Fishery Management Report No. 17-35

Annual Management Report of the 2016 Southeast Alaska Commercial Purse Seine and Drift Gillnet Fisheries

by

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

Symbols and Abbreviations

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Weights and measures (metric)

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

Weights and measures (English)

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

Time and temperature

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

Physics and chemistry

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

General

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

Mathematics, statistics

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

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ABSTRACT

A total of 31.7 million salmon were harvested in commercial salmon fisheries in the Southeast Alaska and Yakutat Region in 2016. The harvest by purse seine gear of 22.2 million fish included traditional fisheries (17.9 million), hatchery terminal areas (1.5 million), hatchery cost recovery (1.4 million), Annette Island (1.3 million), and miscellaneous (0.1 million). Common property purse seine harvests of 19.4 million salmon were below the most recent 10-year average harvest of 39.8 million and ranked as the 36th largest since statehood. The drift gillnet gear harvest of 5.4 million fish included traditional areas (3.6 million), hatchery terminal harvest areas (1.1 million), and Annette Island (0.6 million). Common property drift gillnet harvests of 4.7 million salmon were near the recent 10-year average harvest of 4.8 million and ranked as the eighth largest since statehood. Initial estimates for exvessel values of the common property purse seine and drift gillnet fisheries are $36.5 million and $22.2 million, respectively.

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

INTRODUCTION

This report describes the 2016 Southeast Alaska salmon net fisheries, including the purse seine, drift gillnet, terminal harvest area, hatchery cost-recovery, United States-Canada transboundary rivers (TBR), and Annette Island fisheries. A summary discussion of fishery management actions and outcomes is presented along with landing estimates compared to historical harvests. Unless specified otherwise, all averages referred to are recent 10-year averages. This annual report was formerly part of a report that summarized the Region 1 commercial, personal use, and subsistence salmon fisheries as a report to the Alaska Board of Fisheries (BOF). An overview summary of the 2016 Southeast Alaska regional salmon fisheries (Conrad and Gray 2017), as well as summaries of the 2016 Southeast Alaska regional troll fisheries (Hagerman et al. 2017) and the 2016 Yakutat Area set gillnet fisheries (Zeiser 2017), are published as separate reports and together describe the 2016 salmon season.

PURSE SEINE FISHERY OVERVIEW

During the years following Alaska statehood (1960–2015), the common property purse seine fishery has accounted for approximately 77% of the total commercial salmon harvest in numbers of fish in the Southeast Alaska region. Pink salmon (*Oncorhynchus gorbuscha*) 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. In traditional purse seine fisheries, other salmon species are harvested incidentally to pink salmon. Since 1960, the average percentage of all-gear harvest taken by the common property purse seine fishery, by species, has been 6% of Chinook salmon (*O. tshawytscha*), 43% of sockeye salmon (*O. nerka*), 17% of coho salmon (*O. kisutch*), 89% of pink salmon, and 57% of chum salmon (*O. keta*) harvests (Conrad and Gray 2017). Long-term average species composition of the common property purse seine fishery harvest has been <0.1% Chinook, 1.9% sockeye, 1.0% coho, 87.7% pink, and 9.3% chum salmon (Table 1).

Regulation 5 AAC 33.310, *Fishing seasons and periods for net gear* (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 or available for purse seine fisheries, regulations mandate that specific open areas and fishing periods be established by emergency

order. In 2016, purse seining took place in 6 terminal harvest areas and special harvest areas (THA and SHA) and 16 hatchery cost recovery locations (Figure 2). Traditional purse seine fisheries, fisheries in THAs and SHAs, hatchery cost recovery fisheries, Canadian TBR fisheries, and the Annette Island Reserve fisheries 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 northern and southern portions are included in the same salmon registration area, purse seine fishermen can move freely between districts. 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, and observations from vessels, and from fishery performance data in the form of catch per unit of 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 historical data.

In 2016, expectations were for an average even-year pink salmon return and above average chum salmon returns. The regional all-gear harvest forecast for the 2016 season was for 34 million pink salmon, with a harvest projection of 11.3 million chum salmon and a total harvest projection of 49.5 million salmon (Brenner 2017). Final regional, all-gear harvests included 18.4 million pink, 9.1 million chum, and 31.7 million salmon of all species (Conrad and Gray 2017).

In 2016, the total harvest by purse seine gear was 22.2 million salmon, and the total common property purse seine harvest was 19.4 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 27,000 Chinook, 611,000 sockeye, 257,000 coho, 15.4 million pink, and 3.1 million chum salmon. Historical common property purse seine harvests in traditional and THA fisheries from 1986 to 2016 are presented in Table 1, along with comparisons with the long-term, 56-year averages from 1960 to 2015, and the recent 10-year period from 2006 to 2015. The 2016 season common property purse seine harvest is approximately half the recent average of 39.8 million fish and ranks as the 36th largest common property purse seine harvest in the 57-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. The purse seine fishery value of $36.5 million makes up 30% of the total commercial value for salmon harvests in Southeast Alaska. Trends in value of the common property purse seine fishery following limited entry in 1975 are presented in Table 4 and Figure 3. Values for the purse seine fishery have generally increased since 2002, the lowest point since 1979, to the record high value in 2013. The total value includes $27.2 million for southern Southeast Alaska (districts 1–7), $2.2 million for northern Southeast Alaska (districts 9–14), and $7.1 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 indicate that chum were worth $16.0 million, pink were worth $13.8 million, sockeye were worth $4.9 million, Chinook salmon were worth $1.1 million, and coho were worth $0.7 million.

Total common property purse seine harvests in northern districts in 2016 were 2.6 million fish, ranking 46th of the 57 years since statehood (Table 5). Harvests in southern districts were 16.8 million fish, ranking 27th since statehood (Table 6). Harvest records showing long-term trends for pink, chum, sockeye, and coho salmon for the region are presented in Table 1 and Figure 4. Regional all-gear pink salmon harvests were nearly 12 million fish below forecast in 2016. Purse seine common property pink salmon harvests of 15.4 million fish were less than half the recent average of 35.1 million. Regional common property seine chum salmon harvests of 3.1 million were below the recent average of 3.9 million. Harvests of sockeye salmon of 611,000 fish were above both long-term and recent averages. Harvests of coho salmon of 257,000 were below the long-term and recent averages. Harvests for Chinook salmon were above the long-term and recent averages.

Table 2 presents a detailed breakdown of the 2016 purse seine harvests by species, fishery type, and district. Common property harvests include 17.9 million fish in traditional areas and 1.5 million fish in hatchery terminal areas. Cost recovery seine harvests to support privately operated salmon enhancement programs totaled 1.4 million salmon, of which 80% were chum salmon. Seine harvests reported by the Annette Island Reservation totaled 1.3 million salmon. Miscellaneous harvests of 71,000 salmon include test fisheries authorized by ADF&G, illegally harvested fish confiscated by the Alaska Wildlife Troopers, and sales of fish from sport fishing derbies. Of the 19.4 million salmon harvested in traditional seine fisheries, 16.3 million were harvested in southern Southeast districts and 1.7 million were harvested in northern Southeast districts. At the district level, the largest harvest took place in District 1, followed by districts 4, 2, and 13.

Following some earlier openings in THAs, the 2016 purse seine fishery began on Sunday, June 19 with a combination of traditional and THAs in Districts 2 and 12. Openings on this date included the following: the District 2 shoreline outside Kendrick Bay, the Hidden Falls THA, and the Point Augusta index fishery. Summaries of the 2016 purse seine fisheries dates and times are shown for northern Southeast, southern Southeast, and for THAs in Tables 7, 8, and 9, respectively. Traditional seine fisheries are generally managed inseason based on aerial observations of escapements and evaluation of harvests.

Concurrent gear purse seine openings were May 1–June 10 in Neets Bay THA, and May 1–June 14 in Anita Bay THA. Rotational gear seine fisheries began June 15 in the Neets Bay THA, June 13 in the Anita Bay THA, and May 29 in the Deep Inlet THA. In the Kendrick Bay THA, only seine gear is allowed and the area was open continuously beginning June 15.

The traditional summer pink salmon season ran through August 24 in some districts. Cholmondeley Sound was the only area opened for fall chum salmon in 2016. Concurrent gear openings resumed late in the season at Anita Bay THA through November 10 with minimal harvest and effort.

During the 2016 purse seine fishery, 264 permits were fished (Conrad and Gray 2017). Effort in 2016 decreased by 17 permits compared with 2015, probably due to a lower pink salmon forecast during the even-year cycle. In the 2008 season, 35 permits were purchased in a buyback program to initiate effort consolidation in the fishery. In 2012, the number of permits issued fell an additional 64 permits due to a buyback program.

Summary information for pink salmon escapements by sub-region, district, and stock group is presented in Tables 10, 11, and 12. Summary information for chum and sockeye salmon

escapements is presented in Tables 13 and 14. Escapement data is discussed in a later section of this report.

PURSE SEINE CHINOOK SALMON HARVEST

Regulation 5 AAC 33.392, *Size limits and landing of king salmon* (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, 5 AAC 29.060, *Allocation of king salmon in the Southeastern Alaska-Yakutat Area* (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). Non-Alaska hatchery-produced Chinook salmon over 28 inches in length fall under the terms of the PST and are referred to as treaty Chinook salmon. The board adopted the Chinook salmon harvest guidelines as part of an overall allocation scheme among commercial and sport users resulting from implementation of the PST. 5 AAC 33.392(b) states that a purse seine permit holder may take but may not sell Chinook salmon greater than 21 inches and less than 28 inches. Chinook salmon less than 28 inches do not count against the Chinook salmon harvest quota. In addition, it is specified in 5 AAC 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. For the 2016 season, a coastwide Abundance Index (AI) of 2.06 was agreed to by the Chinook Technical Committee. The purse seine harvest allocation in 2016 was 15,291 treaty Chinook salmon.

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 periods are necessary, it is preferable to implement the related orders 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 salmon 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 2016 common property purse seine harvest (traditional and THA) of Chinook salmon was 27,563 fish, of which 27,368 were reported as 28 inches or larger and 195 as less than 28 inches (Table 1). An accounting of Chinook salmon harvests for treaty purposes is preliminary at this time. The estimated seine harvest of Alaska hatchery Chinook salmon is 8,256 fish. Of these Alaska hatchery fish, 7,921 are designated as “hatchery add-on” Chinook salmon that do not count against the seasonal harvest guideline. For all districts, 19,706 large Chinook salmon were caught in traditional fisheries, and 7,662 fish were caught in hatchery terminal area fisheries. The total large Chinook harvest of 27,368 fish, minus the add-on Chinook harvest translates into a treaty Chinook salmon harvest of 19,447 fish. The treaty Chinook salmon harvest by seine gear in the Annette Island Reservation fishery was 876 fish for a total treaty Chinook salmon harvest of 20,323 fish.

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 2016, traditional, THA and SHA purse

seine harvests in northern Southeast Alaska totaled 2.6 million fish and included 1,600 Chinook, 13,500 sockeye, 11,200 coho, 1.6 million pink, and 1.0 million chum salmon (Tables 2 and 5). The total salmon harvest was well below the recent 10-year and long-term averages and ranked 46th out of 57 years since 1960. Harvests of individual salmon species were all below recent and long-term averages.

Northern Southeast Alaska Inside Fisheries

District 9

District 9 is divided into 2 sections: Section 9-A includes the waters of Chatham Strait off the eastern shoreline of Baranof Island south of the latitude of Point Gardner to Coronation Island and is managed from the Sitka office; Section 9-B encompasses the waters of the western end of Frederick Sound and the southeast portion of Chatham Strait and is managed from the Petersburg office (Figure 1).

Section 9-A includes two separate stock groups with separate management approaches. The northern portion of Section 9-A (Subsection 109-20) is managed for early to mid-run pink salmon returning to Red Bluff Bay, and the southern portion of Section 9-A (Subsection 109-10) is managed for late-run pink salmon returning to streams between Patterson Bay and Little Port Walter. This season, due to weak pink salmon returns, no purse seine openings occurred in Section 9-A. The pink salmon escapement index count for Subsection 109-20 and the Subsection 109-10 streams were within but at the lower end of the target range.

Major commercial fishing areas in Section 9-B include the waters adjacent to Admiralty Island between Little Pybus Bay and Point Gardner and the waters adjacent to the western side of Kuiu Island from Kingsmill Point to Table Bay.

Section 9-B test fisheries at Point Gardner and in the Kingsmill Point area were again conducted in 2016. Point Gardner and Kingsmill Point test fisheries are annual ongoing projects that assess pink and chum salmon abundance and run timing for fish returning to Section 9-B and District 10. Test fishing at Point Gardner was scheduled to occur one day per week for 5 weeks starting in statistical week (SW) 27. Test fishing at Kingsmill Point was scheduled to occur once per week for four weeks starting in SW 28. The Point Gardner test fishery has proven to be a good indicator of pink salmon returning to Frederick Sound and lower Stephens Passage, particularly to District 10. The Kingsmill Point test fishery was used as an indicator for returns to Frederick Sound and to eastern, lower Chatham Strait (Section 9-B and District 10). Results from the Kingsmill Point test fishery are generally less conclusive due to the harvest of fish heading north to Frederick Sound, as well as south to Rowan and Tebenkof Bays. Results from the 2016 test fisheries provided run information that helped determine openings in Section 9-B and District 10.

Section 9-B was first opened for 15 hours on August 8 and again on August 12 (Table 7). Aerial surveys of Tebenkof Bay and nearby areas indicated an increase in pink salmon abundance and a harvestable surplus was likely available for commercial harvest. Open area was limited to waters inside Tebenkof Bay, Rowan Bay, and Bay of Pillars. Effort was light each opening with only two boats landing fish the first opening and four during the second. Harvest was poor each opening.

In 2016, Section 9-B harvest and escapement were below the long-term average. With the exceptions of 1976 and 1977, total harvest was the lowest since statehood with 3,400 pink salmon harvested by the purse seine fleet (Table 2). Escapements were weak throughout the

section with only one of the three Section 9-B stock groups within target ranges while two stock groups were below target ranges. Overall, Section 9-B indexed pink salmon escapement of 40,800 fish was below the target goal range of 480,000–1,130,000 fish (Table 12).

District 10

District 10 encompasses much of Frederick Sound and the southern portion of Stephens Passage (Figure 1). Its eastern boundary is about 10 miles northwest of Petersburg. Major fishing areas include the waters in and adjacent to Port Houghton; Windham Bay (referred to as the "mainland"); 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.

In 2016, the pink salmon return to District 10 was not expected to support pink salmon fisheries based on parent-year escapements. Point Gardner test fishery data has proven to be a good indicator of pink salmon returns to District 10. Test fishing began during the end of June and was generally below average to poor throughout the season, indicating an overall low return to District 10. Results from the Point Gardner test fishery were a key component in determining fishing time and area in 2016.

District 10 mainland opened for two 15-hour periods on August 8 and 12 (Table 7). Open area was restricted to a small portion of the mainland shoreline south and east of Cape Fanshaw to Bay Point. Aerial surveys of the area indicated that there was a harvestable surplus. Effort was minimal and harvest information is confidential.

Total pink salmon harvest in District 10 was well below the long-term average with all but 6 years having lower harvest numbers since statehood (Table 2). Pink salmon escapement to District 10 was below escapement objectives. Two of the four stock groups were within target ranges while the other two stock groups were below target ranges resulting in an overall pink salmon escapement index of 427,000, which was below the target range of 590,000–1,410,000 fish (Table 12).

District 11

District 11, Sections 11-A and 11-D, are designated in regulation as areas that may be opened to purse seining by emergency order. Section 11-A had not been opened since statehood, until the common property fisheries targeting enhanced DIPAC chum salmon returning to the Amalga Harbor SHA began in 2012. Section 11-D, Seymour Canal has opened infrequently, most recently in 2010. In 2016, pink salmon were harvested in the Chatham Strait corridor in District 12. It is assumed that Seymour Canal pink and chum salmon stocks are harvested in these purse seine fisheries and no purse seine openings were provided in Seymour Canal in 2016. Consistent with other northern Southeast Alaska inside pink salmon stock group performance, the two District 11 stock groups were below management target ranges in 2016. Seymour Canal, with an escapement index of 63,000 pink salmon, was well below the management target range of 160,000–400,000 fish. The Stephens Passage stock group, with an escapement index of 16,000 fish, was also well below the management target range of 110,000–250,000 fish. Three common property purse seine openings were held in a portion of the Amalga Harbor SHA in Section 11-A to target returning DIPAC-produced chum salmon in excess of cost recovery needs. On July 14, 21, and 28, six-hour openings were allowed (Table 9) and a total of 44 permit holders harvested approximately 252,500 chum, 2,400 pink, and 2,700 sockeye salmon (Table 2).

District 12

Many separate purse seine fisheries, with respect to area and location, may occur in the waters of District 12 due to its large size. The areas opened to purse seining in 2016 along the Baranof and Chichagof shorelines were the Point Augusta index area and the Hidden Falls THA. The District 12 common property commercial purse seine fishery harvested 153,700 pink and 47,700 chum salmon (Table 2). The pink salmon harvest is 3% of the 10-year average harvest of 5.1 million fish while the chum salmon harvest is 4% of the 10-year average harvest of 1.1 million fish.

Point Augusta Index Area

The District 12 traditional purse seine fishery in upper Chatham Strait opened on Sunday, June 19 in the Point Augusta index area for 15 hours. The Point Augusta openings are intended to provide inseason 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 of northeast Chichagof Island, and since 1992, has been opened annually between late June and mid-July to monitor pink salmon run strength to northern inside waters. In 2016, there were six 15-hour openings from June 19 to July 24 that served as index fisheries, with the open area within one-half mile from shore. The initial opening on June 19 (SW 26) drew no effort. Pink salmon harvest for the next three 15-hour index area openings varied from 1% to 37% of the recent 10-year average. Purse seine effort for these openings varied between 45% and 82% of the average for each opening. The fifth opening on July 17 in SW 30 had 101% of the 10-year average effort and saw a pink salmon harvest 168% of the 10-year average. The sixth and final opening on July 24 in SW 31 saw effort double to 207% of the ten-year average and harvests drop to 43% of the 10-year average. In conjunction with the very slowly developing escapements in pink salmon index streams in the area it was apparent that the pink salmon return to northern southeast Alaska inside waters was weak and commercial seine fisheries in District 12 targeting pink salmon were suspended. The Point Augusta Index Area seine harvest was 147,000 pink salmon, 30% of average, and 32,000 chum salmon, 68% of average for the six index area openings.

Tenakee Inlet pink salmon returns were poor in 2016 and there were no commercial purse seine openings in the area. The 2016 pink salmon escapement index for this stock of 101,000 fish, was well below the management target range of 210,000–510,000 fish (Table 12).

Fish returning to Freshwater Bay and to streams entering Chatham Strait along the eastern shoreline of Chichagof Island comprise the Freshwater Bay stock group. There were no openings on this shoreline in 2016. The 2016 index count of 36,000 pink salmon was well below the management target range of 80,000–180,000 fish.

A subsistence sockeye salmon fishery occurs in this area at the outlet stream to Kook Lake in Basket Bay. As of this writing, 16 permits have harvested 279 sockeye salmon, but not all the permits issued have been returned. Sockeye salmon escapement to Kook Lake has been monitored by a weir project funded and operated by the United States Fish and Wildlife Service (USFWS) from 2005–2007 and 2010–2016. The preliminary escapement for 2016, as counted by video camera through a net weir, is estimated at 4,758 sockeye salmon. Compared to the limited time series of escapement data on record, this escapement is 95% of the average escapement of approximately 5,000 sockeye salmon, with very little purse seine effort in Upper Chatham Strait.

Hawk Inlet Shoreline

The northwestern shoreline of Admiralty Island between Point Marsden and Funter Bay is known as the Hawk Inlet shoreline. Salmon stocks returning from the ocean to their natal streams in Lynn Canal, Stephens Passage, Seymour Canal, Frederick Sound, and Chatham Strait pass through this area after entering northern Southeast Alaska through Icy Strait and mill in the area before turning 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 transiting to inside drift gillnet areas in Districts 11 and 15. The Hawk Inlet shoreline was closed during July between 1984 and 1988 by BOF regulations. In 1989, the BOF 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 BOF authorized ADF&G 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 BOF also specified that open area and time must take into consideration conservation concerns for all species in the area. In January 2006, the BOF further clarified that the sockeye salmon harvest limit be applied to only wild fish. The fishery has been opened in 1989, 1992–1994, 1999, 2001, 2003–2006, 2009, 2011, 2013, and 2015. A variety of factors and run strength assessments have been used by ADF&G to help determine whether a July purse seine fishery on this shoreline is warranted and how the fishery will be structured. The assessment methods used by ADF&G to determine if a harvestable surplus of pink salmon exists are as follows:

1. Parent year pink salmon escapements: The 2014 Taku River fish wheel pink salmon catch was 21% of the even-year average. The overall escapement index value of the northern southeast inside subregion parent year escapement fell below the escapement goal range with most of the 21 pink salmon stock groups' escapements within this subregion below management targets.
2. Standardized test fishing along the Hawk Inlet shoreline occurred on June 24, July 1, 8, and 15, 2016. The weekly pink salmon harvest was consistently below average in 2016 with an overall CPUE of pink salmon that was 21% of average.
3. Aerial surveys of the Hawk Inlet shoreline conducted in late June through early July did not indicate an abundance of pink salmon along the shoreline. Local area pink salmon streams, such as Wheeler Creek and Greens Creek, appeared to have weak returns with few fish observed schooling off stream mouths early in the season.
4. District 15 drift gillnet pink salmon harvests for SW 27–29 (June 26–July 16) were between 1% and 24% of average. District 11 drift gillnet pink salmon harvests for the same time frame were between 2% and 18% of average.
5. Taku River Canyon Island fish wheel cumulative catch of pink salmon through July 20 was 20% of the even-year average, and the Chilkat River fish wheel cumulative catch was 3% of the average.

Overall assessment indicated a poor return of north bound pink salmon along the Hawk Inlet shoreline in July. Should ADF&G determine that pink salmon abundance is sufficient to open the Hawk Inlet common property purse seine fishery, the department considers any possible conservation concerns for other salmon stocks, most significantly sockeye salmon, per the *Northern Southeast seine salmon fishery management plan*. The primary sockeye salmon stocks transiting the Hawk Inlet shoreline during July include those originating from the Chilkat

River/Lake, Chilkoot Lake, Berners Bay rivers, Taku River, and Port Snettisham stocks including Snettisham Hatchery enhanced sockeye and wild Speel and Crescent Lakes stocks. The run timing for some sockeye stocks in northern Southeast Alaska was again delayed in 2016 resulting in concerns over abundance in early July. After being below average in June, Chilkat River fish wheel catches of sockeye salmon were above average in July. The Chilkat Lake weir sonar count remained below average until late July and did not project the run within the escapement goal range until mid-July. Taku River inseason abundance estimates of sockeye salmon and Chilkoot River weir counts were below average in early July and did not project to achieve their respective escapement goal ranges until mid-July. Purse seine openings along the Hawk Inlet shoreline were not warranted in 2016 due to very weak pink salmon returns.

West and Southwest Admiralty

The west Admiralty Island shoreline south of Hawk Inlet was not opened in 2016. Escapement for the West Admiralty stock group produced an index count of 8,900 fish, well below the lower bound of the management target range of 50,000–120,000 fish.

Southwest Admiralty Island seine fisheries which may occur south of Angoon in statistical areas 112-18 and 112-19, and can include openings inside some of the bays, were not opened in 2016. The escapement index for the southwest Admiralty stock group was 40,000 pink salmon, well below the management target range of 100,000–250,000 fish. Subsistence salmon fisheries occur in the sheltered waters of Kootznahoo Inlet on Admiralty Island east of the community of Angoon. Sockeye salmon have been historically harvested in Kanalku Bay and coho and sockeye salmon are harvested near the outlet of the Hasselborg River in Salt Lake. In recognition of the importance of these subsistence fisheries to Angoon residents, approximately 10 miles of shoreline from Parker Point to Point Samuel have not been opened to commercial purse seine gear for many years to provide additional protection for salmon returning to these important subsistence systems. In 2015, the BOF added these waters to regulatory closed waters. In 2016, the sockeye salmon escapement to Kanalku Lake was monitored by a weir project funded by the USFWS and operated by ADF&G. This is the 10th year for this weir project and 16th year of escapement estimates for this lake including a mark–recapture project from 2001 to 2006. Preliminary escapement, as counted through a video weir in 2016, is estimated to be 2,040 sockeye salmon, 147% of the previous 10-year average escapement of 1,389 fish. The Kanalku Lake system has a partial barrier falls that sockeye salmon must negotiate on their return to the lake. Since 2012, camera weirs have been operated below the falls in conjunction with the weir above the falls. Returning sockeye salmon success in ascending the falls varies with respect to such factors as stream flow velocities and predation pressure. Plunge pool modifications occurred at the base of the falls in late 2013. The success of sockeye salmon negotiating the falls has varied from 49% in 2012 to 74% in 2013; the success in 2016 was 71%.

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. 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 and wild stock chum salmon. This season, pink salmon returns to Kelp Bay were weak

and no purse seine openings occurred. The pink salmon escapement index for the Kelp Bay stock group was within the target range, but at the lower end of the range. The chum salmon peak escapement count to Ralph's Creek in Middle Arm was 2,500, well below the 10-year average of 5,500.

Section 13-C

Section 13-C, which includes Hoonah Sound and outer Peril Strait, was not opened to purse seining due to weak pink salmon returns. Pink salmon escapements to Section 13-C were within, but at the lower end of the management target range. Saook Bay and Rodman Bay contain the two most productive summer chum salmon systems in Section 13-C. Chum salmon escapements to both systems were about 20% of the recent 10-year average.

District 14

Several separate purse seine fisheries may occur in District 14 due to the large area of Icy Strait. Due to weak pink and wild chum salmon returns to the area, District 14 was not opened in 2016.

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. Pink salmon escapement for the north Chichagof stock group was poor with an index count of 27,000 fish, well below the management target range of 120,000 to 280,000 fish.

The Homeshore fishery is located along the northern shore of Icy Strait south and east of Excursion Inlet and opens sporadically to target local stocks when abundant. Pink salmon escapement for the Homeshore stock group was very poor with an index count of 1,600 fish, well below the management target range of 30,000–70,000 fish.

Idaho Inlet and Port Althorp were not opened in 2016.

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. The strength of the pink salmon returns to stock groups in Section 13-A were mixed. Lisianski Inlet was opened on July 28 after aerial observations of a pulse of pink salmon in the outer inlet. Effort and harvest was minimal. After this initial opening, sex ratio sampling suggested it was late in the return and the fishery was closed to allow for escapement. With good escapements to Stag Bay, Lisianski Strait was opened beginning August 4 with no effort or harvest occurring. The escapement index for the Lisianski stock group was in the upper half of the upper management target range with an estimate of 221,000 pink salmon. Salisbury Sound was first opened July 28 and closed on August 4. The harvest of 50,000 pink salmon was well below the recent 10-year average. The escapement index count for the Salisbury stock group was within but near the lower end of the management target range.

Pink salmon returns to Portlock Harbor and Slocum Arm on West Chichagof Island were strong with most of the pink salmon harvest in northern Southeast Alaska occurring in this area. Portlock Harbor was first opened July 10 and Slocum Arm was opened on July 21 with openings continuing through August 24. This season, 100,000 pink salmon were harvested in the Portlock Harbor fishery, nearly one third of the recent 10-year average, and 22,000 chum salmon were

harvested, 2.5 times the recent 10-year average. In the Slocum Arm fishery, 1,073,000 pink salmon and 36,000 chum salmon were harvested, both below the recent 10-year averages.

The escapement index count for the Portlock stock group was twice the upper end of the management target range for pink salmon of 130,000. The chum salmon peak escapement count to Black River was 11,650 fish, 1.5 times the recent 10-year average. The pink salmon escapement index for the Slocum Arm stock group was 513,000, just below the upper bound of the management target range. Chum salmon escapement counts to Slocum Arm area streams were mixed.

Section 13-B

Openings in Section 13-B can 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 directed harvest of wild pink and chum salmon, and Redoubt Bay, Necker Bay, and Redfish Bay provide 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. Although 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.

Northern Sitka Sound opened for directed pink salmon harvest beginning July 28 with openings continuing through August 18. The Eastern Channel area was opened to seining on August 4 and closed after August 9 due to poor pink salmon catches and aerial observations indicating few pink salmon moving into the area. The total harvest in the Sitka Sound traditional seine fishery was 552,000 pink salmon and 12,000 chum salmon. The total pink salmon harvest from Sitka Sound includes reported harvest in the Deep Inlet THA and was well below the recent 10-year average. Aerial observations of abundance and catch rates in northern Sitka Sound indicated chum salmon returns to Nakwasina Sound and Katlian Bay were not strong. Pink salmon escapement for the Sitka Sound stock group was within but near the lower end of the management target range.

Whale Bay was not opened this season. Pink salmon escapements to Whale Bay were within the escapement index range but in the lower half of the range. The peak count of chum salmon to the Great Arm head stream was well below the recent 10-year average. West Crawfish Inlet was opened on August 8–9 and no fishing effort occurred. The pink salmon escapements to West Crawfish were within the escapement index range for this stock group. The chum salmon peak escapement count was well below the recent 10-year average.

The *Redoubt Bay and Lake Sockeye Salmon Fisheries Management Plan* (5 AAC 01.760) calls for commercial purse seine openings when the projected total escapement will exceed 40,000. Sockeye escapement projections throughout the season were approximately 30,000 fish and the final weir count was 22,755 sockeye salmon. The optimum escapement goal for Redoubt Lake is 7,000–25,000 sockeye salmon.

This season, aerial observations indicated there was insufficient abundance to provide seine openings targeting sockeye salmon in both Redfish Bay and Necker Bay.

Northern Southeast Alaska Fall Chum Salmon Fishery

Aerial surveys of the Excursion Inlet area in late August indicated no harvestable surplus of fall chum salmon in the area. The peak escapement index count of 1,400 fish is below the recent 10-year average count of 6,200 fish and below the escapement goal range of 4,000–18,000 fish.

Southwest Admiralty seine fisheries can occur south of Angoon in statistical areas 112-18 and 112-19, and often include openings inside some of the bays targeting fall chum salmon. In 2016, no surpluses of chum salmon were available for fall fisheries. The peak aerial survey of 3,300 chum salmon for Chaik Bay Creek is below the 10-year average of 6,200 fish. The department has not developed a formal fall chum salmon escapement goal for any streams in this area.

Northwest Kuiu Island directed fall chum salmon fisheries can occur in waters of Section 9-B in and around Security Bay and in Port Camden. No commercial seine fisheries were scheduled in the Security Bay and Port Camden area in 2016 due to the earlier than normal run timing and no harvestable amounts of chum salmon observed in the fishable portions of the bays. Fall chum salmon escapements to Section 9-B were good and indexed chum salmon escapements to Security Bay and Port Camden were within, or above, their respective sustainable escapement goal (SEG) ranges (Table 13).

Directed chum salmon fisheries can occur in the waters of Sitka Sound targeting fall chum salmon returns to Katlian Bay and Nakwasina Sound. This season Sitka Sound was not opened to target chum salmon due to insufficient abundance.

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, PST harvest sharing provisions, and the need to limit the harvest of Nass and Skeena River sockeye salmon in accordance with the PST determine management decisions in District 4.

Purse seine fishing opportunities targeting species other than pink salmon occur in southern Southeast Alaska. In lower District 2, early season openings target Southern Southeast Regional Aquaculture Association's (SSRAA) Kendrick Bay summer chum salmon. Late season openings targeting wild stock fall chum salmon typically occur in the Cholmondeley Sound area of District 2. There were four fall chum salmon openings in 2016.

In 2016, the common property purse seine harvest (traditional and THA) in southern Southeast Alaska was 16.8 million fish which ranks 27th since 1960. The harvest included: 26,000 Chinook, 597,000 sockeye, 246,000 coho, 13.8 million pink, and 2.1 million chum salmon (Tables 2 and 6).

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 and 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 salmon prior to SW 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 fish (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 2016, the initial opening was July 3 during SW 28 (Table 8). The fishing plan for District 4 before SW 31 was based on the preseason Canada Department of Fisheries and Oceans (DFO) sockeye salmon run forecast of approximately 679,000 fish for the Nass River and 1.28 million fish for the Skeena River. Management actions took into account the preseason forecast and the "underage" of sockeye salmon harvested by the United States in the District 4 fishery from the 1999 through 2015 seasons.

In 2016, based on the forecasted run to the Skeena and Nass Rivers, the AAH for District 4 was initially 21,046 Nass and Skeena River sockeye salmon. The initial opening in District 4 was 15 hours, with approximately 12,000 sockeye and 62,000 pink salmon harvested by 14 vessels, and a pink salmon CPUE of 4,357 fish per vessel. The harvest of 12,000 sockeye salmon was slightly above what was anticipated. To ensure the ability to continue to harvest throughout the treaty period, the district was open for a 12-hour midweek opening during SW 28. During this midweek opening, 82 vessels harvested 16,000 sockeye and 250,000 pink salmon.

In SW 29, District 4 was open initially for a 15-hour period which was followed again by a 12-hour midweek opening. The harvest of pink salmon was 1.16 million harvested by 77 vessels. The harvest of sockeye salmon was 72,681 for the week. Inseason estimates of sockeye salmon returns to the Skeena River rose sharply in early July and began to trend downward by July 12. The Nass was tracking a bit late and slightly under the preseason forecast.

For SW 30, due to the high effort and an inseason forecast on the Skeena that dropped considerably from the large July 5 projection of 2.4 million, District 4 was only open for one 6-hour period. Thirty-seven vessels harvested 10,714 sockeye and 99,457 pink salmon.

During the treaty period, District 4 was time restricted during three openings and remained closed during one opening to limit harvest during the treaty period. A total of 110,346 sockeye salmon were harvested by 106 purse seine vessels prior to SW 31. In past years, 60% to 80% of the sockeye salmon harvested have been of Nass and Skeena origin. Based on preliminary data, it is estimated that approximately 65,000 Nass and Skeena sockeye salmon were harvested in the District 4 purse seine fishery during the treaty period.

After the treaty period, in SW 31, District 4 was open for two more 15-hour periods and then moved to a two-days-on/two-days-off fishing schedule beginning in SW 32. Effort had already peaked at 77 vessels during the first SW 29 opening and then declined through the end of the season on August 18, with a total of three 39-hour openings followed by three 15-hour openings. Effort was high in District 4 during the 2016 season due to the poor returns of pink salmon in northern Southeast Alaska and the stronger pink salmon harvests in southern Southeast Alaska.

The 60 hours that District 4 was open in 2016 prior to SW 31 is slightly lower than the 1985–1998 average of 62 hours, the 1999–2008 average of 64 hours, and the 2009–2015 average of 68 hours. The total effort prior to SW 31 in District 4 was 106 boats and was lower than the 1985–1998 average of 139 boats, much higher than the 1999–2008 average of 47 boats, and much higher than the 2009–2015 average of 42 boats. The total treaty period sockeye salmon

harvest prior to SW 31 was 110,000 fish in 2016, which was lower than the 1985–1998 average of 158,000 fish, and higher than the 1999–2008 average of 65,000 fish, and the 2009–2015 average of 34,000 fish. The seine fleet moves freely between districts as various species are harvested so seining opportunities elsewhere affect the effort and harvest in District 4. This year there were limited opportunities in other districts which increased fishing pressure in District 4.

The District 4 purse seine fishery harvests of 110,000 sockeye and 1.6 million pink salmon were above the 1985–2015 treaty-period averages of 100,000 sockeye and 535,000 pink salmon. For the season, 134 purse seine vessels harvested 3.7 million pink, 406,000 sockeye, 124,000 coho, 349,000 chum, and 12,000 Chinook salmon (Table 2). The effort of 134 vessels was below the 1985–2015 average effort of 155.

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°40.00′ N latitude, 131°45.00′ W longitude and north of the U.S./Canada border in Dixon Entrance. Purse seining primarily takes place in the waters of Revillagigedo Channel, which is immediately south of Ketchikan and along 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.

During 2016, the District 1 purse seine fishery pink salmon catch was slightly below average for the period from 1985 to 2015. After above-average returns in 2014, expectations were for a substantial pink return to the district. The run was initially very strong and came in pulses, but weakened by mid-August forcing an early closure to meet escapement goals for middle to late run systems.

The fishery started on July 3, in SW 28, with a 15-hour opening and normal early season lines which included the Percy Islands. During this opening 36 vessels harvested 79,000 pink salmon. Aerial surveys to the early run systems in Boca De Quadra and Smeaton Bay showed well above average escapements for pink salmon. There was a 15-hour midweek opening in SW 28 due to adequate pink salmon escapements and harvests. For the midweek opening, 55 vessels harvested 223,000 pink salmon. The increase in effort is due to the limited opportunities in northern Southeast Alaska. The next opening was for 15 hours and occurred on Sunday, July 10 in SW 29. Effort decreased and harvest increased slightly with 50 vessels harvesting 236,000 pink salmon. Aerial surveys continued to show good escapements in all of the early run District 1 systems and pink salmon harvests continued to increase indicating a strong run was building. Fishing continued with a 15-hour midweek opening in SW 29 during which 53 vessels harvested 215,000 pink salmon. In SW 30, there were 15-hour openings on July 17 and on July 21. Effort remained similar in the first opening at 51 vessels and the harvest increased to 304,000 pink salmon. Effort then increased for the second opening to 65 vessels harvesting 441,000 pink salmon. Chum salmon catches remained very strong and continued to draw effort to the district. Pink salmon harvests continued to build.

Escapements in District 1 early run systems were very good, but the poor pink salmon return to northern Southeast Alaska along with limited opportunities drove up the effort in southern Southeast Alaska. Effort climbed in SW 31 to 94 vessels during the first 15-hour opening,

reaching 100, the peak for the season, during a 15-hour midweek opening. Closure lines remained moderate, with openings in Carroll Inlet targeting excess fish that were observed. The southern portion of the Gravina shoreline was also open. Purse seine vessels harvested 1.3 million pink salmon during the two openings in SW 31.

In SW 32, District 1 moved to a two-days-on/two-days-off fishing schedule. Portions of the Gravina Shoreline remained open but effort in District 1 declined, moving to Districts 2 and 3. Fifty-six vessels harvested 915,000 pink salmon in two 39-hour openings during the week.

Effort began to climb again in SW 33 and remained high in District 1 for the remainder of the season. There was only one more 39-hour opening in SW 33, before falling back to three 15-hour openings to finish out the season. Due to quickly falling pink salmon harvests the season closed on August 18, during SW 34.

The District 1 traditional purse seine harvest of all salmon species in 2016 was below the 1985–2015 average. The pink salmon harvest of 4.8 million fish was 82% of the average District 1 pink salmon catch since 1985. The chum salmon harvest of 310,000 fish was very close to the 308,000 chum salmon average and the sockeye salmon harvest of 95,000 fish was above the 94,000 sockeye salmon average harvest, the coho salmon harvest of 29,000 fish was 74% of the 39,000 average harvest, and the Chinook salmon harvest of 1,950 fish was 3.5 times the average (Table 2).

District 1 was open for 17 days with 14 openings for a total of 282 hours. This was a substantial decrease over the parent year, in 2014, when the district was open for 402 hours in 22 days. Total fishing time was also well below the 1985–2015 average of 445 hours. District 1 pink salmon escapements were met in the 3 stock groups in 2016 with strong returns to early run systems in East Behm Canal. The indexed escapement to the district was 3.34 million pink salmon, above the management target range of 1.02–2.71 million fish (Table 11).

The McDonald Lake action plan was no longer in effect during the 2016 season, but the strategies in the plan are often considered while making management decisions. Due to the high effort in District 1 along with a slow start in West Behm pink returns, the northern portion of Gravina Island did not open in 2016. The estimated escapement into McDonald Lake in 2016, based on expanded foot survey counts, was 15,600 sockeye salmon (Table 14). This was well below the SEG range of 55,000–120,000 fish.

No management actions were taken during the 2016 season for Hugh Smith sockeye salmon conservation. During the 2006 BOF meetings in Ketchikan, the board removed Hugh Smith Lake sockeye salmon as a stock of concern; however, ADF&G still maintains the option to impose closures if the inseason forecast falls short of the escapement goal. Escapement into Hugh Smith Lake was 12,868 sockeye salmon, near the middle of the escapement goal range of 8,000–18,000 fish (Table 14).

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°40.00′ N latitude, 132°17.50′ W longitude. Fishing primarily takes place in Clarence Strait and does not usually occur in the four 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 have been entering the district in large

enough numbers to warrant early fishing time, as early as mid-June for the seine fleet. These hatchery chum salmon are returning primarily to Kendrick Bay, but Anita Bay, Nakat Inlet, and Neets Bay enhanced chum salmon are also present.

The waters of Kendrick Bay THA were open by regulation continuously to purse seine harvest beginning Wednesday, June 15, SW 25 (Table 9). A limited portion of lower District 2 was opened beginning June 19 in SW 26 to harvest SSRAA enhanced summer chum salmon returning to Kendrick Bay (Table 8). These openings target Kendrick Bay summer chum salmon at a time when few wild stock salmon are present and are managed to maximize the quality of those chum salmon. The open area for this fishery consists of those waters in District 2 north of 54°47.10′ N latitude (approximately one-half nmi south of McLean Point Light) and south of the northern tip of Polk Island. In addition, Beginning in 2014 and continuing in 2015 and 2016, waters were closed east of a line that allowed fishing within 2 nmi of the Prince of Wales Island shoreline. The closure was used to lower harvest rates of salmon species other than chum salmon. These openings outside Kendrick Bay have traditionally been 87 hours, or four days in duration, from Sunday through Wednesday each week for three to four weeks. In 2016, the area outside Kendrick Bay was open for 87 hours in SW 26 and 27, then for an additional 15 hours in SW 28.

Fifty-five purse seine vessels caught 116,000 chum salmon during the first 87-hour opening in SW 26. The harvest increased to 144,000 chum salmon by 106 vessels during the 87-hour period in SW 27. Additionally, 18,000 chum salmon were harvested by 68 vessels during the 15-hour opening in SW 28 with 1,300 sockeye, 8,500 coho, and 46,000 pink salmon harvested during these three periods. With high effort due to poor northern Southeast Alaska salmon returns and increasing harvest of pink salmon in southern Southeast Alaska, the additional openings did not continue past SW 28. Overall, 116 vessels harvested 279,000 chum salmon in the spring Kendrick purse seine openings.

The traditional fishery in District 2 targeting local stocks of pink salmon opened Sunday, July 3 in SW 28 for 15 hours (Table 8). After the traditional Sunday fishery closed, portions of District 2 re-opened on Monday morning for 15 hours for the last spring Kendrick fishery and then again on July 7 for a midweek opening. In the two openings of the traditional fishery in District 2, 68 vessels harvested 55,000 pink salmon. District 2 continued with two 15-hour openings each week for SW 29–31, moved to three 39-hour openings in SW 32 and 33, and finished the pink salmon season with two 15-hour openings, the last one on August 12. The effort peaked early, at 106 vessels during the long openings targeting Kendrick Bay chum salmon in SW 27 and was highly variable throughout the season.

There were 13 traditional pink salmon fishery openings following the earlier extended openings targeting enhanced summer chum returns (Table 8). Pink salmon escapements, while adequate, were not as strong as District 1. This coupled with the high effort levels in southern Southeast Alaska led to conservative lines for District 2 openings. The closure line remained the northernmost tip of Polk Island until SW 31 when it moved to Windy Point. In SW 32, District 2 went to a two-day fishery with the rest of the region for three openings and the closure line moved up to Island Point and then Figgins Point. In SW 33, District 2 opened up to the northern boundary. In SW 34, the area around Moira Sound was closed to protect pink salmon returning to Moira Sound. Harvests of pink salmon in District 2 peaked suddenly in SW 32, when 84 vessels harvested 1.5 million pink salmon, much higher than the previous week's harvest of 227,000 pink salmon or the 478,000 pink salmon harvested in SW 33. The generally slow

harvest rate in District 2 and the mediocre escapements led to closing for the season one opening before the rest of the districts in SW 34. The final directed pink salmon opening occurred on August 15, with 22 vessels harvesting 72,000 pink salmon.

A total of 177 seine vessels fished District 2, greater than the 1985–2015 average of 150. The district was open for purse seine harvest for a total of 504 hours during the 2016 season. This includes the early outside Kendrick fishery and fall chum salmon fishing opportunities that occurred in September.

The District 2 traditional purse seine harvest of 3.14 million pink salmon (Table 2) was below the 1985–2015 average of 4.2 million fish. The total traditional area harvest of 795,000 chum salmon was 171% of the 1985–2015 average of 465,000 fish. Limited portions of District 2 reopened to target fall chum salmon in SW 36 for one 12-hour opening each week for four periods, closing in SW 39 (see Southern Southeast Alaska Fall Chum Salmon Fishery section). The District 2 traditional sockeye salmon harvest of 56,000 fish was above the 1985–2015 average of 43,000 fish, and the coho salmon harvest of 64,000 fish was above the average of 50,000 fish. The Chinook salmon harvest of 4,400 fish was above the average of 500 fish. Indexed escapement to the district of 870,000 pink salmon was above the management target range of 0.29–0.77 million fish (Table 11).

District 3

District 3 encompasses all of the inside waters off the west coast of Prince of Wales Island, 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 area. Some of the main fishing areas include the waters of Cordova Bay, containing 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 waters of Sea Otter Sound in Section 3-C. The timing of pink salmon returns in District 3 is generally later and the district historically opens in statistical week 30.

The District 3 purse seine fishery initially opened to a slow start on Sunday, July 17 in SW 30 for 15 hours (Table 8) and 17 vessels harvested 38,000 pink salmon. District 3 opened for a midweek period that had substantially less effort but the same harvest: 7 vessels harvesting 38,000 pink salmon. Subsequently there were two 15-hour openings each week and effort continued to fall until SW 32 when fishing periods increased to 39 hours with the rest of the region. Harvest reached a peak for the last 39-hour opening in SW 33, with 41 vessels harvesting 295,000 pink salmon. District 3 ended the season with three more 15-hour openings before closing on August 18 in SW 34. District 3 was open for a total of 10 periods and 222 hours.

After the initial two openings, fishing areas were expanded in lower District 3 as pink salmon moved into Cordova Bay. The open area in Section 3-A was expanded north to Webster Point in SW 31, then to Nutkwa Point in SW 32, and lastly to Round Point in SW 34. In the north, there were limited openings in SW 31 and 32, but escapements never developed to provide expanded fishing in upper District 3.

The District 3 purse seine pink salmon harvest of 1.1 million fish (Table 2) was below the 1985–2015 average of 3.9 million fish. The seasonal harvest of sockeye salmon was 17,000 fish or 74% of the 1985–2015 average of 23,000 fish. The coho salmon harvest of 15,000 fish was 48% of the average of 31,000 fish. The chum salmon harvest of 20,000 fish was 18% of the 1985–2015 average of 110,000 fish. The Chinook salmon harvest of 400 fish was 133% of the

1985–2015 average of 300 fish. Indexed escapement to the district of 1.56 million pink salmon was within the management target range of 0.95–2.54 million fish (Table 11). In addition, all four District 3 stock groups were within their management target ranges.

District 5

District 5 encompasses waters of western Sumner Strait, approximately 50 miles southwest of the community of Petersburg (Figure 1). Fisheries occur either inside the major bays including 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.

2016 pink salmon returns to District 5 were expected to result in limited openings based on parent-year escapement. The pink salmon run to District 5 remained weak throughout the season. Openings were limited to two 15-hour periods and were restricted to Affleck Canal (Table 8). Effort and harvest were minimal and are confidential due to low effort.

District 5 pink salmon harvest in 2016 was poor and exceeded the harvest in only one year since statehood (Table 2). Escapements were weak throughout the district. Both the Affleck Canal and Shipley Bay stock groups were below their target ranges (Table 12). Overall, the pink salmon escapement index of 185,500 fish was below the management target range of 250,000–660,000 fish (Table 11).

District 6

District 6 is divided into four sections for management purposes. Purse seining in District 6 is limited to Sections 6-C and 6-D, located 15 to 30 miles southwest of Wrangell. Section 6-D includes most 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 (Figure 1). Section 6-C together with the adjacent Screen Island shoreline of Section 6-D are the only waters in Southeast Alaska that may be fished simultaneously by the purse seine and drift gillnet fleets.

District 6 was expected to have an overall moderate return of pink salmon based on parent-year escapement. However, pink salmon returns in 2016 were lower than expected and as a result, commercial openings were limited. District 6 initially opened for a midweek period in SW 31 on July 28 for 15 hours (Table 8). Open waters were restricted to those areas adjacent to Mosman and McHenry Inlets. There was an indication of a harvestable surplus of pink salmon observed in this area prior to the opening and escapement was good assuming normal run timing. Effort was low with 4 boats harvesting 28,200 pink salmon.

In SW 32, District 6 opened on July 31 for 39 hours including all of Section 6-D south of Point Stanhope to Luck Point and excluding the area within two nmi of the Prince of Wales Island shoreline. This opening began a 2-days-on/2-days-off fishing schedule in District 6 (Table 8). Open area was expanded beginning August 4 to include the Ratz Harbor shoreline south of Ratz Harbor Light. A total of 22 boats fished in District 6 during SW 32 with a harvest of 195,300 pink salmon.

In SW 33, District 6 opened for 39 hours on August 8 in the same area as the previous opening. The District 6 midweek opening on August 12 was reduced to 15 hours and the area was expanded to include all of Section 6-D south of a line from Point Stanhope to Luck Point. Fishing time was reduced due to low harvest and escapement beginning to lag (Table 8). Effort in SW 33 increased to 35 boats which harvested 198,700 pink salmon.

District 6 was fished for 15 hours on August 15 with area reduced to exclude waters off Mosman and McHenry Inlets (Table 8). Effort dropped to 10 boats for this final opening in District 6 with a harvest of 30,800 pink salmon. Mediocre fishery performance, lagging escapement counts, and run timing were considered in closing District 6 to seine fishing for the season.

District 6 purse seine pink salmon harvest and escapement were much lower than expected for the season. Total pink salmon harvest of 453,000 fish was below the long-term average and the 21st highest since statehood (Table 2). Pink salmon indexed escapements to District 6 were all within goal ranges (Table 12). Pink salmon indexed escapement for the district was 311,000 fish, within the management target range of 210,000–570,000 fish (Table 11).

District 7

District 7 encompasses the waters of Ernest Sound, Bradfield Canal, Zimovia Strait, and Eastern Passage (Figure 1). 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: Sections 7-A (northern) and 7-B (southern). Streams in Section 7-A have returns of pink salmon with early and middle run timing, while Section 7-B streams exhibit middle to late run timing for pink salmon. Section 7-A is known as the Anan fishery since management actions in Section 7-A are primarily based on the abundance of pink salmon returning to Anan Creek. The District 7 purse seine fishery primarily harvests pink salmon. Beginning in 1997, chum salmon from enhancement facilities entered the district in large enough numbers to attract additional effort.

In 2016, District 7 parent-year escapements to Anan Creek, the primary early pink salmon system in Section 7-A, were largely blocked by a change to the upper falls in Anan Creek and allowed only limited passage of pink salmon in 2014. Parent-year pink salmon returns were good in Anan Creek but the effect of the partial blockage to the upper river spawning grounds on the return was unknown. Additionally, pink salmon escapements to the Bradfield Canal systems were variable.

Section 7-A opened for 15 hours on July 10 in SW 29 (Table 8). Effort was heavier than previous year's initial openings with 33 boats fishing, but only 21,800 fish were harvested. Despite the poor harvest, escapement to Anan Creek continued to build through the week and was close to normal levels for the time of year. Section 7-A was open for 15 hours in SW 30 on July 17 (Table 8). Effort remained high with 34 boats participating and catches continued to be weak with 56,700 pink salmon harvested. Escapement to Anan Creek started to lag but was within the range seen in past years when acceptable escapement levels were obtained. Given that there was a large portion of the Anan Creek pink salmon return still expected, Section 7-A was open on July 21 for 15 hours (Table 8). However, open area was reduced given the uncertainty of pink salmon run strength to Anan Creek and the Bradfield Canal systems. Effort was higher than expected with 48 boats participating and pink salmon harvest continued to be weak with 74,000 fish harvested. Due to poor and declining harvest rates and uncertainties of overall pink salmon run strength to upper Section 7-A, Section 7-A closed for the remainder of the year.

Section 7-B open time was limited compared to past years, only having 5 openings (Table 8). The area initially opened in SW 31 and remained open through SW 33. The initial opening was on July 28 for 15 hours. Observations of fish and escapement in Section 7-B were good for the time of year. Open area was limited to the lower portion of Section 7-B south of line from Ernest Point to Vixen Point to allow more fish to pass through the area to upper Ernest Sound. Effort

and harvest were average with 12 boats harvesting 97,000 pink salmon. Section 7-B started a 2-days-on/2-days-off schedule on July 31 in SW 32. Open area remained the same. Effort and harvest increased to 24 boats and 224,100 pink salmon, respectively. Open area expanded for the 39-hour opening beginning August 4 to include all of Section 7-B. Effort and harvest decreased with 21 boats harvesting 107,700 pink salmon. Escapement levels to Section 7-B and lower Section 7-A were acceptable for the time of year. A 39-hour opening was scheduled on August 8 with effort and harvest in Section 7-B falling considerably to 11 boats and 26,900 pink salmon, respectively. With effort and harvest decreasing in Section 7-B, a 15-hour opening was scheduled for the midweek fishery in SW 33 on August 12. Effort and harvest again declined during this opening with 5 boats harvesting 4,900 pink salmon and Section 7-B closed for the season.

The District 7 total harvest of 613,000 pink salmon was the 25th highest harvest since statehood. Section 7-B accounted for the majority of the harvest with 461,000 pink salmon harvested. Chum salmon harvest in District 7 was good for the short time it was open; the total harvest was 211,000 fish (Table 2). Escapements to District 7 met the escapement objectives for both the Anan and Union Bay stock groupings (Table 12). District 7 indexed pink salmon escapement of 291,000 fish was within the target range of 260,000–690,000 fish (Table 11).

Southern Southeast Alaska Fall Chum Salmon Fishery

Directed purse seine fishing on wild stock fall chum salmon returns was limited to District 2 in 2016. The District 2 fishery targets chum salmon returning to watersheds in Cholmondeley Sound.

Chum salmon harvest during July and early August were well above average initially and around average in late August. Initial surveys to Cholmondeley Sound showed adequate chum salmon activity in the sound, most likely due to the early closure in District 2, along with a good return of chum salmon to the sound. There were four directed openings on fall chum salmon returning to Cholmondely Sound in 2016. The first 12-hour opening occurred on September 1 (Table 8) with a total harvest of 14,000 chum salmon by 16 vessels. Chum salmon continued to build in the sound and a second 12-hour fishery was held on September 8 with a harvest of 17,000 chum salmon. In SW 38, opening lines were moved to the latitude of Divide Head and during the 12-hour opening, 15 vessels harvested 11,000 chum salmon. The final opening was on September 21 with 6,000 chum salmon harvested by 10 vessels. The total harvest was 48,000 chum salmon. Estimated chum salmon escapement to Disappearance and Lagoon Creeks was at the lower end of the escapement goal range of 30,000–48,000 fish counted on the combined peak survey to both creeks (Table 13).

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 2016 Southeast Alaska/Yakutat Salmon Troll Fisheries (Hagerman et al. 2016).

PINK SALMON

Southeast Alaska pink salmon index streams are grouped into three stock groups that comprise aggregates of index streams across broad subregions: Southern Southeast, Northern Southeast

Inside, and Northern Southeast Outside (Piston and Heinl 2014). Escapement goals established for each of these subregions 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 2016 Southeast Alaska pink salmon escapement index of 10.1 million fish ranked 27th since 1960 (Figure 5). Biological escapement goals were met in the Southern Southeast and Northern Southeast Outside subregions, but the escapement index for the Northern Southeast Inside subregion was below goal range (Table 10). Management targets for pink salmon were met or exceeded for 8 of 15 districts with management targets (Table 11) and, at a finer scale, for 30 of the 46 pink salmon stock groups (Table 12).

Southern Southeast Subregion

The Southern Southeast Subregion includes all of the area from Sumner Strait south to Dixon Entrance (Districts 1–8). The 2016 pink salmon harvest of 16.3 million fish was 75% of the recent 10-year average (Figure 6). The escapement index value of 6.6 million was within the escapement goal range of 3.0 to 8.0 million index fish (Table 10, Figure 6). Escapement indices were within or exceeded management targets for 6 of 7 districts (Table 11) and for 16 of 18 pink salmon stock groups within this subregion (Table 12).

Northern Southeast Inside Subregion

The Northern Southeast Inside Subregion includes all of the area on the inside waters north of Sumner Strait (Districts 9–12, 13 inside, 14, and 15). The 2016 pink salmon harvest of 0.5 million fish was only 4% of the recent 10-year average (Figure 7). The escapement index value of 1.8 million fish was below the escapement goal range of 2.5 to 6.0 million index fish and was the third straight even year with escapement below goal in this subregion (Table 10, Figure 7). Escapement indices were below management targets for 6 of 7 districts (Table 11) and for 14 of 21 pink salmon stock groups within this subregion (Table 12).

Northern Southeast Outside Subregion

The Northern Southeast Outside Subregion includes all of the outer coasts of Chichagof and Baranof islands (District 13 outside). The pink salmon harvest of 1.6 million fish was 38% of the recent 10-year average, a period of very high harvest for this subregion (Figure 8). The escapement index value of 1.7 million fish was within the escapement goal range of 0.75 to 2.50 million index fish (Table 10, Figure 8). Escapement indices were within or exceeded management targets for all seven pink salmon stock groups within this subregion (Tables 11 and 12).

CHUM SALMON

Southeast Alaska summer-run chum salmon index streams are grouped into three stock groups that comprise aggregates of index streams across broad subregions: Southern Southeast, Northern Southeast Inside, and Northern Southeast Outside (Piston and Heinl 2014). 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 Subregion

The Southern Southeast Subregion includes 15 index streams located primarily on inner islands and the mainland of southern Southeast Alaska from Sumner Strait south to Dixon Entrance (Districts 1–7). The 2016 index count of 90,000 chum salmon in the Southern Southeast subregion was well above the lower bound SEG of 62,000 index fish (Table 13; Figure 9).

Northern Southeast Inside Subregion

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). The 2016 index count of 66,000 chum salmon was well below the lower bound SEG of 119,000 index fish (Table 13; Figure 9).

Northern Southeast Outside Subregion

The Northern Southeast Outside Subregion includes nine 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). The 2016 index count of 26,000 chum salmon was above the lower bound SEG of 25,000 fish (Table 13; Figure 9).

Fall-Run Chum Salmon

Fall chum salmon escapement goals were met for four of the five fall-run stocks with formal escapement goals (Table 13), but these stocks supported little or no terminal harvests in 2016. The Chilkat River fall chum salmon escapement (218,000 fish) was well within the goal range, but the harvest of 31,700 fall chum salmon in Lynn Canal was approximately half the recent ten-year average of 66,000 fish. The Excursion River escapement index of 1,400 fish was below the lower-bound SEG range of 4,000-18,000 fish.

SOCKEYE SALMON

In 2016, sockeye salmon escapement goals were met for 11 of the 13 sockeye salmon systems in the region that currently have escapement goals (Table 14). The McDonald Lake (former stock of concern) escapement of 15,600 fish was well below goal range, and has now been below goal in three of the past four years. Escapements exceeded the upper bound of escapement goals at the Taku River, Stikine River-Tahltan, and Chilkoot Lake.

DRIFT GILLNET FISHERIES OVERVIEW

Drift gillnet fishing is allowed by regulation (5 AAC 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 require that specific open areas and fishing periods within these districts and sections be established by emergency order. Drift gillnet openings are also provided in THA fisheries in Nakat Inlet, Neets Bay, Anita Bay, Boat Harbor, Speel Arm, and Deep Inlet (Figure 2). This section summarizes common property traditional drift gillnet fisheries during the 2016 season. THA, hatchery cost recovery, and Annette Island fisheries are discussed in separate sections.

The 2016 drift gillnet fishery opened in SW 19, beginning Monday, May 2, in District 8 targeting Stikine River Chinook salmon (Table 15). Initially, openings were based on the

preseason forecast. Poor catch rates and information from assessment projects indicated that Stikine River Chinook salmon abundance was well below the preseason forecast and the directed gillnet fishery was closed after three weeks of limited openings. Gillnet openings targeting sockeye salmon resumed in SW 25 beginning Monday, June 13, in Districts 6 and 8, and in SW 26, beginning Sunday, June 19 in Sections 1-B, 11-B, 15-A, and 15-C (Table 15). Drift gillnet fisheries targeted sockeye salmon during SW 26–28 in District 1, SW 25–31 in Districts 6 and 8, and SW 26–33 in Districts 11 and 15. Pink salmon returns drive management decisions in SW 29–34 in District 1, SW 32–35 in Districts 6 and 8, and SW 29–35 in Section 11-C. Drift gillnet fisheries target fall chum and coho salmon beginning SW 35 in District 1, SW 36 in Districts 6 and 8, and SW 34 in Districts 11 and 15. Traditional gillnet fisheries occurred for 15 weeks in Sections 1-B, 15-A, and 15-C, for 16 weeks in Section 11-B, and for 18 weeks in Districts 6 and 8 due to a one week earlier start.

Drift gillnet fisheries in THAs and SHAs took place in Nakat Inlet and Neets Bay in District 1, Anita Bay in District 7, Speel Arm in District 11, Deep Inlet in District 13, and Boat Harbor in District 15 (Figure 2). Hours and dates of openings are shown in Table 16. Fisheries in Nakat Inlet, Neets Bay, and Anita Bay THAs harvest enhanced salmon produced by SSRAA. Nakat Inlet was open continuously to drift gillnet from June 1 through November 9. Neets Bay and Anita Bay are open concurrently to harvest by all gear early and late in the season and according to rotational gear schedules the remainder of the time as described in ADF&G news releases. Speel Arm and Boat Harbor fisheries harvest enhanced salmon produced by DIPAC. Speel Arm was open from August 10 through September 15. Boat Harbor was open twice in June and was then open continuously from July 3 to August 30. The Deep Inlet fishery harvests salmon produced by Northern Southeast Regional Aquaculture Association (NSRAA). Deep Inlet is managed as a rotational gear fishery and was open to drift gillnet gear between May 30 and September 30.

The 2016 drift gillnet common property fisheries (traditional and THA/SHA) harvested 4.7 million salmon (Table 17). The gillnet harvest was the eighth highest since statehood, and is the seventh consecutive year of harvests ranking 10th highest or better over the period since statehood. The total common property drift gillnet harvest consisted of approximately 21,000 Chinook, 622,000 sockeye, 264,000 coho, 1.2 million pink, and 2.7 million chum salmon. The harvest of 21,000 Chinook salmon was 68% of the recent average of 30,277 fish. The harvest of 622,000 sockeye salmon was 137% of the recent average of 455,000 fish. The harvest of 264,000 coho salmon was 79% of the recent average of 334,000 fish. Pink salmon harvest of 1.2 million was 103% of the recent average of 1.1 million fish. Chum salmon harvest of 2.7 million was 94% of the recent average of 2.9 million fish. The common property gillnet harvest composition by species included: 0.4% Chinook, 13% sockeye, 6% coho, 24% pink, and 57% chum salmon. Figure 11 shows historical trends of drift gillnet harvests by species since 1960. The most notable recent trend is the large component of chum salmon in drift gillnet fishery harvests since 1992. These harvests are largely attributable to hatchery production.

Drift gillnet harvests by species, harvest type, and district are presented in Table 18. Total drift gillnet harvests in 2016 were 5.4 million salmon. Common property harvests of 4.7 million salmon include 3.6 million fish in traditional fisheries and 1.1 million fish in hatchery terminal areas. Drift gillnet harvests from the Annette Island Reservation totaled 557,000 salmon. Traditional drift gillnet harvests by district included 967,000 fish from District 15, 922,000 fish from District 1, 719,000 fish from District 6, 676,000 fish from District 11, 473,000 fish from

District 13, and 338,000 fish from District 8. Ranking 2016 traditional and terminal harvests among previous years since statehood, District 1 ranked 13th, District 6 ranked 24th, District 8 ranked fourth, District 11 ranked 12th, and District 15 ranked eighth (Tables 19–23).

The drift gillnet fishery exvessel value was $22.2 million in 2016 based on fish tickets (Table 3). Because the 2016 exvessel value is still based on fish tickets, this estimate is probably conservative. A time series of drift gillnet fishery exvessel values based on CFEC data is shown in Table 4 and Figure 12. The 2016 value includes $12.7 million of chum salmon, $4.9 million of sockeye salmon, $2.6 million of coho salmon, $1.0 million of pink salmon, and $0.9 million of Chinook salmon (Table 3).

DRIFT GILLNET CHINOOK SALMON HARVESTS

Allocation of king salmon in the Southeastern—Yakutat Area (5 AAC 29.060(b)(2)) was modified at the 2006 BOF meeting to assign 2.9% of the annual harvest ceiling for Chinook salmon to the drift gillnet fishery. This was a change to the drift gillnet allocation from a fixed number of 7,600 fish to a percentage of the fluctuating annual all gear quota, excluding directed fisheries in Districts 8 and 11, 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 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.

For the 2016 season, a coastwide Abundance Index (AI) of 2.06 was agreed to by the Chinook Technical Committee. The 2016 regional drift gillnet harvest of Chinook salmon totaled 21,612 fish and the common property drift gillnet harvest was 20,701 fish (Table 18). Due to inaccuracies in reporting of small (less than 28 inches) Chinook salmon on fish tickets and reporting of large Chinook salmon for PST purposes, drift gillnet fish tickets were revised in 2012 to report Chinook salmon of all sizes as one category. Data from 2005 to 2011 has been revised. Accounting of Chinook salmon for PST purposes is now done by adjusting fish ticket counts by port sampling measurements for sizes. Chinook salmon of all sizes can be sold in the drift gillnet fishery. Preliminary accounting for PST purposes is based on a drift gillnet fisheries estimate of 13,825 large Chinook salmon, including harvests from the Annette Island Reservation. Total gillnet harvest of large Chinook salmon included an estimated 9,547 Alaska hatchery-produced fish. The hatchery "add-on" was calculated at 8,511 fish resulting in 4,240 Chinook salmon designated as treaty harvest in traditional (non-TBR) fisheries, 707 fish as treaty harvest in the Annette Island gillnet fishery, and 367 fish as treaty harvest in the Taku and Stikine TBR fisheries for a total treaty harvest of 5,314 fish.

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 U.S. harvest of 13.8 percent of the Annual Allowable Harvest (AAH) of the Nass River sockeye salmon run. For the 2016 season, DFO forecasted a total run of 679,000 Nass River sockeye salmon. The AAH is calculated as the total run of Nass sockeye salmon minus either the escapement requirement of 200,000 fish or the actual inriver escapement, whichever is less. The preseason AAH for 2016 Nass sockeye was

therefore 66,100 fish. The preliminary DFO postseason total return for 2016 was estimated at 438,000 sockeye salmon. The preliminary 2016 estimate of Nass River sockeye salmon harvested at Tree Point is 14,400 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 Nass River sockeye salmon. 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. The *District 1 Pink Salmon Management Plan* (5 AAC 33.360) 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.

In 2016, the District 1 drift gillnet fishery opened on June 19 in SW 26 (Table 15). The fishery was open a total of 1,488 hours which was above the 1985–2015 average of 1,370 hours. The fishery was open for four days from SW 26 through SW 32. The *District 1 Pink Salmon Management Plan* went into effect on July 17 (SW 30) and the purse seine fishery was fishing two 15-hour openings each week. The District 1 purse seine fishery went to a two-days-on/two-days-off fishing schedule for only three openings in SW 32 and 33 due to the high effort levels in southern Southeast Alaska. Therefore, the District 1 drift gillnet fishery only had five fishing days in SW 32 and 33. The purse seine fishery closed for the season on August 18 with a second 15-hour period in SW 34. The District 1 gillnet fishery was then open for four days during SW 34 and transitioned to fall chum and coho salmon management in SW 35. The District 1 drift gillnet fishery had a series of four-day openings from SW 35 through SW 40. Effort levels were below average for most of the summer with below average harvests of all species except chum salmon. A total of 75 gillnet vessels fished in the district, 68% of the 1985–2015 average of 110 vessels and similar to the recent 10-year average of 70 vessels.

Traditional Tree Point harvests in 2016 included 1,200 Chinook, 40,000 sockeye, 46,000 coho, 561,000 pink, and 274,000 chum salmon (Table 18). In 2016, the District 1 gillnet harvest of 40,000 sockeye salmon was 33% of the 1985–2015 average of 120,000 fish. The pink salmon harvest of 561,000 fish was 110% of the 1985–2015 average of 508,000 fish. The chum salmon harvest of 274,000 fish was 90% of the 1985–2015 average of 305,000 fish. The coho salmon harvest of 46,000 fish was 92% of the 1985–2015 average of 50,000 fish. The Chinook salmon harvest of 1,200 fish was 80% of the 1985–2015 average of 1,500 fish.

The cumulative sockeye salmon harvest prior to the initiation of the *District 1 Pink Salmon Management Plan* in SW 30 was 14,700 fish, or about 37% of the total sockeye harvest. Sockeye salmon harvest rates were below average until after SW 33.

No management actions were taken during the 2016 season for Hugh Smith sockeye salmon conservation. During the 2006 BOF meetings in Ketchikan, the board removed Hugh Smith Lake sockeye salmon as a stock of concern; however, ADF&G still maintains the option to impose closures if the inseason forecast is below the escapement goal. Escapement into Hugh Smith Lake was 12,868 sockeye salmon, near the midpoint of the escapement goal range (8,000–18,000 fish; Table 14).

Coho salmon escapements to the systems around Ketchikan were above average.

DISTRICTS 6 AND 8: PRINCE OF WALES AND STIKINE

Fishery Overview

Drift gillnet fisheries occur in marine 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 Sections 8-A and 8-B, waters adjacent to the Stikine River flats (Figure 10). 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 Chinook salmon in District 8 and sockeye salmon in Districts 6 and 8 must be compliant with the PST. Chinook salmon have the earliest run timing and initial management in District 8 is based on Stikine River 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 finally transitions to coho salmon in September for the remainder of the season.

Districts 6 and 8 salmon drift gillnet fisheries are mixed stock fisheries. The proportions of Stikine River sockeye salmon in Districts 6 and 8 harvests are estimated inseason using both the historical proportions of stock composition and proportions of thermally marked fish from fry plants in Tahltan and Tuya Lakes. The proportions of Stikine River Chinook salmon are estimated inseason by coded wire tag (CWT) data analysis. Postseason stock compositions for sockeye salmon in Districts 6 and 8 and Chinook salmon in District 8 are determined by GSI.

2016 Harvest Summary

District 6 drift gillnet fishery salmon total harvest was above average and included: 2,100 Chinook, 106,600 sockeye, 122,100 coho, 358,300 pink, and 130,200 chum salmon. Sockeye and pink salmon harvest were above average, coho and chum salmon harvests were below average, and Chinook salmon was average (Table 20). An estimated 700 Chinook salmon in the District 6 harvest (35%) were of Alaska hatchery origin. An estimated 21,700 Stikine River sockeye salmon were harvested in District 6, approximately 20% of the harvest. An estimated 50,500 coho salmon in the District 6 harvest were of Alaska hatchery origin.

Stikine River sockeye salmon harvests in the two major fishing areas of District 6 were markedly different. In the Sumner Strait fishery (Subdistrict 106-41/42) 73,000 sockeye salmon were harvested, of which 20,600 fish were estimated to be Stikine River sockeye salmon and contributed 28% of the total sockeye salmon harvest in that subdistrict. In the Clarence Strait fishery (Subdistrict 106-30), 33,700 sockeye salmon were harvested, of which an estimated 1,100 fish were estimated to be Stikine River sockeye salmon which contributed 3% of the total sockeye salmon harvest in that subdistrict.

The 2016 District 6 drift gillnet fishery was open for 47 days from June 13 through October 4. Total fishing time was average (47.8 days). Sections 6-A, 6-B, and 6-C were open simultaneously each week throughout the season. A portion of Section 6-D (Screen Island) was open by regulation from SW 25 through SW 32 and from SW 37 through the end of the season. Weekly participation varied throughout the season with nearly half of the openings above average and ranging between 76 permits in SW 32 to 15 permits in SW 41. Total season effort in boat days was 2,642 and was average (2,692 boat days).

District 8 drift gillnet salmon total harvest was above average and included 10,000 Chinook, 70,100 sockeye, 22,100 coho, 35,300 pink, and 200,700 chum salmon. Harvests of sockeye and chum salmon were above average while Chinook, coho, and pink salmon harvests were below average (Table 21). Large Chinook salmon harvested in the District 8 drift gillnet fishery from SW 19 through SW 29 totaled 4,800 fish. Genetic stock analysis identified 1,060 large Chinook salmon harvested through SW 29 as above border Stikine River origin. An estimated 59,600 Stikine River sockeye salmon were harvested contributing 85% of the District 8 sockeye salmon harvest. An estimated 36% (8,000 fish) of the District 8 coho salmon harvest was of Alaska hatchery origin.

The District 8 drift gillnet fishery was open for a total of 58 days starting May 2 and included three weeks of directed Stikine River Chinook salmon fishing prior to sockeye salmon directed fisheries beginning SW 25 (June 13). Total fishing time was average (53 days) excluding periods in years when directed Chinook salmon fishing occurred. District 8 closed concurrently with District 6 on October 4. Participation in District 8 was below average in most weeks, with the exception of SW 26–30. The total season effort of 2,342 boat days was above the average of 2,296 boat days.

Chinook Salmon Fishery

The Stikine River Chinook salmon preseason forecast was 33,900 fish resulting in a U.S. AC of 1,100 Stikine River Chinook salmon. This U.S. AC was large enough to allow for limited directed drift gillnet and troll fisheries beginning the first Monday in May in District 8. Opening lengths for the gillnet fishery were determined by anticipated effort combined with available AC. The preseason forecast was used to determine the available AC until reliable inseason run estimates were generated. Troll fishery openings were linked to gillnet fishery openings with gillnet fishery openings of 24 hours resulting in a subsequent troll fishery opening of 72 hours. The Stikine River delta remained closed to gillnet throughout the directed fishery. Small area closures also occurred to reduce conflicts between commercial and sport fishermen and to reduce steelhead harvest. Additional restrictions included a minimum mesh size of 7 inches throughout the directed Stikine Chinook salmon fishery.

District 8 directed Stikine Chinook drift gillnet fishing began at 8:00 a.m. on Monday, May 2 (SW 19) for a 24-hour period (Table 15). There were 4 permit holders that made landings during the initial opening, with several more reporting no harvest. The majority of boats fished in Section 8-B.This trend continued throughout the directed fishery. The average gillnet harvest rate for this initial opening was lower than years with a similar forecast. The District 8 gillnet harvest during SW 19 was 7 large Chinook salmon. The troll and sport fisheries harvested an additional 197 fish. The U.S. weekly AC cumulative guideline, based on historical run timing and the preseason forecast, was 104 Stikine Chinook salmon.

During SW 20 and 21 District 8 was opened with the same area and time as the initial opening (Table 15). Gillnet effort increased to 11 boats in SW 20 and 12 boats in SW 21, well below the 2005–2012 average in years that a directed Chinook salmon fishery occurred. The cumulative harvest of large Stikine Chinook salmon by the U.S. fisheries was an estimated 784 fish, above the allowable cumulative harvest guideline of 635. Average harvest rates showed minimal increases as the fishery developed but continued to be well below expectations. Low fish abundance hampered attempts to assess the run size inseason, but poor fishery performance in both marine and inriver fisheries indicated a much smaller run than expected. As a result,

directed commercial fisheries closed until the start of the directed sockeye salmon fishery. The troll fishery reverted to a spring troll fishery on May 22 and was limited to two hatchery access areas near Anita Bay. The directed Stikine Chinook salmon gillnet fishery was open for a total of 3 days and an estimated 102 large Stikine Chinook salmon were harvested.

The preliminary postseason estimate of the terminal run size was 15,300 Stikine River large Chinook salmon, which resulted in no U.S. AC. Total U.S. harvest of Stikine River large Chinook salmon in all District 8 fisheries from SW 18 through SW 29, the PST accounting period, was 1,708 fish, one-half of the U.S. base level harvest of 3,400 fish. By gear groups, the harvest included 1,060, 190, 438, and 20 fish from gillnet, troll, sport, and subsistence fisheries, respectively (Table 28).

Sockeye Salmon Fishery

The Stikine River sockeye salmon preseason forecast indicated an above average terminal run size of 223,000 fish, with a resulting U.S. AC of 80,000 fish. Preseason forecasts were the primary basis used for management from SW 25 through 27. Inseason estimates of terminal run size were first produced on a weekly basis beginning in SW 27 and were used from SW 28 through the end of the season with the final inseason estimate produced in SW 32. Inseason abundance estimates were highly variable and ranged between 154,000 and 243,000 fish. The postseason Stikine River sockeye salmon run forecast of 253,500 fish resulted in a U.S. AC of 96,200 sockeye salmon. The total U.S. cumulative harvest estimate was 83,400 fish, based on GSI analysis.

Directed sockeye salmon drift gillnet fisheries in Districts 6 and 8 began in SW 25 at 12:00 noon on Monday, June 13, for an initial period of 2 days (Table 15). The opening was initially planned for 3 days based on the preseason forecast and anticipated effort but was reduced to 2 days due to the low returns of Stikine River Chinook salmon. Additionally, an expanded area off the Stikine River delta in District 8 was closed. Effort was comprised of 6 boats in Clarence Strait (106-30), 25 boats in Sumner Strait (106-41), and 50 boats in District 8. An estimated 1,027 Stikine River sockeye salmon were caught in the District 6 and 8 drift gillnet fisheries in SW 25.

Districts 6 and 8 drift gillnet fisheries opened for an initial 3 days in SW 26. Fishing time was based on the anticipated available AC derived from the well above average forecast of Tahltan sockeye salmon. The expanded closure remained in place for the initial 3-day opening (Table 15). On the grounds surveys indicated abundance of sockeye salmon was below the level to warrant additional fishing time in District 6. However, harvest rates were well above average for fishermen targeting sockeye salmon in District 8. Sockeye salmon harvest rates for inriver fisheries in the Stikine River were also well above average with stock assessments indicating the harvest consisted primarily of Tahltan Lake sockeye salmon. With good sockeye salmon harvest rates providing confidence in the forecast, a 2-day midweek opening occurred in District 8 (Table 15). The expanded closure was reduced for the midweek opening to the Old Stikine closure line which kept the Stikine River delta closed. An estimated 13,600 Stikine River sockeye salmon were harvested this week with the majority (10,500 fish) being harvested in District 8. During SW 26, 34 boats fished in Sumner Strait, 12 boats fished in Clarence Strait, and 74 boats fished in District 8.

Both districts were opened for an initial 3 days in SW 27 beginning Sunday at noon with District 8 opening for an additional 2.5-day midweek opening (Table 15). Area restrictions in District 8 were relaxed to open the Stikine River delta, which has not been opened to the commercial drift

gillnet fishery since 2007. Harvest in District 6 did not indicate a surplus of sockeye salmon to warrant extra time. Sockeye salmon harvest in District 8 continued to be well above average. There were 36 boats in Sumner Strait, 23 boats in Clarence Strait, and 85 boats in District 8. An estimated 23,000 Stikine River sockeye salmon were caught this week: 3,900 fish in District 6 and 19,100 fish in District 8.

During SW 28, Districts 6 and 8 were opened for an initial 3 days with an additional 2.5-day midweek opening in District 8 (Table 15). The first inseason forecast of Stikine River sockeye salmon terminal run size generated for this week was 154,000 fish with a resultant U.S. AC of 44,800 fish, considerably below the preseason forecast. However, on the grounds surveys of the gillnet fleet in both districts indicated well above average sockeye salmon abundance. This combined with good inriver harvests indicated that the Stikine Management Model (SMM) was not responding well as is typical for initial model outputs. The U.S. cumulative harvest of Stikine River sockeye salmon through SW 28 was estimated to be 59,700 fish. There were 27 boats in Clarence Strait, 29 boats in Sumner Strait, and 76 boats in District 8.

Districts 6 and 8 were opened for an initial 4 days during SW 29 with an additional 1-day midweek opening in District 8 (Table 15). Effort continued to be below average in District 6 with 24 boats in Clarence Strait and 33 boats in Sumner Strait. Harvest rates of sockeye salmon in both subdistricts fell to below average. Effort in District 8 decreased to near average with 58 boats making landings. Surveys of fishermen targeting sockeye salmon in District 8 indicated that harvest rates of sockeye salmon continued to be well above average for the fourth week in a row. The SMM assessment provided a slight decrease with a projected run size of 153,500 sockeye salmon, which resulted in a U.S. AC of 45,800 fish. By this week, it was evident that the SMM was slow to react to a robust Stikine River sockeye salmon run as indicated by both marine and inriver harvests. An estimated 11,300 Stikine River sockeye salmon were harvested in SW 29 with a cumulative harvest of 71,000 fish.

Both districts were open for an initial 3 days during SW 30 (Table 15). Sockeye salmon harvest rates, on average, usually begin to decline in SW 30 in District 6. Although this was the case in Clarence Strait, surveys in Sumner Strait indicated harvest rates that were well above average. Harvest rates were also above average for fishermen in the traditional areas targeting sockeye in District 8. Although the numbers of vessels fishing in District 8 increased this week, very few targeted sockeye salmon. Run size estimates and corresponding U.S. AC produced by the SMM increased in SW 30 with a predicted terminal run size of 178,800 Stikine River sockeye salmon, resulting in a U.S. AC of 58,800 fish. Inseason estimates generated by the SMM pointed towards a run size larger than the preseason forecast. Due to the low effort in District 8, above average harvest rates, and available U.S. AC, a 1-day extension occurred in both districts (Table 15). An estimated 5,300 Stikine River sockeye salmon were harvested by U.S. fisheries this week. Effort included 26 boats in Clarence Strait, 40 boats in Sumner Strait, and 68 boats in District 8.

Sockeye salmon harvests began to decrease in SW 31; however, harvest rates remained above average for the next few weeks. This was the final week for Stikine River sockeye salmon management. Both districts were open for an initial 3 days beginning July 24 (Table 15). The inseason forecast used for SW 31 estimated a terminal run size of 200,800 Stikine River sockeye salmon with an available U.S. AC of 70,100 fish. On the grounds surveys indicated that sockeye salmon harvest rates were above average again in District 6. Harvest rates in District 8 decreased from previous weeks but remained above the 10-year average. Overall, fishery performance did not indicate a surplus of sockeye salmon above the estimated harvest for this week and both

districts closed as scheduled. Effort included 31 boats fishing in Clarence Strait, 36 boats in Sumner Strait, and 63 boats in District 8. The estimated U.S. harvest of Stikine River sockeye salmon in SW 31 was 2,400 fish with a cumulative harvest through SW31 of 78,700 fish. An estimated 2,600 Stikine River sockeye salmon were harvested in the Districts 6 and 8 drift gillnet fisheries through the remainder of the season.

The postseason preliminary estimate for the Stikine River sockeye salmon run was 253,500 fish. This estimate included Districts 6 and 8 estimated Stikine River sockeye harvest of 81,300 fish, U.S. inriver subsistence fishery estimated harvest of 2,100 fish, total Canadian Stikine inriver harvest of 88,600 fish (including test fishery harvest of 1,760 fish), Tahltan Lake weir count of 38,631 fish (Table 14), estimated Tuya escapement of 8,400 fish, and the estimated mainstem escapement of 34,600 fish. The U.S. total harvest of 83,300 Stikine River sockeye salmon was under the estimated U.S. AC of 96,200 fish and contributed 46% of the total Districts 6 and 8 sockeye salmon harvest (Table 28).

Pink Salmon Fishery

From SW 32 through SW 35, Districts 6 and 8 were managed based on pink salmon abundance. That portion of Section 6-D along the Etolin Island shoreline (Screen Island) was closed to gillnet fishing from SW 33 through SW 36 by regulation. Pink salmon harvest rates prior to the pink salmon management period were well above average in District 6. Harvest and harvest rates in District 8 remained below the recent 10-year average for the duration of the pink salmon management period. Effort in both districts was above average in SW 32 and SW 34 and below average in SW 33. Effort was above average for District 6 and below average for District 8 during SW 35. Pink salmon harvests were less than half the recent 10-year averages from SW 33 through SW 35 in both districts. Fishing time was 3 days each week from SW 32 through SW 34 (Table 15). With below average pink salmon harvest rates in both districts and lagging escapements in District 6, fishing time was reduced to 2 days in SW 35. The District 6 gillnet pink salmon harvest of 358,300 fish was the third highest in the past ten years (Table 20). Approximately 50% of the total pink salmon harvest in Districts 6 and 8 occurred in Clarence Strait with 198,000 fish harvested.

Coho Salmon Fishery

Beginning in SW 36, management emphasis transitioned from pink salmon to coho salmon abundance. Prior to SW 36, 52,600 coho salmon, 43% of the total District 6 harvest, was taken. The hatchery contribution was 14,400 fish in District 6 prior to SW 36 and was comprised primarily of Neck Lake/Burnett Inlet enhanced summer coho salmon. During the coho salmon management period, coho salmon harvests were above average in District 6 with an estimated harvest of 33,500 hatchery and 33,400 wild coho salmon. Harvest of wild coho salmon in District 8 was below average with a harvest of 14,000 fish. Both districts opened for 2 days during the first 2 weeks of coho management. Starting SW 39, both districts were open for 3 days each week through SW 40 and for 2 days for the final opening in SW 41 (Table 15). The 2016 gillnet season concluded at noon on Tuesday, October 4, in both districts.

Chum salmon are harvested incidentally in directed fisheries for sockeye, pink, and coho salmon in both districts. Chum salmon returning to Anita Bay in recent years contributed substantially to chum salmon harvests in both districts, particularly harvests in District 8. Preliminary estimates indicate that Anita Bay chum salmon comprised 55% of the total Districts 6 and 8 chum salmon

harvest. Preliminary estimates also indicate that Neets Bay chum accounted for 32% of the total chum salmon harvest in District 6.

Escapement Summary

Above border Stikine River large Chinook salmon escapement was an estimated 10,300 fish, well below the escapement goal range of 14,000–28,000 fish. The 2016 Little Tahltan weir count was 921 fish, well below the recent 10-year average of 1,366 fish. The Little Tahltan weir count represented approximately 9% of the total escapement compared to the recent 10-year average of 8%. Andrew Creek escapement was below the BEG range with an estimated escapement of 402 Chinook salmon.

Sockeye salmon escapement to the Stikine River was good in 2016. A total of 38,631 sockeye salmon were counted through the Tahltan Lake weir. Of these, 4,315 sockeye salmon were collected for broodstock and 173 for biological samples. The resultant spawning escapement into Tahltan Lake was 34,143 sockeye salmon and was above the escapement goal range of 18,000–30,000 fish. The Stikine River mainstem sockeye salmon escapement estimate of 34,591 fish was within the escapement goal range of 20,000–40,000 fish (Table 14).

Peak escapement counts of sockeye salmon to local island systems were mixed with some being well above and some being well below the recent 10-year average. Escapement of sockeye salmon to McDonald Lake is estimated to be 15,000 fish, well below the SEG range (Table 14).

Indexed pink salmon escapement was within target ranges for all District 6 and District 8 stock groups (Table 12). Escapements of coho salmon are not monitored. Indications from the Stikine River and a few other systems in Southeast Alaska where escapements are monitored, pointed to a generally good escapement 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 in Section 11-C in the waters of Stephens Passage south of the latitude of Midway Island and north of a line from Point League to Point Hugh. When the Taku River Chinook salmon run strength is sufficient, the Section 11-B fishery targets Chinook salmon in May and early June. The fishery targets sockeye and summer chum salmon from mid-June through mid-August and coho and fall chum salmon from late August until the season is closed. The Section 11-C fishery targets pink salmon. Management of the sockeye and coho salmon fishery is based on wild sockeye salmon returns in the summer and wild coho salmon returns in the fall. A stock assessment program conducted at Canyon Island on the Taku River provides inseason run estimates through mark–recapture efforts for Chinook, sockeye, and coho salmon. DIPAC operates a sockeye salmon escapement enumeration program at Speel Lake in Port Snettisham. Aerial and foot surveys are conducted to monitor the development of salmon escapement in other streams throughout the district. The 2016 season was the 17th year of sockeye salmon returns produced by the DIPAC Snettisham Hatchery facility in Port Snettisham. The District 11 common property fishery, which includes both the traditional area and the Speel Arm SHA inside Port Snettisham, harvested 600 Chinook, 215,000 sockeye, 35,000 coho, 47,000 pink, and 448,000 chum salmon (Table 22).

The PST directly affects management of this fishery because the Taku River is a major transboundary river extending into Canada and contributes to the salmon harvested in District 11. The PST mandates that the District 11 sockeye salmon fishery be managed primarily for Taku River spawning escapement needs. Annex IV of the PST provides a sliding harvest share for Taku River sockeye salmon based on documented enhanced sockeye salmon returns resulting from joint U.S./Canada sockeye salmon enhancement projects in the Taku River drainage. This season's return of TBR enhanced sockeye salmon established the 2016 harvest shares for surplus Taku River sockeye salmon at 77% U.S. and 23% Canada.

In 2003, the BOF implemented regulations allowing a directed Chinook salmon fishery in a portion of Section 11-B. In 2005, U.S. and Canada reached a harvest sharing agreement for directed Chinook salmon fisheries to occur. As the result of a bilateral review, and beginning with the 2009 season, the escapement goal range for Taku River Chinook salmon was established at 19,000–36,000 large fish, with a point goal of 25,500 fish. The U.S. AC is determined by a PSC bilaterally agreed-to formula based on the preseason Taku River Chinook salmon run forecast early in the season, and revised inseason based on the inseason run projection estimates generated from the Canyon Island mark–recapture program. The total allowable catch (TAC) applies only to Taku River origin large Chinook salmon over 28 inches in length (>659 mm from mid eye to tail fork [METF]). The U.S. harvest of the Taku River Chinook salmon TAC will not count towards the Southeast Alaska aggregate abundance based management regime (AABM) allocation, although the historical base level catch (BLC) of 940 gillnet caught Chinook salmon continues to be counted as treaty fish. The U.S. AC is shared between gillnet, troll, and sport fisheries occurring in District 11, with no set allocation for each user group. In January 2006, the BOF slightly increased the allowed areas for both gillnet and troll fisheries, adjusted the open periods for troll fisheries to three days per week when the gillnet fishery is open for one day, and to five days in a week when the gillnet fishery is open for two or more days. A seven-inch minimum gillnet mesh restriction was also adopted for directed Chinook salmon fisheries in District 11.

The PST also has provisions for Taku River coho salmon. In early 2015, the TBR Panel accepted a bilaterally reviewed Taku River coho salmon BEG with a range of 50,000–90,000 fish and a point goal of 70,000 fish. Both countries reached agreement on management targets to be in place for the 2016 season: the U.S. would manage its fisheries to pass a minimum of 75,000 coho salmon above the U.S./Canada border, and Canada would manage its fisheries to ensure a minimum escapement past all fisheries of 70,000 fish.

Chinook Salmon Fishery

There were no directed commercial Chinook salmon fisheries in District 11 in 2016. The forecast of 29,200 Taku River large Chinook salmon provided no AC for either the U.S. or Canada. Due to the recent trend of over-forecasting, the 2016 Taku River Chinook salmon forecast was derived by adjusting model results with the recent average forecast error. A Chinook salmon assessment fishery in Canada was conducted this season with the treaty-defined target of sampling 1,400 large Chinook salmon in place. Increased tagging using drifted tangle nets in combination with the Canyon Island fish wheels were successfully utilized again this season to increase the number of tags released for the mark–recapture project. In addition, a purse seine feasibility project was again conducted in Taku Inlet to analyze the effectiveness of using this gear type to capture Chinook salmon and further increase the number of tags released at a site much further downstream from the current tagging sites. The project was successful and resulted

in the tagging of 181 medium and large Chinook salmon, with 50 radio tags also applied. The Canadian assessment fishery began in SW 19 and continued through SW 23. The first bilateral terminal run size estimate was produced in SW 23 and this estimate of 11,600 large Taku Chinook salmon was so far below the escapement goal range of 19,000–36,000 fish it was agreed no more fish should be killed for assessment purposes, and the enumeration project adopted nonlethal fish handling methods for the remainder of the assessment project. The final inseason terminal run estimate produced in SW 29 increased to 15,400 Taku River large Chinook salmon, well below the escapement goal range, and provided no AC for either country. The total Canadian assessment fishery harvest for 2016 was 1,021 Taku River large Chinook salmon apportioned across five weeks of the run.

Management actions used to conduct the 2016 District 11 drift gillnet fishery were limited to imposing time, area, and gear restrictions during SW 26–41. In SW 26, for the initial sockeye salmon opening, Section 11-B was open for two days with the 6-inch maximum mesh size regulation invoked and an unprecedented area restriction closing most of the west side of Taku Inlet to conserve the very poor run of Taku River Chinook salmon. The final 2016 spawning escapement estimate is 12,400 Taku River large Chinook salmon which is below the escapement goal range and the poorest escapement since monitoring of this stock began in 1989. The 2016 harvest of 656 fish in the sport and 190 fish in the commercial and personal use fisheries in District 11 was well below the BLC of 3,500 Taku River large Chinook salmon.

Sockeye Salmon Fishery

The 2016 District 11 drift gillnet fishery began in SW 26. Although there was an above average Taku River sockeye salmon run forecast, Section 11-B was open for two days (Table 15) with area and gear restrictions in place for Chinook salmon conservation. The two-day opening was below the average fishing time during this week. Twenty-nine boats harvested 134 Chinook salmon, of which 44 were Taku River large fish according to inseason CWT analysis. The sockeye salmon harvest of 1,700 fish was 48% of average, while sockeye salmon CPUE was 130% of average. Chum salmon harvest was 17% of average.

Section 11-B was initially opened for two days in SW 27 due to below average fish wheel catches and the drop in catch rates seen in the gillnet fishery the previous week. With above average sockeye salmon CPUE in the fishery and low effort levels, the fishery was extended an additional day. Forty-seven boats harvested 163 Chinook salmon of which an estimated 44 were Taku River large fish based on inseason CWT analysis. The sockeye salmon harvest and CPUE were 62% and 98% of average, respectively. Chum salmon harvest improved to 43% of average for the week while chum salmon CPUE remained below average.

Section 11-B was initially opened for two days in SW 28. The first Taku River sockeye salmon inriver run estimate generated in SW 27 projected an above border run of 65,000 fish, below the escapement goal. The cumulative catch in the Canyon Island fish wheels was also below average. A six-inch minimum mesh size restriction was implemented in Stephens Passage south of Circle Point to conserve Port Snettisham wild sockeye salmon stocks transiting the area while allowing opportunity to harvest DIPAC enhanced chum salmon returning to Limestone Inlet. This restriction remained in place through SW 32. With a small fleet size and above average sockeye salmon CPUE on the first day of the fishery, and some uncertainty in the Taku River sockeye salmon run size with inseason projections only creeping up, a one-day extension was announced in Stephens Passage (south of Circle Point). During the extension, the mesh

restriction remained in place to provide opportunity to harvest returning enhanced chum salmon while minimizing impact on Taku River sockeye salmon. Effort increased from the previous week to 54 boats, harvesting 72 Chinook salmon, 50 of which were Taku River large fish based on inseason CWT analysis. The total District 11 gillnet harvest for the Chinook salmon accounting period SW 18–28, is 159 Taku River large Chinook salmon based on postseason genetic stock identification (GSI) analysis. Sockeye salmon harvest and CPUE which had decreased dramatically on the second day in Taku Inlet, were 42% and 79% of average, respectively. Chum salmon harvest and CPUE were 33% and 53% of average, respectively.

Fishing time for SW 29 was again initially two days in Section 11-B with Taku River sockeye salmon run projections improved but still below the preseason forecast, and the uncertainty from the drop in fishery CPUE over the course of the previous week. Sockeye salmon CPUE was below average for the two days, with the majority of the below average sized fleet targeting chum salmon. Because of the low sockeye salmon catch rates, a one-day extension was announced in statistical area 111-32 with a six-inch minimum mesh size restriction in place and an area restriction closing Taku Inlet north of Greely Point. A two-day extension with the same mesh restriction in place was announced in statistical area 111-31, to provide opportunity on DIPAC enhanced chum salmon while minimizing sockeye salmon harvests in the area. Sockeye salmon harvest and CPUE were 37% and 38% of their respective averages. Chum salmon harvest and CPUE improved from the previous week to 96% and 105% of average, respectively.

Fishing time for SW 30 was again set for two days in Section 11-B based on variable inriver indicators and extensions were announced similar to the previous week with one extra day in statistical area 111-32 and two extra days in 111-31. The area and gear restrictions used during the previous week's extension in 111-32 were not implemented due to increased sockeye salmon CPUE observed during the first two days of the fishery. Effort increased to nearly 90% of the average with 103 boats making landings. This week had the largest effort of the season in Taku Inlet with 89 boats making landings. The sockeye salmon harvest for the entire opening was 129% of average while CPUE was 105% of average. Otolith analysis revealed that 21% of the sockeye salmon harvest from Taku Inlet, and 59% from Stephens Passage, were of Snettisham Hatchery origin. TBR enhanced sockeye salmon of Tatsamenie and King Salmon Lake origin contributed 3% and <1% in Taku Inlet, respectively. The weekly Taku River wild sockeye salmon terminal run projection dropped to 156,000 fish. Chum salmon harvest and CPUE were 128% and 107% of average, respectively.

Fishing time for SW 31 was again initially two days in Section 11-B based on inriver indicators and concern over an increase in effort from conservative openings in nearby gillnet areas. The same extensions as the previous week were announced for a total of three days in statistical area 111-32 and four days in 111-31. The extra time was based on increased sockeye salmon CPUE and a significant reduction in effort that continued throughout the opening. Effort dropped from the previous week to 76 boats, 75% of average for the week, and only 25 boats remained by the third day of the opening. The sockeye salmon harvest dropped to 89% of average while CPUE was 97% of average. Otolith analysis revealed that 37% of the sockeye salmon harvested in Taku Inlet and 94% of the harvest in Stephens Passage were of Snettisham Hatchery origin. TBR enhanced Tatsamenie and King Salmon Lake origin sockeye salmon contributed 6% and <1% to the Taku Inlet harvest, respectively. The weekly Taku River sockeye salmon run estimate indicated 81,000 fish had passed above the border, projecting a terminal run of 166,000 wild

fish. Chum salmon harvest and CPUE fell to 50% and 53% of their respective averages for the week.

Fishing time for SW 32 was initially three days in Section 11-B with Taku River sockeye salmon escapement being estimated within the goal range. Both Taku Inlet and Stephens Passage were extended for an additional day for a total of four days of fishing due to well above average sockeye salmon CPUE. The mesh restriction in Stephens Passage was removed for the last day of the opening due to increasing escapement of Speel Lake wild sockeye salmon through the weir and an obvious abundance of fish observed in Speel Arm. Effort declined from the previous week to 69 boats and sockeye salmon harvest and CPUE were 287% and 298% of their respective averages. The sockeye salmon harvest this week of 47,500 fish nearly doubled the second highest weekly harvest (27,605 fish in SW 33) in the traditional area (not including the Speel Arm SHA). Otolith analysis indicated that 38% of the sockeye salmon harvest from Taku Inlet was of Snettisham Hatchery origin, and TBR enhanced Tatsamenie Lake origin sockeye salmon contributed 8% of the Taku Inlet harvest which was the highest contribution of the season. The weekly Taku River wild sockeye salmon terminal run size projection increased from the previous week to 181,000 fish. Chum salmon harvest and CPUE improved to 146% and 149% of their respective averages for the week.

Fishing time for SW 33 was initially three days in Section 11-B and the six-inch minimum mesh size restriction south of Circle Point was removed for the remainder of the season. With increased escapement of wild fish into Speel Lake, the entrance of Port Snettisham was opened to increase opportunity on returning Snettisham Hatchery sockeye salmon. Nearly 80% of the effort was concentrated in and around Port Snettisham to target returning Snettisham Hatchery sockeye salmon and to be positioned for a potential opening of the Speel Arm SHA. A one-day extension of the previously opened area plus nearly all of the Speel Arm SHA was announced mid-day on August 9 to begin at noon on August 10, due to significant movement of fish through the Speel Lake weir. The vast majority of the fleet immediately ran to the Speel Arm SHA to claim their position, foregoing an entire day of fishing in the traditional areas of the district. Later in the week the entire Speel Arm SHA was opened until further notice when the minimum of the Speel Lake escapement goal was accounted for. Effort was the highest of the season this week with 114 boats fishing in the traditional area (mostly the entrance of Port Snettisham and lower Stephens Passage) and above average effort would generally remain throughout the rest of the season. Sockeye salmon harvest and CPUE, excluding the Speel Arm SHA, for the last official week of sockeye salmon management were 336% and 176% of their respective averages. Otolith analysis indicated that 42% of the sockeye salmon harvest from Taku Inlet and 85% from Stephens Passage were of Snettisham Hatchery origin. TBR enhanced sockeye salmon of Tatsamenie Lake origin accounted for 6% of the Taku Inlet and 2% of the Stephens Passage harvests. This was the final week of otolith sampling from Taku Inlet but Stephens Passage would have two more weeks of minimal sampling in SW 35 and SW 36. The weekly Taku River wild sockeye salmon terminal run size projection increased from the previous week to 219,000 fish. Chum salmon harvest and CPUE improved to 137% and 59% of their respective averages for the week. In the initial opening of the Speel Arm SHA in the last four days of the SW, an above average 80 boats landed 37,800 sockeye salmon (87% of the weekly average) and much lower numbers of other species.

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 Taku River and Port

Snettisham wild sockeye salmon as well as effectively harvest the run of DIPAC enhanced summer chum and sockeye salmon. Limestone Inlet was opened to the inner markers from SW 28 through SW 32 to allow increased opportunity to harvest remote released DIPAC enhanced chum salmon. Port Snettisham (subdistricts 111-33, 111-34) was closed to fishing from SW 26 through SW 32 to limit harvest of Crescent Lake and Speel Lake wild sockeye salmon runs. The partial weir and sonar used to monitor sockeye salmon runs to Crescent Lake was discontinued in 2012 and aerial surveys have been used in the last few seasons to confirm sockeye salmon migration into Crescent Lake. However, surveys this season were flown during high water/low visibility conditions and no fish were visible. It is assumed that conservation measures taken to ensure the documented escapements to Speel Lake also adequately conserved Crescent Lake sockeye salmon. Section 11-C was not opened in 2016 due to the very low abundance of pink salmon observed returning to streams in that area.

Coho Salmon Fishery

Fishing time for SW 34 was set for three days in Section 11-B with the opening delayed until Monday to accommodate the Golden North Salmon Derby taking place in Juneau area waters. The majority of effort remained in or near the Speel Arm SHA at the beginning of the opening to target returning Snettisham Hatchery sockeye salmon, but redistributed to the remainder of the district after it became apparent that there was not a large buildup of hatchery sockeye salmon in the southern portion of the district. A total of 52 boats made landings throughout the week in the traditional area which was 121% of average. The sockeye salmon harvest for the traditional fishery was 232% of average, whereas CPUE was 224% of average. The Speel Arm SHA remained open until further notice and 29 boats made landings there throughout the week. The coho salmon harvest and CPUE for the traditional fishery were 77% and 71% of average, respectively. The first Taku River coho salmon inriver run estimate was produced this week and expanded by average run timing projected an above border run of 89,000 fish, below the preseason forecast. The last inseason weekly Taku River wild sockeye salmon terminal run size projection increased slightly from the previous week to 219,500 fish. In the Speel Arm SHA 29 boats landed 15,600 sockeye salmon.

Fishing time in Section 11-B for SW 35 was again set for three days with coho salmon CPUE increasing during the previous week both in District 11 and the inriver fishery and assessment projects. A total of 54 boats made landings throughout the week in the traditional area, 125% of average. Coho salmon harvest and CPUE in the traditional fishery were 99% and 90% of average, respectively. Sockeye salmon harvest was over three times the average, and although the sample size was small, otolith analysis revealed that Tatsamenie Lake enhanced sockeye contributed 4% to the Stephens Passage harvest for the week. The projected inriver run estimate for Taku River coho salmon decreased slightly from the previous week to 87,000 fish. The Speel Arm SHA remained open until further notice and 11 boats landed 10,300 sockeye salmon.

Section 11-B was opened for three days again in SW 36 with a below forecast run estimate of Taku River coho salmon. A total of 43 boats, 96% of average, made landings in the traditional fishery with coho salmon harvest and CPUE at 89% and 110% of average, respectively. CWT analysis indicated that 55% of the traditional coho salmon harvest was comprised of Alaska hatchery fish, resulting in the largest weekly hatchery coho salmon harvest of the season. The weekly Taku River coho salmon inriver run projection dropped slightly once again to 84,000 fish. The last week of otolith sampling (with a minimal sample size) in Stephens Passage showed that 5% of the sockeye salmon harvest was enhanced fish of Tatsamenie Lake origin, the highest

weekly percentage of the season there. The Speel Arm SHA remained open until further notice and six boats landed 3,000 sockeye salmon.

Fishing time in SW 37 was again three days in Section 11-B due to some uncertainty in the Taku River coho salmon run, but consistent weekly projections continued to suggest the US would achieve the management goal of passing 75,000 fish above border. Effort fell to 34 boats or 91% of average and shifted almost entirely to Taku Inlet with only four boats making landings in Stephens Passage. The coho salmon harvest was 72% of average while CPUE was 106% of average. CWT analysis indicated that 26% of the coho salmon harvest was comprised of Alaska hatchery fish. The weekly Taku River coho salmon inriver run projection rose slightly to 85,000 fish. The Speel Arm SHA remained open until further notice and received no effort throughout the week.

Fishing time in SW 38 was four days in Section 11-B due to below average effort, relatively high hatchery contribution, and an increasing run size projection. Effort fell from the previous week to 27 boats, just slightly above average for the week, with the coho salmon harvest 67% of average while CPUE was 73% of average. CWT analysis indicated that Alaska hatchery fish contributed 24% to the weekly coho salmon harvest. The weekly Taku River coho salmon inriver run projection fell to 83,000 fish. The Speel Arm SHA again attracted no effort, and closed for the season concurrent with the traditional fishery in the rest of the district.

Fishing time in Section 11-B was again four days in SW 39–41. The fleet size remained above average with 15, 10, and 1 boat fishing in SW 39–41, respectively. Coho salmon harvest and CPUE were slightly below average in SW 39, but well above average in both SW 40 and 41. Over 1,500 Alaska hatchery coho salmon were harvested in these three final openings which was 56% of the harvest.

The Taku River coho salmon inriver run projection remained very consistent over the entire coho management time period and the final estimate of above border run size was 99,200 fish, with an escapement estimate of 87,700 coho salmon past all fisheries, close to the upper bound of the escapement goal range. The fall chum salmon harvest in SW 34–41 was 45% of average.

The District 11 drift gillnet fishery closed for the season on October 6 in SW 41.

Harvest and Escapement Summary

The 2016 District 11 traditional area fishery was open for a total of 56 days from June 19 through October 6. Participation in the fishery and fishing effort measured by the total number of permits delivering fish multiplied by the number of days open to fishing each week, peaked in SW 33. Total fishing effort for the 2016 common property drift gillnet fishery was 3,432 boat days, 106% of the recent 10-year average.

The harvest in the traditional area fishery totaled 580 Chinook, 148,000 sockeye, 34,000 coho, 45,000 pink, and 448,000 chum salmon (Table 21 and 24). An additional 67,000 sockeye salmon and small numbers of other species were harvested in the common property fishery in the Speel Arm SHA. Common property harvests for all species but sockeye salmon were below their respective averages. Enhanced stocks contributed substantial numbers to the harvest of Chinook, sockeye, coho, and chum salmon.

The District 11 common property drift gillnet Chinook salmon harvest of 595 fish in SW 26–41, during the traditional sockeye and coho salmon management period, was 32% of the recent

10-year average (Table 22). Alaska hatchery fish contributed 47% of the harvest as estimated by CWT analysis. The Canadian traditional commercial, recreational, and aboriginal harvest of Taku River large Chinook salmon was 609 fish, 41% of their BLC. The 2016 spawning escapement estimate is 12,400 Taku River large Chinook salmon, below the escapement goal range of 19,000–36,000 fish.

The District 11 common property drift gillnet sockeye salmon harvest was 215,000 fish, 159% of the recent 10-year average (Table 22). Domestic hatchery sockeye salmon began to contribute to the fishery during SW 27 and added substantial numbers to the harvests during SW 30–36. Sockeye salmon from joint U.S./Canada fry-planting programs at Tatsamenie and King Salmon lakes contributed an estimated 3,700 fish to the District 11 gillnet fishery. Contributions of DIPAC Snettisham Hatchery enhanced sockeye salmon to the District 11 common property drift gillnet fishery including the Speel Arm SHA totaled a minimum of 124,000 fish or 58% of the harvest. The PST defined base harvest shares for Taku River sockeye salmon in 2016 were 77% US and 23% Canada. The District 11 drift gillnet fishery harvested 40% of the 193,000 wild sockeye salmon TAC for the Taku River, or 52% of the U.S. AC. The Canadian harvest was 17% of the Taku River sockeye salmon TAC or 76% of the Canadian AC. This fishery is covered in more detail in the Canadian TBR Fisheries section of this report. Stock composition estimates will be updated post season based on a combined analysis of otolith and GSI.

The preliminary estimate of Taku River sockeye salmon escapement past all fisheries from the mark–recapture program was 176,400 fish, well above the management target range of 71,000–80,000 fish. Wild sockeye salmon escapements inside Port Snettisham were improved from recent seasons. A total of 5,538 sockeye salmon were counted through the DIPAC-operated weir on the outlet stream of Speel Lake, within the BEG range of 4,000–9,000 fish. The escapement to Crescent Lake was monitored via aerial surveys in 2016. However, surveying conditions including high, discolored water did not provide adequate visibility and it was assumed fish were present but not visible. Though no formal goal exists for this system, the historical peak aerial survey is approximately 5,000 fish. Previous research has indicated the populations of Port Snettisham wild sockeye salmon share similar run timing, so managers assume conservation efforts to achieve the Speel Lake escapement goal also pass an adequate number of sockeye salmon to Crescent Lake.

Coho salmon stocks harvested in District 11 include returns to the Taku River, Stephens Passage, Port Snettisham, and local Juneau area streams as well as to Alaska hatcheries and release sites. The common property coho salmon drift gillnet harvest of 35,000 fish was 87% of the average. Alaska hatchery coho salmon accounted for approximately 7,400 fish or 21% of the District 11 traditional harvest in 2016. The preliminary coho salmon escapement for the Taku River was an estimated 87,700 fish, near the upper end of the recently adopted escapement goal range of 50,000–90,000 fish. Coho salmon escapements to other streams in the district were mostly unknown.

The District 11 common property drift gillnet pink salmon harvest of 46,600 fish was 30% of the recent 10-year average (Table 21). The escapement to the Taku River is unknown. The number of pink salmon passing through the fish wheels at Canyon Island was used as an index of escapement. The total of 1,369 pink salmon caught in the fish wheels was 56% the 2014 parent-year catch, 13% of the 1996–2014 even-year average, and is the smallest catch since the fish wheel program began in 1985. The pink salmon escapement to the Taku River is characterized as well below average.

The District 11 common property drift gillnet harvest of 448,000 chum salmon was 76% of the recent 10-year average (Table 22). The summer chum salmon harvest of 446,000 fish was 99.5% of the total harvest. The summer chum salmon run is considered to last through mid-August (SW 33) and is composed mostly of domestic hatchery fish, with small numbers of wild stock fish. Chum salmon returning to the DIPAC releases in Gastineau Channel and the remote release site in Limestone Inlet contributed a major portion of the harvest, but quantitative contribution estimates are not available. Approximately 77% of the District 11 drift gillnet chum salmon harvest occurred in Taku Inlet and 22% in Stephens Passage. The harvest of 1,900 fall chum salmon during SW 34 and later was 45% of the average. Most of these fall chum salmon are wild fish of Taku River origin. The escapement to the Taku River is unknown. The number of chum salmon passing through the fish wheels at Canyon Island is used as an index of escapement. The 66 fish caught in the fish wheels in 2016 was 25% of the recent 10-year average, and is the lowest count since the fish wheel project began in 1985. The chum salmon escapement to the Taku River is characterized as well below average.

DISTRICT 15: LYNN CANAL

Fishery Overview

Drift gillnet fisheries in Lynn Canal occur 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 local major stocks of sockeye salmon (Chilkat Lake, Chilkoot Lake, Chilkat River mainstem, and Berners River). Hatchery chum salmon are the predominant harvests during the first five weeks of the summer season and have attracted record-level effort in recent years. In the fall, the fishery targets coho and fall chum salmon from mid-August through early October.

The District 15 traditional Lynn Canal drift gillnet fishery was opened for a total of 45 days between June 19 and September 28, 2016 (Table 15). The number of fishing days (45) is 80% of the recent 10-year average of 56 days. Fishing effort totaled 4,094 boat-days, 85% of the average of 4,796 boat-days. The total number of permits participating in the 2016 Lynn Canal drift gillnet fishing season was above average but was lower than the preceding six years, 201 permits as compared to the previous recent 10-year average of 195 permits. The number of drift gillnet boats participating in the 2016 District 15 gillnet fishery each week was above average for five weeks of the season, about average for three weeks, and below average for the remainder of the time. Effort peaked in SW 29 (July 10) when 161 boats actively fished in the district, 110% of the recent 10-year average for this week. 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 projects.

A total of 1.2 million salmon were harvested during the 2016 Lynn Canal common property fishery (Tables 18 and 23). This harvest included 500 Chinook, 189,000 sockeye, 31,000 coho, 82,000 pink, and 932,000 chum salmon. The harvest of sockeye salmon was above average while the Chinook, coho, pink, and chum salmon harvests were below average. The 2016 Chinook salmon harvest was 45% of the average. The sockeye salmon harvest was 140% of the average of 135,000 fish, coho salmon harvest was 71% of the average, chum salmon harvest was 85% of the average, and pink salmon harvest was 36% of the average. The chum salmon harvest was the eighth highest on record.

Stock composition estimates indicated approximately 120,000 Chilkoot Lake sockeye salmon were harvested as determined by scale pattern analysis. This estimate is 1.9 times the recent 10-year average. The commercial harvest of Chilkat Lake sockeye salmon was approximately 36,000 fish, 80% of the average. The estimated harvest of sockeye salmon originating from areas other than Chilkat and Chilkoot Lakes in Lynn Canal was approximately 33,000 fish, about 1.2 times the average. The majority of this harvest originates from the mainstem Chilkat River and Berners Bay River systems.

The 2016 total District 15 chum salmon harvest of 932,000 fish was about 85% of the average. Hatchery contributions of chum salmon from remote release sites at Boat Harbor and Amalga Harbor contributed the majority (based on otolith marking results) of the 900,000 chum salmon harvest through SW 33 (August 13). Chum salmon harvests in the district from SW 34 through the end of the season (August 14 through September 28) are considered fall chum salmon and are predominantly Chilkat River drainage stocks. An estimated 32,000 fall chum salmon were harvested in this fishery. This harvest is 49% of the average of 65,000 fish. The department managed the fall season fishery conservatively in 2016 to ensure escapement of Chilkat River fall chum salmon.

No openings occurred in Berners Bay in 2016 due to expected average returns of coho salmon to Section 15-B streams and adequate harvest opportunities in Section 15-C.

Section 15-A Sockeye Salmon Fishery

The 2016 Lynn Canal drift gillnet season was opened according to regulation on Sunday, June 19 (Table 15). Summer season management of Section 15-A was directed at harvesting returns of Chilkat Lake and Chilkoot Lake sockeye salmon, while minimizing the harvest of a predicted weak run of Chilkat River Chinook salmon. The east side of Section 15-A was opened for two days south of the latitude of Talsani Island in SW 26 (June 19–21) and SW 27 (June 26–28), with a six-inch maximum mesh size restriction in place. In SW 28 (July 3–6), the mesh restriction was lifted and two days were given in the same area, with a one-day extension. Chilkoot Lake sockeye salmon escapements were below the cumulative lower bound goal and continued conservation concerns for Chilkat River Chinook salmon indicated that the areas north of this latitude should not be open.

In SW 29 (July 10–12), Chilkoot Lake sockeye salmon escapement improved. All of Section 15-A south of the latitude of Seduction Point was open for two days allowing the fishing fleet more area to harvest Chilkat and Chilkoot sockeye salmon stocks while continuing to protect Chilkat River Chinook salmon. In SW 30 (July 17–19) and SW 31 (July 24–26), Chinook conservation measures ended. Although sockeye salmon catches in the Chilkat River fish wheels were average, the sockeye salmon escapement into Chilkat Lake was weak and projecting a final escapement below goal. Accordingly, Chilkat Inlet remained closed. Continued average sockeye salmon escapement to Chilkoot Lake led to three days of fishing south of Seduction Point in SW 30 and two days in SW 31.

A slowing of the sockeye salmon escapement at the Chilkoot River weir and continued weakness at the Chilkat Lake weir resulted in a one-day opening south of Seduction Point in SW 32. A very strong Chilkoot sockeye salmon harvest in SW 32 indicated the presence of a large body of sockeye salmon. This was confirmed by a surge in escapement at the Chilkoot River weir. In SW 33, this led to a four-day opening to the terminus of the Chilkoot River mouth on the

Chilkoot side, with the continued closure of Chilkat Inlet. The opening of Mud Bay allowed for an increase in the harvest rate of Chilkat and Chilkoot Lakes sockeye salmon.

Section 15-A Fall Chum and Coho Fishery

Fall fishery management in Section 15-A focused on the harvest of Chilkat River fall chum, coho, and late run Chilkoot and Chilkat Lakes sockeye salmon beginning in SW 34 (August 15–19). In SW 34, all of Section 15-A south of Seduction Point was open for two days and Chilkat Inlet was also open south of Glacier Point. In order to harvest the late Chilkoot Lake sockeye salmon return, yet reduce the harvest of milling Chilkat Lake sockeye salmon, the Chilkoot side was open for four days from the latitude of Mud Bay Point to the terminus of the Chilkoot River. In SW 35 (Aug 21–24), Chilkat Inlet south of Glacier Point and the part of Section 15-A south of Seduction Point were again open for two days. The Chilkoot/Lutak Inlet area was reduced to a three-day opening with the north line moved back from the terminus of the Chilkoot River to the White Rock line, allowing some of the late sockeye salmon run to reach the river.

Continued projection of a below goal sockeye salmon escapement into Chilkat Lake led to the closing of Chilkat Inlet in SW 36 (Aug 28–31) and moving the south line on the Chilkoot Inlet side up to the Katzehin Buoy. This reduced the harvest of Chilkat River sockeye salmon in Mud Bay and Twin Coves. The SW 36 opening was for two days south of Seduction Point and for three days in Chilkoot Inlet. Fishing time for SW 37 (September 4–6) was two days and the management decisions reflected the fact that most of the Chilkat Lake sockeye salmon had passed through the fishery by this time and the fleet switched nets to focus on chum and coho salmon. With an above average fish wheel catch of chum salmon, Chilkat Inlet was opened to Glacier Point. Chilkoot Inlet remained open to the White Rock line to harvest sockeye salmon, with Mud Bay open to allow opportunity to harvest milling chum and coho salmon.

Fishing time for SW 38 (September 11–14) was initially two days and was extended for an additional 24 hours with the same lines as in SW 37. The Chilkat River fish wheels were indicating a projected escapement of chum salmon within the goal range, although there were early indications that the coho return might be below average. Chum salmon harvests were low, with a heavy algal bloom cutting down gear efficiency. The opening in SW 39 (September 18–20) was two days, with Chilkat Inlet again open to Glacier Point, and the north line on the Chilkoot side moved down to Tanani Point. Fish wheel catches were good for both coho and chum salmon, and the SW 38 chum salmon harvest was about 75% of the recent 10-year average. Much of the chum salmon harvest occurred on the Chilkoot side, with little harvest or effort in Chilkat Inlet. Fishing time in SW 40 was again two days, and the line on the Chilkat side was moved up to the north end of Kochu Island to provide more harvest opportunity for chum and coho salmon. With chum and coho salmon harvest rates well below average and weakness in the fish wheel catch for both species, the season was closed in SW 41.

Section 15-B and 15-C Fisheries

Due to adequate coho salmon harvest opportunity in Section 15-C, Section 15-B was not open to commercial fishing in 2016.

Fishing effort in Lynn Canal during the summer season was concentrated in Section 15-C where the fleet targeted returns of hatchery summer chum salmon originating from remote release sites at Amalga and Boat Harbors. Two days of fishing were allowed in Section 15-C including the Boat Harbor Terminal Harvest Area during the initial week of the season, SW 26 (June 19–21).

The eastern side of Section 15-C was closed north of the latitude of Point Bridget to provide a refuge for milling stocks of Berners River and Chilkoot and Chilkat lakes sockeye salmon until assessments of run strengths were made. A six-inch maximum mesh size restriction was imposed in Section 15-C for Chinook salmon conservation purposes. The western side of Section 15-C north of the latitude of Danger Point was closed to protect returns of wild Endicott River pink and chum salmon and other wild salmon stocks migrating to streams in this part of the district. The area north of Danger Point remained closed through the end of SW 33 (August 7–9).

In SW 27 (June 26–29), Section 15-C was open for two days south of the latitude of Point Bridget and south of the latitude of Danger Point within two miles of the western shoreline of Lynn Canal. To provide additional harvest opportunity for enhanced chum salmon, there was a one-day extension in SW 27 in the "postage stamp" area south and east of Vanderbilt Reef; the six-inch maximum mesh restriction remained in effect. Fishing time in SW 28 (July 3-7) was initially two days south of Point Bridget, with an additional day in the postage stamp area. A six-inch minimum mesh size net restriction was imposed to reduce the harvest of sockeye stocks. Both the Chilkoot River weir and the Chilkat River fish wheels had below average sockeye salmon counts. A good harvest of chum salmon led to a 48-hour extension of the larger area, superseding the postage stamp opening.

Fishing time in SW 29 (July 10–14) was again initially two days south of Point Bridget and was then extended for two more days in the postage stamp area only. There was no mesh restriction in place this week and the sockeye salmon harvest was close to the 10-year average. This was the peak of the chum salmon harvest. In SW 30 (July 17–20), the opening was two days south of Point Bridget and was extended for 24 hours. The chum salmon harvest was less than half that of the previous week. But the sockeye harvest of 24,500 fish was close to the historic maximum for this week and was composed of about 65% Chilkoot Lake fish. Fishing time in SW 31 (July 24–27) was initially two days in the postage stamp area, and extended an additional day in the same area. This allowed the fleet to focus on chum salmon while minimizing the harvest of projected weak stocks of Chilkat Lake sockeye salmon.

In SW 32 (July 31–August 1), the opening was set for one day south of Point Bridget to allow for the continued harvest of chum salmon but taking fishing effort off northbound sockeye salmon stocks. Although Chilkoot Lake sockeye salmon escapement was within the total escapement goal range, the weekly escapement was well below the weekly goal range. The Chilkat Lake weir sockeye salmon escapement was below average and projecting an escapement below goal. Fishing time in SW 33 (July 7–9) was two days with the entire section open except the area within two nautical miles of the western shoreline north of the latitude of Danger Point. The open area allowed for the harvest of chum and sockeye salmon returns while protecting wild chum and pink salmon returns to small systems along the western shore.

Section 15-C Fall Chum and Coho Fishery

Section 15-C was managed for Lynn Canal coho and fall chum salmon from SW 34 (August 14–20) through the end of the season (September 28). Due to low harvests and projected weak returns of Berners and Chilkat River coho salmon, all of Section 15-C was closed for SW 34. In SW 35 (August 21–23) and SW 36 (August 28–30), the openings were two days each week in the area south of the latitude of Point Bridget. The opening of the southern portion of the Section allowed for harvest of coho salmon while protecting Chilkat Lake bound sockeye milling in the area north of Point Saint Mary. All of Section 15-C was opened for two days in SW 37

(September 4–6) and the harvest of coho was above average, with the chum harvest below average. Fishing effort was near average and the CPUE for each species was above average. In SW 38 (September 11–15), all of 15-C was initially open for two days and the entire area was then extended for two more days. All of Section 15-C was open for two days in SW 39 (September 18–20) and for 3 days in SW 40 (September 25–28). Fish wheel catches for both species fell sharply and the season closed in SW 41. Fall season effort in Section 15-C was average to below average with coho and fall chum salmon harvests estimated at 15,000 and 5,200 fish, respectively. This harvest was about two thirds the average harvest for coho and 40% of the average harvest of fall chum salmon.

District 15 Escapements

The total sockeye salmon visual count through the Chilkoot River weir was 86,700 fish, which was just over the SEG range of 38,000–86,000 fish and above the recent 10-year average of 71,000 fish. In addition, 2 Chinook, 50 coho, 8,400 pink, and 100 chum salmon were enumerated at the weir. Weekly weir passage rates of Chilkoot Lake sockeye salmon started slowly, with only 7,500 fish through the weir by the end of SW 27, well below the cumulative weekly goal of 12,700 sockeye salmon. Escapement picked up to within the weekly goals for the next two weeks, then slowed in SW 33, falling under the lower bound of the weekly goal. A record surge of 40,000 sockeye salmon across the weir in SW 32 quickly brought the cumulative escapement to near the upper end of the goal. Fishing effort was adjusted to rapidly harvest the concentrated body of fish that were still in salt water. The Chilkoot River weir count in SW 33 was close to the upper bound of the weekly goal but the count was consistently below the goal for the subsequent weeks. The weir was removed on September 9, and the combined sockeye salmon escapement count for the last four weeks of operation was less than half the normal escapement for that period. This year there was one flood event that required the weir to be partially pulled for 27 hours on July 28 and July 29. The final count reflects an interpolated escapement estimate for this time period. The pink salmon weir count of 8,400 fish was 37% of the historical even-year average of 23,000 fish. A large part of the pink salmon return spawns below the weir and the weir count does not represent the total pink salmon escapement to the Chilkoot River.

A DIDSON acoustic camera was used to enumerate sockeye salmon 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 provide scale data for the Lynn Canal stock separation project. Sockeye salmon are also examined for marks 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 are marked with fin clips and released back into the river. Recapture events are conducted on selected spawning ground locations on the Chilkat River mainstem to determine the ratio of tagged sockeye salmon in the population. This information is used to generate a population estimate of the Chilkat River mainstem sockeye salmon escapement. Recapture events at the Chilkat Lake weir provide information on migration timing but are not extensive enough at this time to provide a significant population estimate. Fish wheel catch is also used to judge the relative strength of the salmon run during the migration. The total Chilkat Lake sockeye salmon DIDSON/weir count was 85,900 sockeye salmon and within the BEG range of 70,000–150,000 fish. The DIDSON was shut off on October 11 and the weir was removed the same day.

The mark–recapture escapement estimate for Chilkat River mainstem sockeye salmon is 61,000 fish in 2016. This estimate is about twice the 1999–2015 average escapement of 30,000 mainstem sockeye salmon.

The preliminary mark–recapture escapement estimate for Chilkat River Chinook salmon is 1,373 age 1.3 and older fish. This estimate is 37% of the historical 1991–2015 average and below the escapement goal range of 1,850–3,600 large Chinook salmon.

Pink and chum salmon aerial peak escapement counts conducted along streams on the western shorelines of Lynn Canal were below average. Aerial peak escapement counts for these species on the eastern side of Lynn Canal were below average for both species.

Fall chum salmon escapement is measured by indexing the total fish wheel catch of this species. The index is based on a mark–recapture study conducted in 2001–2004 when it was estimated that the lower Chilkat River fish wheel project captures approximately 1.55% of this run annually. The 2016 fall chum salmon fish wheel catch of 3,346 fish from this project resulted in an estimated escapement of approximately 216,000 fish, well within the escapement goal range of 75,000–250,000 chum salmon. The 2016 estimated escapement is 72% of the 2006–2015 average index estimate of 300,000 chum salmon. The peak aerial survey count of 2,300 chum salmon in the Klehini River was below average but did not include the very dense escapement that occurred in the multiple spawning channels that have been constructed near Herman Creek. The Chilkat River fall chum salmon aerial escapement surveys indicated that returns of this portion of the run were below average. A peak count of 11,000 chum salmon was observed in the Chilkat River in the fall of 2016. This peak aerial count is below the average of 40,000 fish.

Based on the expansion of index surveys conducted throughout the Chilkat River drainage, approximately 27,700 coho salmon returned to spawn in the Chilkat River drainage. This estimate is below both the historical average and the BEG range of 30,000–70,000 fish. Due to low water conditions not all stream surveys were completed this year.

Aerial surveys conducted at Berners Bay streams indicated a peak sockeye salmon escapement of 1,500 fish in the Berners River, 500 fish in the Lace River, and 300 fish in the Antler/Gilkey River system. The peak aerial counts indicate a below average to average sockeye salmon escapement into the drainages of Berners Bay. The Berners River coho salmon escapement was estimated to be 8,400 fish. This escapement is below the recent 10-year average (8,800 fish) and within the BEG range of 5,000–11,500 fish.

HATCHERY HARVESTS

Privately operated hatcheries contributed Chinook, sockeye, coho, pink, and chum salmon to the 2016 commercial drift gillnet and purse seine fisheries. Hatchery-produced salmon are harvested in traditional common property fisheries, common property hatchery terminal area fisheries, spring troll fisheries, Annette Island Reservation 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 to 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 BOF. In several locations, THAs must be managed in cooperation with hatchery organizations to provide for broodstock needs and cost-recovery

harvests. Hatchery SHAs are opened so hatchery operators can harvest returning fish to pay for operating costs (cost recovery) 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 CWT recovery information and through thermal otolith mark recoveries. CWT tagging rates for salmon hatchery releases are specified in hatchery annual management plans. Harvests of returning adults are randomly sampled by ADF&G port sampling programs and are used to estimate hatchery-produced coho and Chinook salmon production. Thermal otolith marks are used to estimate chum or sockeye salmon 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. Although there is currently no coordinated, region-wide program in place to sample and evaluate returning adults, since 2006 SSRAA has evaluated traditional and terminal fisheries in Districts 1–8. DIPAC has evaluated harvests at specific delivery locations in northern Southeast Alaska, and NSRAA has sampled primarily in THA fisheries.

In 2016, 74% of the 31.7 million total all-gear salmon harvest was harvested in traditional fisheries, 8% in THA fisheries, 11% in hatchery cost recovery fisheries, and 6% in Annette Island Reservation fisheries (Conrad and Gray 2017). Of 9.1 million chum salmon harvested in 2016, 40% were harvested in traditional areas, 25% were harvested in hatchery THAs, 30% were harvested in cost recovery fisheries, and 4% were harvested in the Annette Island Reservation fisheries. Chum salmon harvests in 2016, in both purse seine and drift gillnet common property fisheries, were in large part due to hatchery production.

In 2016, Southeast Alaska common property harvests of 5.9 million enhanced fish are estimated to account for 22% of overall harvests and 34% of exvessel value (Stopha 2017). The 2016 common property harvest proportions of enhanced salmon in the region included 13% of Chinook, 11% of sockeye, 19% of coho, 1% of pink, and 81% of chum salmon. For comparison, the 2015 common property harvest proportions of enhanced salmon were 20% of Chinook, 4% of sockeye, 30% of coho, 1% of pink, and 81% of chum salmon (Stopha 2016); and 2014 harvests of enhanced fish in common property fisheries were 12% of overall harvests and included: 13% of Chinook, 7% of sockeye, 27% of coho, 1% of pink, and 85% of chum salmon (Vercessi 2015).

TRADITIONAL COMMON PROPERTY HARVESTS

Chinook salmon are intensively sampled in common property fisheries to provide for abundance-based harvests allowed under the PST, to comply with allocations established for the different gear groups, and to manage spring troll and net fisheries to benefit from Chinook salmon produced by Alaska hatchery programs. CWT are intensively sampled in fisheries to provide accounting for these various purposes.

In 2016, purse seine fisheries harvested 19,700 large Chinook salmon and 143 jacks in traditional fisheries, and 7,700 large Chinook salmon and 52 jacks in terminal area fisheries (Table 2). Based on CWT recoveries, Alaska hatcheries contributed 1,300 large Chinook salmon in traditional areas, 7% of total traditional harvests (ADF&G, CWT Lab, 2017). Chinook salmon non-retention was not in place for the 2016 season. Traditional area harvests were highest in

District 4 with 12,200 Chinook salmon (62%) and District 2 with 4,400 Chinook salmon (22%). An accounting of PST Chinook salmon harvests is preliminary at this time. Total purse seine PST harvests are estimated at 20,300 out of 28,200 total large Chinook salmon harvested in common property and Annette Island Reserve fisheries. Most of the seine harvest of Alaska hatchery-produced Chinook salmon, estimated at 6,000 fish, came from terminal area fisheries.

In 2016, drift gillnet fisheries harvested 14,300 Chinook salmon in traditional area fisheries and 6,400 in hatchery terminal area fisheries for a total harvest of 20,700 fish (Table 18). Based on CWT recoveries, Alaska hatcheries contributed 10,300 Chinook salmon to traditional area fisheries (ADF&G CWT Lab 2017). The largest traditional area harvest occurred in District 8 with 10,000 fish harvested, 70% of the combined traditional area Chinook salmon harvests. Of Chinook salmon harvest in District 8, over 76% were produced by Alaska hatcheries. Directed Chinook salmon fisheries occurred in District 8 for one day for the first 3 weeks in May based on the preseason forecasts. Directed fishing was closed for the remainder of the season once inseason information indicated there was no U.S. AC. No directed fisheries occurred in the other TBR fishery in District 11. Area restrictions were applied to protect Chinook salmon during openings directed at sockeye salmon harvests in both Districts 8 and 11.

An accounting of PST Chinook salmon gillnet harvests is preliminary at this time. Total common property fishery traditional gillnet harvests are estimated to include 12,800 large Chinook salmon, Annette Island Reservation harvests of 700 fish, and TBR fishery harvests of 400 fish. Of the 20,700 total Chinook salmon harvest by common property drift gillnet gear (Table 18), 5,300 of these fish applied to the PST. Most of the remainder of large Chinook salmon originated from Alaska hatcheries.

The total common property purse seine harvest of coho salmon in 2016 was 257,000 fish (Table 1). Of these, 248,000 fish (97%) were harvested in traditional fisheries and 9,000 fish (3%) were harvested in terminal areas (Table 2). Hatchery coho salmon contributions to the traditional area purse seine fishery, based on Alaska hatchery CWT recoveries, are estimated at 29,000 fish, or 11% of the traditional area harvests (ADF&G, CWT Lab 2017). The largest numbers of enhanced coho salmon in traditional fisheries included 18,000 fish in District 4, 2,000 fish in District 2, and 1,000 fish in District 3.

Drift gillnet fisheries harvested 264,000 coho salmon in common property fisheries, including 256,000 fish (97%) in traditional fisheries and 8,000 fish (3%) in hatchery terminal areas (Table 18). Alaska hatchery coho salmon contributions to the traditional drift gillnet fisheries based on CWT recoveries are estimated at 78,000 fish, or 30% of the total harvest from traditional areas (ADF&G, CWT 2017). Enhanced coho salmon harvests were primarily taken in two districts: 65% (51,000 fish) were from District 6 and 10% (8,000 fish) were from District 8.

Of 611,000 sockeye salmon harvested in common property purse seine fisheries in 2016, most (99%) were from traditional fisheries and were from wild stocks (Table 2). Approximately 1,500 enhanced sockeye salmon were taken in purse seine fisheries. The total run produced by the Snettisham Hatchery in 2016 was 296,000 sockeye salmon (Stopha 2017).

In 2016, 622,000 sockeye salmon were harvested in common property drift gillnet fisheries; 542,000 fish (87%) were harvested in traditional fisheries and 81,000 fish (13%) were harvested in terminal harvest areas (Table 18). Contributions of enhanced sockeye salmon to traditional fisheries are also from Taku River (Tatsamenie Lake) and Stikine River (Tahltan and Tuya Lakes) enhancement projects. Harvest in the District 11 traditional drift gillnet fishery included

less than 1% of the total harvest. Harvest in the District 6 fishery included 8,700 enhanced fish from the Stikine enhancement projects, 4,300 fish from Tuya Lake and 4,500 fish from Tahltan Lake, 8% of the total harvest. Harvest in the District 8 fishery included 22,000 enhanced fish from the Stikine enhancement projects, 8,600 fish from Tuya Lake and 13,400 fish from Tahltan Lake, 31% of the total harvest. Terminal harvest area sockeye salmon harvests included 12,000 fish in the Boat Harbor THA and 67,000 fish in the Speel Arm SHA.

The regionwide common property harvest of pink salmon by purse seine and drift gillnet gear was 16.5 million fish in 2016 out of total harvests of 18.4 million (Conrad and Gray 2017). Hatchery operators estimated hatchery pink salmon production harvested in common property fisheries to be 129,000 fish, 0.6% of total commercial harvest (Stopha 2017). Since pink salmon are generally not marked, the basis of operator's estimates is somewhat uncertain. The Port Armstrong Hatchery (AKI), Sitka Sound Science Center (SSSC), and Kake Non-Profit Fisheries Corporation all produce pink salmon.

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, and therefore returns as reported in this section are based on hatchery operators' best estimates.

Regional common property harvest by purse seine and drift gillnet was 5.8 million chum salmon in 2016, 55% of the most recent 10-year average total harvest of 10.5 million (Conrad and Gray 2017). The estimated contribution of enhanced chum salmon to common property purse seine and drift gillnet fisheries is 86% (Stopha 2017).

The purse seine fisheries harvest of 3.1 million chum salmon was 79% of the most recent 10-year average harvest of 3.9 million fish (Table 1). Harvests included 1.8 million fish from traditional fishery areas (59%) and 1.3 million fish from hatchery terminal harvest areas (41%; Table 2). The estimate of hatchery contributions to common property purse seine fisheries, as reported by hatchery operators, is 2.5 million fish, 80% of total purse seine harvests (Stopha 2017). Separate hatchery chum salmon contribution estimates are not available for traditional and terminal areas.

The drift gillnet common property harvest of 2.7 million chum salmon was 94% of the most recent 10-year average harvest of 2.9 million fish (Table 17). Harvests included 1.7 million fish in traditional fishery areas (65%) and 0.9 million fish from hatchery terminal areas (35%; Table 18). The estimate of hatchery contributions to common property drift gillnet fisheries, as reported by hatchery operators, is 2.5 million fish, 94% of total drift gillnet harvests (Stopha 2017). Separate hatchery chum salmon contribution estimates are not available for traditional and terminal areas.

TERMINAL HARVEST AREA AND SPECIAL HARVEST AREA COMMON PROPERTY HARVESTS

Neets Bay

The Neets Bay THA and SHA (Subdistrict 101-95) is managed in consultation with SSRAA to provide for broodstock and cost recovery. Surplus returns also provide some opportunity for common property harvest. Neets Bay is SSRAA's primary cost recovery location, with other terminal areas designated as common property harvest locations. In 2016, the majority of the summer chum salmon harvested inside Neets Bay, 168,000 or 22%, was harvested by the purse seine gear group, and 600,000 or 78% was harvested for cost recovery. Terminal area seine harvests also included 3,900 Chinook and 300 coho salmon (Table 24). Terminal area gillnet harvests included 4,500 chum, 1,800 Chinook, and no coho salmon (Table 25). Cost recovery totals were 600,000 chum, 36,000 coho, and 2,700 Chinook salmon (Table 26).

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 12 through July 4 on a rotational basis between the drift gillnet and purse seine fleets to target excess Chinook salmon (Tables 9 and 16). As a conservation measure to protect Unuk River Chinook salmon, the Neets Bay THA closed for 5 days during the rotational periods in SW 24–26. The Neets Bay THA did not open for common property harvest during August and September in the 2016 season.

Based on otolith sampling, SSRAA has estimated the total traditional commercial common property harvest for enhanced Neets Bay salmon for all gear groups was 2,700 Chinook, 82,000 coho, 381,000 summer chum, and 47,000 fall chum salmon. The summer chum salmon total run of 1,420,000 fish was 115% of the preseason forecast of 1,237,000 fish. The fall chum salmon total run of 219,000 fish was 87% of the preseason forecast of 250,000 fish.

Nakat Inlet

The Nakat Inlet THA (Subdistrict 101-10) was opened in 2016 for troll and drift 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 in SW 23 to November 10 in SW 46 (Table 16) with a drift gillnet harvest of 3,600 coho and 171,000 chum salmon (Table 25). Although the Nakat Inlet THA was open to troll gear, no documented troll gear landings occurred. Based on otolith sampling and analysis by SSRAA, approximately 136,000 Nakat Inlet chum salmon were harvested in the drift gillnet traditional common property fisheries, and an additional 35,000 chums were harvested in the traditional common property purse seine fisheries. The total estimated run of 271,000 summer chum salmon was 104% of the preseason forecast of 260,000. The fall chum salmon run of 71,000 fish was 86% of the 82,800 fall chum salmon forecast.

Kendrick Bay

The Kendrick Bay THA (Subdistrict 102-15) was opened in 2016 for access by the purse seine fleet to harvest returning chum salmon produced by SSRAA. The Kendrick Bay THA opened by regulation on June 15 for the purse seine fleet and remained open through September 30 (Table 9). The harvest consisted of 2,200 sockeye, 3,500 coho, 92,000 pink, and 154,000 summer chum salmon (Table 24). Additional chum salmon returning to Kendrick Bay were harvested outside of the THA along the eastern shoreline of Prince of Wales Island during one 1-day and two 4-day enhanced chum salmon directed fisheries prior to SW 29, June 19–July 4

(Table 8). Harvest in those openings outside of the normal common property openings totaled 279,000 chum salmon. The total enhanced summer chum salmon run for Kendrick Bay was 846,000 fish, 97% of the preseason forecast of 868,000 fish.

Anita Bay

Anita Bay THA is opened each year to allow the harvest of Chinook, chum, and coho salmon produced by SSRAA. These fish are predominantly harvested by the drift gillnet and purse seine fleets. Anita Bay THA is the only common property terminal hatchery fishery in Districts 5–10. The area was open to net and troll fleets concurrently from May 1 through June 12 (Tables 9 and 16). From June 13 through August 30, the fishery operated on a rotational basis for net gear with purse seine and drift gillnet fleets alternating openings; the purse seine fleet fished first. There is no closed period for troll gear. During June and July, rotational schedules start and end at noon with the THA closed to nets for 24 hours between each gear rotation. Prior to 2009, the rotation in Anita Bay was on a 2:1 ratio, with the drift gillnet fleet fishing for 48 hours followed by the seine fleet fishing 24 hours. In 2009, the rotation ratio changed to 1:1 to address imbalances in the enhanced salmon allocation. In 2015 and 2016, rotations were 1:1 from June 13 through July 24 and switched to 2:1 for the duration of the rotational schedule, which ended on August 30. The first gillnet effort in Anita Bay occurred during SW 19 (May 1–7) and the first seine effort occurred during SW 25 (June 12–18). The last fishing effort recorded for the seine fleet occurred during SW 35 (August 21–27) and the last recorded effort by the gillnet fleet occurred during SW 39 (September 18–October 24). Purse seiners harvested 1,500 Chinook, 500 sockeye, 700 coho, 9,500 pink, and 61,400 chum salmon (Table 24). Gillnetters harvested 2,000 Chinook, 200 sockeye, 2,400 coho, 500 pink, and 72,200 chum salmon (Table 25).

Speel Arm

In District 11, the DIPAC midpoint forecast for total Snettisham Hatchery sockeye salmon runs (including Sweetheart Creek) for 2016 was 254,000 fish from their 2011 and 2012 brood year smolt releases. The estimated total return was 277,000 sockeye salmon including broodstock. A fishery in the full Speel Arm SHA would not be considered until the lower bound of the 4,000–9,000 sockeye salmon BEG was assured. In SW 33 (August 9), with approximately 3,000 sockeye salmon through the weir and another 700 fish estimated in the creek below the weir (90% of the lower bound accounted for), the SHA was opened south of the latitude of Bride Point and was scheduled to close concurrently with the remainder of the district, which had also been extended 24 hours, at noon on August 11. On the morning of August 11, the department was appraised that approximately 3,500 sockeye salmon had moved through the weir and an additional 1,000 fish were observed in the creek below the weir. With the minimum of the escapement goal accounted for, the entire Speel Arm SHA was opened until further notice at 6:00 p.m. on August 11. Eighty boats harvested 37,800 sockeye salmon and small numbers of other species of salmon in the SHA during the last four days of SW 33. The Speel Arm SHA remained open until September 15 in SW 38. An additional 28,900 sockeye salmon were harvested in the next three weeks for a total SHA harvest of 66,700 fish (Table 25). During the last two weeks the SHA was opened, there was no reported effort or harvest. The final escapement to Speel Lake documented at the DIPAC operated weir was 5,538 sockeye salmon, within the BEG. The DIPAC Snettisham Hatchery contributed a minimum of 124,000 hatchery sockeye salmon to harvests in the District 11 common property commercial drift gillnet fishery.

Hidden Falls

In District 12, NSRAA forecasted a return to the Hidden Falls THA of 194,000 coho, 5,400 Chinook, and 1,433,000 chum salmon for 2016. Under the authority of Alaska Statute 16.10.455, in order to derive the necessary revenues, the NSRAA Board of Directors requested that the Department of Revenue assess a $0.10 per pound tax of all chum salmon harvested in waters described in 5 AAC 33.374(f) which includes the Hidden Falls THA and adjacent subdistricts. Under this plan, all of the chum salmon returning to the Hidden Falls Hatchery except the 160,000 needed for broodstock would be available to the common property fishery. Openings began June 19 with two additional 15-hour periods, June 23 and June 26, before the fishery was closed due to weak catches and a low abundance of chum salmon. Only 16,000 chum salmon were harvested during these openings (Table 24). The fishery was not opened again until August 12 and was opened for one 15-hour period before closing for the season. Minimal effort occurred during this fishing period. Approximately 195,000 chum salmon were harvested for cost recovery and 202,000 chum salmon for broodstock needs, for a total return of 413,000 chum salmon, 18% of forecast.

Medvejie/Deep Inlet

In District 13, NSRAA forecasted a return to the Medvejie Hatchery in Silver Bay and the Deep Inlet THA of 31,200 Chinook, 62,000 coho salmon, and 1,782,000 chum salmon for 2016. 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 and purse seine gear outside of the THA, and by the NSRAA cost-recovery fishery in the Deep Inlet and Silver Bay SHAs. NSRAA's cost-recovery goal this season was approximately 400,000 chum salmon.

In 2015, the BOF adopted regulations requiring a time ratio for drift gillnet openings to purse seine openings of 2:1 for the 2015–2017 seasons with the exception that from the third Sunday in June through statistical week 30, the time ratio for drift gillnet openings to purse seine openings is 1:1. However, if the postseason preliminary enhanced salmon harvest value data from the previous season indicates the purse seine gear group is within its enhanced salmon allocation percentage range, based on the 5-year rolling average as described in 5 AAC 33.364, the time ratio for drift gillnet openings to purse seine openings is 2:1 for the entire season. Trolling is allowed when net fisheries are closed.

By emergency order, issued under 5 AAC 39.265, harvesters participating in the Deep Inlet THA fishery were required to retain and utilize all salmon harvested during the 2016 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 ADF&G and NSRAA would 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 four days for gillnet and two days for seine per week (Tables 9 and 16). The June fishing period primarily provides an opportunity to harvest Chinook salmon returning to the Medvejie Hatchery and Deep Inlet. In 2016, drift gillnet fishermen were required to fish with a minimum mesh size of six inches prior to June 18 to reduce the harvest of local wild sockeye salmon returning to Silver Bay. During the period of May 29–June 18, the 2:1 rotational schedule provided for seining on Sunday and Wednesday, and gillnetting on Monday, Tuesday, Thursday, and Friday. For the period of June 19–July 23, the 1:1 rotational schedule provided for seining on Sunday, Thursday, and Friday; gillnetting on

Monday, Tuesday, and Wednesday; and trolling on Saturday of each week. For the period July 24–October 1, the time ratio was 2:1 gillnet to seine, with the same weekly schedule as the June period. The Deep Inlet THA was closed from July 6-14 to facilitate collection of early run chum salmon needed for broodstock at the Hidden Falls Hatchery and from August 6-26 to facilitate collection of cost recovery chum salmon. For the season, the total harvest in the Deep Inlet THA as reported on fish tickets included gillnet harvests of 2,400 Chinook, 22,000 pink, and 447,000 chum salmon; seine harvests of 1,400 Chinook, 57,000 pink, and 610,000 chum salmon; and troll harvests of 7,100 chum salmon (Tables 24 and 25). The total chum salmon run to Deep Inlet and Medvejie Hatchery, including broodstock and cost recovery, was approximately 1,629,000 chum salmon, or about 91% of forecast.

Boat Harbor

The inside portion of the Boat Harbor Terminal Harvest Area (BHTHA), west of department markers at the entrance to Boat Harbor, was opened seven days per week, continuously from the start of the season (June 19) through SW 36 (August 30). The remainder of the BHTHA, 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 2.1 nautical miles north of Point Whidbey at 58°37.05′ N latitude, was opened for two days in SW 26 (June 19–21) and two days in SW 27 (June 26–28). In SW 28, the BHTHA open area was changed with the northern and southern lines remaining the same but the area open only within one nautical mile of the western shoreline. This reduction in area was implemented to reduce the harvest of both Chilkat Lake bound sockeye salmon and Endicott River bound chum salmon. This area was open continuously beginning in SW 28 (July 3) until it closed in SW 33 (August 9). The northern line of the BHTHA remained at the latitude of Danger Point throughout the season to further protect Endicott River summer chum salmon and other wild salmon stocks milling in the area between Danger Point and Lance Point, a portion of the BHTHA that has been open in previous years. The number of boats participating each week was below average in the first four weeks of the season, above average in SW 31 and SW 32, and below average for the remainder of the season. Commercial harvests of salmon from the BHTHA included 27 Chinook, 12,200 sockeye, 239,000 chum, 46 coho, and 15,700 pink salmon (Table 25). The Chinook salmon harvest was about 25% of the recent 10-year average, the sockeye salmon harvest was 108% of the average, the chum salmon harvest was 94% of the average, the coho salmon harvest was 29% of the average, and the pink salmon harvest was 25% of the recent 10-year average.

HATCHERY COST RECOVERY HARVESTS

Hatchery cost recovery harvests were reported by seven private non-profit hatchery permit holders from 16 locations during 2016 (Table 26). Total landings were 3.4 million salmon, 89% of the recent 10-year average harvest of 3.9 million fish (Table 27). The harvest included 11,000 Chinook, 148,000 sockeye, 226,000 coho, 331,000 pink, and 2.7 million chum salmon. Chum salmon made up 79% of the total cost recovery harvest in the region in numbers of fish, and chum salmon harvest was 91% of the recent 10-year average. Cost recovery harvests of Chinook, pink, coho, and chum salmon were below average, while sockeye salmon was above average.

Cost-recovery harvests for the 2016 season are summarized by location, enhancement organization, and species in Table 26, including totals by organization. Locations of hatchery SHAs are shown in Figure 2. In decreasing order of magnitude, chum salmon harvests by location included: 690,000 fish by DIPAC at Amalga Harbor, 600,000 fish by SSRAA at Neets

Bay, 390,000 fish by DIPAC at Gastineau Channel, 366,000 fish by NSRAA at Deep Inlet, and 221,000 fish by KNFC at Gunnuk Creek. Pink salmon harvests were well below average including 190,000 fish by the Sitka Sound Science Center and 129,000 fish at Port Armstrong. Coho salmon cost recovery harvests were highest at Port Armstrong with 100,000 fish, Mist Cove with 45,000 fish, Neets Bay with 36,000 fish, Klawock River with 28,000 fish, and Gastineau Channel with 11,000 fish. Chinook salmon cost recovery harvests included 3,800 fish at Silver Bay, 2,700 fish at Neets Bay, and 1,900 fish at Herring Cove.

SSRAA conducted cost recovery at the Neets Bay, Herring Cove, and Burnett Inlet SHAs. Total harvest for all three locations included 600,000 chum, 41,000 coho, and 4,500 Chinook salmon.

DIPAC conducted cost recovery at the Gastineau Channel, Amalga Harbor, and Speel Arm SHAs. Total harvest for these locations included 1.1 million chum, 11,000 coho, and 148,000 sockeye salmon. Harvests in this area were lower than run strength would otherwise have allowed since DIPAC had retired much of the organization's long-term debt and in response the DIPAC board elected to provide common property purse seine openings in the Amalga Harbor SHA.

NSRAA conducted cost recovery at the Deep Inlet, Silver Bay, Hidden Falls, and Mist Cove SHAs. Total harvest for the four locations included 746,000 chum, 46,000 coho, and 4,600 Chinook salmon. Beginning in 2012, NSRAA working with the Department of Revenue, elected to assess a 10% tax of the value of all chum salmon harvested in waters of the Hidden Falls Hatchery SHA and nearby waters in accordance with AS 16.10.455. *Cost Recovery Fisheries*. By invoking this provision, common property seine fisheries in the THA could occur on a regular basis, without disruptions to provide for cost recovery, and cost recovery harvests at this location would be reduced.

Kake Non-Profit Fishery Corporation (KNFC) conducted cost recovery at the Gunnuk Creek and Southeast Cove SHAs. Total harvest was 229,000 chum salmon.

Armstrong Keta, Inc. (AKI)/NSRAA conducted cost recovery at the Port Armstrong SHA. Total harvest included 74,000 chum, 129,000 pink, 100,000 coho, and 1,200 Chinook salmon.

Prince of Wales Hatchery Association (POWHA) conducted cost recovery at the Klawock Hatchery and in Port Saint Nicholas Bay in 2016. Total harvest was 28,000 coho salmon and 500 Chinook salmon.

The Sitka Sound Science Center (SSSC) conducted cost recovery at the Crescent Bay SHA. Total harvest was 190,000 pink salmon, and 2,600 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 PST, which has provided for international harvest sharing arrangements between the two nations since 1985.

STIKINE RIVER

Harvest share arrangements for salmon originating in the Canadian portion of Stikine River vary by species. Harvest shares for Chinook salmon are only pertinent to large (greater than 659 METF length) fish. Chinook salmon harvest share provisions were developed to acknowledge the traditional catches in fisheries (BLCs), which occurred prior to 2005; these included incidental catches in Canadian and U.S. commercial gillnet fisheries, U.S. and Canadian sport fisheries, the Canadian First Nation fishery, and Chinook salmon assessment/test fishery. Finally, for each country, Chinook salmon ACs are based on a sliding scale determined by the magnitude of the TAC after escapement and BLCs are accounted. For sockeye salmon, the harvest sharing objective for the 2016 season was to equally share the TAC of Stikine River sockeye salmon. For coho salmon, Canada was allowed a harvest of 5,000 coho salmon in a directed coho salmon fishery. There are no harvest share agreements for pink and chum salmon.

Canada harvests Stikine River salmon in two commercial fisheries, a First Nation food fishery and test fisheries. The Lower River Commercial Fishery (LRCF) takes place immediately above the U.S./Canada border to about 10 miles above the border. Typically about 12 permit holders participate in the fishery, which accounts for the majority of Canada's salmon harvest. The Upper River Commercial Fishery (URCF) takes place about 150 miles up river near Telegraph Creek; it usually consists of only one permit holder and the harvest is relatively small. The food fishery takes place around Telegraph Creek and at the mouth of the Tahltan River. There are three test fisheries on the Stikine River: Chinook salmon assessment/test fishery, lower river sockeye salmon test fishery, and the Tuya test fishery. The Chinook salmon assessment/test fishery is a key component of the Stikine River Chinook salmon stock assessment program, occurs when there is no directed commercial fishing from SW 19 through SW 25, takes place near the border, and has a limit of 1,400 large Chinook salmon. The lower river sockeye salmon test fishery is for sockeye salmon stock assessment purposes, takes place near the border, and is typically fished from SW 26 through SW 35. The Tuya test fishery was first implemented in 2008 with the intent to harvest excess Tuya River sockeye salmon and occurs in late July/early August on the mainstem of the Stikine River between the Tahltan and Tuya rivers. It has not been implemented since 2014.

Preseason forecasts of Stikine River Chinook salmon provided an AC of 4,740 fish for Canada and therefore triggered directed commercial fisheries. A total of 3,134 large Chinook salmon and 1,339 nonlarge Chinook salmon were harvested in the Canadian Lower River commercial fishery. The 2016 harvests from the combined Canadian commercial, food, and sport fisheries in the Stikine River included 2,731 large Chinook salmon and 794 nonlarge Chinook salmon. An additional 504 large Chinook salmon and 55 nonlarge Chinook salmon were harvested in Canadian sockeye salmon test fisheries. Canada's directed and base level fishery harvest of 4,233 large Chinook salmon was above their TAC (combined AC of 0 fish and BLC of 2,300 fish; Table 28).

Preseason forecasts of the Stikine River sockeye salmon run were used to guide the initial fishing patterns as required by the TBR Annex of the PST. The preseason forecast was used in SW 26 and the SMM was used beginning in SW 28. Starting in SW 28, weekly inputs of harvest, effort, and stock composition were entered into the SMM to provide a weekly forecast of run size and TAC.

Canada's directed sockeye salmon fisheries commenced in SW 26. The LRCF was open for directed sockeye salmon fishing from SW 26 through SW 34 and weekly openings were one to four days in duration. The total sockeye salmon harvest in the LRCF was 75,738 sockeye salmon, including 13 fish harvested in the directed Chinook salmon fishery and 2,148 fish harvested in the directed coho salmon fishery. The URCF was open for two weeks, SW 29 and SW 30, for a total harvest of 333 sockeye salmon. The food fishery harvested 10,644 sockeye salmon. An additional 1,760 sockeye salmon were harvested in test fisheries. Canada's total harvest of Stikine River sockeye salmon in 2016 was 88,648 fish. Of these, 86,715 fish counted towards Canada's AC of 96,175 Stikine River sockeye salmon.

Canada harvested a total of 5,486 coho salmon. The harvest included 4,957 fish in directed coho salmon fishing and 140 coho salmon harvested in test fisheries.

TAKU RIVER

The base harvest sharing objective for Taku River sockeye salmon allows the U.S. to harvest 82% of the TAC and Canada to harvest 18%. The actual harvest share for the season is calculated on a sliding scale, dependent on the run size of adult sockeye salmon returning from the U.S./Canada fry planting program. If the estimated escapement is projected to be above 120,000 wild sockeye salmon, Canada may, in addition to its share of the TAC, harvest the projected surplus apportioned by run timing. The fishery is managed inseason based on wild fish and postseason performance is based on all fish. A fishery directed at Taku River Chinook salmon is allowed when run strength warrants. Management of the directed Chinook salmon fishery is abundance-based through an approach developed by the TBR Technical Committee providing each country harvest shares dependent on overall run size. In early 2015, the TBR Panel accepted a bilaterally reviewed Taku River coho salmon BEG with a range of 50,000 to 90,000 fish and a point goal of 70,000 fish. Both countries reached agreement on management targets for harvest sharing to be in place for the 2016 season; the U.S. would manage its fisheries to pass a minimum of 75,000 coho salmon above the U.S./Canada border and Canada would manage its fisheries to ensure a minimum escapement past all fisheries of 70,000 fish.

The Taku River Canadian commercial, aboriginal, and recreational fisheries combined harvest was 609 large Chinook salmon (greater than 659 mm METF, and mostly 3-ocean age or older), 205 nonlarge Chinook, 37,501 sockeye, and 9,513 coho salmon in 2016 (Table 29). An additional 1,021 large Chinook, 144 nonlarge Chinook, 2,007 coho, and 123 sockeye salmon were harvested in assessment fisheries. Sockeye salmon originating from Taku River fry plants contributed an estimated 4,300 fish to the harvest, making up 11% of the total sockeye harvest. The harvest of large and nonlarge Chinook salmon, in all fisheries, was below the recent 10-year average. In 2005, as a result of the new Chinook salmon agreement that allows directed Chinook salmon fishing if abundance warrants, harvest accounting for small salmon was revised from a commercial weight-based designation (previously referred to "jacks," which were typically fish under 6.25 lb or 11 lb, depending on where they were marketed), to a length-based designation ("nonlarge" Chinook salmon; i.e., less than 660 mm METF). Hence, comparisons with harvests prior to 2005 should be viewed accordingly. In 2016, sockeye salmon harvest was above, and coho salmon harvests were below their respective recent 10-year averages. The 67 days of commercial fishing for the season was above the recent ten-year average (not including directed Chinook salmon commercial or assessment fisheries). The seasonal fishing effort of 314 permit-days was slightly below average. As in recent years, both set and drift gillnets were used, with

the majority of the harvest taken in drift gillnets. The maximum allowable mesh size was 8.0 inches except for the period from June 19 (SW 26) through July 23 (SW 30), at which time it was reduced to 5.5 inches in order to minimize incidental catch of Chinook salmon.

Adult sockeye salmon enumeration weirs operated at Little Trapper, Tatsamenie, Kuthai, and King Salmon Lakes provide information on the distribution and abundance of discrete spawning stocks within the watershed. A mark–recapture program has been operated annually since 1984 in the Taku River to estimate the above-border run size for sockeye salmon; total spawning escapement is then estimated by subtracting the above-border harvest from the mark–recapture estimate. The preliminary 2016 Taku River above-border run estimate is 213,900 sockeye salmon and the spawning escapement is estimated at 176,400 fish. This escapement estimate is above the escapement target range of 71,000 to 80,000 sockeye salmon. The Canadian harvest of 33,300 wild sockeye salmon represented approximately 17% of the TAC and was below Canada's harvest share of 23% of the TAC plus the surplus escapement above 120,000 fish.

The Little Trapper Lake weir count was 7,771 sockeye salmon, which is 93% of the recent 10-year average. There was no broodstock collection at Little Trapper Lake in 2016. The Tatsamenie Lake weir count of 32,934 sockeye salmon is the highest count on record, 385% of the recent 10-year average of 8,546 fish. A total of 1,048 fish were held for broodstock, which left a spawning escapement of 31,886 fish. The sockeye salmon count through the Kuthai Lake weir was 1,496 fish, 176% of the recent 10-year average. The sockeye salmon count through the King Salmon Lake weir was 6,388 fish, 276% of the recent 10-year average. Spawning escapement of coho salmon in the Canadian portion of the Taku River drainage was estimated from the joint Canada/U.S. mark–recapture program. Tag application occurred from June 29 (SW 27) until September 26 (SW 40) and recovery occurred until October 8 (SW 41). The tag recovery effort occurred in both the commercial fishery and in an assessment fishery. The preliminary postseason above-border coho salmon run estimate is 99,200 fish; taking into account the inriver catch of 11,520 fish (included are harvests of 9,466 commercial, 2,007 assessment, and 47 aboriginal) leaves a spawning escapement estimate of 87,700 fish. This is below the recent 10-year average of 91,700 fish but within the newly adopted escapement goal range of 50,000 to 90,000 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, although fish 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 and purse seine fleets.

The total 2016 Annette Island salmon harvest by all gears was reported as 1,700 Chinook, 22,000 sockeye, 46,000 coho, 1.4 million pink, and 396,000 chum salmon. The Annette Island Reserve reported gillnet fishery harvests of 900 Chinook, 4,000 sockeye, 36,000 coho, 273,000 pink, and 243,000 chum salmon (Table 30). Gillnet harvests were around average for all species except sockeye salmon which was well below recent and long-term averages. Chinook salmon harvest was 88%, sockeye salmon was 39%, coho salmon was 90%, pink salmon was 95%, and chum salmon was 116% of their respective 10-year averages. The Annette Island Reserve reported purse seine fishery harvests were 900 Chinook, 18,000 sockeye, 10,000 coho, 1.1 million pink, and 152,000 chum salmon (Table 31). Seine harvests were above the recent 10-year averages for

all species. The purse seine harvest of pink salmon was 126% of the recent 10-year average of 907,000 fish. Annette Island all-gear pink salmon harvests of 1.4 million fish were 26% of total all-gear pink salmon harvests in District 1. Annette Island all-gear chum salmon harvests of 396,000 fish were 43% of total all-gear chum salmon harvests in District 1.

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TABLES AND FIGURES

Table 1.–Southeast Alaska annual commercial, common property, purse seine salmon harvest (from traditional and terminal areas), in numbers of salmon, by species, 1986–2016.

Year	Chinook[a]	Jacks[a]	Sockeye	Coho	Pink	Chum	Total	Rank[b]
1986	12,113	1,158	587,730	568,410	42,788,318	2,198,907	46,156,636	17
1987	4,498	1,786	310,282	121,974	7,018,562	1,234,552	8,691,654	50
1988	11,137	1,028	654,748	157,003	8,825,252	1,625,435	11,274,603	47
1989	13,098	4,005	823,185	330,989	52,070,066	1,079,555	54,320,898	11
1990	11,323	3,454	965,918	372,471	27,915,150	1,062,522	30,330,838	25
1991	11,599	5,508	1,051,269	405,592	58,592,358	2,125,308	62,191,634	5
1992	18,024	2,296	1,336,889	488,399	29,769,079	3,193,433	34,808,120	23
1993	8,335	3,956	1,690,471	473,138	53,414,515	4,606,463	60,196,878	6
1994	14,824	6,265	1,430,610	967,691	51,280,083	6,376,472	60,075,945	7
1995	25,075	1,702	907,120	617,777	43,498,508	6,600,529	51,650,711	12
1996	22,224	931	1,514,523	441,457	61,649,487	8,918,577	72,547,199	3
1997	10,309	532	1,578,021	183,693	24,782,485	5,863,603	32,418,643	24
1998	14,469	1,698	732,790	464,716	38,436,679	9,406,979	49,057,331	15
1999	17,888	2,961	425,298	416,415	71,961,636	8,944,184	81,768,382	2
2000	20,703	1,341	489,257	206,479	18,156,691	8,306,257	27,180,728	27
2001	19,730	2,584	1,013,151	542,643	61,951,322	4,436,178	67,965,608	4
2002	17,145	1,580	154,478	469,680	42,137,936	3,110,330	45,891,149	18
2003	24,054	1,182	681,418	394,168	49,894,749	4,336,128	55,331,699	10
2004	39,297	687	900,557	399,267	42,596,809	5,684,447	49,621,064	14
2005	19,694	727	898,515	341,295	55,746,479	2,817,026	59,823,736	8
2006	24,730	1,240	413,938	109,498	10,117,941	5,614,232	16,281,579	39
2007	27,092	1,306	1,063,704	247,568	42,078,209	3,043,839	46,461,718	16
2008	15,488	530	74,389	208,196	14,297,381	3,215,231	17,811,215	37
2009	28,922	966	307,436	283,431	34,946,847	3,502,998	39,070,600	19
2010	15,764	787	151,270	192,465	20,556,774	3,234,567	24,151,627	30
2011	25,984	1,786	499,289	347,132	55,251,280	2,701,643	58,827,114	9
2012	20,920	793	170,345	275,426	19,172,555	4,826,746	24,466,785	28
2013	22,859	1,657	282,350	545,667	88,764,579	5,797,941	95,415,053	1
2014	27,185	1,105	900,955	388,692	33,471,883	2,384,335	37,174,155	21
2015	29,522	545	908,663	284,301	32,224,601	4,827,047	38,274,679	20
2016	27,368	195	610,598	257,091	15,393,318	3,109,269	19,397,839	36
Averages								
1960-2015[c]	15,324	1,005	600,046	328,277	27,691,492	2,924,449	31,560,593	
2006-2015[d]	23,847	1,072	477,234	288,238	35,088,205	3,914,858	39,793,453	
Max. harvest[e]	39,297	6,265	1,690,471	967,691	88,764,579	9,406,979	95,415,053	
Max. year	2004	1994	1993	1994	2013	1998	2013	
Min. harvest[e]	1,428	166	61,784	70,193	2,572,279	332,514	3,789,373	
Min. year	1976	1983	1975	1975	1960	1969	1960	

[a] Chinook salmon are 28″ or greater from the tip of snout to tip of tail; jacks are less than 28″.

[b] Rank is based on total harvest for years 1960 to 2016.

[c] Equals the long-term average harvest. Harvests from 1960 to 1985 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 2016.

Table 2.–2016 Southeast Alaska commercial purse seine salmon harvest by district, fishery, and species.

Fishery	Chinook[a]	Jacks[a]	Sockeye	Coho	Pink	Chum	Total
District 1							
Traditional	1,950	20	95,134	29,083	4,750,752	309,695	5,186,634
Terminal Harvest Area	3,944	8	74	272	3,361	167,913	175,572
Annette Island	876	0	18,387	10,142	1,145,221	152,374	1,327,000
Hatchery Cost Recovery	44	0	2	0	106	33,804	33,956
District 2							
Traditional	4,399	23	55,852	63,962	3,144,580	794,950	4,063,766
Terminal Harvest Area	633	0	2,152	3,548	92,463	153,829	252,625
District 3							
Traditional	410	1	16,640	14,602	1,101,000	20,203	1,152,856
District 4							
Traditional	12,206	16	405,989	123,696	3,659,894	348,647	4,550,448
District 5							
Traditional	0	0	0	4	92	132	228
District 6							
Traditional	79	22	11,236	6,207	452,987	14,148	484,679
District 7							
Traditional	570	51	9,541	3,891	613,148	210,567	837,768
Terminal Harvest Area	1,536	25	515	663	9,505	61,436	73,680
District 9							
Traditional	0	2	19	57	3,392	592	4,062
Hatchery Cost Recovery	598	0	0	72,243	21,842	27,661	122,344
District 10							
Traditional	1	1	17	46	2,650	324	3,039
District 11							
Terminal Harvest Area	31	18	2,684	130	2,367	252,496	257,726
Hatchery Cost Recovery	105	0	2,144	76	1,798	866,955	871,078
District 12							
Traditional	16	6	6,126	1,021	146,675	31,743	185,587
Terminal Harvest Area	79	1	435	158	7,036	15,929	23,638
District 13							
Traditional	75	1	2,944	5,657	1,346,473	116,423	1,471,573
Terminal Harvest Area	1,439	0	1,240	4,094	56,943	610,242	673,958
Hatchery Cost Recovery	1,074	0	5	222	170,010	164,674	335,985
District 14							
Traditional	0	0	0	0	0	0	0
Southern Subtotals							
Traditional	19,614	133	594,392	241,445	13,722,453	1,698,342	16,276,379
Terminal Area Harvest	6,113	33	2,741	4,483	105,329	383,178	501,877
Annette Island	876	0	18,387	10,142	1,145,221	152,374	1,327,000
Hatchery Cost Recovery	44	0	2	0	106	33,804	33,956
Subtotal	26,647	166	615,522	256,070	14,973,109	2,267,698	18,139,212
Northern Subtotals							
Traditional	92	10	9,106	6,781	1,499,190	149,082	1,664,261
Terminal Area Harvest	1,549	19	4,359	4,382	66,346	878,667	955,322
Hatchery Cost Recovery	1,777	0	2,149	72,541	193,668	1,077,337	1,347,472
Subtotal	3,418	29	15,614	83,704	1,759,204	2,105,086	3,967,055
Total Southeast							
Traditional	19,706	143	603,498	248,226	15,221,643	1,847,424	17,940,640
Terminal Area Harvest	7,662	52	7,100	8,865	171,675	1,261,845	1,457,199
Subtotal (Traditional and THA)	27,368	195	610,598	257,091	15,393,318	3,109,269	19,397,839
Hatchery Cost Recovery	1,821	0	2,151	72,541	193,774	1,111,141	1,381,428
Annette Island	876	0	18,387	10,142	1,145,221	152,374	1,327,000
Miscellaneous	4	0	3,088	1,121	30,265	36,422	70,900
Total	30,069	195	634,224	340,895	16,762,578	4,409,206	22,177,167

[a] Chinook salmon are 28″ or greater from the tip of snout to tip of tail; jacks are less than 28″.

Table 3.–2016 Southeast Alaska fishery exvessel value by area gear type and species, estimated by prices reported on fish tickets.

Fishery	Chinook	Sockeye	Coho	Pink	Chum	Total
Purse Seine						
Southern Seine	$801,366	$4,734,332	$623,652	$12,309,040	$8,763,445	$27,231,835
Northern Seine	$3,771	$72,529	$17,497	$1,344,773	$769,263	$2,207,834
Terminal Seine	$313,045	$56,552	$22,898	$153,992	$6,511,120	$7,057,607
Total Seine Value	$1,118,182	$4,863,413	$664,048	$13,807,806	$16,043,828	$36,497,277
Drift Gillnet						
Tree Point	$53,359	$311,673	$460,126	$506,602	$1,301,827	$2,633,587
Prince of Wales	$93,815	$832,822	$1,210,998	$323,553	$619,663	$3,080,851
Stikine	$449,095	$547,747	$219,644	$31,831	$954,707	$2,203,024
Taku-Snettisham	$26,075	$1,158,207	$341,626	$40,335	$2,129,757	$3,696,000
Lynn Canal	$20,071	$1,379,311	$302,380	$59,830	$3,296,999	$5,058,592
Terminal Gillnet	$285,030	$630,483	$83,262	$78,909	$4,444,847	$5,522,531
Total Gillnet Value	$927,446	$4,860,244	$2,618,035	$1,041,060	$12,747,800	$22,194,584
Set Gillnet (Yakutat)						
Set Gillnet Value	$6,006	$724,968	$1,204,108	$21,952	$1,163	$1,958,197
Troll						
Total Troll Value	$17,507,147	$42,073	$13,722,420	$51,545	$893,602	$32,216,786
Annette Island Reservation	$66,226	$141,984	$356,365	$1,341,658	$2,111,541	$4,017,774
Hatchery Cost Recovery	$341,549	$911,433	$1,637,938	$309,366	$20,338,518	$23,538,804
Miscellaneous	$54,954	$24,690	$22,968	$30,628	$190,139	$323,380
Total Salmon Value	$20,021,510	$11,568,805	$20,225,882	$16,604,015	$52,326,590	$120,746,802

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.–Southeast Alaska purse seine and drift gillnet fishery values in dollars (common property harvest), from 1975 to 2016.

Year	Purse Seine	Drift Gillnet
1975	$6,097,904	$4,144,342
1976	$11,064,253	$8,605,228
1977	$24,528,760	$11,849,486
1978	$27,664,646	$9,750,459
1979	$19,632,769	$11,434,552
1980	$29,487,986	$9,388,349
1981	$36,786,344	$9,393,150
1982	$28,147,770	$10,423,447
1983	$33,292,294	$7,602,633
1984	$35,000,066	$13,498,190
1985	$52,018,934	$17,083,901
1986	$53,893,815	$14,585,793
1987	$22,739,529	$19,227,191
1988	$53,314,374	$32,342,986
1989	$91,241,060	$20,578,737
1990	$44,821,503	$16,439,366
1991	$36,071,105	$12,037,061
1992	$51,054,882	$20,850,361
1993	$52,894,318	$15,904,271
1994	$61,164,567	$17,207,769
1995	$55,806,812	$16,899,040
1996	$42,813,455	$14,430,995
1997	$40,813,997	$11,143,699
1998	$45,509,746	$11,345,286
1999	$56,402,089	$11,489,118
2000	$38,060,764	$10,940,909
2001	$48,742,800	$11,316,836
2002	$20,244,170	$8,132,853
2003	$26,705,739	$8,903,210
2004	$31,672,452	$11,778,867
2005	$36,073,649	$12,753,519
2006	$27,536,028	$20,007,955
2007	$49,646,050	$15,081,267
2008	$40,986,039	$24,209,429
2009	$48,417,377	$18,578,453
2010	$56,238,100	$26,618,998
2011	$122,177,082	$31,126,506
2012	$73,082,389	$37,475,213
2013	$154,063,995	$29,456,345
2014	$58,358,331	$28,379,708
2015	$55,228,071	$20,621,205
2016	$36,497,277	$22,194,584

Note: Data from CFEC basic information tables, 1975–2015 (CFEC 2017).
Fish ticket data for 2016.

Table 5.–Northern Southeast annual commercial, common property, purse seine salmon harvest (from traditional and terminal areas), in numbers of salmon, by species, 1986–2016.

Year	Chinook[a]	Jacks[a]	Sockeye	Coho	Pink	Chum	Total	Rank[b]
1986	751	633	18,583	17,786	933,928	947,510	1,919,191	51
1987	643	1,038	77,112	28,425	3,852,989	833,647	4,793,854	37
1988	631	520	13,323	24,973	1,299,946	653,809	1,993,202	50
1989	547	2,191	98,365	56,522	11,969,441	336,503	12,463,569	22
1990	490	1,217	38,502	43,382	4,082,182	603,299	4,769,072	38
1991	1,859	2,845	72,281	105,849	16,970,650	1,063,401	18,216,885	13
1992	807	1,979	108,331	162,953	12,568,844	1,948,819	14,791,733	18
1993	1,513	3,445	162,153	114,213	16,914,761	3,004,370	20,200,455	12
1994	4,453	5,864	181,038	467,296	31,389,894	4,781,593	36,830,138	4
1995	24,217	927	67,414	223,204	5,409,068	4,310,379	10,035,209	27
1996	21,300	695	111,604	137,603	9,564,130	6,246,728	16,082,060	14
1997	6,275	407	51,465	68,142	11,776,742	3,534,803	15,437,834	16
1998	6,442	1,556	107,675	161,419	16,702,595	4,800,326	21,780,013	10
1999	13,843	2,309	104,204	232,408	35,180,383	6,148,309	41,681,456	3
2000	18,228	1,055	73,008	62,307	7,323,135	6,232,888	13,710,621	19
2001	12,099	1,275	170,705	116,404	13,328,220	2,203,419	15,832,122	15
2002	11,281	954	54,488	219,569	20,793,646	2,057,813	23,137,751	9
2003	6,894	371	146,108	96,735	22,380,951	2,864,976	25,496,035	7
2004	8,990	596	323,489	166,735	23,070,456	4,098,981	27,669,247	6
2005	4,437	335	163,058	133,199	28,624,647	1,835,247	30,760,923	5
2006	5,258	1,056	67,697	46,870	7,548,334	3,810,988	11,480,203	23
2007	7,323	730	90,682	56,240	11,943,703	1,242,925	13,341,603	20
2008	7,807	297	5,631	17,846	1,974,550	2,332,622	4,338,753	40
2009	6,460	479	65,475	36,611	10,603,951	2,427,762	13,140,738	21
2010	6,490	520	29,484	46,565	9,157,767	1,921,639	11,162,465	25
2011	8,188	1,536	212,067	229,200	45,588,738	1,171,844	47,211,573	1
2012	5,828	264	22,298	12,233	1,843,648	2,036,133	3,920,404	44
2013	8,421	724	111,603	213,995	39,322,373	4,512,883	44,169,999	2
2014	2,144	132	18,691	30,130	3,487,391	1,285,687	4,824,175	35
2015	4,748	279	180,578	90,746	20,959,462	2,209,458	23,445,271	8
2016	1,641	29	13,465	11,163	1,565,536	1,027,749	2,619,583	46
Averages								
1960-2015[c]	5,144	649	121,780	101,572	10,151,216	1,784,818	12,165,178	
2006-2015[d]	6,267	602	80,421	78,044	15,242,992	2,295,194	17,703,518	
Max. harvest[e]	24,217	5,864	353,618	467,296	45,588,738	6,246,728	47,210,364	
Max. harvest year	1995	1994	1965	1994	2011	1996	2011	
Min. harvest[e]	12	29	5,286	1,744	80,819	30,357	156,706	
Min. harvest year	1976	2016	1975	1976	1976	1977	1976	

[a] Chinook salmon are 28″ from the tip of snout to tip of tail; jacks are less than 28″.

[b] Rank is based on total harvest for years 1960 to 2016.

[c] Equals the long-term average harvest. Harvests from 1960 to 1985 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 2016.

Table 6.–Southern Southeast Alaska annual commercial, common property, purse seine salmon harvest (from traditional and terminal areas), in numbers of salmon, by species, 1986–2016.

Year	Chinook[a]	Jacks[a]	Sockeye	Coho	Pink	Chum	Total	Rank[b]
1986	11,362	525	569,147	550,624	41,854,390	1,251,397	44,237,445	4
1987	3,855	748	233,170	93,549	3,165,573	400,905	3,897,800	53
1988	10,506	508	641,425	132,030	7,525,306	971,626	9,281,401	42
1989	12,551	1,814	724,820	274,467	40,100,625	743,052	41,857,329	6
1990	10,833	2,237	927,416	329,089	23,832,968	459,223	25,561,766	18
1991	9,740	2,663	978,988	299,743	41,621,708	1,061,907	43,974,749	5
1992	17,217	317	1,228,558	325,446	17,200,235	1,244,614	20,016,387	23
1993	6,822	511	1,528,318	358,925	36,499,754	1,602,093	39,996,423	9
1994	10,371	401	1,249,572	500,395	19,890,189	1,594,879	23,245,807	19
1995	858	775	839,706	394,573	38,089,440	2,290,150	41,615,502	7
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	26
1998	8,027	142	625,115	303,297	21,734,084	4,606,653	27,277,318	16
1999	4,045	652	321,094	184,007	36,781,253	2,795,875	40,086,926	8
2000	2,475	286	416,249	144,172	10,833,556	2,073,369	13,470,107	32
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	20
2003	17,160	811	535,310	297,433	27,513,798	1,471,152	29,835,664	12
2004	30,307	91	577,068	232,532	19,526,353	1,585,466	21,951,817	21
2005	15,257	392	735,457	208,096	27,121,832	981,779	29,062,813	15
2006	19,472	184	346,241	62,628	2,569,607	1,803,244	4,801,376	49
2007	19,769	576	973,022	191,328	30,134,506	1,800,914	33,120,115	10
2008	7,681	233	68,758	190,350	12,322,831	882,609	13,472,462	31
2009	22,462	487	241,961	246,820	24,342,896	1,075,236	25,929,862	17
2010	9,274	267	121,786	145,900	11,399,007	1,312,928	12,989,162	33
2011	17,796	250	287,222	117,932	9,662,542	1,529,799	11,615,541	38
2012	15,092	529	148,047	263,193	17,328,907	2,790,613	20,546,381	22
2013	14,438	933	170,747	331,672	49,442,206	1,285,058	51,245,054	3
2014	25,041	973	882,264	358,562	29,984,492	1,098,648	32,349,980	11
2015	24,774	266	728,085	193,555	11,265,139	2,617,589	14,829,408	30
2016	25,727	166	597,133	245,928	13,827,782	2,081,520	16,778,256	27
Averages								
1960-2015[c]	10,180	356	478,265	226,702	17,540,216	1,139,600	19,395,319	
2006-2015[d]	17,580	470	396,813	210,194	19,845,213	1,619,664	22,089,934	
Max. harvest[e]	30,307	2,663	1,528,318	550,624	52,085,357	4,606,653	56,465,139	
Max. year	2004	1991	1993	1986	1996	1998	1996	
Min. harvest[e]	858	60	49,124	22,228	448,928	35,467	988,340	
Min. year	1995	1983	1971	1969	1967	1969	1969	

[a] Chinook salmon are 28″ from the tip of snout to tip of tail; jacks are less than 28″.

[b] Rank is based on total harvest for years 1960 to 2016.

[c] Equals the long-term average harvest. Harvests from 1960 to 1985 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 2016.

Table 7.–Commercial purse seine fishing time, in hours open per day and statistical week by district and section, for Northern Southeast Alaska in 2016 (gray shading indicates no fishery occurred in this area on this date).

			Districts Subdivided into Sections										
			9	9	10	12	12	13	13	13	14	14	14
Week	Date	Days	A	B	All	A	B	A	B	C	A	B	C
26	19-Jun	Sun				15							
	20-Jun	Mon											
	21-Jun	Tue											
	22-Jun	Wed											
	23-Jun	Thu											
	24-Jun	Fri											
	25-Jun	Sat											
27	26-Jun	Sun				15							
	27-Jun	Mon											
	28-Jun	Tue											
	29-Jun	Wed											
	30-Jun	Thu											
	1-Jul	Fri											
	2-Jul	Sat											
28	3-Jul	Sun				15							
	4-Jul	Mon											
	5-Jul	Tue											
	6-Jul	Wed											
	7-Jul	Thu											
	8-Jul	Fri											
	9-Jul	Sat											
29	10-Jul	Sun				15							
	11-Jul	Mon											
	12-Jul	Tue											
	13-Jul	Wed											
	14-Jul	Thu											
	15-Jul	Fri											
	16-Jul	Sat											
30	17-Jul	Sun				15							
	18-Jul	Mon											
	19-Jul	Tue											
	20-Jul	Wed											
	21-Jul	Thu											
	22-Jul	Fri											
	23-Jul	Sat											

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Table 7.–Page 2 of 2.

			Districts Subdivided into Sections											
			9	9	10	12	12	13	13	13	14	14	14
Week	Date	Days	A	B	All	A	B	A	B	C	A	B	C
31	24-Jul	Sun					15		15		15		
	25-Jul	Mon											
	26-Jul	Tue											
	27-Jul	Wed											
	28-Jul	Thu											
	29-Jul	Fri											
	30-Jul	Sat											
32	31-Jul	Sun							15		15		
	1-Aug	Mon											
	2-Aug	Tue											
	3-Aug	Wed											
	4-Aug	Thu							19		15		
	5-Aug	Fri							20				
	6-Aug	Sat											
33	7-Aug	Sun											
	8-Aug	Mon				15			19		19		
	9-Aug	Tue		15					20		20		
	10-Aug	Wed											
	11-Aug	Thu											
	12-Aug	Fri		15		15			15				
	13-Aug	Sat											
34	14-Aug	Sun											
	15-Aug	Mon							15		15		
	16-Aug	Tue											
	17-Aug	Wed											
	18-Aug	Thu							15		15		
	19-Aug	Fri											
	20-Aug	Sat											
35	21-Aug	Sun							15				
	22-Aug	Mon											
	23-Aug	Tue											
	24-Aug	Wed							15				
	25-Aug	Thu											
	26-Aug	Fri											
	27-Aug	Sat											

Table 8.–Commercial purse seine fishing time, in hours open per day and statistical week by district and section, for Southern Southeast Alaska in 2016 (gray shaded cells indicate no fishery occurred for this area and date).

			Districts Subdivided into Sections															
			1	1	1	1	1	1	2	3	3	3	4	5	6	6	7	7
Week	Date	Days	A	B	C	D	E	F		A	B	C			B	D	A	B
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				15					
	4-Jul	Mon							15									
	5-Jul	Tue																
	6-Jul	Wed																
	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						15	15				12					
	15-Jul	Fri																
	16-Jul	Sat																
30	17-Jul	Sun						15	15	15	15		6				15	
	18-Jul	Mon																
	19-Jul	Tue																
	20-Jul	Wed																
	21-Jul	Thu						15	15	15	15						15	
	22-Jul	Fri																
	23-Jul	Sat																

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Table 8.–Page 2 of 3.

			Districts Subdivided into Sections															
			1	1	1	1	1	1	2	3	3	3	4	5	6	6	7	7
Week	Date	Days	A	B	C	D	E	F		A	B	C			B	D	A	B
31	24-Jul	Sun				15		15	15	15		15						
	25-Jul	Mon																
	26-Jul	Tue																
	27-Jul	Wed																
	28-Jul	Thu				15		15	15	15		15				15		15
	29-Jul	Fri																
	30-Jul	Sat																
32	31-Jul	Sun				19		19	19	19		19				19		19
	1-Aug	Mon				20		20	20	20		20				20		20
	2-Aug	Tue																
	3-Aug	Wed																
	4-Aug	Thu				19		19	19	19		19			19	19		19
	5-Aug	Fri				20		20	20	20		20			20	20		20
	6-Aug	Sat																
33	7-Aug	Sun																
	8-Aug	Mon				19		19	19		15	19	15		19	19		19
	9-Aug	Tue				20		20	20			20			20	20		20
	10-Aug	Wed																
	11-Aug	Thu																
	12-Aug	Fri				15		15	15			15	15		15	15		15
	13-Aug	Sat																
34	14-Aug	Sun																
	15-Aug	Mon				15		15	15			15			15	15		
	16-Aug	Tue																
	17-Aug	Wed																
	18-Aug	Thu				15		15				15						
	19-Aug	Fri																
	20-Aug	Sat																
35	21-Aug	Sun																
	22-Aug	Mon																
	23-Aug	Tue																
	24-Aug	Wed																
	25-Aug	Thu																
	26-Aug	Fri																
	27-Aug	Sat																

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			Districts Subdivided into Sections															
			1	1	1	1	1	1	2	3	3	3	4	5	6	6	7	7
Week	Date	Days	A	B	C	D	E	F		A	B	C			B	D	A	B
36	28-Aug	Sun																
	29-Aug	Mon																
	30-Aug	Tue																
	31-Aug	Wed																
	1-Sep	Thu							12									
	2-Sep	Fri																
	3-Sep	Sat																
37	4-Sep	Sun																
	5-Sep	Mon																
	6-Sep	Tue																
	7-Sep	Wed																
	8-Sep	Thu							12									
	9-Sep	Fri																
	10-Sep	Sat																
38	11-Sep	Sun																
	12-Sep	Mon																
	13-Sep	Tue																
	14-Sep	Wed																
	15-Sep	Thu							12									
	16-Sep	Fri																
	17-Sep	Sat																
39	18-Sep	Sun																
	19-Sep	Mon																
	20-Sep	Tue																
	21-Sep	Wed							12									
	22-Sep	Thu																
	23-Sep	Fri																
	24-Sep	Sat																

Table 9.–Commercial purse seine fishing time, in hours open per day and statistical week for Neets Bay, Kendrick Bay, Anita Bay, Hidden Falls, Deep Inlet Terminal Harvest Areas (THA), and Amalga Harbor Special Harvest Area (SHA) in Southeast Alaska in 2016 (gray shaded cells indicate that no fishery occurred for this area and date).

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

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

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Table 9.–Page 3 of 5.

Week	Date	Day	Neets Bay[a]	Kendrick Bay[b]	Anita Bay[c]	Amalga Harbor	Hidden Falls	Deep Inlet
32	31-Jul	Sun		24				15
	1-Aug	Mon		24				
	2-Aug	Tue		24	12			
	3-Aug	Wed		24				15
	4-Aug	Thu		24				
	5-Aug	Fri		24	12			
	6-Aug	Sat		24				
33	7-Aug	Sun		24				
	8-Aug	Mon		24	12			
	9-Aug	Tue		24				
	10-Aug	Wed		24				
	11-Aug	Thu		24	12			
	12-Aug	Fri		24			15	
	13-Aug	Sat		24				
34	14-Aug	Sun		24	12			
	15-Aug	Mon		24				
	16-Aug	Tue		24				
	17-Aug	Wed		24	12			
	18-Aug	Thu		24				
	19-Aug	Fri		24				
	20-Aug	Sat		24	12			
35	21-Aug	Sun		24				
	22-Aug	Mon		24				
	23-Aug	Tue		24	12			
	24-Aug	Wed		24				
	25-Aug	Thu		24				
	26-Aug	Fri		24	12			
	27-Aug	Sat		24				
36	28-Aug	Sun		24				15
	29-Aug	Mon		24	12			
	30-Aug	Tue		24				
	31-Aug	Wed		24				15
	1-Sep	Thu		24	24			
	2-Sep	Fri		24	24			
	3-Sep	Sat		24	24			
37	4-Sep	Sun		24	24			15
	5-Sep	Mon		24	24			
	6-Sep	Tue		24	24			
	7-Sep	Wed		24	24			15
	8-Sep	Thu		24	24			
	9-Sep	Fri		24	24			
	10-Sep	Sat		24	24			
38	11-Sep	Sun		24	24			15
	12-Sep	Mon		24	24			
	13-Sep	Tue		24	24			
	14-Sep	Wed		24	24			15
	15-Sep	Thu		24	24			
	16-Sep	Fri		24	24			
	17-Sep	Sat		24	24			

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Table 9.–Page 4 of 5.

Week	Date	Day	Neets Bay[a]	Kendrick Bay[b]	Anita Bay[c]	Amalga Harbor	Hidden Falls	Deep Inlet
39	18-Sep	Sun		24	24			15
	19-Sep	Mon		24	24			
	20-Sep	Tue		24	24			
	21-Sep	Wed		24	24			15
	22-Sep	Thu		24	24			
	23-Sep	Fri		24	24			
	24-Sep	Sat		24	24			
40	25-Sep	Sun		24	24			15
	26-Sep	Mon		24	24			
	27-Sep	Tue		24	24			
	28-Sep	Wed		24	24			15
	29-Sep	Thu		24	24			
	30-Sep	Fri		12	24			
	1-Oct	Sat			24			
41	2-Oct	Sun			24			
	3-Oct	Mon			24			
	4-Oct	Tue			24			
	5-Oct	Wed			24			
	6-Oct	Thu			24			
	7-Oct	Fri			24			
	8-Oct	Sat			24			
42	9-Oct	Sun			24			
	10-Oct	Mon			24			
	11-Oct	Tue			24			
	12-Oct	Wed			24			
	13-Oct	Thu			24			
	14-Oct	Fri			24			
	15-Oct	Sat			24			
43	16-Oct	Sun			24			
	17-Oct	Mon			24			
	18-Oct	Tue			24			
	19-Oct	Wed			24			
	20-Oct	Thu			24			
	21-Oct	Fri			24			
	22-Oct	Sat			24			
44	23-Oct	Sun			24			
	24-Oct	Mon			24			
	25-Oct	Tue			24			
	26-Oct	Wed			24			
	27-Oct	Thu			24			
	28-Oct	Fri			24			
	29-Oct	Sat			24			
45	30-Oct	Sun			24			
	31-Oct	Mon			24			
	1-Nov	Tue			24			
	2-Nov	Wed			24			
	3-Nov	Thu			24			
	4-Nov	Fri			24			
	5-Nov	Sat			24			

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Table 9.–Page 5 of 5.

Week	Date	Day	Neets Bay[a]	Kendrick Bay[b]	Anita Bay[c]	Amalga Harbor	Hidden Falls	Deep Inlet
46	6-Nov	Sun			24			
	7-Nov	Mon			24			
	8-Nov	Tue			24			
	9-Nov	Wed			24			
	10-Nov	Thu			12			
	11-Nov	Fri						
	12-Nov	Sat						

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

[a] Neets Bay THA: opened continuously to concurrent seine, troll, and gillnet gear from noon, May 1 to noon, June 10. From October 6 through the October 12 season closure the THA was opened continuously to concurrent seine, troll and gillnet gear.

[b] Kendrick Bay THA: open continuously for purse seine gear from June 15 through September 30.

[c] Anita Bay THA: opened continuously to concurrent seine, troll, and gillnet gear from midnight, May 1 to noon, June 11. From midnight, September 1 through the noon, November 10 season closure the THA was open continuously to concurrent seine, troll, and gillnet gear.

Table 10.–2016 Southeast Alaska pink salmon escapement indices and biological escapement goals by subregion (in millions of index fish).

Subregion	2016 Pink Salmon Index	Biological Escapement Goal	
		Lower Bound	Upper Bound
Southern Southeast	6.60	3.00	8.00
Northern Southeast Inside	1.78	2.50	6.00
Northern Southeast Outside	1.70	0.75	2.50
Total	10.08		

Table 11.–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 2007 to 2016.

Sub-region	District	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Lower Management Target	Upper Management Target
SSE[a]	101	+					+	+	+		+	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[b]	109		-				-	+			-	0.63	1.5
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[c]	113					+		+	+	+		0.75	2.50

[a] SSE = Southern Southeast subregion.

[b] NSEI = Northern Southeast Inside subregion.

[c] NSEO = Northern Southeast Outside subregion.

Table 12.–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, 2007–2016.

Sub-region	District	Stock Group	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Lower Management Target	Upper Management Target
SSE[a]	101	E Behm	+		+			+	+	+		+	0.67	1.77
SSE	101	Portland	+	-	+		+	+	+	+		+	0.1	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	+	+					+	+			0.3	0.79
SSE	103	Klawock	+		+				+	+			0.42	1.11
SSE	103	Sea Otter Sound							+				0.1	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[b]	109	E Baranof		-			+	-		-			0.09	0.21
NSEI	109	Eliza Harbor		-	-	-		-		-		-	0.14	0.33
NSEI	109	Saginaw Bay		-	-			-	+		+		0.13	0.3
NSEI	109	SE Baranof		-		-	+	-	+				0.07	0.16
NSEI	109	Tebenkof							+			-	0.21	0.5
NSEI	110	Farragut Bay		-			+		+		+		0.02	0.04
NSEI	110	Houghton		-				-		-		-	0.38	0.9
NSEI	110	Portage Bay		-					+	-			0.03	0.07
NSEI	110	Pybus/Gambier		-	-					-	+	-	0.17	0.4
NSEI	111	Seymour Canal		-	-			-		-		-	0.16	0.4
NSEI	111	Stephens		-			+	-		-		-	0.11	0.25

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Table 12.–Page 2 of 2.

Sub-region	District	Stock Group	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Lower Management Target	Upper Management 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	+	-		-		-		-	+	-	0.1	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[c]	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	0.7
NSEO	113	Slocum Arm							+	+			0.16	0.52
NSEO	113	W Crawfish	+			+		+	+	+	+		0.03	0.1
NSEO	113	Whale Bay	+						+	+	+		0.04	0.15

[a] SSE = Southern Southeast subregion.

[b] NSEI = Northern Southeast Inside subregion.

[c] NSEO = Northern Southeast Outside subregion.

Table 13.–Sustainable escapement goals and escapement indices for Southeast Alaska chum salmon, 1980–2016 (in thousands).

Stock	Southern Southeast	Northern Southeast Inside	Northern Southeast Outside	Cholmondeley Sound	Port Camden	Security Bay	Excursion River	Chilkat River
Enumeration Method	Peak Index	Peak Index	Peak Index	Peak Index	Peak Index	Peak Index	Peak Index	Estimated Escapement
Run-type	Summer	Summer	Summer	Fall	Fall	Fall	Fall	Fall
No. Streams	15	63	9	2	2	1	1	1
1980	85	N/A	N/A	26	6	14	35	N/A
1981	62	N/A	N/A	26	7	4	34	N/A
1982	31	60	13	8	5	12	2	N/A
1983	62	162	25	15	1	5	3	N/A
1984	95	159	89	40	10	19	8	N/A
1985	116	149	54	40	12	21	4	N/A
1986	106	141	40	28	14	12	9	N/A
1987	102	106	25	46	9	11	2	N/A
1988	225	162	29	36	7	16	4	N/A
1989	104	53	18	35	7	8	2	N/A
1990	70	107	35	30	4	20	5	275
1991	86	76	50	58	5	6	1	N/A
1992	101	153	36	37	5	19	3	N/A
1993	159	228	21	46	7	7	8	N/A
1994	119	272	18	43	5	5	4	30
1995	98	209	27	35	3	14	6	72
1996	246	931	37	62	5	19	9	66
1997	77	226	43	31	4	5	34	85
1998	178	197	25	59	6	32	8	127
1999	95	318	27	100	2	20	10	277
2000	153	443	104	36	3	13	17	245
2001	147	229	66	45	*ND*	4	18	305
2002	63	397	23	39	0	6	5	206
2003	74	210	36	75	1	9	6	166
2004	101	242	85	60	3	13	5	329
2005	80	185	82	15	2	3	1	202
2006	80	282	66	54	2	15	2	689
2007	146	149	42	18	1	5	6	323
2008	13	99	56	50	1	12	8	441
2009	46	107	17	39	2	5	1	329
2010	51	77	28	76	5	7	6	89
2011	179	125	25	93	2	5	3	360
2012	155	177	38	54	4	10	2	287
2013	86	278	23	13	2	3	8	166
2014	47	91	28	48	4	6	11	142
2015	115	166	26	73	7	22	12	207
2016	90	66	26	30	5	14	1	218
Goal Range:								
Lower Bound	62	119	25	30	2	5	4	75
Upper Bound	-	-	-	48	7	15	18	250

Note: ND = no data. Survey estimates are based on peak aerial observations and do not represent total escapements.

Table 14.–Escapement estimates for Southeast Alaska sockeye salmon stocks in 2016, compared to escapement goals.

Stock	Goal Type[a]	Estimated Escapement or Index	Escapement Goal Range	Comment	Enumeration Method
Hugh Smith Lake	OEG	12,900	8,000–18,000		Weir Count
McDonald Lake	SEG	15,600	55,000–120,000	Below Goal	Expanded Foot Survey
Stikine—mainstem	SEG	34,600	20,000–40,000		Run Reconstruction
Stikine—Tahltan[b]	BEG	38,600	18,000–30,000	Above Goal	Weir Count
Speel Lake	BEG	5,600	4,000–9,000		Weir Count
Taku—inriver	SEG	151,000	71,000–80,000	Above Goal	Mark–recapture
Redoubt Lake	OEG	22,800	7,000–25,000		Weir Count
Chilkoot Lake	SEG	86,700	38,000–86,000	Above Goal	Weir Count
Chilkat Lake	BEG	85,900	70,000–150,000		Weir/Sonar Count
Situk River	BEG	55,700	30,000–70,000		Weir Count
Lost River	SEG	450	1,000	Below Goal	Peak Boat Survey
Klukshu River[b]	BEG	7,600	7,500–15,000		Weir Count
East Alsek-Doame River	BEG	19,200	13,000–26,000		Peak Aerial Survey

[a] Goal type includes optimal (OEG), sustainable (SEG), and biological (BEG) escapement goals.

[b] Spawning area is located in Canada.

Table 15.–Commercial drift gillnet fishing time, in hours open per day and statistical week by district and section, for Southeast Alaska in 2016. Gray-shaded cells indicate no fishery occurred for this area and date.

			Districts (Subdivided into Sections)									
			1	6		8		11		15		
Week	Date	Day	B	A	B	A	B	B	C	A	B	C
25	12-Jun	Sun										
	13-Jun	Mon		12	12	12	12					
	14-Jun	Tues		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	24		24		24
	21-Jun	Tues	24	24	24	24	24	12		12		12
	22-Jun	Wed	24	24	24	24	24					
	23-Jun	Thu	12	12	12	18	18					
	24-Jun	Fri				24	24					
	25-Jun	Sat				18	18					
27	26-Jun	Sun	12	12	12	12	12	12		12		12
	27-Jun	Mon	24	24	24	24	24	24		24		24
	28-Jun	Tues	24	24	24	24	24	24		12		24
	29-Jun	Wed	24	12	12	12	12	12				12
	30-Jun	Thu	12	18		18	18					
	1-Jul	Fri		24		24	24					
	2-Jul	Sat		18		18	18					
28	3-Jul	Sun	12	12	12	12	12	12		12		12
	4-Jul	Mon	24	24	24	24	24	24		24		24
	5-Jul	Tues	24	24	24	24	24	24		24		24
	6-Jul	Wed	24	12	12	12	12	12		12		24
	7-Jul	Thu	12			18	18					12
	8-Jul	Fri				24	24					
	9-Jul	Sat				18	18					
29	10-Jul	Sun	12	12	12	12	12	12		12		12
	11-Jul	Mon	24	24	24	24	24	24		24		24
	12-Jul	Tues	24	24	24	24	24	24		12		24
	13-Jul	Wed	24	24	24	24	24	24				24
	14-Jul	Thu	12	12	12	12	12	12				12
	15-Jul	Fri				12	12					
	16-Jul	Sat				12	12					
30	17-Jul	Sun	12	12	12	12	12	12		12		12
	18-Jul	Mon	24	24	24	24	24	24		24		24
	19-Jul	Tues	24	24	24	24	24	24		24		24
	20-Jul	Wed	24	24	24	24	24	24		12		12
	21-Jul	Thu	12	12	12	12	12	12				
	22-Jul	Fri										
	23-Jul	Sat										
31	24-Jul	Sun	12	12	12	12	12	12		12		12
	25-Jul	Mon	24	24	24	24	24	24		24		24
	26-Jul	Tues	24	24	24	24	24	24		12		24
	27-Jul	Wed	24	12	12	12	12	24				12
	28-Jul	Thu	12					12				
	29-Jul	Fri										
	30-Jul	Sat										

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			Districts (Subdivided into Sections)									
			1	6		8		11		15		
Week	Date	Day	B	A	B	A	B	B	C	A	B	C
32	31-Jul	Sun	12	12	12	12	12	12		12		12
	1-Aug	Mon	24	24	24	24	24	24		12		12
	2-Aug	Tues	24	24	24	24	24	24				
	3-Aug	Wed	24	12	12	12	12	24				
	4-Aug	Thu	24					12				
	5-Aug	Fri	12									
	6-Aug	Sat										
33	7-Aug	Sun	12	12	12	12	12	12		12		12
	8-Aug	Mon	24	24	24	24	24	24		24		24
	9-Aug	Tues	24	24	24	24	24	24		24		12
	10-Aug	Wed	24	12	12	12	12	24		24		
	11-Aug	Thu	24					12		12		
	12-Aug	Fri	12									
	13-Aug	Sat										
34	14-Aug	Sun	12	12	12	12	12					24
	15-Aug	Mon	24	24	24	24	24	12		12		24
	16-Aug	Tues	24	24	24	24	24	24		24		24
	17-Aug	Wed	24	12	12	12	12	24		24		24
	18-Aug	Thu	12					12		24		24
	19-Aug	Fri								12		24
	20-Aug	Sat										24
35	21-Aug	Sun	12	12	12	12	12	12		12		12
	22-Aug	Mon	24	24	24	24	24	24		24		24
	23-Aug	Tues	24	12	12	12	12	24		24		12
	24-Aug	Wed	24					12		12		
	25-Aug	Thu	12									
	26-Aug	Fri										
	27-Aug	Sat										
36	28-Aug	Sun	12	12	12	12	12	12		12		12
	29-Aug	Mon	24	24	24	24	24	24		24		24
	30-Aug	Tues	24	12	12	12	12	24		24		12
	31-Aug	Wed	24					12		12		
	1-Sep	Thu	12									
	2-Sep	Fri										
	3-Sep	Sat										
37	4-Sep	Sun	12	12	12	12	12	12		12		12
	5-Sep	Mon	24	24	24	24	24	24		24		24
	6-Sep	Tues	24	12	12	12	12	24		12		12
	7-Sep	Wed	24					12				
	8-Sep	Thu	12									
	9-Sep	Fri										
	10-Sep	Sat										
38	11-Sep	Sun	12	12	12	12	12	12		12		12
	12-Sep	Mon	24	24	24	24	24	24		24		24
	13-Sep	Tues	24	12	12	12	12	24		24		24
	14-Sep	Wed	24					24		24		24
	15-Sep	Thu	12					12		12		12
	16-Sep	Fri										
	17-Sep	Sat										

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			Districts (Subdivided into Sections)									
			1	6		8		11		15		
Week	Date	Day	B	A	B	A	B	B	C	A	B	C
39	18-Sep	Sun	12	12	12	12	12	12		12		12
	19-Sep	Mon	24	24	24	24	24	24		24		24
	20-Sep	Tues	24	24	24	24	24	24		12		12
	21-Sep	Wed	24	12	12	12	12	24				
	22-Sep	Thu	12					12				
	23-Sep	Fri										
	24-Sep	Sat										
40	25-Sep	Sun	12	12	12	12	12	12		12		12
	26-Sep	Mon	24	24	24	24	24	24		24		24
	27-Sep	Tues	24	24	24	24	24	24		24		24
	28-Sep	Wed	24	12	12	12	12	24		12		12
	29-Sep	Thu	12					12				
	30-Sep	Fri										
	1-Oct	Sat										
41	2-Oct	Sun		12	12	12	12	12				
	3-Oct	Mon		24	24	24	24	24				
	4-Oct	Tues		12	12	12	12	24				
	5-Oct	Wed						24				
	6-Oct	Thu						12				
	7-Oct	Fri										
	8-Oct	Sat										

Table 16.–Commercial drift gillnet fishing time, in hours open per day and statistical week for Nakat Inlet, Neets Bay, Anita Bay, Speel Arm, Deep Inlet and Boat Harbor Terminal Harvest Areas (THA) in Southeast Alaska in 2016.

Week	Date	Day	Nakat Inlet	Neets Bay	Anita Bay	Speel Arm	Deep Inlet	Boat Harbor
19	1-May	Sun		24	24			
	2-May	Mon		24	24			
	3-May	Tue		24	24			
	4-May	Wed		24	24			
	5-May	Thu		24	24			
	6-May	Fri		24	24			
	7-May	Sat		24	24			
20	8-May	Sun		24	24			
	9-May	Mon		24	24			
	10-May	Tue		24	24			
	11-May	Wed		24	24			
	12-May	Thu		24	24			
	13-May	Fri		24	24			
	14-May	Sat		24	24			
21	15-May	Sun		24	24			
	16-May	Mon		24	24			
	17-May	Tue		24	24			
	18-May	Wed		24	24			
	19-May	Thu		24	24			
	20-May	Fri		24	24			
	21-May	Sat		24	24			
22	22-May	Sun		24	24			
	23-May	Mon		24	24			
	24-May	Tue		24	24			
	25-May	Wed		24	24			
	26-May	Thu		24	24			
	27-May	Fri		24	24			
	28-May	Sat		24	24			
23	29-May	Sun		24	24			
	30-May	Mon		24	24		15	
	31-May	Tue		24	24		15	
	1-Jun	Wed	24	24	24			
	2-Jun	Thu	24	24	24		15	
	3-Jun	Fri	24	24	24		15	
	4-Jun	Sat	24	24	24			
24	5-Jun	Sun	24	24	24			
	6-Jun	Mon	24	24	24		15	
	7-Jun	Tue	24	24	24		15	
	8-Jun	Wed	24	24	24			
	9-Jun	Thu	24	24	24		15	
	10-Jun	Fri	24	12	12		15	
	11-Jun	Sat	24					

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Week	Date	Day	Nakat Inlet	Neets Bay	Anita Bay	Speel Arm	Deep Inlet	Boat Harbor
25	12-Jun	Sun	24	12				
	13-Jun	Mon	24	12			15	
	14-Jun	Tue	24				15	
	15-Jun	Wed	24		12			
	16-Jun	Thu	24		12		15	
	17-Jun	Fri	24	12			15	
	18-Jun	Sat	24	12				
26	19-Jun	Sun	24		12			12
	20-Jun	Mon	24		12		15	24
	21-Jun	Tue	24				15	24
	22-Jun	Wed	24	12			15	24
	23-Jun	Thu	24	12	12			24
	24-Jun	Fri	24		12			24
	25-Jun	Sat	24					24
27	26-Jun	Sun	24					24
	27-Jun	Mon	24	12	12		15	24
	28-Jun	Tue	24	12	12		15	24
	29-Jun	Wed	24				15	24
	30-Jun	Thu	24					24
	1-Jul	Fri	24	12	12			24
	2-Jul	Sat	24	12	12			24
28	3-Jul	Sun	24					24
	4-Jul	Mon	24				15	24
	5-Jul	Tue	24		12		15	24
	6-Jul	Wed	24		12		15	24
	7-Jul	Thu	24					24
	8-Jul	Fri	24					24
	9-Jul	Sat	24		12			24
29	10-Jul	Sun	24		12			24
	11-Jul	Mon	24					24
	12-Jul	Tue	24					24
	13-Jul	Wed	24		12			24
	14-Jul	Thu	24		12			24
	15-Jul	Fri	24					24
	16-Jul	Sat	24					24
30	17-Jul	Sun	24		12			24
	18-Jul	Mon	24		12		15	24
	19-Jul	Tue	24				15	24
	20-Jul	Wed	24				15	24
	21-Jul	Thu	24		12			24
	22-Jul	Fri	24		12			24
	23-Jul	Sat	24					24

-continued-

Table 16.–Page 3 of 5.

Week	Date	Day	Nakat Inlet	Neets Bay	Anita Bay	Speel Arm	Deep Inlet	Boat Harbor
31	24-Jul	Sun	24					24
	25-Jul	Mon	24		12		15	24
	26-Jul	Tue	24		12		15	24
	27-Jul	Wed	24					24
	28-Jul	Thu	24		12		15	24
	29-Jul	Fri	24		12		15	24
	30-Jul	Sat	24					24
32	31-Jul	Sun	24		12			24
	1-Aug	Mon	24		12		15	24
	2-Aug	Tue	24				15	24
	3-Aug	Wed	24		12			24
	4-Aug	Thu	24	12	12		15	24
	5-Aug	Fri	24				15	24
	6-Aug	Sat	24		12			24
33	7-Aug	Sun	24		12			24
	8-Aug	Mon	24					24
	9-Aug	Tue	24		12			24
	10-Aug	Wed	24		12	12		24
	11-Aug	Thu	24			24		24
	12-Aug	Fri	24		12	24		24
	13-Aug	Sat	24		12	24		24
34	14-Aug	Sun	24	12		24		24
	15-Aug	Mon	24	12	12	24		
	16-Aug	Tue	24		12	24		
	17-Aug	Wed	24			24		
	18-Aug	Thu	24	12	12	24		
	19-Aug	Fri	24	12	12	24		
	20-Aug	Sat	24			24		
35	21-Aug	Sun	24		12	24		
	22-Aug	Mon	24	12	12	24		
	23-Aug	Tue	24	12		24		
	24-Aug	Wed	24		12	24		
	25-Aug	Thu	24		12	24		
	26-Aug	Fri	24			24		
	27-Aug	Sat	24		12	24		
36	28-Aug	Sun	24		12	24		
	29-Aug	Mon	24			24	15	
	30-Aug	Tue	24			24	15	
	31-Aug	Wed	24			24		
	1-Sep	Thu	24		12	24	15	
	2-Sep	Fri	24		24	24	15	
	3-Sep	Sat	24		24	24		

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Table 16.–Page 4 of 5.

Week	Date	Day	Nakat Inlet	Neets Bay	Anita Bay	Speel Arm	Deep Inlet	Boat Harbor
37	4-Sep	Sun	24		24	24		
	5-Sep	Mon	24		24	24	15	
	6-Sep	Tue	24		24	24	15	
	7-Sep	Wed	24		24	24		
	8-Sep	Thu	24		24	24	15	
	9-Sep	Fri	24		24	24	15	
	10-Sep	Sat	24		24	24		
38	11-Sep	Sun	24		24	12		
	12-Sep	Mon	24		24	24	15	
	13-Sep	Tue	24		24	24	15	
	14-Sep	Wed	24		24	24		
	15-Sep	Thu	24		24	12	15	
	16-Sep	Fri	24	12	24		15	
	17-Sep	Sat	24	12	24			
39	18-Sep	Sun	24		24			
	19-Sep	Mon	24		24		15	
	20-Sep	Tue	24	12	24		15	
	21-Sep	Wed	24	12	24			
	22-Sep	Thu	24		24		15	
	23-Sep	Fri	24		24		15	
	24-Sep	Sat	24	12	24			
40	25-Sep	Sun	24	12	24			
	26-Sep	Mon	24		24		15	
	27-Sep	Tue	24		24		15	
	28-Sep	Wed	24	12	24			
	29-Sep	Thu	24	12	24		15	
	30-Sep	Fri	24	12	24		15	
	1-Oct	Sat	24	24	24			
41	2-Oct	Sun	24	24	24			
	3-Oct	Mon	24	24	24			
	4-Oct	Tue	24	24	24			
	5-Oct	Wed	24	24	24			
	6-Oct	Thu	24	24	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			

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Table 16.–Page 5 of 5.

Week	Date	Day	Nakat Inlet	Neets Bay	Anita Bay	Speel Arm	Deep Inlet	Boat Harbor
43	16-Oct	Sun	24	24	24			
	17-Oct	Mon	24	24	24			
	18-Oct	Tue	24	24	24			
	19-Oct	Wed	24	24	24			
	20-Oct	Thu	24	24	24			
	21-Oct	Fri	24	24	24			
	22-Oct	Sat	24	24	24			
44	23-Oct	Sun	24	24	24			
	24-Oct	Mon	24	24	24			
	25-Oct	Tue	24	24	24			
	26-Oct	Wed	24	24	24			
	27-Oct	Thu	24	24	24			
	28-Oct	Fri	24	24	24			
	29-Oct	Sat	24	24	24			
45	30-Oct	Sun	24	24	24			
	31-Oct	Mon	24	24	24			
	1-Nov	Tue	24	24	24			
	2-Nov	Wed	24	24	24			
	3-Nov	Thu	24	24	24			
	4-Nov	Fri	24	24	24			
	5-Nov	Sat	24	24	24			
46	6-Nov	Sun	24	24	24			
	7-Nov	Mon	24	24	24			
	8-Nov	Tue	24	12	24			
	9-Nov	Wed	24		24			
	10-Nov	Thu	24		12			
	11-Nov	Fri						
	12-Nov	Sat						

Note: This table shows all openings from statistical weeks 18–46. Early season, concurrent gear openings from weeks 18–21 and late season concurrent gear openings from weeks 42–45 are not shown since the THAs are open continuously. Nakat Inlet and Anita Bay THAs during these periods are opened by regulation.

[a] Nakat Inlet THA: is open continuously by regulation from June 1 through November 10 for concurrent harvest by drift gillnet and troll gear.

[b] Neets Bay THA: was opened continuously to concurrent seine, troll, and gillnet gear from midnight, May 1 to noon, June 10. From noon, October 2 through the noon, November 10 season closure the THA was again opened continuously to concurrent seine, troll and gillnet gear.

[c] Anita Bay THA: was opened continuously to concurrent seine, troll, and gillnet gear from midnight, May 1 to noon, June 10. From September 1 through the noon, November 10 season closure, the THA was also open continuously to concurrent seine, troll, and gillnet gear.

[d] Boat Harbor THA: the portion of the THA inside of Boat Harbor proper was open continuously to drift gillnet gear from the third Sunday in June (6/21/15) through August 20 unless modified by emergency order. Waters of the THA outside of Boat Harbor are managed by EO.

Table 17.–Alaska total commercial, common property, drift gillnet salmon harvest (from traditional and terminal areas), in numbers of salmon, by species, 1986–2016.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Rank[a]
1986	8,441	658,611	395,889	1,282,418	815,813	3,161,172	27
1987	8,430	736,200	165,249	1,359,526	747,363	3,016,768	30
1988	9,079	600,925	163,808	688,750	1,144,856	2,607,418	33
1989	9,579	893,976	234,423	2,769,875	542,846	4,450,699	9
1990	14,693	767,492	351,039	1,168,061	616,226	2,917,511	31
1991	18,456	711,874	545,376	820,409	707,277	2,803,393	32
1992	11,285	922,069	645,159	1,408,331	845,176	3,832,020	25
1993	18,011	1,021,899	417,681	1,087,670	1,401,186	3,946,447	19
1994	16,735	686,792	698,125	1,030,607	1,823,497	4,255,756	13
1995	13,342	640,971	415,158	1,337,764	2,478,672	4,885,907	5
1996	9,982	1,026,591	368,570	615,311	2,033,650	4,054,104	17
1997	11,006	645,516	131,240	1,384,200	1,689,474	3,861,436	23
1998	5,937	501,291	412,446	1,489,395	1,923,764	4,332,833	12
1999	8,983	545,681	351,598	1,274,672	2,166,260	4,347,194	11
2000	13,475	496,614	167,623	679,452	2,561,607	3,918,771	21
2001	13,644	687,476	294,441	1,568,859	1,576,881	4,141,301	15
2002	10,216	464,138	436,612	802,290	1,415,849	3,129,105	29
2003	10,704	598,679	434,234	1,354,839	1,528,198	3,926,654	20
2004	20,148	798,096	316,192	944,447	1,835,679	3,914,562	22
2005	55,754	462,209	272,873	1,530,243	1,511,570	3,832,649	24
2006	47,202	625,667	252,449	744,048	3,126,853	4,796,219	7
2007	30,067	501,765	175,286	984,250	2,485,605	4,176,973	14
2008	32,044	264,877	337,447	560,612	2,592,212	3,787,192	26
2009	25,221	408,336	320,910	566,734	2,729,966	4,051,167	18
2010	19,316	388,105	503,136	1,315,953	2,219,596	4,446,106	10
2011	31,010	517,994	237,976	1,641,100	2,801,644	5,229,724	4
2012	26,240	498,318	265,357	938,892	3,517,702	5,246,512	3
2013	34,524	456,014	441,552	1,664,045	3,422,488	6,018,624	1
2014	27,877	497,968	554,301	1,417,432	2,381,367	4,878,945	6
2015	29,267	389,979	251,058	1,374,363	3,351,918	5,396,585	2
2016	20,701	622,390	263,968	1,152,890	2,679,235	4,739,184	8
Averages							
1960-2015[b]	15,937	503,493	259,571	978,458	1,237,921	2,995,381	
2006-2015[c]	30,277	454,902	333,947	1,120,743	2,862,935	4,802,805	
Max. harvest[d]	55,754	1,026,591	698,125	2,769,875	3,517,702	6,018,818	
Max. harvest year	2005	1996	1994	1989	2012	2013	
Min. harvest[d]	4,598	108,574	37,986	55,984	199,887	432,438	
Min. harvest year	1983	1975	1960	1960	1960	1960	

[a] Rank is based on total harvest for years 1960 to 2016.

[b] Equals the long-term average harvest. Harvests from 1960 to 1985 are included in average but not shown in table.

[c] Equals the recent 10-year average harvest.

[d] Minimum and maximums are based on species harvest from 1960 to 2016.

Table 18.–Southeast Alaska 2016 commercial drift gillnet salmon harvest, in numbers of salmon, by area, harvest type, and species.

Fishery	Chinook	Sockeye	Coho	Pink	Chum	Total
District 1						
Traditional (Tree Point)	1,191	39,912	46,393	561,021	273,608	922,125
Terminal Harvest Area	1,919	1,376	3,628	47,330	175,116	229,369
Annette Island	855	3,798	35,677	273,022	243,342	556,694
District 6						
Traditional (Prince of Wales)	2,094	106,649	122,101	358,309	130,236	719,389
District 7						
Terminal Harvest Area	2,050	209	2,434	498	72,204	77,395
District 8						
Traditional (Stikine)	10,024	70,143	22,146	35,250	200,653	338,216
District 11						
Traditional (Taku/Snettisham)	582	148,317	34,445	44,668	447,616	675,628
Terminal Harvest Area	13	66,732	592	1,936	668	69,941
District 13						
Terminal Harvest Area	2,353	208	1,695	21,908	447,215	473,379
District 15						
Traditional (Lynn Canal)	448	176,631	30,488	66,257	692,938	966,762
Terminal Harvest Area	27	12,213	46	15,713	238,981	266,980
Subtotals						
Traditional	14,339	541,652	255,573	1,065,505	1,745,051	3,622,120
Terminal Harvest Areas	6,362	80,738	8,395	87,385	934,184	1,117,064
Common Property Total	20,701	622,390	263,968	1,152,890	2,679,235	4,739,184
Hatchery Cost Recovery	56	81,792	0	0	0	81,848
Annette Island	855	3,798	35,677	273,022	243,342	556,694
Total	21,612	707,980	299,645	1,425,912	2,922,577	5,377,726

Table 19.–Southeast Alaska annual Portland Canal / Tree Point (District 1) traditional and terminal harvest area drift gillnet salmon harvest, in numbers of salmon, by species, 1986–2016.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Rank[a]
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	27
1988	2,041	116,245	17,213	231,484	550,701	917,684	28
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	30
1991	2,077	131,509	70,359	600,733	185,863	990,541	21
1992	1,061	244,650	40,064	581,244	288,478	1,155,497	11
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	25
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	7
1997	1,608	169,614	28,229	380,957	409,591	989,999	22
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	20
2000	1,196	94,720	19,577	424,672	218,818	758,983	34
2001	1,393	80,440	36,420	521,645	252,438	892,336	29
2002	1,127	121,116	68,724	515,395	174,794	881,156	31
2003	829	105,878	97,538	626,916	322,608	1,153,769	12
2004	2,069	142,763	50,820	409,429	327,439	932,520	26
2005	1,711	80,027	65,353	559,296	252,630	959,017	24
2006	2,271	63,368	31,271	216,779	297,660	611,349	39
2007	2,057	68,170	29,890	360,986	389,744	850,847	33
2008	4,059	34,915	97,599	275,654	319,718	731,945	35
2009	4,922	70,607	68,522	174,052	339,159	657,262	36
2010	3,302	64,747	99,081	597,138	458,622	1,222,890	8
2011	4,661	91,825	36,183	357,811	566,508	1,056,988	19
2012	4,024	64,612	73,576	217,281	757,675	1,117,170	14
2013	4,483	55,948	111,133	763,434	329,680	1,264,678	6
2014	4,473	57,192	116,437	763,838	274,202	1,216,142	9
2015	3,347	29,173	58,004	157,016	820,271	1,067,811	17
2016	3,110	41,288	50,021	608,351	448,724	1,151,494	13
Averages							
1960-2015[b]	1,875	107,730	38,537	414,346	244,467	806,955	
2006-2015[c]	3,760	60,056	72,170	388,399	455,324	979,708	
Max. harvest[d]	4,922	394,137	116,437	1,349,929	820,271	1,840,372	
Max. harvest year	2009	1993	2014	1989	2015	1989	
Min. harvest[d]	337	14,281	3,110	19,823	20,033	138,601	
Min. harvest year	1970	1960	1963	1960	1969	1960	

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

[a] Rank is based on total harvest for years 1960 to 2016.

[b] Equals the long-term average harvest. Harvests from 1960 to 1985 are included in average but not shown in table.

[c] Equals the recent 10-year average harvest.

[d] Minimum and maximums are based on species harvest from 1960 to 2016.

Table 20.–Southeast Alaska annual Prince of Wales (District 6) traditional and terminal harvest area drift gillnet salmon harvest, in numbers of salmon, by species, 1986–2016.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Rank[a]
1986	1,705	145,714	205,598	308,942	82,621	744,580	21
1987	853	136,437	37,151	243,710	43,020	461,171	39
1988	2,961	92,532	14,419	69,619	69,675	249,206	51
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	20
1991	2,842	144,105	198,786	133,567	124,631	603,932	31
1992	1,374	203,158	299,884	94,278	140,471	739,165	22
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	14
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	35
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	38
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	30
2005	1,572	110,192	114,440	461,187	198,564	885,955	11
2006	1,948	91,980	69,015	149,907	268,436	581,286	33
2007	2,144	92,481	80,573	383,355	297,998	856,551	13
2008	1,619	30,533	116,074	90,217	102,156	340,599	45
2009	2,138	111,984	144,569	143,589	287,707	689,987	26
2010	2,473	112,450	225,550	309,795	97,948	748,216	19
2011	3,008	146,069	117,860	337,169	158,096	762,202	18
2012	1,853	45,466	121,418	129,646	104,307	402,690	41
2013	2,202	49,223	160,659	474,551	94,260	780,895	17
2014	2,092	58,430	286,815	415,392	106,243	868,972	12
2015	2,723	121,921	112,561	224,816	232,390	694,411	25
2016	2,094	106,649	122,101	358,309	130,236	719,389	24
Averages							
1960-2015[b]	1,527	107,331	106,936	313,252	115,348	644,395	
2006-2015[c]	2,220	86,054	143,509	265,844	174,954	672,581	
Max. harvest[d]	3,008	311,100	299,884	1,101,196	448,409	1,462,525	
Max. harvest year	2011	1996	1992	1989	1999	2001	
Min. harvest[d]	46	10,354	336	1,246	502	12,484	
Min. harvest year	1960	1960	1960	1960	1960	1960	

[a] Rank is based on total harvest for years 1960 to 2016.

[b] Equals the long-term average harvest. Harvests from 1960 to 1985 are included in average but not shown in table.

[c] Equals the recent 10-year average harvest.

[d] Minimum and maximums are based on species harvest from 1960 to 2016.

Table 21.–Southeast Alaska annual Stikine (District 8) traditional and terminal harvest area drift gillnet salmon harvest, in numbers of salmon, by species, 1986–2016.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Rank[a]
1986	109	4,187	14,324	4,968	5,943	29,531	43
1987	201	1,620	1,015	3,331	949	7,116	53
1988	776	1,246	12	145	3,129	5,308	54
1989	388	10,083	4,261	27,640	3,375	45,747	34
1990	682	11,580	8,218	13,822	9,386	43,688	38
1991	1,366	17,987	15,629	6,406	5,977	47,365	33
1992	1,045	52,717	22,127	66,742	15,458	158,089	22
1993	1,799	76,874	14,307	39,661	22,504	155,145	23
1994	1,996	97,224	44,891	35,405	27,658	207,174	13
1995	1,702	76,756	17,834	37,788	54,296	188,376	16
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	14
1998	460	22,031	19,206	39,246	41,057	122,000	26
1999	1,049	36,601	28,437	48,552	117,196	231,835	11
2000	1,671	15,833	5,651	9,497	40,337	72,989	28
2001	7	610	10,731	11,012	5,397	27,757	45
2002	25	208	21,131	4,578	2,017	27,959	44
2003	312	42,158	38,795	76,113	51,701	209,079	12
2004	7,410	103,392	26,617	20,439	37,996	195,854	15
2005	26,970	99,465	42,203	106,395	150,121	425,154	2
2006	30,033	61,298	34,430	56,810	343,827	526,398	1
2007	17,463	70,580	19,880	39,872	177,573	325,368	5
2008	14,599	35,679	34,479	18,105	81,876	184,738	18
2009	2,830	36,680	30,860	27,010	190,800	288,180	8
2010	2,359	32,737	42,772	58,610	51,005	187,483	17
2011	5,321	51,478	20,720	65,022	142,526	285,067	9
2012	8,027	21,997	20,100	16,374	240,569	307,067	6
2013	10,817	20,609	43,669	116,026	103,365	294,486	7
2014	8,023	19,808	30,184	33,830	84,771	176,616	20
2015	13,845	22,896	30,153	35,926	166,009	268,829	10
2016	10,024	70,143	22,146	35,250	200,653	338,216	4
Averages							
1962-2015[b]	4,345	30,359	18,137	29,008	45,993	127,841	
2006-2015[c]	11,332	37,376	30,725	46,759	158,232	284,423	
Max. harvest[d]	30,033	154,150	44,891	116,026	343,827	526,398	
Max. harvest year	2006	1996	1994	2013	2006	2006	
Min. harvest[d]	7	0	0	0	1	1,530	
Min. harvest year	2001	1975	1975	1975	1975	1975	

[a] Rank is based on total harvest for years 1962 to 2016. No harvest data in Alexander database for 1960 and 1962.

[b] Equals the long-term average harvest. Harvests from 1962 to 1985 are included in average but not shown in table.

[c] Equals the recent 10-year average harvest.

[d] Minimum and maximums are based on species harvest from 1962 to 2016.

Table 22.–Southeast Alaska annual Taku/Snettisham (District 11) traditional and terminal harvest area drift gillnet salmon harvest, in numbers of salmon, by species, 1986–2016.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Rank[a]
1986	2,584	73,061	30,512	16,568	58,792	181,517	44
1987	2,076	75,212	35,219	363,439	121,660	597,606	18
1988	1,777	38,901	44,818	157,732	140,038	383,266	33
1989	1,811	74,019	51,812	180,639	36,979	345,260	36
1990	3,480	126,884	67,530	153,126	145,799	496,819	26
1991	3,214	109,471	126,576	74,170	160,422	473,853	27
1992	2,341	135,411	172,662	314,445	112,527	737,386	13
1993	6,748	171,383	65,539	17,083	166,478	427,231	29
1994	5,047	105,893	188,501	401,525	214,171	915,137	7
1995	4,660	103,362	83,606	41,228	349,949	582,805	20
1996	2,659	199,014	33,633	12,660	354,463	602,429	17
1997	2,804	94,745	3,515	51,424	176,864	329,352	37
1998	794	69,677	28,713	168,283	296,111	563,578	22
1999	1,949	79,686	17,308	59,316	429,359	587,618	19
2000	1,154	185,956	7,828	58,696	669,994	923,628	6
2001	1,698	293,043	22,646	123,026	237,122	677,535	14
2002	1,850	204,103	40,464	78,624	231,936	556,977	23
2003	1,467	238,160	24,338	114,166	170,874	549,005	24
2004	2,345	283,756	45,769	154,640	131,757	618,267	16
2005	23,301	106,048	21,289	182,778	93,700	427,116	30
2006	11,261	262,527	60,145	191,992	382,952	908,877	8
2007	1,452	112,241	22,394	100,375	590,169	826,631	10
2008	2,193	116,693	37,349	90,162	774,095	1,020,492	4
2009	6,800	62,070	36,615	56,801	918,350	1,080,636	3
2010	1,685	76,607	62,241	132,785	488,898	762,216	11
2011	2,510	163,896	28,574	344,766	667,929	1,207,675	1
2012	1,291	140,898	24,115	193,969	566,741	927,014	5
2013	1,224	207,231	51,441	127,343	726,849	1,114,088	2
2014	1,471	126,738	54,186	29,190	291,409	502,994	25
2015	1,150	83,431	23,572	296,575	475,456	880,184	9
2016	595	215,049	35,037	46,604	448,284	745,569	12
Averages							
1960-2015[b]	3,845	99,368	41,423	117,820	209,159	471,615	
2006-2015[c]	3,104	135,233	40,063	156,396	588,285	923,081	
Max. harvest[d]	23,301	293,043	188,501	401,525	918,350	1,207,675	
Max. harvest year	2005	2001	1994	1994	2009	2011	
Min. harvest[d]	595	17,735	1,185	2,768	2,678	48,162	
Min. harvest year	2,016	1,967	1,975	1,965	1,975	1975	

[a] Rank is based on total harvest for years 1960 to 2016.

[b] Equals the long-term average harvest. Harvests from 1960 to 1985 are included in average but not shown in table.

[c] Equals the recent 10-year average harvest.

[d] Minimum and maximums are based on species harvest from 1960 to 2016.

Table 23.–Southeast Alaska annual Lynn Canal (District 15) traditional and terminal harvest area drift gillnet salmon harvest, in numbers of salmon, by species, 1986–2016.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Rank[a]
1986	2,772	289,905	82,121	38,115	381,382	794,295	22
1987	3,223	415,336	53,751	165,751	392,938	1,030,999	16
1988	1,257	351,799	81,536	208,404	377,583	1,020,579	17
1989	1,955	471,914	50,307	110,454	123,631	758,261	23
1990	670	357,418	63,005	101,099	210,510	732,702	25
1991	746	308,731	129,232	5,474	210,547	654,730	29
1992	610	286,035	108,753	351,562	245,247	992,207	18
1993	741	173,113	59,952	11,336	306,566	551,708	37
1994	980	171,729	140,764	147,277	685,449	1,146,199	11
1995	831	88,676	79,949	15,613	568,368	753,437	24
1996	642	149,578	52,658	2,607	415,930	621,415	32
1997	838	118,828	15,572	53,437	462,330	651,005	30
1998	682	134,937	26,118	32,351	160,669	354,757	45
1999	559	163,560	35,350	62,737	351,251	613,457	33
2000	297	109,560	35,638	21,001	759,357	925,853	20
2001	1,672	147,811	34,606	67,718	445,578	697,385	27
2002	582	82,014	77,941	88,044	665,398	913,979	21
2003	663	95,111	59,742	53,621	394,250	603,387	34
2004	805	151,245	51,960	98,341	745,450	1,047,801	15
2005	710	65,469	27,947	209,833	326,895	630,854	31
2006	344	145,579	55,133	94,700	1,094,246	1,390,002	6
2007	1,063	156,936	18,177	89,782	823,999	1,089,957	14
2008	659	46,655	46,932	26,034	1,072,135	1,192,415	9
2009	681	126,594	35,820	163,057	845,710	1,171,862	10
2010	871	100,973	65,870	171,054	764,629	1,103,397	13
2011	1,178	63,788	33,776	508,930	1,115,821	1,723,493	3
2012	2,736	224,643	23,321	353,271	1,567,227	2,171,198	1
2013	1,148	122,103	68,009	127,703	1,509,501	1,828,465	2
2014	1,396	234,682	58,117	90,602	1,303,009	1,687,806	4
2015	523	131,577	23,456	629,209	836,831	1,621,596	5
2016	475	188,844	30,534	81,970	931,919	1,233,742	8
Averages							
1960-2015[b]	1,417	159,472	53,066	92,614	457,265	763,835	
2006-2015[c]	1,060	135,353	42,861	225,434	1,093,311	1,498,019	
Max. harvest[d]	6,099	471,914	140,764	629,209	1,567,227	2,171,198	
Max. harvest year	1984	1989	1994	2015	2012	2012	
Min. harvest[d]	276	18,491	10,964	1,760	58,562	132,343	
Min. harvest year	1963	1975	1960	1960	1960	1960	

[a] Rank is based on total harvest for years 1960 to 2016.

[b] Equals the long-term average harvest. Harvests from 1960 to 1985 are included in average but not shown in table.

[c] Equals the recent 10-year average harvest.

[d] Minimum and maximums are based on species harvest from 1960 to 2016.

Table 24.–Annual common property purse seine harvests from terminal harvest areas (THA) in Southeast Alaska, 1990–2016.

THA Area	Year	Chinook[a]	Jacks[a]	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	3	1,172	459	13,084	14,718
Average 1990–2007		15	-	512	621	11,757	104,788	117,693
Neets Bay	1998	58	5	1,135	141	8,918	891,029	901,286
	2000	23	0	0	0	8	984	1,015
	2002	607	0	2	42,365	0	9,156	52,130
	2003	310	0	2	15,077	20	45,969	61,378
	2004	1,379	0	0	5,968	0	5,711	13,058
	2005	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
	2011	8,701	8	133	8,071	179	89,447	106,539
	2012	5,379	6	130	27,777	3,029	353,500	389,821
	2013	5,226	0	189	2,162	912	18,764	27,253
	2014	6,288	103	108	36,180	284	45,961	88,924
	2015	9,661	2	1,278	21,428	25,044	672,885	730,298
	2016	3,944	8	74	272	3,361	167,913	175,572
Average 1998–2016		3,742	-	185	10,636	2,478	136,106	153,156

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THA Area	Year	Chinook[a]	Jacks[a]	Sockeye	Coho	Pink	Chum	Total
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
	2012	35	31	3,502	5,644	123,922	219,876	353,010
	2013	72	0	2,951	3,549	127,603	78,842	213,017
	2014	205	1	1,464	1,902	92,211	106,378	202,161
	2015	1	0	3,759	6,713	49,912	256,681	317,066
	2016	633	0	2,152	3,548	92,463	153,829	252,625
Average 1994–2016		81	-	1,768	1,755	35,988	136,786	176382
Klawock Inlet	1990	0	0	2	112	60	4,596	4,770
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
	2012	5,540	78	512	298	8,400	295,782	310,610
	2013	4,848	711	154	233	16,621	43,920	66,487
	2014	2,680	292	84	337	779	30,569	34,741
	2015	4,818	206	531	94	7,413	99,632	112,694
	2016	1,536	25	515	663	9,505	61,436	73,680
Average 2004–2016		3,023	-	245	311	9,839	92,578	106,134
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

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THA Area	Year	Chinook[a]	Jacks[a]	Sockeye	Coho	Pink	Chum	Total
Amalga Harbor	2012	32	0	4,015	137	4,677	411,397	420,258
	2013	144	0	4,429	162	33,557	1,081,913	1,120,205
	2014	24	4	1,440	132	860	227,048	229,508
	2015	16	2	912	208	41,731	222,594	265,463
	2016	31	18	2,684	130	2,367	252,496	257,726
Average 2004–2016		49	-	2,696	154	16,638	439,090	458,632
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
	2012	4,030	204	1,738	2,865	35,853	1,078,796	1,123,486
	2013	3,185	284	4,244	7,104	486,130	1,206,438	1,707,385
	2014	418	81	484	76	3,277	252,398	256,734
	2015	678	40	849	861	78,262	43,152	123,842
	2016	79	1	435	158	7,036	15,929	23,638
Average 1990–2016		5,684	-	4,883	5,446	495,697	1,320,222	1,832,393
Deep Inlet	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
	2012	1,466	32	608	2,239	115,423	333,868	453,636
	2013	3,814	3	2,378	2,489	184,557	581,669	774,910
	2014	1,341	13	1,905	2,147	147,548	590,875	743,829
	2015	3,639	2	2,495	3,838	516,675	1,308,994	1,835,643
	2016	1,439	0	1,240	4,094	56,943	610,242	673,958
Average 1990–2016		1,362	-	991	1,537	124,648	649,866	778,414

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Table 24.–Page 4 of 4.

THA Area	Year	Chinook[a]	Jacks[a]	Sockeye	Coho	Pink	Chum	Total
2016 Seine THA Summary:								
Neets Bay	2016	3,944	8	74	272	3,361	167,913	175,572
Kendrick Bay	2016	633	0	2,152	3,548	92,463	153,829	252,625
Anita Bay	2016	1,536	25	515	663	9,505	61,436	73,680
Amalga Harbor	2016	31	18	2,684	130	2,367	252,496	257,726
Hidden Falls	2016	79	1	435	158	7,036	15,929	23,638
Deep Inlet	2016	1,439	0	1,240	4,094	56,943	610,242	673,958
Total 2016 Seine THA		7,662	52	7,100	8,865	171,675	1,261,845	1,457,199

[a] Chinook salmon are 28″ from the tip of snout to tip of tail; jacks are less than 28″.

Table 25.–Annual common property drift gillnet harvests from terminal harvest areas (THA) in Southeast Alaska, 1990–2016.

THA Area	Year	Chinook	Sockeye	Coho	Pink	Chum	Total
Nakat Inlet	1990	4	79	33	196	2,198	2,510
	1991	0	17	40	203	1,969	2,229
	1992	2	1	63	36	6,403	6,505
	1993	0	39	80	144	6,506	6,769
	1994	2	81	322	307	36,113	36,825
	1995	1	42	1,095	1,885	100,441	103,464
	1996	0	74	46	14	27,474	27,608
	1997	2	140	2,542	264	58,361	61,309
	1998	0	145	282	552	27,053	28,032
	1999	0	25	8	168	2,879	3,080
	2000	0	69	1,368	689	19,697	21,823
	2001	14	399	425	3,908	32,719	37,465
	2002	5	763	1,252	2,859	16,408	21,287
	2003	2	615	2,413	5,544	39,261	47,835
	2004	24	406	518	1,988	24,892	27,828
	2005	10	299	86	2,870	12,848	16,113
	2006	20	598	1,187	3,818	26,113	31,736
	2007	105	1,348	2,387	20,994	156,552	181,386
	2008	83	802	1,607	4,488	79,725	86,705
	2009	57	748	403	3,477	71,982	76,667
	2010	63	2,066	3,350	27,628	131,761	164,868
	2011	99	3,206	1,340	21,979	192,009	218,633
	2012	159	2,035	2,955	13,413	429,753	448,315
	2013	160	1,369	3,808	70,162	95,245	170,744
	2014	59	1,362	15,023	55,454	81,574	153,472
	2015	130	1,012	9,389	8,863	298,199	317,593
	2016	125	1,375	3,628	47,330	170,592	223,050
Average 1990-2016		42	708	2,061	11,083	79,582	93,476
Neets Bay	1998	62	6	1	37	7,693	7,799
	2000	13	0	0	0	45	58
	2001	0	0	491	0	3	494
	2002	294	0	33,956	0	13,466	47,716
	2003	150	0	31,506	0	37,083	68,739
	2004	47	0	19,411	0	10,829	30,287
	2005	244	3	14,087	2	5,599	19,935
	2006	443	0	1,003	0	2,320	3,766
	2007	353	0	0	0	74	427
	2008	2,028	0	0	0	143	2,171
	2009	3,705	0	950	0	4,142	8,797
	2010	1,795	1	7,868	0	1,774	11,438
	2011	2,818	1	6,221	9	34,572	43,621
	2012	2,461	17	8,122	10	13,820	24,430
	2013	2,262	1	1,714	0	2,450	6,427
	2014	3,147	2	10,072	27	8,339	21,587
	2015	1,927	6	8,847	12	69,313	80,105
	2016	1,794	1	0	0	4,524	6,319
Average 1998-2016		1,308	2	8,014	5	12,011	21,340
Wrangell Narrows	1990	0	3	2,961	30	6	3,000
	1991	787	1	626	1	1	1,416
	1992	19	3	949	30	3	1,004
	1993	3	11	1,820	39	34	1,907
	1994	0	28	4,830	397	195	5,450
	1996	0	0	489	0	0	489
Average 1990-1996		135	8	1,946	83	40	2,211

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THA Area	Year	Chinook	Sockeye	Coho	Pink	Chum	Total
Earl West	1990	6,039	32	2,164	16	1,109	9,360
	1991	8,211	71	4,794	59	19,837	32,972
	1992	4,854	98	1,669	60	42,995	49,676
	1993	6,400	165	6,993	49	7,874	21,481
	1994	6,979	209	2,898	228	33,771	44,085
	1995	3,735	142	5,240	202	62,110	71,429
	1996	3,047	238	4,494	5	23,859	31,643
	1997	2,033	132	3,857	814	53,658	60,494
	1998	2,270	49	4,055	230	43,638	50,242
	1999	3,059	297	2,556	546	29,118	35,576
	2000	7,912	373	2,692	1,375	53,161	65,513
	2001	7,101	833	880	5,528	86,088	100,430
	2002	4,040	231	366	281	42,575	47,493
	2003	6,119	193	254	2,350	73,357	82,273
	2004	389	150	74	401	18,196	19,210
	2005	4	0	0	0	31	35
Average 1990–2005		4,512	201	2,687	759	36,961	45,120
Ohmer Creek	1990	125	6	0	0	4	135
	1992	78	0	0	0	0	78
	1993	171	0	0	0	0	171
Average 1990–1993		125	2	0	0	1	128
Anita Bay	2002	0	0	917	0	4	921
	2003	52	33	1,268	330	2,263	3,946
	2004	1,457	359	2,221	136	43,197	47,370
	2005	567	554	1,239	1,970	57,146	61,476
	2006	627	264	969	986	88,043	90,889
	2007	3,320	194	3,202	1,865	92,576	101,157
	2008	1,805	88	3,480	376	28,651	34,400
	2009	3,295	231	4,107	400	28,521	36,554
	2010	3,929	296	7,166	1,484	61,587	74,462
	2011	6,205	496	313	3,536	67,183	77,733
	2012	3,618	382	1,805	322	97,874	104,001
	2013	8,433	235	4,212	1,929	58,456	73,265
	2014	7,020	175	7,500	803	43,488	58,986
	2015	4,421	234	1,993	458	61,881	68,987
	2016	2,050	209	2,434	498	72,204	77,395
Average 2002–2016		3,120	250	2,855	1,006	53,538	60,769
Speel Arm	1998	3	602	84	2,947	194	3,830
	1999	0	2,171	241	0	146	2,558
	2000	17	17,684	282	3,980	1,399	23,362
	2001	2	3,355	117	197	116	3,787
	2002	10	25,615	641	1,062	915	28,243
	2003	2	32,727	631	1,771	454	35,585
	2004	54	42,502	480	4,368	370	47,774
	2005	6	18,781	564	1,265	490	21,106
	2006	19	127,746	723	6,890	1,115	136,493
	2010	9	14,660	37	431	28	15,165
	2011	72	63,496	1,011	6,109	220	70,908
	2012	3	15,339	449	1,855	406	18,052
	2013	13	68,757	419	4,060	1,245	74,494
	2014	6	17,006	287	8	54	17,361
	2015	67	28,335	403	7,950	275	37,030
	2016	13	66,732	592	1,936	668	69,941
Average 1998–2016		19	34,094	435	2,802	506	37,856

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Table 25.–Page 3 of 4.

THA Area	Year	Chinook	Sockeye	Coho	Pink	Chum	Total
Deep Inlet	1993	79	261	5,444	226	373,306	379,316
	1994	20	203	1,043	1,026	159,913	162,205
	1995	439	401	3,199	3,378	409,527	416,944
	1996	16	34	1,382	3,304	190,932	195,668
	1997	82	640	377	42,772	361,662	405,533
	1998	53	505	609	96,362	494,124	591,653
	1999	5	649	112	729	609,253	610,748
	2000	25	96	30	7,592	620,104	627,847
	2001	635	726	693	14,483	266,796	283,333
	2002	2,146	331	509	32,417	186,584	221,987
	2003	840	242	242	10,646	212,892	224,862
	2004	2,938	172	100	15,824	421,070	440,104
	2005	919	454	402	8,784	432,483	443,042
	2006	718	651	1,486	32,874	651,689	687,418
	2007	2,568	1,163	1,170	8,015	113,546	126,462
	2008	7,110	314	1,534	60,064	213,581	282,603
	2009	4,555	170	417	1,825	119,719	126,686
	2010	4,697	295	456	45,087	296,907	347,442
	2011	8,127	442	550	23,866	83,581	116,566
	2012	4,691	320	1,022	28,029	183,309	217,372
	2013	6,217	665	2,429	53,059	600,377	662,747
	2014	3,402	943	1,062	83,777	278,245	367,429
	2015	3,258	747	1,319	30,363	759,080	794,767
	2016	2,353	208	1,695	21,908	447,215	473,379
Average 1993–2016		2,329	443	1,137	26,100	353,579	383,588
Boat Harbor	1995	257	7,510	556	9,814	176,495	194,632
	1996	32	3,346	113	249	73,725	77,465
	1997	61	7,561	114	20,475	187,354	215,565
	1998	171	11,162	159	8,129	72,154	91,775
	1999	72	6,969	104	22,172	118,346	147,663
	2000	30	13,313	698	3,674	256,267	273,982
	2001	151	22,859	176	22,293	102,734	148,213
	2002	43	7,987	420	19,497	156,845	184,792
	2003	28	3,824	121	5,866	71,677	81,516
	2004	40	7,647	73	9,697	163,411	180,868
	2005	28	2,629	82	36,922	94,336	133,997
	2006	17	4,876	373	9,845	398,671	413,782
	2007	92	12,524	199	16,638	258,869	288,322
	2008	130	12,120	817	15,376	466,248	494,691
	2009	124	12,093	465	81,577	303,740	397,999
	2010	143	11,340	933	37,719	178,006	228,141
	2011	221	6,254	461	178,034	262,370	447,340
	2012	200	17,506	247	60,429	214,986	293,368
	2013	57	8,576	151	60,869	261,738	331,391
	2014	58	20,777	313	6,280	77,458	104,886
	2015	25	7,147	178	166,344	127,005	300,699
	2016	27	12,213	46	15,713	238,981	266,980
Average 1995–2015		91	10,011	309	36,710	193,701	240,821

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Table 25.–Page 4 of 4.

THA Area	Year	Chinook	Sockeye	Coho	Pink	Chum	Total
2016 Gillnet THA Summary:							
Nakat Inlet	2016	125	1,375	3,628	47,330	170,592	223,050
Neets Bay	2016	1,794	1	0	0	4,524	6,319
Anita Bay	2016	2,050	209	2,434	498	72,204	77,395
Speel Arm	2016	13	66,732	592	1,936	668	69,941
Deep Inlet	2016	2,353	208	1,695	21,908	447,215	473,379
Boat Harbor	2016	27	12,213	46	15,713	238,981	266,980
Total 2016 Gillnet THA		6,362	80,738	8,395	87,385	934,184	1,117,064

Table 26.–Southeast Alaska region 2016 private hatchery cost recovery salmon harvest by district, organization, special harvest area, and species.

District	Hatchery	Special Harvest Area	Chinook	Sockeye	Coho	Pink	Chum	Total
1	SSRAA	Herring Cove	1,858	0	1,129	0	0	2,987
1	SSRAA	Neets Bay	2,682	91	36,403	1,888	599,588	640,652
3	POWHA	Klawock River	0	0	27,573	0	0	27,573
3	POWHA	Port Saint Nicholas	468	0	0	0	0	468
6	SSRAA	Burnette Inlet	0	0	3,427	0	0	3,427
9	AKI	Port Armstrong	1,202	55	100,237	129,413	74,051	304,958
9	NSRAA	Mist Cove	0	0	44,987	35	1	45,023
9	KNFC	Southeast Cove	2	5	0	13	7,966	7,986
9	KNFC	Gunnuk Creek	0	18	7	2,269	221,111	223,405
11	DIPAC	Gastineau Channel	27	350	10,832	384	390,261	401,854
11	DIPAC	Amalga	78	1,794	63	1,414	690,263	693,612
11	DIPAC	Speel Arm	0	145,708	0	0	0	145,708
12	NSRAA	Hidden Falls	74	6	323	1,156	213,140	214,699
13	SSSC	Crescent Bay	0	0	3	189,619	2,564	192,186
13	NSRAA	Deep Inlet	741	7	662	3,032	365,829	370,271
13	NSRAA	Silver Bay	3,776	3	135	1,296	166,695	171,905
		Total	10,908	148,037	225,781	330,519	2,731,469	3,446,714

	Total by Permit Holder (Organization)	Chinook	Sockeye	Coho	Pink	Chum	Total
	SSRAA	4,540	91	40,959	1,888	599,588	647,066
	POWHA	468	0	27,573	0	0	28,041
	KNFC	2	23	7	2,282	229,077	231,391
	AKI	1,202	55	100,237	129,413	74,051	304,958
	DIPAC	105	147,852	10,895	1,798	1,080,524	1,241,174
	NSRAA	4,591	16	46,107	5,519	745,665	801,898
	SSSC	0	0	3	189,619	2,564	192,186
	Total	10,908	148,037	225,781	330,519	2,731,469	3,446,714

Note: 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
SSSC: Sitka Sound Science Center

Table 27.–Southeast Alaska region private hatchery cost recovery harvest in numbers by species, 1977–2016.

Year	Chinook[a]	Jacks[a]	Sockeye	Coho	Pink	Chum	Total
1977	-	-	-	-	92,459	-	92,459
1978	-	-	-	-	-	-	0
1979	-	-	-	5,893	29,555	-	35,448
1980	0	0	0	0	0	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	232,531	698,067	4,087,184	5,081,084
2012	18,096	0	125,664	201,044	153,194	3,065,001	3,562,999
2013	30,443	222	49,609	285,491	968,118	2,099,940	3,433,823
2014	11,659	0	123,029	373,416	234,090	1,389,601	2,131,795
2015	17,456	65	111,381	221,087	333,233	2,306,954	2,990,176
2016	9,107	29	148,032	231,471	330,519	2,731,469	3,450,627
Averages							
1981-2015	21,803	-	47,575	199,425	765,307	2,098,034	3,132,209
2006-2015	26,379	-	80,758	260,220	484,925	3,004,117	3,856,543

[a] Chinook salmon are 28″ from the tip of snout to tip of tail; jacks are less than 28″.

Table 28.–Annual Canadian Stikine River harvests from all fisheries, 1972–2016.

Year	Chinook Large[a]	Chinook Jacks[a]	Sockeye	Coho	Pink	Chum	Total
1972	0	0	4,373	0	0	0	4,373
1973	200	0	3,670	0	0	0	3,870
1974	100	0	3,500	0	0	0	3,600
1975	1,202	0	2,252	50	0	0	3,504
1976	1,160	0	3,644	13	0	0	4,817
1977	162	0	6,310	0	0	0	6,472
1978	500	0	5,000	0	0	0	5,500
1979	1,636	73	13,534	10,720	1,994	424	28,381
1980	2,367	18	20,919	6,769	756	771	31,600
1981	1,617	28	27,017	2,867	3,857	1,128	36,514
1982	2,568	24	20,540	15,944	1,842	722	41,640
1983	1,456	650	21,120	6,173	1,120	304	30,823
1984[b]	726	70	5,327	1	62	0	6,186
1985	1,203	197	26,804	2,175	2,356	536	33,271
1986	2,056	999	17,846	2,506	107	307	23,821
1987	2,528	462	11,283	6,513	646	459	21,891
1988	2,833	500	16,538	2,322	418	733	23,344
1989	3,018	331	21,639	6,842	825	674	33,329
1990	2,610	994	19,964	4,442	496	499	29,005
1991	1,807	693	25,138	2,893	394	208	31,133
1992	2,635	445	29,242	2,123	122	231	34,798
1993	2,757	447	52,698	2,791	29	395	59,117
1994	2,303	457	53,380	3,452	90	173	59,855
1995	2,001	1,058	66,777	3,645	48	263	73,792
1996	2,931	519	90,148	1,459	25	232	95,314
1997	4,701	318	68,197	412	269	222	74,119
1998	2,354	456	50,486	933	55	13	54,297
1999	3,935	1,383	47,202	573	11	8	53,112
2000	4,245	676	31,535	737	181	144	37,518
2001	3,517	174	29,341	1,994	78	56	35,160
2002	3,438	947	22,607	2,827	19	33	29,871
2003	2,866	1,873	69,571	1,889	850	112	77,161
2004	4,048	2,666	88,451	762	8	134	96,069
2005	20,049	1,297	88,089	991	0	39	110,465
2006	15,776	2,078	102,733	596	4	14	121,201
2007	10,510	1,727	61,472	240	0	2	73,951
2008	7,932	1,077	37,097	2,935	88	90	49,219
2009	2,316	737	51,082	6,475	362	193	61,165
2010	3,196	1,155	55,471	6,042	209	122	66,195
2011	3,170	1,819	61,947	6,231	3	99	73,269
2012	5,215	1,333	34,922	6,624	0	363	48,457
2013	3,371	1,641	36,371	8,100	161	461	50,105
2014	3,335	768	44,056	5,751	45	66	54,021
2015	4,233	1,596	61,911	5,652	297	167	73,856
2016	3,235	849	88,649	5,346	NA	NA	
Averages							
1972–2015[c]	4,533	1,001	36,030	3,205	408	238	43,984
2006–2015	7,487	1,363	57,324	4,399	87	145	70,805

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

[a] 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 mm METF or <735 mm METF) used when no data.

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

[c] Chinook averages only since 1986 when large fish and jacks were recorded separately in all fisheries.

Table 29.–Annual Canadian Taku River harvests from all fisheries, 1979–2016.

Year	Chinook		Sockeye	Coho	Pink	Chum	Total
	Large[a]	Jacks[a]					
1979[b]	397		13,578	6,006	13,661	15,474	49,116
1980	610		22,752	6,405	26,821	18,531	75,119
1981	459		10,922	3,607	10,771	5,591	31,350
1982	354		3,144	51	202	3	3,754
1983	465	400	17,056	8,390	1,874	1,760	29,945
1984	594	221	27,292	5,372	6,964	2,492	42,935
1985	630	24	14,411	1,792	3,373	136	20,366
1986	585	77	14,939	1,833	58	110	17,602
1987	427	106	13,887	6,519	6,250	2,270	29,459
1988	954	186	12,967	3,643	1,030	733	19,513
1989	1,232	139	18,805	4,033	695	42	24,946
1990	1,606	128	21,474	3,685	378	12	27,283
1991	1,477	432	25,380	5,439	296	2	33,026
1992	1,866	147	29,862	5,541	0	7	37,423
1993	1,944	171	33,523	4,634	16	15	40,303
1994	2,484	235	29,001	14,693	172	18	46,603
1995	1,752	298	32,711	13,738	2	8	48,509
1996	3,499	144	42,025	5,052	0	0	50,720
1997	2,939	84	24,352	2,690	0	1	30,066
1998	1,272	227	19,277	5,090	0	2	25,868
1999	1,640	259	21,151	5,575	0	0	28,625
2000	3,043	174	28,468	5,447	0	0	37,132
2001	2,863	347	48,117	3,099	0	25	54,451
2002	3,014	646	31,726	3,802	0	0	39,188
2003	3,679	1,181	33,024	3,643	4	0	41,531
2004	3,953	745	20,359	9,684	0	0	34,741
2005	7,716	821	22,102	8,259	0	0	38,898
2006	8,334	216	21,446	11,669	391	0	42,056
2007	2,542	744	17,249	8,073	0	0	28,608
2008	2,418	469	19,509	3,973	0	0	26,369
2009	7,036	1,137	11,260	9,766	0	0	29,199
2010	5,469	700	20,661	14,408	0	0	41,238
2011	3,277	669	24,543	12,478	0	0	40,967
2012	2,965	607	30,113	14,072	0	0	47,757
2013	738	669	25,173	10,374	0	0	36,954
2014	2,472	657	17,795	16,568	0	0	37,492
2015	2,447	404	19,881	10,183	0	0	32,915
2016	1,630	349	37,311	11,520	0	0	50,810
Averages							
1979-2015	2,410	408	22,701	7,008	1,972	1,277	35,809
2006-2015	3,770	627	20,763	11,156	39	0	36,356

[a] Chinook salmon are 28″ from the tip of snout to tip of tail; jacks are less than 28″.

[b] 1979 is commercial catch only.

Table 30.–Annette Island Reserve annual commercial drift gillnet salmon harvest in numbers by species, 1980–2016.

Year	Chinook	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	509	8,101	25,404	137,321	131,510	302,845
2007	894	13,318	28,795	242,444	153,080	438,531
2008	608	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	1,282	17,298	48,007	241,564	288,516	596,667
2012	1,396	16,676	37,684	308,995	341,338	706,089
2013	1,151	7,275	40,881	440,104	144,619	634,030
2014	1,094	8,675	45,305	484,572	98,023	637,669
2015	1,413	5,796	23,851	144,959	444,627	620,646
2016	855	3,798	35,677	273,022	243,342	556,694
Averages						
1980–2015	748	23,634	31,507	322,362	118,235	496,486
2006–2015	967	9,832	39,496	288,537	210,408	549,238
Max. harvest	3,447	76,054	74,552	823,081	444,627	971,989
Max. harvest year	2001	1993	2010	1989	2015	1995
Min. harvest	38	3,798	2,565	103,496	17,444	185,886
Min. harvest year	1980	2008	1980	2003	1983	2005

Table 31.–Annette Island Reserve annual commercial purse seine salmon harvest in numbers by species, 1980–2016.

Year	Chinook[a]	Jacks[a]	Sockeye	Coho	Pink	Chum	Total
1980	3	-	1,861	909	464,336	17,272	484,381
1981	4	-	1,316	1,100	245,151	4,747	252,318
1982	18	-	2,430	3,024	422,196	12,635	440,303
1983	3	-	5,939	3,335	999,270	4,996	1,013,543
1984	15	-	9,559	11,288	502,465	27,055	550,382
1985	47	-	6,133	3,919	494,115	9,105	513,319
1986	19	-	5,500	20,309	851,282	13,938	891,048
1987	5	-	618	9,204	28,584	17,991	56,402
1988	5	-	2,373	1,431	491,507	11,503	506,819
1989	73	-	14,572	2,127	1,231,281	12,216	1,260,269
1990	34	-	7,732	6,863	478,392	8,349	501,370
1991	2,194	-	5,068	6,262	543,316	4,954	561,794
1992	315	-	3,417	16,736	338,375	11,727	370,570
1993	29	-	14,807	3,868	735,899	8,953	763,556
1994	15	-	5,157	2,409	158,961	3,135	169,677
1995	11	-	18,001	9,695	1,151,375	14,456	1,193,538
1996	1	-	7,310	5,548	728,714	10,905	752,478
1997	29	-	20,645	5,281	295,390	25,062	346,407
1998	34	-	5,005	10,455	363,480	39,083	418,057
1999	10	-	5,110	6,511	631,342	16,230	659,203
2000	2,202	-	10,727	4,016	713,056	32,176	762,177
2001	709	-	25,432	13,413	1,655,144	20,950	1,715,648
2002	550	-	12,946	9,809	1,073,942	21,252	1,118,499
2003	80	4	3,871	6,820	466,016	9,618	486,409
2004	336	2	16,081	5,884	543,146	20,785	586,234
2005	173	-	6,911	6,777	489,527	13,631	517,019
2006	239	1	12,807	4,815	126,099	28,672	172,633
2007	175	2	6,260	5,007	603,712	37,400	652,556
2008	52	-	1,957	7,452	626,445	21,987	657,893
2009	90	7	7,496	15,183	1,612,453	38,480	1,673,709
2010	112	7	4,943	10,408	854,881	68,069	938,420
2011	420	-	12,031	4,989	498,932	142,056	658,428
2012	225	-	5,415	4,690	498,882	126,966	636,178
2013	245	1	3,625	7,834	2,137,912	37,862	2,187,479
2014	193	-	12,970	5,464	1,476,628	31,307	1,526,562
2015	752	-	20,837	10,249	632,022	259,504	923,364
2016	876	-	18,387	10,142	1,145,221	152,374	1,327,000
Averages							
1980–2015	262	1	8,524	7,030	699,006	32,917	747,740
2006–2015	250	2	8,834	7,609	906,797	79,230	1,002,722
Max. harvest	2,202	7	25,432	20,309	2,137,912	259,504	2,187,479
Max. harvest year	2000	2009	2001	1986	2013	2015	2013
Min. harvest	1	1	618	909	28,584	3,135	56,402
Min. harvest year	1996	2006	1987	1980	1987	1994	1987

[a] Chinook salmon are 28″ from the tip of snout to tip of tail; jacks are less than 28″.

- No data for jack Chinook salmon.

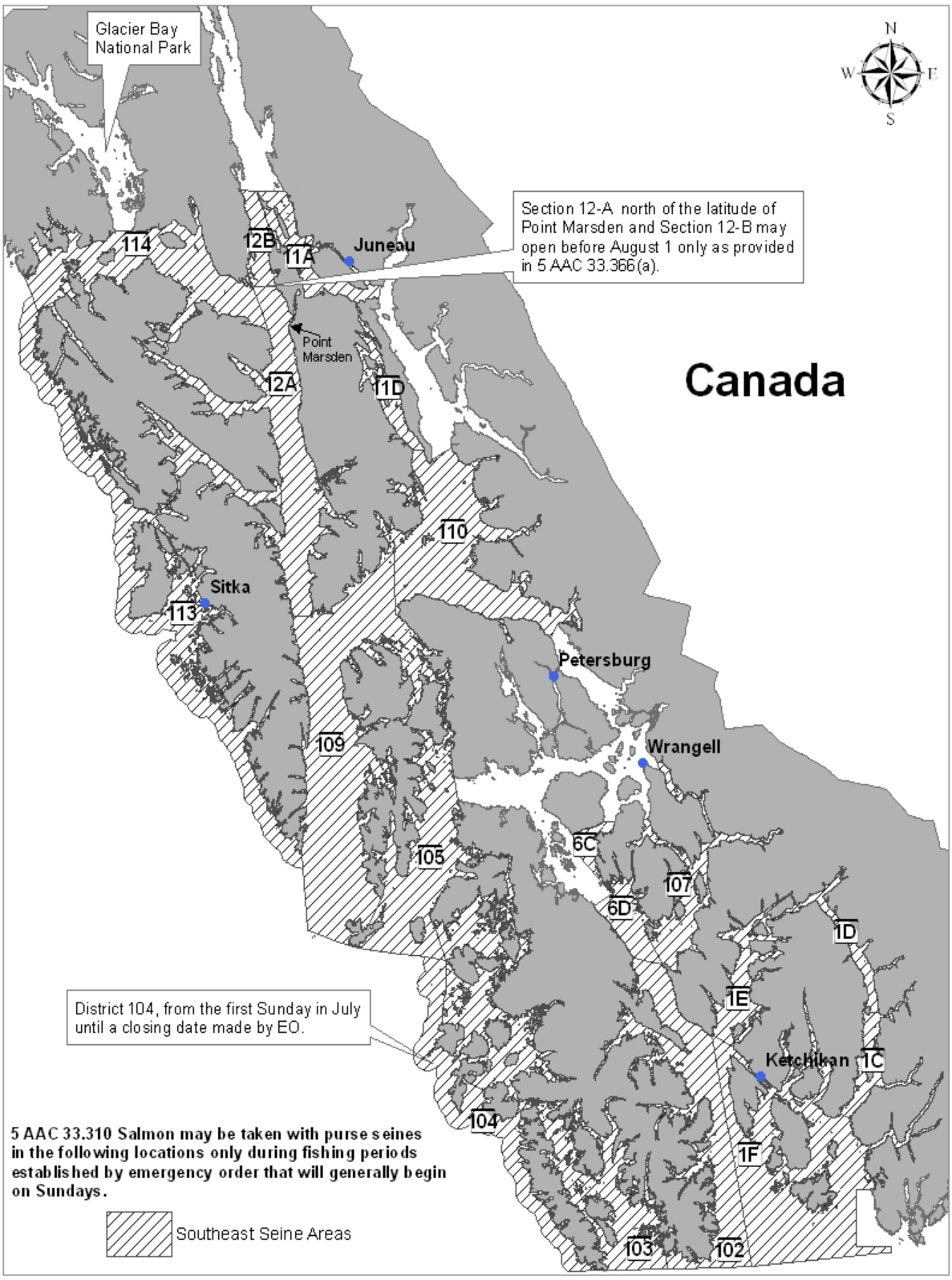

Figure 1.–Southeast Alaska purse seine fishing areas. Fishing periods and areas are determined by emergency order.

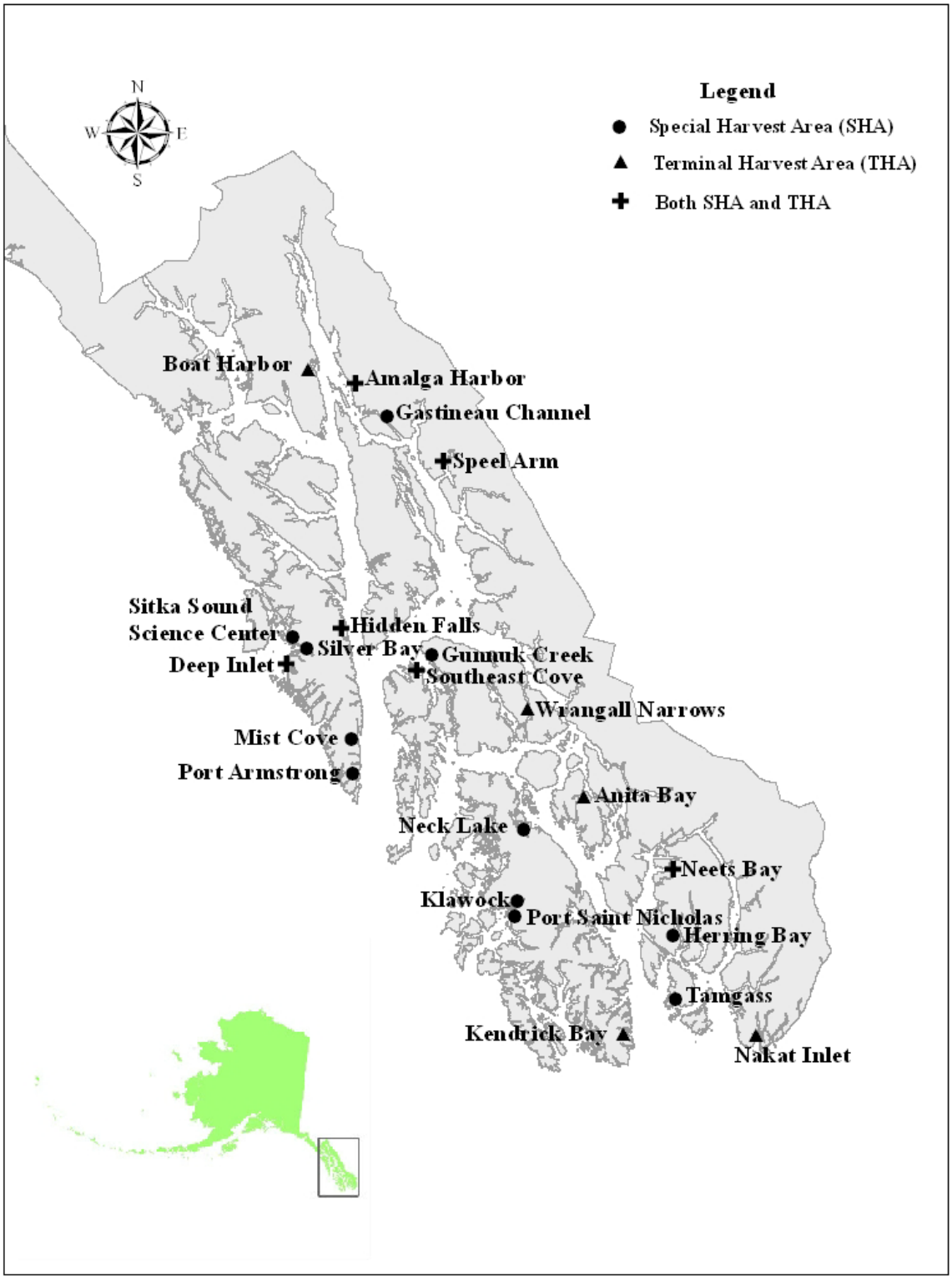

Figure 2.–Locations of terminal harvests in Southeast Alaska showing common property terminal harvest areas (THA), private hatchery cost recovery special harvest areas (SHA), and areas with both harvest types.

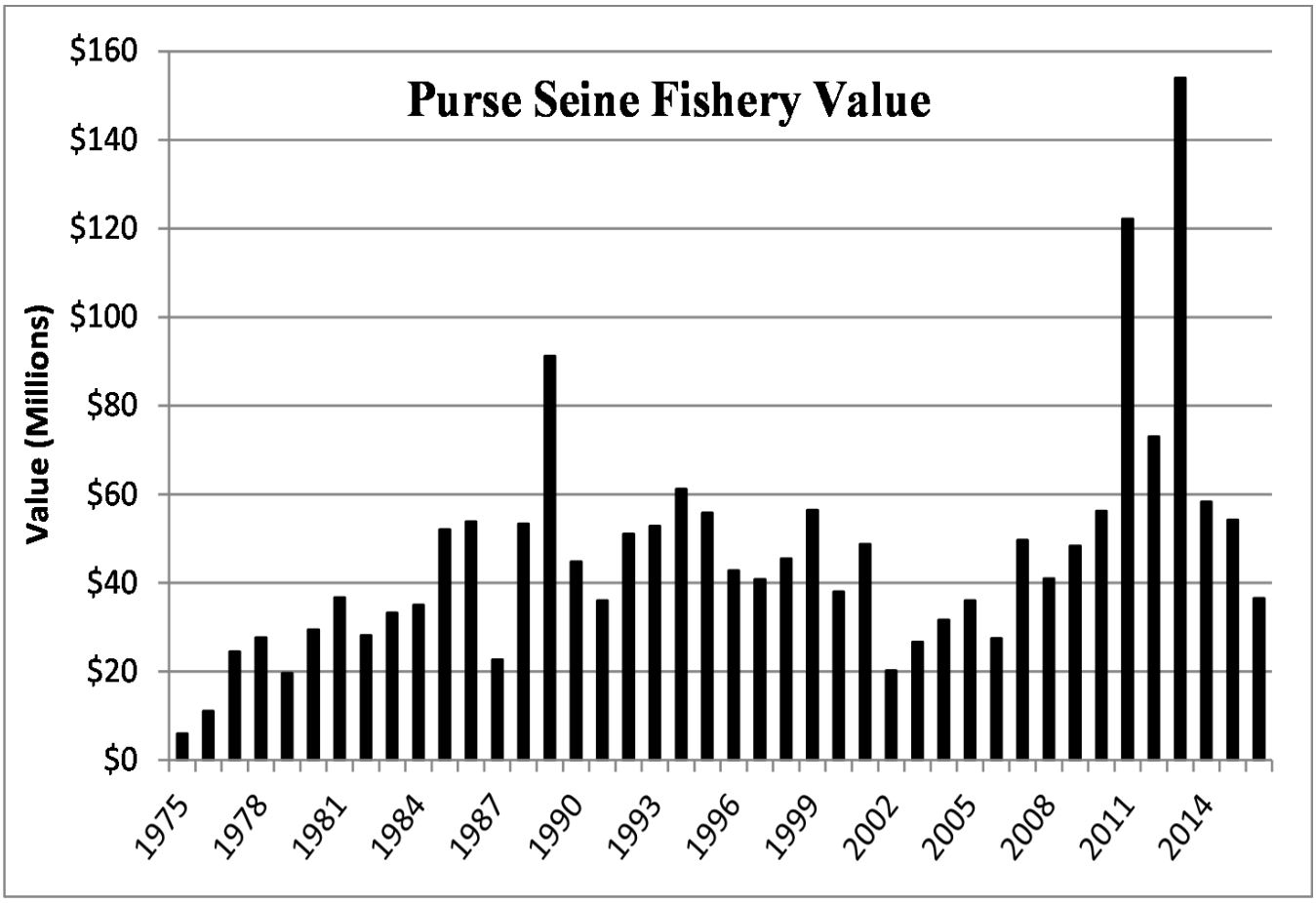

Figure 3.–Southeast Alaska purse seine fishery exvessel value in dollars (common property harvest), from 1975 to 2016.

Note: Data from CFEC basic information tables, 1975–2015 (CFEC 2017). Fish ticket data for 2016.

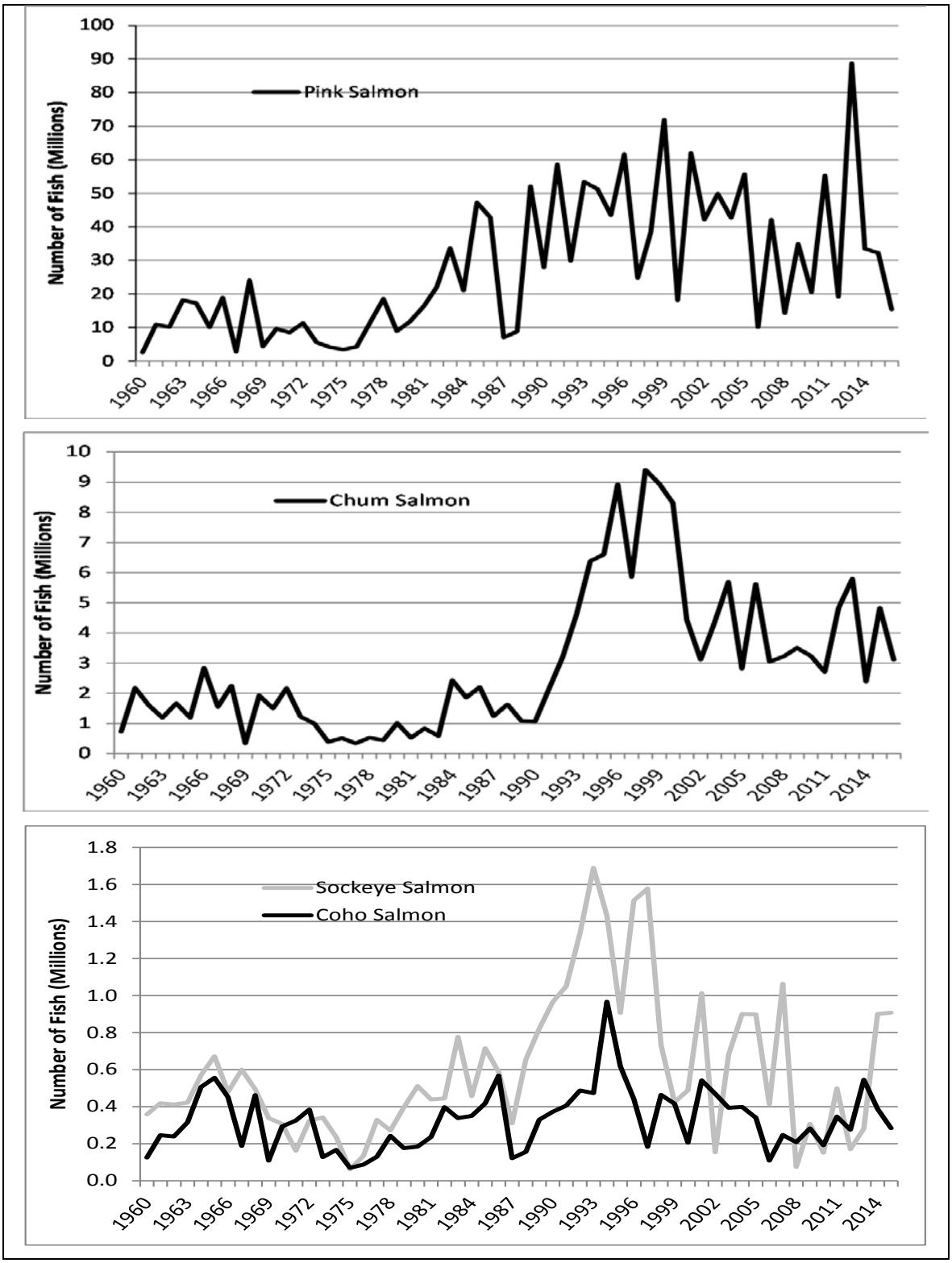

Figure 4.–Southeast Alaska Region annual common property purse seine salmon harvest (traditional and terminal harvest areas), in numbers of fish, for pink, chum, coho, and sockeye salmon, from 1960 to 2016.

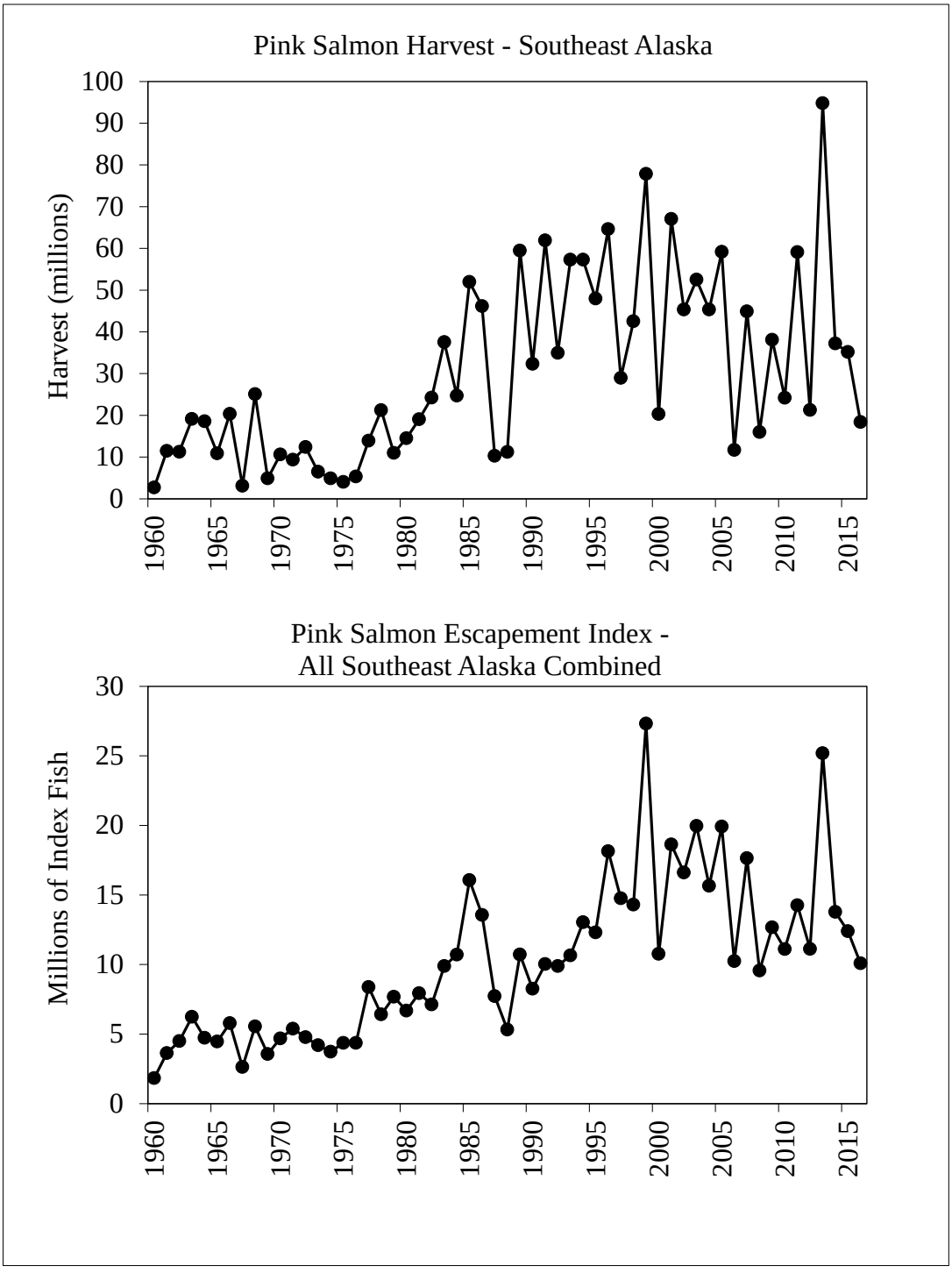

Figure 5.–Trends of pink salmon harvest and pink salmon escapement index for Southeast Alaska, all sub-regions combined, from 1960 to 2016.

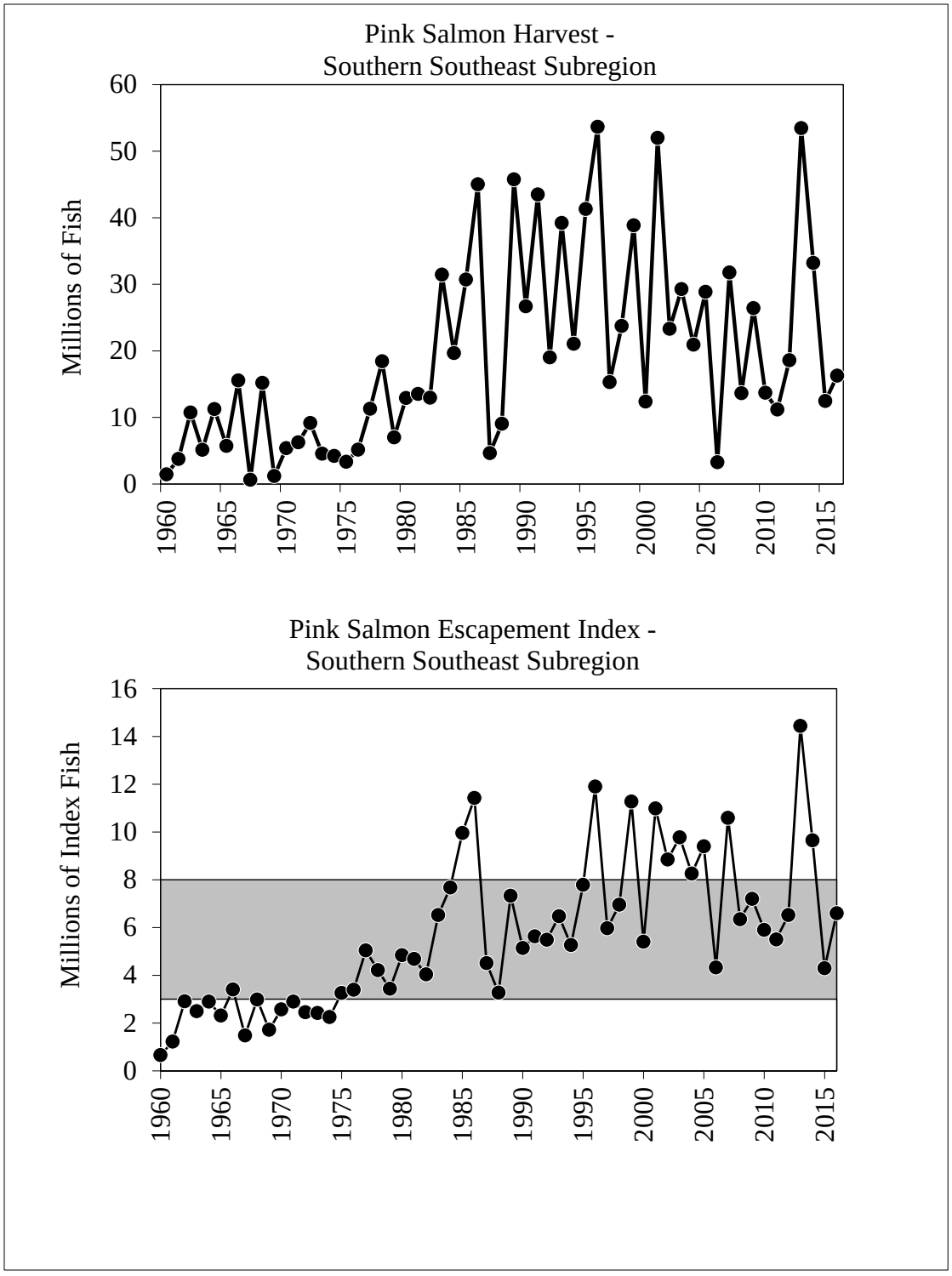

Figure 6.–Annual pink salmon harvest and escapement index for the Southern Southeast sub-region, 1960–2016 (Districts 101-108). The shaded area shows the escapement goal range of 3.0 million to 8.0 million index spawners.

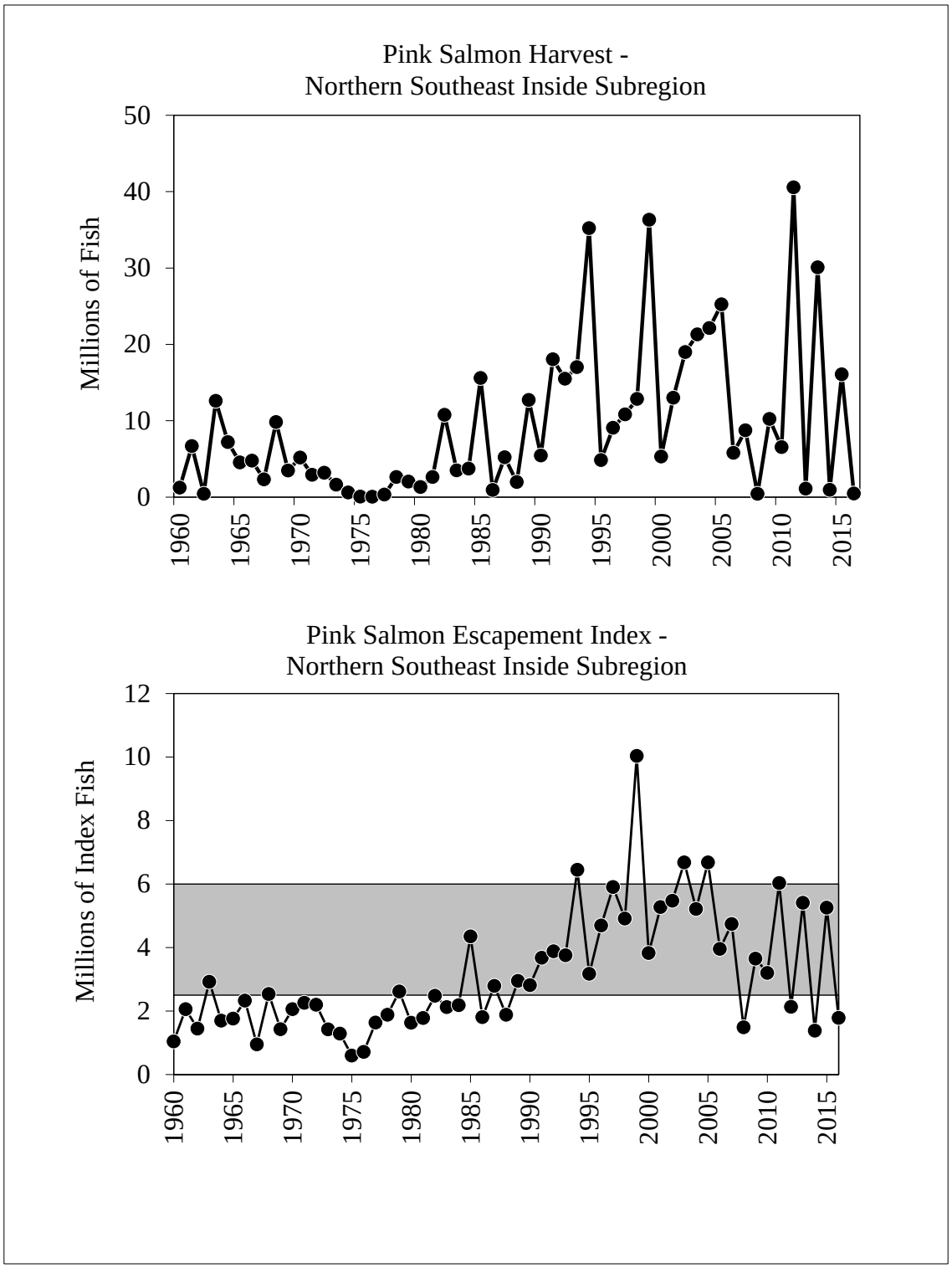

Figure 7.–Annual pink salmon harvest and escapement index for the Northern Southeast Inside sub-region, 1960–2016 (Districts 109–112, 114–115, and 113 subdistricts 51–59). The shaded area shows the escapement goal range of 2.5 million to 6.0 million index spawners.

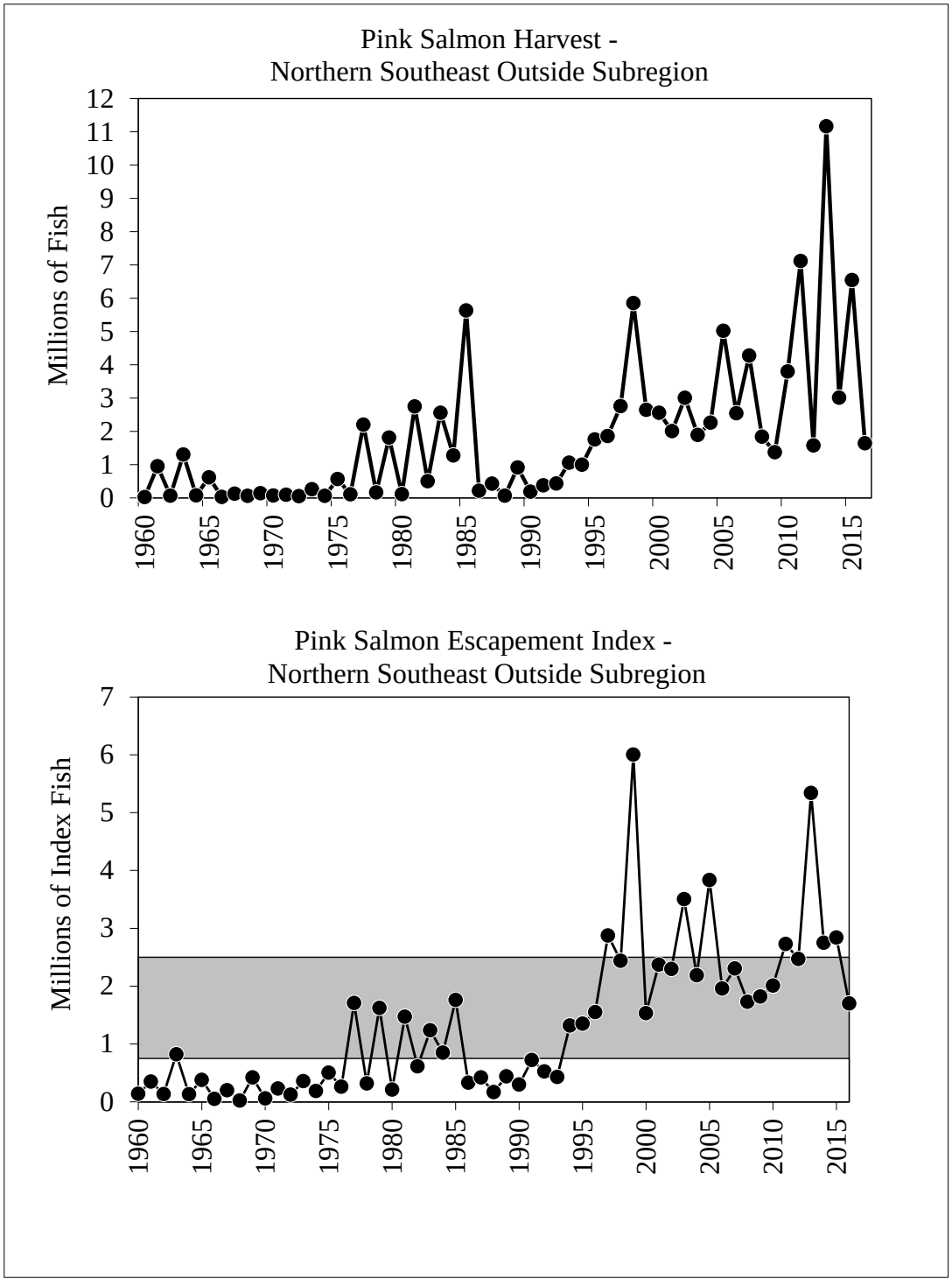

Figure 8.–Annual pink salmon harvest and escapement index for the Northern Southeast Outside sub-region, 1960–2016 (District 113, subdistricts 22–44 and 62–96). The shaded area shows the escapement goal range of 0.75 million to 2.50 million index spawners.

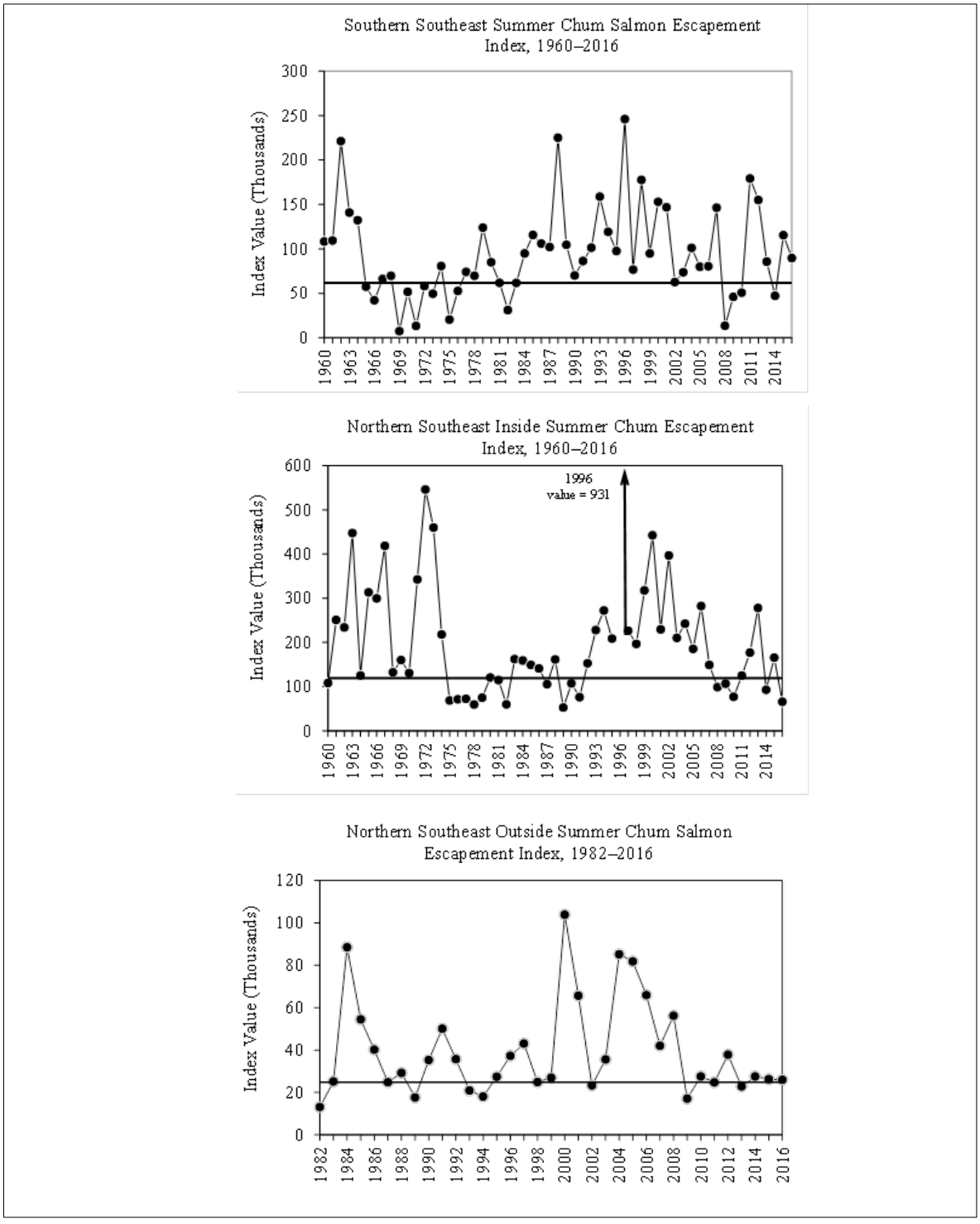

Figure 9.–Wild summer-run chum salmon escapement indices for the Southern Southeast stock group (1960–2016), Northern Southeast Inside stock group (1960–2016), and Northern Southeast Outside stock group (1982–2016). The solid lines show the sustainable escapement goal threshold for each stock.

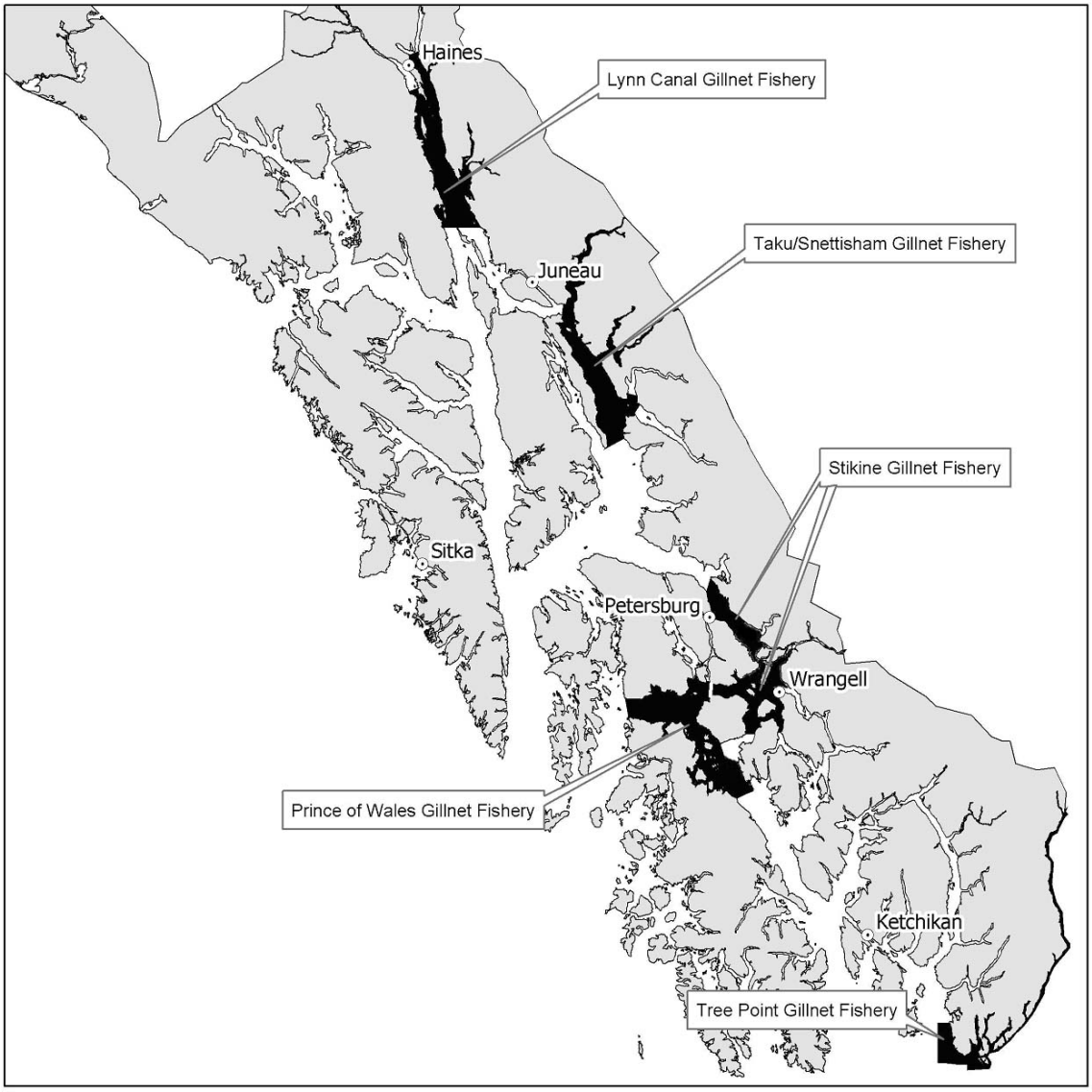

Figure 10.–Traditional drift gillnet fishing areas in Southeast Alaska.

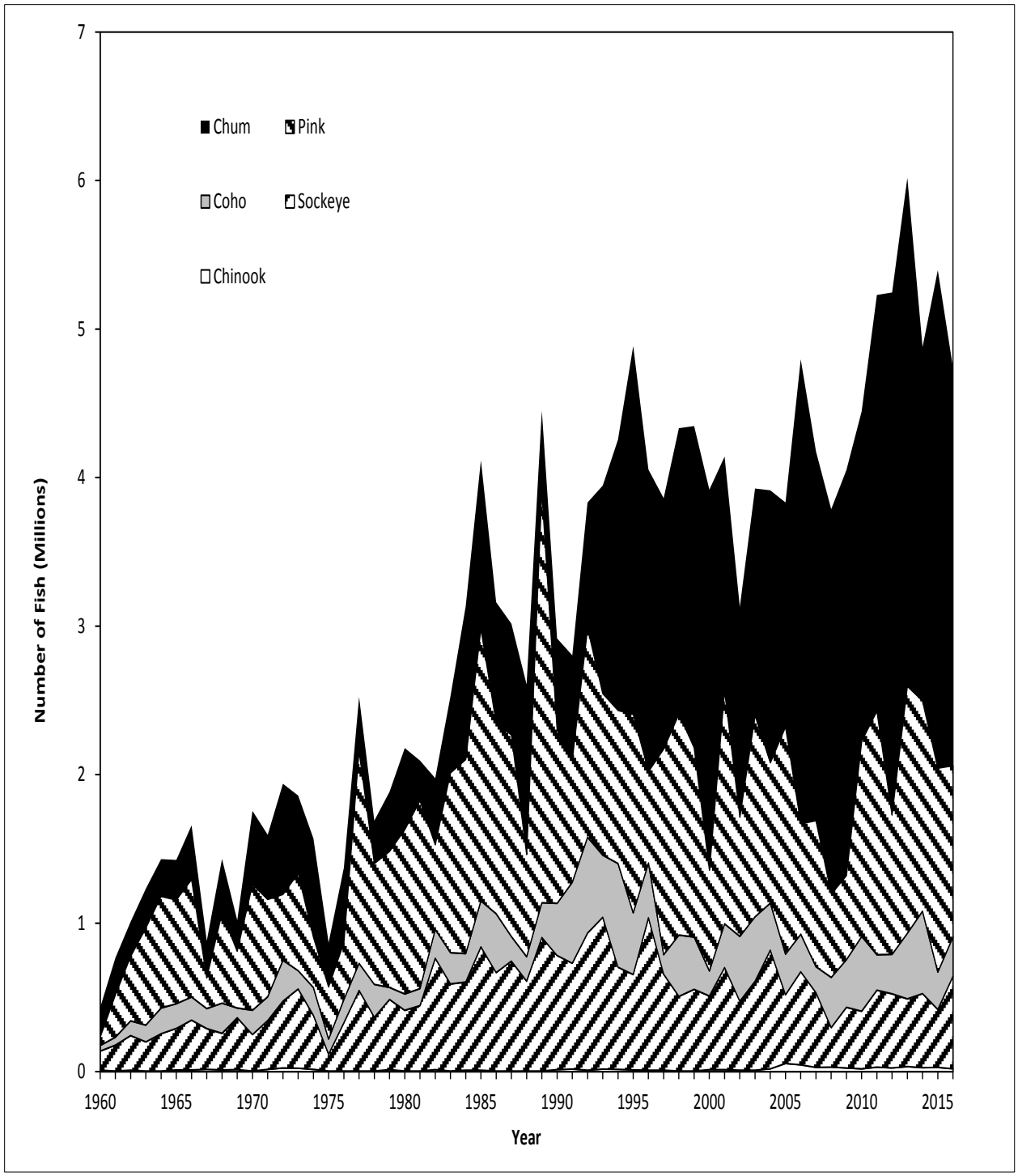

Figure 11.–Southeast Alaska annual total commercial drift gillnet salmon harvest from traditional and terminal harvest areas harvests, in numbers, by species, 1960 to 2016.

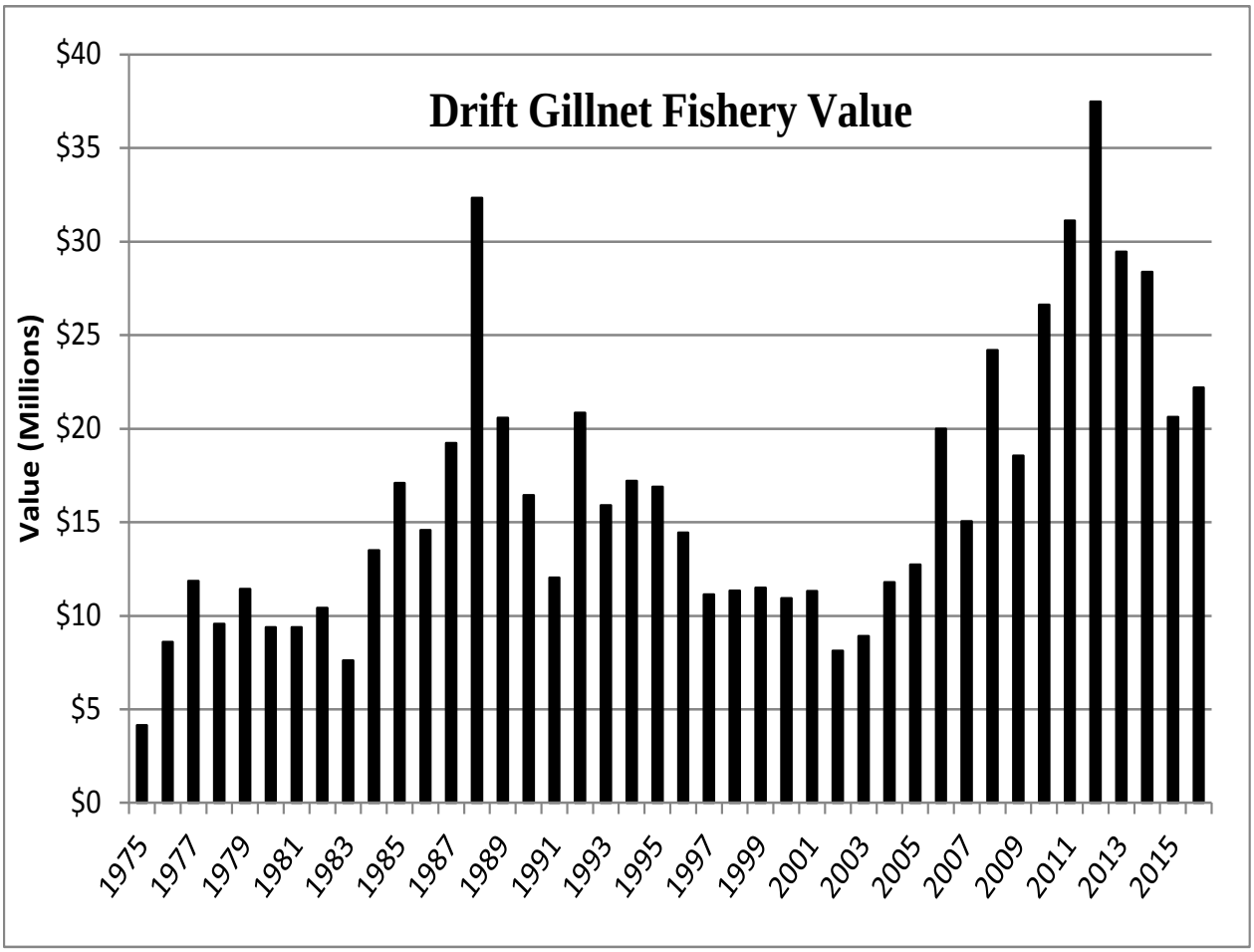

Figure 12.–Southeast Alaska drift gillnet fishery exvessel value in dollars (common property harvests) from 1975 to 2016.

Note: Data from CFEC basic information tables, 1975–2015 (CFEC 2017). Fish ticket data for 2016.