal exclusion fish. The hatchery "add-on" was calculated at 18,101 leaving around 9,436 Chinook designated as Treaty Harvest. As a result, the total drift gillnet harvest during the 2011 season was roughly 887 fish above the 8,549 Chinook salmon harvest

cap. The all-gear U.S. harvest of Treaty Chinook harvest of 289,980 was 1.6% below the all-gear quota of 294,800 Chinook salmon.

#### **DISTRICT 1: TREE POINT**

The 2009 PST agreement calls for abundance based management of the District 1 (Tree Point) drift gillnet fishery. The agreement specifies a harvest of 13.8 percent of the Annual Allowable Harvest (AAH) of the Nass River sockeye run. For the 2011 season, Canadian Department of Fisheries and Oceans (DFO) forecast a total return of 523,000 Nass River sockeye salmon. The AAH is calculated as the total run of Nass sockeye salmon minus either the escapement requirement of 200,000 or the actual inriver escapement, whichever is less. The preseason AAH for 2011 Nass sockeye was therefore 44,574 fish.

The District 1 drift gillnet fishery opens by regulation on the third Sunday in June. During the early weeks of the fishery, management is based on the run strength of Alaska wild stock chum and sockeye salmon and on the strength of the Nass River sockeye salmon. Beginning in the third week of July, when pink salmon stocks begin to enter the fishery in large numbers, management emphasis shifts by regulation to that species. By regulation, the District 1 Pink Salmon Management Plan sets gillnet fishing time in this district in relation to the District 1 purse seine fishing time when both fleets are concurrently harvesting the same pink salmon stocks. The preliminary 2011 estimate of Nass River sockeye salmon harvested at Tree Point is 62,000 fish, higher than the AAH.

In 2011 the District 1 drift gillnet fishery opened on June 19, statistical week 26 (Table 14). The fishery was open a total of 1,200 hours, below the 1985 to 2010 treaty period average of 1,811. The fishery received 4 days of fishing time from the opening week through statistical week 29. The District 1 Pink Salmon Management Plan went into effect beginning in statistical week 30. In statistical weeks 30 and 31, the District 1 purse seine fleet received only one day of fishing each week. This limited the district 1 drift gillnet fishery to two day openings during these weeks. District 1 purse seine harvests of pink salmon increased during statistical week 31, therefore the District 1 drift gillnet fishery was given a five day opening in statistical week 32 anticipating three or more days of purse seine harvest in District 1. The actual District 1 purse seine pink salmon harvests remained very poor in statistical week 32 driving the actual purse seine open periods to be limited to only two days. This poor purse seine pink salmon harvest rate continued throughout the remainder of the season, keeping the District 1 drift gillnet fishery limited to two day openings for statistical weeks 33 through 35. In statistical week 35 ended directed purse seine pink salmon fisheries in District 1 and during statistical week 36 the District 1 drift gillnet fishery began to be managed based on fall coho and chum salmon returns. Based on the strong chum salmon return the District 1 drift gillnet fishery opened for four days from during statistical weeks 36 through 38. The final opening in Statistical week 39 was limited to three days and had minimal effort. A total of 88 gillnet vessels fished in the district, 76% of the 1985–2010 average of 115 vessels.

Traditional Tree Point harvests in 2011 included approximately 1,700 Chinook, 89,000 sockeye, 29,000 coho, 336,000 pink salmon and 340,000 chum salmon (Table 17). In 2011 the District 1 common property gillnet harvest of 91,800 sockeye salmon was 82% of the 1960–2010 average of 112,434 (Table 18). The cumulative sockeye harvest prior to the initiation of the District 1 Pink Salmon Management Plan in Week 30 was 49,475 fish, or about 56% of the season's total sockeye harvest. Sockeye salmon harvests rates remained near average throughout the season.

The common property pink salmon harvest of 357,811was about 87% of the long term average of 410,667. The traditional and terminal chum salmon harvest of 566,508 was about 180% of the recent 10-year average of 313,481. The common property coho salmon harvest of 36,183 was 56% of the recent 10-year average of 64,522 and just above the long term average of 34,563. The Chinook salmon traditional and terminal area harvest of 4,576 was well-above the recent 10-year average harvest of 2,345.

During the 2006 Board of Fisheries meetings in Ketchikan the board de-listed Hugh Smith Lake sockeye salmon as a stock of concern, however the department still maintained the option to enact closures if the forecasting fell short of projecting the necessary escapement. At no point in the season did the Hugh Smith projected run size fall below the escapement goal range, therefore no sockeye management closures were taken. Escapement into Hugh Smith Lake was approximately 22,000 sockeye salmon and above the escapement goal range of 8,000–18,000.

Beginning on August 28, statistical week 36, the District 1 gillnet fishery was managed on the strength of fall chum and coho salmon returns. Coho harvests were below average in the beginning of the summer, however by statistical week 35 returns had improved. This improvement did not last however, and the coho harvest rate fell below average the next week and remained there until the end of the season. The wild chum salmon component was strong in the District 1 gillnet fishery, and harvest rates remained average throughout the season. Coho escapements to the systems around Ketchikan were below average and inclement weather prevented some coho escapement surveys. Chum salmon escapement surveys showed high levels of chum salmon during 2011.

#### DISTRICTS 6 AND 8: PRINCE OF WALES AND STIKINE

# **Fishery Overview**

Drift gillnet fisheries occur in waters adjacent to Prince of Wales Island and the Stikine River in Districts 6 and 8. Waters open to commercial drift gillnet fishing in District 6 include Sections 6-A (Sumner Strait), 6-B, 6-C, and a portion of 6-D (Clarence Strait). The District 8 commercial drift gillnet fishery occurs in Section 8-A and Section 8-B, waters north and south of the Stikine flats. Management of these fisheries is interrelated due to their proximity and the migration patterns of stocks harvested in both areas. Salmon stocks of Stikine River origin, a major transboundary river originating in Canada, are harvested in both districts. Management of Districts 6 and 8 is usually based on preseason forecasts for initial openings and switches to inseason assessment based on fishery performance and inriver stock assessment. Salmon species migrate through the districts at different times allowing management to target different species during different time periods throughout the season. Chinook salmon display the earliest run timing and initial early season management in District 8 is based on Chinook salmon abundance. In June as the Chinook salmon run begins to wane, management emphasis shifts to sockeye salmon. In August management emphasis is based on pink salmon abundance and switches to coho salmon for in September.

Districts 6 and 8 salmon fisheries are a mixed stock fishery. Returns to the Stikine River were estimated for sockeye salmon in each district and the Stikine River Chinook salmon contribution was estimated for District 8. The proportions of Stikine River sockeye salmon in Districts 6 and 8 harvests were estimated inseason using both the historical proportions of stock composition and the inseason proportions of thermally marked fish from fry plants in Tahltan and Tuya

Lakes. The proportions of Stikine River Chinook salmon were estimated by subtracting the hatchery contributions determined from port sampling efforts.

The 2011 gillnet harvest in District 6 was approximately 3,000 total Chinook, 146,000 sockeye, 118,000 coho, 337,000 pink, and 158,000 chum salmon (Tables17 and 19). Salmon harvests were above the recent 10-year average (2001–2010) for Chinook, sockeye, and pink salmon. Coho and chum salmon harvests were below the recent 10-year average. Chinook, sockeye, coho, pink, and chum salmon harvests were approximately 181%, 146%, 78%, 107%, and 77% of their respective 10-year averages. The preliminary post season estimate of Stikine River sockeye salmon harvested in District 6 was 32,900 fish or approximately 23% of the harvest. The Sumner Strait fishery (Subdistrict 106-41) harvested an estimated 29,700 Stikine River. The Clarence Strait fishery (Subdistrict 106-30) harvested an estimated 3,200 Stikine River sockeye salmon. Burnett Inlet/Neck Lake sockeye salmon contribution was estimated at 3,882 sockeye (2.7%) of the District 6 sockeye salmon harvest. Approximately 1,100 large Chinook salmon in the District 6 harvest were of Alaska hatchery origin and 59,000 coho salmon were of Alaska hatchery origin, 50% of the total coho salmon harvest.

The District 6 drift gillnet fishery was open for 41 days from June 13 through September 27. Total fishing time was below the recent 10-year average of 49.6 days, but above the average of 38.7 days since statehood. Sections 6-A, 6-B, and 6-C were open concurrently each week throughout the season. Section 6-D was open by regulation from statistical weeks 25 through 32 and statistical weeks 37 through the end of the season. Weekly fishing effort in number of vessels fishing in District 6 was above average for half of the weekly fishing periods. The greatest effort of vessels fishing occurred in statistical week 38 (September 11–17) with 101 boats fishing. The total season effort was near average at 2,647 boat-days.

The District 8 total season gillnet harvest was approximately 4,100 Chinook, 1,200 jack Chinook (jack Chinook being defined as under 28 inches in length), 51,500 sockeye, 21,000 coho, 65,000 pink, and 143,000 chum salmon (Tables 17 and 20). Chinook and coho salmon harvests were 45% and 69% of their respective ten-year averages, while sockeye, pink, and chum salmon harvests were 107%, 155%, and 131% of their respective 10-year averages. The District 8 fishery harvested and estimated 36,400 Stikine River sockeye salmon, 71% of the District 8 sockeye salmon harvest. An estimated 11% (2,311 fish) of the District 8 coho salmon harvest was of Alaskan hatchery origin. The Alaska hatchery Chinook salmon contribution in District 8 was estimated at 2,677 fish, 65% of the total harvest.

District 8 opened on June 20 after being postponed one week due to Stikine Chinook salmon concerns. District 8 closed concurrently with District 6 on September 27. The district was open for 41 days, which is near average (excluding years a directed Chinook fishery occurred). The weekly fishing effort in number of vessels fishing in District 8 was variable with about half the weekly fishing periods receiving higher than average effort. The season effort of 1,733 boat-days was below the 2001–2010 average of 2,045 boat-days.

#### **Chinook Salmon Fishery**

In 2011, directed Chinook salmon commercial fisheries did not occur for the third consecutive season since directed fisheries began in 2005. The preseason terminal run forecast of 30,000 large Stikine Chinook salmon resulted in a U.S. AC of 190 fish. An AC of this size does not allow for directed commercial fisheries but allowed for liberalization of the District 8 sport

fishery. Liberalization measures included increased daily and annual bag limits and the use of two rods per person. Inseason forecasts ranging between 18,327 and 22,716 large Stikine Chinook salmon were considerably lower than the preseason forecasts and did not allow for any allowable catch above base level catches. The preliminary postseason estimate of the total terminal run based on mark-recapture information, was approximately 22,700 large Chinook. In 2011, all Chinook salmon commercially harvested in Districts 6 and 8 drift gillnet fisheries were incidental to the harvest of other salmon species.

The total number of large (over 28 inches in length) Stikine Chinook salmon harvested by District 8 gillnetters from statistical weeks 26 through 29 (during sockeye management openings) was 1,431 fish. The initial gillnet sockeye opening was postponed by one week in District 108 due to the low inseason forecasts of Stikine Chinook salmon abundance. District 8 troll hatchery access openings through the end of June resulted in a total harvest of 471 Stikine Chinook salmon. Troll openings were limited in time and areas were closed due to the poor return. The District 8 sport fish Stikine Chinook salmon harvest estimate from statistical weeks 18 through 29 was 1,063 fish. The sport fishery was de-liberalized starting June 21. The final cumulative U.S. harvest of large Stikine Chinook salmon through week 29, including the Federal Stikine subsistence fishery, was 3,032 fish. The final postseason estimate of the run size was not large enough to produce a U.S. allowable catch; however, the U.S. harvest was below the base level harvest of 3,400 fish. Chinook salmon escapement to the Stikine was estimated at 14,469 fish, above the lower end goal of 14,000 fish. Little Tahltan River escapement increased from 1,057 last year with an escapement of 1,753 large Chinook salmon but still below management objectives. The most recent ten-year average escapement to this system is approximately 5,800 fish. Andrews Creek escapement was within the goal range this season with approximately 936 Chinook salmon estimated.

# **Sockeye Salmon Fishery**

The District 6 gillnet season began at 12:00 noon on Monday, June 13 (statistical week 25), for an initial two-day period (Table 14). Monday openings occurred during the first two sockeye management periods due to a recent Board of Fish action intended to minimize interactions between commercial and sport fisheries on the weekends early in the season. No additional area closures were implemented in District 6, and District 8 remained closed during the initial opening. The first sockeye salmon opening is normally two days. Any decision to extend fishing time during the first three openings is based primarily on the preseason forecast and fishery performance estimated by management biologists monitoring the fishery on the grounds. Sockeye salmon catches were below average in most areas and the fishery closed after two days. For this initial sockeye opening, 25 boats fished in Clarence Strait (106-30) and 50 boats fished in Sumner Strait (106-41). The preseason forecast of Stikine River sockeye salmon was 182,800 fish. This run size would allow the U.S. fisheries to harvest a total of 58,550 Stikine River sockeye salmon, which includes 32,100 Tahltan Lake fish. The preseason forecast was used for weeks 25 through 27, with inseason run size estimates produced weekly starting in week 27 and used throughout the remainder of the season.

During statistical week 26 (June 19–June 25), there were 42 boats fishing in Sumner Strait, 22 boats fishing in Clarence Strait, and 32 boats fishing in District 8. This was the first opening of the season in District 8. Lines for the initial commercial opening in District 8 were expanded beyond the Stikine River flats to limit the harvests of Chinook salmon returning to the Stikine River. The initial opening was announced for two days in each district. Both districts were

extended by an additional day primarily due to above average sockeye catch rates in both Districts 6 and 8 as indicated by inseason fishery monitoring. The inseason sockeye salmon stock assessment for sub-district 106-41 indicated that 15.6% of the catch was comprised of thermally marked Tahltan fish, while 11.2% were Tuya fish. In District 8, 32.3% were thermally marked Tahltan fish and 17.9% were Tuya fish.

During statistical week 27 (June 26–July 2), there were 42 boats fishing in Sumner Strait, 18 boats fishing in Clarence Strait, and 49 boats fishing in District 108. Both districts were opened for an initial three days and the line restrictions were liberalized to the commonly used lines that restrict fishing on the Stikine River flats. Inseason monitoring indicated that sockeye abundance in Districts 6 and 8 were well above average. Due to the below average preseason forecast only a 24-hour extension in both districts occurred. The first inseason terminal run estimate produced later in the week resulted in 166,200 fish, which is below the preseason forecast. The estimated run size of Talhtan sockeye increased while the other Stikine stocks decreased. The peak sockeye salmon harvest for the season in both districts occurred this week with over 50,000 sockeye salmon harvested. Of this harvest, about 55% are estimated to be Stikine fish. The inseason sockeye salmon stock assessment for subdistrict 106-41 for week 27 indicated that 14.5% of the catch was comprised of thermally marked Tahltan fish while 18.4% were Tuya fish. The District 8 inseason stock assessment indicated 26.8% thermally marked Tahltan fish and 18.9% Tuya fish.

During statistical week 28 (July 3–July 9), Districts 6 and 8 were opened for an initial three days. There were 27 boats fishing in Clarence Strait, 44 boats in Sumner Strait, and a total of 48 boats fishing in District 108. Surveys on the fishing grounds indicated that sockeye catch rates remained strong in both districts. With above average sockeye catch rates in both districts and below average effort in District 8 and average effort in District 6, a 24-hour extension was announced on the grounds for both districts. The inseason sockeye salmon stock assessment for week 28 indicated that marked Tahltan fish contributed 6.3% of the 106-41 catch and 16.1% of the District 108 catch. Marked Tuya fish contributed to 10.5% of the 106-41 catch and 23.4% of the District 108 catch. The second inseason Stikine run size estimate increased from the prior week to 173,900 fish, but still remained below the preseason forecast. The U.S. AC was estimated to be 56,300 fish with a Tahltan AC of 39,300. The U.S. harvest of Stikine sockeye salmon through this week was 53,600, including 32,700 Tahltan fish. The estimated run sizes produced by the Stikine Management Model (SMM) were in question due the unknown of how the increase in the number of Canadian permits fishing in the lower river was affecting CPUE, one of the key SMM inputs. However, it was thought the lower CPUE may offset good inriver fishing conditions created by below average flows.

During statistical week 29 (July 10–July 16), 29 boats fished in Clarence Strait, 36 boats fished in Sumner Strait, and 30 boats fished in District 8. This was the initial week of the McDonald Lake sockeye stock of concern conservation period, which preempted a reduction of fishing time to a maximum of two days in District 6. Any additional time during this three-week period would be in the form of midweek openings in District 108. Effort was below average in both districts with sockeye salmon harvest rates above average for those boats fishing in traditional sockeye salmon areas. Despite continued good fishery performance, the run size estimates produced by SMM continued to be lower than the preseason forecast and no additional fishing time occurred. The estimate produced near the end of the week resulted in a decrease in the Stikine sockeye run size. The estimate of Tahltan returning fish decreased from the prior week,

whereas the mainstem estimate increased. The U.S. AC of Stikine fish was estimated to be 51,500. The U.S. cumulative harvest through this week was 59,400 fish. Statistical week 29 inseason sockeye salmon stock assessment indicated that marked Tahltan fish contributed 5.1% of the 106-41 catch and 11.7% of the District 8 catch. Marked Tuya fish contributed to 9.7% of the 106-41 catch and 13.0% of the District 8 catch. The first Tahltan weir counts that were received at the end of the week were very good with just over 9,000 sockeye salmon past the weir in just two days. The well above average weir count indicated that the SMM was underestimating the Tahltan component of the Stikine River sockeye run.

Effort shifted during statistical week 30 (July 17–July 23) as 33 boats fished in Clarence Strait, 25 boats fished in Sumner Strait, and 71 boats fished in District 8. The majority of boats fishing in District 8 were targeting enhanced chum returning to Anita Bay. Both districts were open for an initial two days. A midweek opening in District 8 for 24 hours was announced on the grounds. The additional time was based on expected low sockeye harvests due to low effort targeting sockeye, continued above average sockeye salmon catch rates for both districts, and an increase in estimated Stikine River sockeye salmon abundance. This week's SMM produced a slightly higher Stikine sockeye salmon run size estimate with estimated total run size of 168,400 fish. The resultant U.S. AC was 52,600 fish. The estimated mainstem run size continued to increase, while the Tahltan estimated run size continued to decrease. However, by this time, the Tahltan weir count was over 20,000 sockeye indicating the Tahltan run size was going to be larger than the SMM estimated. The U.S. harvest of Stikine sockeye salmon through week 30 was 63,000 fish with a harvest of 36,100 Tahltan fish. The inseason sockeye salmon stock assessment for week 30 indicated that marked Tahltan fish contributed 3.0% of the 106-41 catch and 4.2% of the District 8 catch.

Overall effort increased during statistical week 31 (July 24–July 30) with 33 boats fishing in Clarence Strait, 25 boats in Sumner Strait, and 72 boats in District 8. Both districts were open for an initial two days. Sockeye salmon catch rates continued to be above average in both districts with continued below average effort in District 6 and above average effort in District 8. Tahltan Lake sockeye had no concerns for meeting escapement goal, increasing mainstem run size estimates, and low expected harvest of Stikine sockeye justified a 24-hour midweek opening in District 8. Due to limitations from the McDonald Lake sockeye salmon action plan, no additional time was possible in District 6. This was the last week of restrictions based on McDonald Lake sockeye salmon and for sockeye salmon based management in both districts. Estimates produced by the SMM this week and during the next two week's continued to indicate increasing mainstem and decreasing Tahltan run sizes but with a total run size estimate remaining around 161,000 Stikine sockeye salmon.

#### Pink Salmon Fishery

During statistical weeks 32 through 35 (July 31–August 27), both Districts 6 and 8 were managed for pink salmon. That portion of Section 6-D in District 6 along the Etolin Island shoreline was closed to gillnet fishing from week 33 through week 36 by regulation. In Districts 6 and 8, three day openings occurred in weeks 32 and 33 based on above average catch rates in week 31 and good parent year escapements. Catch rates were below average in week 33 for both districts with some improvements in District 6 for week 34. Improvements in pink salmon catch rates continued for both districts in week 35. However, due to poor pink salmon escapements to local systems, no additional fishing time was warranted during the remainder of the pink salmon management period. During the 2011 season, the fishing effort was generally above the weekly

ten year average effort in both districts throughout the pink salmon management period. Above average effort and a high price paid for pink salmon were likely the catalysts behind the above average total harvest in both districts.

# **Coho Salmon Fishery**

During statistical week 36 (August 28–September 3) the management emphasis changed from pink salmon to wild coho salmon. Prior to the switch to coho salmon management, the District 6 fishery harvested 81,987 coho salmon, approximately 70% of the total District 6 coho salmon catch. The Neck Lake/Burnett Inlet enhanced summer coho returns comprised the majority of this early coho salmon harvest with an estimated contribution of approximately 52,000 fish in the District 6 fishery prior to week 36. The average weekly Alaska hatchery coho salmon catch rates in the District 6 fishery was above average until week 32, at which point it remained below average for the rest of the gillnet season. During the coho salmon management period, pink and chum salmon remained the most abundant species in the catch composition for the first three weeks in District 6. The coho salmon harvest was below recent 10 years average in both Districts 6 and 8. The weekly wild coho salmon component of the harvest remained below average with a peak during week 38, two weeks later than average. During the coho management period, both districts had two-day openings except for statistical weeks 36 and 37, which were three-day openings. The 2011 gillnet season in both districts ended at noon on Tuesday, September 27.

# **Harvest and Escapement Summary**

The 2011 post-season run size estimate of Stikine-bound sockeye salmon is 214,900 fish. This estimate includes: the Districts 6 and 8 estimated harvest of 69,300 Stikine sockeye salmon, the U.S. inriver subsistence fishery estimated harvest of 1,741 fish, the total Canadian Stikine inriver harvest of 61,386 fish (including test fishery harvest), the Tahltan Lake escapement of approximately 34,588 fish (above goal range of 18,000 to 30,000), the estimated Tuya escapement of 14,200 fish, and the estimated mainstem escapement of 33,700 fish (within the escapement goal range of 20,000 to 40,000 fish). The total U.S. harvest of 71,000 Stikine sockeye salmon is just below the estimated U.S. Allowable Catch of 73,600 and contributed to 35% of the total Districts 6 and 8 sockeye salmon harvest.

Chum salmon harvested in both districts are harvested incidentally to directed fisheries for sockeye, pink, and coho salmon. Chum salmon returning to Anita Bay in some years contribute significantly to chum salmon harvests in both districts, particularly harvests in District 8. Preliminary estimates indicate that Anita Bay chum salmon made up 34% of the total Districts 6 and 8 chum salmon harvest. Preliminary estimates also indicate that Neets Bay chum made up 65% of the total chum harvest in District 6.

Escapements to sockeye, pink, and coho salmon to local systems were acceptable. Peak escapement counts of sockeye salmon to local systems were generally below average to average. Escapement of sockeye salmon to McDonald Lake is estimated to be 113,000 fish, near the upper end of the goal range. This was the second consecutive year McDonald Lake was within the goal. Pink salmon escapement goals were met in Southern Southeast as a whole, but District 6 was one of the weaker areas in the region. Escapement of coho salmon as a whole is not monitored. However, indications from the Stikine River and a few other systems around Southeast where escapement is monitored generally around an average return of coho salmon.

# **DISTRICT 11: TAKU/SNETTISHAM**

## **Fishery Overview**

The District 11 Taku/Snettisham commercial drift gillnet fishery occurs in the waters of Section 11-B, including Taku Inlet, Port Snettisham, and Stephens Passage north of the latitude of Midway Island, and Section 11-C including the waters of Stephens Passage south of the latitude of Midway Island and north of a line from Point League to Point Hugh. If the Taku Chinook run strength is sufficient, the fishery may target Chinook salmon in May and early June; sockeye and summer chum salmon through mid-August; and coho and fall chum salmon in the fall. Management of the summer sockeye and coho salmon fishery is based on the strength of returns of wild sockeye salmon stocks in the summer and wild stocks of coho and chum salmon in the fall. A stock assessment program conducted at Canyon Island on the Taku River provides inseason estimates of Taku River run strength of Chinook, sockeye, and coho salmon through mark-recapture efforts. Douglas Island Pink and Chum Salmon Inc. (DIPAC) operate sockeye salmon escapement enumeration programs at Speel and Crescent lakes. Aerial and foot stream surveys are conducted to monitor the development of salmon escapement in other streams in the district. The 2011 season was the 12<sup>th</sup> year of a large return of adult hatchery sockeye salmon back to the DIPAC Snettisham Hatchery facility located inside Port Snettisham. The District 11 common property fishery, which includes both the traditional area and the Speel Arm SHA inside Port Snettisham, harvested 2,510 Chinook, 164,000 sockeye, 28,500 coho, 344,800 pink, and 668,000 chum salmon (Tables 17 and 21).

The Pacific Salmon Treaty (PST) affects management of the fishery because the Taku River, a major transboundary river (TBR) extending into Canada, contributes substantial portions of the salmon harvested in District 11. The PST mandates that the Taku sockeye salmon fishery be managed primarily for Taku River spawning escapement needs. The return of TBR enhanced sockeye salmon determines harvest sharing arrangements of surplus Taku River sockeye salmon between Canada and the U.S. Revised Annex IV language of the PST provides a sliding harvest share for all sockeye, wild and enhanced, based on documented enhanced sockeye returns resulting from joint U.S./Canada sockeye salmon enhancement projects in the Taku River drainage. The 2011 return of TBR enhanced sockeye established harvest share for surplus Taku River sockeye salmon at 79% US and 21% Canada. The PST also has provisions for transboundary Taku River coho salmon specifying that the U.S. manage its fishery for an aboveborder run size minimum of 38,000 fish. If the inseason projection of the above-border run size is between 38,000 and 50,000 fish, a directed Canadian inriver harvest of 3,000 coho salmon is allowed for stock assessment purposes. If the projected inseason run size exceeds 50,000 fish, then the directed inriver harvest increases to 5,000 fish; if the projection exceeds 60,000 fish then allowed harvest increases to 7,500; and if the projection exceeds 75,000 coho salmon, the allowed harvest increases to 10,000 fish.

In 2003 the BOF implemented regulations allowing a directed Chinook salmon fishery in section 11-B, and in 2005, US and Canada reached a harvest sharing agreement as outlined in the PST for a directed Chinook salmon fishery to occur. As the result of a bilateral review and beginning with the 2009 season, the escapement goal range for Taku Chinook was established at 19,000 to 36,000 large Chinook salmon, with a point goal of 25,500 fish. The US Allowed Catch (AC) is determined by a Pacific Salmon Commission bilaterally agreed on formula based on the preseason Taku Chinook salmon run forecast early in the season, and revised in-season based on the

in-season run projection estimates generated from the Canyon Island mark-recapture program. The AC applies only to large Taku origin Chinook salmon over 28 inches in length (659mm MEF). The U.S. harvest of the Taku Chinook salmon AC will not count towards the Southeast Alaska aggregate abundance-based management regimes (AABM) allocation although the historical base harvest of 940 Chinook salmon continues to be counted as treaty fish. The U.S. allowed catch is shared between the gillnet, troll, and sport fisheries occurring in District 11, with no set allocation for each user group. In January 2006 the BOF made changes slightly increasing the allowed areas for both gillnet and troll fisheries, adjusted the open periods for troll to three days in a week the gillnet fishery is open for one day, and to five days in a week the gillnet fishery is open for two or more days. A seven inch minimum gillnet mesh restriction was also adopted for the directed Chinook fishery. There were no directed commercial Chinook fisheries in District 11 in 2011. Although a small allowed catch of Taku Chinook was available to the U.S. based on the preseason forecast, it was deemed too small to provide for manageable directed commercial fisheries, and once inseason estimates were available, no allowed catch was provided for directed U.S. fisheries. However, sport fish bag limit and gear restrictions in District 11 were liberalized between April 25 and June 21.

The 2011 traditional area fishery was open for a total of 46 days from June 19 through September 28. Participation in the fishery peaked in statistical week 29 with 160 boats fishing. Fishing effort, as measured by the total number of boats delivering fish each week multiplied by the number of days open to fishing, also peaked for the common property fishery in statistical week 29. Total fishing effort for the 2011 common property drift gillnet fishery was 2,555 boat days, 103% of the 2001–2010 (10-year) average. The harvest in the traditional area fishery totaled 2,400 Chinook, 100,500 sockeye, 27,500 coho, 339,000 pink, and 668,000 chum salmon (Table 17). An additional 63,500 sockeye were harvested in the common property fishery in the Speel Arm SHA. Common property harvests for Chinook, pink, and chum salmon were above the 10-year average. Enhanced stocks contributed significant numbers to the harvest of both sockeye and chum salmon, and minor numbers to the harvest of other species.

Management actions used to conduct the 2011 District 11 drift gillnet fishery were limited to imposing time, area, and mesh restrictions during statistical weeks 26–40 when the management emphasis is on sockeye and coho salmon.

# **Chinook Fishery**

The pre-season terminal run forecast of 40,986 large Taku River Chinook salmon provided an Allowed Catch (AC) of 1,533 fish for directed Chinook fisheries in District 11. Because there was AC available from the preseason forecast, the District 11 sport fishery enjoyed liberalized bag limits and gear restrictions from April 25 until June 21. However, due to the limited Chinook AC, any potential commercial fisheries were postponed until the first inseason estimate of run strength was generated. In statistical week 21 the first inseason estimate was approximately half of the preseason estimate and provided no AC for directed Chinook fisheries. The inseason estimate of run strength generated in SW 25 projected a terminal run of approximately 16,000 large Chinook, substantially below forecast and not large enough to reach the lower bound of the escapement goal range. The water conditions on the Taku River this season were one of the worse ever experienced during Chinook sampling, rapidly moving between very low and very high levels over the course of the Chinook run, hindering the ability to generate inseason abundance estimates with confidence. The 3,500 fish Base Level Catch (BLC) provides for large Taku Chinook harvested in the sport and the regular sockeye and coho directed gillnet fisheries

in District 11. The harvest of 1,065 fish in the sport and 765 fish in the drift gillnet fisheries in District 11 was well within the allowed BLC of large Taku Chinook in 2011.

# **Sockeye Fishery**

Management emphasis for the District 11 drift gillnet fishery shifted to sockeye salmon beginning in statistical week 26. In statistical week 26, Section 11-B was opened for less than average two days with Taku Inlet closed north of the latitude of Jaw Point due to Chinook concerns. Forty three boats harvested 652 Chinook of which 294 were large Taku fish. The 2,150 fish sockeye harvest was 34% of the 10-year average. The sockeye CPUE was 86% of the average. Chum harvests were 9% of the ten-year average.

Fishing time in Section 11-B for statistical week 27 was three days with the north line established at the latitude of Jaw Point to protect any milling Chinook salmon near the Taku River mouth. 52 boats harvested 725 Chinook of which 301 were large Taku Chinook. The 4,500 fish sockeye harvest was 43% of the ten-year average. The sockeye CPUE was 86% of the average. Otolith analysis revealed that 2% of the sockeye salmon harvest from Taku Inlet was of TBR enhanced Tatsamenie and Trapper Lake origin. Chum salmon harvests were 52% of the ten-year average.

Fishing time for statistical week 28 was set for three days in Taku Inlet and Stephens Passage, with the north line established at the latitude of Jaw Point to protect any milling Chinook salmon near the Taku River mouth and a six-inch minimum mesh restriction south of Circle Point was imposed to conserve for wild Port Snettisham sockeye salmon while providing opportunity on enhanced summer chum salmon. Limestone Inlet was opened concurrent with Stephens Passage to provide access to enhanced DIPAC chum salmon returning to this remote release site. Effort increased to 75 boats and 205 Chinook were harvested, 168 of which were large Taku fish. The total District 11 harvest of large Taku Chinook salmon for the directed Chinook fishery accounting period, statistical weeks 19–28, was 1,828 fish. This includes 1,065 fish harvested in Juneau area sport fisheries, and 763 fish incidentally caught in the directed sockeye drift gillnet fishery, well below the 3,500 fish base line catch allotment for these fisheries. The 8,490 fish sockeye harvest in statistical week 27 was 58% of the ten-year average. The sockeye CPUE was 86% of the average. Otolith analysis revealed that 1% of the sockeye salmon harvest from Taku Inlet was of DIPAC Snettisham hatchery origin, and 5% were of TBR enhanced Tatsamenie and Trapper Lake origin. Chum harvests were 93% of the ten-year average.

Fishing time for statistical week 29 was again set for three days in Taku Inlet and Stephens Passage with a six-inch minimum mesh restriction south of Circle Point to conserve for wild Port Snettisham sockeye salmon while providing opportunity on enhanced summer chum salmon. With adequately developing pink salmon returns to local streams, Section 11-C was opened for three days. Effort increased to 160 boats and the 18,900 fish sockeye harvest was equal to the ten-year average. The sockeye CPUE was 73% of the average. Otolith analysis revealed that 4% of the sockeye salmon harvest from Taku Inlet was of DIPAC Snettisham hatchery origin. TBR enhanced sockeye salmon of Tatsamenie and Trapper Lake origin contributed 2.8% of the harvest in Taku Inlet this week. The harvest of 297,800 summer chum, mostly of DIPAC hatchery origin, was 291% of the ten-year average.

With weak sockeye indicators and higher than average effort levels, fishing time for statistical week 30 was set for two days in Taku Inlet and Stephens Passage with a six-inch minimum mesh restriction south of Circle Point to conserve for wild Port Snettisham sockeye salmon while

providing opportunity on enhanced summer chum salmon. Section 11-C was opened for two days. Effort remained steady at 155 boats with the 9,800 fish sockeye harvest 48% of the tenyear average. The sockeye CPUE was 38% of the average. Otolith analysis revealed that 18% of the sockeye salmon harvest from Taku Inlet during this week was of DIPAC Snettisham hatchery origin. TBR enhanced Tatsamenie and Trapper Lake origin sockeye salmon contributed 11% to the Taku Inlet harvest. Chum harvests were 146% of the ten-year average.

Fishing time for statistical week 31 was set for three days in Taku Inlet and Stephens Passage with a six-inch minimum mesh restriction south of Circle Point to conserve for wild Port Snettisham sockeye salmon while providing opportunity on enhanced summer chum salmon. Section 11-C was opened for four days. Effort declined to 124 boats. With the inseason estimate of inriver abundance projecting that the lower bound of the escapement goal range had been achieved, the Section 11-B fishery was extended an additional 24 hours. The 18,100 fish sockeye harvest was 71% of the ten-year average. The sockeye CPUE was 59% of the average. Otolith analysis revealed that 23% of the sockeye salmon harvest from Taku Inlet was of DIPAC Snettisham hatchery origin , and 9% was of TBR enhanced Tatsamenie and Trapper Lake origin. Chum harvests were 243% of the ten-year average. The harvest of pink salmon in Section 11-C was 349% of the ten-year average, due to both good returns and improved market conditions.

Fishing time for statistical week 32 was set for three days in Taku Inlet and Stephens Passage with a six-inch minimum mesh restriction south of Circle Point to conserve for wild Port Snettisham sockeye salmon while providing opportunity on enhanced summer chum salmon. Section 11-C was opened for four days. With good catches in the marine fishery and inriver, below average effort and no escapement concerns, the Section 11-B fishery was extended 24 hours. Effort dropped to 87 boats and the 20,300 fish sockeye harvest was 85% of the ten-year average. The sockeye CPUE was 92% of the average. Otolith analysis indicated that 25% of the sockeye salmon harvest from Taku Inlet was of DIPAC Snettisham hatchery origin, and 3% was of TBR enhanced Tatsamenie and Trapper Lake origin. Chum harvests declined to 32% of the ten-year average. The harvest of pink salmon in Section 11-C was 168% of the ten-year average.

Fishing time for statistical week 33 was set for four days in Taku Inlet and Stephens Passage. Section 11-C was opened for four days. Effort increased to 100 boats and the 13,400 fish sockeye harvest was 92% of the ten-year average. The sockeye CPUE was 77% of the average. Otolith analysis indicated 29% of the harvest from Taku Inlet was of DIPAC Snettisham hatchery origin, and 3% was of TBR enhanced Tatsamenie and Trapper Lake origin. The harvest of pink salmon in Section 11-C was 183% of the ten-year average.

During the summer fishing season, fishing time in Stephens Passage south of the latitude of Circle Point may differ from that in Taku Inlet to target or conserve wild Taku and Port Snettisham sockeye salmon as well as effectively harvest the return of enhanced DIPAC summer chum and sockeye salmon. Limestone Inlet was opened to the inner markers from statistical week 28 through statistical week 33 to allow the harvest of remote released DIPAC hatchery chum salmon. Port Snettisham (Subdistricts 111-33, 111-34) was closed to fishing during statistical weeks 26–33 to limit harvest of wild Crescent and Speel Lake sockeye salmon runs. The partial weir and sonar used to monitor sockeye returns to Crescent Lake experienced technical difficulties and was unable to provide meaningful data this season. Visual observation confirmed sockeye salmon migrating into Crescent Lake but enumeration was not possible. In statistical week 34 a strong pulse of fish through the Speel Lake weir brought the cumulative escapement above the 4,000 fish lower bound of the escapement goal range. Because of this, the

Speel Arm SHA was opened to common property fishing for one day in statistical week 34 and opened concurrently with the Section 11-B fishery in statistical weeks 35 to 37 to target enhanced Snettisham Hatchery sockeye salmon.

# **Coho Fishery**

Beginning in statistical week 34, the management emphasis in the District 11 drift gillnet fishery shifts to wild Taku coho salmon. The fall drift gillnet season lasted seven weeks, beginning on August 16 in statistical week 34, and lasting until September 28 in statistical week 40. Fishing time in Section 11-B was set at three days in statistical week 34 due to weaker than expected coho returns, and the opening was delayed until Monday August 15<sup>th</sup> to accommodate the Golden North Salmon Derby taking place in Juneau area waters. Section 11-C was opened for three days due to adequately developing pink salmon returns to local systems. The 900 fish coho salmon harvest was 35% of the ten-year average. The coho CPUE was 47% of the average. The Speel Arm SHA was opened for one day in statistical week 34 and 61,100 sockeye were harvested by 77 boats. An otolith sample obtained and analyzed by DIPAC indicated 96.3% of the sample was enhanced Snettisham Hatchery sockeye. The harvest of pink salmon in Section 11-C was 153% of the ten-year average.

Fishing time in Sections 11-B and 11-C was set for three days in statistical week 35, with the Speel Arm SHA open to target enhanced Snettisham Hatchery sockeye. The 3,100 fish coho salmon harvest was 70% of the ten-year average. The coho CPUE was 49% of the average. 750 sockeye were harvested in the Speel Arm SHA by 25 boats.

Fishing time in statistical week 36 was set for three days in Sections 11-B, 11-C, and the Speel Arm SHA. The 3,900 fish coho harvest was 59% of the ten year average. The coho CPUE was 46% of the average. 1,400 sockeye were harvested in the Speel Arm SHA by 6 boats.

Fishing time in statistical week 37 was set for three days in Sections 11-B and the Speel Arm SHA. Section 11-C was closed as the pink salmon returns to the area were completed. The 1,100 fish coho harvest was 48% of the ten year average. The coho CPUE was 22% of the average. 130 sockeye were harvested in the Speel Arm SHA by 3 boats.

Fishing time in statistical week 38 was reduced to two days in Sections 11-B and the Speel Arm SHA was closed. The 2,400 fish coho harvest was 17% of the ten year average. The coho CPUE rebounded to 91% of the average.

Fishing time in Section 11-B was set at three days for the remaining two weeks of the fishery as, in addition to improvements in fishery performance, the minimum 38,000 coho stipulated in the Pacific Salmon Treaty had been passed above border. The 1,000 coho harvested in the last two weeks of the fishery were 32% of the ten-year average harvest for these statistical weeks.

The Section 11-B traditional sockeye salmon harvest for the weeks 34–40 was 44% of the 10-year average. The preliminary postseason estimate of Taku River coho salmon in 2011 was 83,350 fish inriver with an escapement past all fisheries of 70,900 fish. The fall chum salmon harvest in statistical weeks 34–40 was 49% of the ten-year average.

The District 11 drift gillnet fishery closed on September 28 in statistical week 40.

## **Harvest and Escapement Summary**

The District 11 common property drift gillnet Chinook salmon harvest of 2,510 fish is 129% of the 10-year average harvest for the weeks fished. Alaskan hatchery fish contributed 24% of the

harvest as estimated by coded wire tag (CWT) analysis. The Taku River stock assessment program's preliminary estimate of escapement is 27,500 large Chinook salmon, within the current escapement goal range of 19,000 to 36,000 large fish.

The District 11 common property drift gillnet sockeye salmon harvest was 164,000 fish, 93% of the 10-year average. Domestic hatchery sockeye salmon began to contribute to the fishery during statistical week 28 and added significant numbers to the harvests during statistical weeks 29 through 34. The final contributions of Taku River and Port Snettisham wild sockeye salmon to the District 11 commercial drift gillnet harvest will not be known until post-season analyses of stock identification data are available. However, harvest of thermally marked sockeye salmon from fry-plants was estimated inseason by otolith analysis. Sockeye salmon from joint U.S./Canada fry-planting programs at Tatsamenie and Trapper Lakes contributed an estimated 5,450 fish to the fishery with nearly all of these harvested in Taku Inlet. Contributions of domestic U.S. enhanced sockeye salmon to the District 11 common property drift gillnet fishery including the Speel Arm SHA totaled approximately 88,300 fish or 54% of the harvest. The District 11 drift gillnet fishery harvested 51% of the 118,700 fish total wild sockeye salmon TAC for the Taku River. Stock composition estimates will be updated post season based on a combined analysis of otolith, scale pattern, and brain parasite incidence characteristics. The preliminary estimate of Taku River sockeye salmon escapement past all fisheries from the markrecapture program was 112,200 fish, above the escapement goal range. Wild sockeye salmon escapements inside Port Snettisham were improved from recent seasons. A total of 4,777 sockeye salmon were counted through the DIPAC operated weir on the outlet stream of Speel Lake, above the minimum of the 4,000–13,000 fish escapement goal range. This is the second time the Speel Lake lower bound has been met since 2006. The escapement to Crescent Lake was monitored with DIPAC's split-beam hydro acoustic counter at the outlet of Crescent Lake again this year, but due to some technical issues did not provide useful fish passage data. It is known that all species of pacific salmon do enter Crescent Lake; however sockeye salmon is the predominant species. The peak aerial survey count for Crescent Lake in 2011 was 3,000 sockeye salmon. Though no formal goal exists for this system, the historical average peak aerial survey is approximately 5,000 fish. ADF&G and DIPAC will continue to work on the technical aspects of this program to improve the "usability" of this data.

Coho salmon stocks harvested in District 11 include runs to the Taku River, Stephens Passage, Port Snettisham, and local Juneau area streams as well as Alaskan hatcheries. The common property coho salmon drift gillnet harvest of 28,550 fish was 76% of the 10-year average. Alaskan hatchery coho salmon contributed 2,075 fish or 7.3% to the District 11 common property harvest in 2011. The preliminary coho escapement for the Taku River was estimated to be approximately 70,900 fish, surpassing the minimum in-river goal of 38,000.

Coho salmon escapements to other streams in the district were mostly unknown.

The District 11 common property drift gillnet pink salmon harvest of 344,800 fish was 286% of the 10-year average, with increased harvest rates stimulated by the increased price and record pink salmon return to northern Southeast Alaskan waters. The escapement number to the Taku River was unknown and the number of pink salmon passing through the fish wheels at Canyon Island was used as an index of escapement. The total of 17,775 pink salmon caught in the fish wheels was 192% of the 2009 parent-year and was 143% the 2001–2009 odd-year average. The pink salmon escapement to the Taku River was characterized as above average.

The District 11 common property drift gillnet harvest of 668,000 chum salmon was 166% of the 10-year average. The summer chum salmon harvest of 665,700 fish comprised 99.7% of the full season's harvest. The summer chum salmon run was considered to last through mid-August (statistical week 33) and was comprised mostly of domestic hatchery fish, with small numbers of wild stock. Chum salmon returning to the DIPAC facilities in Gastineau Channel and remote release site at Limestone Inlet contributed a major portion of the harvest, but quantitative contribution estimates were not available. Approximately 83% of the District 11 drift gillnet chum salmon harvest was made in Taku Inlet, and 17% in Stephens Passage. The harvest of 2,000 fall chum salmon during statistical week 34 and later was 49% of the 10-year average. Most of these fall chum salmon are of wild Taku River origin. The escapement number to the Taku River was unknown and the chum salmon passing through the fish wheels at Canyon Island were used as an index of escapement. The 162 fish caught in the fish wheels in 2011 was 54% of the 10-year average. The chum salmon escapement to the Taku River was characterized as below average.

# **DISTRICT 15: LYNN CANAL**

## **Fishery Overview**

Drift gillnet fisheries in Lynn Canal occurs in the waters of District 15 encompassing Section 15-A (upper Lynn Canal), Section 15-C (lower Lynn Canal), and Section 15-B (Berners Bay). The fishery targets four major stocks of sockeye salmon (Chilkat Lake, Chilkoot Lake, Chilkat River mainstem and Berners River). Hatchery chum salmon are predominant harvests during the first five weeks of the summer season. The fishery targets coho and fall chum salmon during the fall season (middle August through early October).

The District 15 traditional Lynn Canal drift gillnet fishery was opened for a total of 48 days between June 19 and October 5, 2011 (Table 14). The number of fishing days is below average (82% the 2001–2010 average of 59 days). Fishing effort totaled 4,595 boat-days (1.2 times the 2001–2010 average of 3,804 boat-days). The total number of permits participating in the 2011 Lynn Canal drift gillnet fishing season was well above average, (220 permits as compared to the previous 10-year average of 148 permits). The number of drift gillnet boats participating in the District 15 gillnet fishery each week was also well above average in 2011. Effort peaked in week 27 (June 26) when 171 boats were counted in the district. Peak effort in the district is typical during this time as the drift gillnet fleet targets abundant hatchery chum salmon returns to Amalga and Boat Harbor release areas.

A total harvest of 1.7 million salmon took place during the 2011 Lynn Canal (District 15) common property fishery (Tables 17 and 22). This harvest included 1,166 Chinook, 64,000 sockeye, 34,000 coho, 509,000 pink and 1,116,000 chum salmon (Tables 17 and 22). The harvests of Chinook, pink, and chum salmon were all above average while the sockeye and coho salmon harvests were below average. The 2011 Chinook salmon harvest of 1,166 fish was well above the 2001-2010 average (1.4 times this average). The coho salmon harvest was 72% of the previous 10-year average. The harvest of pink and chum salmon was 1.6 and 4.8 times the 10-year averages for these species, respectively. The sockeye salmon harvest was 57% of the previous 10-year average of 112,000 fish.

Of the total District 15 sockeye salmon harvest, approximately 26,800 Chilkoot Lake sockeye salmon were harvested as determined by scale pattern analysis. This estimate is 52% of the recent 10-year average. The commercial harvest of Chilkat Lake sockeye salmon was

approximately 15,600 fish, 38% of the 10-year average. The estimated harvest of sockeye salmon originating from areas other than Chilkat and Chilkoot lakes in Lynn Canal was approximately 21,400 fish, about 1.2 times the recent 10-year average. The majority of this harvest originates from the mainstem Chilkat River and Berners Bay river systems.

The 2011 total District 15 chum salmon harvest of 1,116,000 fish is 1.6 times the previous 10-year average and the highest on record since 1960. Hatchery contributions of chum salmon from remote release sites at Boat Harbor and Amalga Harbor contributed an estimated 92% of the chum harvest (based on otolith marking results) through statistical week 33 (beginning August 14). Chum salmon harvest in the district from statistical weeks 34 through the end of the season (August 14 through October 5) are considered fall chum salmon and are predominantly Chilkat River drainage stocks. An estimated 64,800 fall chum salmon were harvested in this fishery. The 2011 catch of fall chum salmon is about 1.1 times the recent 10-year average of 59,100 fish.

Coho salmon harvests for Lynn Canal totaled 34,000 fish. This harvest was approximately 72% of the recent 10-year average of 47,000 fish. Due to below average expectations for Berners River coho salmon, Section 15-B was not open to commercial drift gillnet fishing in 2011. The total District 15 harvest of 508,900 pink salmon is approximately 4.8 times the previous ten-year average and is the highest harvest on record.

# **Section 15-A Sockeye Fishery**

The 2011 Lynn Canal drift gillnet season was opened per regulation Sunday, June 19 (Table 14). Summer season management of section 15-A was directed at harvesting returns Chilkat Lake sockeye and Chilkoot Lake sockeye salmon. Section 15-A was opened for two days south of the latitude of Seduction Point west of a line from Seduction Point to Talsani Island to Eldred Rock to Sullivan rock light to a point within two nautical miles of the western shoreline of Lynn Canal at the latitude of Point Sherman in the first week (June 19-June 21) of this fishery. Due to an expected average return of Chilkat River Chinook salmon, Chilkat Inlet remained closed during the first week of the fishing season. The eastern shoreline of Section 15-A was closed for the first 6 weeks of the summer season to protect expected poor returns of Chilkoot Lake sockeye salmon while directing harvest on Chilkat River mainstem and Chilkat Lake sockeye salmon on the western side of section 15-A. This area was again open two days in week 27 (June 26–June 28). In weeks 28 (July 3-July 5) and 29 (July 10-July 12) this area was open for two days a week with Chilkat Inlet open south of the Glacier Point-Twin Coves line. The western area of section 15-A was open for two days each in weeks 30 (July 17-July 19) and 31 (July 24-July 26) with Chilkat Inlet open south of the latitude of the northernmost tip of Kochu Island. All of section 15-A south of the latitude of Seduction Point, including Chilkat Inlet south of the Glacier Point-Twin Coves line, was initially open for two days in week 32 (July 31-August 1) and was extended for one additional day. In week 33 (August 7-August 10) section 15-A was open for three days south of the latitude of the southernmost tip of Talsani Island (Talsani line) with Chilkoot Inlet open north of the latitude of Mud Bay Point and south of Tanini Point.

# **Section 15-A Fall Chum and Coho Fishery**

Fall fishery management focused on the harvesting Chilkat River fall chum, coho and late run Chilkat Lake sockeye salmon in Section 15-A beginning in statistical week 34 (August 14). In week 34 (August 15–August 19) section 15-A was open for three days with Chilkoot Inlet initially open north of the latitude of Mud Bay Point and south of Tanini Point. A strong push of Chilkoot sockeye through the weir resulted in the decision to extend the opening an additional

day, with the north line moved up to the White Rock in Lutak Inlet. The next week (week 35, August 22-August 25) section 15-A opened for three days south of the Talsani line with Chilkoot and Lutak Inlets open north of the latitude of Mud Bay Point to the terminus of the Chilkoot River. In week 36 (August 28–August 31) and week 37 (September 4–September 7) this section was open for two days south of the Talsani line, and for three days in Chilkoot and Lutak Inlets, from Mud Bay to the White Rock line, allowing for the harvest of surplus pink salmon. In week 38 (September 11-September 13) the area was open for two days, from the Talsani line south. Starting in week 39 (September 18-September 21) the north line was moved to Seduction Point, allowing for the increased harvest of chum salmon. Week 39 started with a two-day opening south of Seduction Point, with Chilkat Inlet open south of the Glacier Point-Twin Coves line. This area was extended an additional day to provide more opportunity for the harvest of chum salmon. In week 40 (September 25-September 28) this same area was open for three days, and additionally Chilkoot Inlet was open for three days south of a line from Tanini Point to Taiya Point. The Chilkoot Inlet area allowed for the harvest of fall chum salmon pushed north by the strong south winds that were prevalent. The last opening for the season occurred in week 41 (October 2-October 5), when all of 15-A was open for three days south of the latitude of the northernmost tip of Kochu Island in the Chilkat Inlet and south of a line from Tanini Point to Taiya Point in Chilkoot Inlet.

#### Section 15-B and 15-C Fisheries

Due to below average expectations for Berners Bay coho salmon, Section 15-B did not open during the 2011 season.

Fishing effort in Lynn Canal during the summer season was concentrated in section 15-C where the fleet targeted larger than average returns of hatchery summer chum salmon originating from remote release sites at Amalga Harbor and Boat Harbor. Two days of fishing were allowed in section 15-C including the Boat Harbor terminal harvest area during the initial week of the season (June 19-June 21). The eastern side of section 15-C was closed north of the latitude of Point Bridget to provide protection for expected poor returns of Chilkoot and Chilkat Lake sockeye salmon. In addition, a six inch minimum mesh size gear restriction was in place for most of the summer season in section 15-C to reduce the harvest of sockeye salmon while targeting hatchery chum salmon. The western side of Section 15-C north of the latitude of Danger point was also closed to protect wild Endicott River chum salmon and other wild salmon stocks migrating to streams in this area of the district. The area north of Danger Point remained closed through statistical week 31 (July 31). In weeks 27–31 (June 26–July 16), Section 15-C was open for two days each week south of the latitude Point Bridget and south of the latitude of Danger Point within two miles of the western shoreline of Lynn Canal with an additional day each in what is known as the "postage stamp area" (south of a line from a point on the eastern shoreline of Lynn Canal at the latitude of Vanderbilt Reef light to Vanderbilt Reef light and east of a line from Vanderbilt Reef to the latitude of Little Island light). This area was open for the additional day to target hatchery chum salmon while reducing exploitation rates on migrating sockeye salmon. In week 30 the six inch mesh restriction was lifted. All of Section 15-C was open for three days each in weeks 32 and 33 (July 31-August 13) except an area two nautical miles of the western shoreline at the latitude of Lance Point north to the latitude of Point Sherman (the opening for week 32 was initially two days, but was extended to three). This closed area was designed to protect poor returns of wild Endicott River chum salmon.

The inside portion of the Boat Harbor terminal harvest area (west of department markers at the entrance to Boat Harbor) was opened for two days in week 26 (June 19-June 21) and then on a continual basis from the week 27 (June 26) through the first two days of week 36 (August 30). The remainder of the Boat Harbor terminal harvest area (those waters within two nautical miles of the western shoreline of Lynn Canal south of the latitude of Danger Point at 58°41.73' N. latitude and north of a point 2.4 miles north of Point Whidbey at 58°37.05' N. latitude) was opened for two days in week 26 (June 19-June 21) and then continuously beginning in week 27 (June 26) through week 31 (July 30). The northern line of the Boat Harbor Terminal Harvest Area remained at the latitude of Danger Point during this time to protect Endicott River summer chum salmon and other wild salmon stocks migrating through this area. In week 32 (July 31) the north line of this area was moved up to Lance Point to provide for additional fishing opportunity on surplus pink and chum salmon. The outside portion of the Boat Harbor terminal harvest area stayed open continuously until it was closed after a four day opening in week 34 (August 18). The number of boats participating in this terminal harvest area each week was generally well above average during the summer fishery. Commercial harvests of salmon from the Boat Harbor Terminal Harvest Area included 221 Chinook, 6,300 sockeye, 263,000 chum, 500 coho and 178,000 pink salmon (Table 24). Harvests for all species except chum salmon were above average for this area. The chum salmon harvest is 78% of the previous ten-year average of 227,600 summer chum salmon.

## **Section 15-C Fall Chum and Coho Fishery**

Section 15-C was managed for Lynn Canal coho and fall chum salmon from week 34 through the end of the season. In weeks 34 and 35 (August 14–August 27) all of section 15-C was open for three days each week. All of section 15-C was open for two days each week in weeks 36–38 (August 28–September 17). In week 39 (September 18–September 21) section 15-C initially opened for two days but was extended one day to allow for additional harvest of chum salmon. Section 15-C was opened for three days each week in weeks 40 and 41 (September 25–October 8). The season closed after week 41 to conserve late returns of Chilkat River fall chum salmon and coho salmon. The last day of fishing was October 5. Fall season effort in Section 15-C was above average in 2011. The 2011 coho and fall chum salmon harvests in Section 15-C were estimated at 18,500 and 16,200 fish, respectively. This harvest was below average for coho and above average for chum salmon.

## **District 15 Escapements**

The total sockeye salmon visual count through the Chilkoot River weir was 65,900 fish, which fell within the sustainable escapement goal range of 38,000–86,000 fish. This weir count was just above the 2001–2010 average of 64,300 fish. In addition, 43 Chinook, 18 coho, 76,200 pink and 118 chum salmon were enumerated at this weir. Weekly weir passage rates of Chilkoot Lake sockeye salmon were generally below or near average all season with the exception of statistical weeks 32 and 33 (July 31–August 13), when 15,600 and 13,200 (ten-year average is 8,000 and 5,400, respectively) sockeye salmon were enumerated. The pink salmon weir count was 1.8 times the historical even year average of 40,500 fish. A large part of the pink salmon return spawns below the weir and the count does not represent the total pink salmon escapement to the Chilkoot River.

A DIDSON acoustic camera was used again in 2011 to enumerate sockeye through the Chilkat Lake weir. The weir was also used to capture returning Chilkat Lake sockeye salmon for age-sex

and length composition sampling and to sample fish for tag ratios originating from the lower Chilkat River fish wheel project. Two fish wheels are used to capture salmon in the lower Chilkat River and all captured sockeye salmon larger than 360 mm (MEF) are marked with fin clips and released back into the river. Recapture events are conducted at the Chilkat Lake weir site and on selected spawning ground locations on the Chilkat River mainstem to determine the ratio of tagged sockeye salmon in the population. Fish wheel catch is also used to judge the relative strength of the salmon return during the migration. The total Chilkat Lake sockeye salmon DIDSON/weir count was 63,000 sockeye salmon. This count was slightly below the biological escapement goal range of 70,000–150,000 fish. The preliminary mark-recapture escapement estimate for Chilkat River mainstem sockeye salmon is 37,500 fish (SE=3,966). The 2011 mark-recapture estimate is close to the 1994–2010 average escapements of 33,900 fish.

Preliminary mark-recapture escapement estimate for Chilkat River Chinook salmon is 3,000 age-1.3 and older Chinook salmon. This estimate is near the historical 1991–2010 average and near the middle of the escapement goal range of 1,850–3,600 large fish.

Chum salmon aerial peak escapement counts conducted along streams on the western shorelines of Lynn Canal were generally average, while the pink salmon counts were above average. Aerial peak escapement counts for these species on the eastern side of Lynn Canal were above average for both species.

Chilkat River fall chum salmon escapement based on fish wheel catch appeared to be above average. Fall chum salmon escapement is measured by indexing the total fish wheel catch of this species. The index is based on a mark-recapture program conducted during the years 2001–2004 where it was estimated that the lower Chilkat River fish wheel project captures approximately 1.5% of this return annually. The 2011 fall chum salmon fish wheel catch of 5,517 fish from this project resulted in an estimated escapement of approximately 368,000 fish. The 2001–2010 average index estimate for this species is 317,000 fish. The peak aerial survey count for chum salmon on the Klehini River was above average. The Chilkat River fall chum salmon escapement aerial surveys indicated that returns of this portion of the run was near average. A peak count of 31,500 chum salmon was observed in the Chilkat River in the fall of 2011. This peak aerial count is just above the previous 10-year average of 30,000 fish.

Chilkat River coho escapement was below average in 2011. Based on the expansion of index surveys conducted through the Chilkat River drainage, approximately 66,600 coho salmon returned to spawn in the Chilkat River drainage. This estimate is below the historical average and near the upper end of the biological escapement goal range of 30,000–70,000 fish.

Aerial surveys conducted at Berners Bay streams indicated a peak sockeye salmon escapement of 9,000 fish. The peak aerial count is well above the previous 10-year average of 2,700 fish. Berners River coho salmon escapements were estimated at approximately 6,050 fish. This escapement is about half the ten-year average escapement (12,200). This stream count is near the mid-point of the biological escapement goal range of 4,000–9,200 fish.

## HATCHERY HARVESTS

Privately operated hatcheries contributed Chinook, sockeye, coho, pink, and chum salmon to the 2011 commercial drift gillnet and purse seine fisheries. Hatchery-produced salmon are harvested in traditional common property fisheries, common property hatchery terminal area fisheries, and in private hatchery cost recovery fisheries. Accurate harvest information is available from fish

tickets for these harvest types. Management attention in traditional fisheries is directed on the harvest of wild stocks, although co-migrating enhanced fish contribute substantially to traditional area harvests. As enhanced fish enter terminal areas near hatchery release sites fishery management is directed on the harvest of hatchery-produced surplus returns. In most cases fisheries in terminal harvest areas are managed according to allocation plans approved by the Alaska Board of Fisheries. In several locations terminal harvest areas (THAs) must be managed in cooperation with hatchery organizations to provide for broodstock needs and cost recovery harvests. Harvests in hatchery Special Harvest Areas (SHAs) are opened so hatchery operators can harvest returning fish to pay for operating costs and to reserve sufficient broodstock to provide for egg take goals. For some terminal locations only cost recovery harvest takes place; for some locations both common property and cost recovery harvests occur; at other locations only common property harvests occur (Figure 2).

Hatchery contributions to common property fisheries are estimated by evaluation of coded wire tag (CWT) recovery information, and through thermal otolith mark recoveries. CWT rates are specified in hatchery annual management plans, harvests are randomly sampled by ADF&G port sampling programs, and used to estimate hatchery-produced coho and Chinook salmon production. Thermal otolith marks are increasingly used to estimate chum or sockeye harvests in fisheries, or to evaluate the performance of differentially-marked groups returning to a release location. Thermal marking is advantageous since entire releases can be mass-marked, however, there is currently no comprehensive program in place to sample returning adults throughout the region. Beginning in 2006 SSRAA funded a program to sample salmon harvested in traditional fisheries in southern Southeast for otoliths at delivery locations in Ketchikan and Petersburg and from fishery samples collected by ADF&G port sampling staff on board salmon tenders. DIPAC Inc. also conducts port sampling at delivery locations in northern Southeast Alaska. NSRAA conducts sampling primarily in THA fisheries.

In 2011, of the 73.6 million total all-gear salmon harvest, 89% were harvested in traditional fisheries, 2 in THA fisheries, 7% in hatchery cost recovery fisheries, and 2% in Annette Island reservation fisheries (Pontius and Davidson 2012). Of 10.7 million chum produced in 2011, 47% were harvested in traditional areas, 11% were harvested in hatchery THAs, and 38% were harvested in cost recovery fisheries and 4% were harvested in the Annettte Island reservation fisheries. Chum salmon harvests in 2011 in both purse seine and drift gillnet common property fisheries are in large part due to hatchery production.

Southeast Alaska harvests of enhanced fish in 2011 in common property (traditional and terminal area) fisheries, for combined gear types (including purse seine, drift gillnet and troll gear), were estimated to account for 9.6% of overall harvests. Harvests of enhanced fish in common property fisheries included: 21.9% of Chinook, 14.8% of sockeye, 26.5% of coho, 1.2% of pink, and 80.9% of chum salmon (Vercessi *In prep*). For comparison proportions of enhanced fish in Southeast Alaska common property fisheries in 2010 were as follows: 22% of Chinook, 8% of sockeye, 28% of coho, 2% of pink, 72% of chum and 18% of overall harvests, based on hatchery annual reports (White 2011). The combined value 2011 enhanced fish in common property fisheries is estimated at \$39 million, 22% of the overall value.

#### TRADITIONAL COMMON PROPERTY HARVESTS

Chinook salmon are intensively sampled in common property fisheries to provide for abundance based harvests allowed under the Pacific Salmon Treaty, to comply with allocations established for the different gear groups, and to manage spring troll and net fisheries for additional harvests of Chinook produced by Alaska hatchery programs. Coded wire tags are intensively sampled in various fisheries to provide accounting for these various purposes.

In 2011 purse seine fisheries harvested 25,983 large Chinook in common property fisheries (Table 1). An estimated 17,901 Chinook salmon are estimated to be from Alaska hatcheries and 9,140 are designated as *Treaty* harvests (Skannes, et al. 2012). Seine *Treaty* harvests were below the seine allocation of 12,676 Chinook salmon. Purse seine harvests of around 18,000 occurred in hatchery terminal harvest areas, primarily in Districts 1, 7, 12, and 13. Seine harvests of around 8,000 from traditional areas included 53% from District 4 with the remainder distributed between districts.

In 2011 drift gillnet fisheries harvested 26,883 large Chinook in common property fisheries including about 10,000 in traditional areas and 17,000 from terminal harvest areas (Table 17). Terminal harvests occurred primarily in Districts 1, 7, and 13. An estimated 19,800 Chinook are estimated to be from Alaska hatcheries, 630 are designated as wild terminal exclusion harvests, and 9,436 Chinook are designated as *Treaty* harvests. The drift gillnet allocation of 8,549 Chinook salmon was exceeded by 887 fish. All gear harvests of *Treaty* Chinook were below the quota provided under the Pacific Salmon Treaty. Hatchery operators have estimated combined troll, seine, and gillnet gear Chinook contributions to common property fisheries of 65,874 fish, or 21.9% of Southeast Alaska common property Chinook salmon harvest of 300,858 fish.

Troll fisheries harvested an estimated 24,987 hatchery-produced Chinook salmon in the 2010-2011 season, 10.3% of total Chinook salmon harvests. Around 21% of the all gear Chinook salmon harvest of 358,352, including 12,000 sport harvests, is estimated to have originated from Alaska hatchery production.

The total common property seine harvest of coho salmon in 2011 was around 347,000 (Table 1). Of these 334,000 (96%), were harvested in traditional fisheries and only 12,800 were harvested in terminal areas (Table 2). Hatchery coho salmon contributions to the purse seine fishery based on analysis of coded wire tag recoveries are estimated at 98,258 fish, or 28.3% of the total. The largest numbers of enhanced coho were harvested from District 12 (33%), District 3 (11%), District 9 (10%), and District 4 (10%). Hatchery operators have estimated 98,589 coho salmon in common property purse seine fisheries (Vercessi *In prep*).

Drift gillnet fisheries harvested 238,000 coho salmon in common property fisheries, including 228,000 (96%) in traditional fisheries and 9,900 in hatchery terminal areas (Table 17). Hatchery coho salmon contributions to the drift gillnet fishery based on coded wire tag recoveries are estimated at 72,004 fish, or 30.3% of the total. Eighty one percent (81%) of enhanced coho were harvested in District 6 and another 14% were harvested in District 1. Hatchery operators have estimated 87,446 coho salmon in common property drift gillnet fisheries (Vercessi *In prep*). Overall hatchery contributions of coho salmon to seine, gillnet and troll fisheries have been estimated at 501,873 fish, 26.5% of commercial common property fisheries in Southeast Alaska.

Of 499,000 sockeye harvested in common property purse seine fisheries in 2011 most (99.3%) were from traditional fisheries (Table 2). A few enhanced sockeye are likely to have been harvested in common property purse seine fisheries in 2011, including purse seine fisheries in Upper Chatham Strait and Icy Strait. DIPAC has estimated 29,654 enhanced sockeye taken in purse seine fisheries.

Of 518,094 sockeye salmon harvested in common property drift gillnet fisheries in 2011, 444,199 (85.7)% were harvested in traditional fisheries, and 73,895 (14.3%) were from hatchery terminal areas (Table 17). In District 11 the major contributions of enhanced sockeye salmon included 62,000 DIPAC fish in the Speel Arm THA and 5,450 Tatsamenie and Trapper Lake sockeye, 41% of total District 11 sockeye salmon common property harvests of 163,976 fish. A total of 198,00 sockeye were harvested in the District 6 and District 8 gillnet fisheries combined. The Stikine River proportion sockeye returns harvested in Districts 6 and 8 was 69,300 fish, 35% of total sockeye harvests for these two districts. The proportion from enhancement under the PST included was 50% of Stikine harvests and included 17,470 Tuya Lake fish and 17,221 Taltan Lake fish. Hatchery operators have estimated total sockeye salmon contributions to Southeast Alaska common property fisheries of 151,434 fish, 14.8% of 1,022,562 total Southeast common property harvests (Vercessi *In prep*).

The regionwide common property harvest of pink salmon was 57.4 million fish in 2011. Overall hatchery operator estimated pink salmon production hatvested in common property fisheries was 703,544, 1.2% of total production (Vercessi *In prep*). The most significant hatchery production of pink salmon is at the Port Armstrong Hatchery (AKI) in Section 9-A. In 2011 AKI harvested 508,000 pink salmon for cost recovery in the SHA. AKI has estimated hatchery contributions of 517,713 pink salmon to common property seine harvests in 2011. In Section 13-B SJ-SSSC harvested 94,000 pink salmon for cost recovery in 2011. It is likely that some harvest of SJ-SSSC pink salmon took place in purse seine common property fisheries in Sitka Sound, however there was not a basis to calculate a number. Kake Nonprofit Fisheries Corporation (KNFC) harvested 13,800 pink salmon for cost recovery in 2011. KNFC estimates 186,000 to seine and 9,800 to troll fisheries in 2011.

Generally, the majority of harvests of chum salmon in Southeast Alaska are derived from hatchery production, and hatchery harvest estimates are determined by a combination of otolith sampling of commercial traditional and terminal area fisheries. Most, but not all chum salmon are thermally marked, and sometimes harvest estimates are based on expected proportions of returns to terminal areas instead of systematic sampling for otolith marks. Precise estimates of harvests in traditional common property fishery areas are not always known, so returns as reported in this section are based on hatchery operators' best estimates.

Common property purse seine harvests of 2.7 million chum salmon in 2011 were 69% of the most recent 10-year average harvest of 3.9 million (Table 1). Purse seine fisheries included 2.1 million from traditional fishery areas (78%) and 0.6 million from hatchery terminal harvest areas (22%) (Table 2). In 2010 total combined contributions estimated by SSRAA, NSRAA, and DIPAC to common property seine fisheries were 2,393,000 or 74% of total harvests (White 2011). In 2011 hatchery operators (SSRAA, NSRAA, DIPAC, KNFC, AKI, and SSSC) estimated total seine harvests of 1,664,327 enhanced chum salmon in common property fisheries, 61.6% of the total common property seine harvests of 2,700,914 chum salmon (Vercessi, *In prep*).

Drift gillnet harvests of 2.8 million chum salmon were 133% of the most recent 10-year average harvest of 2.1 million (Table 16). Harvests included 2.2 million in traditional fishery areas (77%) and 0.6 million from hatchery terminal areas (33%; Table 17). In 2010 total combined contributions estimated by NSRAA, SSRAA, and DIPAC to common property drift gillnet fisheries were 1,903,000 million chum or 86% of the common property drift gillnet harvest (White 2011). In 2011 hatchery operators (SSRAA, NSRAA, DIPAC, KNFC, AKI, and SSSC)

estimated total gillnet harvests of 2,750,214 enhanced chum salmon in common property fisheries, 98.2% of total common property gillnet harvests of 2,800,609 chum salmon (Vercessi, *In prep*).

Troll harvests of hatchery-produced chum salmon are estimated by hatchery operators as 602,181 fish for 2011 (Vercessi, *In prep*), representing 85.7% of total troll chum harvests of 702,756 fish. Troll harvests of chum increased in 2011 from 365,348 in 2010. The 2010 estimate of hatchery contributions to troll harvests was 93% (White 2011).

Estimated all-gear hatchery contribution to common property chum salmon harvests was 5,016,722 chum salmon, 80.9% of total common property harvests of 6,204,279 fish. The estimated all-gear hatchery contribution of chum salmon to common property fisheries was estimated at 72% in 2010 (White 2011).

# TERMINAL HARVEST AREA COMMON PROPERTY HARVESTS

## **Neets Bay**

The Neets Bay THA and SHA (Subdistrict 101-95, Figure 2) is primarily managed by Southern Southeast Regional Aquaculture Association (SSRAA) to provide broodstock and to conduct cost recovery, but there is some opportunity for terminal harvest in common property fisheries. In 2011, the majority of the summer chums returning to Neets Bay were harvested for cost recovery. Neets Bay SHA is the primary location for cost recovery for SSRAA programs. Cost recovery totals were 1.48 million chum salmon, 1,656 coho salmon, and 8,222 Chinook salmon (Table 25). The Neets Bay THA was open concurrently to all gear groups from May 1 through June 10 with very limited effort. The THA was next opened from June 11 through 28 on a rotational basis between the gillnet and seine fleets to target excess Chinook salmon. Rotational purse seine openings are shown in Table 8 and drift gillnet openings are shown in Table 15. On September 24 through October 5, the THA was re-opened on a rotational schedule between the net gear groups, and then on Thursday, October 6 the Neets Bay THA was open concurrently for all gear groups through the end of the season on November 10. The purse seine harvest in Neets Bay THA was about 8,700 Chinook, 8,100 coho, and 89,500 chum salmon (Table 23). The drift gillnet harvest in the Neets Bay THA was about 2,800 Chinook, 6,200 coho, and 34,600 chum salmon (Table 24). The combined harvest for both the gillnet and the purse seine fleet inside the Neets Bay THA was 11,519 Chinook, 14,292 coho salmon, and 124,019 chum salmon. Based on otolith analysis the total common property return for enhanced Neets Bay salmon for all gear groups was 15,615 Chinook, 66,770 coho, 535,060 summer chum, and 255,440 fall chum salmon. The summer chum salmon total return of 1,533,760 was 131% of the preseason forecast.

#### **Nakat Inlet**

The Nakat Inlet Terminal Harvest Area (THA) (Subdistrict 101-10) was opened in 2011 for troll and gillnet gear to harvest enhanced chum and coho salmon returns produced by SSRAA. The Nakat Inlet THA was open continuously by regulation from June 1, statistical week 23, to November 10, statistical week 46 for gillnet and troll (Table 15). The drift gillnet fishery harvested 1,340 coho and 192,009 chum salmon (Table 24) in the Nakat Inlet THA. Although Nakat Inlet THA was open from June 1 through November 10 to troll gear, no documented landings occurred. Approximately 195,000 Nakat Inlet chum salmon were also harvested in the drift gillnet common property fisheries, and an additional 18,000 were harvested in the common

property purse seine fisheries. The total estimated return of 403,000 chum salmon was well above the preseason forecast of 249,900 chum salmon.

# **Kendrick Bay**

The Kendrick Bay THA (Subdistrict 102-15) was opened in 2011 for access by the seine fleet to harvest returning chum salmon produced by SSRAA. The 2011 Kendrick Bay forecast was 509,000 summer chum salmon. The Kendrick Bay THA was opened by regulation beginning June 15 for the purse seine fleet and remained open through November 10 (Table 8). Forty five vessels took part in this fishery harvesting 2,946 sockeye salmon, 3,338 coho salmon, 39,037 pink salmon, and 227,079 summer chum salmon (Table 23). Additional chum salmon returning to Kendrick Bay were harvested outside of the Kendrick Bay THA along the eastern shoreline of Prince of Wales Island during the 4 day chum salmon directed fisheries prior to statistical week 29 (July 10). Chum harvest in those openings totaled 232,285 chum salmon; of those chum salmon approximately 197,532 or 85% were of hatchery origin, with approximately 66% being Kendrick Bay enhanced chum salmon. The total return for Kendrick Bay enhanced summer chum salmon was 729,170; this was 143% of the preseason forecast.

## **Anita Bay**

The Anita Bay Terminal Harvest Area (THA) is opened each year to allow the harvest of surplus Chinook, chum, and coho salmon produced by SSRAA. These fish are predominantly harvested by the drift gillnet and purse seine fleets. The Anita Bay THA is the only terminal common property hatchery fishery in Districts 5–10. The area opened for concurrent net fisheries and troll fishing from May 1 through June 12 (Tables 8 and 15). From June 13 through August 30 the fishery operated on a rotational basis with purse seine and drift gillnet fleets alternating openings with the purse seine fleet fishing first. Rotational fishery schedules were similar to the past two seasons, starting and ending at noon with the area closed to net fishermen for 24 hours between each gear rotation. The seine fleet would fish for 24 hours followed by a 24-hour closure and would be followed by the gillnet fleet fishing for 24 hours. Prior to 2009, the rotation in Anita Bay was 2:1 with the gillnet fleet fishing for 48 hours followed by the seine fleet fishing 24 hours. The first gillnet effort in Anita Bay occurred during statistical week 19 (May 1–May 7) and the first seine effort occurred during statistical week 25 (June 12–June 18). The last fishing effort recorded for the seine fleet occurred during statistical week 34 (August 14-Aug. 20) and the last recorded effort by the gillnet fleet occurred during statistical week 40 (September 25– October 1). This was the eighth consecutive year that hatchery returns to the Anita Bay THA were harvested since the release site changed from Earl West Cove to Anita Bay in 2001. Purse seine fishermen harvested 3,311 Chinook, 108 sockeye, 98 coho, 40,719 pink, and 82,942 chum salmon from the Anita Bay THA in 2011 (Table 23). Gillnet fishermen harvested 6,205 Chinook, 496 sockeye, 313 coho, 3,536 pink, and 67,183 chum salmon inside the THA (Table 24). The total estimated returns of 13,525 Chinook and 295,000 chum salmon were well above preseason forecasts while the estimated return of 1,700 coho salmon was well below forecast.

#### **Speel Arm**

In District 11, the Douglas Island Pink and Chum, Inc (DIPAC) midpoint forecast for total Snettisham Hatchery sockeye salmon returns in 2011 was 203,000 fish from their 2006 and 2007 brood year smolt releases. The actual return was 140,000 sockeye salmon including broodstock. Because of recent poor returns to Speel Lake no fishery in the Speel Arm SHA was contemplated until the 4,000 fish minimum escapement through the weir was realized. In weeks 33 and 34 rain

inspired a pulse of fish to move through the Speel Lake weir, and the Speel Arm SHA was opened for 1 day concurrent with the end of the announced three-day opening in the Section 11-B and 11-C fishery. 77 boats harvested 61,148 sockeye and minor numbers of other species of salmon. An otolith sample obtained and analyzed by DIPAC indicated 96.3% of the sample was of Snettisham Hatchery origin. The Speel Arm SHA was opened for three days each week during statistical weeks 35 to 37, and an additional 2,300 sockeye were harvested. The final escapement to Speel Lake documented by the DIPAC operated weir was 4,777 sockeye salmon, above the minimum of the escapement goal range, the second time the minimum of the goal range has been achieved since 2006. This improvement is attributed to the time and gear restrictions imposed in Stephens Passage during weeks 28-33. DIPAC's Snettisham Hatchery contributed an estimated 62,000 hatchery sockeye salmon to harvests in the District 11 common property commercial drift gillnet fishery. The midpoint projection for the 2012 return to the Snettisham Hatchery sockeye salmon program is for a total return of 230,000 fish.

#### **Hidden Falls**

In District 12, the Northern Southeast Aquaculture Association (NSRAA) forecast a return to the Hidden Falls THA of 204,800 coho, 7,200 Chinook and 1,195,000 chum salmon. The NSRAA board set the chum salmon cost recovery goal at 720,000 pounds or approximately 90,000 fish and the broodstock goal was 150,000 fish. The 2011 Hidden Falls Hatchery chum salmon return was much weaker than expected and the THA was only opened to common property seining specifically to target chum salmon June 19, June 23, and June 26 (Table 8). Once NSRAA was assured of having adequate broodstock, the Hidden Falls THA was opened as a traditional seine fishery beginning July 26 primarily to target abundant pink salmon in the area but also to harvest remaining surplus hatchery chum salmon. During the June period, Kasnyku Bay remained closed as provided under Hidden Falls Hatchery Terminal Harvest Management Plan (5AAC 33.374) to provide trollers access to hatchery Chinook salmon. The total harvest of hatchery chum salmon during the three June openings was only 81,000 fish. Additionally, an estimated 50,000 hatchery chum salmon were caught in the Kelp Bay/Catherine Island traditional seine fishery. The final hatchery cost recovery harvest was 102,000 chum salmon and 145,000 were utilized for broodstock. The total return of chum salmon to Hidden Falls was approximately 378,000 or 32% of the forecast return.

# Medvejie/Deep Inlet

In District 13, NSRAA forecast a return to the Medvejie Hatchery in Silver Bay and the Deep Inlet THA of 34,550 Chinook and 1,060,000 chum salmon for 2011. Deep Inlet chum salmon are harvested in the Deep Inlet THA by purse seine, drift gillnet and troll gear during scheduled opening times, by troll gear and purse seine gear outside of the THA, and by the NSRAA cost recovery fishery in the Deep Inlet and Silver Bay Special Harvest Areas (SHA).

The Alaska Board of Fisheries in 2009 changed the net fishery allocation in the Deep Inlet THA Management Plan from a 2:1 to a 1:1 time ratio of gillnet to seine beginning the third Sunday in June when chum salmon are the target species. The time ratio prior to the third week in Sunday would remain 2:1 gillnet to seine when hatchery king salmon are the target species. The change of the time ratio of fishing time was for the purpose of bringing the two gear groups closer to their baseline allocation percentages of enhanced salmon value as specified under the Enhanced Salmon Allocation Management Plan (5 AAC 33.364). The new allocation plan for the Deep Inlet THA will sunset after the 2011 season.

The NSRAA Board decided at their March meeting in Sitka that this season's chum salmon cost recovery goals for the Silver Bay/Deep Inlet return was 661,000 pounds or approximately 83,000 chum salmon. The broodstock goal was 70,000 chum salmon. This allowed for a projected common property harvest of approximately 907,000 chum salmon.

In accordance with the Deep Inlet Management Plan, rotational fishery schedules followed a 2:1 ratio of gillnet fishing time to purse seine fishing time beginning May 29 and changed to a 1:1 ratio beginning June 19 (Tables 8 and 15). Additionally, the Board of Fisheries has allowed trolling to occur when net fisheries are closed and when trolling does not interfere with cost recovery. By emergency order, issued under 5AAC 39.265, harvesters participating in the Deep Inlet THA fishery were required to retain and utilize all salmon harvested during the 2011 season. This action was taken in order to promote full utilization of salmon, to prevent waste of salmon, to determine harvest patterns of incidentally harvested coho and sockeye salmon, and so the department and NSRAA have full and accurate reporting of returns. Purse seine and gillnet fishermen were also required to retain all Chinook salmon harvested in the Deep Inlet THA.

The common property rotational fishery began May 29 with 4 days gillnet and 2 days seine per week. The May/June fishing period primarily provides an opportunity to harvest king salmon returning to the Medvejie Hatchery. In 2011, drift gillnet fishermen were required to fish with a minimum mesh size of 6 inches prior to June 18, to reduce the harvest of local wild sockeye salmon returning to Silver Bay. During the time period of May 29 through June 18, as many as 26 gillnet boats and 7 seine boats participated in the fishery. The first seine effort did not occur until June 12. The total harvest during this period was approximately 4,600 Chinook salmon and 3,400 chum salmon. Beginning June 19, the schedule included seining on Sundays, Thursdays, and Fridays, and gillnetting on Mondays, Tuesdays and Wednesdays, and trolling on Saturdays of each week. This schedule remained in effect through August 10 when the Deep Inlet THA was closed to common property fishing in order for NSRAA to achieve cost recovery goals. During the Southeastern Alaska August troll coho closure August 10–14, trolling remained open in the waters of Eastern Channel and portions of Sitka Sound August 10-12, in accordance with 5 AAC 129.112, to target hatchery chum salmon. Allowing only three days of trolling in Eastern Channel during the 5-day coho troll closure was due increasing concerns by NSRAA that the chum salmon return was weaker than expected. For the three days, 19 trollers harvested only 1,500 chum salmon. The Deep Inlet THA did not reopen to common property fisheries for the remainder of the 2011 season. The total 2011 harvest in the Deep Inlet THA included 8,100 Chinook salmon and 83,000 chum salmon by drift gillnet gear, 3,600 Chinook salmon and 104,000 chum salmon by purse seine gear, and 5 Chinook salmon and 1,300 chum salmon by troll gear. Trollers harvested an additional 37,000 chum salmon outside of the THA during the season and seiners harvested approximately 60,000 chum salmon in Eastern Channel in the traditional Sitka Sound seine pink salmon fishery. NSRAA harvested 32,000 chum salmon for cost recovery, one-third of the season's goal. The total chum salmon return to Medvejie Hatchery/Deep Inlet THA, including broodstock was approximately 380,000 fish or 36% of the forecast.

#### **Boat Harbor**

The Boat Harbor proper area (west of department markers at the entrance to Boat Harbor) was opened on a continual basis from the start of the season (June 26) through week 36 (August 30). The remainder of the Boat Harbor area (those waters within two nautical miles of the western shoreline of Lynn Canal south of the latitude of Danger Point at 58°41.73' N. latitude and north

of a point 2.4 miles north of Point Whidbey at 58°37.05' N. latitude) was opened continuously beginning in week 27 (June 26) through week 34 (August 18). As in previous years, the northern line of the Boat Harbor Terminal Harvest Area remained at the latitude of Danger Point through the summer season to protect Endicott River summer chum salmon and other wild salmon stocks migrating through this area. The number of boats participating in this terminal harvest area each week was generally above average during the summer fishery. Commercial harvests of salmon from the Boat Harbor Terminal Harvest Area included 126 large Chinook, 6,254 sockeye, 178,000 chum, 461 coho and 178,000 pink salmon. Harvests were above average for Chinook, coho and chum salmon and below average for sockeye and pink salmon.

# HATCHERY COST RECOVERY HARVESTS

Hatchery cost recovery harvests were reported by seven private non-profit hatchery permit holders from 15 locations during 2011 (Table 25). Historical cost recovery harvests are shown in Table 26. Total landings were approximately 5.1 million salmon, 117% of the recent 10-year average harvest of 4.4 million. The harvest included 41,000 Chinook, 22,000 sockeye, 231,000 coho, 698,000 pink, and 4.1 million chum salmon. Chum salmon made up 80% of the total cost recovery harvest in the region in numbers of fish and were 127% of the recent 10-year average harvest. The sockeye salmon harvest was 23% of the recent 10-year average. Coho harvest was 73% of the recent 10-year average harvest. Chinook harvests were 114% of the recent 10-year average. The pink salmon harvest was 102% of the recent 10-year average harvest.

2011-season cost recovery harvests are summarized by location, enhancement organization, and species in Tables 25, including totals by organization. Locations of hatchery special harvest areas are shown in Figure 2. The largest chum salmon harvests by location included 1,485,000 by SSRAA at Neets Bay, 1,350,000 by DIPAC at Amalga Harbor, 693,000 by DIPAC at Gastineau Channel, 259,000 by NSRAA at Hidden Falls, and 213,000 by Armstrong-Keta, Inc at Port Armstrong. Pink salmon harvests were average with around 500,000 fish, and 71% of total cost recovery of pink salmon by Armstrong Keta, Inc. Coho cost recovery harvests were highest at the Port Armstrong Hatchery with 88,812, similar at Hidden Falls Hatchery with 86,045, and followed by the Mist Cove-Deer Lake harvest of 38,513. Sockeye salmon harvests from the Speel Arm SHA were 21,191 fish. Chinook cost recovery harvests in the region were above the recent 10-year average. The largest harvests of Chinook salmon occurred at Silver Bay SHA with 15,500, followed by Herring Cove with 8,800 and Neets Bay with 8,200.

SSRAA conducted cost recovery at the Neets Bay, Herring Cove, and Neck Lake SHAs. Total harvest for all three locations included 1,485,000 chum, 6,200 coho, and 17,000 Chinook salmon.

DIPAC conducted cost recovery at the Amalga Harbor, Gastineau Channel, and Port Snettisham SHAs. Total harvest for all three locations included 2,043,000 chum, 8,300 coho, 22,000 sockeye, and about 264 Chinook salmon.

NSRAA conducted cost recovery at the Deep Inlet, Hidden Falls, Silver Bay, and Mist Cove SHAs. Total harvest for the four locations included 333,000 chum, 48,000 pink, 125,000 coho, and 19,500 Chinook salmon.

Kake Nonprofit Fishery Corporation (KNFC) conducted cost recovery at the Gunnuk Creek SHA. Total harvest was 13,800 pink salmon and 12,133 chum salmon.

Armstrong Keta, Inc (AKI) conducted cost recovery at the Port Armstrong SHA. Total harvest included 499,000 pink, 213,000 chum, 89,000 coho, and 1,679 Chinook salmon.

Prince of Wales Hatchery Association (POWHA) conducted cost recovery at the Klawock Lake and the Port Saint Nicholas SHAs. Total harvest was 1,021 coho and 2,091 Chinook salmon.

The Sitka Sound Science Center (SJ-SSSC) conducted cost recovery at the Crescent Bay SHA. Total harvest was 93,73400 pink and 671 chum salmon.

# CANADIAN TRANSBOUNDARY RIVER FISHERIES

#### Introduction

Canadian aboriginal food fisheries have operated on the transboundary Stikine and Taku Rivers for many years. A small-scale commercial fishery has occurred on the upper Stikine River since 1975. In 1979 Canada initiated larger scale commercial fisheries in the lower portions of both the Taku and Stikine Rivers. Both drift and set gillnets are used in the lower river fisheries and one fish wheel has also been operated on the Taku River. The commercial fisheries are conducted primarily in the mainstem portions of the rivers by fishers using small skiffs. Commercial and aboriginal food fisheries are included as part of the U.S./Canada Pacific Salmon Treaty (PST) which has provided for international harvest sharing arrangements between the two nations since 1985.

#### STIKINE RIVER

For the Stikine River, the harvest-sharing objective for the 2011 season was to equally share the total allowable catch (TAC) of Stikine River sockeye salmon. In the event that there were sockeye salmon surplus to spawning requirements at Tahltan Lake, attempts would be made to harvest some of the surplus. A directed Stikine Chinook salmon fishery was conducted by Canada but not by the U.S. in 2011. Fishery openings for sockeye salmon were based on weekly run strength and the TAC as defined by the harvest sharing agreement. Canada is allowed a harvest of 4,000 coho salmon in a directed coho salmon fishery. Both countries are to work to develop and implement an abundance-based approach to managing coho salmon on the Stikine River.

The preseason run size estimate of 30,000 large Chinook salmon was above the threshold run size limit of 28,100 fish. The threshold number is the sum of the midpoint escapement goal (21,000) + the Canadian base level catch (2,300) + the US base level catch (3,400) + the inriver test fishery catch (1,400). Should the preseason run size estimate be below 28,100 large Chinook salmon, neither country is permitted to prosecute a targeted net fishery on Stikine bound Chinook salmon. Both countries, however, are permitted to harvest their base level catch taken in the course of the targeted sockeye fisheries. Further, Canada is permitted to prosecute a test fishery so designed to provide inseason run estimates while harvesting a maximum of 1,400 large Chinook.

The preseason run forecast indicated a run size characterized as below average. Joint Canadian and U.S. inseason predictions of terminal run size ranged from 18,300 to 22,700 Chinook salmon (Table 1). Managers used the daily catch and effort data transmitted from the Kakwan Point tagging site to make daily run projections. Joint weekly run size estimates were calculated on Wednesday or Thursday of the current week and were used to set the following week's fishery openings. For inseason forecasting managers used the average of the *model* and the marc-

recapture (M-R) estimates in weeks 23–34. All inseason projections indicated a run size that was less than the preseason expectation and well below the 2002–2010 average run size. Based on M-R data from the inriver commercial fishery, the preliminary postseason estimated terminal run size of Stikine Chinook salmon was 20,600 large Chinook salmon, below the final preliminary inseason estimate of 22,700 large Chinook salmon.

The 2011 Little Tahltan Chinook salmon escapement of 1,753 fish represents approximately 12% of the total inriver escapement of 14,412 fish, compared to the average of approximately 16%.

Preseason forecasts of the Stikine River sockeye salmon run were used to guide the initial fishing patterns of the U.S. and Canadian fisheries as required by the Transboundary Rivers Annex of the PST. The preseason forecast was for a Stikine sockeye salmon run of 183,300 fish and was used during weeks 25 through 27.

After week 27 inseason forecasts of total run size and TAC produced by the Stikine Management Model (SMM) were used to assist in determining weekly fishing plans. The weekly inputs to the model included: the harvest, effort, and stock composition (proportion Tahltan/Tuya from egg diameters, proportion Tuya from thermal mark analyses of otoliths) in the Canadian lower river test and commercial fisheries; harvests in the upper river aboriginal and commercial fisheries; the harvest, effort, and assumed stock composition in Subdistrict 106-41 (Sumner Strait); and the harvest and assumed stock composition in District 8 and Subdistrict 106-30 (Clarence Strait).

Other assessment methods including inseason run reconstruction and a linear regression of Catch Per Unit Effort (CPUE) of Tahltan Lake sockeye salmon and mainstem sockeye against total inriver run size (1998–2007) were used in concert with the SMM by Canada post week 27. The weekly inputs to the Tahltan sockeye salmon regression model included the cumulative weekly CPUE of Tahltan Lake sockeye salmon (1998–2008: from week 28 to 33 all correlations were significant and ranged from an r<sup>2</sup> of 0.67 in week 28 to an r<sup>2</sup> of 0.91 week 33). Post stat week 33, the run reconstruction inputs included the projected Tahltan Lake escapement, the catch to date of Tahltan lake sockeye expanded by run timing to predict the total catch, and the First Nations catch of Tahltan Lake sockeye.

Catches from the combined Canadian commercial and aboriginal gillnet fisheries, and the sport fishery in the Stikine River in 2011 included: 2,283 large Chinook (includes 29 release mortalities), 1,542 jack Chinook (includes 50 release mortalities), 55,623 sockeye, 5,718 coho, 99 chum, and 9 pink salmon (Table 27). This harvest includes 353 large Chinook salmon harvested during the directed Chinook fishery during weeks 20–22. In addition some pink and chum salmon were released; all of the 232 steelhead caught were released. A test fishery designed to target on Tuya bound fish at a site located in the mainstem Stikine River between the mouth of the Tahltan and the mouth of the Tuya River yielded a catch of 2,878 sockeye, 13 Chinook large salmon, and 6 jack Chinook. A total of 799 large Chinook and 219 jack Chinook was harvested by the commercial fleet under the auspices of a test fishery. The PST test fishery quota is 1,400 large Chinook; however, because the test fishery was only conducted during stat weeks 23–25 (29 May 29–June18; 65% of the run), the guideline test fish harvest was adjusted to reflect this proportion resulting in a guideline harvest of only 912 large Chinook.

An additional seven licenses were fished in the lower river commercial fishery in 2011. These licenses were leased by active commercial fishers from license holders that have not participated in the fishery for over a decade. Fishers were limited to one net, both set and drift gill netting techniques were used with the majority of the harvest taken in drift gillnets. There was a limited

targeted Chinook salmon fishery in 2011 occurring from week 20–22. The initial targeted fishery was based on the preseason estimated return of 30,000 large Chinook. Post week 22, the inseason run size estimate dropped to approximately 18,600 Chinook which resulted in the closure of the commercial fishery. The commercial fishing fleet, however, served as a test fishery from stat week 23–25 (May 29 to June18), with a guideline catch quota of approximately 900 fish. The objective of the test fishery was primarily to collect spaghetti tags applied 20 km downstream and thus provide a means to generate inseason run size estimates. The fleet targeted Chinook for a total of four days, below the average of 21 days. Sockeye salmon were targeted for a total of 25 days, below the average of 31 days. The coho salmon fishery was opened for a total of 16 days, above the average of 7 days.

The total of 34,588 sockeye salmon counted through the Tahltan Lake weir in 2011 was above the average of 30,760 fish. The 2011 count was above the escapement goal of 24,000 and above the upper end of the escapement goal range of 18,000 to 30,000 fish. A preliminary estimate of 9,355 fish originated from the fry-planting program which is below the 38% contribution of smolts observed in 2008, the principal cycle year contributing to the 2011 run. A total of 340 sockeye salmon was sacrificed at the weir for stock composition analysis. In addition, a total of 4,559 sockeye salmon was collected for broodstock, resulting in a spawning escapement of 29,689 sockeye salmon in Tahltan Lake.

The spawning escapements for the mainstem and Tuya stock groups are calculated using stock identification, the test fishery, and inriver commercial catch data. Based on this run reconstruction approach, the preliminary escapement estimates are 33,659 mainstem and 14,197 Tuya sockeye salmon. The mainstem spawning escapement is near average and within the escapement goal range of 20,000 to 40,000 fish. Aerial surveys were not conducted due to budget constraints in 2011.

The 2011 Chinook salmon escapement enumerated at the Little Tahltan weir was 1,753 large fish and 194 jack Chinook salmon. The escapement of large Chinook salmon in the Little Tahltan River was 70% below the average of 5,785 fish and 47% below the MSY escapement goal for this stock of 3,300 large Chinook salmon. The weir count was also well below the low end of the escapement goal range of 2,700 to 5,300 large fish. This is the fifth consecutive year that the lower end of the escapement was not reached.

Aerial surveys of five index sites were conducted on November 4. The combined count of 2,542 coho salmon, under fair to good viewing conditions, was 35% below the average of 3,910 coho salmon.

#### TAKU RIVER

The harvest sharing objective for Taku River sockeye salmon allows the US to harvest 79% of the TAC and Canada to harvest 21%. The TAC is managed on wild fish only. The harvest share is calculated on a sliding scale, dependent on the run of adult sockeye from the U.S./Canada fry planting program. Additionally, if the inriver escapement is projected to be above 120,000 wild sockeye, Canada may, in addition to its share of the TAC, harvest the projected surplus escapement apportioned by run timing. A fishery directed at Taku Chinook salmon is allowed when run-strength warrants. Management of the directed Chinook salmon fishery is abundance-based through an approach developed by the Transboundary River Committee (TBR) committee. The U.S. directed coho salmon fishery is managed to ensure a minimum above border escapement of 38,000 fish, and Canada is allowed a harvest of Taku River coho on a sliding

scale depending on the inseason projections of above border run size. Both countries are working to develop and implement an abundance-based approach to managing coho salmon on the Taku River.

The Taku River fishers harvested 2,436 large Chinook, 535 jack Chinook (fish less than 2.3 kg), 24,136 sockeye, and 8,490 coho salmon in 2011 (Table 28). This harvest includes 1,709 large Chinook harvested in a directed Chinook fishery during weeks 18–21. An additional 699 large Chinook were harvested in an assessment fishery during weeks 22–25. The sockeye salmon harvest was at the 2001–2010 average of 24,672. An additional 538 sockeye were harvested during assessment fisheries, primarily directed at coho salmon. Fish originating from fry plants contributed an estimated 1,879 fish to the harvest, comprising 8% of the total sockeye salmon harvest. The harvest of large Chinook salmon was 69% of the average of 3,525 fish, while the harvest of jack Chinook salmon was near the average of 493 fish. The harvest of coho salmon was 54% above the average of 5,532 fish. An additional 4,002 coho were harvested during an assessment fishery. For the commercial fishery there were 63 days of fishing, 17% above the average of 54 days. The seasonal fishing effort of 440 boat-days was 19% above the average of 371 boat-days. As in recent years, both set and drift gill netting techniques were used with the majority of the harvest taken in drift gillnets. Maximum allowable mesh size was 20.4 cm (8 inch mesh).

Adult enumeration weirs operated at Little Trapper, Tatsamenie, Kuthai, and King Salmon Lakes to provide information on the distribution and abundance of discrete spawning stocks within the watershed. A mark-recapture program has been operated annually from 1984 to 2011 to estimate the above-border run size for sockeye salmon (i.e., border escapement). The total spawning escapement is then estimated by subtracting the inriver harvest. The preliminary 2011 estimate of above border run is 136,861 sockeye salmon and the spawning escapement is estimated at 112,187 fish, which is above the escapement goal of 71,000 to 80,000 sockeye salmon. The Canadian harvest of 22,258 wild sockeye (excluding test fishery harvests) represented approximately 19% of the total TAC, below the base of 21%.

The Little Trapper Lake weir count of 3,809 sockeye salmon was 30% of the average of 12,724 fish. There was no broodstock collection in 2011. The Tatsamenie Lake weir count of 7,880 sockeye salmon was 92% of the average of 8,609 fish. A total of 1,300 fish were held for broodstock, which left a spawning escapement of 6,580 fish. The sockeye salmon count through the Kuthai Lake weir was 811 fish, 27% of the average count of 3,055 fish. The King Salmon Lake weir count was 523 fish and was 30% of the average of 1,736 fish. However, the weir count of 523 sockeye was exceeded by a helicopter survey count of 935 fish on September 19. It is speculated that alternate access to the lake may exist through a wetland located just south of the lake outlet, and that some fish used this to bypass the weir.

A Chinook salmon mark-recapture study was again conducted in 2011. The above border Chinook salmon run estimate is 30,758 large (3-ocean and larger) fish. Accounting for inriver harvest results in a spawning escapement estimate of 27,523 large Chinook salmon, which is below the average of 38,650 large fish, and within the escapement goal range of 30,000 to 55,000 fish.

Spawning escapement of coho salmon in the Canadian portion of the Taku drainage was estimated from the joint Canada/U.S. mark-recapture program. The above border run was estimated to be 83,349 fish and the spawning escapement was estimated at 70,857 fish. The spawning escapement was below the average of 113,961 coho salmon and above the upper end of the interim escapement goal range (27,500 to 35,000 fish).

# ANNETTE ISLAND FISHERIES

Presidential proclamation established the Annette Island Fishery Reserve in 1916. It provides a 3,000-foot offshore zone wherein the reserve natives have exclusive fishing rights. Salmon are harvested by purse seine, gillnet, and troll gear. The Annette Island Fishery Reserve natives also have the right to use fish traps, however, traps have not been used on the Island since 1993. The small hand troll fleet harvests very modest numbers of Chinook and coho salmon. Most of the harvest in recent years has been taken by the gillnet fleet and purse seine fleet.

The total 2011 Annette Island salmon harvest by all gears was reported as 1,705 Chinook, 29,323 sockeye, 15,187 coho, 741,000 pink, and 404,000 chum salmon. The Annette Island Reserve reported gillnet fishery harvests of 664 Chinook, 17,292 sockeye, 10,074 coho, 241,563 pink, and 263,824 chum salmon (Table 29). Gillnet harvests were above the recent 10-year average for Chinook, sockeye, pink and chum salmon and below the 10-year average for coho salmon. Sockeye were 164% of the 2001–2010 average and chum salmon were 235% of the 2001–2010average. The Annette Island Reserve reported purse seine fishery harvests were 420 Chinook, 12,031 sockeye, 4,773 coho, 498,932 pink, and 139,746 chum salmon (Table 30). Seine harvests were below the 10-year average harvest for coho and pink salmon and above average for Chinook, sockeye, and chum salmon. The purse seine harvest of chum salmon was five times the recent 10-year average harvest o 28,000 and set a new record for this species. Annette Island pink salmon harvests of 740,495 were 45% of total pink salmon harvests in District 1. Escapement targets for District 1 pink salmon systems were within ranges.

# **ACKNOWLEDGEMENTS**

This report includes contributions from area management biologists throughout the region, who manage the fisheries described. Scott Walker, Troy Thynes, Kevin Monagle, and Dave Gordon managed the purse seine fisheries and provided summaries. Justin Breese, Bo Meredith, Kevin Clark, Tom Kowalske, Troy Thynes, Dave Harris, Randy Bachman, and Eric Coonradt managed or assisted with the drift gillnet and terminal area fisheries and provided fishery summaries. Andy Piston provided sections summarizing escapement information for pink, chum, and sockeye salmon. Kathleen Jensen prepared text and tables describing Canadian fisheries on the Stikine and Taku rivers. Kira Pontius and Martina Kallenberger ran structured query reports to update tables.

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# **TABLES**

Table 1.—Southeast Alaska annual commercial, common property, purse seine salmon harvest (from traditional and terminal areas), in numbers of salmon, by species, 1980–2011.

Year	Chinooka	<b>Jacks</b> <sup>a</sup>	Sockeye	Coho	Pink	Chum	Total	Rank <sup>b</sup>
1980	11,701	=	510,956	184,570	11,869,988	1,002,478	13,579,693	37
1981	10,264	-	438,921	237,402	16,268,867	517,002	17,472,456	33
1982	30,529	-	445,385	397,349	22,048,891	828,444	23,750,598	27
1983	13,394	166	778,195	338,881	33,666,234	579,168	35,376,038	19
1984	20,762	-	457,160	350,017	21,070,834	2,433,749	24,332,522	25
1985	21,535	-	716,342	417,852	47,233,196	1,849,523	50,238,448	12
1986	12,113	1,158	587,730	568,410	42,788,318	2,198,907	46,156,636	16
1987	4,498	1,786	310,282	121,974	7,018,562	1,234,552	8,691,654	45
1988	11,137	1,028	654,748	157,003	8,825,252	1,625,435	11,274,603	42
1989	13,098	4,005	823,185	330,989	52,070,066	1,079,555	54,320,898	10
1990	11,323	3,454	965,918	372,471	27,915,150	1,062,522	30,330,838	22
1991	11,599	5,508	1,051,269	405,592	58,592,358	2,125,308	62,191,634	4
1992	18,024	2,296	1,336,889	488,399	29,769,079	3,193,433	34,808,120	20
1993	8,335	3,956	1,690,471	473,138	53,414,515	4,606,463	60,196,878	5
1994	14,824	6,265	1,430,610	967,691	51,280,083	6,376,472	60,075,945	6
1995	25,075	1,702	907,120	617,777	43,498,508	6,600,529	51,650,711	11
1996	22,224	931	1,514,523	441,457	61,649,487	8,918,577	72,547,199	2
1997	10,309	532	1,578,021	183,693	24,782,485	5,863,603	32,418,643	21
1998	14,469	1,698	732,790	464,716	38,436,679	9,406,979	49,057,331	14
1999	17,888	2,961	425,298	416,415	71,961,636	8,944,184	81,768,382	1
2000	20,703	1,341	489,257	206,479	18,156,691	8,306,257	27,180,728	24
2001	19,730	2,584	1,013,151	542,643	61,951,322	4,436,178	67,965,608	3
2002	17,145	1,580	154,478	469,680	42,137,936	3,110,330	45,891,149	17
2003	24,054	1,182	681,418	394,168	49,894,749	4,336,128	55,331,699	9
2004	39,297	687	900,557	399,267	42,596,809	5,684,447	49,621,064	13
2005	19,694	727	898,515	341,295	55,746,479	2,817,026	59,823,736	7
2006	24,730	1,240	413,938	109,498	10,117,941	5,614,232	16,281,579	34
2007	27,092	1,306	1,063,704	247,568	42,078,209	3,043,839	46,461,718	15
2008	15,488	530	74,389	208,196	14,297,381	3,215,231	17,811,215	32
2009	28,922	966	307,436	283,431	34,946,847	3,502,998	39,070,600	18
2010	15,764	787	151,270	192,465	20,556,774	3,234,567	24,151,627	26
2011	25,983	1,787	499,279	346,979	55,233,738	2,700,914	58,808,680	8
Averages								
1960 to 2010 <sup>c</sup>	14,347	988	604,725	324,359	25,918,405	2,808,459	29,671,283	
2001 to 2010 <sup>d</sup>	23,192	1,159	565,886	318,821	37,432,445	3,899,498	42,241,000	
Max. harvest <sup>e</sup>	39,297	6,265	1,690,471	967,691	71,961,636	9,406,979	81,768,382	
Max. year	2004	1994	1993	1994	1999	1998	1999	
Min. harvest <sup>e</sup>	1,428	166	61,784	70,193	2,572,279	332,514	3,789,373	
Min. year	1976	1983	1975	1975	1960	1968	1960	

<sup>&</sup>lt;sup>a</sup> Chinook salmon are 28" from the tip of snout to tip of tail, jacks are less than 28".

<sup>&</sup>lt;sup>b</sup> Rank is based on total harvest for years 1960 to 2011.

<sup>&</sup>lt;sup>c</sup> Equals the long-term average harvest. Harvests from 1960 to 1979 are included in average but not shown in table.

<sup>&</sup>lt;sup>d</sup> Equals the recent 10-year average harvest.

<sup>&</sup>lt;sup>e</sup> Minimum and maximums are based on species harvest from 1960 to 2011.

Table 2.–2011 Southeast Alaska commercial purse seine salmon harvest by district, fishery, and species.

Fishery	Chinook	Jacks	Sockeye	Coho	Pink	Chum	Total
District 1							
Traditional	424	2	20,582	6,375	535,079	102,710	665,172
Terminal Harvest Area	8,701	8	133	8,071	179	89,447	106,539
Annette Island	420	0	12,031	4,773	498,932	139,746	655,902
Hatchery Cost Recovery	8,028	0	198	1,656	0	1,252,807	1,262,689
District 2	-,-			,		, - ,	, - ,
Traditional	717	24	38,976	33,460	736,991	791,693	1,601,861
Terminal Harvest Area	91	1	2,946	3,338	39,037	227,079	272,492
District 3		_	_,-	-,	-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	,
Traditional	330	2	19,139	33,444	4,108,156	78,545	4,239,616
District 4	220	_	17,107	55,	.,100,100	70,010	.,20>,010
Traditional	4,289	15	202,504	28,285	2,376,849	137,116	2,749,058
District 5	1,200	10	202,501	20,203	2,370,019	137,110	2,7 12,030
Traditional	82	16	2,613	4,724	1,779,563	17,034	1,804,032
District 6	02	10	2,013	7,727	1,777,505	17,034	1,004,032
Traditional	0	0	0	0	0	0	0
District 7	U	U	U	U	U	U	U
Traditional	26	7	221	3	29,256	2,855	32,368
Taditional Terminal Harvest Area	3,136	175	108	98	40,719	82,942	127,178
	3,130	173	106	90	40,719	62,942	127,176
District 9	(2)	202	24.526	(4.522	C 092 220	116 227	7 100 442
Traditional	626	203	24,526	64,532	6,983,329	116,227	7,189,443
Hatchery Cost Recovery	1,572	0	20	127,325	508,172	195,708	832,797
District 10	225	~ ~ 1	21.727	17.040	0.501.010	55.460	2 02 6 7 6 1
Traditional	225	561	21,727	17,343	3,721,242	75,463	3,836,561
District 11					40.004	4 00 4 0 = 0	
Hatchery Cost Recovery	264	4	1,337	768	43,281	1,806,073	1,851,727
District 12							
Traditional	722	230	104,851	91,189	19,906,931	466,247	20,570,170
Terminal Harvest Area	2,419	420	111	1,082	29,463	81,187	114,682
Hatchery Cost Recovery	4,115	279	14	86,045	27,650	259,287	377,390
District 13							
Traditional	416	86	21,524	27,050	8,526,883	233,624	8,809,583
Terminal Harvest Area	3,600	2	410	248	39,820	104,626	148,706
Hatchery Cost Recovery	15,511	444	1	4	105,162	74,427	195,549
District 14							
Traditional	179	35	38,908	27,737	6,380,241	94,119	6,541,219
Southern Subtotals D1-8							
Traditional	5,868	66	284,035	106,291	9,565,894	1,129,953	11,092,107
Terminal Area Harvest	11,928	184	3,187	11,507	79,935	399,468	506,209
Annette Island	420	0	12,031	4,773	498,932	139,746	655,902
Hatchery Cost Recovery	8,525	0	198	1,656	0	1,252,807	1,263,186
Subtotal	26,741	250	299,451	124,227	10,144,761	2,921,974	13,517,404
Northern Subtotals D9-14							
Traditional	2,168	1,115	211,536	227,851	45,518,626	985,680	46,946,976
Terminal Area Harvest	6,019	422	521	1,330	69,283	185,813	263,388
Hatchery Cost Recovery	21,462	727	1,372	214,142	684,265	2,335,495	3,257,463
Subtotal	29,649	2,264	213,429	443,323	46,272,174	3,506,988	50,467,827
Total Southeast	2>,0.>		210, .25	,	.0,272,17	2,200,200	20,107,027
Traditional	8,036	1,181	495,571	334,142	55,084,520	2,115,633	58,039,083
Terminal Area Harvest	17,947	606	3,708	12,837	149,218	585,281	769,597
Subtotal (Traditional and THA)	25,983	1,787	499,279	346,979	55,233,738	2,700,914	58,808,680
		727			684,265		
Hatchery Cost Recovery Annette Island	29,987		1,570	215,798		3,588,302	4,520,649 655,902
	420	0	12,031	4,773	498,932	139,746	
Miscellaneous	6	2 516	786	273	56,666	5,313	63,046
Total	56,396	2,516	513,666	567,823	56,473,601	6,434,275	64,048,277

<sup>&</sup>lt;sup>a</sup> Chinook salmon are 28" from the tip of snout to tip of tail; jacks are less than 28".

Table 3.–2011 Fishery Exvessel Value by area gear type and species, estimated by prices reported on fish tickets.

Fishery	Chinook	Sockeye	Coho I	Pink (	Chum	Total Value
Purse Seine						
Southern Seine	\$196,226	\$2,363,739	\$303,567	\$16,042,004	\$8,153,741	\$27,264,715
Northern Seine	\$42,972	\$1,884,574	\$775,149	\$70,462,833	\$6,385,235	\$80,154,723
Terminal Seine	\$655,066	\$36,932	\$93,710	\$214,128	\$4,029,660	\$5,067,679
<b>Total Seine Value</b>	\$809,468	\$4,285,811	\$1,132,539	\$87,876,877	\$18,382,421	\$112,487,117
Drift Gillnet						
Tree Point	\$68,194	\$873,419	\$208,139	\$576,272	\$2,716,017	\$4,460,407
Prince of Wales	\$100,061	\$1,488,209	\$1,170,997	\$552,959	\$1,127,857	\$4,458,441
Stikine	\$136,939	\$615,677	\$190,099	\$106,636	\$1,016,780	\$2,074,675
Taku	\$58,991	\$1,071,117	\$238,144	\$527,628	\$3,972,869	\$5,893,014
Lynn Canal	\$22,620	\$649,444	\$333,253	\$512,227	\$5,791,518	\$7,339,283
Terminal Gillnet	\$620,865	\$735,994	\$72,241	\$334,653	\$4,398,827	\$6,188,061
<b>Total Gillnet Value</b>	\$1,113,656	\$5,418,227	\$2,235,982	\$2,618,678	\$19,027,338	\$30,413,881
Set Gillnet (Yakutat)						
Set Gillnet	\$27,448	\$1,288,973	\$764,417	\$258,218	\$3,416	\$2,342,472
Troll						
Winter Troll	\$4,694,188	\$0	\$0	\$0	\$24	\$4,694,212
Spring Troll	\$2,599,879	\$4,714	\$58,269	\$283,849	\$1,010,322	\$3,957,033
Summer Troll	\$7,549,231	\$37,864	\$10,472,612	\$454,061	\$3,999,367	\$22,513,135
<b>Total Troll Value</b>	\$14,210,797	\$42,039	\$10,424,120	\$735,305	\$4,996,595	\$30,408,855
Annette Island Res	\$33,151	\$275,255	\$70,210	\$1,332,916	\$2,915,484	\$4,627,015
Hatchery Cost Rec.	\$1,559,665	\$182,960	\$1,791,296	\$1,202,071	\$14,730,211	\$19,466,203
Misc	\$43,558	\$3,982	\$2,142	\$41,942	\$21,521	\$112,875
Total Value	\$17,797,744	\$11,497,247	\$16,420,705	\$94,066,008	\$60,076,715	\$199,858,419

*Note*: Fishery exvessel values calculated from fish ticket prices reported in this table provide only an initial estimate for fishery values. CFEC calculates exvessel values based on fish tickets and annual processor reports usually one year after the fishery is completed.

Table 4.—Northern Southeast annual commercial, common property, purse seine salmon harvest (from traditional and terminal areas), in numbers, by species, 1980–2011.

Year	Chinooka	Jacks <sup>a</sup>	Sockeye	Coho	Pink	Chum	Total	Rank <sup>b</sup>
1980	512	-	27,569	12,378	902,071	415,511	1,358,041	49
1981	2,280	-	60,750	44,016	4,428,712	282,754	4,818,512	33
1982	3,643	-	67,140	108,952	10,718,372	162,007	11,060,114	24
1983	2,672	106	60,516	54,457	5,323,586	271,365	5,712,702	32
1984	1,808	-	53,308	48,703	4,161,231	1,473,603	5,738,653	31
1985	7,996	-	99,242	77,561	19,343,125	1,011,367	20,539,291	9
1986	751	633	18,583	17,786	933,928	947,510	1,919,191	46
1987	643	1,038	77,112	28,425	3,852,989	833,647	4,793,854	34
1988	631	520	13,323	24,973	1,299,946	653,809	1,993,202	45
1989	547	2,191	98,365	56,522	11,969,441	336,503	12,463,569	20
1990	490	1,217	38,502	43,382	4,082,182	603,299	4,769,072	35
1991	1,859	2,845	72,281	105,849	16,970,650	1,063,401	18,216,885	11
1992	807	1,979	108,331	162,953	12,568,844	1,948,819	14,791,733	16
1993	1,513	3,445	162,153	114,213	16,914,761	3,004,370	20,200,455	10
1994	4,453	5,864	181,038	467,296	31,389,894	4,781,593	36,830,138	3
1995	24,217	927	67,414	223,204	5,409,068	4,310,379	10,035,209	25
1996	21,300	695	111,604	137,603	9,564,130	6,246,728	16,082,060	12
1997	6,275	407	51,465	68,142	11,776,742	3,534,803	15,437,834	14
1998	6,442	1,556	107,675	161,419	16,702,595	4,800,326	21,780,013	8
1999	13,843	2,309	104,204	232,408	35,180,383	6,148,309	41,681,456	2
2000	18,228	1,055	73,008	62,307	7,323,135	6,232,888	13,710,621	17
2001	12,099	1,275	170,705	116,404	13,328,220	2,203,419	15,832,122	13
2002	11,281	954	54,488	219,569	20,793,646	2,057,813	23,137,751	7
2003	6,894	371	146,108	96,735	22,380,951	2,864,976	25,496,035	6
2004	8,990	596	323,489	166,735	23,070,456	4,098,981	27,669,247	5
2005	4,437	335	163,058	133,199	28,624,647	1,835,247	30,760,923	4
2006	5,258	1,056	67,697	46,870	7,548,334	3,810,988	11,480,203	21
2007	7,323	730	90,682	56,240	11,943,703	1,242,925	13,341,603	18
2008	7,807	297	5,631	17,846	1,974,550	2,332,622	4,338,753	37
2009	6,460	479	65,475	36,611	10,603,951	2,427,762	13,140,738	19
2010	6,490	520	29,484	46,565	9,157,767	1,921,639	11,162,465	23
2011	8,187	1,537	212,057	229,181	45,587,909	1,171,493	47,210,364	1
Averages								
1960 to 2010 <sup>c</sup>	5,073	655	123,028	100,230	8,966,009	1,739,878	10,934,874	
2001 to 2010 <sup>d</sup>	7,704	661	111,682	93,677	14,942,623	2,479,637	17,635,984	
Max. harvest <sup>e</sup>	24,217	5,864	353,618	467,296	45,587,909	6,246,728	47,210,364	
Max. harvest year	1995	1994	1965	1994	2011	1996	2011	
Min. harvest <sup>e</sup>	12	106	5,286	1,744	80,819	30,357	156,706	
Min. harvest year	1976	1983	1975	1976	1976	1977	1976	

<sup>&</sup>lt;sup>a</sup> Chinook salmon are 28" from the tip of snout to tip of tail, jacks are less than 28".

<sup>&</sup>lt;sup>b</sup> Rank is based on total harvest for years 1960 to 2011

<sup>&</sup>lt;sup>c</sup> Equals the long-term average harvest. Harvests from 1960 to 1979 are included in average but not shown in table.

d Equals the recent 10-year average harvest.

<sup>&</sup>lt;sup>e</sup> Minimum and maximums are based on species harvest from 1960 to 2011.

Table 5.—Southern Southeast Alaska annual commercial, common property, purse seine salmon harvest from traditional and terminal areas), in numbers, by species, 1980–2011.

Year	Chinook <sup>a</sup>	<b>Jacks</b> <sup>a</sup>	Sockeye	Coho	Pink	Chum	Total	Rank <sup>b</sup>
1980	11,189	-	483,387	172,192	10,967,917	586,967	12,221,652	31
1981	7,984	-	378,171	193,386	11,840,155	234,248	12,653,944	30
1982	26,886	-	378,245	288,397	11,330,519	666,437	12,690,484	29
1983	10,722	60	717,679	284,424	28,342,648	307,803	29,663,336	12
1984	18,954	-	403,852	301,314	16,909,603	960,146	18,593,869	21
1985	13,539	-	617,100	340,291	27,890,071	838,156	29,699,157	11
1986	11,362	525	569,147	550,624	41,854,390	1,251,397	44,237,445	3
1987	3,855	748	233,170	93,549	3,165,573	400,905	3,897,800	48
1988	10,506	508	641,425	132,030	7,525,306	971,626	9,281,401	37
1989	12,551	1,814	724,820	274,467	40,100,625	743,052	41,857,329	5
1990	10,833	2,237	927,416	329,089	23,832,968	459,223	25,561,766	16
1991	9,740	2,663	978,988	299,743	41,621,708	1,061,907	43,974,749	4
1992	17,217	317	1,228,558	325,446	17,200,235	1,244,614	20,016,387	20
1993	6,822	511	1,528,318	358,925	36,499,754	1,602,093	39,996,423	8
1994	10,371	401	1,249,572	500,395	19,890,189	1,594,879	23,245,807	17
1995	858	775	839,706	394,573	38,089,440	2,290,150	41,615,502	6
1996	924	236	1,402,919	303,854	52,085,357	2,671,849	56,465,139	1
1997	4,034	125	1,526,556	115,551	13,005,743	2,328,800	16,980,809	23
1998	8,027	142	625,115	303,297	21,734,084	4,606,653	27,277,318	14
1999	4,045	652	321,094	184,007	36,781,253	2,795,875	40,086,926	7
2000	2,475	286	416,249	144,172	10,833,556	2,073,369	13,470,107	27
2001	7,631	1,309	842,446	426,239	48,623,102	2,232,759	52,133,486	2
2002	5,864	626	99,990	250,111	21,344,290	1,052,517	22,753,398	18
2003	17,160	811	535,310	297,433	27,513,798	1,471,152	29,835,664	10
2004	30,307	91	577,068	232,532	19,526,353	1,585,466	21,951,817	19
2005	15,257	392	735,457	208,096	27,121,832	981,779	29,062,813	13
2006	19,472	184	346,241	62,628	2,569,607	1,803,244	4,801,376	44
2007	19,769	576	973,022	191,328	30,134,506	1,800,914	33,120,115	9
2008	7,681	233	68,758	190,350	12,322,831	882,609	13,472,462	26
2009	22,462	487	241,961	246,820	24,342,896	1,075,236	25,929,862	15
2010	9,274	267	121,786	145,900	11,399,007	1,312,928	12,989,162	28
2011	17,796	250	287,222	117,798	9,645,829	1,529,421	11,598,316	33
Averages								
1960 to 2010 <sup>c</sup>	9,274	333	481,695	224,126	16,952,329	1,068,547	18,736,304	
2001 to 2010 <sup>d</sup>	15,488	498	454,204	225,144	22,489,822	1,419,860	24,605,016	
Max. harvest	30,307	2,663	1,528,318	550,624	52,085,357	4,606,653	56,465,139	
Max. harvest year	2004	1991	1993	1986	1996	1998	1996	
Min. harvest	858	60	49,124	22,228	448,928	35,467	988,340	
Min. harvest year	1995	1983	1971	1969	1967	1969	1969	

<sup>&</sup>lt;sup>a</sup> Chinook salmon are 28" from the tip of snout to tip of tail, jacks are less than 28".

<sup>&</sup>lt;sup>b</sup> Rank is based on total harvest for years 1960 to 2011.

<sup>&</sup>lt;sup>c</sup> Equals the long-term average harvest. Harvests from 1960 to 1979 are included in average but not shown in table.

d Equals the recent 10-year average harvest.

<sup>&</sup>lt;sup>e</sup> Minimum and maximums are based on species harvest from 1960 to 2011.

Table 6.—Commercial purse seine fishing time, in hours open per day and statistical week by district and section, for Northern Southeast Alaska in 2011. *Note:* gray shading indicates no fishery occurred in this area on this date.

Meck   Date   Day   A   B   All   A   B   A   B   C   A   B   C								Districts	s, Subdivide	d into Se	ctions			
26					9	10	12	12		13			14	
20-Jun		Date		A	В	All		В	A	В	С	A	В	С
21-Jun   Tuc   22-Jun   Wed   22-Jun   Thu   24-Jun   Fri   52-Jun   Sat	26	19-Jun	Sun				15							
22-Jun   Wed   23-Jun   Thu   Fri   25-Jun   Sat   Sun   15   15   15		20-Jun	Mon											
23-Jun														
24-Jun   Fri   25-Jun   Sat														
25-Jun   Sat														
27			Fri											
27-Jun   Mon   28-Jun   Tue   29-Jun   Wed   30-Jun   Thu   1-Jul   Fri   2-Jul   Sat     15   15     15			Sat											
28-Jun Tue 29-Jun Wed 30-Jun Thu 1-Jul Fri 2-Jul Sat  28 3-Jul Sun 15 15 15 15 15 15 15 15 15 15 15 15 15	27		Sun			15	15				15			
29-Jun		27-Jun	Mon											
29-Jun		28-Jun	Tue											
1-Jul   Fri   2-Jul   Sat   Sat		29-Jun	Wed											
1-Jul   Fri   2-Jul   Sat   Sat		30-Jun												
2-Jul			Fri											
28														
A-Jul	28					15	15				15			
S-Jul		4-Jul												
6-Jul Wed 7-Jul Thu 15 15 8-Jul Fri 9-Jul Sat  29 10-Jul Sun 11-Jul Mon 12-Jul Thu 13-Jul Wed 13-Jul Fri 20 19 20 19 19 16-Jul Sat  30 17-Jul Sun 18-Jul Mon 15 19 19 19 19 19-Jul Tue 20		5-Jul	Tue											
7-Jul Fri 8-Jul Fri 9-Jul Sat  29 10-Jul Sun 15 15 19 15 15 15 15 15 15 15 15 15 15 15 15 15		6-Jul	Wed											
8-Jul Fri 9-Jul Sat  29 10-Jul Sun 11-Jul Mon 12-Jul Tue 13-Jul Wed 14-Jul Thu 19 15 15 19 20 19 19 19 19 19 19-Jul Tue 18-Jul Mon 17-Jul Sun 18-Jul Mon 15 19 19 19 19 19 19 19 19 19 19 19 19-Jul Tue 20-Jul Wed 20-Jul Wed 20-Jul Wed 20-Jul Thu		7-Jul				15	15				15		15	
9-Jul Sat  29 10-Jul Sun 11-Jul Mon 12-Jul Tue 13-Jul Wed 14-Jul Thu 19 15 15 19 20 19 19 19 19 19 19-Jul Tue 18-Jul Sat  30 17-Jul Sun 18-Jul Mon 15 19 19 19 19 19 19 19 19 19 19 19 19 19		8-Jul												
29														
11-Jul   Mon   20	29					15	15		19		15		15	15
12-Jul	-	11-Jul							20					
13-Jul		12-Jul	Tue											
14-Jul     Thu     19     15     15     19     20     19     19     19     19     19     19     19     19     19     19     19     19     19     20     20     20     20     20     20     20     20     20     20     20     20     19     19     19     19     19     19     19     19     19     19     19     19     19     19     19     19     20		13-Jul												
15-Jul Fri 20 19 20 19 19 20 20 20 20 30 30 17-Jul Sun 18-Jul Mon 15 19 19 19 19 19 19 19 19 19-Jul Tue 20 20 20 20 20 20 20 20 20 20 20 20 20		14-Jul	Thu	19		15	15				19			
16-Jul         Sat         20         20         20           30         17-Jul         Sun         18-Jul         Mon         15         19         19         19         19         19         19         19         19         19         19         19         19         19         19         19         19         20         <		15-Jul		20					19		20		19	19
30 17-Jul Sun 18-Jul Mon 15 19 19 19 19 19 19-Jul Tue 20 20 20 24 20 20 19 19 19 20-Jul Wed 20 20 20 20 20 20 20 20 20 20 20 20 20		16-Jul	Sat						20				20	20
18-Jul Mon 15 19 19 19 19 19 19 19 19 19 19 19 19 19	30	17-Jul	Sun											
19-Jul Tue 20 20 24 20 20 19 19 20 20 20 21-Jul Thu 20 20 19 19 19	- 0	18-Jul		15		19	19		19	19	19			
20-Jul Wed 20 20 20 21-Jul Thu 19						20	20		24	20	20		19	19
21-Jul Thu 19		20-Jul							20				20	20
22-Jul Fri 19 19 19 19 24 19 19 19 19 23 Jul Set 20 20 20 20 20 20 20 20 20 20 20 20 20		21-Jul							19			19		<u>-</u> ~
23 Jul Sat 20 20 20 20 24 20 20 20 20 20		22-Jul	Fri	19	19	19	19		24	19	19	24	19	19
7. THE STATE OF TH		23-Jul	Sat	20	20	20	20		24	20	20	20	20	20

Table 6.–Page 2 of 3.

			Districts, Subdivided into Sections										
				9	10	12	12		13			14	
Week	Date	Day	A	В	All	A	В	A	В	C	A	В	C
31	24-Jul	Sun						24					
	25-Jul	Mon						24			19		
	26-Jul	Tue	19	19	19	19		24	19	19	24	19	19
	27-Jul	Wed	24	20	20	24		24	24	24	24	24	14
	28-Jul	Thu	24		19	24		24	20	24	24	24	24
	29-Jul	Fri	20		20	20		24		20	24	20	20
	30-Jul	Sat						24			24		
32	31-Jul	Sun	19	19	19	19		24	19	19	24	19	19
	1-Aug	Mon	20	20	20	20		24	20	20	24	20	20
	2-Aug	Tue						24			24		
	3-Aug	Wed						24			24		
	4-Aug	Thu		19	19	19		24	19	19	24	19	19
	5-Aug	Fri		20	20	20		24	20	20	24	20	20
	6-Aug	Sat						24			24		
33	7-Aug	Sun						24			24		
	8-Aug	Mon		19	19		6	24	19	19	24	19	19
	9-Aug	Tue		20	20	19		24	20	20	24	20	20
	10-Aug	Wed				20		24			24		
	11-Aug	Thu						24			24		
	12-Aug	Fri	19	19	19	19	19	24	19	19	24	19	19
	13-Aug	Sat	20	20	20	20	20	24	20	20	24	20	20
34	14-Aug	Sun						24			24		
	15-Aug	Mon						24			24		
	16-Aug	Tue	19	19	19	19	19	24	19	19	24	19	19
	17-Aug	Wed	20	20	20	20	20	24	20	20	24	20	20
	18-Aug	Thu						24			24		
	19-Aug	Fri						24			24		
	20-Aug	Sat	18	18	18	18	18	24	18	18	24	18	18

Table 6.–Page 3 of 3.

			Districts, Subdivided into Sections										
				9	10	12	12		13			14	
Week	Date	Day	A	В	All	A	В	A	В	C	A	В	С
35	21-Aug	Sun	21	21	21	21	21	24	21	21	24	21	21
	22-Aug	Mon						24			24		
	23-Aug	Tue						24			24		
	24-Aug	Wed	18	18		18	18	24	18	18	24	18	18
	25-Aug	Thu	21	21		21	21	24	21	21	24	21	21
	26-Aug	Fri						24			24		
	27-Aug	Sat						24			24		
36	28-Aug	Sun	18	18		18	18	24	18		24	18	18
	29-Aug	Mon	24	21		21	21	21	21		21	21	21
	30-Aug	Tue	21										
	31-Aug	Wed											
	1-Sep	Thu	18	18		18		18	18			18	18
	2-Sep	Fri	21	21		21		21	21			21	21
	3-Sep	Sat											
37	4-Sep	Sun											
	5-Sep	Mon	18	18		18		18	18			18	18
	6-Sep	Tue	21	21		21		21	21			21	21
	7-Sep	Wed											
	8-Sep	Thu											
	9-Sep	Fri											
	10-Sep	Sat											
38	11-Sep	Sun		12									12
	12-Sep	Mon											
	13-Sep	Tue											
	14-Sep	Wed											
	15-Sep	Thu											
	16-Sep	Fri											
	17-Sep	Sat											

Table 7.—Commercial purse seine fishing time, in hours open per day and statistical week by district and section, for Southern Southeast Alaska in 2011. *Note:* Gray shaded cells indicate no fishery in this area on this date.

			Districts, Subdivided into Sections									
			1	2	3			4	5	7		
Week	Date	Day	F	All	A	В	C	All	All	A		
26	19-Jun	Sun		19								
	20-Jun	Mon		24								
	21-Jun	Tue		24								
	22-Jun	Wed		20								
	23-Jun	Thu										
	24-Jun	Fri										
	25-Jun	Sat										
27	26-Jun	Sun		19								
	27-Jun	Mon		24								
	28-Jun	Tue		24								
	29-Jun	Wed		20								
	30-Jun	Thu										
	1-Jul	Fri										
	2-Jul	Sat										
28	3-Jul	Sun	15	15				12		15		
	4-Jul	Mon		19								
	5-Jul	Tue		24								
	6-Jul	Wed		20								
	7-Jul	Thu	15	15				12				
	8-Jul	Fri										
	9-Jul	Sat										
29	10-Jul	Sun	15	15				15		15		
	11-Jul	Mon										
	12-Jul	Tue										
	13-Jul	Wed										
	14-Jul	Thu		19				15				
	15-Jul	Fri		20								
	16-Jul	Sat										

1

Table 7.–Page 2 of 4.

			Districts, Subdivided into Sections							
			1	2		3		4	5	7
Week	Date	Day	F	All	A	В	С	All	All	A
30	17-Jul	Sun								
	18-Jul	Mon	15		15	15		15		
	19-Jul	Tue		15						
	20-Jul	Wed								
	21-Jul	Thu								
	22-Jul	Fri	15	15	15	15		15		
	23-Jul	Sat								
31	24-Jul	Sun								
	25-Jul	Mon								
	26-Jul	Tue	19	19	19	19		19		
	27-Jul	Wed	20	20	20	20		20		
	28-Jul	Thu								
	29-Jul	Fri								
	30-Jul	Sat								
32	31-Jul	Sun	15	19	19	19	19	19	19	
	1-Aug	Mon		20	20	20	20	20	20	
	2-Aug	Tue								
	3-Aug	Wed								
	4-Aug	Thu	15	19	19	19	19	19	19	
	5-Aug	Fri		20	20	20	20	20	20	
	6-Aug	Sat								
33	7-Aug	Sun								
	8-Aug	Mon			15	15	15	15	19	
	9-Aug	Tue							20	
	10-Aug	Wed								
	11-Aug	Thu								
	12-Aug	Fri	15	15	19	19	15	19	19	
	13-Aug	Sat			20	20		20	20	

Table 7.–Page 3 of 4.

			Districts, Subdivided into Sections								
			1	2		3		4	5	7	
Week	Date	Day	F	All	A	В	C	All	All	A	
34	14-Aug	Sun									
	15-Aug	Mon									
	16-Aug	Tue		15	19	19	15	19	19		
	17-Aug	Wed			20	20		20	20		
	18-Aug	Thu									
	19-Aug	Fri									
	20-Aug	Sat	15	15	18	18	15	18	18		
35	21-Aug	Sun			21	21		21	21		
	22-Aug	Mon									
	23-Aug	Tue									
	24-Aug	Wed		15	18	18		18	18		
	25-Aug	Thu			21	21		21	21		
	26-Aug	Fri									
	27-Aug	Sat									
36	28-Aug	Sun		15		18		18	18		
	29-Aug	Mon				21		21	21		
	30-Aug	Tue									
	31-Aug	Wed									
	1-Sep	Thu		18		18		18	18		
	2-Sep	Fri		21		21		21	21		
	3-Sep	Sat									
37	4-Sep	Sun									
	5-Sep	Mon				18		18			
	6-Sep	Tue				21		21			
	7-Sep	Wed									
	8-Sep	Thu		12							
	9-Sep	Fri									
	10-Sep	Sat									
38	11-Sep	Sun									
	12-Sep	Mon		12							
	13-Sep	Tue									
	14-Sep	Wed		10							
	15-Sep	Thu		12							
	16-Sep	Fri									
	17-Sep	Sat									

Table 7.–Page 4 of 4.

				Districts, Subdivided into Sections									
Week	Date	Day	1 F	2 All	A	3 B	C	4 All	5 All	7 A			
39	18-Sep	Sun											
	19-Sep	Mon											
	20-Sep	Tue											
	21-Sep	Wed		17									
	22-Sep	Thu		19									
	23-Sep	Fri											
	24-Sep	Sat											
40	25-Sep	Sun											
	26-Sep	Mon											
	27-Sep	Tue											
	28-Sep	Wed		17									
	29-Sep	Thu		19									
	30-Sep	Fri											
	1-Oct	Sat											
41	2-Oct	Sun		17									
	3-Oct	Mon		19									
	4-Oct	Tue											
	5-Oct	Wed											
	6-Oct	Thu											
	7-Oct	Fri		17									
	8-Oct	Sat		19									

Table 8.—Commercial purse seine fishing time, in hours open per day and statistical week for Neets Bay, Kendrick Bay, Anita Bay, Hidden Falls, and Deep Inlet Terminal Harvest Areas (THA) in Southeast Alaska in 2011. *Note:* Gray shaded cells indicate that no fishery occurred for this area on this date.

Week	Date	Day	Neets Bay <sup>a</sup>	Kendrick Bay <sup>b</sup>	Anita Bay <sup>c</sup>	<b>Hidden Falls</b>	Deep Inlet
23	29-May	Sun	24		24 24		15
	30-May	Mon	24		24		
	31-May	Tue	24		24		
	1-Jun	Wed	24		24 24		15
	2-Jun	Thu	24		24		
	3-Jun	Fri	24		24		
	4-Jun	Sat	24		24		
24	5-Jun	Sun	24		24		15
	6-Jun	Mon	24		24		
	7-Jun	Tue	24		24		
	8-Jun	Wed	24		24		15
	9-Jun	Thu	24		24		
	10-Jun	Fri	12		24		
	11-Jun	Sat			24		
25	12-Jun	Sun			12		15
	13-Jun	Mon			12 12		
	14-Jun	Tue	12 12		12		
	15-Jun	Wed	12	24			15
	16-Jun	Thu		24 24 24			
	17-Jun	Fri		24	12		
	18-Jun	Sat			12		
26	19-Jun	Sun	12	24 24 24 24 24 24 24		15	15
	20-Jun	Mon	12	24			
	21-Jun	Tue		24	12		
	22-Jun	Wed		24	12		
	23-Jun	Thu	12	24		15	15
	24-Jun	Fri	12				15
	25-Jun	Sat		24	12		
27	26-Jun	Sun		24	12	15	15
	27-Jun	Mon	12	24			
	28-Jun	Tue	12	24			
	29-Jun	Wed		24	12 12		
	30-Jun	Thu		24	12		15
	30-Jun 2-Jul	Sat		24 24 24 24			
	∠-J UI	Dai		24			

Table 8.–Page 2 of 4.

Week	Date	Day	Neets Bay <sup>a</sup>	Kendrick Bay <sup>b</sup>	Anita Bay <sup>c</sup>	Hidden Falls	Deep Inlet
28	3-Jul	Sun		24 24	12		15
	4-Jul	Mon		24	12		
	5-Jul	Tue		24			
	6-Jul	Wed		24			
	7-Jul	Thu		24	12		15
	8-Jul	Fri		24	12		15
	9-Jul	Sat		24			
29	10-Jul	Sun		24			15
	11-Jul	Mon		24	12		
	12-Jul	Tue		24	12		
	13-Jul	Wed		24			
	14-Jul	Thu		24 24			15
	15-Jul	Fri		24 24	12		15
	16-Jul	Sat		24	12		
30	17-Jul	Sun		24			15
	18-Jul	Mon		24			
	19-Jul	Tue		24	12 12		
	20-Jul	Wed		24	12		
	21-Jul	Thu		24			15
	22-Jul	Fri		24			15
	23-Jul	Sat		24	12 12		
31	24-Jul	Sun		24	12		15
	25-Jul	Mon		24			
	26-Jul	Tue		24			
	27-Jul	Wed		24	12 12		
	28-Jul	Thu		24	12		15
	29-Jul	Fri		24			15
	30-Jul	Sat		24			
32	31-Jul	Sun		24 24	12 12		15
	1-Aug	Mon		24	12		
	2-Aug	Tue		24			
	3-Aug	Wed		24			
	4-Aug	Thu		24	12 12		15 15
	5-Aug	Fri		24	12		15
	6-Aug	Sat		24			

78

Table 8.–Page 3 of 4.

Week	Date	Day	Neets Bay <sup>a</sup>	Kendrick Bay <sup>b</sup>	Anita Bay <sup>c</sup>	Hidden Falls	Deep Inlet
33	7-Aug	Sun		24 24			15
	8-Aug	Mon		24	12		15
	9-Aug	Tue		24	12		
	10-Aug	Wed		24			
	11-Aug	Thu		24			
	12-Aug	Fri		24	12	19	
	13-Aug	Sat		24	12	20	
34	14-Aug	Sun		24			
	15-Aug	Mon		24			
	16-Aug	Tue		24	12	19	
	17-Aug	Wed		24	12	20	
	18-Aug	Thu		24			
	19-Aug	Fri		24			
	20-Aug	Sat		24	12		
35	21-Aug	Sun		24	12		
	22-Aug	Mon		24			
	23-Aug	Tue		24			
	24-Aug	Wed		24	12		
	25-Aug	Thu		24	12		
	26-Aug	Fri		24			
	27-Aug	Sat		24			
36	28-Aug	Sun		24	12		
	29-Aug	Mon		24	12		
	30-Aug	Tue		24			
	31-Aug	Wed		24			
	1-Sep	Thu		24	24		
	2-Sep	Fri		24	24		
	3-Sep	Sat		24	24		
37	4-Sep	Sun		24	24		
	5-Sep	Mon		24	24		
	6-Sep	Tue		24	24		
	7-Sep	Wed		24	24		
	8-Sep	Thu		24	24		
	9-Sep	Fri		24	24		
	10-Sep	Sat		24	24		

Table 8.–Page 4 of 4.

Week	Date	Day	Neets Bay <sup>a</sup>	Kendrick Bay <sup>b</sup>	Anita Bay <sup>b</sup>	Hidden Falls	Deep Inlet
38	11-Sep	Sun			24		
	12-Sep	Mon		24 24	24 24		
	13-Sep	Tue		24	24		
	14-Sep	Wed		24	24		
	15-Sep	Thu		24	24		
	16-Sep	Fri		24	24		
	17-Sep	Sat		24	24		
39	18-Sep	Sun		24	24		
	19-Sep	Mon		24	24		
	20-Sep	Tue		24	24		
	21-Sep	Wed		24	24		
	22-Sep	Thu		24	24		
	23-Sep	Fri		24	24		
	24-Sep	Sat		24	24		
40	25-Sep	Sun		24	24		
	26-Sep	Mon	12	24	24		
	27-Sep	Tue	12	24	24		
	28-Sep	Wed		24	24		
	29-Sep	Thu		24	24 24		
	30-Sep	Fri	12	24	24		
	1-Oct	Sat	12		24		
41	2-Oct	Sun			24		
	3-Oct	Mon			24		
	4-Oct	Tue	12		24		
	5-Oct	Wed	12		24 24		
	6-Oct	Thu	12		24		
	7-Oct	Fri	24		24 24		
	8-Oct	Sat	24		24		

Note: This table shows most openings however regulations also provide access during early and late portions of the season as follows:

<sup>&</sup>lt;sup>a</sup> Neets Bay THA: opened continuously to concurrent seine, troll, and gillnet gear from midnight May 1 to noon June 10. From noon October 6 through the noon November 10 season closure the THA was opened continuously to concurrent seine, troll and gillnet gear.

<sup>&</sup>lt;sup>b</sup> Kendrick Bay THA: open continuously for purse seine gear from June 15 through September 30.

<sup>&</sup>lt;sup>c</sup> Anita Bay THA: opened continuously to concurrent seine, troll, and gillnet gear from midnight May 1 to noon June 12. From midnight September 1 through the noon November 10 season closure the THA was open continuously to concurrent seine, troll and gillnet gear.

Table 9.– 2011 Southeast Alaska pink salmon escapement indices and biological escapement goals by sub–region (in millions of index fish).

	2011 Pink	Biological E	scapement Goal
Sub-region	Salmon Index	Lower Bound	Sub-region
Southern Southeast	5.5	3.0	8.0
Northern Southeast Inside	6.0	2.5	6.0
Northern Southeast Outside	2.7	0.75	2.50
Total	14.3	-	-

Table 10.— Southeast Alaska pink salmon spawning escapement target ranges by district, for which the escapement index for each district and year was within (gray-shaded cells), above (+), or below (-) the management target range, from 2002 to 2011.

Sub- region	District	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Lower Management Target	Upper Management Target
SSE <sup>a</sup>	101	+	+		+	2000	+	2000	2002			1.02	2.71
SSE	102	+	+		+		+	+	+		+	0.29	0.77
SSE	103	+	+	+	+		+					0.95	2.54
SSE	105	+	+		+	-						0.25	0.66
SSE	106		+	+	+							0.21	0.57
SSE	107		+		+						-	0.26	0.69
SSE	108		+	+	+			-				0.02	0.06
NSEI <sup>b</sup>	109				+			-				0.63	1.50
NSEI	110		+					-				0.59	1.41
NSEI	111							-				0.27	0.65
NSEI	112	+	+	+	+			-		-		0.53	1.26
NSEI	113		+				+	-		-	+	0.32	0.76
NSEI	114		+		+		+	-		-	+	0.15	0.35
NSEI	115				+			-	+	-	+	0.03	0.07
NSEO <sup>c</sup>	113		+		+						+	0.75	2.50

<sup>&</sup>lt;sup>a</sup> SSE = Southern Southeast sub-region.

<sup>&</sup>lt;sup>b</sup> NSEI = Northern Southeast Inside sub-region.

<sup>&</sup>lt;sup>c</sup> NSEO = Northern Southeast Outside sub-region.

Table 11.— Southeast Alaska pink salmon spawning escapement target ranges by stock group (in millions), and years for which the escapement index for each stock group was within (gray-shaded cells), above (+), or below (-) the management target range, 2002–2011.

Sub-													Lower Management	Upper Management
region	District	Stock Group	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Target	Target
region	District	Stock Group	2002	2005	2004	2005	2000	2007	2000	2007	2010	2011	Target	Target
$SSE^a$	101	E Behm	+	+		+		+		+			0.67	1.77
SSE	101	Portland	+	+	+	+	-	+	-	+		+	0.10	0.28
SSE	101	W Behm		+			-	+	+				0.25	0.66
SSE	102	Kasaan	+	+		+		+	+	+		+	0.24	0.64
SSE	102	Moira			-			+	+	+			0.05	0.13
SSE	103	E Dall	+		+			+					0.13	0.36
SSE	103	Hetta	+			+		+	+				0.30	0.79
SSE	103	Klawock		+	+	+		+		+			0.42	1.11
SSE	103	Sea Otter Sound		+	+								0.10	0.28
SSE	105	Affleck Canal	+	+	+	+			-				0.14	0.38
SSE	105	Shipley Bay		+		+	-						0.11	0.28
SSE	106	Burnett	+	+		+		+				-	0.05	0.14
SSE	106	Ratz Harbor	+	+	+	+		+	+				0.04	0.12
SSE	106	Totem Bay		+	+	+			-	-			0.05	0.13
SSE	106	Whale Pass		+		+			-				0.07	0.18
SSE	107	Anan		+		+						-	0.21	0.57
SSE	107	Union Bay	+	+		+		+			+		0.05	0.12
SSE	108	Stikine		+	+	+			-				0.02	0.06
NSEI <sup>b</sup>	109	E Baranof			+	+	+		-			+	0.09	0.21
NSEI	109	Eliza Harbor				+			-	-	-		0.14	0.33
NSEI	109	Saginaw Bay	+		+	+			-	-			0.13	0.30
NSEI	109	SE Baranof	-	-	-	+			-		_	+	0.07	0.16
NSEI	109	Tebenkof	+	+									0.21	0.50
NSEI	110	Farragut Bay		+	+				-			+	0.02	0.04
NSEI	110	Houghton		+					_				0.38	0.90
NSEI	110	Portage Bay			+		-		_				0.03	0.07
NSEI	110	Pybus/Gambier			+	+			_	-			0.17	0.40
NSEI	111	Seymour Canal							_	-			0.16	0.40
NSEI	111	Stephens	+			+			-			+	0.11	0.25

Table 11.–Page 2 of 2.

													Lower	Upper
													Management	Management
<b>Sub-region</b>	<b>District</b>	Stock Group	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Target	Target
NSEI	112	Freshwater Bay	+	+	+			+	-				0.08	0.18
NSEI	112	Kelp Bay		+		+	-	+		+		+	0.06	0.14
NSEI	112	Lower Lynn Canal		+		+	+		-	+		+	0.02	0.06
NSEI	112	SW Admiralty		+	+	+		+	-		-		0.10	0.25
NSEI	112	Tenakee	+			+			-		-		0.21	0.51
NSEI	112	W Admiralty		+	+	+	+		-				0.05	0.12
NSEI	113	Hoonah Sound		+				+	-		-	+	0.32	0.76
NSEI	114	Homeshore		+	+	+						+	0.03	0.07
NSEI	114	N Chichagof		+		+		+	-		-	+	0.12	0.28
NSEI	115	Upper Lynn Canal				+			-	+	-	+	0.03	0.07
NSEO <sup>c</sup>	113	Lisianski		+		+		+		+		+	0.08	0.27
NSEO	113	Portlock	+	+	+	+	+	+	+	+	+	+	0.04	0.13
NSEO	113	Salisbury Sound							-		-		0.19	0.63
NSEO	113	Sitka Sound	+	+	+						+	+	0.21	0.70
NSEO	113	Slocum Arm		+									0.16	0.52
NSEO	113	W Crawfish	+		+	+	+	+			+		0.03	0.10
NSEO	113	Whale Bay	+	+	+	+		+					0.04	0.15

<sup>&</sup>lt;sup>a</sup> SSE = Southern Southeast sub-region.

<sup>&</sup>lt;sup>b</sup> NSEI = Northern Southeast Inside sub-region.

<sup>&</sup>lt;sup>c</sup> NSEO = Northern Southeast Outside sub-region.

Table 12.– Sustainable escapement goals and escapement indices for Southeast Alaska chum salmon, 1980–2011 (in thousands).

Stock Enumeration	Southern Southeast Peak	Northern Southeast Inside Peak	Northern Southeast Outside Peak	Cholmon- deley Sound Peak	Port Camden Peak	Security Bay Peak	Excursion River Peak	Chilkat River Estimated
Method	Index	Index	Index	Index	Index	Index	Index	Escapement
Run-type	Summer	Summer	Summer	Fall	Fall	Fall	Fall	Fall
No. Streams	13	63	5	2	2	1	1 25	1
1980	76 56	N/A	N/A	26	6	14	35	N/A
1981	56	N/A	N/A	26	7	4	34	N/A
1982	22	60	10	8	5	12	2	N/A
1983	54	162	21	15	1	5	3	N/A
1984	79	159	78	40	10	19	8	N/A
1985	93	149	31	40	12	21	4	N/A
1986	87	141	30	28	14	12	9	N/A
1987	77	106	17	46	9	11	2	N/A
1988	201	162	19	36	7	16	4	N/A
1989	85	53	15	35	7	8	2	N/A
1990	64	107	28	30	4	20	5	275
1991	68	76	36	58	5	6	1	N/A
1992	91	153	25	37	5	19	3	N/A
1993	131	228	16	46	7	7	8	N/A
1994	111	272	14	43	5	5	4	30
1995	92	209	19	35	3	14	6	61
1996	222	931	30	62	5	19	9	59
1997	69	226	50	31	4	5	34	88
1998	147	197	19	59	6	32	8	130
1999	85	318	32	100	2	20	10	283
2000	95	443	96	36	3	13	17	270
2001	125	229	58	45		4	18	312
2002	55	397	19	39	0	6	5	206
2003	66	210	30	75	1	9	6	166
2004	74	242	86	60	3	13	5	310
2005	66	185	77	15	2	3	1	202
2006	76	282	57	54	2	15	2	704
2007	132	149	34	18	1	5	6	331
2008	13	99	46	50	1	12	8	451
2009	41	107	15	39	2	5	1	337
2010	47	77	24	76	5	7	6	91
<u>2011</u>	157	125	23	93	2	5	3	368
Goal Range:								
Lower Bound	68	149	19	30	2	5	4	75
Upper Bound				48	7	15	18	170

Note: survey estimates are based on peak aerial observations and do not represent total escapements.

Table 13.– Escapement estimates for Southeast Alaska sockeye salmon stocks in 2011, compared to escapement goals.

		Estimated Escapement	Escapement		
Stock	Goal Type <sup>a</sup>	or Index	Goal Range	Comment	Enumeration Method
Hugh Smith Lake	OEG	22,000	8,000–18,000	Above Goal	Weir Count
McDonald Lake	SEG	113,000	55,000-120,000	-	Expanded Peak Survey
Stikine—mainstem	SEG	33,700	20,000-40,000	-	Estimated
Stikine—Tahltan <sup>b</sup>	BEG	34,500	18,000-30,000	Above Goal	Weir Count
Speel Lake	BEG	4,800	4,000–13,000	-	Weir Count
Taku—in-river	SEG	103,700	71,000-80,000	Above Goal	Mark-recapture
Redoubt Lake	OEG	21,800	7,000–25,000	-	Weir Count
Chilkoot Lake	SEG	66,000	38,000-86,000	-	Weir Count
Chilkat Lake	BEG	64,000	70,000 to 150,000	Below Goal	Weir/Sonar Count
Situk River	BEG	90,000	30,000-70,000	Above Goal	Weir Count
Lost River	SEG	1,006	1,000	-	Peak Foot or Boat Survey
Klukshu River <sup>b</sup>	BEG	21,400	7,500–15,000	Above Goal	Weir Count
East Alsek-Doame River	BEG	36,300	13,000-26,000	Above Goal	Peak Aerial Survey

<sup>&</sup>lt;sup>a</sup>Goal type includes optimal (OEG), sustainable (SEG), and biological (BEG) escapement goals.

<sup>&</sup>lt;sup>b</sup> Spawning area is located in Canada.

Table 14.—Commercial drift gillnet fishing time, in hours open per day and statistical week by district and section, for Southeast Alaska in 2011. Notes: bold for hours open indicates either a fishery extension or a mid-week opening was provided. Gray shaded cells indicate no fishery in this area on this date.

					]	Distric	ets (Su	ıbdivi	ded in	to Section	ons)		
			1		6			8		11		15	i
Week	Date	Day	В	A	В	С	D	A	В	В	С	A	C
25	12-Jun	Sun											
	13-Jun	Mon		12	12	12	12						
	14-Jun	Tue		24	24	24	24						
	15-Jun	Wed		12	12	12	12						
	16-Jun	Thu											
	17-Jun	Fri											
	18-Jun	Sat											
26	19-Jun	Sun	12							12		12	12
	20-Jun	Mon	24	12	12	12	12	12	12	24		24	24
	21-Jun	Tue	24	24	24	24	24	24	24	12		12	12
	22-Jun	Wed	24	24	24	24	24	24	24				
	23-Jun	Thu	12	12	12	12	12	12	12				
	24-Jun	Fri											
	25-Jun	Sat											
27	26-Jun	Sun	12	12	12	12	12	12	12	12		12	12
	27-Jun	Mon	24	24	24	24	24	24	24	24		24	24
	28-Jun	Tue	24	24	24	24	24	24	24	24		12	24
	29-Jun	Wed	24	24	24	24	24	24	24	12			12
	30-Jun	Thu	12	12	12	12	12	12	12				
	1-Jul	Fri											
	2-Jul	Sat											
28	3-Jul	Sun	12	12	12	12	12	12	12	12		12	12
	4-Jul	Mon	24	24	24	24	24	24	24	24		24	24
	5-Jul	Tue	24	24	24	24	24	24	24	24		12	24
	6-Jul	Wed	24	24	24	24	24	24	24	12			12
	7-Jul	Thu	12	12	12	12	12	12	12				
	8-Jul 9-Jul	Fri Sat											
29	10-Jul	Sun	12	12	12	12	12	12	12	12	12	12	12
29	10-Jul 11-Jul	Mon	24	24	24	24	24	24	24	24	24	24	24
	11-Jul 12-Jul	Tue	24	12	12	12	12	12	12	24	24	12	24
	12-Jul	Wed	24	12	12	12	12	12	12	12	12	12	12
	13-Jul 14-Jul	Thu	12							12	12		12
	15-Jul	Fri	12										
	16-Jul	Sat											
30	17-Jul	Sun	12	12	12	12	12	12	12	12	12	12	12
20	18-Jul	Mon	24	24	24	24	24	24	24	24	24	24	24
	19-Jul	Tue	12	12	12	12	12	12	12	12	24	24	24
	20-Jul	Wed		18				18	18		12	12	12
	21-Jul	Thu		6				6	6				
	22-Jul	Fri	24										
	23-Jul	Sat	24										
							contin	nod.					

Table 14.–Page 2 of 3.

					I	Distric	ts (Su	bdivi	ded in	to Sectio	ons)		
			1		6			8		11		15	;
Week	Date	Day	В	A	В	C	D	A	В	В	C	A	C
31	24-Jul	Sun	12	12	12	12	12	12	12	12	12	12	12
	25-Jul	Mon	24	24	24	24	24	24	24	24	24	24	24
	26-Jul	Tue	24	12	12	12	12	12	12	24	24	12	24
	27-Jul	Wed	24	18				18	18	24	24		12
	28-Jul	Thu	12	6				6	6	12	12		
	29-Jul	Fri											
	30-Jul	Sat											
32	31-Jul	Sun	12	12	12	12	12	12	12	12	12	12	12
	1-Aug	Mon	24	24	24	24	24	24	24	24	24	24	24
	2-Aug	Tue	24	24	24	24	24	24	24	24	24	24	24
	3-Aug	Wed	24	12	12	12	12	12	12	24	24	12	12
	4-Aug	Thu	24							12	12		
	5-Aug	Fri	12										
	6-Aug	Sat											
33	7-Aug	Sun	12	12	12	12		12	12	12	12	12	12
	8-Aug	Mon	24	24	24	24		24	24	24	24	24	24
	9-Aug	Tue	12	24	24	24		24	24	24	24	24	24
	10-Aug	Wed		12	12	12		12	12	24	24	12	12
	11-Aug	Thu								12	12		
	12-Aug	Fri											
	13-Aug	Sat											
34	14-Aug	Sun	12	12	12	12		12	12				
	15-Aug	Mon	24	24	24	24		24	24	12	12	12	12
	16-Aug	Tue	12	24	24	24		24	24	24	24	24	24
	17-Aug	Wed		24	24	24		24	24	24	24	24	24
	18-Aug	Thu		12	12	12		12	12	12	12	24	12
	19-Aug	Fri										12	
	20-Aug	Sat											
35	21-Aug	Sun	12	12	12	12		12	12	12	12	12	12
	22-Aug	Mon	24	24	24	24		24	24	24	24	24	24
	23-Aug	Tue	12	12	12	12		12	12	24	24	24	24
	24-Aug	Wed								12	12	12	12
	25-Aug	Thu											
	26-Aug	Fri											
26	27-Aug	Sat	12	10	10	10		10	12	10	10	10	10
36	28-Aug	Sun	12	12	12	12		12	12	12	12	12	12
	29-Aug	Mon	24	24	24	24		24	24	24	24	24	24
	30-Aug	Tue	24	12	12	12		12	12	24	24	24	12
	31-Aug	Wed	24							12	12	12	
	1-Sep	Thu	12										
	2-Sep	Fri Set											
	3-Sep	Sat					ontini	1					

Table 14.–Page 3 of 3.

					I	Distric	ts (Su	bdivi	ded in	to Section	ons)		
			1		6			8		11		15	;
Week	Date	Day	В	A	В	С	D	A	В	В	С	A	C
37	4-Sep	Sun	12	12	12	12	12	12	12	12		12	12
	5-Sep	Mon	24	24	24	24	24	24	24	24		24	24
	6-Sep	Tue	24	24	24	24	24	24	24	24		24	12
	7-Sep	Wed	24	12	12	12	12	12	12	12		12	
	8-Sep	Thu	12										
	9-Sep	Fri											
	10-Sep	Sat											
38	11-Sep	Sun	12	12	12	12	12	12	12	12		12	12
	12-Sep	Mon	24	24	24	24	24	24	24	24		24	24
	13-Sep	Tue	24	24	24	24	24	24	24	12		12	12
	14-Sep	Wed	24	12	12	12	12	12	12				
	15-Sep	Thu	12										
	16-Sep	Fri											
	17-Sep	Sat											
39	18-Sep	Sun	12	12	12	12	12	12	12	12		12	12
	19-Sep	Mon	24	24	24	24	24	24	24	24		24	24
	20-Sep	Tue	12	12	12	12	12	12	12	24		24	24
	21-Sep	Wed								12		12	12
	22-Sep	Thu											
	23-Sep	Fri											
	24-Sep	Sat											
40	25-Sep	Sun		12	12	12	12	12	12	12		12	12
	26-Sep	Mon		24	24	24	24	24	24	24		24	24
	27-Sep	Tue		12	12	12	12	12	12	24		24	24
	28-Sep	Wed								12		12	12
	29-Sep	Thu											
	30-Sep	Fri											
41	1-Oct	Sat										10	10
41	2-Oct	Sun										12	12
	3-Oct	Mon										24	24
	4-Oct	Tue										24	24
	5-Oct	Wed										12	12
	6-Oct	Thu Fri											
	7-Oct 8-Oct												
42		Sat Sun											
42	9-Oct												
	10-Oct 11-Oct	Mon Tue											
	11-Oct 12-Oct	Wed											
	12-Oct 13-Oct	Thu											
	13-0ct 14-0ct	Fri											
	14-0ct 15-0ct	Sat											
	13-001	Säl											

Table 15.—Commercial drift gillnet fishing time, in hours open per day and statistical week for Nakat Inlet, Boat Harbor, Deep Inlet, Speel Arm, Neets Bay, and Anita Bay Terminal Harvest Areas (THA) in Southeast Alaska in 2011. *Note:* Gray shaded cells indicate no fishery occurred in this area on this date.

Week	Date	Day	Nakat	Boat Harbor <sup>b</sup>	Deep	Neets	Anita Dd
22	20.14		Inlet <sup>a</sup>	Harbor	Inlet	Bay <sup>c</sup>	Bayd
23	29-May	Sun				24	24
	30-May	Mon			15	24	24
	31-May	Tue			15	24	24
	1-Jun	Wed	24			24	24
	2-Jun	Thu	24		15	24	24
	3-Jun	Fri	24		15	24	24
	4-Jun	Sat	24			24	24
24	5-Jun	Sun	24			24	24
	6-Jun	Mon	24		15	24	24
	7-Jun	Tue	24		15	24	24
	8-Jun	Wed	24			24	24
	9-Jun	Thu	24		15	24	24
	10-Jun	Fri	24		15	12	24
	11-Jun	Sat	24			12	24
25	12-Jun	Sun	24			24	12
	13-Jun	Mon	24		15	12	
	14-Jun	Tue	24		15		
	15-Jun	Wed	24				12
	16-Jun	Thu	24		15	12	12
	17-Jun	Fri	24		15	24	
	18-Jun	Sat	24			12	
26	19-Jun	Sun	24	12			12
20	20-Jun	Mon	24	24	15		12
	21-Jun	Tue	24	12	15	12	12
	22-Jun	Wed	24	12	15	12	
	22-Jun 23-Jun	Thu	24		13	12	12
	23-Jun 24-Jun	Fri	24				12
	25-Jun	Sat	24			12	12
27	26-Jun	Sun	24	12		12	
21	26-Jun 27-Jun	Sun Mon	24 24	24	15	12	12
	27-Jun 28-Jun	Tue	24 24	24 24	15		12
	28-Jun 29-Jun	Wed	24 24	24 24	15		12
	29-Jun 30-Jun	Thu	24 24	24	13		
							10
	1-Jul	Fri	24	24			12
20	2-Jul	Sat	24	24			12
28	3-Jul	Sun	24	24	1.7		
	4-Jul	Mon	24	24	15		4.0
	5-Jul	Tue	24	24	15		12
	6-Jul	Wed	24	24	15		12
	7-Jul	Thu	24	24			
	8-Jul	Fri	24	24			
	9-Jul	Sat	24	24			12

Table 15.–Page 2 of 4.

Week	Date	Day	Nakat Inlet <sup>a</sup>	Boat Harbor <sup>b</sup>	Deep Inlet	Neets Bay <sup>c</sup>	Anita Bay <sup>d</sup>
29	10-Jul	Sun	24	24		•	12
	11-Jul	Mon	24	24	15		
	12-Jul	Tue	24	24	15		
	13-Jul	Wed	24	24	15		12
	14-Jul	Thu	24	24			12
	15-Jul	Fri	24	24			
	16-Jul	Sat	24	24			
30	17-Jul	Sun	24	24			12
	18-Jul	Mon	24	24	15		12
	19-Jul	Tue	24	24	15		
	20-Jul	Wed	24	24	15		
	21-Jul	Thu	24	24			12
	22-Jul	Fri	24	24			12
	23-Jul	Sat	24	24			
31	24-Jul	Sun	24	24			
	25-Jul	Mon	24	24	15		12
	26-Jul	Tue	24	24	15		12
	27-Jul	Wed	24	24	15		
	28-Jul	Thu	24	24			
	29-Jul	Fri	24	24			12
	30-Jul	Sat	24	24			12
32	31-Jul	Sun	24	24			12
32	1-Aug	Mon	24	24	15		
	2-Aug	Tue	24	24	15		12
	3-Aug	Wed	24	24	15		12
	4-Aug	Thu	24	24	13		12
	5-Aug	Fri	24	24			
	6-Aug	Sat	24	24			12
33	7-Aug	Sun	24	24			12
33	8-Aug	Mon	24	24			12
	9-Aug	Tue	24	24	15		
	10-Aug	Wed	24	24	15		12
	10-Aug 11-Aug	Thu	24	24	13		12
	11-Aug 12-Aug	Fri	24	24			12
	12-Aug 13-Aug	Sat	24 24	24			
34	13-Aug 14-Aug	Sun	24	24			12
34	14-Aug 15-Aug	Sun Mon	24 24	24 24			12
			24 24	24			12
	16-Aug	Tue					
	17-Aug	Wed	24	24			10
	18-Aug	Thu	24	24			12
	19-Aug	Fri	24	24			12
	20-Aug	Sat	24	24			

Table 15.–Page 3 of 4.

Week	Date	Day	Nakat Inlet <sup>a</sup>	Boat Harbor <sup>b</sup>	Deep Inlet	Neets Bay <sup>c</sup>	Anita Bay <sup>d</sup>
35	21-Aug	Sun	24	24	Hilet	Бау	Бау
33	22-Aug	Mon	24	24			12
	23-Aug	Tue	24	24			12
	24-Aug	Wed	24	24			12
	25-Aug	Thu	24	24			
	26-Aug	Fri	24	24			12
	27-Aug	Sat	24	24			12
36	28-Aug	Sun	24	24			
30	29-Aug	Mon	24	24			
	30-Aug	Tue	24	12			12
	31-Aug	Wed	24	12			12
	1-Sep	Thu	24				24
	2-Sep	Fri	24				24
	3-Sep	Sat	24				24
37	4-Sep	Sun	24				24
	5-Sep	Mon	24				24
	6-Sep	Tue	24				24
	7-Sep	Wed	24				24
	8-Sep	Thu	24				24
	9-Sep	Fri	24				24
	10-Sep	Sat	24				24
38	11-Sep	Sun	24				24
	12-Sep	Mon	24				24
	13-Sep	Tue	24				24
	14-Sep	Wed	24				24
	15-Sep	Thu	24				24
	16-Sep	Fri	24				24
	17-Sep	Sat	24				24
39	18-Sep	Sun	24				24
	19-Sep	Mon	24				24
	20-Sep	Tue	24				24
	21-Sep	Wed	24				24
	22-Sep	Thu	24				24
	23-Sep	Fri	24				24
	24-Sep	Sat	24			12	24
40	25-Sep	Sun	24			12	24
	26-Sep	Mon	24				24
	27-Sep	Tue	24				24
	28-Sep	Wed	24			12	24
	29-Sep	Thu	24			12	24
	30-Sep	Fri	24				24
	1-Oct	Sat	24				24

Table 15.-Page 4 of 4.

Week	Date	Day	Nakat Inlet <sup>a</sup>	Boat Harbor <sup>b</sup>	Deep Inlet	Neets Bay <sup>c</sup>	Anita Bay <sup>d</sup>
41	2-Oct	Sun	24			12	24
	3-Oct	Mon	24			12	24
	4-Oct	Tue	24				24
	5-Oct	Wed	24				24
	6-Oct	Thu	24			12	24
	7-Oct	Fri	24			24	24
	8-Oct	Sat	24			24	24
42	9-Oct	Sun	24			24	24
	10-Oct	Mon	24			24	24
	11-Oct	Tue	24			24	24
	12-Oct	Wed	24			24	24
	13-Oct	Thu	24			24	24
	14-Oct	Fri	24			24	24
	15-Oct	Sat	24			24	24

This table shows most openings however regulations also provide access during early and late portions of the season as follows:

<sup>&</sup>lt;sup>a</sup> Nakat Inlet THA: is open continuously from June 1 through November 10 for concurrent harvest by drift gillnet and troll gear.

<sup>&</sup>lt;sup>b</sup> Boat Harbor THA: is open continuously to drift gillnet gear from the third Sunday in June (6/19/11) through September 15 unless modified by emergency order. In 2011 it was closed by EO at noon on August 30.

<sup>&</sup>lt;sup>c</sup> Neets Bay THA: is opened continuously to concurrent seine, troll, and gillnet gear from midnight May 1 to noon June 10. From noon October 6 through the noon November 10 season closure the THA was opened continuously to concurrent seine, troll and gillnet gear.

<sup>&</sup>lt;sup>d</sup> Anita Bay THA: is open continuously to concurrent seine, troll, and gillnet gear from midnight May 1 to noon June 12. From midnight September 1 through the noon November 10 season closure the THA was open continuously to concurrent seine, troll and gillnet gear.

Table 16.—Alaska total commercial, common property, drift gillnet salmon harvest (from traditional and terminal areas), in numbers, by species, 1980–2011.

1980	Year	Chinook <sup>a</sup>	<b>Jacks</b> <sup>a</sup>	Sockeye	Coho	Pink	Chum	Total I	Rank <sup>b</sup>
1982	1980	5,433	-	408,296	109,516	1,107,273	548,674	2,179,192	31
1983	1981	6,317	-	438,824	114,535	1,264,900	270,231	2,094,807	32
1984	1982	14,710	-	749,348	194,424	569,351	448,332	1,976,165	33
1985	1983	4,598	-	586,574	210,332	1,209,372	516,639	2,527,515	29
1986	1984	10,338	-	593,319	191,023	1,307,853	1,030,346	3,132,879	23
1987   8,430   - 736,200   165,249   1,359,526   747,363   3,016,768   25	1985	10,386	-	830,238	309,380	1,832,570	1,134,446	4,117,020	11
1988	1986	8,441	-	658,611	395,889	1,282,418	815,813	3,161,172	22
1988	1987	8,430	-	736,200	165,249	1,359,526	747,363	3,016,768	25
1990	1988	9,079	-	600,925	163,808	688,750	1,144,856	2,607,418	28
1991   18,456	1989	9,579	-	893,976	234,423	2,769,875	542,846	4,450,699	4
1992   11,285   - 922,069   645,159   1,408,331   845,176   3,832,020   20   1993   18,011   - 1,021,899   417,681   1,087,670   1,401,186   3,946,447   14   1994   16,735   - 686,792   698,125   1,030,607   1,823,497   4,255,756   8   1995   13,342   - 640,971   415,158   1,337,764   2,478,672   4,885,907   2   1996   9,982   - 1,026,591   368,570   615,311   2,033,650   4,054,104   12   1997   11,006   - 645,516   131,240   1,384,200   1,689,474   3,861,436   18   1998   5,937   - 501,291   412,446   1,489,395   1,923,764   4,332,833   7   1999   8,983   - 545,681   351,598   1,274,672   2,166,260   4,347,194   6   2000   13,475   - 496,614   167,623   679,452   2,561,607   3,918,771   16   2001   13,644   - 687,476   294,441   1,568,859   1,576,881   4,141,301   10   2002   10,216   - 464,138   436,612   802,290   1,415,849   3,129,105   24   2003   10,704   - 598,679   434,234   1,354,839   1,528,198   3,926,654   15   2005   49,901   5,853   462,209   272,873   1,530,243   1,511,570   3,832,649   19   2006   43,714   3,488   625,667   252,449   744,048   3,126,853   4,796,219   3   2007   26,215   3,852   501,765   175,286   984,250   2,485,605   4,176,973   9   2008   29,159   2,885   264,877   337,447   560,612   2,592,212   3,787,192   21   2009   22,965   2,256   408,336   320,910   566,734   2,729,966   4,051,167   13   2010   16,462   3,058   388,078   503,751   1,315,795   2,219,761   4,446,905   5   2011   26,883   4,093   518,094   237,921   1,640,776   2,800,609   5,228,376   1   4,000,000   4,43,434   2,139   519,932   334,420   1,037,212   2,102,257   4,020,273   1,000   10,000	1990	14,693	-	767,492	351,039	1,168,061	616,226	2,917,511	26
1993   18,011   - 1,021,899   417,681   1,087,670   1,401,186   3,946,447   14   1994   16,735   - 686,792   698,125   1,030,607   1,823,497   4,255,756   8   1995   13,342   - 640,971   415,158   1,337,764   2,478,672   4,885,907   2   1996   9,982   - 1,026,591   368,570   615,311   2,033,650   4,054,104   12   1997   11,006   - 645,516   131,240   1,384,200   1,689,474   3,861,436   18   1998   5,937   - 501,291   412,446   1,489,395   1,923,764   4,332,833   7   1999   8,983   - 545,681   351,598   1,274,672   2,166,260   4,347,194   6   2000   13,475   - 496,614   167,623   679,452   2,561,607   3,918,771   16   2001   13,644   - 687,476   294,441   1,568,859   1,576,881   4,141,301   10   2002   10,216   - 464,138   436,612   802,290   1,415,849   3,129,105   24   2003   10,704   - 598,679   434,234   1,354,839   1,528,198   3,926,654   15   2004   20,148   - 798,096   316,192   944,447   1,835,679   3,914,562   17   2005   49,901   5,853   462,209   272,873   1,530,243   1,511,570   3,832,649   19   2006   43,714   3,488   625,667   252,449   744,048   3,126,853   4,796,219   3   2007   26,215   3,852   501,765   175,286   984,250   2,485,605   4,176,973   9   2008   29,159   2,885   264,877   337,447   560,612   2,592,212   3,787,192   21   2009   22,965   2,256   408,336   320,910   566,734   2,729,966   4,051,167   13   2010   16,462   3,058   388,078   503,751   1,315,795   2,219,761   4,446,005   5   2011   26,883   4,093   518,094   237,921   1,640,776   2,800,609   5,228,376   1   Averages   1960 to 2010°   14,164   419   506,575   250,713   936,425   1,055,855   2,764,151   2001 to 2010 <sup>4</sup>   24,313   2,139   519,932   334,420   1,037,212   2,102,257   4,020,273	1991	18,456	1	711,874	545,376	820,409	707,277	2,803,393	27
1994	1992	11,285	-	922,069	645,159	1,408,331	845,176	3,832,020	20
1995 13,342 - 640,971 415,158 1,337,764 2,478,672 4,885,907 2 1996 9,982 - 1,026,591 368,570 615,311 2,033,650 4,054,104 12 1997 11,006 - 645,516 131,240 1,384,200 1,689,474 3,861,436 18 1998 5,937 - 501,291 412,446 1,489,395 1,923,764 4,332,833 7 1999 8,983 - 545,681 351,598 1,274,672 2,166,260 4,347,194 6 2000 13,475 - 496,614 167,623 679,452 2,561,607 3,918,771 16 2001 13,644 - 687,476 294,441 1,568,859 1,576,881 4,141,301 10 2002 10,216 - 464,138 436,612 802,290 1,415,849 3,129,105 24 2003 10,704 - 598,679 434,234 1,354,839 1,528,198 3,926,654 15 2004 20,148 - 798,096 316,192 944,447 1,835,679 3,914,562 17 2005 49,901 5,853 462,209 272,873 1,530,243 1,511,570 3,832,649 19 2006 43,714 3,488 625,667 252,449 744,048 3,126,853 4,796,219 3 2007 26,215 3,852 501,765 175,286 984,250 2,485,605 4,176,973 9 2008 29,159 2,885 264,877 337,447 560,612 2,592,212 3,787,192 21 2009 22,965 2,256 408,336 320,910 566,734 2,729,966 4,051,167 13 2010 16,462 3,058 388,078 503,751 1,315,795 2,219,761 4,446,905 5 2011 26,883 4,093 518,094 237,921 1,640,776 2,800,609 5,228,376  Max. harv. year 49,901 5,853 1,026,591 698,125 2,769,875 3,126,853 5,228,376  Max. harv. year 49,901 5,853 1,026,591 698,125 2,769,875 3,126,853 5,228,376  Max. harv. year 49,901 5,853 1,026,591 698,125 2,769,875 3,126,853 5,228,376  Max. harv. year 49,901 5,853 1,026,591 698,125 2,769,875 3,126,853 5,228,376  Max. harv. year 49,901 5,853 1,026,591 698,125 2,769,875 3,126,853 5,228,376  Max. harv. year 49,901 5,853 1,026,591 698,125 2,769,875 3,126,853 5,228,376  Max. harv. year 49,901 5,853 1,026,591 698,125 2,769,875 3,126,853 5,228,376  Max. harv. year 49,901 5,853 1,026,591 698,125 2,769,875 3,126,853 5,228,376  Max. harv. year 49,901 5,853 1,026,591 698,125 2,769,875 3,126,853 5,228,376  Max. harv. year 49,901 5,853 1,026,591 698,125 2,769,875 3,126,853 5,228,376	1993	18,011	-	1,021,899	417,681	1,087,670	1,401,186	3,946,447	14
1996 9,982 - 1,026,591 368,570 615,311 2,033,650 4,054,104 12 1997 11,006 - 645,516 131,240 1,384,200 1,689,474 3,861,436 18 1998 5,937 - 501,291 412,446 1,489,395 1,923,764 4,332,833 7 1999 8,983 - 545,681 351,598 1,274,672 2,166,260 4,347,194 6 2000 13,475 - 496,614 167,623 679,452 2,561,607 3,918,771 16 2001 13,644 - 687,476 294,441 1,568,859 1,576,881 4,141,301 10 2002 10,216 - 464,138 436,612 802,290 1,415,849 3,129,105 24 2003 10,704 - 598,679 434,234 1,354,839 1,528,198 3,926,654 15 2004 20,148 - 798,096 316,192 944,447 1,835,679 3,914,562 17 2005 49,901 5,853 462,209 272,873 1,530,243 1,511,570 3,832,649 19 2006 43,714 3,488 625,667 252,449 744,048 3,126,853 4,796,219 3 2007 26,215 3,852 501,765 175,286 984,250 2,485,605 4,176,973 9 2008 29,159 2,885 264,877 337,447 560,612 2,592,212 3,787,192 21 2009 22,965 2,256 408,336 320,910 566,734 2,729,966 4,051,167 13 2010 16,462 3,058 388,078 503,751 1,315,795 2,219,761 4,446,905 5 2011 26,883 4,093 518,094 237,921 1,640,776 2,800,609 5,228,376  Max. harv. year 49,901 5,853 1,026,591 698,125 2,769,875 3,126,853 5,228,376  Max. harv. year 2005 2005 1996 1994 1989 2006 2011  Min. harvest* 4,598 1 108,574 37,986 55,984 199,887 432,438	1994	16,735	-	686,792	698,125	1,030,607	1,823,497	4,255,756	8
1997 11,006 - 645,516 131,240 1,384,200 1,689,474 3,861,436 18 1998 5,937 - 501,291 412,446 1,489,395 1,923,764 4,332,833 7 1999 8,983 - 545,681 351,598 1,274,672 2,166,260 4,347,194 6 2000 13,475 - 496,614 167,623 679,452 2,561,607 3,918,771 16 2001 13,644 - 687,476 294,441 1,568,859 1,576,881 4,141,301 10 2002 10,216 - 464,138 436,612 802,290 1,415,849 3,129,105 24 2003 10,704 - 598,679 434,234 1,354,839 1,528,198 3,926,654 15 2004 20,148 - 798,096 316,192 944,447 1,835,679 3,914,562 17 2005 49,901 5,853 462,209 272,873 1,530,243 1,511,570 3,832,649 19 2006 43,714 3,488 625,667 252,449 744,048 3,126,853 4,796,219 3 2007 26,215 3,852 501,765 175,286 984,250 2,485,605 4,176,973 9 2008 29,159 2,885 264,877 337,447 560,612 2,592,212 3,787,192 21 2009 22,965 2,256 408,336 320,910 566,734 2,729,966 4,051,167 13 2010 16,462 3,058 388,078 503,751 1,315,795 2,219,761 4,446,905 5 2011 26,883 4,093 518,094 237,921 1,640,776 2,800,609 5,228,376 1  Averages 1960 to 2010° 14,164 419 506,575 250,713 936,425 1,055,855 2,764,151 2001 to 2010 <sup>d</sup> 24,313 2,139 519,932 334,420 1,037,212 2,102,257 4,020,273  Max. harvest° 49,901 5,853 1,026,591 698,125 2,769,875 3,126,853 5,228,376 Max. harv. year 2005 2005 1996 1994 1989 2006 2011  Min. harvest° 4,598 1 108,574 37,986 55,984 199,887 432,438	1995	13,342	-	640,971	415,158	1,337,764	2,478,672	4,885,907	2
1998         5,937         -         501,291         412,446         1,489,395         1,923,764         4,332,833         7           1999         8,983         -         545,681         351,598         1,274,672         2,166,260         4,347,194         6           2000         13,475         -         496,614         167,623         679,452         2,561,607         3,918,771         16           2001         13,644         -         687,476         294,441         1,568,859         1,576,881         4,141,301         10           2002         10,216         -         464,138         436,612         802,290         1,415,849         3,129,105         24           2003         10,704         -         598,679         434,234         1,354,839         1,528,198         3,926,654         15           2004         20,148         -         798,096         316,192         944,447         1,835,679         3,914,562         17           2005         49,901         5,853         462,209         272,873         1,530,243         1,511,570         3,832,649         19           2006         43,714         3,488         625,667         252,449         744,048         3,126	1996	9,982	-	1,026,591	368,570	615,311	2,033,650	4,054,104	12
1999 8,983 - 545,681 351,598 1,274,672 2,166,260 4,347,194 6 2000 13,475 - 496,614 167,623 679,452 2,561,607 3,918,771 16  2001 13,644 - 687,476 294,441 1,568,859 1,576,881 4,141,301 10 2002 10,216 - 464,138 436,612 802,290 1,415,849 3,129,105 24 2003 10,704 - 598,679 434,234 1,354,839 1,528,198 3,926,654 15 2004 20,148 - 798,096 316,192 944,447 1,835,679 3,914,562 17 2005 49,901 5,853 462,209 272,873 1,530,243 1,511,570 3,832,649 19 2006 43,714 3,488 625,667 252,449 744,048 3,126,853 4,796,219 3 2007 26,215 3,852 501,765 175,286 984,250 2,485,605 4,176,973 9 2008 29,159 2,885 264,877 337,447 560,612 2,592,212 3,787,192 21 2009 22,965 2,256 408,336 320,910 566,734 2,729,966 4,051,167 13 2010 16,462 3,058 388,078 503,751 1,315,795 2,219,761 4,446,905 5 2011 26,883 4,093 518,094 237,921 1,640,776 2,800,609 5,228,376 1  Averages 1960 to 2010° 14,164 419 506,575 250,713 936,425 1,055,855 2,764,151 2001 to 2010 <sup>d</sup> 24,313 2,139 519,932 334,420 1,037,212 2,102,257 4,020,273  Max. harveste 49,901 5,853 1,026,591 698,125 2,769,875 3,126,853 5,228,376 Max. harv. year 2005 2005 1996 1994 1989 2006 2011  Min. harveste 4,598 1 108,574 37,986 51,965 1968 199,887 432,438	1997	11,006	-	645,516	131,240	1,384,200	1,689,474	3,861,436	18
2000         13,475         -         496,614         167,623         679,452         2,561,607         3,918,771         16           2001         13,644         -         687,476         294,441         1,568,859         1,576,881         4,141,301         10           2002         10,216         -         464,138         436,612         802,290         1,415,849         3,129,105         24           2003         10,704         -         598,679         434,234         1,354,839         1,528,198         3,926,654         15           2004         20,148         -         798,096         316,192         944,447         1,835,679         3,914,562         17           2005         49,901         5,853         462,209         272,873         1,530,243         1,511,570         3,832,649         19           2006         43,714         3,488         625,667         252,449         744,048         3,126,853         4,796,219         3           2007         26,215         3,852         501,765         175,286         984,250         2,485,605         4,176,973         9           2008         29,159         2,885         264,877         337,447         560,612 <td< td=""><td>1998</td><td>5,937</td><td>-</td><td>501,291</td><td>412,446</td><td>1,489,395</td><td>1,923,764</td><td>4,332,833</td><td>7</td></td<>	1998	5,937	-	501,291	412,446	1,489,395	1,923,764	4,332,833	7
2001 13,644 - 687,476 294,441 1,568,859 1,576,881 4,141,301 10 2002 10,216 - 464,138 436,612 802,290 1,415,849 3,129,105 24 2003 10,704 - 598,679 434,234 1,354,839 1,528,198 3,926,654 15 2004 20,148 - 798,096 316,192 944,447 1,835,679 3,914,562 17 2005 49,901 5,853 462,209 272,873 1,530,243 1,511,570 3,832,649 19 2006 43,714 3,488 625,667 252,449 744,048 3,126,853 4,796,219 3 2007 26,215 3,852 501,765 175,286 984,250 2,485,605 4,176,973 9 2008 29,159 2,885 264,877 337,447 560,612 2,592,212 3,787,192 21 2009 22,965 2,256 408,336 320,910 566,734 2,729,966 4,051,167 13 2010 16,462 3,058 388,078 503,751 1,315,795 2,219,761 4,446,905 5 2011 26,883 4,093 518,094 237,921 1,640,776 2,800,609 5,228,376 1  Averages 1960 to 2010 <sup>c</sup> 14,164 419 506,575 250,713 936,425 1,055,855 2,764,151 2001 to 2010 <sup>d</sup> 24,313 2,139 519,932 334,420 1,037,212 2,102,257 4,020,273  Max. harvest <sup>e</sup> 49,901 5,853 1,026,591 698,125 2,769,875 3,126,853 5,228,376 Max. harv. year 2005 2005 1996 1994 1989 2006 2011  Min. harvest <sup>e</sup> 4,598 1 108,574 37,986 55,984 199,887 432,438	1999	8,983	-	545,681	351,598	1,274,672	2,166,260	4,347,194	6
2002 10,216 - 464,138 436,612 802,290 1,415,849 3,129,105 24 2003 10,704 - 598,679 434,234 1,354,839 1,528,198 3,926,654 15 2004 20,148 - 798,096 316,192 944,447 1,835,679 3,914,562 17 2005 49,901 5,853 462,209 272,873 1,530,243 1,511,570 3,832,649 19 2006 43,714 3,488 625,667 252,449 744,048 3,126,853 4,796,219 3 2007 26,215 3,852 501,765 175,286 984,250 2,485,605 4,176,973 9 2008 29,159 2,885 264,877 337,447 560,612 2,592,212 3,787,192 21 2009 22,965 2,256 408,336 320,910 566,734 2,729,966 4,051,167 13 2010 16,462 3,058 388,078 503,751 1,315,795 2,219,761 4,446,905 5 2011 26,883 4,093 518,094 237,921 1,640,776 2,800,609 5,228,376 1    Averages  1960 to 2010° 14,164 419 506,575 250,713 936,425 1,055,855 2,764,151 2001 to 2010 <sup>d</sup> 24,313 2,139 519,932 334,420 1,037,212 2,102,257 4,020,273    Max. harveste 49,901 5,853 1,026,591 698,125 2,769,875 3,126,853 5,228,376 Max. harv. year 2005 2005 1996 1994 1989 2006 2011 Min. harveste 4,598 1 108,574 37,986 55,984 199,887 432,438	2000	13,475	-	496,614	167,623	679,452	2,561,607	3,918,771	16
2003	2001	13,644	-	687,476	294,441	1,568,859	1,576,881	4,141,301	10
2004 20,148 - 798,096 316,192 944,447 1,835,679 3,914,562 17 2005 49,901 5,853 462,209 272,873 1,530,243 1,511,570 3,832,649 19 2006 43,714 3,488 625,667 252,449 744,048 3,126,853 4,796,219 3 2007 26,215 3,852 501,765 175,286 984,250 2,485,605 4,176,973 9 2008 29,159 2,885 264,877 337,447 560,612 2,592,212 3,787,192 21 2009 22,965 2,256 408,336 320,910 566,734 2,729,966 4,051,167 13 2010 16,462 3,058 388,078 503,751 1,315,795 2,219,761 4,446,905 5 2011 26,883 4,093 518,094 237,921 1,640,776 2,800,609 5,228,376 1  Averages 1960 to 2010 <sup>c</sup> 14,164 419 506,575 250,713 936,425 1,055,855 2,764,151 2001 to 2010 <sup>d</sup> 24,313 2,139 519,932 334,420 1,037,212 2,102,257 4,020,273  Max. harvest <sup>e</sup> 49,901 5,853 1,026,591 698,125 2,769,875 3,126,853 5,228,376  Max. harv. year 2005 2005 1996 1994 1989 2006 2011  Min. harvest <sup>e</sup> 4,598 1 108,574 37,986 55,984 199,887 432,438	2002		-	464,138	436,612	802,290	1,415,849	3,129,105	24
2005	2003	10,704	-	598,679	434,234	1,354,839	1,528,198	3,926,654	15
2006	2004	20,148	-	798,096	316,192	944,447	1,835,679	3,914,562	17
2007 26,215 3,852 501,765 175,286 984,250 2,485,605 4,176,973 9 2008 29,159 2,885 264,877 337,447 560,612 2,592,212 3,787,192 21 2009 22,965 2,256 408,336 320,910 566,734 2,729,966 4,051,167 13 2010 16,462 3,058 388,078 503,751 1,315,795 2,219,761 4,446,905 5 2011 26,883 4,093 518,094 237,921 1,640,776 2,800,609 5,228,376 1  Averages 1960 to 2010 <sup>c</sup> 14,164 419 506,575 250,713 936,425 1,055,855 2,764,151 2001 to 2010 <sup>d</sup> 24,313 2,139 519,932 334,420 1,037,212 2,102,257 4,020,273  Max. harvest <sup>e</sup> 49,901 5,853 1,026,591 698,125 2,769,875 3,126,853 5,228,376  Max. harv. year 2005 2005 1996 1994 1989 2006 2011  Min. harvest <sup>e</sup> 4,598 1 108,574 37,986 55,984 199,887 432,438	2005	49,901	5,853	462,209	272,873	1,530,243	1,511,570	3,832,649	19
2008 29,159 2,885 264,877 337,447 560,612 2,592,212 3,787,192 21 2009 22,965 2,256 408,336 320,910 566,734 2,729,966 4,051,167 13 2010 16,462 3,058 388,078 503,751 1,315,795 2,219,761 4,446,905 5 2011 26,883 4,093 518,094 237,921 1,640,776 2,800,609 5,228,376 1 Averages  1960 to 2010 <sup>c</sup> 14,164 419 506,575 250,713 936,425 1,055,855 2,764,151 2001 to 2010 <sup>d</sup> 24,313 2,139 519,932 334,420 1,037,212 2,102,257 4,020,273 Max. harvest <sup>e</sup> 49,901 5,853 1,026,591 698,125 2,769,875 3,126,853 5,228,376 Max. harv. year 2005 2005 1996 1994 1989 2006 2011 Min. harvest <sup>e</sup> 4,598 1 108,574 37,986 55,984 199,887 432,438	2006	43,714	3,488	625,667	252,449		3,126,853	4,796,219	3
2009 22,965 2,256 408,336 320,910 566,734 2,729,966 4,051,167 13 2010 16,462 3,058 388,078 503,751 1,315,795 2,219,761 4,446,905 5 2011 26,883 4,093 518,094 237,921 1,640,776 2,800,609 5,228,376 1 Averages 1960 to 2010 <sup>c</sup> 14,164 419 506,575 250,713 936,425 1,055,855 2,764,151 2001 to 2010 <sup>d</sup> 24,313 2,139 519,932 334,420 1,037,212 2,102,257 4,020,273 Max. harvest <sup>e</sup> 49,901 5,853 1,026,591 698,125 2,769,875 3,126,853 5,228,376 Max. harv. year 2005 2005 1996 1994 1989 2006 2011 Min. harvest <sup>e</sup> 4,598 1 108,574 37,986 55,984 199,887 432,438	2007	26,215	3,852	501,765	175,286	984,250			9
2010         16,462         3,058         388,078         503,751         1,315,795         2,219,761         4,446,905         5           2011         26,883         4,093         518,094         237,921         1,640,776         2,800,609         5,228,376         1           Averages           1960 to 2010 <sup>c</sup> 14,164         419         506,575         250,713         936,425         1,055,855         2,764,151           2001 to 2010 <sup>d</sup> 24,313         2,139         519,932         334,420         1,037,212         2,102,257         4,020,273           Max. harvest <sup>e</sup> 49,901         5,853         1,026,591         698,125         2,769,875         3,126,853         5,228,376           Max. harv. year         2005         2005         1996         1994         1989         2006         2011           Min. harvest <sup>e</sup> 4,598         1         108,574         37,986         55,984         199,887         432,438	2008	29,159	2,885	264,877	337,447	560,612		3,787,192	21
2011         26,883         4,093         518,094         237,921         1,640,776         2,800,609         5,228,376         1           Averages         1960 to 2010 <sup>c</sup> 14,164         419         506,575         250,713         936,425         1,055,855         2,764,151           2001 to 2010 <sup>d</sup> 24,313         2,139         519,932         334,420         1,037,212         2,102,257         4,020,273           Max. harvest <sup>e</sup> 49,901         5,853         1,026,591         698,125         2,769,875         3,126,853         5,228,376           Max. harv. year         2005         2005         1996         1994         1989         2006         2011           Min. harvest <sup>e</sup> 4,598         1         108,574         37,986         55,984         199,887         432,438	2009		2,256	408,336		566,734	2,729,966	4,051,167	13
Averages         1960 to 2010 <sup>c</sup> 14,164         419         506,575         250,713         936,425         1,055,855         2,764,151           2001 to 2010 <sup>d</sup> 24,313         2,139         519,932         334,420         1,037,212         2,102,257         4,020,273           Max. harvest <sup>e</sup> 49,901         5,853         1,026,591         698,125         2,769,875         3,126,853         5,228,376           Max. harv. year         2005         2005         1996         1994         1989         2006         2011           Min. harvest <sup>e</sup> 4,598         1         108,574         37,986         55,984         199,887         432,438	2010	16,462	3,058	388,078	503,751	1,315,795	2,219,761	4,446,905	
1960 to 2010 <sup>c</sup> 14,164       419       506,575       250,713       936,425       1,055,855       2,764,151         2001 to 2010 <sup>d</sup> 24,313       2,139       519,932       334,420       1,037,212       2,102,257       4,020,273         Max. harvest <sup>e</sup> 49,901       5,853       1,026,591       698,125       2,769,875       3,126,853       5,228,376         Max. harv. year       2005       2005       1996       1994       1989       2006       2011         Min. harvest <sup>e</sup> 4,598       1       108,574       37,986       55,984       199,887       432,438	2011	26,883	4,093	518,094	237,921	1,640,776	2,800,609	5,228,376	1
2001 to 2010 <sup>d</sup> 24,313       2,139       519,932       334,420       1,037,212       2,102,257       4,020,273         Max. harvest <sup>e</sup> 49,901       5,853       1,026,591       698,125       2,769,875       3,126,853       5,228,376         Max. harv. year       2005       2005       1996       1994       1989       2006       2011         Min. harvest <sup>e</sup> 4,598       1       108,574       37,986       55,984       199,887       432,438	Averages								
Max. harveste         49,901         5,853         1,026,591         698,125         2,769,875         3,126,853         5,228,376           Max. harv. year         2005         2005         1996         1994         1989         2006         2011           Min. harveste         4,598         1         108,574         37,986         55,984         199,887         432,438	1960 to 2010 <sup>c</sup>								
Max. harv. year       2005       2005       1996       1994       1989       2006       2011         Min. harveste       4,598       1       108,574       37,986       55,984       199,887       432,438	2001 to 2010 <sup>d</sup>	24,313	2,139	519,932	334,420	1,037,212	2,102,257	4,020,273	
Min. harvest <sup>e</sup> 4,598 1 108,574 37,986 55,984 199,887 432,438	Max. harvest <sup>e</sup>								
1002 1001 1075 1000 1000 1000 1000	Max. harv. year		2005						
Min. harv, year 1983 1991 1975 1960 1960 1960 1960	Min. harvest <sup>e</sup>								
	Min. harv, year	1983	1991	1975	1960	1960	1960	1960	

<sup>&</sup>lt;sup>a</sup> Chinook salmon are 28" from the tip of snout to tip of tail, jacks are less than 28". - incicates no data.

b Rank is based on total harvest for years 1960 to 2011.

<sup>&</sup>lt;sup>c</sup> Equals the long-term average harvest. Harvests from 1960 to 1979 are included in average but not shown in table.

d Equals the recent 10-year average harvest.

e Minimum and maximums are based on species harvest from 1960 to 2011

Table 17.-Southeast Alaska 2011 commercial drift gillnet salmon harvest, in numbers, by area, harvest type, and species.

Fishery	Chinooka	<b>Jacks</b> <sup>a</sup>	Sockeye	Coho	Pink	Chum	Total
District 1							
Traditional (Tree Point)	1,662	82	88,618	28,622	335,823	339,927	794,734
Terminal Harvest Area	2,914	3	3,207	7,561	21,988	226,581	262,254
Annette Island	1,277	5	17,292	10,074	241,563	263,824	534,035
District 6							
Traditional (Prince of Wales)	2,103	904	146,089	117,854	337,170	158,096	762,216
District 7							
Terminal Harvest Area	5,818	387	496	313	3,536	67,183	77,733
District 8							
Traditional (Stikine)	4,099	1,222	51,478	20,717	65,022	142,526	285,064
District 11							
Traditional (Taku/Snettisham)	1,371	1,067	100,480	27,540	338,657	667,709	1,136,824
Terminal Harvest Area	44	28	63,496	1,011	6,109	220	70,908
District 13							
Terminal Harvest Area	8,106	0	442	550	23,541	82,546	115,185
District 15							
Traditional (Lynn Canal)	640	305	57,534	33,292	330,896	853,451	1,276,118
Terminal Harvest Area	126	95	6,254	461	178,034	262,370	447,340
Subtotals							
Traditional	9,875	3,580	444,199	228,025	1,407,568	2,161,709	4,254,956
Terminal Harvest Areas	17,008	513	73,895	9,896	233,208	638,900	973,420
<b>Common Property Total</b>	26,883	4,093	518,094	237,921	1,640,776	2,800,609	5,228,376
Hatchery Cost Recovery	0	0	0	0	0	0	0
Annette Island	1,277	5	17,292	10,074	241,563	263,824	534,035
Miscellaneous	0	0	5	0	12	321	338
Total	28,160	4,098	535,391	247,995	1,882,351	3,064,754	5,762,749

<sup>&</sup>lt;sup>a</sup> Chinook salmon are 28" from the tip of snout to tip of tail, jacks are less than 28".

Table 18.—Southeast Alaska annual Portland Canal / Tree Point (District 1) traditional and terminal harvest area drift gillnet salmon harvest, in numbers, by species, 1980–2011.

								•
Year	Chinooka	Jacks <sup>a</sup>	Sockeye	Coho	Pink	Chum		Rank <sup>b</sup>
1980	1,531	-	109,383	19,329	675,422	153,827	959,492	18
1981	1,448	-	104,853	19,125	433,735	38,527	597,688	35
1982	3,522	-	190,840	27,833	348,769	84,537	655,501	32
1983	1,113	-	135,903	41,556	773,126	139,411	1,091,109	11
1984	1,494	-	88,431	35,436	720,706	227,817	1,073,884	12
1985	2,787	-	173,101	52,973	691,462	256,368	1,176,691	8
1986	1,271	-	145,707	63,030	906,384	286,910	1,403,302	4
1987	2,077	-	107,595	38,113	583,295	188,790	919,870	22
1988	2,041	-	116,245	17,213	231,484	550,701	917,684	23
1989	2,015	-	145,210	32,873	1,349,929	310,345	1,840,372	1
1990	1,714	-	85,770	42,926	580,782	176,184	887,376	25
1991	2,077	-	131,509	70,359	600,733	185,863	990,541	16
1992	1,061	-	244,650	40,064	581,244	288,478	1,155,497	9
1993	1,249	-	394,137	32,588	481,316	389,823	1,299,113	5
1994	959	-	100,458	47,336	264,755	526,314	939,822	20
1995	1,024	-	164,336	54,769	791,392	734,344	1,745,865	2
1996	1,257	-	212,477	33,215	371,049	629,553	1,247,551	6
1997	1,608	-	169,614	28,229	380,957	409,591	989,999	17
1998	1,160	-	160,657	60,548	650,268	556,143	1,428,776	3
1999	1,844	-	160,053	64,534	611,613	181,674	1,019,718	15
2000	1,196	-	94,720	19,577	424,672	218,818	758,983	29
2001	1,393	-	80,440	36,420	521,645	252,438	892,336	24
2002	1,127	-	121,116	68,724	515,395	174,794	881,156	26
2003	829	-	105,878	97,538	626,916	322,608	1,153,769	10
2004	2,069	-	142,763	50,820	409,429	327,439	932,520	21
2005	1,701	10	80,027	65,353	559,296	252,630	959,017	19
2006	2,179	92	63,368	31,271	216,779	297,660	611,349	34
2007	1,966	91	68,170	29,890	360,986	389,744	850,847	28
2008	3,977	82	34,915	97,599	275,654	319,718	731,945	30
2009	4,920	2	70,607	68,522	174,052	339,159	657,262	31
2010	3,286	16	64,747	99,081	597,138	458,622	1,222,890	7
2011	4,576	85	91,825	36,183	357,811	566,508	1,056,988	14
Averages								
1960 to 2010 <sup>c</sup>	1,641	6	112,434	34,563	410,667	214,546	773,857	
2001 to 2010 <sup>d</sup>	2,345	29	83,203	64,522	425,729	313,481	889,309	
Max. harvest <sup>e</sup>	4,920	92	394,137	99,081	1,349,929	734,344	1,8403,302	
Max. harv.	2009	2006	1993	2010	1989	1995	1989	
Min. harvest <sup>e</sup>	337	2	14,281	3,110	19,823	20,033	138,601	
Min. harv, year	1970	2009	1960	1963	1960	1969	1960	

Note: The data shown does not include Annette Island Reservation harvests.

<sup>&</sup>lt;sup>a</sup> Chinook salmon are 28" from the tip of snout to tip of tail, jacks are less than 28". - indicates no data.

<sup>&</sup>lt;sup>b</sup> Rank is based on total harvest for years 1960 to 2011.

<sup>&</sup>lt;sup>c</sup> Equals the long-term average harvest. Harvests from 1960 to 1979 are included in average but not shown in table.

<sup>&</sup>lt;sup>d</sup> Equals the recent 10-year average harvest.

e Minimum and maximums are based on species harvest from 1960 to 2011.

Table 19.—Southeast Alaska annual Prince of Wales (District 6) traditional and terminal harvest area drift gillnet salmon harvest, in numbers, by species, 1980–2011.

Year	Chinooka	Jacks <sup>a</sup>	Sockeye	Coho	Pink	Chum	Total	Rank <sup>b</sup>
1980	580	-	107,422	16,666	45,662	26,291	196,621	50
1981	1,565	-	182,001	22,614	437,573	34,296	678,049	23
1982	1,671	-	193,817	45,218	26,087	18,906	285,699	44
1983	567	-	48,842	62,442	208,290	20,144	340,285	41
1984	895	-	91,664	48,244	343,633	70,599	555,035	30
1985	1,687	-	265,033	97,605	585,134	70,150	1,019,609	9
1986	1,705	-	145,714	205,598	308,942	82,621	744,580	19
1987	853	-	136,437	37,151	243,710	43,020	461,171	35
1988	2,961	-	92,532	14,419	69,619	69,675	249,206	46
1989	1,544	-	192,734	93,777	1,101,196	67,351	1,456,602	2
1990	2,108	-	185,808	167,196	319,216	73,238	747,566	18
1991	2,842	1	144,105	198,786	133,567	124,631	603,932	27
1992	1,374	-	203,158	299,884	94,278	140,471	739,165	20
1993	995	-	205,966	232,858	537,999	134,635	1,112,453	7
1994	754	-	211,076	272,692	180,391	176,221	841,134	13
1995	951	-	207,298	170,561	448,163	300,078	1,127,051	6
1996	644	-	311,100	224,129	188,035	283,290	1,007,198	10
1997	1,075	-	168,518	77,550	789,051	186,456	1,222,650	4
1998	518	-	113,435	273,197	502,655	332,022	1,221,827	5
1999	518	-	104,835	203,301	491,179	448,409	1,248,242	3
2000	1,220	-	90,076	96,207	156,619	199,836	543,958	31
2001	1,138	-	164,013	188,465	825,447	283,462	1,462,525	1
2002	446	-	56,135	226,560	82,951	112,541	478,633	34
2003	422	-	116,904	212,057	470,697	300,253	1,100,333	8
2004	2,735	-	116,259	138,631	245,237	110,574	613,436	26
2005	1,526	46	110,192	114,440	461,187	198,564	885,955	11
2006	1,737	211	91,980	69,015	149,907	268,436	581,286	29
2007	1,852	292	92,481	80,573	383,355	297,998	856,551	12
2008	1,049	570	30,533	116,074	90,217	102,156	340,599	40
2009	1,625	513	111,984	144,569	143,589	287,707	689,987	22
2010	1,223	1,250	112,428	225,520	309,566	97,948	747,935	17
2011	2,103	904	146,089	117,854	337,170	158,096	762,216	16
Averages								
1960 to 2010 <sup>c</sup>	1,388	57	109,596	101,747	312,948	113,023	638,758	
2001 to 2010 <sup>d</sup>	1,375	288	100,291	151,590	316,215	205,964	775,724	
Max. harvest <sup>e</sup>	2,961	1,250	311,100	299,884	1,101,196	448,409	1,462,525	
Max. harv. year	1988	2010	1996	1992	1989	1999	2001	
Min. harvest <sup>e</sup>	46	1	10,354	336	1,246	502	12,484	
Min. harv, year	1960	1991	1960	1960	1960	1960	1960	

<sup>&</sup>lt;sup>a</sup> Chinook salmon are 28" from the tip of snout to tip of tail, jacks are less than 28". - indicates no data.

<sup>&</sup>lt;sup>b</sup> Rank is based on total harvest for years 1960 to 2011.

<sup>&</sup>lt;sup>c</sup> Equals the long-term average harvest. Harvests from 1960 to 1979 are included in average but not shown in table.

d Equals the recent 10-year average harvest.

<sup>&</sup>lt;sup>e</sup> Minimum and maximums are based on species harvest from 1960 to 2011.

Table 20.-Southeast Alaska annual Stikine (District 8) traditional and terminal harvest area drift gillnet salmon harvest, in numbers, by species, 1980-2011.

Year	Chinooka	Jacks <sup>a</sup>	Sockeye	Coho	Pink	Chum	Total	Rank <sup>b</sup>
1980	631	-	14,053	2,946	7,224	6,910	31,764	37
1981	283	-	8,833	1,403	1,466	3,594	15,579	43
1982	1,052	-	7,136	20,003	16,174	734	45,099	30
1983	47	-	178	15,369	4,171	675	20,440	41
1984	14	-	1,290	5,141	4,960	1,892	13,297	46
1985	20	-	1,066	4,936	5,329	2,004	13,355	45
1986	109	-	4,187	14,324	4,968	5,943	29,531	38
1987	201	-	1,620	1,015	3,331	949	7,116	48
1988	776	-	1,246	12	145	3,129	5,308	49
1989	388	-	10,083	4,261	27,640	3,375	45,747	29
1990	682	-	11,580	8,218	13,822	9,386	43,688	33
1991	1,366	-	17,987	15,629	6,406	5,977	47,365	28
1992	1,045	-	52,717	22,127	66,742	15,458	158,089	17
1993	1,799	-	76,874	14,307	39,661	22,504	155,145	18
1994	1,996	-	97,224	44,891	35,405	27,658	207,174	9
1995	1,702	-	76,756	17,834	37,788	54,296	188,376	12
1996	1,717	-	154,150	19,059	37,651	135,623	348,200	3
1997	2,566	-	93,039	2,140	65,745	38,913	202,403	10
1998	460	-	22,031	19,206	39,246	41,057	122,000	21
1999	1,049	-	36,601	28,437	48,552	117,196	231,835	7
2000	1,671	-	15,833	5,651	9,497	40,337	72,989	23
2001	7	-	610	10,731	11,012	5,397	27,757	40
2002	25	-	208	21,131	4,578	2,017	27,959	39
2003	312	-	42,158	38,795	76,113	51,701	209,079	8
2004	7,410	-	103,392	26,617	20,439	37,996	195,854	11
2005	24,293	2,677	99,465	42,203	106,395	150,121	425,154	2
2006	27,014	3,019	61,298	34,430	56,810	343,827	526,398	1
2007	14,627	2,836	70,580	19,880	39,872	177,573	325,368	4
2008	13,049	1,550	35,679	34,479	18,105	81,876	184,738	14
2009	2,406	424	36,680	30,860	27,010	190,800	288,180	5
2010	1,562	797	32,737	42,772	58,610	51,005	187,483	13
2011	4,099	1,222	51,478	20,717	65,022	142,526	285,064	6
Averages								
1962 to 2010 <sup>c</sup>	3,618	231	30,665	17,032	26,515	35,641	113,701	
2001 to 2010 <sup>d</sup>	9,071	1,130	48,281	30,190	41,894	109,231	239,797	
Max. harvest <sup>e</sup>	27,014	3,019	154,150	44,891	114,555	343,827	526,398	
Max. harv. year	2006	2006	1996	1994	1964	2006	2006	
Min. harvest <sup>e</sup>	7	424	0	0	0	1	1,530	
Min. harv, year	2001	2009	1975	1975	1975	1975	1975	

a Chinook salmon are 28" from the tip of snout to tip of tail, jacks are less than 28". – indicates no data.

b Rank is based on total harvest for years 1962 to 2011. No harvest data in Alexander database for 1960 and 1962.

c Equals the long-term average harvest. Harvests from 1962 to 1979 are included in average but not shown in table.

d Equals the recent 10-year average harvest.

e Minimum and maximums are based on species harvest from 1962 to 2011.

Table 21.-Southeast Alaska annual Taku/Snettisham (District 11) traditional and terminal harvest area drift gillnet salmon harvest, in numbers, by species, 1960–2011.

Year	Chinooka	Jacks <sup>a</sup>	Sockeye	Coho	Pink	Chum	Total	Rank <sup>b</sup>
1980	2,251	-	123,451	41,677	296,622	192,793	656,794	11
1981	1,721	-	49,942	26,711	254,856	76,438	409,668	26
1982	3,014	-	83,722	29,073	109,270	37,584	262,663	35
1983	888	-	31,821	21,455	66,239	15,264	135,667	44
1984	1,773	-	77,233	33,836	145,971	86,764	345,577	30
1985	2,632	-	88,093	55,518	311,305	106,900	564,448	17
1986	2,584	-	73,061	30,512	16,568	58,792	181,517	39
1987	2,076	-	75,212	35,219	363,439	121,660	597,606	14
1988	1,777	-	38,901	44,818	157,732	140,038	383,266	28
1989	1,811	-	74,019	51,812	180,639	36,979	345,260	31
1990	3,480	-	126,884	67,530	153,126	145,799	496,819	21
1991	3,214	-	109,471	126,576	74,170	160,422	473,853	22
1992	2,341	-	135,411	172,662	314,445	112,527	737,386	9
1993	6,748	-	171,383	65,539	17,083	166,478	427,231	24
1994	5,047	-	105,893	188,501	401,525	214,171	915,137	5
1995	4,660	-	103,362	83,606	41,228	349,949	582,805	16
1996	2,659	-	199,014	33,633	12,660	354,463	602,429	13
1997	2,804	-	94,745	3,515	51,424	176,864	329,352	32
1998	794	-	69,677	28,713	168,283	296,111	563,578	18
1999	1,949	-	79,686	17,308	59,316	429,359	587,618	15
2000	1,154	-	185,956	7,828	58,696	669,994	923,628	4
2001	1,698	-	293,043	22,646	123,026	237,122	677,535	10
2002	1,850	-	204,103	40,464	78,624	231,936	556,977	19
2003	1,467	-	238,160	24,338	114,166	170,874	549,005	20
2004	2,345	-	283,756	45,769	154,640	131,757	618,267	12
2005	20,195	3,106	106,048	21,289	182,778	93,700	427,116	25
2006	11,123	138	262,527	60,145	191,992	382,952	908,877	6
2007	1,223	229	112,241	22,394	100,375	590,169	826,631	7
2008	1,721	472	116,693	37,349	90,162	774,095	1,020,492	3
2009	5,694	1,106	62,070	36,615	56,801	918,350	1,080,636	2
2010	1,291	394	76,607	62,241	132,785	489,063	762,381	8
2011	1,415	1,095	163,976	28,551	344,766	667,929	1,207,732	1
Averages								
1960 to 2010 <sup>c</sup>	3,965	107	94,949	41,918	109,923	176,171	427,033	
2001 to 2010 <sup>d</sup>	4,861	545	175,525	37,325	122,535	402,002	742,792	
Max. harvest <sup>e</sup>	20,195	3,106	293,043	188,501	401,525	918,350	1,207,732	
Max. harv. year	2005	2005	2001	1994	1994	2009	2011	
Min. harvest <sup>e</sup>	794	138	17,735	1,185	2,768	2,678	48,162	
Min. harv, year	1998	2006	1967	1975	1965	1975	1975	

<sup>&</sup>lt;sup>a</sup> Chinook salmon are 28" from the tip of snout to tip of tail, jacks are less than 28". – indicates no data.

<sup>b</sup> Rank is based on total harvest for years 1960 to 2010.

<sup>c</sup> Equals the long-term average harvest. Harvests from 1960 to 1979 are included in average but not shown in table.

<sup>d</sup> Equals the recent 10-year average harvest.

<sup>e</sup> Minimum and maximums are based on species harvest from 1960 to 2010.

Table 22.-Southeast Alaska annual Lynn Canal (District 15) traditional and terminal harvest area drift gillnet salmon harvest, in numbers, by species, 1980–2011.

Year	<b>Chinook</b> <sup>a</sup>	<b>Jacks</b> <sup>a</sup>	Sockeye	Coho	Pink	Chum		Rank <sup>b</sup>
1980	440	-	53,987	28,898	82,343	168,853	334,521	42
1981	1,300	-	93,195	44,682	137,270	117,376	393,823	38
1982	5,451	-	273,833	72,297	69,051	306,571	727,203	21
1983	1,983	-	369,830	69,510	157,546	341,145	940,014	14
1984	6,099	-	334,582	68,215	78,000	642,268	1,129,164	7
1985	3,260	-	302,940	98,301	239,081	699,000	1,342,582	3
1986	2,772	-	289,905	82,121	38,115	381,382	794,295	17
1987	3,223	-	415,336	53,751	165,751	392,938	1,030,999	11
1988	1,257	-	351,799	81,536	208,404	377,583	1,020,579	12
1989	1,955	-	471,914	50,307	110,454	123,631	758,261	18
1990	670	-	357,418	63,005	101,099	210,510	732,702	20
1991	746	-	308,731	129,232	5,474	210,547	654,730	24
1992	610	-	286,035	108,753	351,562	245,247	992,207	13
1993	741	-	173,113	59,952	11,336	306,566	551,708	32
1994	980	-	171,729	140,764	147,277	685,449	1,146,199	6
1995	831	-	88,676	79,949	15,613	568,368	753,437	19
1996	642	-	149,578	52,658	2,607	415,930	621,415	27
1997	838	-	118,828	15,572	53,437	462,330	651,005	25
1998	682	-	134,937	26,118	32,351	160,669	354,757	40
1999	559	-	163,560	35,350	62,737	351,251	613,457	28
2000	297	-	109,560	35,638	21,001	759,357	925,853	15
2001	1,672	_	147,811	34,606	67,718	445,578	697,385	22
2002	582	-	82,014	77,941	88,044	665,398	913,979	16
2003	663	-	95,111	59,742	53,621	394,250	603,387	29
2004	805	-	151,245	51,960	98,341	745,450	1,047,801	10
2005	710	-	65,469	27,947	209,833	326,895	630,854	26
2006	343	1	145,579	55,133	94,700	1,094,246	1,390,002	2
2007	773	290	156,936	18,177	89,782	823,999	1,089,957	9
2008	560	99	46,655	46,932	26,034	1,072,135	1,192,415	4
2009	519	162	126,594	35,820	163,057	845,710	1,171,862	5
2010	612	263	100,968	65,870	171,054	764,629	1,103,396	8
2011	766	400	63,788	33,753	508,930	1,115,821	1,723,458	1
Averages								
1960 to 2010 <sup>c</sup>	1,403	16	159,876	54,216	68,170	377,931	661,611	
2001 to 2010 <sup>d</sup>	724	82	111,838	47,413	106,218	717,829	984,104	
Max. harvest <sup>e</sup>	6,099	400	471,914	140,764	508,930	1,115,821	1,723,458	
Max. harv. year	1984	2011	1989	1994	2011	2011	2011	
Min. harvest <sup>e</sup>	276	1	18,491	10,964	1,760	58,562	132,343	
Min. harv, year	1963	2006	1975	1960	1960	1960	1960	

a Chinook salmon are 28" from the tip of snout to tip of tail, jacks are less than 28". - indicates no data.
 b Rank is based on total harvest for years 1960 to 2011.
 c Equals the long-term average harvest. Harvests from 1960 to 1979 are included in average but not shown in table.
 d Equals the recent 10-year average harvest.
 e Minimum and maximums are based on species harvest from 1960 to 2011.

Table 23.-Annual common property purse seine harvests from terminal harvest areas (THA) in Southeast Alaska, 1990-2011.

THA Area	Year	Chinooka	<b>Jacks</b> <sup>a</sup>	Sockeye	Coho	Pink	Chum	Total
Nakat Inlet	1990	0	0	103	604	1,444	10,531	12,682
	1991	0	0	531	531	7,134	47,957	56,153
	1992	0	0	53	361	1,497	16,843	18,754
	1993	0	0	443	796	60,319	37,965	99,523
	1994	0	0	24	129	5,513	45,057	50,723
	1995	0	0	150	1,099	9,200	131,415	141,864
	1996	0	0	18	935	2,204	296,181	299,338
	1997	0	0	390	1,177	11,132	239,156	251,855
	1998	1	0	302	385	2,681	188,489	191,858
	1999	0	0	383	138	8,520	44,866	53,907
	2000	0	0	1,181	730	5,545	51,731	59,187
	2001	4	0	490	34	5,478	36,449	42,455
	2002	0	0	930	592	13,350	46,263	61,135
	2003	4	0	363	298	9,172	87,930	97,767
	2004	4	0	1,179	564	18,299	114,883	134,929
	2005	10	0	45	132	24,211	138,041	162,439
	2006	239	3	2,630	1,505	25,471	339,339	369,187
	2007	0	0	2,030	1,172	459	13,084	14,718
Average 1990–20		15		512	621	11,757	104,788	117,693
Neets Bay	1998	58	5	1,135	141	8,918	891,029	901,286
Neets Day	2000	23	0	0	0	8	984	1,015
	2002	607	0	2	42,365	0	9,156	52,130
	2002	310	0	2	15,077	20	45,969	61,378
			0	0				
	2004 2005	1,379			5,968	0	5,711	13,058
		2,572	0	2	6,308	4	1,083	9,969
	2006	777	0	0	0	0	14	791
	2007	208	0	1	6	5	189	409
	2008	4,911	0	3	2	0	235	5,151
	2009	7,807	0	47	11	226	7,676	15,767
	2010	5,762	0	44	15,049	136	3,293	24,284
1000.20	2011	8,701	8	133	8,071	179	89,447	106,539
Average 1998–20		2,760	-	114	7,750	791	87,899	99,315
Kendrick Bay	1994	0	0	335	420	2,948	99,171	102,874
	1995	0	1	2,717	607	53,302	157,217	213,844
	1996	0	1	548	177	1,167	155,044	156,937
	1997	1	1	1,204	160	9,055	243,886	254,307
	1998	0	1	1,114	1,272	8,499	362,911	373,797
	1999	0	0	390	493	4,673	42,045	47,601
	2000	0	0	1,182	295	1,212	76,991	79,680
	2001	0	0	221	540	5,259	32,518	38,538
	2002	0	0	108	120	1,790	4,352	6,370
	2003	0	3	82	119	927	2,094	3,225
	2004	3	0	58	47	37	55	200
	2005	17	0	63	153	1,626	20,829	22,688
	2006	316	5	3,392	3,074	61,302	284,061	352,150
	2007	299	14	3,470	1,702	64,974	219,640	290,099
	2008	0	8	1,503	2,652	20,523	163,571	188,257
	2009	93	0	1,692	929	24,594	74,033	101,341
	2010	96	5	5,818	2,907	40,689	164,981	214,496
	2011	91	1	2,946	3,338	39,037	227,079	272,492
Average 1994–20	2011	<b>91</b> 51	1 -	<b>2,946</b> 1,491	<b>3,338</b> 1,056	<b>39,037</b> 18,979	<b>227,079</b> 129,471	<b>272,492</b> 151,050

Table 23.–Page 2 of 3.

THA Area	Year	Chinooka	<b>Jacks</b> <sup>a</sup>	Sockeye	Coho	Pink	Chum	Total
Anita Bay	2004	232	0	5	0	0	6	243
	2005	50	14	61	95	3,356	66,506	70,082
	2006	4,509	35	187	1,149	5,066	261,103	272,049
	2007	4,275	12	31	20	4,176	40,805	49,319
	2008	2,172	59	58	223	887	46,345	49,744
	2009	2,579	23	187	213	15,746	31,917	50,665
	2010	2,926	166	746	616	15,239	142,551	162,244
	2011	3,136	175	108	98	40,719	82,942	127,178
Average 2004–2011		2,485	-	173	302	10,649	84,022	97,691
Earl West Cove	1990	2,461	237	2	1	32	49	2,782
	1991	1,208	12	1	2,451	9	221	3,902
	1992	913	18	9	1	13	48	1,002
	1993	1,145	0	2	474	6	414	2,041
	1994	829	0	1	28	2	1,725	2,585
	1995	816	0	37	4	464	34,878	36,199
	1996	831	0	3	0	0	311	1,145
	1997	995	4	1	14	3	15,632	16,649
	1998	597	5	2	3	11	13,452	14,070
	1999	761	0	4	0	27	7,636	8,428
	2000	1,147	2	78	30	292	35,131	36,680
	2001	4,298	99	19	11	410	8,562	13,399
	2002	1,418	413	10	338	637	8,990	11,806
	2003	350	0	6	4	693	16,310	17,363
	2004	0	0	0	0	29	371	400
Average 1990–2004		1,185	_	12	224	175	9,582	11,230
Port Armstrong	1995	0	0	16	6,685	306,796	61	313,558
Hidden Falls	1990	5	174	3,487	773	207,188	257,987	469,614
	1992	501	658	8,235	1,943	450,867	734,129	1,196,333
	1993	1,075	1,372	15,940	8,016	1,979,613	1,471,182	3,477,198
	1994	3,446	1,046	13,081	11,738	1,479,866	2,842,059	4,351,236
	1995	21,431	792	9,049	20,908	284,234	3,213,002	3,549,416
	1996	19,785	204	9,106	4,991	335,538	3,375,359	3,744,983
	1997	5,494	297	3,090	2,491	450,001	1,376,980	1,838,353
	1998	5,616	643	5,428	11,964	751,632	1,851,116	2,626,399
	1999	12,070	1,580	6,811	18,151	1,417,199	2,338,575	3,794,386
	2000	17,609	840	7,391	1,761	225,173	2,742,107	2,994,881
	2001	11,109	1,077	8,556	5,463	455,412	1,098,670	1,580,287
	2002	9,300	491	3,095	11,972	336,382	1,225,544	1,586,784
	2003	4,304	73	2,659	920	524,819	1,357,104	1,889,879
	2004	4,088	92	6,225	11,457	1,339,387	1,156,394	2,517,643
	2005	1,241	40	1,170	1,392	383,367	250,077	637,287
	2006	3,907	677	6,924	3,416	537,646	1,710,387	2,262,957
	2007	5,017	238	2,572	1,258	315,050	502,248	826,383
	2008	5,120	183	1,316	7,427	32,940	1,752,950	1,799,936
	2009	3,207	239	2,665	787	643,969	1,742,298	2,393,165
	2010	2,662	243	2,290	2,630	97,815	649,691	755,331
	2011	2,419	420	111	1,082	29,463	81,187	114,682
Average 1990-2011		6,638	-	5,676	6,216	584,646	1,510,907	2,114,625

-continued-

Table 23.–Page 3 of 3.

THA Area	Year	Chinooka	<b>Jacks</b> <sup>a</sup>	Sockeye	Coho	Pink	Chum	Total
Deep Inlet	1992	12	0	5	3,038	537	168,270	171,862
-	1993	29	14	425	3,196	58,834	458,223	520,721
	1994	39	3	887	3,370	20,249	395,917	420,465
	1995	2,488	6	1,485	3,130	25,573	523,373	556,055
	1996	1,344	0	758	667	98,458	1,076,558	1,177,785
	1997	420	0	1,750	545	144,320	817,008	964,043
	1998	337	0	1,881	582	376,039	1,069,499	1,448,338
	1999	385	20	1,221	547	105,181	2,137,457	2,244,811
	2000	372	3	476	1,111	260,755	1,831,459	2,094,176
	2001	548	0	408	415	72,174	222,198	295,743
	2002	775	0	164	199	92,241	118,558	211,937
	2003	404	3	631	145	63,173	379,575	443,931
	2004	250	6	766	452	56,862	629,459	687,795
	2005	405	10	930	331	161,611	410,610	573,897
	2006	431	9	2,141	1,722	224,118	965,713	1,194,134
	2007	1,586	18	424	954	15,733	110,348	129,063
	2008	2,618	81	329	1,864	152,799	322,008	479,699
	2009	2,603	0	327	547	7,708	277,492	288,677
	2010	3,696	30	722	561	118,871	802,653	926,533
	2011	3,600	2	410	248	39,820	104,626	148,706
Average 1992–2011		1,117	-	807	1,181	104,753	641,050	748,919

<sup>a Chinook salmon are 28" from the tip of snout to tip of tail, jacks are less than 28".
- Average was not calculated for Jack Chinook.</sup> 

Table 24.-Annual common property drift gillnet harvests from terminal harvest areas (THA) in Southeast Alaska, 1990-2011.

THA Area	Year	Chinooka	Jacks <sup>a</sup>	Sockeye	Coho	Pink	Chum	Total
Nakat Inlet	1990	4	0	79	33	196	2,198	2,510
	1991	0	0	17	40	203	1,969	2,229
	1992	2	0	1	63	36	6,403	6,505
	1993	0	0	39	80	144	6,506	6,769
	1994	2	0	81	322	307	36,113	36,825
	1995	1	0	42	1,095	1,885	100,441	103,464
	1996	0	0	74	46	14	27,474	27,608
	1997	2	0	140	2,542	264	58,361	61,309
	1998	0	0	145	282	552	27,053	28,032
	1999	0	0	25	8	168	2,879	3,080
	2000	0	0	69	1,368	689	19,697	21,823
	2001	14	0	399	425	3,908	32,719	37,465
	2002	5	0	763	1,252	2,859	16,408	21,287
	2003	2	0	615	2,413	5,544	39,261	47,835
	2004	24	0	406	518	1,988	24,892	27,828
	2005	10	0	299	86	2,870	12,848	16,113
	2006	20	0	598	1,187	3,818	26,113	31,736
	2007	95	10	1,348	2,387	20,994	156,552	181,386
	2008	69	14	802	1,607	4,488	79,725	86,705
	2009	55	2	748	403	3,477	71,982	76,667
	2010	63	0	2,066	3,350	27,628	131,761	164,868
	2011	96	3	3,206	1,340	21,979	192,009	218,633
Average 1990–2011		21	-	544	948	4,728	48,789	55,031
Neets Bay	1998	62	0	6	1	37	7,693	7,799
	2000	13	0	0	0	0	45	58
	2001	0	0	0	491	0	3	494
	2002	294	0	0	33,956	0	13,466	47,716
	2003	150	0	0	31,506	0	37,083	68,739
	2004	47	0	0	19,411	0	10,829	30,287
	2005	244	0	3	14,087	2	5,599	19,935
	2006	443	0	0	1,003	0	2,320	3,766
	2007	353	0	0	0	0	74	427
	2008	2,028	0	0	0	0	143	2,171
	2009	3,705	0	0	950	0	4,142	8,797
	2010	1,795	0	1	7,868	0	1,774	11,438
	2011	2,818	0	1	6,221	9	34,572	43,621
Average 1998–2011		919	-	1	8,884	4	9,057	18,865
Wrangell Narrows	1990	0	0	3	2,961	30	6	3,000
	1991	787	0	1	626	1	1	1,416
	1992	19	0	3	949	30	3	1,004
	1993	3	0	11	1,820	39	34	1,907
	1994	0	0	28	4,830	397	195	5,450
	1996	0	0	0	489	0	0	489
Average 1990–1996		135	-	8	1,946	83	40	2,211

-continued-

Table 24.–Page 2 of 3.

THA Area	Year	Chinooka	<b>Jacks</b> <sup>a</sup>	Sockeye	Coho	Pink	Chum	Total
Earl West Cove	1990	6,039	0	32	2,164	16	1,109	9,360
	1991	8,211	0	71	4,794	59	19,837	32,972
	1992	4,854	0	98	1,669	60	42,995	49,676
	1993	6,400	0	165	6,993	49	7,874	21,481
	1994	6,979	0	209	2,898	228	33,771	44,085
	1995	3,735	0	142	5,240	202	62,110	71,429
	1996	3,047	0	238	4,494	5	23,859	31,643
	1997	2,033	0	132	3,857	814	53,658	60,494
	1998	2,270	0	49	4,055	230	43,638	50,242
	1999	3,059	0	297	2,556	546	29,118	35,576
	2000	7,912	0	373	2,692	1,375	53,161	65,513
	2001	7,101	0	833	880	5,528	86,088	100,430
	2002	4,040	0	231	366	281	42,575	47,493
	2003	6,119	0	193	254	2,350	73,357	82,273
	2004	389	0	150	74	401	18,196	19,210
	2005	4	0	0	0	0	31	35
Average 1990–2005		4,512	-	201	2,687	759	36,961	45,120
Ohmer Creek	1990	125	0	6	0	0	4	135
	1992	78	0	0	0	0	0	78
	1993	171	0	0	0	0	0	171
Average 1990–1993		125	-	2	0	0	1	128
Anita Bay	2002	0	0	0	917	0	4	921
	2003	52	0	33	1,268	330	2,263	3,946
	2004	1,457	0	359	2,221	136	43,197	47,370
	2005	553	14	554	1,239	1,970	57,146	61,476
	2006	613	14	264	969	986	88,043	90,889
	2007	3,303	17	194	3,202	1,865	92,576	101,157
	2008	1,741	64	88	3,480	376	28,651	34,400
	2009	3,246	49	231	4,107	400	28,521	36,554
	2010	3,792	137	296	7,166	1,484	61,587	74,462
	2011	5,818	387	496	313	3,536	67,183	77,733
Average 2002–2011		2,058	-	252	2,488	1,108	46,917	52,891
Speel Arm	1998	3	0	602	84	2,947	194	3,830
	1999	0	0	2,171	241	0	146	2,558
	2000	17	0	17,684	282	3,980	1,399	23,362
	2001	2	0	3,355	117	197	116	3,787
	2002	10	0	25,615	641	1,062	915	28,243
	2003	2	0	32,727	631	1,771	454	35,585
	2004	54	0	42,502	480	4,368	370	47,774
	2005	6	0	18,781	564	1,265	490	21,106
	2006	17	2	127,746	723	6,890	1,115	136,493
	2010	3	6	14,660	37	431	28	15,165
	2011	44	28	63,496	1,011	6,109	220	70,908
Average 1998–2011		14	-	31,758	437	2,638	495	35,346

-continued-

Table 24.–Page 3 of 3.

THA Area	Year	Chinook <sup>a</sup>	<b>Jacks</b> <sup>a</sup>	Sockeye	Coho	Pink	Chum	Total
Deep Inlet	1993	79	0	261	5,444	226	373,306	379,316
	1994	20	0	203	1,043	1,026	159,913	162,205
	1995	439	0	401	3,199	3,378	409,527	416,944
	1996	16	0	34	1,382	3,304	190,932	195,668
	1997	82	0	640	377	42,772	361,662	405,533
	1998	53	0	505	609	96,362	494,124	591,653
	1999	5	0	649	112	729	609,253	610,748
	2000	25	0	96	30	7,592	620,104	627,847
	2001	635	0	726	693	14,483	266,796	283,333
	2002	2,146	0	331	509	32,417	186,584	221,987
	2003	840	0	242	242	10,646	212,892	224,862
	2004	2,938	0	172	100	15,824	421,070	440,104
	2005	919	0	454	402	8,784	432,483	443,042
	2006	705	13	651	1,486	32,874	651,689	687,418
	2007	2,471	97	1,163	1,170	8,015	113,546	126,462
	2008	7,062	48	314	1,534	60,064	213,581	282,603
	2009	4,555	0	170	417	1,825	119,719	126,686
	2010	4,696	1	295	456	45,087	296,907	347,442
	2011	8,106	0	442	550	23,541	82,546	115,185
Average 1993–2011	1,538	1,884	-	408	1,040	21,524	327,191	352,055
Boat Harbor	1995	257	0	7,510	556	9,814	176,495	194,632
	1996	32	0	3,346	113	249	73,725	77,465
	1997	61	0	7,561	114	20,475	187,354	215,565
	1998	171	0	11,162	159	8,129	72,154	91,775
	1999	72	0	6,969	104	22,172	118,346	147,663
	2000	30	0	13,313	698	3,674	256,267	273,982
	2001	151	0	22,859	176	22,293	102,734	148,213
	2002	43	0	7,987	420	19,497	156,845	184,792
	2003	28	0	3,824	121	5,866	71,677	81,516
	2004	40	0	7,647	73	9,697	163,411	180,868
	2005	28	0	2,629	82	36,922	94,336	133,997
	2006	17	0	4,876	373	9,845	398,671	413,782
	2007	57	35	12,524	199	16,638	258,869	288,322
	2008	100	30	12,120	817	15,376	466,248	494,691
	2009	81	43	12,093	465	81,577	303,740	397,999
	2010	81	62	11,340	933	37,719	178,006	228,141
	2011	126	95	6,254	461	178,034	262,370	447,340
Average 1995–2011		81	_	9,060	345	29,293	196,544	235,338

<sup>Chinook salmon are 28" from the tip of snout to tip of tail, jacks are less than 28".
Average was not calculated for Jack Chinook.</sup> 

Table 25.–Southeast Alaska region 2011 private hatchery cost recovery salmon harvest by district, organization, special harvest area, and species.

Distri	ct Permit Holder	Special Harvest Area	Chinook	Jacks	Sockeye	Coho	Pink	Chum	Total
1	SSRAA	Neets Bay	8,222	0	198	1,656	0	1,484,606	1,494,682
	SSRAA	Herring Cove	8,799	0	0	1,461	0	0	10,260
3	POWHA	Klawock River	0	0	0	1,021	0	0	1,021
	POWHA	Port Saint Nicholas	2,091	0	0	0	0	0	2,091
6	SSRAA	Neck Lake	0	0	0	3,055	0	0	3,055
9	KNFC	Gunnuk Creek	0	0	1	2,426	13,802	12,133	28,362
	AKI	Port Armstrong	1,679	0	20	88,812	499,350	213,286	803,147
	NSRAA	Mist Cove	0	0	0	38,513	8,822	7	47,342
11	DIPAC	Amalga	39	4	575	749	41532	1350696	1393595
		Gastineau Channel	225	0	1	7,572	1,749	692,765	702,312
		Speel Arm	0	0	21,191	0	0	0	21,191
12	NSRAA	Hidden Falls	4,008	279	14	86,045	27,650	259,264	377,260
13	NSRAA	Deep Inlet/Silver Bay	15,502	434	1	4	11,428	73,756	101,125
	SJ-SSSC	Crescent Bay	9	10	0	0	93,734	671	94,424
		Total	40,574	727	22,001	231,314	698,067	4,087,184	5,079,867
	Total by Permit Ho	older (Organization)	Chinook	Jacks	Sockeye	Coho	Pink	Chum	Total
	SSRAA		17,021	0	198	6,172	0	1,484,606	1,507,997
	POWHA		2,091	0	0	1,021	0	0	3,112
	KNFC		0	0	1	2,426	13,802	12,133	28,362
	AVI		1 670	0	20	00 013	400.250	212 206	902 147

 Total by Permit Holder (Organization)	Chinook	Jacks	Sockeye	Coho	Pink	Chum	Total
SSRAA	17,021	0	198	6,172	0	1,484,606	1,507,997
POWHA	2,091	0	0	1,021	0	0	3,112
KNFC	0	0	1	2,426	13,802	12,133	28,362
AKI	1,679	0	20	88,812	499,350	213,286	803,147
DIPAC	264	4	21,767	8,321	43,281	2,043,461	2,117,098
NSRAA	19,510	713	15	124,562	47,900	333,027	525,727
 SJ-SSSC	9	10	0	0	93,734	671	94,424
Total	40,574	727	22,001	231,314	698,067	4,087,184	5,079,867

<sup>&</sup>lt;sup>a</sup> Permit holder organization acronyms and names are as follows:

SSRAA: Southern Southeast Regional Aquaculture Association

POWHA: Prince of Wales Hatchery Association KNFC: Kake Nonprofit Fishery Corporation

AKI: Armstrong Keta, Inc.

DIPAC: Douglas Island Pink and Chum, Inc.

NSRAA: Northern Southeast Regional Aquaculture Association

SJ-SSSC: Sheldon Jackson-Sitka Sound Science Center

<sup>&</sup>lt;sup>b</sup> Total harvest by gear includes seine (shown in Table 2) and raceway/fish ladder harvest of 353,601 (8% of total).

Table 26.–Southeast Alaska region private hatchery cost recovery harvest in numbers by species, 1977–2011.

Year	Chinook	Jacks	Sockeye	Coho	Pink	Chum	Total
1977	-	-	-	-	92,459	-	92,459
1978	-	-	-	-	-	-	0
1979	-	-	-	5,893	29,555	-	35,448
1980	-	-	-	-	_	752	752
1981	0	0	1	5,003	132,744	1	137,749
1982	0	0	1	12,514	7,346	778	20,639
1983	0	0	1	4,220	120,688	18,269	143,178
1984	937	0	7	26,856	169,795	453,204	650,799
1985	2,658	0	18	33,386	470,949	133,051	640,062
1986	1,093	0	6	143,799	61,178	161,792	367,868
1987	2,371	5	1,121	50,465	994,190	594,563	1,642,715
1988	8,276	1	85	4,039	115,729	512,809	640,939
1989	18,701	78	66	16,913	213,364	180,346	429,468
1990	21,878	298	75	113,779	880,750	375,092	1,391,872
1991	18,219	0	1,478	256,261	1,111,148	369,308	1,756,414
1992	16,695	28	2,108	268,913	2,111,411	695,451	3,094,606
1993	23,246	0	7,545	106,476	332,763	1,256,796	1,726,826
1994	17,498	70	3,322	150,248	3,457,270	1,678,031	5,306,439
1995	31,129	276	8,448	215,431	411,701	1,707,559	2,374,544
1996	33,496	0	6,636	164,662	609,316	4,536,244	5,350,354
1997	30,122	22	58,879	135,179	1,695,171	3,736,406	5,655,779
1998	15,943	0	34,590	234,675	1,411,511	4,004,257	5,700,976
1999	15,016	84	24,075	349,200	3,053,220	3,611,886	7,053,481
2000	31,358	1	107,244	215,937	176,215	4,231,270	4,762,025
2001	44,619	0	138,197	338,113	1,189,294	2,125,390	3,835,613
2002	28,445	0	36,859	749,889	853,059	2,710,351	4,378,603
2003	45,723	0	75,869	328,650	420,141	4,889,605	5,759,988
2004	62,470	0	210,665	221,721	933,287	3,550,119	4,978,262
2005	29,407	1	140,245	231,341	1,004,250	1,857,449	3,262,693
2006	12,764	30	124,109	246,062	377,353	4,473,325	5,233,643
2007	28,166	1	74,419	146,797	606,443	3,484,759	4,340,585
2008	41,799	0	53,981	340,538	83,099	3,017,712	3,537,129
2009	35,107	0	85,049	259,997	682,266	2,912,641	3,975,060
2010	27,729	406	38,334	295,235	713,384	3,204,048	4,279,136
2011	40,574	727	22,001	231,314	698,067	4,087,184	5,079,867
Averages							
1981 to 2010	21,496	_	41,114	188,877	813,301	2,016,084	3,080,915
2001 to 2010	35,623	-	97,773	315,834	686,258	3,222,540	4,358,071
-			•	•	•		

<sup>&</sup>lt;sup>a</sup> Chinook salmon are 28" from the tip of snout to tip of tail, jacks are less than 28".

<sup>-</sup> No harvest or average not calculated.

Table 27.-Annual Canadian Stikine River commercial and food fisheries harvests, 1972–2011.

	Chino	ok					
Year	Large	Jacks <sup>a</sup>	Sockeye	Coho	Pink	Chum	Total
1972	0	-	4,373	0	0	0	4,373
1973	200	-	3,670	0	0	0	3,870
1974	100	-	3,500	0	0	0	3,600
1975	1,202	-	2,252	50	0	0	3,504
1976	1,160	-	3,644	13	0	0	4,817
1977	162	-	6,310	0	0	0	6,472
1978	500	-	5,000	0	0	0	5,500
1979	1,636	63	13,534	10,720	1,994	424	28,371
1980	2,367	-	20,919	6,769	756	771	31,582
1981	1,617	-	27,017	2,867	3,857	1,128	36,486
1982	2,568	-	20,540	15,944	1,842	722	41,616
1983	1,456	645	21,120	6,173	1,120	304	30,818
1984 <sup>b</sup>	726	59	5,327	1	62	0	6,175
1985	1,203	185	25,464	2,175	2,356	536	31,919
1986	2,029	975	17,434	2,280	107	307	23,132
1987	2,339	444	9,615	5,731	646	459	19,234
1988	2,564	444	15,291	2,117	418	733	21,567
1989	2,801	289	20,032	6,098	825	674	30,719
1990	2,379	959	18,024	4,037	496	499	26,394
1991	1,640	660	22,763	2,648	394	208	28,313
1992	2,021	239	26,284	1,855	122	231	30,752
1993	2,189	308	47,197	2,616	29	395	52,734
1994	2,008	350	45,095	3,381	90	173	51,097
1995	1,753	860	53,467	3,418	48	263	59,809
1996	2,633	421	74,281	1,404	25	232	78,996
1997	4,671	286	65,559	401	269	222	71,408
1998	2,329	423	43,803	726	55	13	47,349
1999	3,082	1,264	38,055	181	11	8	42,601
2000	3,312	628	27,468	301	181	144	32,034
2001	1,681	103	25,600	233	78	56	27,751
2002	1,782	578	17,294	82	19	33	19,788
2003	1,563	1,057	58,784	190	850	112	62,556
2004	3,997	2,568	85,018	275	8	134	92,000
2005	20,016	1,276	85,890	276	Ö	39	107,497
2006	15,776	2,078	101,405	72	4	14	119,349
2007	10,505	1,727	60,013	52	Ö	2	72,299
2008	7,906	1,067	33,651	2,398	88	90	45,200
2009	2,284	738	47,029	5,985	362	193	56,590
2010	1,787	978	50,543	5,301	209	122	58,940
2011	2,283	1,542	55,623	5.718	9	99	65.274
Averages	21230	-12 12	001020	VI, 10			UC. 11
1972 to 2010 °	3,075	747	32,109	2,481	444	237	38,903
2001 to 2010	6,730	1,217	56,523	1,486	162	80	66,197
Note: Harvest of salmo							00,177

*Note:* Harvest of salmon that were Excess to Spawning Requirements are not included.

Jacks as reported by fishery and loosely based on "small" fish ~2.5–3.0 kg; the jack catch may not correspond with the estimated jack catch based on sampling, i.e. jack<660 mid-eye-to-fork or <735 fl. - used when no data.

b There was no commercial fishery in 1984; only the food fishery harvest is shown.

<sup>&</sup>lt;sup>c</sup> Chinook averages only since 1986 when large fish and jacks were recorded separately in all fisheries.

Table 28.-Annual Canadian Taku River commercial and food fisheries harvests, 1979-2011.

						Chinook	<u> </u>
Tota	Chum	Pink	Coho	Sockeye	<b>Jacks</b> <sup>a</sup>	<b>Large</b> <sup>a</sup>	Year
48,816	15,474	13,661	6,006	13,578	0	97	1979 <sup>b</sup>
74,819	18,531	26,821	6,405	22,752	0	310	1980
31,050	5,591	10,771	3,607	10,922	0	159	1981
3,454	3	202	51	3,144	0	54	1982
29,645	1,760	1,874	8,390	17,056	400	165	1983
42,635	2,492	6,964	5,372	27,292	221	294	1984
20,066	136	3,373	1,792	14,411	24	330	1985
17,302	110	58	1,833	14,939	77	285	1986
28,115	2,270	6,250	5,712	13,650	106	127	1987
18,011	733	1,030	3,221	12,259	186	582	1988
23,397	42	695	3,022	18,598	139	901	1989
26,178	12	378	3,213	21,189	128	1,258	1990
30,559	2	296	3,435	25,217	432	1,177	1991
35,808	7	0	4,264	29,824	147	1,566	1992
38,244	15	16	3,041	33,357	171	1,644	1993
46,303	18	172	14,693	29,001	235	2,184	1994
48,404	8	2	13,738	32,711	298	1,647	1995
50,615	0	0	5,052	42,025	144	3,394	1996
29,961	1	0	2,690	24,352	84	2,834	1997
25,763	2	0	5,090	19,277	227	1,167	1998
27,165	0	0	4,887	21,063	257	958	1999
34,599	0	0	4,737	28,149	87	1,626	2000
52,664	25	0	3,068	47,870	118	1,583	2001
36,867	0	0	3,770	31,208	291	1,598	2002
39,540	0	4	3,584	32,997	784	2,171	2003
29,494	0	0	6,416	20,268	451	2,359	2004
35,376	0	0	5,086	21,858	821	7,611	2005
38,248	0	391	8,867	21,184	207	7,599	2006
23,632	0	0	5,276	16,873	442	1,041	2007
24,582	0	0	3,839	19,499	330	914	2008
24,987	0	0	5,803	11,086	1,167	6,931	2009
36,869	0	0	10,408	20,395	720	5,346	2010
35,597	0	0	8490	24136	535	2436	2011
							verages
33,044	1,024	1,913	5,173	22,723	280	1,930	80-10
34,260	2	36	5,532	24,672	493	3,525	01-10

<sup>&</sup>lt;sup>a</sup> Chinook salmon are 28" from the tip of snout to tip of tail, jacks are less than 28".

<sup>&</sup>lt;sup>b</sup> 1979 is commercial catch only

Table 29.-Annette Island Reserve annual commercial drift gillnet salmon harvest in numbers by species, 1980-2011.

Year	Chinook <sup>a</sup>	<b>Jacks</b> <sup>a</sup>	Sockeye	Coho	Pink	Chum	Total
1980	38	-	15,775	2,565	191,854	38,779	249,011
1981	211	-	25,594	5,092	214,052	24,366	269,315
1982	267	-	43,475	6,712	162,244	26,814	239,512
1983	170	-	21,994	7,887	212,944	17,444	260,439
1984	39	-	23,707	8,240	404,360	71,610	507,956
1985	292	-	50,899	22,933	407,577	76,225	557,926
1986	98	-	27,941	52,834	512,733	96,945	690,551
1987	527	-	47,469	24,042	223,337	86,831	382,206
1988	579	-	26,555	7,138	364,430	115,825	514,527
1989	369	-	33,194	21,266	823,081	52,717	930,627
1990	524	-	43,998	26,764	615,560	75,372	762,218
1991	798	-	39,353	55,803	296,036	76,844	468,834
1992	455	-	56,494	54,289	548,384	90,043	749,665
1993	269	-	76,054	28,199	456,453	65,223	626,198
1994	183	-	36,458	46,433	339,070	133,206	555,350
1995	122	-	37,502	41,662	773,781	118,922	971,989
1996	237	-	22,549	36,039	139,085	115,385	313,295
1997	461	-	20,720	25,485	114,664	141,511	302,841
1998	270	=	11,549	29,012	435,816	175,598	652,245
1999	729	-	16,757	42,662	265,072	84,101	409,321
2000	2,560	-	11,802	14,173	205,224	132,793	366,552
2001	3,447	-	15,813	43,642	340,071	105,505	508,478
2002	1,268	-	21,875	55,071	289,332	62,186	429,732
2003	692	-	3,935	33,059	103,496	46,431	187,613
2004	1,523	-	14,661	23,269	172,504	76,862	288,819
2005	1,132	-	6,374	25,005	108,522	44,853	185,886
2006	506	3	8,101	25,404	137,321	131,510	302,845
2007	853	41	13,318	28,795	242,444	153,080	438,531
2008	606	2	3,813	40,022	299,685	135,988	480,116
2009	627	=	7,540	30,457	113,077	120,025	271,726
2010	692	-	9,826	74,552	472,644	246,349	804,063
2011	1,277	5	17,292	10,074	241,563	263,824	534,035
Averages							
1980 to 2010	663	1	25,648	30,274	322,092	94,818	473,496
2001 to 2010	1,135	5	10,526	37,928	227,910	112,279	389,781
Max. harvest	3,447	41	76,054	74,552	823,081	263,824	
Max. harv. year	2001	2007	1993	2010	1989	2011	
Min. harvest	38	2	3,813	2,565	103,496	17,444	
Min. harv. year	1980	2008	2008	1980	2003	1983	

<sup>&</sup>lt;sup>a</sup> Chinook salmon are 28" from the tip of snout to tip of tail, jacks are less than 28".

<sup>-</sup> No data for Jack Chinook.

Table 30.—Annette Island Reserve annual commercial purse seine salmon harvest in numbers by species, 1980–2011.

Year	Chinook <sup>a</sup>	<b>Jacks</b> <sup>a</sup>	Sockeye	Coho	Pink	Chum	Tota
1980	3	-	1,861	909	464,336	17,272	484,381
1981	4	-	1,316	1,100	245,151	4,747	252,31
1982	18	-	2,430	3,024	422,196	12,635	440,30
1983	3	-	5,939	3,335	999,270	4,996	1,013,54
1984	15	-	9,559	11,288	502,465	27,055	550,38
1985	47	-	6,133	3,919	494,115	9,105	513,31
1986	19	-	5,500	20,309	851,282	13,938	891,04
1987	5	-	618	9,204	28,584	17,991	56,40
1988	5	-	2,373	1,431	491,507	11,503	506,81
1989	73	-	14,572	2,127	1,231,281	12,216	1,260,26
1990	34	-	7,732	6,863	478,392	8,349	501,37
1991	2,194	-	5,068	6,262	543,316	4,954	561,79
1992	315	-	3,417	16,736	338,375	11,727	370,57
1993	29	-	14,807	3,868	735,899	8,953	763,55
1994	15	_	5,157	2,409	158,961	3,135	169,67
1995	11	-	18,001	9,695	1,151,375	14,456	1,193,53
1996	1	-	7,310	5,548	728,714	10,905	752,47
1997	29	_	20,645	5,281	295,390	25,062	346,40
1998	34	-	5,005	10,455	363,480	39,083	418,05
1999	10	-	5,110	6,511	631,342	16,230	659,20
2000	2,202	-	10,727	4,016	713,056	32,176	762,17
2001	709	_	25,432	13,413	1,655,144	20,950	1,715,64
2002	550	-	12,946	9,809	1,073,942	21,252	1,118,49
2003	80	4	3,871	6,820	466,016	9,618	486,40
2004	336	2	16,081	5,884	543,146	20,785	586,23
2005	173	_	6,911	6,777	489,527	13,631	517,01
2006	239	1	12,807	4,815	126,099	28,672	172,63
2007	175	2	6,260	5,007	603,712	37,400	652,55
2008	52	-	1,957	7,452	626,445	21,987	657,89
2009	90	7	7,496	15,183	1,612,453	38,480	1,673,70
2010	112	7	4,943	10,408	854,881	68,069	938,42
2011	420		12,031	4,773	498,932	139,746	655,90
Averages			,	, -	y	,	
1980 to 2010	245	1	8,129	7,092	642,576	18,946	676,98
2001 to 2010	252	2	9,870	8,557	805,137	28,084	851,90
Max. harvest	2,202	7	25,432	20,309	1,655,144	139,746	2,20
Max. harv. year	2000	2009/2010	2001	1986	2001	2011	200
Min. harvest	1	1	618	909	28,584	3,135	_50
Min. harv. year	1996	2006	1987	1980	1987	1994	199
iviiii. iiai v. yeai	1//0	2000	1701	loss than 20"	1701	1// [	1//

<sup>&</sup>lt;sup>a</sup> Chinook salmon are 28" from the tip of snout to tip of tail, jacks are less than 28".

<sup>-</sup> No data for Jack Chinook.

#### **FIGURES**

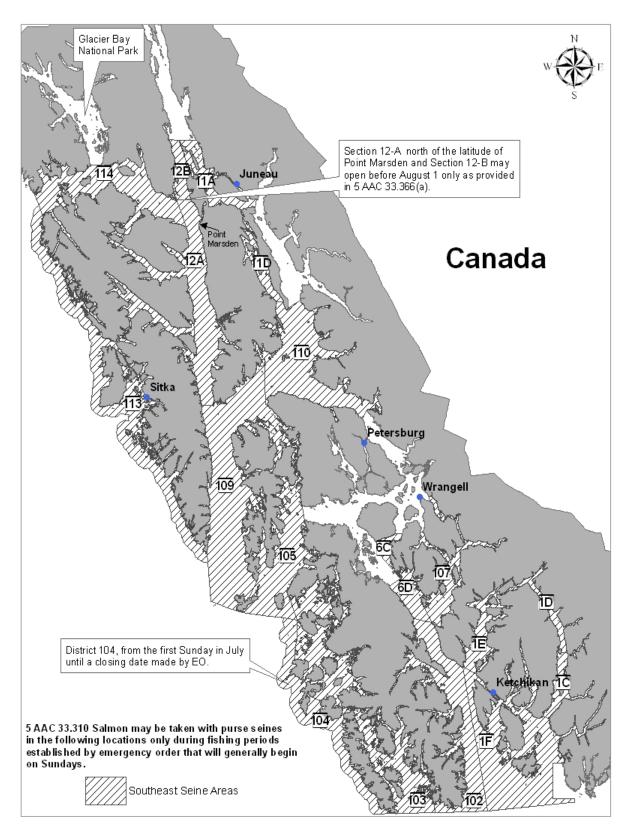


Figure 1.-Southeast Alaska purse seine fishing areas. Fishing periods areas are determined by emergency order.

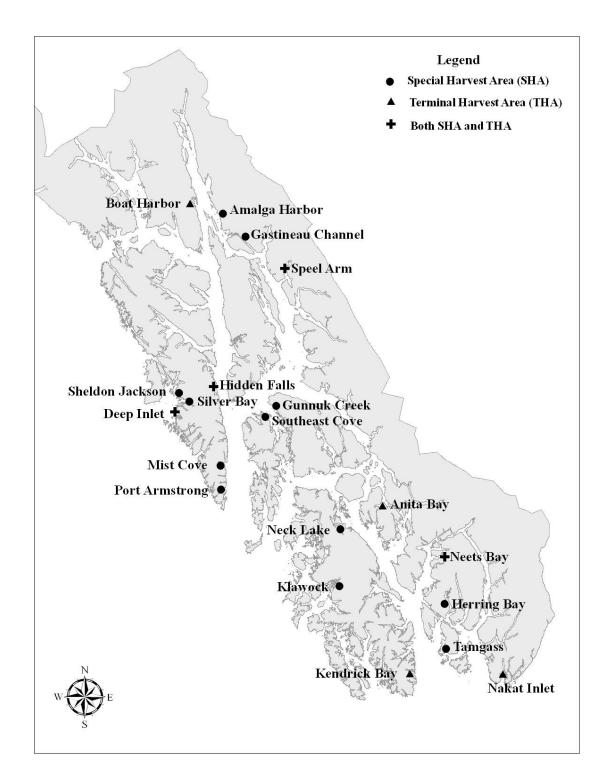


Figure 2.–Locations of terminal harvests in Southeast Alaska showing common property Terminal Harvest Areas (THAs), private hatchery cost recovery Special Harvest Areas (SHAs), and areas with both harvest types.

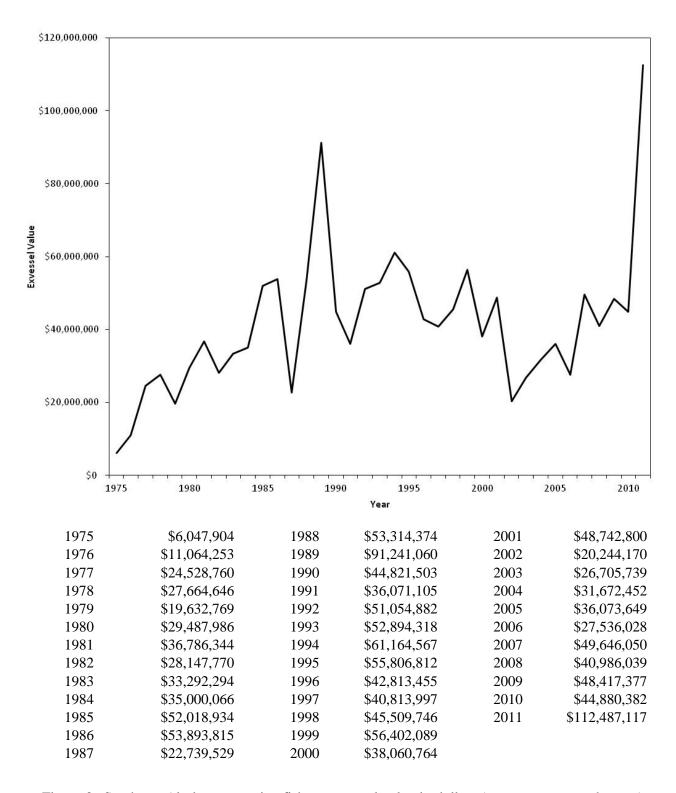


Figure 3.–Southeast Alaska purse seine fishery exvessel value in dollars (common property harvest), from 1975 to 2011.

Note: Data from CFEC including preliminary data for 2010.

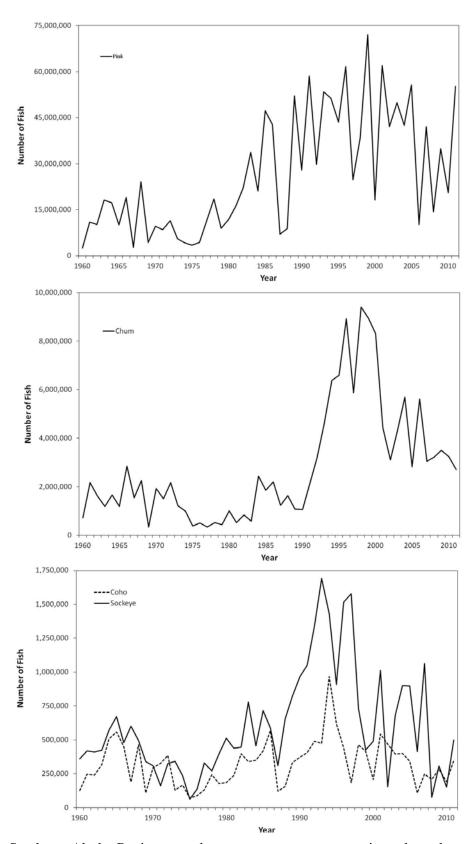


Figure 4.—Southeast Alaska Region annual common property purse seine salmon harvest (traditional and terminal harvest areas), in numbers of fish, by species, from 1960 to 2011.

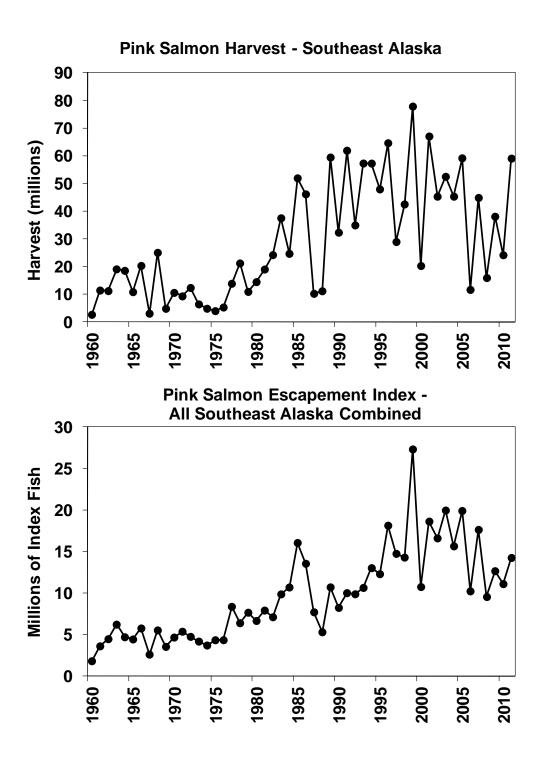
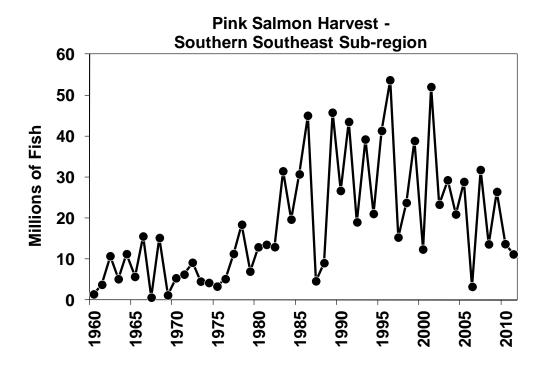


Figure 5.– Trends of pink salmon harvest and pink salmon escapement index for Southeast Alaska, all subregions combined, from 1960 to 2011.



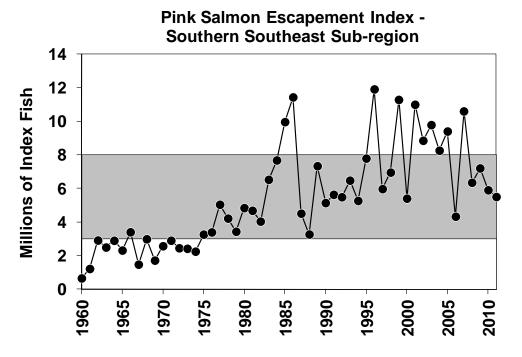
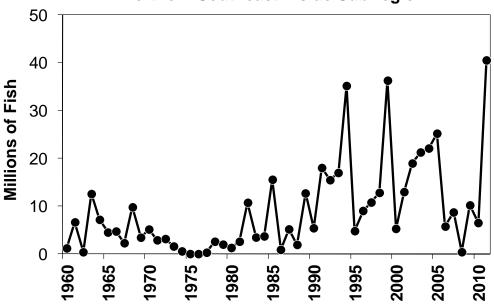


Figure 6.— Annual pink salmon escapement index for the Southern Southeast sub-region, 1960–2011 (Districts 101-108). The shaded area shows the escapement goal range of 3.0 million to 8.0 million index spawners.

### Pink Salmon Harvest - Northern Southeast Inside Sub-region



# Pink Salmon Escapement Index - Northern Southeast Inside Sub-region

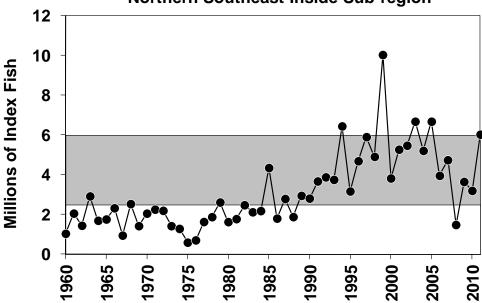
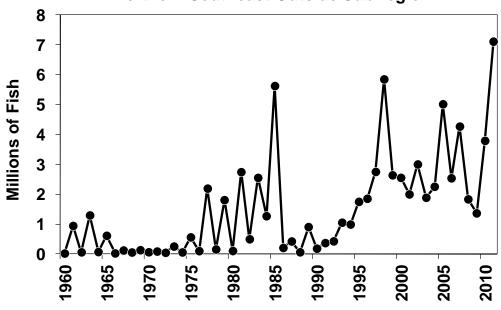


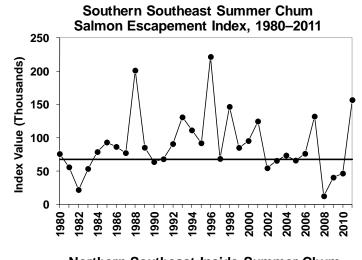
Figure 7.– Annual pink salmon harvest and escapement index for the Northern Southeast Inside subregion, 1960–2011 (Districts 109–112, 114–115, and 113 subdistricts 51–59). The shaded area shows the escapement goal range of 2.5 million to 6.0 million index spawners.

## Pink Salmon Harvest - Northern Southeast Outside Sub-region

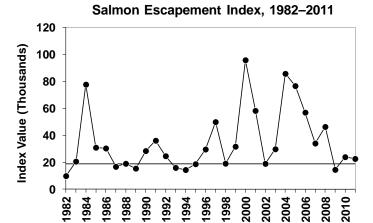


#### Pink Salmon Escapement Index -Northern Southeast Outside Sub-region Millions of Index Fish

Figure 8.– Annual pink salmon escapement index for the Northern Southeast Outside subregion, 1960–2011 (District 113, subdistricts 22–44 and 62–96). The shaded area shows the escapement goal range of 0.75 million to 2.50 million index spawners.



#### **Northern Southeast Inside Summer Chum** Escapement Index, 1982-2011 Index Value (Thousands) value = 931



Northern Southeast Outside Summer Chum

Figure 9.— Wild summer-run chum salmon escapement indices for the Southern Southeast stock group (1980–2011), Northern Southeast Inside stock group (1982–2011), and Northern Southeast Outside stock group (1982–2011). The solid lines show the sustainable escapement goal threshold for each stock.

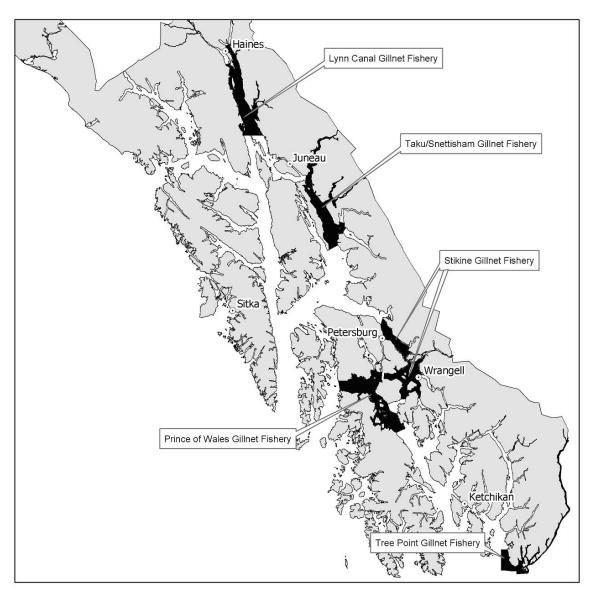


Figure 10.-Traditional drift gillnet fishing areas in Southeast Alaska.

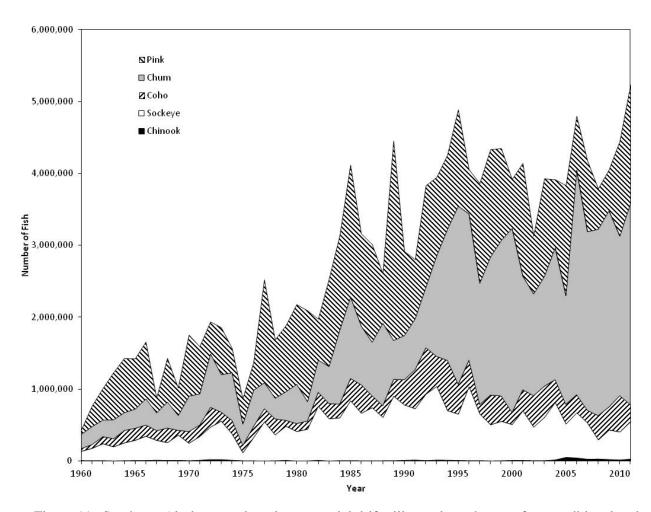


Figure 11.—Southeast Alaska annual total commercial drift gillnet salmon harvest from traditional and terminal harvest areas harvests, in numbers, by species, 1961 to 2011.

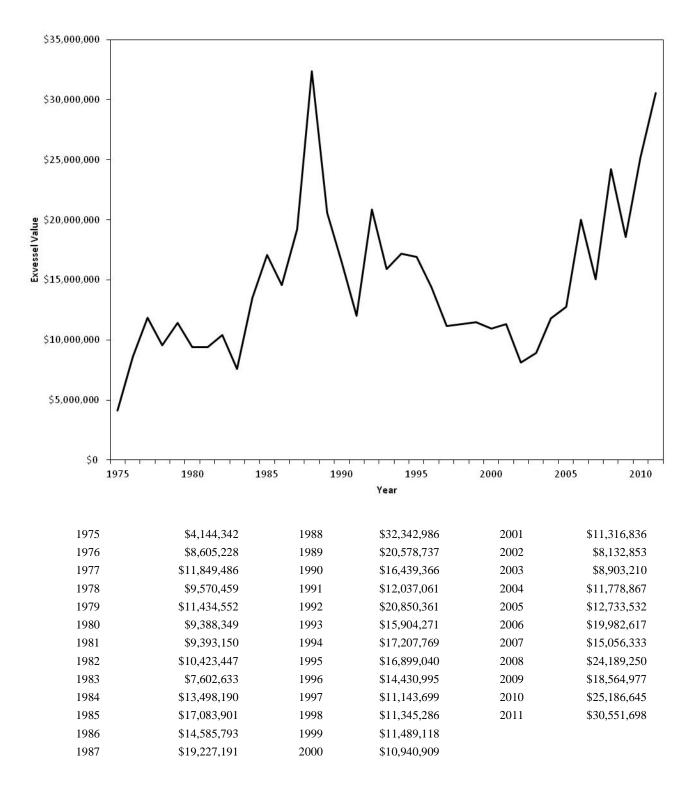


Figure 12.–Southeast Alaska drift gillnet fishery exvessel value in dollars (common property harvests) from 1975 to 2011.

Note: Data from CFEC including preliminary data from 2010.