Fishery Management Report No. 20-19

Annual Management Report of the 2019 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

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

Weights and measures (metric)

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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TABLE OF CONTENTS

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (Continued)

LIST OF TABLES

LIST OF TABLES (Continued)

LIST OF FIGURES

ABSTRACT

A total of 33.5 million salmon were harvested in commercial salmon fisheries in the Southeast Alaska and Yakutat Region in 2019. The harvest by purse seine gear of 24.7 million fish included traditional fisheries (21.5 million), hatchery terminal areas (2.2 million), and Annette Island (1.0 million). Common property purse seine harvests of 23.7 million salmon were below the most recent average harvest of 38.6 million and ranked as the 33rd largest since statehood. The drift gillnet gear harvest of 4.2 million fish included traditional areas (2.6 million), hatchery terminal harvest areas (1.2 million), and Annette Island (0.4 million). Common property drift gillnet harvests of 3.8 million salmon were below the recent average harvest of 4.9 million and ranked as the 27th largest since statehood. Initial estimates for exvessel value are $55.6 million for common property purse seine fisheries and $18.8 million for common property drift gillnet fisheries.

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 2019 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, comparisons will be made to either the recent average (2009–2018) or the long-term average (1960–2018). 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 2019 Southeast Alaska regional salmon fisheries (Conrad and Thynes 2020), as well as summaries of the 2019 Southeast Alaska regional troll fisheries (Hagerman et al. 2020) and the 2019 Yakutat Area set gillnet fisheries (Hoffman and Christian 2020), are published as separate reports and together describe the 2019 salmon season.

PURSE SEINE FISHERY OVERVIEW

During the years following Alaska statehood (1960–2019), the common property purse seine fishery has accounted for approximately 76% 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*), 42% of sockeye salmon (*O. nerka*), 16% of coho salmon (*O. kisutch*), 89% of pink salmon, and 56% of chum salmon (*O. keta*) harvests (Conrad and Thynes 2020). Long-term average species composition of the common property purse seine fishery harvest has been <1.0% Chinook, 2.6% sockeye, 1.4% coho, 84.4% pink, and 11.6% 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 2019, purse seining took place in 9 terminal harvest areas (THA) and special harvest areas (SHA) (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, 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 2019, expectations were for a weak odd-year pink salmon return and an above-average chum salmon return. The regional all-gear harvest forecast for the 2019 season was for 18 million pink salmon, with a harvest projection of 17.5 million chum salmon and a total harvest projection of 43.8 million salmon (Brenner 2019). Final regional, all-gear harvests included 21.2 million pink, 9.4 million chum, and 33.5 million salmon of all species (Conrad and Thynes 2020).

In 2019, the total harvest by purse seine gear was 24.8 million salmon, and the total common property purse seine harvest was 23.7 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 21,000 Chinook, 445,000 sockeye, 246,000 coho, 18.6 million pink, and 4.4 million chum salmon. Historical common property purse seine harvests in traditional and THA fisheries from 1987 to 2018 are presented in Table 1, along with comparisons with the long-term, 59-year averages from 1960 to 2018, and the recent 10-year period average from 2009 to 2018. The 2019 season common property purse seine harvest is below the recent average of 38.6 million fish and ranks as 33rd largest common property purse seine harvest in the 60-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 $55.6 million accounts for 47% 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. Total value includes $28.8 million for southern Southeast Alaska (districts 1–7), $9.4 million for northern Southeast Alaska (districts 9–14), and $17.4 million for seine fisheries in THAs. Initial estimates for value of purse seine harvests by species based on prices from fish tickets indicate that pink salmon were worth $20.5 million, chum salmon were worth $27.6 million, sockeye salmon were worth $4.8 million, coho salmon were worth $1.4 million, and Chinook salmon were worth $1.1 million.

Total common property purse seine harvests in northern districts in 2019 were 5.7 million fish, ranking 37th of the 60 years since statehood (Table 5). Harvests in southern districts were 18 million fish, ranking 25th 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 3.2 million fish above forecast in 2019. Purse seine common property pink salmon harvests of 18.6 million fish were below the recent average of 33.9 million. Regional common property purse seine chum salmon harvests of 4.3 million were above the recent average of 3.9 million. Harvests of sockeye salmon of 445,000 fish were above the recent average but below the long-term average. Harvests of coho salmon of 246,000 were below the long-term and recent averages. Harvests for Chinook salmon were above the long-term average but below the recent average.

Table 2 presents a detailed breakdown of the 2019 purse seine harvests by species, fishery type, and district. Common property harvests include 21.5 million fish in traditional areas and 2.1 million fish in hatchery terminal areas. Purse seine harvests reported by the Annette Island Reservation totaled 984,000 salmon. Miscellaneous harvests of 76,000 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 21.5 million salmon harvested in traditional purse seine fisheries, 17.8 million were harvested in southern Southeast districts and 3.7 million were harvested in northern Southeast districts. At the district level, the largest harvest took place in District 2, followed by Districts 4, 1, 3, and 13.

Following some earlier openings in THAs, the 2019 purse seine fishery began on Sunday, June 16, with a combination of traditional areas and THAs in Districts 2 and 12. Openings on this date included District 2 shoreline outside Kendrick Bay; Point Augusta index fishery; and the SE Cove and Hidden Falls THAs. Summaries of the 2019 purse seine fisheries dates and times are shown for northern Southeast in Table 7, southern Southeast in Table 8, and for THAs in Table 9. Traditional purse seine fisheries are generally managed inseason based on aerial observations of escapements and evaluation of harvests.

Concurrent gear purse seine openings were June 1–12 in both the Carroll Inlet and Anita Bay THAs. Rotational net fisheries began June 13 in Carroll Inlet and Anita Bay THAs, June 19 in Neets Bay THA, and June 2 in Deep Inlet THA. In Kendrick Bay THA, only purse seine gear is allowed, and the area was open continuously beginning May 15. Twice weekly openings began June 16 for purse seine gear in a new SHA in Thomas Bay. Crawfish Inlet SHA openings began August 25 for purse seine gear.

The traditional summer pink salmon season ran through August 29 in some districts. Fall chum salmon opening began September 1 in Cholmondeley Sound, Port Camden, and Security Bay. Concurrent gear openings resumed late in the season at the Anita Bay THA through November 10 with minimal harvest and effort.

During the 2019 purse seine fishery, 240 permits were fished (Conrad and Thynes 2020). Effort in 2019 decreased by 2 permits compared with 2018. 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 subregion, 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 traditional purse seine, troll, and recreational fisheries, but not to the drift 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 (hatchery) 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 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 pretreaty hatchery production and estimation error. The purse seine harvest allocation in 2019 was 5,900 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 nonretention periods are necessary, it is preferable to implement the related emergency orders either early or late in the season when 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, nonretention is required.

In 2018, the Alaska Board of Fisheries declared Chinook salmon stocks from Chilkat, King Salmon, and Unuk rivers, as stocks of concern. The board also approved action plans for these stocks that required nonretention of Chinook salmon by the purse seine fleet for the entire fishing season.

The total 2019 common property purse seine harvest (traditional and THA) of Chinook salmon was 22,400 fish, of which 21,200 were reported as 28 inches or larger and 1,200 as less than 28 inches (Table 1). An accounting of Chinook salmon harvests for treaty purposes is preliminary at this time. The estimated purse seine harvest of Alaska hatchery Chinook salmon is 12,506 fish. Of these Alaska hatchery fish, 12,011 are designated as "hatchery add-on" Chinook salmon that do not count against the seasonal harvest guideline. For all districts, 9,534 Chinook salmon were caught in traditional fisheries, and 11,640 fish were caught in hatchery terminal area fisheries. The total large Chinook salmon harvest of 21,174 fish, minus the add-on Chinook salmon harvest, translates into a treaty Chinook salmon harvest of 9,168 fish. The treaty Chinook salmon harvest by purse seine gear in the Annette Island Reservation fishery was 188 fish for a total treaty Chinook salmon harvest of 9,356 fish, more than 3,000 fish above the purse seine treaty allocation.

NORTHERN SOUTHEAST ALASKA PURSE SEINE FISHERIES

Purse seine fishing in northern Southeast Alaska includes the fisheries that occur in Districts 9 through 14 (Figure 1). Fishery management is driven primarily by pink salmon stock abundance but also includes fisheries in hatchery terminal harvest areas. In 2019, traditional, THA, and SHA purse seine harvests in northern Southeast Alaska totaled 5.6 million fish and included 3,200

Chinook, 60,300 sockeye, 53,600 coho, 2.5 million pink, and 3.1 million chum salmon (Tables 2 and 5). The total salmon harvest was well below the recent and long-term averages and ranked 37th out of 60 years since 1960. Harvests of individual salmon species were all below recent and long-term averages, except chum salmon which was above both the 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 an early to mid-run pink salmon run to Red Bluff Bay. 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, Section 9-A was opened once, due to an aerial survey that showed an active jump show. Unfortunately, the show of pink salmon was short lived and very few salmon were harvested. The pink salmon escapement estimate for Section 9-A was below the lower bound of the target range (Table 12).

Primary commercial fishing areas in Section 9-B include the waters adjacent to Admiralty Island from Little Pybus Bay to 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 Kingsmill Point areas were operational in 2019. Point Gardner and Kingsmill Point test fisheries are annual programs that assess pink and chum salmon abundance for run timing and provide timely insight regarding fish returning to Section 9-B and District 10. 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 is 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. Test fishing at Point Gardner began in statistical week (SW) 26 and occurred one day per week for five weeks. Test fishing at Kingsmill Point began in SW 27 and occurred one day per week for four weeks.

Purse seine fisheries in Section 9-B were expected to be limited based on the parent-year return. Section 9-B first opened in mid-SW 30 (July 25) between Point Ellis and Kingsmill Point Light for 15 hours. Although an opening at this time in this area is early for directed pink salmon fishing, observations of pink salmon abundance were good for the time of year. Harvest was 85,000 pink salmon with 50 vessels participating (Table 8).

In SW 31 (July 28), the open area was adjusted to the area between Swaine Point and the Washington Bay Light including the waters of Tebenkof Bay. A total of seven vessels harvested 28,000 pink salmon. For a midweek opener in SW 31, 39 hours were permitted beginning July 31 with the open area further modified to include area between Point Cosmos and the Washington

Bay Light, excluding Keku Straits, Port Camden, Rowan Bay, Bay of Pillars, and Gedney Harbor. Harvest was 33,000 pink salmon with seven vessels participating.

In SW 32, Section 9-B was open for two 39-hour periods beginning on August 4 and August 8. Open area remained the same for the August 4 period and harvests continued to be low with 6 boats harvesting 24,000 pink salmon. On August 8, open area was adjusted to include all of lower Section 9-B south of Point Ellis, leaving Gedney Harbor closed. Harvest improved to 222,000 pink salmon with eight boats participating.

In SW 33, Section 9-B was opened for 39 hours (August 12–13) from Washington Point Light south. Interior portions of Rowan Bay, Bay of Pillars, Tebenkof Bay, and Gedney Harbor were closed to allow escapement. Harvest was 450,000 pink salmon with 27 vessels participating. A 39-hour opener was allowed later in the week (August 16–17) with the same area. Harvest was 228,000 pink salmon from 17 boats.

Section 9-B was open for two 39-hour periods in SW 34. The first began on August 20 with the open area south of Point Ellis and restrictions in Tebenkof Bay, Gedney Harbor, and Port Malmesbury. Harvest was 70,000 pink salmon with ten vessels participating. The second open period for SW 34 began on August 24 with the same open area but time was reduced to 15 hours and harvest declined to 26,000 pink salmon from ten boats.

In 2019, Section 9-B harvest and escapement were below the long-term averages. The 2019 harvest of 1.1 million pink salmon was higher than the 2018 harvest but was still well below the long-term average and was the 26th largest since statehood (Table 2). Escapements were highly variable throughout the area with the two Kuiu Island stock groups being at the lower end of their target ranges and the Eliza Harbor stock group well under its target range. Overall, Section 9-B indexed pink salmon escapement of 678,000 index fish was within the goal range of 500,000–1,190,000 index 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. Primary 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 area at the mouth of Seymour Canal.

In 2019, pink salmon returns to District 10 were expected to provide very limited, if any, pink salmon fisheries based on parent-year escapements. Results from the Point Gardner test fishery and aerial surveys indicated very low pink salmon abundance in District 10. Therefore, no purse seine openings occurred in 2019 marking the 8th time since statehood that no salmon were harvested in the district (Table 2). Pink salmon escapements were generally very poor throughout the district. Overall, the District 10 pink salmon escapement index of 284,500 index fish was well below the target range of 590,000 to 1,410,000 index fish and was the 10th lowest since statehood (Table 11).

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 (Figure 1). Section 11-A first opened since statehood in 2012 when common property fisheries targeting hatchery chum salmon returning to the Amalga Harbor SHA began. Section 11-D, Seymour Canal, has opened infrequently as Seymour Canal pink and

chum salmon stocks are harvested in the District 12 corridor and District 10 purse seine fisheries. Seymour Canal most recently opened in 2010 when there was a large return of pink salmon to the area. In 2019, no purse seine openings were provided due a very poor pink salmon return. Seymour Canal, with an escapement index of 36,800 pink salmon, was well below the management target range of 160,000–400,000 index fish. The Stephens Passage stock group, with an escapement index of 54,700 index fish, was also well below the management target range of 110,000–250,000 index fish (Table 12).

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 (Figure 1). The areas opened to purse seining in 2019 along the Baranof and Chichagof shorelines were the Point Augusta index area, and the Hidden Falls THA. The western shoreline of Admiralty Island was opened twice with limited time and area from the latitude of Hanus Reef to Point Marsden. The District 12 common property commercial purse seine fishery harvested 149,000 pink and 61,500 chum salmon (Table 2). The pink salmon harvest was 3% of the recent average harvest of 5.1 million fish while the chum salmon harvest was 8% of the recent average harvest of 0.7 million fish.

Point Augusta Index Area and Eastern Chichagof Island

The District 12 traditional purse seine fishery in upper Chatham Strait opened on Sunday, June 16, in the Point Augusta index area for 15 hours. The Point Augusta index area openings are intended to provide information on early pink salmon run strength and timing.

The Point Augusta index fishery has taken place along a one-mile stretch of the Chatham Strait shoreline on 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 2019, there were five 15-hour openings, from June 16 to July 14, that served as index fisheries with the area open within one-half mile from shore. The initial opening on June 16 (SW 25) had no effort. Pink salmon harvest for the remaining four 15-hour index area openings were less than half of recent averages. Purse seine effort for these openings were near to above recent averages for each opening. Although indicators varied, it appeared that the pink salmon returns to northern southeast Alaska inside waters were poor to weak. The Point Augusta index area was expanded to one nautical mile offshore on July 18 and remained so for the following two openings. The last opening of the season occurred on July 25 when it became apparent there were no pink salmon surplus to escapement needs in the northern southeast inside waters. The 2019 Point Augusta purse seine harvest for the eight open periods totaled 66,400 pink salmon, 12% of the 564,000 fish the recent average, and 32,100 chum salmon, 50% of the 64,000 fish the recent average harvest.

Tenakee Inlet pink salmon returns were very poor in 2019. Due to above average parent-year returns of chum salmon to Tenakee Inlet systems, Tenakee Inlet was open in the waters east of Corner Point. No effort occurred in the initial two openings, and after the June 30 opening where 11 boats harvested 3,200 pink salmon, 10% of the recent average and 100 chum salmon, 12% of the recent average. No further opportunity was provided in Tenakee Inlet as the chum salmon run was poor. The 2019 pink salmon escapement index for this stock group of 41,300 index fish was well below the management target range of 210,000–510,000 index fish (Table 12).

Fish returning to Freshwater Bay and streams entering Chatham Strait along the eastern shoreline of Chichagof Island comprise the Freshwater Bay stock group. The 2017 parent-year escapement

for this stock group was slightly below management target. With weak escapements to systems in Freshwater Bay, there were no openings on the northeast Chichagof Island shoreline in 2019. The 2019 index count for the Freshwater Bay stock group of 29,000 pink salmon was well below the management target range of 70,000–160,000 index fish.

Hawk Inlet Shoreline

The western shoreline of Admiralty Island between Point Marsden and Funter Bay is known as the Hawk Inlet shoreline. Salmon stocks returning to 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 destined for inside drift gillnet areas in Districts 11 and 15. The Hawk Inlet shoreline was closed during July between 1984 and 1988 by regulation. In 1989, the BOF adopted *Northern Southeast seine salmon fishery management plans* [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. In 2015, the BOF included wild sockeye salmon harvest from the Amalga Harbor SHA hatchery chum salmon fishery in the Hawk Inlet shoreline wild sockeye salmon harvest limit described in *Northern Southeast Seine Fishery Management Plans*. In 2018, the BOF removed the Amalga Harbor SHA sockeye salmon harvest from the plan and through the 2020 season, reduced the time period when the 15,000 wild sockeye salmon harvest limit applied from the entire month of July to July 1 through July 22.

The fishery has been opened in 1989, 1992–1994, 1999 and 2001, 2003–2006, 2009, 2011, 2013, 2015, 2017, and 2019. Prosecuting the purse seine fishery in 2019 was determined by a number of pink salmon run strength assessments:

- Parent year pink salmon escapements—overall escapement index value of the northern southeast inside subregion parent-year escapement fell within the escapement goal range. In this subregion, 16 of the 21 pink salmon stock groups were above management targets (5 stock groups were below the targets).
- Hawk Inlet standardized test fishery—weekly pink salmon harvest was above average in one of the four weeks in 2019; overall CPUE of pink salmon that was 65% of recent average. Test fishing occurred on June 28, July 5, 12, and 19, 2019.
- Aerial surveys—early season pink salmon counts were poor; surveys were conducted late June through early July. Starting in mid-July, increasing numbers of pink salmon were observed staging in front of spawning streams in lower Lynn Canal and upper Stephens Passage.
- Drift gillnet pink salmon harvests—District 15 pink salmon harvests were both 80% of the recent average, SWs 28 and 29 (July 7–July 20). During the same SWs, District 11 pink salmon harvests for the were between 88% and 121% of the recent average.
- Fish wheel catch— parent year 2017 Taku River fish wheel pink salmon catch was 135% of the recent odd-year average and the 2019 the cumulative catch of pink salmon through

July 20 was 141% of average. In 2019, the Chilkat River fish wheel cumulative pink salmon catch was 133% of the average.

Overall assessment indicated a near-average return of northbound pink salmon along the Hawk Inlet shoreline in July.

Per the *Northern Southeast seine salmon fishery management plans*, 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, primarily sockeye salmon. 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 and wild Speel and Crescent lakes stocks. In June, sockeye salmon returns to the Chilkoot and Taku rivers developed slowly. By early July the Chilkoot River escapement projection met the lower bound of the SEG range and continued to improve over the season, with the final escapement 165% of the upper bound of the EGR. Chilkat River fish wheel catches of sockeye salmon were also slow to develop through June and were above average most weeks of the season. The Chilkat Lake Didson sonar counts were projected to be just within the BEG range beginning mid-July and were above average most weeks of the season, with a final escapement of 98% of the upper bound of the EGR. Taku River inseason abundance observed via cumulative fishwheel CPUE was below average in June and improved to near average in mid-July, but inseason projections of terminal run strength were consistently well above the 2019 escapement objective.

With observed good pink salmon returns to the Taku River and early indications of potentially good pink salmon returns to Lynn Canal and upper Stephens Passage streams, no conservation concerns for sockeye salmon, passage of the time of concern for returning Taku and Chilkat rivers Chinook salmon, and the observed abundance of pink salmon along the Hawk Inlet shoreline, limited openings north of Point Marsden were warranted. The Hawk Inlet shoreline was first opened on July 18 for 6 hours within 0.5 nmi of shore between Point Marsden and the Latitude of Hanus Reef. Fourteen boats harvested a total of 32,350 salmon with a species composition of 64% pink, 32% chum, and 4% sockeye salmon. The shoreline was opened for the second and final time on July 21 for 8 hours within 0.5 nmi of shore between Point Marsden and the latitude of Hanus Reef. Twelve boats harvested 19,650 salmon: 74% pink, 19% chum, and 6% sockeye salmon. The total harvest in these two openings was 35,200 pink, 14,100 chum, and 2,500 sockeye salmon. Otolith analysis of sockeye salmon sampled from these openings indicated 11% of the sockeye salmon harvested along this shoreline were of Snettisham Hatchery origin, resulting in an estimated wild sockeye salmon harvest of 2,200 fish, below the 15,000 wild sockeye salmon harvest limit for these fisheries. After these two openings it became obvious to managers there was little if any surplus pink salmon to escapement needs in northern inside waters and no further common property fisheries occurred on this shoreline.

West and Southwest Admiralty

The west Admiralty Island shoreline south of Hawk Inlet was not opened in 2019. Indexed escapement for the West Admiralty stock group was 27,500 pink salmon, below the lower bound of the management target range of 50,000 to 120,000 index fish (Table 12).

Southwest Admiralty Island purse seine fisheries may occur south of Angoon in statistical areas 112-18 and 112-19, and often include openings inside some of the bays. This area was not opened in 2019. The escapement index for the southwest Admiralty stock group was 69,900 pink salmon,

below the lower bound of the management target range of 100,000 to 250,000 index fish (Table 12).

Subsistence salmon fisheries, particularly for sockeye salmon, are considered in the management of purse seine fisheries along the Admiralty shoreline. In recognition of the importance of these subsistence fisheries to Angoon residents, approximately 10 miles of shoreline from Parker Point to Point Samuel had not been opened to commercial purse seine gear for many years to provide additional protection for salmon returning to these important subsistence systems and were added to regulatory closed waters by the BOF in 2015. Sockeye returning to Kanalku Lake were of particular importance to the subsistence harvest and were of a concern for many years. The Kanalku Lake system has a partial barrier falls that sockeye salmon must negotiate on their return to the lake. Based on camera weirs operated below the falls in conjunction with the weir above the falls between 2012 and 2017, it has been found that returning sockeye salmon success in ascending the falls varies with respect to such factors as stream flow 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. Following the falls modification, the passage rate was estimated between 54% and 72%. At the end of the 2017 season, the sockeye salmon escapement monitoring project to Kanalku Lake, a weir project funded by the USFWS and operated by ADF&G, was cancelled after 11 years of operation and the 17th year escapement had been enumerated either through the weir counts or mark and recapture estimates. No monitoring of the system other than aerial surveys was conducted in 2019. The 2019 reported subsistence harvest was 85 sockeye salmon.

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 of Kelp Bay is monitored for summer chum salmon returns. If chum salmon escapement is adequate in Middle Arm, then Kelp Bay and the Catherine Island shoreline are normally opened south of Point Lull Light providing additional area to harvest Hidden Falls Hatchery and wild stock chum salmon. In 2019, aerial surveys in Kelp Bay indicated no surplus wild chum salmon were available for harvest. The chum salmon peak escapement estimate to Ralph's Creek in Middle Arm of Kelp Bay was 2,300 fish, below the recent average of 5,600 fish. Pink salmon began to enter Kelp Bay in mid-July; however, escapement estimates were low and no pink salmon openings occurred in 2019. The pink salmon escapement index for the Kelp Bay stock group was within the management target range (Table 12).

Section 13-C

Section 13-C, which includes Hoonah Sound and outer Peril Strait, did not open in 2019. Aerial survey observations indicated a low abundance of pink salmon returning to Section 13-C streams. Low water conditions existed in many of the pink salmon streams throughout the season. The escapement index estimates for this stock group fell well below the management target range (Table 12). Saook Bay and Rodman Bay contain the two most productive summer chum salmon systems in Section 13-C. Chum salmon escapements to both systems had counts below the recent averages.

District 14

Several separate purse seine fisheries may occur in District 14 due to the large area of Icy Strait. In 2019, no areas in District 14 were open to purse seine fisheries.

The Whitestone shoreline fishery, located along the northeast coast of Chichagof Island in Icy Strait, can open mid- to late-July to target middle run pink salmon stocks returning to Icy Strait, Chatham Strait, Lower Lynn Canal, and Stephens Passage. The pink salmon escapement index count for the north Chichagof stock group was 43,900 fish, below the management target range of 120,000–280,000 fish (Table 12).

The pink salmon escapement index count for the Homeshore stock group was 3,900 index fish, well below the management target range of 30,000–70,000 index fish (Table 12).

Idaho Inlet and Port Althorp in western District 14 are opened occasionally when run strength warrants. In the last 10 seasons, these areas were opened in 2011, 2013, and 2017.

Northern Southeast Alaska Outside Fisheries

Section 13-A

In Section 13-A, separate fisheries occurred in Portlock Harbor, Slocum Arm, Salisbury Sound, and Lisianski Inlet. The pink salmon returns to the Portlock Harbor, Slocum Arm, and Salisbury Sound stock groups were at recent averages. The pink salmon return to the Lisianski Inlet stock group, although in excess of the escapement target, was below the recent average run size.

The Lisianski stock group was open to commercial fishing 13 times in 2019 with a harvest of approximately 208,000 pink salmon. Although aerial surveys showed that pink salmon escapements to three of the five monitored systems were below recent averages, the final pink salmon escapement estimate of 283,000 fish exceeded the escapement target (Table 12).

Portlock Harbor was first opened July 18 commensurate with regional openings (Table 7). Approximately 87,000 pink salmon were harvested, which was below the recent average harvest. The pink salmon escapement index estimate was well above the upper bound of the management target range of 130,000 index fish (Table 12). The Portlock Harbor fishery also harvested 9,800 chum salmon. The chum salmon escapement estimate in Black River was 7,300 fish, above the recent average of 6,400 chum salmon.

Khaz Bay and Slocum Arm were first opened July 18 commensurate with regional openings (Table 7). The final opening occurred on August 28. Aerial survey observations indicated that larger numbers of pink salmon entered this area in mid-August. The total harvest was 633,000 pink salmon and 43,000 chum salmon. The pink salmon harvest was well below the recent average of 1,303,000 fish. The pink salmon escapement index estimates for this stock group fell in the upper end of the management target range (Table 12). Chum salmon escapements were generally above recent averages.

Salisbury Sound was first opened August 19 with openings continuing through August 29. Openings were commensurate with regional openings (Table 7). The total harvest of pink salmon was 92,000 fish, below the recent average harvest. The escapement index estimate for the Salisbury stock group was below the midpoint of the management target range (Table 12).

Section 13-B

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

Sitka Sound has two distinct purse seining areas which have different management considerations due to hatchery production. The southern portion of Sitka Sound includes the Eastern Channel/Silver Bay corridor with several productive pink salmon streams as well as large runs of hatchery 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.

Sitka Sound opened once for a directed pink salmon fishery on August 17 (Table 7). Due to aerial survey observations, openings were structured to target pink salmon returning to southern Sitka Sound systems only. The total harvest was 24,000 pink salmon and 173,000 chum salmon for this one opening. An additional 82,000 pink salmon were harvested in the Deep Inlet THA for the season. The total pink salmon harvest, including in the Deep Inlet THA, was 106,000 fish, well below the recent average. Aerial observations of abundance and harvest rates in northern Sitka Sound indicated chum salmon returns to Nakwasina Sound and Katlian Bay were below average. Pink salmon escapement was near the midpoint of the management target range. Most of the pink salmon systems in Sitka Sound had below average escapements.

Whale Bay first opened on July 31 and was opened a total of eight times in 2019 to target pink salmon (Table 7). Aerial surveys indicated there were pink salmon in excess to escapement needs returning to systems in the Great Arm of Whale Bay. Approximately 37,000 pink salmon were harvested in Whale Bay in 2019. Pink salmon escapements to individual Whale Bay systems were generally below average with the noted exception of the Whale Bay Great Arm head stream, which saw a pink salmon run of nearly double the recent average. The final pink salmon escapement estimate for the Whale Bay stock group was 142,500 fish, which was near the upper bound of the escapement goal range (Table 12).

There were no openings in Whale Bay specifically designed to harvest wild chum salmon returning to Great Arm systems. A total of 66,300 chum salmon were harvested with purse seine gear in Whale Bay this season. This level of harvest was greater than anything observed in the history of the fishery. The peak estimate of chum salmon to the Whale Bay Great Arm head stream was 7,100 fish, well above the recent average of 3,700 fish. Otolith samples from August 19 indicated that the peak chum salmon escapement estimate was composed of mostly wild fish. Late in the season aerial surveys showed a large buildup of what was believed to be Crawfish Inlet hatchery chum salmon. Otolith sampling of chum salmon in the Great Arm head stream from August 28 indicated large numbers of Crawfish Inlet hatchery chum salmon were present in the system by the end of August. It is believed that the unusually high harvest of chum salmon in Whale Bay was the result of the fishery intercepting Crawfish Inlet hatchery chum salmon transiting through the area.

West Crawfish Inlet was not opened for a directed pink salmon harvest in 2019; however, it was opened nine times to harvest Crawfish Inlet hatchery chum salmon that were building up at the head of the inlet. Aerial surveys indicated a weak run of pink salmon returning to index systems. The pink salmon escapement index estimate was well below the target range for this stock group

(Table 12). The chum salmon peak escapement count was 9,900 fish, above the recent average; however, a portion of this estimated escapement included hatchery stray chum salmon from the Crawfish Inlet THA.

Redoubt Bay and Lake Sockeye Salmon Management Plan [5 AAC 01.760] calls for commercial purse seine openings when the sockeye salmon projected total escapement will exceed 40,000 fish. Sockeye escapement projections beginning in late June exceeded the 40,000-fish threshold with actual escapement into Redoubt Lake exceeding 40,000 fish on August 4. Redoubt Bay was opened for purse seining on July 7. A total of 24 openings occurred until this area was closed after the August 18 opening (Table 7). Approximately 30,000 sockeye salmon were harvested in southern Sitka Sound in 2019. The final weir count was 59,106 sockeye salmon. The optimum escapement goal range for Redoubt Lake is 7,000–25,000 sockeye salmon.

Aerial observations indicated there was insufficient abundance to provide purse seine openings targeting sockeye salmon in Redfish Bay and Necker Bay in 2019.

Northern Southeast Alaska Fall Chum Salmon Fishery

Aerial surveys of Excursion Inlet in August and September indicated no harvestable surplus of chum salmon in the area. The 2019 peak chum salmon escapement index count of 3,600 fish was below the management target range.

Southwest Admiralty purse 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 2019, no surpluses of chum salmon were available for fall chum salmon fisheries. The peak aerial survey of 4,000 chum salmon for Chaik Bay Creek was below the recent average of 8,100 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. In 2019, these areas were opened during SWs 36–38 (Table 7). Fall chum salmon escapements to Section 9-B were good with indexed chum salmon escapements to Security Bay and Port Camden within goal range (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 (Figure 1). As in northern Southeast Alaska, fishery management is driven primarily by pink salmon abundance. However, during the early portion of the season, management decisions in District 4 are determined by the need to limit the harvest of Nass and Skeena River sockeye salmon in accordance with the PST.

Purse seine fishing opportunities targeting species other than pink salmon occur in southern Southeast Alaska. In lower District 2, early season openings target hatchery summer chum salmon released at Kendrick Bay, a remote release site operated by Southern Southeast Regional Aquaculture Association (SSRAA). Late-season openings targeting wild stock fall chum salmon typically occur in the Cholmondeley Sound area of District 2. There were two directed fall chum salmon openings in 2019.

In 2019, common property purse seine harvest (traditional and THA) in southern Southeast Alaska was 18.1 million fish, which ranks 25th since 1960. Harvest included 18,000 Chinook, 385,000 sockeye, 193,000 coho, 16.1 million pink, and 1.3 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 (Figure 1). District 4 is a mixed stock fishery and harvests salmon bound for streams in Southeast Alaska and Canada. In the early season, before SW 31, District 4 is managed based on PST obligations. For the remainder of the season, District 4 is managed based on pink salmon abundance.

The 2019 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 Department of Fisheries and Oceans Canada (DFO) 2019 preseason sockeye salmon run forecasts were approximately 620,000 sockeye salmon for the Nass River and 1.7 million sockeye salmon for the Skeena River. This produced an initial AAH estimate of 30,000 Nass and Skeena River sockeye salmon for the District 4 purse seine fishery.

The District 4 purse seine fishery opened on July 7, 2019, in SW 28, with a 12-hour opening (Table 8). During this opening, 26 vessels harvested 960 sockeye and 6,420 pink salmon. District 4 was opened again in SW 29, with another 12-hour opening. Harvests during the second opening improved with 11 vessels harvesting 2,680 sockeye and 19,200 pink salmon. However, the initial Skeena River in-season sockeye salmon estimate was well below the 2019 forecast. Therefore, the second SW 29 opening was restricted to 10 hours, and when 17 vessels harvested an additional 5,760 sockeye and 71,100 pink salmon, District 4 remained closed during SW 30, the last week of the treaty period.

During the early season treaty period, effective management actions were taken to maintain Alaska's treaty obligations. The District 4 purse seine fishery had three openings during the treaty period, remaining completely closed during half of the potential openings including all of SW 30. Total fishing time in the treaty period was 34 hours, approximately half of the average of 62 hours from 1985 to 2018, or half of the average of 61 hours for the current treaty annex period 2009 to 2018. Total harvest was 9,400 sockeye and 96,700 pink salmon by 36 vessels. This sockeye salmon harvest was 6% of the 1985–1998 average of 158,000 fish, 14% of the 1999–2008 average of 65,000 fish, and one quarter of the recent average of 38,000 fish. Effort was also very low compared to the 1985–1998 average of 139 vessels, the 1999–2008 average of 47 vessels, and the recent average of 48 vessels. In recent years, approximately 60% of sockeye salmon harvested during the treaty period have been of Nass and Skeena origin. In January 2020, the NBTC finalized the run reconstruction for 2018 and presented the preliminary run reconstruction for 2019 to the bilateral Northern Panel. For 2019, the preliminary run reconstruction allowed for an AAH of 5,780 Nass and Skeena sockeye. During the treaty period Alaska harvested approximately 4,433 Nass and Skeena sockeye. This resulted in an underage of 1,347 sockeye salmon for 2019.

After early season treaty obligations were met, District 4 started SW 31 with a 15-hour opening. Because pink salmon escapements were building rapidly and harvests had improved, the District 4 purse seine fishery moved into a two-day-on two-day-off fishing schedule along with the rest of southern Southeast Alaska. The second opening in SW 31 was the first of the two-day fishery schedule, which continued for seven openings until District 4 closed in statistical week 34.

Effort in 2019 was below average due to low pink salmon forecasts and returns in Southeast Alaska. Effort peaked in District 4 at 88 vessels for the first two-day opening in SW 31. Low harvest rates drove most vessels to other areas. For the season, 112 purse seine vessels harvested 3.5 million pink, 271,000 sockeye, 78,000 coho, and 175,000 chum salmon (Table 2). The effort of 112 vessels was below the 1985–2018 average effort of 149 vessels.

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 due south to the Canada border at 54°40.00′ N lat, 131°45.00′ W long, and north of the U.S./Canada border in Dixon Entrance (Figure 1). Purse seining primarily takes place in the waters of Revillagigedo Channel, which is immediately south of Ketchikan and in Clarence Strait along the Gravina Island shoreline, as the season progresses and escapements begin to improve. Run timing to Revillagigedo Channel is generally early and provides some of the first opportunity in the Ketchikan Area for harvest of wild stock pink salmon.

During 2019, the District 1 purse seine fishery pink salmon harvest was slightly below the 1985–2018 average. Pink salmon returns in 2017 met or exceeded escapement goals in all stock groups, so expectations were for a good return in 2019 (Table 12). The pink salmon return was average in southern Southeast Alaska, in contrast with poor pink salmon returns in northern Southeast Alaska.

The District 1 purse seine fishery started on July 7, in SW 28, with a 15-hour period and normal early season lines that included the Percy Islands. During this opening, 29 vessels harvested 52,300 pink salmon. Aerial surveys of the early-run systems in Boca De Quadra and Smeaton Bay showed average escapements for pink salmon. The next opening was for 15 hours and occurred on Sunday, July 14, in SW 29. Effort increased to 45 vessels and harvest increased to 162,600 pink salmon. Pink salmon escapements improved to average or above in District 1 early run systems and pink salmon harvests were average for this opening. A second 15-hour opening in SW 29 brought improved harvest rates with 258,400 pink salmon harvested by a similar effort of 47 vessels. Effort climbed to the season peak of 63 vessels during the first SW 30 opening, driven by lower harvest rates in other districts and the closure of District 4 due to treaty obligations. These 63 vessels harvested 208,300 pink salmon during the first and 52 vessels harvested 316,600 pink salmon during the second SW 30 openings. The effort in District 1 decreased to 40 vessels for SW 31 harvesting 168,000 pink salmon in a 15-hour opening. SW 31 also marked a shift to a two-day-on two-day-off fishing schedule, with a second opening. During this 39-hour opening, effort remained similar with 42 vessels harvesting 384,000 pink salmon. Escapements in District 1 climbed steadily supporting the two-day-on two-day-off schedule. Effort and harvest peaked during SW 32 when 52 vessels harvested a total of 853,000 pink salmon for the week. After this week, effort and harvest declined steadily for the rest of the season ending after a total of 8 two-day fisheries, closing on August 29 (Table 8).

Fish in most District 1 early run systems arrived fairly early, and stock groups were within target ranges. Open periods and area in District 1 took advantage of excess pink salmon, with a localized closure around the mouth of Boca De Quadra to protect returning Hugh Smith Lake sockeye salmon.

In 2019, District 1 traditional purse seine harvest of Chinook salmon was above the 1985–2018 average. Harvest of all other salmon species were below the 1985–2018 average: pink salmon harvest of 3.5 million fish was 64%, chum salmon harvest of 225,000 fish was 76%, sockeye salmon harvest of 38,000 fish was 42%, and coho salmon harvest of 25,000 fish was 67% of the average harvest since 1985. Chinook salmon harvest of 900 fish was 117% of the average harvest since 1985 (Table 2).

District 1 was open for 22 days with 11 periods totaling 402 hours (Table 8). This was an increase from the parent year, 2017, when the district was open for 336 hours in 16 periods. Total fishing time was slightly below the 1985–2018 average of 433 hours. Indexed escapement to the district was 2.24 million pink salmon, within the management target range of 1.02–2.71 million index fish (Table 11).

The *McDonald Lake Sockeye Salmon Stock Status and Action Plan, 2018* (Walker et al. 2018) was in effect during the 2019 season. The western shore of Gravina remained closed north of the latitude of Cone Point until SW 32. Estimated escapement into McDonald Lake of 24,200 sockeye salmon, was below the SEG range of 55,000–120,000 fish (Table 14).

Due to a very poor return of Hugh Smith Lake sockeye salmon, management action was taken during the 2019 season closing area near Boca De Quadra during SW 31 then an expanded area in SW 32 and 33. During the 2006 BOF meeting 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 range. 2019 Hugh Smith Lake adult sockeye salmon escapement was 2,240 fish, well below 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 lat, 132°17.50′ W long (Figure 1). Fishing primarily takes place in Clarence Strait and does not usually occur in the four major inlets (Kasaan Bay, Cholmondeley Sound, Moira Sound, and Thorne Bay) where productive salmon streams are located. 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 purse seine fleet. These hatchery chum salmon are returning primarily to Kendrick Bay, but Anita Bay, Nakat Inlet, and Neets Bay hatchery chum salmon are also present.

Waters of Kendrick Bay THA were open by regulation continuously to purse seine harvest beginning Saturday, June 15, SW 24 (Table 9). A limited portion of lower District 2 was opened beginning Sunday, June 16, in SW 25 to harvest hatchery 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 quality of those chum salmon. Open area for this fishery consists of waters in District 2 north of 54°47.10′ N lat (approximately 0.5 nmi south of McLean Point Light) and south of the northern tip of Polk Island. Additionally,

beginning in 2014 and continuing through 2019, waters were closed east of a line that allowed fishing within 2.0 nmi of the Prince of Wales Island shoreline. This 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 2019, the area outside Kendrick Bay was open for 87 hours in SWs 25 and 26, then for two additional 15-hour openings in SW 27.

Seventeen purse seine vessels caught 500 chum salmon during the first 87-hour opening in SW 25. Harvest increased to 7,500 chum salmon by 47 vessels during the 87-hour period in SW 26. Additionally, 7,900 chum salmon were harvested by 41 vessels during the first 15-hour opening and 4,900 chum salmon were harvested by 21 vessels during the second 15-hour opening in SW 27, with 500 sockeye, 1,300 coho, and 4,700 pink salmon harvested during these four periods. Due to the low harvest rate of hatchery chum salmon, openings did not continue past SW 27. Overall, 67 vessels harvested 12,800 chum salmon in early season Kendrick purse seine openings.

The traditional purse seine fishery in District 2 targeting local stocks of pink salmon opened Sunday, July 7 in SW 28 for 15 hours (Table 8). In this opening, 38 vessels harvested 9,500 pink salmon. District 2 opened with a 15-hour fishing period and re-opened for another 15-hour midweek fishing period in SW 29. District 2 had two 15-hour fishing periods in SW 30 and another to start SW 31. In the second half of SW 31 District 2 shifted to a two-day-on two-day-off fishing schedule that it followed until SW 35. The District 2 purse seine fishery closed for pink salmon on August 29. Effort peaked early at 56 vessels during SW 31 and was highly variable throughout the season.

There were 14 traditional pink salmon fishery openings following the earlier extended openings targeting hatchery summer chum salmon returns (Table 8). Pink salmon escapements and harvests were near average for most of the season which kept effort low. Escapement estimates in most areas of District 2 reached management targets earlier than usual, allowing for more aggressive lines and area. District 2 open area expanded North of Polk Island to Windy Point in SW 30, to High Island Light in SW 31, to Figgins Point and Windfall Harbor in SW 32, and finally included the whole district in SW 33. Harvests of pink salmon in District 2 were below average in the early part of the 2019 season and climbed to above average for SWs 33 and 34.

A total of 145 purse seine vessels fished District 2, close to the 1985–2018 average of 150. The district was open for purse seine harvest for a total of 630 hours during the 2019 season. This includes the early outside Kendrick fishery and fall chum salmon fishing opportunities that occurred in September (Table 8).

District 2 traditional purse seine harvest of 4.17 million pink salmon (Table 2) was above the 1985–2018 average of 3.9 million. Total harvest of 399,000 chum salmon was 83% of the 1985–2018 average of 479,000. Limited portions of District 2 reopened to target fall chum salmon in one 12-hour opening in SW 36 and another 12-hour opening in SW 37, after which the fall chum salmon fishery closed (see Southern Southeast Alaska Fall Chum Salmon Fishery section). The District 2 traditional fishery sockeye salmon harvest of 34,000 fish was below the 1985–2018 average of 41,000 fish, coho salmon harvest of 41,000 fish was below the average of 49,000 fish, and Chinook salmon harvest of 750 fish was 167% of the average of 600 fish. Indexed escapement to the district of 670,000 pink salmon was in the management target range of 290,000–770,000 index fish (Table 11).

District 3

District 3 encompasses all 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 (Figure 1). It has a large and diverse geographical range and is a very productive pink salmon area. Some of the primary fishing areas include waters of Cordova Bay, containing fish bound for Hetta, Nutkwa, and Klakas inlets in Section 3-A, waters of Boca De Finas and San Christoval Channel in Section 3-B, and waters of Sea Otter Sound in Section 3-C. Timing of pink salmon returns in District 3 is generally later and the district historically opens in SW 30.

The District 3 purse seine fishery opened on Sunday, July 21, in SW 30 (Table 8). During the first two 15-hour openings in SW 30, 11 vessels harvested 45,000 pink salmon. Effort in District 3 dropped to four vessels for the next 15-hour opening in SW 31 and climbed back up to 11 vessels for the midweek 39-hour opening. The District 3 fishery continued with 39-hour openings each week from SW 32 through the end of the season in SW 35. Harvest peaked in the second opening of SW 32 with 51 vessels harvesting 789,000 pink salmon and effort peaked the next opening with 54 vessels harvesting 546,000 pink salmon. Low effort and no escapement concerns allowed for liberal fishing lines in District 3. The District 3 season ended on August 29 after a total of 11 openings and 357 hours (Table 8).

District 3 purse seine pink salmon harvest of 2.8 million fish (Table 2) was less than half of the 1985–2018 average of 3.8 million fish. Harvest of sockeye salmon was 24,000 fish or 110% of the 1985–2018 average of 22,000 fish; coho salmon harvest of 32,000 fish was 107% of the 1985–2018 average of 30,000 fish; chum salmon harvest of 114,000 fish was 108% of the 1985–2018 average of 105,000 fish; and Chinook salmon harvest of 300 fish was 67% of the 1985–2018 average of 300 fish. Indexed escapement of 1.49 million pink salmon was within the management target range of 0.95–2.54 million index fish (Table 11).

District 5

District 5 encompasses waters of western Sumner Strait, approximately 50 nmi southwest of the community of Petersburg (Figure 1). Fisheries occur either inside the major bays on Prince of Wales or Kuiu Islands, which include Affleck Canal, Port Beauclerc, Shakan Bay, and Shipley Bay; or in the more exposed waters along the northwestern side of Prince of Wales Island between Cape Pole and Point Baker.

The McDonald Lake action plan was in effect for the District 5 purse seine fishery in 2019. The plan stipulates that no purse seine fishing will occur in SWs 29–31 along the northwest shore of Prince of Wales Island between Point Baker and the Barrier Islands. In 2019, pink salmon returns to District 5 were expected to result in moderate openings throughout the district based on parent-year escapement. The pink salmon run to District 5 was below expectations resulting in minimal openings in limited areas. Management was more affected by low pink salmon abundance than by the action plan.

District 5 opened SW 30 on July 25 for 15 hours (Table 8). Open area was limited to Shakan Bay east of the Station Island Light (the interior portion of the bay). Effort was minimal and harvest is confidential.

In SW 31, District 5 opened for a 15-hour period on July 28 and a 39-hour period beginning July 31. Open areas for July 28 remained the same as the previous period, but for the July 31/August 1 opener the area expanded to include the portion of Sumner Strait between Cape Amelius and Cape Decision

including Affleck Canal, and the interior waters of Shakan and Shipley bays. Total effort for the week was six vessels harvesting 20,000 pink salmon.

In SW 32, District 5 was open for one 39-hour period, beginning Sunday August 4 with the same area available as in the July 31 opener. Four boats harvested 24,000 pink salmon.

During SWs 33–35 (August 12–25), District 5 fishing was open on a rotating schedule of two-days on two-days off. However, fishing was limited to the Affleck Canal area on the southwest corner of Kuiu Island based on observations of pink salmon escapement. Effort and harvest remained low.

The total District 5 harvest in 2019 was 124,000 pink salmon, the 35th highest since statehood (Table 2). Escapements throughout the district were poor to good. The Shipley Bay stock group was within its target range; however, the Affleck stock group was below target range due to poor escapement in many of the systems north of Affleck Canal (Table 12). Overall, the pink salmon escapement index of 330,800 index fish was within the management target range of 250,000 to 660,000 index fish (Table 11).

District 6

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

The McDonald Lake action plan was in effect for the District 6 purse seine fishery in 2019. The action plan dictated the west side of Etolin Island between Point Stanhope and the latitude of Round Point and along the east side of Prince of Wales Island between Luck Point and Narrow Point remain closed SWs 29–31. District 6 was expected to have an overall moderate return of pink salmon based on parent-year escapement. Like District 5, low pink salmon abundance had more impact on management actions than did the McDonald Lake action plan.

District 6 was opened for the first time in SW 32 (August 4) for 15 hours with area restricted to north of Cape Harrington and west of Round Point (Stikine Strait). Harvest was 9,700 pink salmon with six vessels participating. A second opener for 39-hours occurred beginning August 8 and was restricted to within 2.0 nmi of the Prince of Wales shoreline south of Ratz harbor (Table 8). This opener was based on observed pink salmon escapement in Prince of Wales streams (Ratz Harbor and Eagle Creek). Harvest was 129,000 pink salmon with eleven boats participating.

In SW 33, District 6 was open for two 39-hour periods. The initial opening for the week was on August 12 with the same open area as the previous week. Effort remained at eleven boats with a harvest of 111,000 pink salmon. Open area was expanded north to a regulatory marker slightly less than three miles to the north of the Ratz Harbor Light and open area was restricted to within 2.0 nmi of the Prince of Wales Island shoreline for the second period of the week resulting in 126,000 pink salmon harvested by 14 vessels.

Two more 39-hour periods were permitted during SW 34. The first opening began on August 20 with open area adjusted to allow fishing in all of Section 6-C, and portions of Section 6-D: the Stikine Straits west of Round Point and the Prince of Wales shoreline within 2.0 nmi south of the regulatory marker mentioned above. Closed areas included the Prince of Wales Island shoreline within 2.0 nmi north of the regulatory marker mentioned above, and the area east of a line from

Point Stanhope to Kelp Point (Mosman, Burnet, and McHenry inlets). During this opener, 31 vessels harvested 161,000 pink salmon. For the August 24 period, the shoreline on Prince of Wales Island and in Stikine Strait were opened to normal markers while the area east of the line between Point Stanhope and Kelp Point remained closed. Effort and harvest dropped with 107,000 pink salmon harvested and nine vessels participating.

District 6 closed to purse seining for the season after a 39-hour period in SW 35 that began on August 28. Area remained the same as the last period in SW 34; however, harvest dropped to 81,000 pink salmon with ten vessels participating. Total pink salmon harvest for the season was 725,000 fish compared to the recent average of 481,000 and ranked 13th since statehood.

Escapements to District 6 were mixed but all stock groups were within their respective target ranges with some systems having very poor escapement, other systems with adequate escapement, and a few systems with excellent escapement. Pink salmon indexed escapement for the district was 432,300 index fish, within the management target range of 210,000–570,000 index 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, 30 nmi 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 the section are primarily based on pink salmon abundance returning to Anan Creek. The District 7 purse seine fishery primarily harvests pink salmon. Beginning in 1997, chum salmon from hatchery releases began to enter the district in numbers large enough to attract additional effort.

The McDonald Lake action plan was in effect for the District 7 purse seine fishery in 2019. The plan dictated Section 7-B would remain closed in SW 29–31, unless pink salmon abundance was high. If pink salmon abundance is adequate to allow openings in Section 7-B, then the northern portion of section 7-B, north of Union Point may be open during SW 31. If Section 7-B opens in SW 31, restrictions could occur in the area south of Union Point into SW 32 to reduce the overall harvest of sockeye salmon. Management actions were affected by the action plan in 2019 as Section 7-B opened in the latter part of SW 31.

In 2019, Section 7-A did not open on a set date and the initial opening was based on observations of pink salmon abundance. Section 7-A was initially opened for 15 hours and in a limited area in SW 27 on June 30 with 22 vessels participating (Table 8). Pink salmon harvest was very low with a harvest of 8,100 fish, and the chum salmon harvest of 222 fish was also low.

In SW 28, Section 7-A opened on July 8 for another 15-hour period with the same area as on June 30. Escapement to Anan Creek was below average, whereas escapements to the Bradfield systems were stronger. Effort was once again 22 boats, harvest increased for both pink and chum to 46,000 and 2,100, respectively, but neither were very impressive numbers when compared to historical data.

In SW 29, Section 7-A opened with the same area for two 15-hour periods on July 14 and again on July 18. Effort increased to 34 boats and harvest increased to 77,000 pinks and 11,000 chums. The July 18 opener saw another increase in effort and harvest. Pink salmon harvest was 128,000 and 30,000 chums were recorded with 39 vessels participating.

Given the increase in abundance of both species, two 15-hour periods were permitted during SW 30. Area was kept the same. The first was on July 21 when 41 boats caught 124,000 pinks and 54,000 chums, all three metrics represent an increase from the July 18 period. Another 15-hour opportunity was permitted on July 25 with effort and pink salmon harvest continuing an upward trend. Pink salmon harvest was 149,000 while chum salmon harvest declined to 24,000 fish with 47 vessels participating.

Using the same area again, Section 7-A was opened for two additional 15-hour periods in SW 31. The first occurred on July 28 with effort dropping to 28 boats harvesting 78,000 pinks and 24,000 chums. The final opener for the 2019 season in Section 7-A occurred on July 31 and resulted in a harvest of 144,000 pinks and 27,000 chum salmon with 21 vessels participating.

Section 7-B was opened for the first time in 2019 at the end of SW 31 on August 1. A fleet of 28 boats harvested 24,000 pink salmon and 2,900 chum salmon. In SW 32, Section 7-B opened for two 39-hour periods, the first beginning on August 4. A fleet of 37 vessels harvested 266,000 pink salmon and 21,000 chum salmon. The second and final Section 7-B open period began on August 8 with a fleet of 22 boats harvesting 143,000 pink salmon and 6,000 chum salmon.

The District 7 total harvest of 1,210,000 pink salmon, compared to the recent average of 953,000, ranked 16 since statehood. Chum salmon harvest in District 7 was well above average and was the eighth highest harvest since statehood at 206,000 fish (Table 2). The majority of pink and chum salmon harvests were from Section 7-A and included 699,000 pink and 164,000 chum salmon. Escapements to District 7 were within management target ranges for both the Anan and Union Bay stock groups (Table 12). District 7 indexed pink salmon escapement of 362,000 index fish was within the target range of 260,000–690,000 index 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 2019. The District 2 fishery targets chum salmon returning to watersheds in Cholmondeley Sound.

Early season chum salmon harvests were below average for the first half of the purse seine season and above average after SW 30. Initial surveys to Cholmondeley Sound showed adequate chum salmon activity. There were two directed openings on fall chum salmon returning to Cholmondeley Sound in 2019. The first 12-hour period occurred on September 1 with a total harvest of 7,000 chum salmon by 21 vessels. A second 12-hour period was held on September 8 with a harvest of 2,000 chum salmon by 13 vessels (Table 8). At the conclusion of the second opening, it was evident based on harvests and observations of escapement, the run would be weak, therefore the fishery remained closed for the remainder of the season. Overall, 27 vessels participated in the fall fishery harvesting 9,000 chum salmon. The combined peak survey of Disappearance and Lagoon creeks was 20,000 chum salmon, which was below the escapement goal range of 30,000–48,000 fish (Table 13).

SOUTHEAST ALASKA SALMON ESCAPEMENTS

This section provides a regional review of salmon escapements. A more detailed summary discussion of Chinook and coho salmon escapements is included in the Annual Management Report for the 2019 Southeast Alaska/Yakutat Salmon Troll Fisheries (Hagerman et al. 2020).

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 2019 Southeast Alaska pink salmon escapement index of 8.81 million fish ranked 33rd since 1960 (Figure 5). Biological escapement goals were met in two of the three subregions of Southeast Alaska (Table 10). Management targets for pink salmon were met or exceeded for 9 of 15 districts with management targets (Table 11) and, at a finer scale, for 27 of the 46 pink salmon stock groups (Table 12).

Southern Southeast Subregion

The Southern Southeast Subregion includes all the area from Sumner Strait south to Dixon Entrance (Districts 1–8). The 2019 pink salmon harvest of 18 million fish was 90% of the recent average (Figure 6). The escapement index value of 5.63 million was within the escapement goal range range of 3.0 to 8.0 million index fish (Table 10, Figure 6). Escapement indices were within or exceeded management targets for all 7 districts and all 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 2019 pink salmon harvest of 1.8 million fish was 14% of the recent average (Figure 7). The escapement index value of 1.65 million fish was below the escapement goal range of 2.5 to 6.0 million index fish (Table 10, Figure 7). Escapement indices were below management targets for 6 of 7 districts (Table 11) and for 17 of 21 pink salmon stock groups within this subregion (Table 12).

Northern Southeast Outside Subregion

The Northern Southeast Outside Subregion includes all the outer coasts of Chichagof and Baranof islands (District 13 outside). The pink salmon harvest of 1.3 million fish was 29% of the recent average (Figure 8). The escapement index value of 1.53 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 5 of 7 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 2017). 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 2019 index count of 105,000 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 2019 index count of 123,000 chum salmon was just above the lower bound SEG of 107,000 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 2019 index count of 25,470 chum salmon was just 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 three of the five fall-run stocks with formal escapement goals in 2019 (Table 13). The Chilkat River escapement index of 224,230 fish was within the SEG range of 75,000 to 250,000 index fish. The harvest of 64,600 fall chum salmon in Lynn Canal was above the recent average of 56,500 fish. The Excursion River escapement index of 3,600 fish was below the SEG range of 4,000 to 18,000 index fish. The Cholmondeley Sound escapement index of 20,000 fish was below the lower bound of the SEG range of 30,000 to 48,000 index fish, and the harvest of 3,000 chum salmon in Cholmondeley Sound was well below the recent average harvest of 22,500 fish. The Port Camden index of 4,800 fish was within the lower bound of the SEG range of 2,000 to 7,000 index fish, and the Security Bay index of 14,300 fish was within the range of 5,000 to 15,000 index fish.

SOCKEYE SALMON

In 2019, sockeye salmon escapement goals were met for 10 of the 12 sockeye salmon systems in the region that currently have escapement goals (Table 14). Sockeye salmon runs were generally poor south of Sumner Strait (extending through British Columbia, Canada) and average to strong further north in Southeast Alaska. The McDonald Lake escapement of 24,200 fish was well below goal range and has now been below goal in six of the past seven years. The McDonald Lake sockeye salmon stock was adopted as a management stock of concern at the 2018 Alaska Board of Fisheries meeting. The escapement of 2,200 sockeye salmon at Hugh Smith Lake was well below the optimal escapement goal range of 8,000 to 18,000 fish. Escapements exceeded the upper bound of escapement goal ranges at Stikine-Tahltan, Taku River, Redoubt Lake, Chilkoot Lake, Situk River, Klukshu River, and the East Alsek River.

CHINOOK SALMON

There are 10 Chinook salmon stocks in Southeast Alaska that are monitored for escapement. The two Transboundary River stocks that are monitored for Chinook salmon escapement are the Taku and Stikine rivers, both of which had escapements that were below their BEG ranges. Escapement

to these systems have been below their BEG ranges since 2016 but showed improved escapement when compared to the last two years. Chinook salmon escapements to three monitored systems in East Behm Canal declined in 2019; however, three of the four monitored systems were within BEG ranges. The 2019 Unuk River Chinook salmon run was again within the BEG range and marked the first time since 2011 that the escapement goal was reached in consecutive years. Three of the four remaining systems (Andrew Creek, Situk, and Chilkat rivers) had Chinook salmon escapements within their BEG ranges. Finally, the King Salmon River, a small river system located on Admiralty Island, had an estimated escapement of 27 fish, which is below the BEG range, marks six of the last seven years escapement has not been met, and surpassed 2018 as the lowest escapement on record (Hagerman et al. 2020).

COHO SALMON

Only a small percentage of the coho salmon escapements in Southeast Alaska are enumerated or surveyed because of the extremely scattered distribution of stocks and difficult conditions for observation of spawners during the fall months. Escapement goals for indicator streams have usually been met or exceeded in recent years. In 2019, coho salmon returns to northern inside areas were generally within or above BEGs and were generally average in outer coastal systems, and salmon were within goal ranges in the Ketchikan Area (Hagerman et al. 2020).

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, Carroll 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 2019 season. THA, hatchery cost recovery, and Annette Island fisheries are discussed in separate sections.

Drift gillnet openings targeting sockeye salmon began in SW 25 at noon on Sunday, June 16, in District 6 and Sections 1-B, 11-B, 15-A, and 15-C (Table 15). Drift gillnet fisheries targeted sockeye salmon during SWs 25–28 in District 1, SWs 25–31 in District 6, SWs 26–29 in District 8, and SWs 25–33 in Districts 11 and 15. Pink salmon returns drive management decisions in SWs 29–34 in District 1, SWs 32–34 in Districts 6 and 8, and SWs 29–35 in Section 11-C. Drift gillnet fisheries target fall chum and coho salmon beginning SW 35 in Districts 1, 6, and 8, and SW 34 in Districts 11 and 15. Traditional drift gillnet fisheries occurred for 14 weeks in District 8, 16 weeks in District 1, and 17 weeks in Districts 6, 11, and 15.

Drift gillnet fisheries in THAs and SHAs took place in Carroll Inlet, 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 Carroll Inlet, Nakat Inlet, Neets Bay, and Anita Bay THAs harvest salmon produced by SSRAA. Carroll Inlet was open continuously from June 1 through June 12, and then by rotation through June 30. Nakat Inlet was open continuously to drift gillnet from June 1 through November 10. 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 hatchery salmon from Douglas Island Pink and Chum, Inc. (DIPAC). Waters of the Boat Harbor THA that occur inside Boat Harbor were open continuously from May 17 to September 3. Outside waters of the Boat Harbor THA within 1.0 nmi of the western shore of Lynn Canal were open for 2 days per week from June 16 to July 9, 4 days the week of July 7, and then continuously from July 21 through August 24. 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 June 3 and September 25.

The 2019 drift gillnet common property fisheries (traditional and THA/SHA) harvested 3.8 million salmon (Table 17). The drift gillnet harvest was the 27th highest since statehood. Common property harvest of 21,000 Chinook salmon was 83% of the recent average of 25,000 fish. Common property harvest of 395,000 sockeye salmon was 93% of the recent average of 425,000 fish. Common property harvest of 196,000 coho salmon was 60% of the recent average of 326,000 fish. Common property pink salmon harvest of 872,000 was 75% of the recent average of 1.2 million fish. Common property chum salmon harvest of 2.3 million was 80% of the recent average of 4.9 million fish. Common property drift gillnet harvest composition by species included 0.6% Chinook, 10% sockeye, 5% coho, 23% pink, and 61% chum salmon. Figure 11 shows historical trends of drift gillnet harvests by species since 1960. The most notable 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 2019 were 4.2 million salmon. Common property harvests of 3.8 million salmon include 2.6 million fish in traditional fisheries and 1.2 million fish in hatchery terminal areas. Drift gillnet harvests from Annette Island Reservation totaled 382,000 salmon. Traditional drift gillnet harvests by district included 996,000 fish from District 15, 621,000 fish from District 6, 435,000 fish from District 11, 433,000 fish from District 1, and 82,000 fish from District 8. Ranking 2019 traditional and terminal harvests among previous years since statehood, District 1 ranked 43rd, District 6 ranked 32nd, District 8 ranked 30th, District 11 ranked 30th, and District 15 ranked 7th (Tables 19–23).

The drift gillnet fishery exvessel value was $18.8 million in 2019 based on fish tickets (Table 3). A time series of drift gillnet fishery exvessel values based on CFEC data is shown in Table 4 and Figure 12. The 2019 value includes $10.1 million of chum salmon, $4.6 million of sockeye salmon, $2.0 million of coho salmon, $1.1 million of pink salmon, and $1.0 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 pretreaty 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 harvest levels, if needed, may include early season area closures for protection of mature wild Chinook salmon

and nighttime fishing restrictions to minimize harvest of immature fish. The drift gillnet harvest allocation in 2019 was 4,000 treaty Chinook salmon.

Regional drift gillnet harvest of Chinook salmon totaled 21,400 fish and the common property drift gillnet harvest was 20,900 fish in 2019 (Table 18). Chinook salmon of all sizes can be sold in the drift gillnet fishery. Due to inaccuracies in reporting of small Chinook salmon less than 28 inches 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, and data from 2005 to 2011 was revised accordingly. Accounting of Chinook salmon for PST purposes is now done by adjusting fish ticket counts by port sampling measurements for sizes. Preliminary accounting for PST purposes is based on a drift gillnet fishery harvest estimate of 14,419 large Chinook salmon, including harvests from the Annette Island Reservation. Total gillnet harvest of large Chinook salmon included an estimated 12,773 Alaska hatchery fish. The hatchery "add-on" was calculated at 11,377 fish resulting in 2,717 Chinook salmon designated as treaty harvest in traditional (non-TBR) fisheries, 306 fish as treaty harvest in the Annette Island drift gillnet fishery, and 20 fish as treaty harvest in the Taku and Stikine TBR fisheries for a total treaty harvest of 3,042 fish.

DISTRICT 1: DRIFT GILLNET FISHERY

Fishery Overview

The District 1 Tree Point commercial drift gillnet fishery can occur in the waters of Sections 1-A and 1-B. Due to wild chum concerns on the Canadian side of Portland Canal and the proximity to the Nass River, Section 1-A and a portion of Section 1-B north of the latitude of Akeku Point has remained closed since the 1970's (Figure 10). In Section 1-B, fishing primarily occurs along the mainland shore south of Foggy Point to Cape Fox and along the western shore of Tongass and Kanagunut Island just north of the U.S./Canada border.

The District 1 drift gillnet fishery is one of two northern boundary fisheries that are managed under the terms of the PST. The 2019 PST agreement calls for abundance-based management of the District 1 drift gillnet fishery. The agreement specifies a U.S. harvest of 13.8 percent of the AAH of the Nass River sockeye salmon run.

The District 1 drift gillnet fishery opens by regulation on the third Sunday in June. During early weeks of the fishery, management is based on run strength of Alaska wild stock chum and strength of Nass River sockeye salmon. In the third week of July, when pink salmon stocks begin to enter the fishery in larger numbers, management emphasis shifts by regulation to that species. The *District 1 Pink Salmon Management Plan* (5 AAC 33.360) sets drift 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. Management focus shifts to fall coho when the pink salmon management plan is no longer in effect, usually in SW 35 or 36 depending on pink salmon abundance. For the remainder of the season the fishery is managed based on the strength of wild fall coho salmon.

2019 Fishery Overview

In 2019, the District 1 drift gillnet fishery opened on June 16 in SW 25 (Table 15). The fishery was open a total of 1,656 hours, which was above the 1985–2018 average of 1,371 hours. The fishery was open for four days each week from SW 25 through SW 30. The four days per week was based on above average in river returns of sockeye to the Nass River based on fish wheel data, average wild chum catch in the district, and below-average effort.

For the 2019 season, DFO forecasted a total run of 620,000 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 2019 Nass River sockeye was therefore 58,000 fish. The preliminary postseason Nass River total return for sockeye in 2019 was estimated at 370,000 sockeye salmon. The preliminary 2019 estimate of Nass River sockeye salmon harvested in District 1 is 11,300 fish.

The *District 1 Pink Salmon Management Plan* went into effect on July 21 (SW 30). Based on average to above-average pink salmon harvest and well-distributed, building pink salmon escapements, the District 1 purse seine fishery fished two 15-hour periods during SW 30. Therefore, the drift gillnet fishery continued with four days of fishing time. The District 1 purse seine fishery shifted to a two-day on two-day off fishing schedule in SW 31. Therefore, the drift gillnet fishery received five days of fishing time during SW 31. Pink salmon harvest and escapement remained average to slightly below average, with average to above-average escapements to all District 1 stock groups. The purse seine fishery remained on a two-day-on two-day-off schedule through SW 35 resulting in five days of fishing time per week for the District 1 drift gillnet fishery. The District 1 purse seine fishery closed for the season in SW 35, which brought the District 1 pink salmon management plan to a close and began fall management for the District 1 drift gillnet fishery.

Under fall management, the fishery is managed on strength of the wild coho salmon run. Although coho salmon harvest was well below average leading into fall management, the Hugh Smith Lake coho salmon weir count, which is a long-term indicator stock on the south end, was tracking above the upper end of the escapement goal range of 500–1,600. Coded wire tag (CWT) data in the District 1 drift gillnet fishery is analyzed as the percentage of hatchery coho and can range from 20% to as much as 90% in September. In SW 35, hatchery contribution was only 18% compared to the average 35%. This low hatchery contribution coupled with strong early returns of coho to Hugh Smith Lake and low effort justified four fishing days per week through SW 40.

2019 Harvest and Escapement Summary

Total harvests of all salmon species and effort were below average for the season. Traditional District 1 drift gillnet harvests in 2019 included 1,300 Chinook, 16,000 sockeye, 29,000 coho, 205,000 pink, and 182,000 chum salmon. Drift gillnet harvest of 16,000 sockeye salmon was 14% of the 1985–2018 average of 112,000 fish; pink salmon harvest of 205,000 fish was 42% of the 1985–2018 average of 490,000 fish; chum salmon harvest of 182,000 fish was 61% of the 1985–2018 average of 298,000 fish; coho salmon harvest of 29,000 fish was 59% of the 1985–2018 average of 49,000 fish; and Chinook salmon harvest of 1,300 fish was 87% of the 1985–2018 average of 1,500 fish (Table 18). Effort levels were below average throughout the season. A total of 57 drift gillnet vessels fished in the district, which is less than the recent average and 60% of the 1985–2018 average of 106 vessels.

Cumulative sockeye salmon harvest prior to the initiation of the *District 1 Pink Salmon Management Plan* in SW 30 was 6,000 fish, or about 37% of the total sockeye harvest. Sockeye salmon harvest rates were below average all season.

During SWs 32 and 33, a portion of District 1 was closed for Hugh Smith Lake 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 range. Escapement into Hugh Smith

Lake was 2,240 sockeye salmon, well below the escapement goal range of 8,000–18,000 fish (Table 14).

Coho salmon escapements to systems around Ketchikan were average and met escapement goals.

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 delta (Figure 10). Management of these fisheries is interrelated due to their proximity and migration patterns of stocks harvested in both areas. Salmon stocks of Stikine River origin, a major transboundary river originating in Canada, are harvested in Districts 6 and 8. Management of Chinook salmon in District 8 and sockeye salmon in Districts 6 and 8 must be in accordance 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 harvests are estimated inseason using historical data for stock composition and proportions of thermally marked fish from hatchery raised fry planted in Tahltan and Tuya lakes. Stikine River Chinook salmon are estimated inseason by CWT data analysis. Final stock compositions for sockeye salmon harvested in Districts 6 and 8 and Chinook salmon harvested in District 8 are determined by genetic stock identification (GSI).

2019 Harvest Summary

The 2019 District 6 Prince of Wales drift gillnet fishery total harvest was 622,000 salmon, below the recent average of 696,000 fish, and included 1,000 Chinook, 24,000 sockeye, 59,000 coho, 425,000 pink, and 113,000 chum salmon. Compared to recent averages, Chinook, sockeye, coho, and chum salmon harvests were below average, whereas pink salmon harvests were above average (Table 20). An estimated 500 Chinook salmon (48%) in the District 6 harvest were of Alaska hatchery origin. An estimated 5,500 Stikine River sockeye salmon were harvested in District 6, approximately 23% of the harvest. An estimated 9,600 coho salmon in the District 6 harvest (16%) were of Alaska hatchery origin.

Harvests of Stikine River sockeye salmon in the two major fishing areas of District 6 were markedly different. In the Sumner Strait fishery (Subdistrict 106-41), 14,400 sockeye salmon were harvested, of which 4,600 fish were estimated to be of Stikine River origin and contributed 32% of the total sockeye salmon harvest in that subdistrict. In the Clarence Strait fishery (Subdistrict 106-30), 9,500 sockeye salmon were harvested, of which 900 fish were estimated to be of Stikine River origin and contributed 9% of the total sockeye salmon harvest in that subdistrict.

The District 6 drift gillnet fishery was opened for 45 days from June 16 through October 8, below the recent average of 47 days (Table 15). 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 closed by

regulation from SWs 32–35. Weekly participation was below average during the sockeye management period from SWs 25–31. Effort during the pink salmon management period (SWs 32–35) was below average for the first week, and then remained above average for the remainder of the period. Effort during the coho salmon management period (SWs 36–41) was above average for the first week, but then fell below average for the remainder of the season. The number of permits ranged between 80 permits fished in SW 36 to 2 permits fished in SW 41. Total season effort of 2,217 boat-days was below the recent average of 2,752 boat-days.

Total salmon harvest in the District 8 drift gillnet fishery was well below the recent average and included 4,300 Chinook, 6,600 sockeye, 9,500 coho, 10,900 pink, and 50,700 chum salmon (Table 21). Harvests of all five species were below their respective averages. Large Chinook salmon through SW 29 totaled 2,450 fish, of which 112 fish were identified as above the border Stikine River origin by GSI. Of the sockeye salmon harvest, an estimated 6,600 Stikine River sockeye salmon were harvested, which contributed 86% of the District 8 sockeye salmon harvest. An estimated 2,600 fish (27%) of the District 8 coho salmon harvest were of Alaska hatchery origin.

The District 8 drift gillnet fishery was opened for a total of 39 days starting June 23 (Table 15). Total fishing time was below the recent average (47 days), excluding years with directed Chinook salmon fishing, and closed concurrently with District 6 on October 8. Participation in District 8 was below average most weeks, except for SW 32. The total season effort of 775 boat-days was well below the average of 1,724 boat-days.

Chinook Salmon Fishery

The Stikine River Chinook salmon preseason forecast was 8,250 fish, which was expected to be below escapement needs and insufficient to allow directed fisheries in District 8. The standard mark–recapture program was not conducted due to the low forecast and the desire by the U.S. and Canada to reduce mortality associated with the program. Inseason estimates produced by the CPUE model were not available as a result of the low confidence of the model estimates due to the very low numbers of fish caught. The postseason terminal run size estimate is 14,422 fish with an escapement estimate of 13,629 fish, below the escapement goal range of 14,000–28,000 fish.

Due to poor performance of Chinook salmon fisheries in Southeast Alaska, restrictions were implemented in the Districts 6 and 8 drift gillnet fisheries to conserve Chinook salmon. The District 6 opening was delayed by one week and a six-inch maximum mesh restriction was in place for the first three weeks. In District 8, a two-week delay of the initial opening with area and mesh restrictions implemented through SW 29.

U.S. harvest of large Stikine River Chinook salmon in all District 8 fisheries were minimal. The GSI estimated harvest of large Stikine River Chinook salmon by the District 8 drift gillnet fishery through SW 29 was 113 fish. Spring Troll fisheries were closed in District 8 to reduce harvest of Chinook salmon. Commercial trolling opened in District 8 for the Summer Troll fishery on July 1 with nonretention of Chinook salmon in effect. The District 8 sport fishery implemented nonretention of Chinook salmon from April 1 through July 15. A small area inside District 8, adjacent to City Creek in Petersburg, was open for retention of Chinook salmon from June 15 through July 31 to target Alaska hatchery Chinook salmon returning to this location. Harvest of Stikine River Chinook salmon in the sport fishery was estimated to be 2 fish. A directed U.S. subsistence Chinook salmon fishery was not opened in 2019. A total of 19 large fish were harvested incidentally during the subsistence sockeye salmon fishery through SW 29. Cumulative

U.S. District 8 harvest by all gear groups through SW 29 was estimated to be 134 large Stikine River Chinook salmon.

Sockeye Salmon Fishery

The Stikine River sockeye salmon preseason forecast indicated a below average terminal run size of 90,000 fish, with a resulting U.S. allowable catch (AC) of 22,260 fish. Preseason forecasts were the primary basis of management during SWs 25-27. Inseason estimates of terminal run sizes were first produced on a weekly basis beginning in SW 27 and were used from SW 28–SW 30. Inseason abundance estimates were variable and ranged between 121,500 and 140,800 sockeye salmon. The postseason Stikine River sockeye salmon run estimate of 89,400 fish resulted in an U.S. AC of 18,400 sockeye salmon. The total U.S. harvest based on GSI analysis was estimated to be 13,000 sockeye salmon.

Stikine River sockeye salmon generally begin to decrease in abundance in mid-July as other stocks, including McDonald Lake sockeye salmon begin to migrate through the fishery. Due to poor escapements in 4 out of 5 consecutive years from 2013 to 2017, the McDonald Lake run was designated a stock of management concern during the 2018 Southeast and Yakutat BOF meeting and an action plan was developed to reduce harvest (Walker et al. 2018). The BOF action plan for this stock of concern prescribed a maximum fishing time of two days for SWs 29–31 in District 6.

District 6 opened in SW 25 at 12:00 noon on Sunday, June 18, for an initial two-day period with a six-inch maximum gillnet mesh restriction in place; District 8 remained closed (Table 15). On-the-grounds surveys indicated low sockeye salmon abundance and no additional fishing time occurred. Effort was comprised of 5 boats in Clarence Strait and 27 boats in Sumner Strait. An estimated 240 Stikine River sockeye salmon were harvested in the District 6 drift gillnet fishery in SW 25.

In SW 26, Districts 6 and 8 opened for an initial two-day period with a six-inch maximum gillnet mesh restriction in place. Additionally, closed areas were expanded around the Stikine River delta in District 8. On-the-grounds surveys indicated sockeye salmon abundance in District 6 well below the level to warrant additional fishing time. Sockeye salmon harvest rates in District 8 were above average; however, additional time did not occur due to Stikine River Chinook salmon conservation. Effort was 17 boats in Clarence Strait, 23 boats in Sumner Strait, and 12 boats in District 8. An estimated 740 Stikine River sockeye salmon were harvested in the District 6 drift gillnet fishery in SW 26.

Districts 6 and 8 opened for an initial three days in SW 27 with a six-inch maximum mesh restriction in both districts. On-the-grounds surveys indicated low sockeye salmon abundance in both districts. There was Stikine sockeye salmon AC available for the U.S., but the opening was limited to three days due to Chinook salmon conservation concerns. An estimated 3,400 Stikine River sockeye salmon were harvested this week. The estimated harvest of Stikine River sockeye salmon was 1,700 fish in District 6 and 1,800 fish in District 8. Effort included 27 boats in Sumner Strait, 15 boats in Clarence Strait, and 35 boats in District 8.

During SW 28, Districts 6 and 8 were opened for an initial two days. The first inseason forecast of Stikine River sockeye salmon terminal run size generated this week was 121,500 fish, which resulted in a U.S. AC of 34,800 fish and was considerably above the preseason forecasts. However, on-the-grounds surveys indicated sockeye salmon abundance in both districts was well below the level to allow for additional time. The U.S. cumulative harvest of Stikine River sockeye salmon

through SW 28 was estimated to be 7,600 fish. Effort was below recent averages and included 14 boats in Clarence Strait, 28 boats in Sumner Strait, and 28 boats in District 8.

Districts 6 and 8 were opened for a total of two days during SW 29. Opening time for District 6 was limited to two days for SWs 29–31 due to McDonald Lake sockeye salmon concerns. Time was limited to two days in District 8 due to Stikine River mainstem sockeye salmon concerns. Effort remained below recent averages with 21 boats in Clarence Strait, 27 boats in Sumner Strait, and 20 boats in District 8. Harvest rates of sockeye salmon in District 6 remained below average; however, harvest rates improved to near average for fishermen targeting sockeye salmon in District 8. Although there was very little change in the Stikine Management Model (SMM) run size assessment this week, the estimated run size for the Tahltan component increased, while the mainstem component decreased. The resultant U.S. AC remained at 34,800 fish. An estimated 1,900 Stikine River sockeye salmon were harvested in SW 29 with a cumulative harvest of 9,500 fish.

District 6 opened for 2 days during SW 30. District 8 was closed SWs 30 and 31 due to the preseason forecast and historical timing of Stikine River mainstem sockeye. The final SMM estimated run and corresponding U.S. AC increased in SW 30 with a projected run size of 140,800 fish and resultant U.S. AC of 45,000 fish. However, the mainstem component continued to decrease. Sockeye salmon harvest rates remained below recent averages this week. Effort remained below recent averages with 26 boats in Clarence Strait and 21 boats in Sumner Strait.

District 6 opened for of two days during SW 31; District 8 remained closed. Sockeye salmon harvest and harvest rates increased slightly this week but remained well below recent averages. Effort remained below recent averages with 28 boats fishing in Clarence Strait and 20 boats in Sumner Strait. SW 31 was the final week of sockeye salmon management in District 6; management actions to conserve Stikine River sockeye salmon in District 8 continued through SW 34. An estimated 1,300 Stikine River sockeye salmon were harvested in the District 6 and 8 drift gillnet fisheries through the remainder of the season.

The preliminary postseason estimate for Stikine River sockeye salmon was 89,400 fish. This estimate included the Districts 6 and 8 estimated Stikine River sockeye harvest of 11,100 fish, U.S. inriver subsistence fishery estimated harvest of 1,900 fish, total Canadian Stikine inriver harvest of 16,400 fish (there was no test fishery in 2019), Tahltan Lake weir count of 36,999 fish (Table 14), and estimated mainstem escapement of 23,227 fish. The U.S. total harvest of 13,000 Stikine River sockeye salmon was below the U.S. AC of 18,400 fish and contributed to 37% of Districts 6 and 8 sockeye salmon harvest.

Pink Salmon Fishery

During SWs 32–35, Districts 6 and 8 were managed based on pink salmon abundance. That portion of Section 6-D in District 6 along the Etolin Island shoreline was closed to drift gillnet fishing from SW 32 through SW 35 by regulation. Pink salmon harvest rates were well above average during the four weeks prior to and for the first two weeks of the pink salmon management period. Harvest rates then fell to just above average in SW 34 and below average in SW 35. Harvests and harvest rates in District 8 were well below average prior to the pink salmon management period and continued to be well below average through the pink salmon management period. Effort in District 6 was below average in SW 32 and then increased to above average for the remainder of the pink salmon management period. Inversely, effort in District 8 was above average for SW 32 and then fell to below average for the remainder of the period.

Coho Salmon Fishery

Beginning in SW 36, management emphasis transitioned to wild coho salmon abundance. Prior to switching to coho salmon management, 33,044 coho salmon, approximately 56% of the total District 6 harvest, had been harvested. The hatchery contribution was approximately 2,600 fish in District 6 prior to SW 35 and was composed primarily of releases from Neck Lake. During the coho salmon management period, coho salmon harvests were below average in District 6 with an estimated harvest of 7,000 hatchery fish and 19,100 wild coho salmon. Harvest of wild coho salmon in District 8 was also below average with an estimated harvest of 6,900 fish. Both districts were open for three days each week except for SWs 37 and 41 when open time was two days each week. The 2019 drift gillnet season concluded at noon on Tuesday, October 8, in both districts.

Escapement Summary

Above border Stikine River large Chinook salmon spawning escapement was estimated at approximately 13,820 fish: below the escapement goal range of 14,000–28,000 fish. The 2019 Little Tahltan weir count was 536 large fish, well below the recent average of 914 fish. Andrew Creek escapement was within escapement goal range with an estimated escapement of 698 Chinook salmon.

A total of 36,999 sockeye salmon were counted through the Tahltan Lake weir, which was above the escapement goal range of 18,000–30,000 fish. The Stikine River mainstem sockeye salmon escapement estimate of 23,227 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 above and some being well below recent averages. Escapement of sockeye salmon to McDonald Lake is estimated to be 24,200 fish, well below the SEG range (Table 14).

Pink salmon escapements were mixed for Districts 6 and 8. The District 8 indexed escapement of 102,000 fish was well above the management target range of 20,000–60,000 fish. Pink salmon escapement to District 6 was variable as some systems had very good escapement and others were at the lower end of goal ranges. The District 6 indexed pink salmon escapement was 432,000 fish, within the management target range of 210,000–570,000 fish (Table 11).

Escapements of coho salmon are not monitored in Districts 6 and 8. Indications from Canadian fisheries in the Stikine River and 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, 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 sockeye and coho salmon fisheries are based on wild sockeye salmon returns in summer and wild coho salmon returns in 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 2019 season was the 20th year of sockeye salmon returns produced by DIPAC's 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 1,400 Chinook, 105,000 sockeye, 24,500 coho, 71,700 pink, and 246,600 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 salmon harvested in District 11. The PST mandates 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 returns of TBR enhanced sockeye salmon established 2019 harvest shares for surplus Taku River sockeye salmon at 80% U.S. and 20% 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 and directed Taku River Chinook salmon fisheries on both sides of the border began that same season. Beginning in the 2009 season, the escapement goal range for Taku River Chinook salmon was revised to 19,000–36,000 large fish, with a point goal of 25,500 fish. U.S. AC is determined by a PSC bilaterally agreed-upon 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 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 of 940 drift 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 2006, the BOF slightly increased the allowed areas for both drift gillnet and troll fisheries and adjusted open periods for troll fisheries to three days per week when the drift gillnet fishery is open for one day, and to five days in a week when the drift gillnet fishery is open for two or more days. A seven-inch minimum drift gillnet mesh restriction was also adopted for directed Chinook salmon fisheries in District 11.

The PST 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. Management intent of both countries in 2019 was to achieve the management objective and respective ACs, based on terminal run size, defined in the harvest sharing agreement developed for the current Annex Period.

Chinook Salmon Fishery

There were no directed commercial Chinook salmon fisheries in District 11 in 2019. The forecast of 9,050 Taku River large Chinook salmon provided no AC for either the U.S. or Canada. A forecast well below the lower end of the escapement goal range resulted in significant restrictions in early District 11 directed sockeye salmon drift gillnet openings with commercial troll, sport,

and personal use fisheries also curtailed or delayed minimizing harvest of Chinook salmon returning to northern inside waters. No Chinook salmon inriver assessment fishery was conducted by Canada in 2019; however, drift tangle nets were used near the Wright River to spaghetti- and radiotag fish to allow for a mark–recapture estimate and potentially give some sense of inseason run abundance based on catch rates. With no reliable way of estimating inseason run size, both the U.S. and Canada managed their early season sockeye salmon fisheries based on the preseason Chinook salmon forecast. The Chinook salmon tagging project proved invaluable with 181 radio tags released (total catch in drift nets was 536 large fish), allowing a mark–recapture postseason estimate to be formulated with the Nahlin River sonar project used as the recapture event.

Management actions for Taku River Chinook salmon conservation occurred in District 11 and Canadian fisheries. Management actions in the District 11 drift gillnet fishery included two-day fishing periods in Taku Inlet in SWs 25–28; a significant area closure including most of Taku Inlet and waters extending further south and west in SWs 25 and 26; a closure line north of Point Cooper in SW 27; a six-inch maximum mesh size restriction in place throughout the district in SWs 25–27; and night closures in place (10 p.m. to 4 a.m.) throughout the district in SWs 25–27. Canada delayed their first inriver directed sockeye salmon fishery opening by two weeks to SW 27 and started two days later in that week (July 2); implemented nonretention of all Chinook salmon in their commercial and recreational fisheries; and implemented a 5.5-inch maximum mesh size restriction through SW 29. Commercial spring troll fisheries throughout the region were limited to select outer coastal areas, near hatchery facilities/release sites, in THAs, and in areas that have been identified as having low proportional harvest of wild SEAK/Yakutat Chinook salmon. Nonretention of Chinook salmon in the sport fishery was in effect in northern inside waters from April 1 through June 14. The personal use sockeye salmon fishery on the U.S. side of the Taku River was also delayed by more than two weeks and started on July 15. The 2019 harvest estimates of Taku River large Chinook salmon were 94 fish in the sport and 134 fish in commercial and personal use fisheries in District 11.

Sockeye Salmon Fishery

The 2019 District 11 drift gillnet fishery began in SW 25. Section 11-B was open for two days (Table 15) with a six-inch maximum mesh size restriction, night closures in effect from 10 p.m. to 4 a.m., and an area restriction closing waters in Taku Inlet north of Point Greely and west of a line of longitude running midinlet from the latitude of Point Greely to a point where it intersects with the Admiralty Island shoreline south of Grand Island. Effort was approximately 126% of recent average for the week with 35 boats fishing. Sockeye salmon harvest of 191 fish was 15% and CPUE (fish per boat-day) of 3 was 2% of the weekly recent averages. Total Chinook salmon harvest was 83 fish with 27 large fish estimated of Taku River origin based on inseason CWT analysis and age-sex-length (ASL) sampling. Chum salmon harvest and CPUE were far below the weekly average.

Section 11-B was opened for two days in Taku Inlet (statistical area 111-32) and Stephens Passage (statistical area 111-31) in SW 26 with the same restrictions throughout the district as the previous opening to minimize Chinook salmon harvest. The two days of fishing in the district was approximately 74% of average for the week. Forty-one boats, 84% of the weekly average, harvested 133 Chinook salmon of which an estimated 86 fish were Taku River large fish based on inseason CWT analysis and ASL sampling. The sockeye salmon harvest of 988 fish was 36% and CPUE of 12 was 57% of weekly averages. TBR enhanced sockeye salmon of equal parts King Salmon and Tahltan lakes origin made up 2.5% of the 941 fish Taku Inlet harvest, while Snettisham

Hatchery origin fish represented less than 1% of that harvest based on otolith analysis. Chum salmon harvest of 2,530 fish was 9% and CPUE of 31 was 15% of weekly averages.

Section 11-B was opened for two days in Taku Inlet and Stephens Passage in SW 27. Chinook salmon conservation measures were reduced this week with open waters extended north to the latitude of Point Cooper. The maximum mesh size restriction and night closures remained in place throughout the opening. The two days of fishing time in the district was 69% of recent average for the week. Effort increased from the previous week to 59 boats, 84% of the weekly average. Chinook salmon harvest for the week was 304, of which an estimated 122 fish were Taku River large fish based on inseason CWT analysis and ASL sampling. Sockeye salmon harvest of 2,363 increased to 56% and CPUE of 20 increased to 94% of the weekly averages. Otolith analysis indicated less than 1% of the 1,712 sockeye salmon harvested from Taku Inlet were of Snettisham Hatchery origin. TBR enhanced sockeye salmon of predominantly Tahltan Lake but also King Salmon Lake origins made up 2.5% of the Taku Inlet harvest. A Taku River sockeye salmon run size estimate was not produced this week, but Canyon Island fish wheel sockeye salmon hourly catch rates were average to above average. Chum salmon harvest of 17,677 fish was 24% and CPUE of 150 was 46% of averages for the week.

The opening for SW 28 was again two days in Taku Inlet but three days were announced in Stephens Passage. The maximum mesh size restriction and night closures were rescinded for this opening and the northern line was moved up to Jaw Point. A six-inch minimum mesh size restriction was implemented south of Circle Point in Stephens Passage—which would stay in place until SW 31—to minimize harvest of Port Snettisham wild sockeye salmon returns while still allowing opportunity to target hatchery chum salmon. The three days fishing was open in the district was 103% of the recent average for the week. Ninety-nine boats, 96% of the weekly average, harvested 272 Chinook salmon, of which an estimated 34 fish were Taku River large fish based on inseason CWT analysis and ASL sampling. Sockeye salmon harvest of 7,900 fish was 88% and CPUE of 27 was 92% of averages for the week. Otolith analysis revealed that 4% of the 6,000-sockeye salmon harvest from Taku Inlet, and 15% of the 2,000-fish Stephens Passage harvest, were of Snettisham Hatchery origin. TBR enhanced sockeye salmon of King Salmon, Tahltan, and Tatsamenie lakes origin made up 1% of the Taku Inlet harvest. The first bilateral Taku River sockeye salmon run size estimate was produced this week and projected an inriver run of 52,100 fish, below the interim management objective of 59,000 fish. Chum salmon harvest of 46,300 fish was 35% and CPUE of 156 was 34% of weekly averages.

Fishing time for SW 29 was set initially at three days in both Taku Inlet and Stephens Passage with Taku River sockeye salmon run size indicators both in District 11 and inriver showing increased abundance. The Jaw Point line in upper Taku Inlet was modified slightly to allow a little more area on the west side but remained as a Chinook salmon conservation measure. A one-day extension in Stephens Passage, with the minimum mesh size restriction, was granted for a total of an above-average four days of fishing time. The three days of fishing time in Taku Inlet was the first well-above-average weekly fishing period. Effort decreased from the previous week with 87 boats making landings, 70% of the weekly average. Chinook salmon harvest was 144 fish for the week, and no fish were estimated to be Taku River large fish based on inseason CWT analysis and ASL sampling. Sockeye salmon harvest of 17,700 fish for the opening was 121% of the weekly average, and CPUE of 51 was 118% of average for the week. Otolith analysis revealed that 16% of the 14,300 sockeye salmon harvested from Taku Inlet, and 40% of the 3,400-fish Stephens Passage harvest, were of Snettisham Hatchery origin. TBR enhanced sockeye salmon of

Tatsamenie and King Salmon lakes origin made up 1% of the harvest in Taku Inlet. The weekly Taku River sockeye salmon inriver run size projection increased from the previous week to 60,800 fish. Chum salmon harvest of 84,000 fish and CPUE of 242 increased slightly from the previous week to 48% each of their respective weekly averages. This opening had the highest weekly chum salmon harvest and CPUE of the season.

Fishing time for SW 30 was a repeat of the previous week with an initial three days in Taku Inlet and Stephens Passage followed by a one-day extension in Stephens Passage for a total of four days of fishing in the district, 125% of recent average for the week. The upper line in Taku Inlet was relaxed to the normal line just off the river flats. Effort increased from the previous week to 96 boats, 78% of average for the week. Sockeye salmon harvest was 153% of average and CPUE was 149% of average for the week, and the 27,600 fish harvested this week was the highest weekly harvest of the season. Otolith analysis revealed that 26% of the sockeye salmon harvested in Taku Inlet, and 23% from Stephens Passage, were of Snettisham Hatchery origin. TBR enhanced sockeye salmon of Tatsamenie Lake origin accounted for an estimated 1% of the harvest in Taku Inlet and 2% in Stephens Passage. This was the only opening of the season where TBR enhanced fish were represented in Stephens Passage. The weekly Taku River sockeye salmon inriver run size projection increased from the previous week to 96,100 fish. Chum salmon harvest and CPUE increased from the previous week to 58% each of their respective weekly averages. This opening had the second highest weekly chum salmon harvest of the season, at 66,000 fish, and abundance decreased markedly in subsequent openings.

Fishing time for SW 31 was again initially three days in Taku Inlet and Stephens Passage. With an increasing Taku River sockeye salmon run size projection, and both District 11 and inriver fisheries showing solid abundance, Stephens Passage was extended for an additional day for an above average four days of fishing for the week. Due to building escapement of Speel Lake sockeye salmon, the minimum mesh size restriction south of Circle Point was removed for the one-day extension in Stephens Passage to allow some targeting of Snettisham Hatchery sockeye salmon transiting the area as well as the smaller sized, latter portion of the hatchery chum salmon returns. Effort increased from the previous week to 108 boats, 111% of the weekly recent average and the highest weekly effort of the season. Sockeye salmon harvest of 21,400 fish was 142% and CPUE of 50 was 116% of weekly averages. Otolith analysis revealed that 6% of the 17,300 sockeye salmon harvested in Taku Inlet, and 25% of the 4,100 fish Stephens Passage harvest, were of Snettisham Hatchery origin. TBR enhanced sockeye salmon of Tatsamenie Lake origin made up 1% of the harvest in Taku Inlet. The weekly Taku River sockeye salmon inriver run size projection increased from the previous week to 106,800 fish, the highest estimate of the season.

Fishing time for SW 32 was again initially three days in Taku Inlet and Stephens Passage. The minimum mesh size restriction south of Circle Point was kept in place initially, but with escapement of sockeye salmon into Speel Lake ramping up throughout the week, the mesh restriction was removed after the first day along with area being extended into the entrance of Port Snettisham for the remaining two days of the original opening. Continued passage of fish through the Speel Lake weir and observed buildup of fish in the creek below the weir resulted in additional time and area extensions totaling five days of fishing time in Stephens Passage, four days in the entrance of Port Snettisham, and one day in the Speel Arm SHA for the week. Total fishing time of five days in the district was above average. Effort fell from the previous week to 56 boats, 75% of the weekly average. Traditional (not including the Speel Arm SHA) sockeye salmon harvest was 58% and CPUE was 55% of weekly averages. Otolith analysis indicated that 27% of the

sockeye salmon harvest from Taku Inlet was of Snettisham Hatchery origin. TBR enhanced sockeye salmon of Tatsamenie Lake origin made up 2.5% of the harvest in Taku Inlet. The weekly Taku River sockeye salmon inriver run size projection remained similar to the previous week at 104,000 fish. The 24-hour Speel Arm SHA opening resulted in a minimal sockeye salmon harvest of approximately 1,400 fish with 23 boats making landings.

Fishing time for SW 33 was initially three days throughout the district for the fifth consecutive opening. Unlike previous openings, this opening included the entrance to Port Snettisham and the Speel Arm SHA to target Snettisham Hatchery sockeye salmon. Stephens Passage, the entrance of Port Snettisham, and the Speel Arm SHA were extended an additional day for four days of fishing time. The Speel Arm SHA did not have additional fishing time due to sockeye salmon escapement through the Speel Lake weir having slowed significantly, probably due to the hot and dry weather. Total fishing time of four days in the district was above the weekly average. Effort again fell from the previous opening to 23 boats, 33% of the recent average for the week. Sockeye salmon harvest of 5,500 fish was 61% and CPUE of 60 was 178% of weekly averages, marking the highest weekly CPUE of the season. Otolith analysis indicated that 35% of the 2,900 sockeye salmon harvest from Taku Inlet were of Snettisham Hatchery origin. TBR enhanced sockeye salmon of Tatsamenie Lake origin made up 3.5% of the harvest in Taku Inlet, which was the highest weekly proportion of TBR enhanced fish for the season. The weekly Taku River sockeye salmon inriver run size projection remained similar to the previous week at 105,200 fish. With approximately 90% of the run historically through Canyon Island at this juncture in the season, it appeared that the upper end of the interim spawning objective goal range would be exceeded. This was the last week of the sockeye salmon management period in District 11 with coho salmon management starting in SW 34. The first Taku River coho salmon inriver run estimate was produced this week with a terminal run of 59,600 fish, which was well below the threshold at which the U.S. fishery has AC.

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 to effectively harvest returns of DIPAC hatchery summer chum and sockeye salmon. Limestone Inlet was opened to the inner markers from SW 28 through the first day of SW 32 to allow increased opportunity to harvest remote released DIPAC hatchery chum salmon. Port Snettisham (111-33, 111-34) was closed to fishing from SW 25 through SW 31. A six-inch minimum mesh size restriction in place south of Circle Point from SW 28 through all but the final day of SW 31 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. A small number of sockeye salmon were observed in the lake on aerial surveys this season. It is assumed that conservation measures taken to ensure the documented escapements to Speel Lake also contributed to Crescent Lake sockeye salmon escapement.

Coho Salmon Fishery

Fishing time for SW 34 was set for two days in Taku Inlet and three days in Stephens Passage and the entrance to Port Snettisham. The additional day in the southern portion of the district allowed further targeting of Snettisham Hatchery sockeye salmon with minimal impact on Taku River coho salmon returns. The Speel Arm SHA was opened until further notice this week and would remain open until September 13. A well below average 19 boats made landings in the traditional fishery for the week. The weekly sockeye salmon harvest of 1,700 fish was 37%, whereas the CPUE of 30 fish/boat-day was 82% of weekly averages. Otolith analysis indicated that 53% of the 900

sockeye salmon harvest from Taku Inlet, and 80% of the 300 fish Stephens Passage harvest, were of Snettisham Hatchery origin and TBR enhanced sockeye salmon of Tatsamenie Lake origin made up 1% of the Taku Inlet harvest. Coho salmon harvest of 1,900 fish was 73% and CPUE of 34 was 155% of weekly averages. CWT analysis indicated that 31% of the coho salmon harvest for the week was composed of Alaska hatchery fish. Coho salmon hatchery contribution in the District 11 drift gillnet harvest this season was once again composed almost entirely of DIPAC fish returning to Gastineau Channel. The second Taku River coho salmon terminal run size estimate was 80,300 fish, a large increase from the previous week that resulted in a modest U.S. AC of above-border Taku River coho salmon.

Fishing time for SW 35 was set at two days throughout the district with no extension granted due to declining effort throughout the opening and an overall consensus from the fleet that fishing was dropping off. This week's opening was delayed until Monday, August 26, to reduce conflict with the annual Golden North Salmon Derby that was postponed from the previous week due a poor marine weather forecast. A total of 22 boats made landings throughout the opening—50% of average for the week—with all but a few boats fishing in and around Taku Inlet. Otolith analysis indicated that of the 100 fish harvested, 38% were of Snettisham Hatchery and Tatsamenie Lake origins. This was the last week of sockeye salmon otolith sampling for the season in District 11. Coho salmon harvest of 2,600 fish was 57% and CPUE of 58 was 176% of weekly averages. CWT analysis indicated that 42% of the coho salmon harvest for the week were Alaska hatchery fish. The projected terminal run estimate for Taku River coho salmon decreased from the previous week to 77,200 fish, which allowed approximately 2,000 above-border Taku River coho salmon to be harvested by the U.S. for the season.

Fishing time for SW 36 was initially set at one day in Taku Inlet and two days in Stephens Passage and the entrance of Port Snettisham. An extension granted an additional day in the southern portion of the district due to above average coho salmon catch rates. A total of 20 boats, 50% of the weekly average, made landings. Coho salmon harvest of 2,100 fish was 28% and CPUE of 35 was 67% of weekly averages. CWT analysis indicated that 38% of the coho salmon harvest for the week was comprised of Alaska hatchery fish. The weekly terminal run size estimate for Taku River coho salmon increased from the previous week to 91,200 fish, resulting in the first substantial U.S. AC of the season.

Fishing time for SW 37 was initially set at two days throughout the district, but with high harvest rates spread throughout the fishing area, the fishery was extended for two more days for a total of four days of fishing time. Effort increased slightly from the previous week to 25 boats, 71% of average for the week; the increase of in-harvest rates brought out a few boats that were probably ready to call it a season the week before. Coho salmon harvest of 7,000 fish was 125% of average for the week and CPUE of 71 was 169% of the weekly average, marking the highest weekly harvest and CPUE of the season. CWT analysis indicated that 52% of the coho salmon harvest was comprised of Alaska hatchery fish. The weekly Taku River coho salmon terminal run size estimate increased from the previous week to 102,500 fish. Speel Arm SHA closed for the season on September 13 without receiving any effort during the week.

Fishing time for SW 38 was set at four days throughout the district with an initial day provided for a total of five days due to good catch rates throughout the initial opening. Effort was average and remained similar to the previous week with 26 boats fishing. Coho salmon harvest of 4,000 fish was 89% of average for the week while CPUE of 31 was 60% of the weekly average. CWT analysis indicated that Alaska hatchery fish contributed 36% to the weekly coho salmon harvest. The

weekly Taku River coho salmon terminal run projection fell slightly from the previous week to 99,200 fish.

Fishing time for SWs 39 through 41 remained at five days for each opening. Effort dropped from eight boats in SW 39, to two boats in SW 40, to no boats in SW 41. Coho salmon harvest and catch rates were well below average each week and the cumulative harvest in these weeks was approximately 400 fish. CWT analysis indicated the composition of the coho salmon harvest was 100% Alaska hatchery fish for SWs 39 and 40. The weekly Taku River coho salmon terminal run size estimate remained just under 100,000 fish in SWs 39 and 40 and increased to 105,100 fish in SW 41. District 11 closed for the season at noon on Friday, October 11.

Harvest and Escapement Summary

The 2019 District 11 traditional fishery was open for a total of 62 days from June 16 through October 11. Speel Arm SHA initially opened for a 24-hour period in SW 32 at noon on August 8, opened four days in SW 33, and remained open continuously starting in SW 34 until September 13 in SW 37. Participation in the common property fishery and fishing effort measured in boat days (total number of permits delivering fish multiplied by the number of days open to fishing each week) peaked in SW 31. Total fishing effort for the 2019 common property drift gillnet fishery was 2,699 boat days, 84% of average.

Harvest in the District 11 drift gillnet fishery totaled 1,360 Chinook, 105,000 sockeye, 23,500 coho, 71,700 pink, and 246,600 chum salmon (Tables 22 and 24). Harvests for all species were below recent averages. Hatchery-produced salmon contributed to the harvest of Chinook, sockeye, coho, and chum salmon.

The District 11 drift gillnet Chinook salmon harvest of 1,360 fish in SWs 25–41, during the traditional sockeye and coho salmon management periods, was 73% of the recent average (Table 22). Alaska hatchery fish contributed to 41% of the harvest as estimated by CWT analysis. The 2019 GSI-based harvest estimates of Taku River large Chinook salmon of 94 fish in the sport and 134 fish in the drift gillnet and personal use fisheries in District 11. Canadian commercial harvest of Taku River large Chinook salmon was zero fish as Canada implemented nonretention in their fisheries. The 2019 escapement estimate is 11,558 Taku River large Chinook salmon, below the escapement goal range of 19,000–36,000 fish, but an increase from last year's 7,300 fish, the lowest escapement estimated since full stock assessment began in 1989.

The District 11 drift gillnet sockeye salmon harvest was 105,000 fish, 82% of the recent average (Table 22). Domestic hatchery sockeye salmon began to contribute to the fishery during SW 26 and added substantial numbers to harvests during SWs 29–33. Sockeye salmon from joint U.S./Canada fry-planting programs at Tatsamenie and King Salmon lakes contributed an estimated 1,000 fish. Contributions of DIPAC Snettisham Hatchery sockeye salmon totaled a minimum of 31,000 fish or 30% of the harvest. The PST harvest shares for the TAC of Taku River sockeye salmon in 2019 were 80% U.S. and 20% Canada based on minimal enhanced fish production. District 11 drift gillnet fishery harvested an estimated 63% of the 107,200 sockeye salmon TAC for the Taku River, or 79% of the U.S. AC. The Canadian harvest was estimated at 20% of the Taku River sockeye salmon TAC or 100% of the Canadian AC. The Canadian fishery is covered in more detail in the Canadian TBR Fisheries section of this report.

The preliminary estimate of Taku River wild sockeye salmon escapement past all fisheries from the mark–recapture program was 74,900 fish, above the interim management spawning objective

range of 55,000–62,000 fish. A total of 6,447 sockeye salmon were counted through the DIPAC-operated weir on the outlet stream of Speel Lake through September 19, within the SEG range of 4,000–9,000 fish. Sockeye salmon escapement to Crescent Lake was monitored via aerial surveys in 2019 and although surveying conditions including high, turbid water from glacier melt provided inadequate visibility to observe fish on most surveys, a small number were seen on a single survey. Although 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. Coho salmon drift gillnet harvest of 23,500 fish was 64% of the recent average. Alaska hatchery coho salmon accounted for approximately 8,200 fish or 35% of the District 11 harvest in 2019. The above border Taku River coho salmon escapement was estimated at 82,800 fish, within the recently adopted escapement goal range of 50,000–90,000 fish. Coho salmon escapements to other streams in the district were mostly unknown.

District 11 drift gillnet pink salmon harvest of 71,700 fish was 48% of the recent average (Table 22). Pink salmon escapement to the Taku River was characterized as average. The number of pink salmon caught at the Canyon Island fish wheels is used as an index of escapement. A total of 16,971 pink salmon caught in the fish wheels was 92% of the 2017 parent-year catch and 112% of the 1999–2017 odd-year average. Comparisons to historical data are not as straightforward for the 2018 and 2019 seasons because fish wheel operation times were altered significantly in efforts to address the sockeye salmon dropout rate in the mark–recapture project. This resulted in the wheels not spinning 24 hours per day as they had in the past.

District 11 drift gillnet harvest of 246,600 chum salmon was 41% of the recent average (Table 22). Summer chum salmon harvest of 244,800 fish was 99.5% of the total chum salmon harvest. The summer chum salmon run is considered to last through mid-August (SW 33) and is composed of almost entirely hatchery fish. Chum salmon returning to DIPAC release sites in Gastineau Channel and Limestone Inlet contributed a major portion of the harvest, but quantitative contribution estimates are not available. Approximately 54% of the District 11 drift gillnet chum salmon harvest occurred in Taku Inlet and 46% in Stephens Passage. The harvest of 1,200 fall chum salmon during SW 34 and later was 42% of average. Most of these fall chum salmon are wild fish of Taku River origin but run size and escapement are unknown. The number of chum salmon passing through the fish wheels at Canyon Island is used as an index of escapement. The 118 chum salmon caught in the fish wheels in 2019 was 68% of recent average. The chum salmon escapement to the Taku River was characterized as below average; the same caveats exist for comparing data from the last two seasons to the historical dataset outlined in the pink salmon section above.

DISTRICT 15: LYNN CANAL

Fishery Overview

The District 15 Lynn Canal commercial drift gillnet fishery occurs in waters of Lynn Canal north of Little Island Light. District 15 encompasses Section 15-A (upper Lynn Canal), Section 15-C (lower Lynn Canal), and Section 15-B (Berners Bay). The fishery has historically targeted wild sockeye salmon from mid-June through September with a predominant Chilkoot Lake sockeye salmon harvest component during early summer and an increasing Chilkat Lake sockeye salmon

harvest component throughout the season and into early fall. Traditionally, sockeye salmon have mostly been harvested in Section 15-A, but in recent years there has been increased harvest of sockeye salmon in Section 15-C, including Snettisham hatchery sockeye salmon. Chilkat River fall chum and coho salmon and Berners Bay coho salmon are harvested from mid-August to mid-October. In recent decades, the fishing in Section 15-C has been focused on harvesting DIPAC hatchery summer chum salmon returning to release sites at Boat Harbor THA and Amalga Harbor SHA from mid-June to mid-July.

The drift gillnet fishery in District 15 has been managed in accordance with the *Lynn Canal and Chilkat River King Salmon Fishery Management Plan* (5 AAC 33.384) since 2003. This plan closes the commercial drift gillnet fishery in Chilkat Inlet north of Seduction Point through the first two weeks of the season and north of Glacier Point during the third and fourth week of the season if the projected inriver run of Chinook salmon to the Chilkat River is less than 1,850 ocean-age-3 and older fish. Management specific to wild sockeye salmon fisheries is based on escapements to Chilkat and Chilkoot lakes measured by fish weir stock assessment projects. Fall coho and chum salmon fisheries are based on returns to the Chilkat River basin assessed by a fish wheel stock assessment project and aerial and foot surveys within the Chilkat River drainage. Harvest of hatchery chum salmon returning to the Boat Harbor release site are regulated under the *Boat Harbor Terminal Harvest Area Management Plan* (5 AAC 33.386), which defines the THA as those waters within 2 nmi of the western shoreline of Lynn Canal from the latitude of Lance Point south to the latitude of a point located approximately 2.4 nmi north of Point Whidbey. In accordance with this plan, fishing is open continuously within the waters of Boat Harbor west of 135°09.57′ W long, and the remainder of the THA is opened after managing for adequate escapement of wild salmon stocks. The Boat Harbor THA area encompasses subdistrict 115-11 and is managed as a THA until September 15. After September 15, subdistrict 115-11 is managed as a traditional wild stock fishery with the rest of District 15.

Chilkat River Chinook salmon escapements have fallen below the lower bound of the BEG range of 1,750 to 3,500 fish in 6 out of 7 consecutive years from 2012 to 2018. From 2012 through 2017, the department implemented conservative management actions to reduce the harvest rate of Chilkat River Chinook salmon. Those management actions were insufficient to consistently reduce the harvest rate. In 2018, the BOF designated Chilkat River Chinook salmon as a stock of concern after multiple years of failing to achieve escapement. Management of District 15 now follows management actions outlined in the *Chilkat River and King Salmon River King Salmon Stock Status and Action Plan, 2018* (Lum and Fair 2018). The goal of this plan is to rebuild the Chilkat River Chinook salmon run to consistently achieve escapements within the escapement goal range and to consistently provide reasonable fishing opportunity at more historical levels for subsistence, commercial, and sport fisheries. Management actions for the Lynn Canal commercial drift gillnet fishery include time, area, and gear restrictions. In 2019, management actions beyond those prescribed in the action plan were taken and included additional time and area restrictions.

2019 Harvest and Effort Summary

The District 15 drift gillnet fishery opened on June 16 (SW 25) and closed at noon on October 9 (SW 41). Section 15-A was open for 73.5 days, above the recent average of 51 days, and Section 15-C was open for 55 days, also above the recent average (Table 15). A total of 242 drift gillnet permits were fished in District 15, above the recent average of 223 permits. Effort was above average in Section 15-A throughout the sockeye fishery; a large run of Chilkoot River sockeye salmon and unusual amount of DIPAC hatchery chum salmon in the area were the likely causes

of higher-than-normal effort. Effort in Section 15-C was slightly below average during the first four weeks of the season. District 15 peak effort was in SW33 with 170 boats fishing, 76% of average. Effort began to drop below 100 permits by SW 33 when fall management for coho and chum salmon began. During the final week of the fishery (SW41), effort dropped to 12 boats. Total fishing effort for the season in traditional fisheries (excluding Boat Harbor THA) was 7,598 boat-days, 83% of average.

2019 total District 15 drift gillnet fishery common property harvest (traditional and THA) was 1,610,000 salmon, above the recent average of 1,557,000 fish, and the 7th highest harvest since 1960 (Tables 18 and 23). Total common property harvest by species included 1,100 Chinook, 242,000 sockeye, 48,000 coho, 144,000 pink, and 1,200,000 chum salmon (Table 23). Chum, coho and sockeye harvests were above the recent averages, and pink and Chinook salmon harvest were below. Sockeye salmon harvest was the 6th highest in the last 30 years. GSI estimates indicated the sockeye salmon harvest was composed of 17% Chilkat Lake, 63% Chilkoot Lake, 4% Snettisham, 8% Taku/Stikine rivers, and 1% other origins. The majority of the chum salmon harvest (99%) occurred in SWs 25–33 as boats targeted DIPAC hatchery fish. Estimated DIPAC chum salmon contribution was approximately 1,100,000 fish to the District 15 total harvest.

Chinook Salmon Fishery

There were no directed commercial Chinook salmon fisheries in District 15 in 2019. The Chilkat River Chinook salmon preseason total run forecast of 1,000 large (ocean-age-3 and older) fish was below the lower bound of the escapement goal range of 1,750–3,500 fish. Despite restrictions mandated by the newly adopted *Chilkat River and King Salmon River King Salmon Stock Status and Action Plan, 2018* (Lum and Fair 2018), the BEG was not achieved in 2018. Management actions implemented in 2019 were more conservative than 2018 and exceeded both the *Lynn Canal and Chilkat River King Salmon Fishery Management Plan* (5 AAC 33.384) and the *Chilkat River and King Salmon River King Salmon Stock Status and Action Plan, 2018* (Lum and Fair 2018). As a result of these management actions, the drift gillnet fishery harvest rate on Chilkat River Chinook salmon was an all-time low of 4.5% and escapement was achieved. Total harvest of 1,100 Chinook salmon was slightly below the recent average and total harvest of Chilkat River large Chinook salmon estimated by GSI was 53 fish. The majority of Chinook salmon harvest (95%) occurred during the first 6 weeks of the season with a peak harvest of 216 occurring in SW 29. Peak Chinook salmon harvests generally correspond with peak fishing effort targeting hatchery chum salmon in Section 15-C.

Sockeye Salmon Fishery

The 2019 sockeye salmon runs to District 15 exceeded expectations. Fair to strong parent-year escapements and zooplankton estimates indicated an average to above-average return of sockeye salmon to both the Chilkat and Chilkoot rivers in 2019. District 15 drift gillnet sockeye salmon harvest of 241,500 fish was 184% of the recent average, 154% of the historical average (Table 23), and the highest harvest since 1992. Traditionally, the majority of sockeye salmon harvest occurs in Section 15-A but with increasing effort in Section 15-C early in the season, sockeye salmon harvests have increased in recent years. In Section 15-A, 155,000 sockeye salmon were harvested, 68% of the District 15 sockeye salmon harvest, and in 15-C, 73,500 sockeye salmon were harvested, which was 32% of the harvest.

GSI estimates provided stock composition of the harvest for SWs 25-35. Estimates indicated that Chilkat Lake sockeye salmon were present for all sampling events and made up 20–30% of the

harvest each week, similar to the weekly stock composition estimates seen in 2018. Chilkoot Lake sockeye salmon composed 20–30% of the weekly harvest for the first four weeks of the season (SWs 25–28), then increased to 50% of the harvest in SW 29. Chilkoot Lake sockeye salmon stock composition estimates continued to increase for two more weeks, peaked at nearly 80% of the weekly harvest in SW 32, and then decreased to approximately 50% in SWs 33 and 34, and 40% in SW 35. Approximately 150,000 Chilkoot Lake sockeye salmon were harvested in 2019, 63% of total harvest. Juneau area mainland stocks contributed to the harvest during the first four weeks of the fishery (SWs 25–28), with the highest contribution of 32% occurring in SW 27, but overall contributed to 2% of the total sockeye salmon harvest. Snettisham stocks (hatchery and wild) contributed 5–7% in SWs 28–30, 10–13% in SWs 34 and 35, and represented 4% of the total harvest. Taku and Stikine rivers sockeye salmon stocks were present throughout all sampling events in SWs 26–31 and contributed to 8% of the total sockeye salmon harvest.

The 2019 District 15 drift gillnet fishery began in SW 25 (Table 15). Sockeye salmon harvest opportunities were limited by management actions taken to reduce harvest of Chilkat River Chinook. Management actions included reduced fishing area and fishing time limited to 2 days a week through the first five weeks of the fishery (SW 25–29). In Section 15-A, area open to commercial fishing was limited to south of Eldred Rock Lighthouse and east of a line from Eldred Rock Lighthouse to a point 2.0 nmi from the eastern shoreline at 58°51.00′ N lat, 135°12.77′ W long. Additional restrictions to minimize harvest of Chilkat River Chinook salmon included night closures from 10 p.m. to 4 a.m. through SW 28, and a six-inch maximum mesh size restriction through SW 29. Sockeye salmon harvest of 400 fish in SW 25 was 63% of the weekly average. Subsequently, sockeye salmon harvests began to increase and were above the weekly average in SWs 26–29. Although the Section 15-A fishery was limited in time and area during the first five weeks, effort was above average each week and the total sockeye salmon harvest of 12,500 fish during SWs 25–29 was 176% of the combined weekly average for those weeks.

By SW 30, Chinook salmon conservation measures were reduced in Section 15-A, but night closures were implemented to protect juvenile Chinook salmon. The Eldred Rock Lighthouse open area was extended north to the southernmost tip of Talsani Island. Sockeye salmon escapements to Chilkat and Chilkoot lakes were both projected to meet escapement goal, therefore fishing time in Section 15-A was extended 24 hours. The three days of fishing resulted in an average harvest of 7,600 sockeye salmon. Effort was above average this week but declined from the prior week, probably due to more time and area in Section 15-C.

In SW 31, Section 15-A fishing time and area increased. All waters south of Seduction Point were initially open for two days and waters north of Katzehin River flats light to the terminus of the Chilkoot River were initially open for 24 hours. Chilkoot River weir counts increased rapidly with three consecutive days of well-above-average counts—including a record daily count of 56,000 sockeye salmon—and the upper bound of the Chilkoot Lake sockeye salmon SEG was achieved overnight. As a result, waters north of Katzehin River flats to the terminus of the Chilkoot River were opened until further notice. This week's harvest of 63,000 sockeye salmon was well above both the recent and the long-term averages and was the highest weekly sockeye salmon harvest since 1980.

In SW 32, all waters of Section 15-A were open, and area increased to include all of Section 15-A with the exception of Chilkat Inlet north of Seduction Point. This week's harvest of 26,000 sockeye salmon was 216% of the weekly average. By SW 33, all waters of Section 15-A were open to commercial fishing and sockeye salmon harvests remained above weekly averages until SW 35.

Night closures were lifted in SW 35. Sockeye salmon harvests began to decline in SW35 and remained below the weekly average for the rest of the season (SW 35–40).

In the Section 15-C drift gillnet fishery, most sockeye salmon are harvested incidentally in Subdistrict 115-10 as fishermen target hatchery chum salmon. Sockeye and chum salmon harvest opportunities were limited for the second year in a row due to Chilkat River Chinook salmon management actions that included reduced area and time, gear restrictions, and night closures. Night closures from 10 p.m. to 4 a.m. daily were in effect through SW 28 and a six-inch maximum mesh restriction was implemented through SW 29.

Section 15-C opened to commercial fishing in SW 25. During SWs 25–27, fishing was limited to a 2 days per weeks in the Postage Stamp area (small area in the southeastern portion of Section 15-C opened to target hatchery returns to Amalga Harbor). The Boat Harbor THA was also opened and management actions taken in that area are discussed later in this report. Total harvest of sockeye salmon in the first two weeks of the season was 1,100 fish, 23% of the recent average. In SW 28, fishing time increased to a 3-day period in the Postage Stamp and 4,500 sockeye salmon were harvested, half the weekly recent average. In SW 29, fishing area expanded west and waters south of the latitude of Vanderbilt Reef Light opened for an initial 3-day period with an additional 24-hour extension. This week's harvest of 9,300 fish was 78% of the weekly average.

By SW 30, sockeye salmon escapements to Chilkat and Chilkoot rivers were projecting to meet escapement. As a result, fishing area in Section 15-C expanded north to the latitude of Point Bridget and fishing time increased to four days with an additional 24-hour extension for total of five days. This week was the peak week of sockeye salmon harvest with nearly 30,000 fish harvested, 256% of the weekly average.

Section 15-C was open south of Point Bridget with an initial open time of two days each week for SWs 31–33 and fishing time was extended an additional two days in each week (Table 15). In SW 31, sockeye salmon harvest of 6,500 fish was 83% of average, the SW 32 sockeye salmon harvest of 10,100 fish was 180% of average, and the sockeye salmon harvest for SW 33 of 6,100 sockeye salmon was 169% of average.

In SW 34, open area expanded to include all of Section 15-C with an initial 3-day open period followed by a one-day extension. The sockeye salmon harvest of 2,500 fish was 147% of average.

In SW 35, the drift gillnet fishery start was delayed until Monday, August 26, to reduce conflict with the Golden North Salmon Derby. All waters of Section 15-C remained opened with five days of fishing time. Sockeye salmon harvest fell below average with 940 fish harvested. The same lines were implemented throughout the remainder of the fishing season. Fishing time for SWs 36–39 was set at three days a week and as sockeye salmon harvests continued to decline, the fleet switched to larger mesh sizes to target wild chum and coho salmon. Section 15-C closed after a four-day fishing period in SW 40.

Coho Salmon Fishery

Chilkat River and Berners Bay coho salmon are harvested in the fall fishery. The fishery is managed by monitoring coho salmon catches in the Chilkat River fish wheels and stream surveys in Berners Bay. Additionally, chum salmon escapement to the Chilkat River is considered in management as the run timing is similar to coho salmon and the drift gillnet fleet uses similar mesh sizes to target both species. Although coho salmon can be present in the harvest throughout the season, in the last 10 years 92% of coho salmon harvest in District 15 has occurred after SW 32.

The 2019 total coho harvest of 48,000 was 116% of the recent average and 92% of the 30-year average.

Fall management for coho salmon started in SW 34 in Section 15-C. Prior to the start of coho management, coho salmon harvests were below the weekly averages in SWs 25–32. By SW 33, coho salmon harvest began to increase and remained well above average through SW 37. A peak harvest of 12,000 fish occurred in SW 35: the second highest weekly harvest since 1995 and 539% of average. Coho salmon harvests decreased in SW 39 and continued to drop throughout the season as effort declined. With no management concerns for Chilkat River chum or coho salmon escapement, opportunity in Section 15-A was equal to the opportunity given in Section 15-C. The majority of the District 15 coho same harvest was from Section 15-C with a harvest of 35,000 fish, 72% of the total coho salmon harvest.

Pink Salmon Fishery

Pink salmon returning to the Chilkat River basin and to the Chilkoot River have similar trends to other systems in northern Southeast Alaska in that they have had an odd- versus even-year trend in brood year strength during the last decade. Pink salmon returns in odd years have been considerably higher than even years and the 2019 return proved that trend. The pink salmon returns to Upper Lynn Canal were characterized as above average. Pink salmon are caught incidentally when boats are targeting sockeye salmon. Pink salmon harvest of 143,600 fish was 64% of the recent average and 155% of the 30-year average.

Chum Salmon Fishery

The chum salmon fishery in District 15 is composed of both summer hatchery chum and wild fall chum salmon returning to the Chilkat River. 2019 chum salmon common property (traditional and THA) salmon harvest of 1,200,000 fish was 102% of the recent average and 166% of the 30-year average. Summer hatchery chum salmon are harvested in District 15 traditional fisheries as fish return to the Boat Harbor and the Amalga Harbor release sites and in the Boat Harbor THA. In 2019 a larger proportion than normal of the District 15 chum harvest occurred in Section 15-A, probably due to a larger run of chum salmon and prevailing southerly winds for several weeks. A total of 281,000 chum salmon were harvested in Section 15-A and 900,000 chum salmon were harvest in Section 15-C, both above the recent averages.

Harvest opportunities for hatchery summer chum salmon harvest were limited by management actions to conserve Chilkat River Chinook salmon that reduced fishing time and area. Inside waters of the Boat Harbor THA were open continuously without any restrictions. In SWs 25–27, a portion of the outside waters of the THA (Subdistrict 115-11) were open for 2 days with the rest of District 15 for a total harvest of 64,000 chum salmon, 101% of the recent averages for those weeks.

In SW 28, the Boat Harbor THA was expanded to regulation boundaries and fishing time was four days. The week's total District 15 harvest of 196,500 chum salmon was below the weekly average.

In SW 29, Boat Harbor THA was open in the same area for an initial four days, followed by a one-day extension. In the remainder of Section 15-C, the Postage Stamp area was expanded south to the latitude of Vanderbilt Reef Light for an initial 3-day open period followed by a one-day extension. SW 29 was the peak of the District 15 chum salmon harvest with a harvest of 483,000 fish, 256% of the weekly average.

In SW 30, Boat Harbor THA was opened until further noticed but fishing area was reduced to south of the latitude of Danger Point and restricted to within 1.0 nmi of the shore. The restricted area provided continued opportunity to harvest hatchery chum salmon while reducing the harvest of wild chum salmon destined for Endicott and Chilkat rivers. The remainder of Section 15-C was opened south of the latitude of Point Bridget for a 4-day period. The total District 15 harvest was 244,000 chum salmon, 214% of the weekly average.

In SW 31, chum salmon harvest of 38,000 fish was 72% of the recent average and in SW 32, 11,500 fish were harvested, 55% of the recent average. In SW 33, the Boat Harbor THA remained opened continuously and Section 15-C was open for an initial two days with a two-day extension. SW 33 harvest of 8,500 chum salmon was 108% of the recent average. In SW 34, Boat Harbor THA remained opened continuously, and all waters of Section 15-C was open for an initial three days followed by a one-day extension. Chum salmon harvest remained strong with a harvest of 9,000 fish, 157% of the recent average. In SW 35, chum salmon harvest in Section 15-A was twice the harvest of Section 15-C. As chum salmon harvests dropped in Section 15-C, the Boat Harbor THA closed with the rest of Section 15-C as the hatchery chum salmon run was finished.

Chilkat River basin fall chum salmon begin to show in the harvest by SW 34. The fall chum salmon fishery is managed by monitoring chum salmon catches in the Chilkat River fish wheels. Traditionally, wild chum salmon are harvested primarily in Section 15-A but can also be harvested in Section 15-C when boats are targeting coho salmon and using larger gillnet mesh sizes. From SW 34 through the end of the season, 51,000 chum salmon were harvested in Section 15-A and 14,000 were harvested in Section 15-C. Chilkat River fish wheel chum salmon catches were well above average indicating a strong run in 2019. Chilkat Inlet was open to commercial fishing to the latitude of Letnikof Cove Light in SWs 35 and 36, and the chum salmon harvest in Section 15-A was 18,500 fish, 135% of average for those weeks. SW 37 was the peak chum salmon harvest during the fall management period with 17,000 fish harvested, 165% of the weekly average. Subsequently, District 15 chum salmon harvests fell below weekly averages for the last three weeks of the season.

Escapement Summary

District 15 has three stock assessment projects to estimate escapements of Chilkat and Chilkoot lakes sockeye salmon. These programs include an adult salmon counting weir on the Chilkoot River that enumerates sockeye salmon escapement into Chilkoot Lake, a dual-frequency identification sonar (DIDSON) weir is used to estimate sockeye salmon escapements into Chilkat Lake, Chilkat River Fish Wheel project monitors migration of all five species of salmon returning to the Chilkat River basin, and escapement surveys to determine Chilkat River coho salmon escapement.

Chilkoot Lake 2019 total escapement was 143,000 sockeye salmon exceeded the upper bound of the escapement goal range of 38,000–86,000 fish and was the largest escapement on record. The Chilkoot Lake fish weir was installed on June 6 (SW 23) with below average fish passage during the first three weeks of operation. Sockeye salmon escapements into Chilkoot Lake were an anomaly in 2019 compared to historical trends. After low observed escapements for several weeks, sockeye salmon escapement increased quickly in SW 26 and SW 27 with weekly counts of 3,000 and 4,500 fish. Escapements remained above average and continued to increase through SW 29, indicating a strong sockeye salmon run to Chilkoot Lake. In SW 30, escapement counts spiked drastically, setting records for both a daily sockeye salmon count of just under 15,000 fish and a

weekly count of 56,000 fish. Weir counts exceeding 10,000 fish per day were recorded four days in a row. By July 27 (SW 30), the upper bound of the SEG range was met with only 50% of the run through the weir. By SW 31, escapement rates started decreasing but remained well above average each week until the weir ceased operations on September 8. A total of 64 Chinook, 18 coho, 17,200 pink, and 400 chum salmon were also counted through the Chilkoot River weir.

Chilkat Lake 2019 total escapement was 135,000 sockeye salmon, near the midpoint of the escapement goal range of 70,000–150,000 fish. This year's escapement was above the recent average of 105,000 fish and the 30-year average of 107,000 fish. The Chilkat Lake fish weir project began operation on June 10 (SW 24). The 2019 sockeye salmon escapement trend started off slow with below-average fish passage through the first week of July (SW 27). In SW 28, escapement counts started increasing quickly with a small peak of 3,000 fish on July 11. A peak count of 17,400 fish was recorded on August 14 (SW 33), achieving the 70,000 fish lower bound of the BEG range. During SWs 29–35 weekly escapement and the cumulative count remained above averages throughout the rest of the season. Escapement counts started tapering off on October 4, and the project ended on October 9. The project experienced several high-water events in 2019 with "reversals" occurring four times throughout the season. A total of 6,000 coho salmon were estimated to have passed through the weir in 2019.

Chilkat River fish wheels were deployed on June 2 and were operating on June 3. Fish wheels are used to monitor relative abundance of salmon as they enter the Chilkat River drainage. In addition, fish wheel catch is used as a relative index to estimate the spawning escapement of Chilkat River fall chum salmon. In 2018, the fish wheels had to be relocated due to a large-scale Haines Highway construction project. Construction of the highway interfered with fish wheel operations and the project was not successful. In 2019, the fish wheels were launched from a new site along the Haines Highway. The fish wheels were anchored in a predetermined site (between miles 9 and 10 of the Haines highway) that wouldn't be impacted by the construction project. Fish wheels maintained adequate rotation speed throughout the season and the location proved to be successful.

Total catch in the Chilkat River fish wheels was 218 Chinook, 1,900 sockeye, 2,700 coho, 5,200 pink, and 3,500 chum salmon. The first Chinook salmon was caught on June 10 (SW 24) with a peak catch of 24 fish on July 7 (SW 28). Total catch of 218 Chinook salmon was above average and contributed to the mark–recapture study to provide an estimated escapement of 2,028 large (age-1.3 and older) fish. The Chilkat River Chinook salmon escapement goal was met for the first time since 2015.

Coho salmon captured in the fish wheels serve as an indicator of run strength and run timing. The first coho salmon was caught in the fish wheels on August 13 (SW 33), slightly later than normal. Coho salmon catches were above average throughout the season, indicating a strong run to the Chilkat River. In SW 37, coho salmon catches doubled, then peaked in SW 38 with a weekly catch of 854 fish, well above the average for that time. Total fish wheel catch of 2,700 coho salmon was twice the average.

The first pink salmon was caught in the fish wheels on June 30 (SW 27), two weeks later than normal. Pink salmon catches spiked in SW 28 and peaked in SW 29 with a weekly catch of 1,400 fish. High catch rates persisted for three weeks before declining in SW 31. Weekly pink salmon catches fell below average throughout the rest of the season. Total catch of 5,200 pink salmon was 85% of average.

The first chum salmon was caught in the fish wheels on June 23 (SW 26) with near average catches up to SW 33. Chum salmon catches increased in SW 26 and peaked in SW 37, with a weekly catch of just under 1,000 fish. Catch rates remained above average until they declined in SW 39. The final chum salmon catch of 3,440 fish was 95% of the recent average. Using the proportion of the run captured by the fish wheels of 1.5%, as estimated from previous mark–recapture studies, total Chilkat River basin chum salmon escapement estimate was 222,000 fish, within the Chilkat River fall chum salmon SEG range of 75,000–250,000 fish.

The current management program for Chilkat River coho salmon relies on escapement monitoring in four index streams. Escapement of coho salmon to the Chilkat River basin is estimated by conducting weekly foot or boat surveys during speak spawning. Peak survey counts are expanded to estimate total escapement. In 2019, the estimated escapement was 36,100 coho salmon, within the BEG range of 30,000–70,000 fish.

HATCHERY HARVESTS

Privately operated hatcheries contributed Chinook, sockeye, coho, pink, and chum salmon to the 2019 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 private hatchery cost-recovery fisheries. Accurate overall harvest information is available from fish tickets. Management actions in traditional fisheries are directed to harvest of wild stocks, although comigrating hatchery salmon contribute substantially to traditional area harvests. As hatchery salmon enter terminal areas near hatchery release sites, fishery management is directed on harvest of surplus hatchery 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 enough 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; and at other locations only common property harvests occur (Figure 2).

Hatchery contributions to common property fisheries are estimated primarily 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 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, regionwide 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 2019, 77% of the 33.5 million total all-gear salmon harvest was harvested in traditional fisheries, 10% in THA fisheries, 9% in hatchery cost recovery fisheries, and 4% in Annette Island Reservation fisheries. Of 11.5 million chum salmon harvested in 2019, 42% were harvested in traditional areas, 33% were harvested in hatchery THAs, 24% in cost recovery fisheries, and 1% in the Annette Island Reservation fisheries (Conrad and Thynes 2020). Chum salmon harvests in

2019, in both purse seine and drift gillnet common property fisheries, were in large part due to hatchery production.

In 2019, Southeast Alaska common property harvests of 6.5 million hatchery salmon are estimated to account for 22% of overall harvests and 37% of exvessel value. 2019 common property harvest proportions of hatchery salmon in the region included 23% of Chinook, 5% of sockeye, 28% of coho, 1% of pink, and 85% of chum salmon (Wilson 2020). For comparison, 2018 common property harvests of hatchery salmon were estimated to account for 46% of overall harvests and proportions of hatchery salmon included 23% of Chinook, 20% of sockeye, 37% of coho, 2% of pink, and 93% of chum salmon (Stopha 2019); and 2017 for 18% of overall harvests and proportions of hatchery salmon included 19% of Chinook, 12% of sockeye, 17% of coho, 2% of pink, and 83% of chum salmon (Stopha 2018).

TRADITIONAL COMMON PROPERTY HATCHERY 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. CWTs are intensively sampled in fisheries to provide accounting for these purposes.

In 2019, purse seine fisheries harvested 9,500 large Chinook salmon and 1,100 jacks in traditional fisheries. The majority (75%) of Chinook salmon were harvested in the District 4 fishery (Table 2). Large Chinook salmon were allowed to be retained during four fishing periods and Chinook salmon less than 28 inches (jacks) could be retained but not sold throughout the season. Alaska hatchery contribution based on CWT recoveries was estimated to be 1,455, 15% of the harvest (Table 24).

In 2019, drift gillnet fisheries harvested 8,900 Chinook salmon in traditional fisheries (Table 18) and based on CWT recoveries, Alaska hatcheries contributed 6,640 (75%) to the Chinook salmon harvest (Table 25). The largest hatchery harvest occurred in District 8 with 4,300 fish harvested (ADF&G CWT Lab 2020). No directed Chinook salmon fisheries occurred in 2019 and time, area, and gear restrictions were applied to conserve Chinook salmon during openings directed at sockeye salmon harvests in Districts 8, 11, and 15.

Traditional purse seine coho salmon harvest in 2019 was 230,000 fish (Table 2). Alaska hatchery coho salmon contributions based on CWT recoveries are estimated at 30,000 fish, 13% of the harvest (Table 24). The largest harvests of Alaska hatchery coho salmon by area included 7,300 fish in District 4, and 6,300 fish in District 3 (ADF&G CWT Lab 2020).

Drift gillnet fisheries harvested 168,000 coho salmon in traditional fisheries in 2019 (Table 18). Alaska hatchery coho salmon contributions based on CWT recoveries are estimated at 37,000 fish, 17% of the harvest (Table 25). Alaska hatchery coho salmon harvest were evenly distributed among most of the fishing areas with 8,000 fish harvested in District 1, 9,700 fish in District 6, 8,200 fish in District 11, and 8,800 fish in District 15 (ADF&G CWT Lab 2020).

Estimates of hatchery sockeye, pink, and chum salmon contributing to traditional fisheries can be made by sampling for otolith marks. Sockeye salmon are sampled in various fisheries by ADF&G, but ADF&G does not sample pink and chum salmon harvests. Chum salmon harvests are sampled extensively in southern Southeast Alaska fisheries by SSRAA and harvests are sampled to a lesser degree in northern Southeast by hatchery operators. Estimates of common property (both

traditional and THA/SHA) harvests are annually made by hatchery operators and included in their annual reports. An estimate of hatchery contribution of sockeye, pink, and chum salmon can be made from subtracting common property harvests of assumed hatchery fish in THAs and SHAs from hatchery operators' overall common property hatchery harvest estimates.

Of 434,000 sockeye salmon harvested in traditional purse fisheries in 2019, almost all were from wild stocks (Tables 2 and 24). An estimated 480 hatchery sockeye salmon were harvested in purse seine fisheries (Wilson 2020).

In 2019, 370,000 sockeye salmon were harvested in traditional drift gillnet fisheries (Table 18). Contributions of hatchery sockeye salmon to traditional fisheries include fish from the Taku River (Tatsamenie and King Salmon lakes) and the Stikine River (Tahltan and Tuya lakes) enhancement projects. Harvest of enhanced TBR fish in the District 11 traditional drift gillnet fishery included approximately 1% of the total harvest. Harvest in the District 6 fishery included 1,440 sockeye salmon (6% of the total harvest) from the Stikine enhancement projects; 40 fish from Tuya Lake, and 1,400 fish from Tahltan Lake. Harvest in the District 8 fishery included 1,630 sockeye salmon (24% of the total harvest) from Stikine enhancement projects, 20 fish from Tuya Lake, and 1,610 fish from Tahltan Lake. Total hatchery contribution to traditional drift gillnet harvest was estimated at 37,200 sockeye salmon primarily from Snettisham Hatchery and primarily harvested in District 11 (Table 25).

Hatchery pink salmon generally contribute little to traditional fisheries. Regionwide traditional fisheries harvest of pink salmon by purse seine and drift gillnet gear was 19.3 million fish in 2019 (Tables 2 and 18). Estimated harvest of hatchery pink salmon in traditional fisheries was 106,000 fish, <1% of the harvest (Tables 24 and 25). Since pink salmon are generally not sampled, the basis of operator's estimates is uncertain.

The majority of chum salmon harvested in Southeast Alaska are from hatchery production. Hatchery harvest estimates are determined by a combination of otolith sampling of commercial, traditional, and terminal area fisheries. Most chum salmon are thermally marked and 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; therefore, returns as reported in this section are based on hatchery operators' best estimates. 2019 traditional fisheries harvest by purse seine and drift gillnet was 3.6 million chum salmon: 2.4 million fish harvested in the purse seine fishery and 1.2 million fish in the drift gillnet fishery (Tables 2 and 18). Estimated hatchery contributions to traditional fisheries is estimated at 1.6 million chum salmon or 65 % of the harvest in the purse seine fishery and 628,000 chum salmon, or 52% of the harvest, in the drift gillnet fishery (Tables 24 and 25).

TERMINAL HARVEST AREA AND SPECIAL HARVEST AREA COMMON PROPERTY HARVESTS

THA/SHA Summary

In 2019, 13 THAs and SHAs were open for common property purse seine and drift gillnet fisheries (Tables 9 and 16). A total of 23,000 Chinook, 37,000 sockeye, 45,000 coho, 226,500 pink and 3.1 million chum salmon were harvested. Common property purse seine fisheries harvested most of the overall chum (64%), pink (77%), and Chinook (51%) salmon harvests, whereas the drift gillnet fishery harvested the majority of the sockeye (68%) and coho (63%) salmon harvests. Crawfish Inlet contributed the largest amount of chum salmon to overall common property purse seine

harvests with 985,000 fish harvested, 50% of the total common property purse seine THA/SHA harvest (Table 26). The Boat Harbor THA had the largest common property drift gillnet harvest of chum salmon with 567,000 chum salmon harvested, 51% of the overall drift gillnet common property THA/SHA harvest (Table 27).

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 one of two locations where SSRAA's primary cost recovery takes place, with other terminal areas designated as common property harvest locations. Neets Bay THA was open on a rotational basis for drift gillnet and purse seine gear from June 17 through July 6 and was open for troll gear from June 15 through August 1 to target excess Chinook salmon (Tables 9 and 16). Due to an extremely poor run of summer chum salmon, Neets Bay THA did not open for any targeted chum or coho salmon common property opportunities. There was also concern about achieving broodstock collection goal at Neets Bay. Cost recovery was halted shortly after the beginning of the season to conserve all returning hatchery chum salmon for broodstock requirements. In Neets Bay, drift gillnet gear harvested 3,100 Chinook salmon and 500 chum salmon (Table 27) and purse seine gear harvested 6,000 Chinook salmon and 1,000 chum salmon (Table 26) for the season. Cost recovery totals were 165,000 chum, 500 Chinook, and 20,000 coho salmon (Table 28).

Based on otolith sampling, SSRAA has estimated traditional commercial common property harvest for Neets Bay hatchery chum salmon for all gear groups was 158,000 summer chum and 15,000 fall chum salmon. The summer chum salmon total run of 315,000 fish was 16% of the preseason forecast of 1,911,400 fish. The fall chum salmon total run of 25,000 fish was 7% of the preseason forecast of 345,100 fish.

Nakat Inlet

The Nakat Inlet THA (Subdistrict 101-10) opens by regulation on June 15 to drift gillnet and troll gear to harvest returning chum salmon produced by SSRAA. Nakat Inlet remained open on a continual basis through November 10 (Table 16). Harvest consisted of 200 sockeye, 9,000 coho, 7,600 pink, and 89,000 summer chum salmon (Table 27). Additional chum salmon returning to Nakat Inlet were harvested outside the THA in the traditional District 1 drift gillnet fishery (Tables 8 and 25). The total hatchery summer chum salmon run to Nakat Inlet was 192,000 fish, 76% of the preseason forecast of 254,000 chum salmon.

Carroll Inlet

The Carroll Inlet THA (Subdistrict 101-48) was opened in 2019 on a rotational basis for purse seine and drift gillnet gear to harvest returning Chinook salmon produced by SSRAA. Carroll Inlet was open concurrently to all gear groups from June 1 through June 12, and then while remaining open for troll gear, opened by rotation between purse seine and drift gillnet through June 30 (Tables 9 and 16). This was the second season that Carroll Inlet had returning hatchery Chinook salmon in recent years. Drift gillnet harvest consisted of 500 Chinook salmon, and purse seine harvest consisted of 1,000 Chinook salmon (Tables 26 and 27). Harvest of nontarget salmon species was less than 10% of the total catch and consisted primarily of chum salmon. The total Chinook salmon run to Carroll Inlet was estimated to be 4,200 fish.

Kendrick Bay

The Kendrick Bay THA (Subdistrict 102-15) was opened in 2019 for purse seine gear to harvest returning chum salmon produced by SSRAA. Kendrick Bay opened by regulation on June 15 and remained open through September 30 (Table 9). Harvest consisted of 70 Chinook, 900 sockeye, 800 coho, 16,000 pink, and 83,000 summer chum salmon (Table 26). Additional chum salmon returning to Kendrick Bay were harvested outside the THA along the eastern shoreline of Prince of Wales Island during two four-day and two one-day hatchery chum salmon directed fisheries prior to SW 28, June 16–July 1 (Table 8). Harvest in those openings outside of normal common property openings totaled 20,000 chum salmon. Total hatchery summer chum salmon run for Kendrick Bay was 329,000 fish, 32% of the preseason forecast of 1,031,700 fish.

Anita Bay

The Anita Bay THA (Subdistrict 107-35) is opened each year to harvest Chinook, chum, and coho salmon produced by SSRAA. These fish are predominantly harvested by the drift gillnet and purse seine fleets. By regulation, the area can be opened as early as May 1; however, because of concerns for wild Southeast Alaska Chinook salmon stocks and the fact that hatchery Chinook salmon are not predominantly in the area until June, the THA opening was delayed until June 1. Anita Bay opened to net and troll fishing concurrently from June 1 through June 12, with the outer portion of the THA opened to troll only. From June 13 through August 31, the fishery operated on a rotational basis for purse seine and drift gillnet fleets, with the purse seine fleet fishing first in 2019 (Tables 9 and 16). There was no closed period for troll gear. Area at the head of Anita Bay was closed to facilitate broodstock collection for 28 days in August. During June and July, rotational fishing schedules start and ended at noon with the THA closed to nets for 24 hours between rotations. Prior to 2009, the rotational schedule in Anita Bay was 2:1; with the drift gillnet fleet fishing for 48 hours followed by the purse seine fleet fishing 24 hours. In 2009, the rotation ratio changed to 1:1 to address imbalances in hatchery salmon allocations. From 2015 through 2017, rotations were 1:1 from June 13 through July 24, and switched to 2:1 for the duration of the rotational schedule. The rotation schedule switched back to 1:1 for the entire rotation period in 2018 and was in place for 2019. The first gillnet and purse seine effort in Anita Bay occurred during SW 22. The last fishing effort recorded for the purse seine fleet occurred during SW 35 and the last recorded effort by the gillnet fleet occurred during SW 41. The purse seine fishery harvested 1,700 Chinook, 300 sockeye, 200 coho, 27,000 pink, and 81,000 chum salmon (Table 26). Drift gillnet harvest included 4,000 Chinook, 100 sockeye, 8,000 coho, 2,500 pink, and 47,000 chum salmon (Table 27). Total runs of hatchery salmon returning to Anita Bay were estimated to be 7,200 Chinook salmon, 46% of forecast; 188,000 chum salmon, 35% of forecast; and 10,200 coho salmon, 90% of forecast.

Southeast Cove

2019 was the first year the Southeast (SE) Cove THA (Subdistrict 109-41) was open for common property fisheries to harvest returns of NSRAA produced chum salmon. SE Cove first opened on June 16 to common property purse seine and troll fisheries. Troll was open continuously whereas purse was open on Sundays and Thursdays. The purse fishery was open for a total of six 15-hour periods closing on July 4 after it was apparent the chum salmon run was not meeting expectations and cost-recovery harvest goals would not be met (Table 9). The common property purse seine harvest was 40,000 chum salmon (Table 26). The total run was estimated at 953,000 chum salmon, 54% of forecast.

Thomas Bay

The Thomas Bay THA (Subdistrict 110-12) was open to common property purse seine and troll fisheries to harvest initial chum salmon returns of NSRAA produced chum salmon. NSRAA was expecting a small return of 10,000 chum salmon. THA boundaries were designed to minimize effects on recreational users and Dungeness crab fishermen in the area. The Thomas Bay bluffs were closed to fishing on the weekends and the head of Thomas Bay off the Patterson River flats and west of Ruth Island, including Bock Bight, were closed for the season. The purse seine fishery was open on Sundays and Thursdays beginning June 16 through July 25, for 15 hours each open period. On July 28, the purse seine fishery was open each day of the week through the end of the week when the area closed for the season on August 3. This extended opening was to attract effort to harvest any remaining chum salmon because there was reports of chum salmon in the area and no boats had fished for several openings. Participation was minimal throughout the season and harvest is confidential (Table 26).

Speel Arm

DIPAC forecast for total Snettisham Hatchery sockeye salmon returns (including Sweetheart Creek) for 2019 was 230,000 fish from their 2014 and 2015 brood year smolt releases. A fishery in Speel Arm SHA (Subdistrict 111-33) would not be considered until the lower bound of 4,000–9,000 wild Speel Lake sockeye salmon SEG was assured. Speel Arm first opened on August 8 in SW 32 for a 24-hour period. Sockeye salmon harvest was minimal for this initial opening. The SHA was opened for four days in SW 33 along with the rest of the district. Speel Arm remained open continuously starting in SW 34 from August 18 through September 13 in SW 37. Thirty-three boats made landings from Speel Arm harvesting 9,600 sockeye salmon; the majority harvested in SWs 33 and 34. An additional 94,000 sockeye salmon (77,000 adults and 17,000 jacks) were harvested for cost recovery (Table 27). The total 2019 run size of 142,000 was 62% of forecast. Final escapement to Speel Lake documented at the DIPAC operated weir through September 19 was 6,447 sockeye salmon.

Amalga Harbor

Since 2012, portions of Amalga Harbor SHA (Subdistrict 111-55) in Section 11-A are opened for common property purse seine fishing to harvest DIPAC hatchery chum salmon surplus to cost-recovery needs. To minimize disruptions to landowners and recreational users of this high-use area on the Juneau road system, openings occur only in July and only on Thursdays. Prior to 2018, openings were limited to 6 hours; beginning in 2018, openings were increased to 9 hours. Openings are based on progress toward DIPAC cost-recovery goals. Common property Amalga Harbor SHA fisheries were not opened in 2019 due to DIPAC not achieving their cost-recovery goals. The total Amalga Harbor chum salmon run was estimated to be 841,000 fish, 40% of the 2.1 million fish forecast.

Hidden Falls

NSRAA forecasted a return to Hidden Falls THA of 167,000 coho, 1,900 Chinook, and 1,603,000 chum salmon for 2019. Under the authority of Alaska Statute 16.10.455, to derive the necessary revenues, NSRAA Board of Directors requested that no tax be assessed for chum salmon in Section 12-A statistical areas 112-22 (HFH THA), 112-21 (Kelp Bay), and 112-11 (Outer Kelp Bay) to provide needed revenue for hatchery operations. Common property purse fishing periods began June 16 and continued until June 27 with a cleanup fishery on August 8 and 9, for a total of six

15-hour fishing periods. Approximately 14,000 chum, 300 coho, and 400 Chinook salmon were harvested during these periods (Table 26). The total chum salmon run was 241,000 fish, 15% of forecast.

Medvejie/Deep Inlet

NSRAA forecasted a run to Medvejie Hatchery in Silver Bay and Deep Inlet THA of 35,300 Chinook, 78,000 coho salmon, and 2,144,000 chum salmon for 2019. Deep Inlet chum salmon are harvested in the Deep Inlet THA (Subdistrict 113-38) 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 did not anticipate cost recovery in this area for 2019.

In 2018, the BOF adopted regulations requiring a time ratio for drift gillnet openings to purse seine openings of 1:2 for the 2018 season and 1:1 for the 2019–2020 seasons. 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 2018 season. This action was taken 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 drift gillnet fishermen were also required to retain all Chinook salmon harvested in the Deep Inlet THA.

The common property rotational fishery began June 2 (Tables 9 and 16). The June fishing period primarily provides an opportunity to harvest Chinook salmon returning to Medvejie Hatchery and Deep Inlet. In 2019, drift gillnet fishermen were required to fish with a minimum mesh size of six inches prior to June 15 to reduce harvest of local wild sockeye salmon returning to Silver Bay. For the season, common property drift gillnet and purse harvests in Deep Inlet THA was for drift gillnet harvests of 4,000 Chinook, 6,500 pink, and 421,600 chum salmon; and purse seine harvests of 2,400 Chinook, 82,000 pink, and 756,000 chum salmon (Tables 26 and 27). The total chum salmon run to Deep Inlet and Medvejie Hatchery returns, including broodstock and cost recovery, was approximately 1.3 million chum salmon, 62% of forecast.

Crawfish Inlet

NSRAA forecasted 3,448,000 chum salmon to return to Crawfish Inlet THA. Crawfish Inlet was intended to be primarily a troll fishery area. NSRAA, in consultation with ADF&G, determined the troll fishery and planned cost-recovery operations were insufficient to harvest large number of chum salmon building up in the Crawfish Inlet THA and West Crawfish Inlet. West Crawfish Inlet is a traditional purse seine fishery area and common property purse seine openings in Crawfish Inlet SHA began on August 4 and continued through September 26. In addition to these openings, West Crawfish Inlet was opened to harvest buildups of hatchery chum salmon that appeared in the area. These openings began on August 25 and ended on September 26, with nine 15-hour fishing periods. The total run of chum salmon to Crawfish Inlet was estimated to be 1,868,000 fish, 54% of forecast.

Boat Harbor

The Boat Harbor THA is a release site for DIPAC hatchery summer chum salmon. Chum salmon begin returning in June and are harvested beginning with the first opening of the District 15 fishery in mid-June. Specific actions adopted by the BOF in 2018 to limit harvest of Chinook salmon included time and gear restrictions during the first two weeks of the season. Despite conservative

management measures implemented in 2018, escapement of Chilkat River Chinook salmon again fell below the lower bound of the BEG. More restrictive management actions were necessary in 2019 to further reduce harvest of Chilkat River Chinook salmon. BOF-directed actions included limiting the outer waters of the THA to weekly 2-day fishing periods with a 6-inch maximum mesh size restriction during the first four weeks of the fishery (SWs 25–28). Additional restrictions included a reduced fishing area and night closures in outside waters of the THA. Inside waters of the Boat Harbor THA opened with the rest of District 15 on June 16 and remained open 7 days a week, unrestricted, through SW 33. After restrictions were lifted, outer waters of the THA were open for four days in SW 28, five days in SW 29, and then remained open continuously through SW 33. By SW 36, the THA was no longer managed as a THA and weekly openings followed suite with the rest of Section 15-C until the season closed.

Harvests in the Boat Harbor THA were primarily composed of DIPAC's hatchery summer chum salmon. DIPAC forecasted a total chum salmon run of 2,874,000 fish in 2019. The actual run of chum salmon run was estimated to be 1,452,400 fish, nearly half of forecast. Total chum salmon harvest in District 15 was 1,200,000 fish and 92% of the total chum salmon harvest was comprised hatchery chum salmon. A total of 568,000 chum salmon were harvested in the Boat Harbor THA, 229% of the recent average. Other salmon harvests included 120 Chinook, 13,400 sockeye, 300 coho, and 33,000 pink salmon (Table 27).

HATCHERY COST RECOVERY HARVESTS

Hatchery cost recovery harvests were reported by five private nonprofit hatchery permit holders from 18 locations during 2019 (Table 28). Total landings were 2.9 million salmon, 77% of the recent average harvest of 3.7 million fish. Harvest included 32,000 Chinook, 97,000 sockeye, 181,000 coho, 313,000 pink, and 2.2 million chum salmon. Chum salmon made up 78% of the total cost recovery harvest in the region in numbers of fish, and chum salmon harvest was 79% of the recent average. Cost-recovery harvests of all but Chinook salmon were below recent averages (Table 29).

Cost-recovery harvests for the 2019 season are summarized by location, enhancement organization, and species in Table 28, including totals by organization. Locations of hatchery SHAs are shown in Figure 2.

SSRAA conducted cost recovery at Herring Cove, Neets Bay, Port Asumcion, Klawock River, Port Saint Nicholas, Neck Lake Burnett Inlet, and Anita Bay SHAs. Total harvest for all six locations included 230,000 chum, 58,000 coho, and 2,900 Chinook salmon.

DIPAC conducted cost recovery at Gastineau Channel, Amalga Harbor, and Speel Arm SHAs. Total harvest for these locations included 572,000 chum, 97,000 sockeye and 2,000 Chinook salmon.

NSRAA conducted cost recovery at Mist Cove, SE Cove, Hidden Falls, Deep Inlet, Silver Bay, and Crawfish Inlet SHAs. Total harvest for the four locations included 1.2 million chum, 18,800 coho, and 7,700 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 purse 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. In 2019, the NSRAA Board decided not to tax chum

salmon harvested in Section 12-A statistical areas 112-22 (HFH THA), 112-21 (Kelp Bay), and 112-11 (Outer Kelp Bay) to provide revenue for hatchery operations.

Armstrong Keta, Inc. (AKI)/NSRAA conducted cost recovery at Port Armstrong SHA. Total harvest included 195,000 pink, 168,000 chum, 88,000 coho, and 19,000 Chinook salmon.

Sitka Sound Science Center (SSSC) conducted cost recovery at the Crescent Bay SHA. Total harvest was 112,000 pink, 28,000 chum, and 17,000 coho 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 using small skiffs. Commercial, recreational, 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 from the Stikine River in Canada vary by species. Harvest shares for Chinook salmon are only pertinent to large (greater than 659 mm METF) fish. Chinook salmon harvest share provisions were developed to acknowledge traditional harvests in fisheries which occurred prior to 2005. These included incidental harvests in Canada and U.S. commercial drift gillnet fisheries, U.S. and Canada sport fisheries, Canada First Nations fishery, and Chinook salmon assessment/test fishery. Finally, for each country, Chinook salmon TAC is split equally after escapement and BLCs are accounted. For sockeye salmon, the harvest sharing objective for the 2019 season share of the TAC of Stikine River sockeye salmon was 53% U.S. and 47% Canada. 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 Nations 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 upriver near Telegraph Creek and 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 and usually occurs when there is no directed commercial fishing from SW 19 through SW 25. This fishery takes place near the border and has a limit of 1,400 large Chinook salmon. The Chinook salmon assessment fishery did not occur in 2019 due to expected low numbers of available Chinook salmon. The lower river sockeye salmon test fishery is used for sockeye salmon stock assessment purposes, which takes place near the border and is typically fished from SW 26 through SW 35 (no test

fishery in 2019). The Tuya test fishery was first implemented in 2008 with the intent to harvest excess Tuya River sockeye salmon and has occurred 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 did not produce an AC for Canada. Instead, the low forecast triggered conservative measures during directed sockeye salmon fisheries. Zero large and nonlarge Chinook salmon were harvested in the Canadian Lower River commercial fishery. The 2019 harvests from the combined Canada commercial, food, and sport fisheries in the Stikine River included 333 large and 237 nonlarge Chinook salmon. Zero large and nonlarge Chinook salmon were harvested in the Canada sockeye salmon test fisheries. Canada's base level fishery harvest of 333 large Chinook salmon was above their BLC of 114 fish (Table 30).

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 with the SMM driving decisions 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 and coho salmon fishing from SW 26 through SW 29 with a closure in the middle of the season because of the poor sockeye salmon forecast. It was also opened in SW 35 and SW 36. Weekly openings were one to six days in duration. The total sockeye salmon harvest in the LRCF was 10,800 sockeye salmon, including 830 fish harvested in the directed coho salmon fishery. The URCF was open for three weeks, SWs 28–30, for a total harvest of 40 sockeye salmon. The food fishery harvested 5,400 sockeye salmon. Canada's total harvest of Stikine River sockeye salmon in 2019 was 16,400 fish. Of these, 16,200 fish counted towards Canada's AC of 16,300 Stikine River sockeye salmon.

Canada harvested a total of 5,200 coho salmon in directed coho salmon fishing.

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; for 2019 the TAC was shared at 80% US and 20% Canada. 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 can be provided when run size is adequate. 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. The management intent for both countries in 2019 was to manage their fisheries to achieve the spawning objective and respective ACs based on harvest sharing dictated by Paragraph 3(b)(iii) of Annex IV, Chapter 1 of the PST.

The Taku River Canada commercial harvest was 21,395 sockeye and 12,145 coho salmon in 2019 (Table 31). These harvests do not include recreational or aboriginal fisheries. Nonretention of Chinook salmon was in place for both large (greater than 659 mm METF and mostly ocean-age-3 or older) and nonlarge fish. Sockeye salmon originating from Taku River fry plants contributed an estimated 300 fish to the harvest, comprising 1% of the total sockeye salmon harvest. 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 2019, the sockeye harvest was just below the recent average while the coho salmon harvest was well above average. The 60 days of commercial fishing for the season was above the recent average. The seasonal fishing effort of 226 permit-days was well below average even when only considering openings directed at sockeye and coho salmon. The directed sockeye salmon fishery was delayed two weeks and two days to minimize harvest of Chinook salmon and opened Tuesday, July 2 (SW 27). Chinook salmon nonretention was in place for all size classes. As in recent years, both set and drift gillnets were used except for SW 27 when only one drift gillnet was allowed. The maximum allowable mesh size was 8.0 inches except for the period from July 2 (SW 27) through July 20 (SW 29) 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 Kuthai, King Salmon, Little Trapper, and Tatsamenie lakes provide information on the distribution and abundance of discrete spawning stocks within the Taku River 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. A Taku Sockeye Working Group was established in 2018 to review the stock assessment project with an aim to minimize potential bias inherent in estimating run size based on mark–recapture methodology, and to establish an MSY goal for Taku River sockeye salmon prior to the 2020 fishing season. Recent (1984, 2015, 2017, and 2018) radio telemetry work has shown a 22% average observed dropout rate of fish tagged in the Canyon Island fishwheels. At the February 2019 TBR Panel, meeting an interim arrangement for Taku River sockeye salmon was adopted. This arrangement incorporated an adjustment of 22% to inseason above border run estimates produced from the mark–recapture project and the same adjustment to the existing spawning objectives resulting in a 55,000 to 62,000 fish range with a management target of 59,000 fish for the 2019 season. The 2019 Taku River above border run size estimate is 95,900 wild sockeye salmon and the spawning escapement is estimated at 74,900 wild fish. This escapement estimate is above the interim spawning objective range. The 2019 interim arrangement for harvest sharing of Taku River sockeye salmon allowed Canada, in addition to its share of the TAC, to harvest the projected surplus in excess of the spawning objective range apportioned by run timing.

The sockeye salmon count through the Kuthai Lake weir was 605 fish which is 75% of average but a huge step up from last season (13 fish). Partial barriers in the Silver Salmon River canyon below the lake that were enhanced in a 2007 flooding event, continue to be increasingly significant obstacles to upstream salmon migration. Studies are currently underway to assess and mitigate the eight identified potential migration obstacles. The sockeye salmon count through the King Salmon Lake weir was 4,292 fish, 159% of average. The Little Trapper Lake weir count was 6,382 sockeye salmon, which is 91% of average. The Tatsamenie Lake weir count of approximately 3,700 sockeye salmon is 34% of average and was expected due to poor parent-year escapements. There were 2.6 million eggs and 429,000 eggs collected for sockeye salmon broodstock at Tatsamenie and Little Trapper lakes, respectively, in 2019. 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 July 4 (SW 27) until October 4 (SW 40)

with fish wheels in operation throughout the entire period. Recovery occurred until October 11 (SW 41) in the Canada commercial fishery. The final inseason above border coho salmon run estimate was 95,000 fish; subtracting the inriver catch of 12,252 fish leaves a spawning escapement estimate of approximately 82,700 fish, 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 drift gillnet and purse seine fleets.

The total 2019 Annette Island salmon harvest by all gears was reported as 1,400 Chinook, 10,200 sockeye, 17,600 coho, 1.2 million pink, and 97,000 chum salmon. The Annette Island Reserve reported drift gillnet fishery harvests of 500 Chinook, 2,300 sockeye, 14,200 coho, 307,000 pink, and 58,000 chum salmon (Table 32). Drift gillnet harvests were below recent averages for all salmon species except pink salmon. The Chinook salmon harvest was 45%, sockeye salmon harvest was 27%, coho salmon harvest was 37%, pink salmon harvest was 111%, and chum salmon harvest was 26% of recent averages. The Annette Island Reserve reported purse seine fishery harvests were 200 Chinook, 7,900 sockeye, 3,400 coho, 933,000 pink, and 39,000 chum salmon (Table 33). Purse seine harvests were also below the recent average for all salmon species. The purse seine harvest of pink salmon was 50% of the recent average of 975,000 fish. Annette Island all-gear pink salmon harvests of 1.2 million fish were 33% of total all-gear pink salmon harvests in District 1. Annette Island all-gear chum salmon harvests of 97,000 fish were 24% 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, 1988–2019.

Year	Chinook[a]	Jacks[a]	Sockeye	Coho	Pink	Chum	Total	Rank[b]
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	26
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	24
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	25
1998	14,469	1698	732,790	464,716	38,436,679	9,406,979	49,057,331	15
1999	17,888	2961	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	28
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	41
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	39
2009	28,922	966	307,436	283,431	34,946,847	3,502,998	39,070,600	19
2010	15,932	774	151,430	193,221	20,630,072	3,233,835	24,225,264	31
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	29
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	27,363	195	610,532	257,065	15,388,943	3,108,581	19,392,679	38
2017	10,448	896	287,857	270,043	32,061,417	4,044,328	36,674,989	22
2018	16,139	613	230,931	154,176	6,850,978	4,985,011	12,237,848	48
2019	21,174	1,224	445,273	246,357	18,611,309	4,380,820	23,706,157	33
Averages								
1960–2018[c]	15,462	1,705	588,679	323,145	27,205,054	2,981,463	31,114,786	
2009–2018[d]	22,527	933	434,979	299,915	33,876,316	3,941,247	38,575,917	
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 tip of snout to tip of tail; jacks are less than 28″.

[b] Rank is based on total harvest for years 1960 to 2019.

[c] Equals the long-term average harvest. Harvests from 1960 to 1986 are included in average but not shown in table.

[d] Equals the recent average harvest.

[e] Minimum and maximums are based on species harvest from 1960 to 2019.

Table 2.–Southeast Alaska commercial purse seine salmon harvest by district, fishery, and species, 2019.

Fishery	Chinook[a]	Jacks[a]	Sockeye	Coho	Pink	Chum	Total
District 1							
Traditional	725	174	38,093	24,809	3,507,893	224,564	3,796,258
Terminal Harvest Area	7,044	12	14	15	142	1,038	8,265
Annette Island	188	0	7,887	3,433	932,514	39,437	983,459
District 2							
Traditional	584	167	33,856	41,250	4,166,382	398,866	4,641,105
Terminal Harvest Area	59	11	862	753	16,248	82,627	100,560
District 3							
Traditional	218	96	24,193	31,981	2,819,188	113,970	2,989,646
District 4							
Traditional	7,174	591	270,993	77,593	3,528,011	175,212	4,059,574
District 5							
Traditional	1	0	348	400	124,073	21,836	146,658
District 6							
Traditional	26	7	6,531	12,492	724,672	24,733	768,461
District 7							
Traditional	450	54	9,754	3,259	1,209,405	206,300	1,429,222
Terminal Harvest Area	1,748	29	320	187	27,040	80,990	110,314
District 9							
Traditional	165	2	7,414	24,789	1,169,458	110,799	1,312,627
Terminal Harvest Area	2	2	87	20	120	39,556	39,787
District 10							
Traditional	0	0	0	0	0	0	0
Terminal Harvest Area	**	**	**	**	**	**	**
District 11							
Terminal Harvest Area	0	0	0	0	0	0	0
District 12							
Traditional	20	1	5,674	884	104,835	47,223	158,637
Terminal Harvest Area	322	67	561	308	43,824	14,349	59,431
District 13							
Traditional	171	3	36,650	12,324	1,083,004	1,097,926	2,230,078
Terminal Harvest Area	2,465	8	9,923	15,293	86,982	1,740,441	1,855,112
District 14							
Traditional	0	0	0	0	0	0	0
Southern Subtotals							
Traditional	9,178	1,089	383,768	191,784	16,079,624	1,165,481	17,830,924
Terminal Area Harvest	8,851	52	1,196	955	43,430	164,655	219,139
Annette Island	188	0	7,887	3,433	932,514	39,437	983,459
Subtotal	18,217	1,141	392,851	196,172	17,055,568	1,369,573	19,033,522
Northern Subtotals							
Traditional	356	6	49,738	37,997	2,357,297	1,255,948	3,701,342
Terminal Area Harvest	2,789	77	10,571	15,621	130,958	1,794,736	1,954,752
Subtotal	3,145	83	60,309	53,618	2,488,255	3,050,684	5,656,094
Total Southeast							
Traditional	9,534	1,095	433,506	229,781	18,436,921	2,421,429	21,532,266
Terminal Area Harvest	11,640	129	11,767	16,576	174,388	1,959,391	2,173,891
Subtotal (Traditional and THA)	21,174	1,224	445,273	246,357	18,611,309	4,380,820	23,706,157
Annette Island	188	0	7,887	3,433	932,514	39,437	983,459
Miscellaneous	0	0	2,764	135	25,591	47,481	75,971
Total	21,362	1,224	455,924	249,925	19,569,414	4,467,738	24,765,587

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

** Confidential data

Table 3.–Southeast Alaska fishery exvessel value by area gear type and species, estimated by prices reported on fish tickets, 2019.

Fishery	Chinook	Sockeye	Coho	Pink	Chum	Total
Purse Seine						
Southern Purse Seine	$433,580	$4,108,230	$1,042,596	$17,605,509	$5,625,709	$28,815,624
Northern Purse Seine	$16,818	$532,444	$206,563	$2,580,994	$6,062,388	$9,399,207
Terminal Purse Seine	$707,936	$221,834	$168,393	$319,884	$15,945,808	$17,363,855
Total Purse Seine Value	$1,158,334	$4,862,508	$1,417,552	$20,506,387	$27,633,905	$55,578,686
Drift Gillnet						
Tree Point	$47,902	$188,319	$296,213	$250,027	$804,603	$1,587,064
Prince of Wales	$39,146	$280,888	$608,965	$517,806	$498,980	$1,945,785
Stikine	$155,161	$77,643	$97,483	$13,276	$223,371	$566,934
Taku-Snettisham	$43,816	$1,124,081	$238,976	$84,334	$1,084,649	$2,575,857
Lynn Canal	$35,571	$2,687,200	$487,693	$135,070	$2,685,269	$6,030,803
Terminal Gillnet	$632,351	$257,371	$309,121	$63,531	$4,851,029	$6,113,403
Total Drift Gillnet Value	$953,945	$4,615,502	$2,038,452	$1,064,045	$10,147,902	$18,819,845
Set Gillnet (Yakutat)						
Set Gillnet Value	$10,165	$451,546	$1,124,148	$34,336	$942	$1,621,137
Troll						
Total Troll Value	$11,661,578	$73,331	$13,363,131	$101,659	$1,232,998	$26,432,698
Annette Island Reservation	$42,889	$176,882	$95,300	$1,481,302	$499,948	$2,296,320
Hatchery Cost Recovery	$1,224,071	$999,649	$1,379,376	$521,660	$8,493,646	$12,618,401
Miscellaneous	$24,104	$38,289	$11,567	$56,927	$231,099	$361,987
Total Salmon Value	$15,075,086	$11,217,707	$19,429,525	$23,766,316	$48,240,440	$117,729,074

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), 1975–2019.

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	$122,181,438	$31,126,506
2012	$73,082,279	$37,475,066
2013	$154,063,851	$29,456,023
2014	$58,359,164	$28,377,429
2015	$55,228,561	$20,621,188
2016	$41,671,425	$22,718,531
2017	$75,696,745	$30,748,441
2018	$51,377,047	$27,969,355
2019	$55,578,686	$18,819,845

Note: Data from CFEC basic information tables, 1975–2018 (CFEC 2020).
Fish ticket data for 2019.

Table 5.–Northern Southeast annual commercial, common property, purse seine salmon harvest (from traditional and terminal areas), in numbers of salmon, by species, 1989–2019.

Year	Chinook[a]	Jacks[a]	Sockeye	Coho	Pink	Chum	Total	Rank[b]
1989	547	2,191	98,365	56,522	11,969,441	336,503	12,463,569	23
1990	490	1,217	38,502	43,382	4,082,182	603,299	4,769,072	41
1991	1,859	2,845	72,281	105,849	16,970,650	1,063,401	18,216,885	14
1992	807	1,979	108,331	162,953	12,568,844	1,948,819	14,791,733	19
1993	1,513	3,445	162,153	114,213	16,914,761	3,004,370	20,200,455	13
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	28
1996	21,300	695	111,604	137,603	9,564,130	6,246,728	16,082,060	15
1997	6,275	407	51,465	68,142	11,776,742	3,534,803	15,437,834	17
1998	6,442	1,556	107,675	161,419	16,702,595	4,800,326	21,780,013	11
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	20
2001	12,099	1,275	170,705	116,404	13,328,220	2,203,419	15,832,122	16
2002	11,281	954	54,488	219,569	20,793,646	2,057,813	23,137,751	10
2003	6,894	371	146,108	96,735	22,380,951	2,864,976	25,496,035	8
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	24
2007	7,323	730	90,682	56,240	11,943,703	1,242,925	13,341,603	21
2008	7,807	297	5,631	17,846	1,974,550	2,332,622	4,338,753	43
2009	6,460	479	65,475	36,611	10,603,951	2,427,762	13,140,738	22
2010	6,498	506	29,819	46,894	9,263,455	1,925,264	11,272,436	26
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	47
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	38
2015	4,748	279	180,578	90,746	20,959,462	2,209,458	23,445,271	9
2016	1,641	29	13,465	11,156	1,565,536	1,027,749	2,619,576	49
2017	2,130	477	134,517	189,529	24,129,123	2,820,484	27,276,260	7
2018	5,464	242	34,030	49,480	2,262,514	3,666,097	6,017,827	34
2019	3,145	83	60,309	53,618	2,488,255	3,050,684	5,656,094	37
Averages								
1960–2018[c]	5,039	628	118,678	100,653	10,110,694	1,821,487	12,157,180	
2009–2018[d]	5,152	467	82,254	90,997	15,902,619	2,308,336	18,389,826	
Max harvest[e]	24,217	5,864	353,618	467,296	45,588,738	6,246,728	47,211,573	
Max year	1995	1994	1965	1994	2011	1996	2011	
Min harvest[e]	12	29	5,286	1,744	80,819	30,357	156,706	
Min 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 2019.

[c] Equals the long-term average harvest. Harvests from 1960 to 1986 are included in average but not shown in table.

[d] Equals the recent average harvest.

[e] Minimum and maximums are based on species harvest from 1960 to 2019.

Table 6.–Southern Southeast Alaska annual commercial, common property, purse seine salmon harvest (from traditional and terminal areas), in numbers of salmon, by species, 1989–2019.

Year	Chinook[a]	Jacks[a]	Sockeye	Coho	Pink	Chum	Total	Rank[b]
1989	12,551	1814	724,820	274,467	40,100,625	743,052	41,857,329	6
1990	10,833	2237	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	4034	125	1,526,556	115,551	13,005,743	2,328,800	16,980,809	27
1998	8027	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	33
2001	7,631	1309	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	52
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	32
2009	22,462	487	241,961	246,820	24,342,896	1,075,236	25,929,862	17
2010	9,434	268	121,611	146,327	11,366,617	1,308,571	12,952,828	34
2011	17,796	250	287,222	117,932	9,662,542	1,529,799	11,615,541	39
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	31
2016	25,722	166	597,067	245,909	13,823,407	2,080,832	16,773,103	28
2017	8,318	419	153,340	80,514	7,932,294	1,223,844	9,398,729	43
2018	10,675	371	196,901	104,696	4,588,464	1,318,914	6,220,021	47
2019	18,029	1141	384,964	192,739	16,123,054	1,330,136	18,050,063	25
Averages								
1960–2018[c]	10,423	354	469,999	222,489	17,094,303	1,159,946	18,957,515	
2009–2018[d]	17,375	466	352,725	208,918	17,973,696	1,632,910	20,186,091	
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 2019.

[c] Equals the long-term average harvest. Harvests from 1960 to 1986 are included in average but not shown in table.

[d] Equals the recent average harvest.

[e] Minimum and maximums are based on species harvest from 1960 to 2019.

Table 7.–Commercial purse seine fishing time, in hours open per day and statistical week by district and section, for Northern Southeast Alaska in 2019 (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
25	16-Jun	Sun				15							
	17-Jun	Mon											
	18-Jun	Tue											
	19-Jun	Wed											
	20-Jun	Thu											
	21-Jun	Fri											
	22-Jun	Sat											
26	23-Jun	Sun				15							
	24-Jun	Mon											
	25-Jun	Tue											
	26-Jun	Wed											
	27-Jun	Thu											
	28-Jun	Fri											
	29-Jun	Sat											
27	30-Jun	Sun				15							
	1-Jul	Mon											
	2-Jul	Tue											
	3-Jul	Wed											
	4-Jul	Thu											
	5-Jul	Fri											
	6-Jul	Sat											
28	7-Jul	Sun				15			15				
	8-Jul	Mon							15				
	9-Jul	Tue											
	10-Jul	Wed											
	11-Jul	Thu							15				
	12-Jul	Fri							15				
	13-Jul	Sat											
29	14-Jul	Sun				15		15	15				
	15-Jul	Mon							15				
	16-Jul	Tue											
	17-Jul	Wed											
	18-Jul	Thu				15		15	15				
	19-Jul	Fri							15				
	20-Jul	Sat											
30	21-Jul	Sun				15		15	15				
	22-Jul	Mon							15				
	23-Jul	Tue							15				
	24-Jul	Wed							15				
	25-Jul	Thu		10		15		15	15				
	26-Jul	Fri							15				
	27-Jul	Sat											
31	28-Jul	Sun		15				15	15				
	29-Jul	Mon							15				
	30-Jul	Tue							15				
	31-Jul	Wed		19				19	15				
	1-Aug	Thu		20				20	15				
	2-Aug	Fri							15				
	3-Aug	Sat											

-continued-

Table 7.–Page 2 of 2.

			Districts Subdivided into Sections										
Week	Date	Days	9 A	9 B	10 All	12 A	12 B	13 A	13 B	13 C	14 A	14 B	14 C
32	4-Aug	Sun		19				19	19				
	5-Aug	Mon		20				20	24				
	6-Aug	Tue							24				
	7-Aug	Wed							20				
	8-Aug	Thu		19				19	19				
	9-Aug	Fri		20				24	20				
	10-Aug	Sat						20					
33	11-Aug	Sun											
	12-Aug	Mon		19				19	19				
	13-Aug	Tue		20				24	24				
	14-Aug	Wed						20	20				
	15-Aug	Thu											
	16-Aug	Fri	19	19				19	19				
	17-Aug	Sat	20	20				24	24				
34	18-Aug	Sun						20	20				
	19-Aug	Mon											
	20-Aug	Tue		19				19	19				
	21-Aug	Wed		20				20	20				
	22-Aug	Thu											
	23-Aug	Fri											
	24-Aug	Sat		19				19	19				
35	25-Aug	Sun		20				20	20				
	26-Aug	Mon											
	27-Aug	Tue											
	28-Aug	Wed						19	19				
	29-Aug	Thu						20	20				
	30-Aug	Fri											
	31-Aug	Sat											
36	1-Sep	Sun		12									
	2-Sep	Mon											
	3-Sep	Tue											
	4-Sep	Wed											
	5-Sep	Thu		12									
	6-Sep	Fri											
	7-Sep	Sat											
37	8-Sep	Sun		12									
	9-Sep	Mon											
	10-Sep	Tue											
	11-Sep	Wed											
	12-Sep	Thu		12									
	13-Sep	Fri											
	14-Sep	Sat											
38	15-Sep	Sun		12									
	16-Sep	Mon											
	17-Sep	Tue											
	18-Sep	Wed											
	19-Sep	Thu											
	20-Sep	Fri											
	21-Sep	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 2019 (gray shaded cells indicate no fishery occurred for this area and date).

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

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Table 8.–Page 2 of 3.

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

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Table 8.–Page 3 of 3.

			Districts Subdivided into Sections													
Week	Date	Days	1 C	1 D	1 E	1 F	2	3 A	3 B	3 C	4	5	6 C	6 D	7 A	7 B
35	25-Aug	Sun				20	20	20	20	20	20	20	20	20		
	26-Aug	Mon														
	27-Aug	Tue														
	28-Aug	Wed				19	19	19	19	19			19	19		
	29-Aug	Thu				20	20	20	20	20			20	20		
	30-Aug	Fri														
	31-Aug	Sat														
36	1-Sep	Sun					12									
	2-Sep	Mon														
	3-Sep	Tue														
	4-Sep	Wed														
	5-Sep	Thu														
	6-Sep	Fri														
	7-Sep	Sat														
37	8-Sep	Sun					12									
	9-Sep	Mon														
	10-Sep	Tue														
	11-Sep	Wed														
	12-Sep	Thu														
	13-Sep	Fri														
	14-Sep	Sat														

Table 9.–Commercial purse seine fishing time, in hours open per day and statistical week for Neets Bay, Carroll Inlet, Kendrick Bay, Anita Bay, SE Cove, Thomas Bay, Hidden Falls, Deep Inlet, and Crawfish Inlets Terminal Harvest Areas (THA), and Amalga Harbor Special Harvest Area (SHA) in Southeast Alaska in 2019 (gray shaded cells indicate that no fishery occurred for this area and date).

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

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Table 9.–Page 2 of 4.

Week	Date	Day	Neets Bay	Carroll Inlet	Kendrick Bay	Anita Bay	SE Cove	Thomas Bay	Amalga Harbor	Hidden Falls	Crawfish Inlet	Deep Inlet
27	30-Jun	Sun		12	24	12	15	15				15
	1-Jul	Mon	12		24							
	2-Jul	Tue	12		24							
	3-Jul	Wed			24	12						
	4-Jul	Thu			24	12	15	15				15
	5-Jul	Fri	12		24							15
	6-Jul	Sat	12		24							
28	7-Jul	Sun			24	12		15				15
	8-Jul	Mon			24	12				15		
	9-Jul	Tue			24							
	10-Jul	Wed			24							
	11-Jul	Thu			24	12		15				15
	12-Jul	Fri			24	12						15
	13-Jul	Sat			24							
29	14-Jul	Sun			24			15				15
	15-Jul	Mon			24	12						
	16-Jul	Tue			24	12						
	17-Jul	Wed			24							
	18-Jul	Thu			24			15				15
	19-Jul	Fri			24	12						15
	20-Jul	Sat			24	12						
30	21-Jul	Sun			24			15				15
	22-Jul	Mon			24							
	23-Jul	Tue			24	12						
	24-Jul	Wed			24	12						
	25-Jul	Thu			24			15				15
	26-Jul	Fri			24							15
	27-Jul	Sat			24	12						
31	28-Jul	Sun			24	12		15				15
	29-Jul	Mon			24			19				
	30-Jul	Tue			24			24				
	31-Jul	Wed			24	12		24				
	1-Aug	Thu			24	12		24				15
	2-Aug	Fri			24			24				15
	3-Aug	Sat			24			24				
32	4-Aug	Sun			24	12					15	15
	5-Aug	Mon			24	12						
	6-Aug	Tue			24							
	7-Aug	Wed			24							
	8-Aug	Thu			24	12						15
	9-Aug	Fri			24	12						15
	10-Aug	Sat			24							
33	11-Aug	Sun			24							15
	12-Aug	Mon			24	12					15	
	13-Aug	Tue			24	12						
	14-Aug	Wed			24							
	15-Aug	Thu			24							15
	16-Aug	Fri			24	12						15
	17-Aug	Sat			24	12					15	

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Table 9.–Page 3 of 4.

Week	Date	Day	Neets Bay	Carroll Inlet	Kendrick Bay	Anita Bay	SE Cove	Thomas Bay	Amalga Harbor	Hidden Falls	Crawfish Inlet	Deep Inlet
34	18-Aug	Sun			24							15
	19-Aug	Mon			24							
	20-Aug	Tue			24	12						
	21-Aug	Wed			24	12						
	22-Aug	Thu			24							15
	23-Aug	Fri			24							15
	24-Aug	Sat			24	12						
35	25-Aug	Sun			24	12					15	15
	26-Aug	Mon			24							
	27-Aug	Tue			24							
	28-Aug	Wed			24	12						
	29-Aug	Thu			24	12					15	15
	30-Aug	Fri			24							15
	31-Aug	Sat			24							
36	1-Sep	Sun			24	24					12	15
	2-Sep	Mon			24	24						
	3-Sep	Tue			24	24						
	4-Sep	Wed			24	24						
	5-Sep	Thu			24	24					15	15
	6-Sep	Fri			24	24						15
	7-Sep	Sat			24	24						
37	8-Sep	Sun			24	24					15	15
	9-Sep	Mon			24	24						
	10-Sep	Tue			24	24						
	11-Sep	Wed			24	24						
	12-Sep	Thu			24	24					15	15
	13-Sep	Fri			24	24						15
	14-Sep	Sat			24	24						
38	15-Sep	Sun			24	24					15	15
	16-Sep	Mon			24	24						
	17-Sep	Tue			24	24						
	18-Sep	Wed			24	24						
	19-Sep	Thu			24	24					15	15
	20-Sep	Fri			24	24						15
	21-Sep	Sat			24	24						
39	22-Sep	Sun			24	24					15	15
	23-Sep	Mon			24	24						
	24-Sep	Tue			24	24						
	25-Sep	Wed			24	24						15
	26-Sep	Thu			24	24					15	15
	27-Sep	Fri			24	24						
	28-Sep	Sat			24	24						
40	29-Sep	Sun			24	24						
	30-Sep	Mon			24	24						
	1-Oct	Tue				24						
	2-Oct	Wed				24						
	3-Oct	Thu				24						
	4-Oct	Fri				24						
	5-Oct	Sat				24						

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Table 9.–Page 4 of 4.

Week	Date	Day	Neets Bay	Carroll Inlet	Kendrick Bay	Anita Bay	SE Cove	Thomas Bay	Amalga Harbor	Hidden Falls	Crawfish Inlet	Deep Inlet
41	6-Oct	Sun				24						
	7-Oct	Mon				24						
	8-Oct	Tue				24						
	9-Oct	Wed				24						
	10-Oct	Thu				24						
	11-Oct	Fri				24						
	12-Oct	Sat				24						
42	13-Oct	Sun				24						
	14-Oct	Mon				24						
	15-Oct	Tue				24						
	16-Oct	Wed				24						
	17-Oct	Thu				24						
	18-Oct	Fri				24						
	19-Oct	Sat				24						
43	20-Oct	Sun				24						
	21-Oct	Mon				24						
	22-Oct	Tue				24						
	23-Oct	Wed				24						
	24-Oct	Thu				24						
	25-Oct	Fri				24						
	26-Oct	Sat				24						
44	27-Oct	Sun				24						
	28-Oct	Mon				24						
	29-Oct	Tue				24						
	30-Oct	Wed				24						
	31-Oct	Thu				24						
	1-Nov	Fri				24						
	2-Nov	Sat				24						
45	3-Nov	Sun				24						
	4-Nov	Mon				24						
	5-Nov	Tue				24						
	6-Nov	Wed				24						
	7-Nov	Thu				24						
	8-Nov	Fri				24						
	9-Nov	Sat				24						
46	10-Nov	Sun				12						

Table 10.–Southeast Alaska pink salmon escapement indices and biological escapement goals by subregion (in millions of index fish), 2019.

Subregion	2019 Pink Salmon Index	Biological Escapement Goal	
		Lower Bound	Upper Bound
Southern Southeast	5.63	3.00	8.00
Northern Southeast Inside	1.65	2.50	6.00
Northern Southeast Outside	1.53	0.75	2.50
Total	8.81		

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, 2010–2019.

Sub-region	District	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	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			-	+			-		-		0.65	1.56
NSEI	110			-		-		-		-	-	0.59	1.41
NSEI	111			-		-		-		-	-	0.25	0.60
NSEI	112	-		-		-		-		-	-	0.52	1.24
NSEI	113	-	+	-		-	+		+	-	-	0.32	0.78
NSEI	114	-	+		+	-	+	-	+	-	-	0.14	0.34
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, 2010–2019.

Sub-region	District	Stock Group	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	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			-	+	-	+	-				0.14	0.33
NSEI	109	SE Baranof	-	+	-	+				+	-		0.07	0.16
NSEI	109	Tebenkof							-				0.22	0.53
NSEI	110	Farragut Bay		+		+		+		+	-	-	0.02	0.04
NSEI	110	Houghton			-		-		-	-	-	-	0.37	0.87
NSEI	110	Portage Bay					-			+		-	0.03	0.08
NSEI	110	Pybus/Gambier					-	+	-		-	-	0.17	0.41
NSEI	111	Seymour Canal			-		-		-	-	-	-	0.15	0.37
NSEI	111	Stephens		+	-	-	-		-		-	-	0.10	0.23

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Table 12.–Page 2 of 2.

Sub-region	District	Stock Group	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Lower Management Target	Upper Management Target
NSEI	112	Freshwater Bay		+	-	-	-	-	-	-	-	-	0.07	0.16
NSEI	112	Kelp Bay		+	-	+	-				-		0.07	0.16
NSEI	112	Lower Lynn Canal		+			-	+	-		-	-	0.03	0.06
NSEI	112	SW Admiralty	-		-		-	+	-	+	-	-	0.1	0.24
NSEI	112	Tenakee	-		-		-		-		-	-	0.21	0.49
NSEI	112	W Admiralty				+	-	-	-	-	-	-	0.05	0.12
NSEI	113	Hoonah Sound	-		-		-	+		+	-	-	0.32	0.78
NSEI	114	Homeshore		+		+	-	+	-	-	-	-	0.03	0.07
NSEI	114	N Chichagof	-	+		+	-	+	-	+	-	-	0.11	0.27
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, 1980–2019 (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
2017	84	277	25	52	4	16	14	130
2018	127	109	19	70	1	6	6	*ND*
2019	105	123	25	20	5	14	4	224
Goal Range:								
Lower Bound	62	107	25	30	2	5	4	75
Upper Bound	-	-	-	48	7	15	18	250

ND = No data

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

Table 14.–Escapement estimates for Southeast Alaska sockeye salmon stocks compared to escapement goals, 2019.

Stock	Goal Type[a]	Estimated Escapement or Index	Escapement Goal Range	Comment	Enumeration Method
Hugh Smith Lake	OEG	2,200	8,000–18,000	Below Goal	Weir Count
McDonald Lake	SEG	24,200	55,000–120,000	Below Goal	Expanded Foot Survey
Stikine—mainstem[b]	SEG	23,200	20,000–40,000	Within Goal	Run Reconstruction
Stikine—Tahltan[b]	BEG	36,600	18,000–30,000	Above Goal	Weir Count
Speel Lake	BEG	6,400	4,000–9,000	Within Goal	Weir Count
Taku—inriver[b]	SEG	76,600	55,000–62,000[c]	Above Goal	Mark–recapture
Redoubt Lake	OEG	59,100	7,000–25,000	Above Goal	Weir Count
Chilkoot Lake	SEG	140,400	38,000–86,000	Above Goal	Weir Count
Chilkat Lake	BEG	135,000	70,000–150,000	Within Goal	Weir/Sonar Count
Situk River	BEG	72,600	30,000–70,000	Above Goal	Weir Count
Klukshu River[b]	BEG	19,100	7,500–15,000	Above Goal	Weir Count
East Alsek River	BEG	27,300	13,000–26,000	Above Goal	Peak Aerial Survey

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

[b] Spawning area is located in Canada.

[c] Interim escapement goal adopted by the TBR Panel in February 2019.

Table 15.–Commercial drift gillnet fishing time, in hours open per day and statistical week by district and section, for Southeast Alaska in 2019 (gray shaded cells indicate no fishery occurred for this area and date).

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

-continued-

Table 15.–Page 2 of 3.

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

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Table 15.–Page 3 of 3.

			Districts (Subdivided into Sections)										
			1	1	6	6	8	8	11	11	15	15	15
Week	Date	Day	A	B	A/B/C	D	A	B	B	C	A	B	C
39	22-Sep	Sun		12	12	12	12	12	12		12		12
	23-Sep	Mon		24	24	24	24	24	24		24		24
	24-Sep	Tues		24	24	24	24	24	24		24		24
	25-Sep	Wed		24	12	12	12	12	24		12		12
	26-Sep	Thu		12					24				
	27-Sep	Fri							12				
	28-Sep	Sat											
40	29-Sep	Sun		12	12	12	12	12	12		12		12
	30-Sep	Mon		24	24	24	24	24	24		24		24
	1-Oct	Tues		24	24	24	24	24	24		24		24
	2-Oct	Wed		24	12	12	12	12	24		24		24
	3-Oct	Thu		12					24		12		12
	4-Oct	Fri							12				
	5-Oct	Sat											
41	6-Oct	Sun			12	12	12	12	12		12		12
	7-Oct	Mon			24	24	24	24	24		24		24
	8-Oct	Tue			12	12	12	12	24		24		24
	9-Oct	Wed							24		12		12
	10-Oct	Thu							24				
	11-Oct	Fri							12				
	12-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 2019.

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

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Table 16.–Page 2 of 4.

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

-continued-

Table 16.–Page 3 of 4.

Week	Date	Day	Nakat Inlet	Neets Bay	Carroll Inlet	Anita Bay	Speel Arm	Deep Inlet	Boat Harbor
36	1-Sep	Sun	24			24	12		24
	2-Sep	Mon	24			24	24	15	24
	3-Sep	Tue	24			24	24	15	12
	4-Sep	Wed	24			24	24	15	
	5-Sep	Thu	24			24	24		
	6-Sep	Fri	24			24	24		
	7-Sep	Sat	24			24	24		
37	8-Sep	Sun	24			24	12		
	9-Sep	Mon	24			24	24	15	
	10-Sep	Tue	24			24	24	15	
	11-Sep	Wed	24			24	24	15	
	12-Sep	Thu	24			24	24		
	13-Sep	Fri	24			24	12		
	14-Sep	Sat	24			24			
38	15-Sep	Sun	24			24			
	16-Sep	Mon	24			24		15	
	17-Sep	Tue	24			24		15	
	18-Sep	Wed	24			24		15	
	19-Sep	Thu	24			24			
	20-Sep	Fri	24			24			
	21-Sep	Sat	24			24			
39	22-Sep	Sun	24			24			
	23-Sep	Mon	24			24		15	
	24-Sep	Tue	24			24		15	
	25-Sep	Wed	24			24		15	
	26-Sep	Thu	24			24			
	27-Sep	Fri	24			24			
	28-Sep	Sat	24			24			
40	29-Sep	Sun	24			24			
	30-Sep	Mon	24			24			
	1-Oct	Tue	24			24			
	2-Oct	Wed	24			24			
	3-Oct	Thu	24			24			
	4-Oct	Fri	24			24			
	5-Oct	Sat	24			24			
41	6-Oct	Sun	24			24			
	7-Oct	Mon	24			24			
	8-Oct	Tue	24			24			
	9-Oct	Wed	24			24			
	10-Oct	Thu	24			24			
	11-Oct	Fri	24			24			
	12-Oct	Sat	24			24			
42	13-Oct	Sun	24			24			
	14-Oct	Mon	24			24			
	15-Oct	Tue	24			24			
	16-Oct	Wed	24			24			
	17-Oct	Thu	24			24			
	18-Oct	Fri	24			24			
	19-Oct	Sat	24			24			

-continued-

Table 16.–Page 4 of 4.

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

Table 17.–Alaska total commercial, common property, drift gillnet salmon harvest (from traditional and terminal areas), in numbers of salmon, by species, 1989–2019.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Rank[a]
1989	9,579	893,976	234,423	2,769,875	542,846	4,450,699	11
1990	14,693	767,492	351,039	1,168,061	616,226	2,917,511	34
1991	18,456	711,874	545,376	820,409	707,277	2,803,393	35
1992	11,285	922,069	645,159	1,408,331	845,176	3,832,020	26
1993	18,011	1,021,899	417,681	1,087,670	1,401,186	3,946,447	20
1994	16,735	686,792	698,125	1,030,607	1,823,497	4,255,756	14
1995	13,342	640,971	415,158	1,337,764	2,478,672	4,885,907	6
1996	9,982	1,026,591	368,570	615,311	2,033,650	4,054,104	18
1997	11,006	645,516	131,240	1,384,200	1,689,474	3,861,436	24
1998	5,937	501,291	412,446	1,489,395	1,923,764	4,332,833	13
1999	8,983	545,681	351,598	1,274,672	2,166,260	4,347,194	12
2000	13,475	496,614	167,623	679,452	2,561,607	3,918,771	22
2001	13,644	687,476	294,441	1,568,859	1,576,881	4,141,301	16
2002	10,216	464,138	436,612	802,290	1,415,849	3,129,105	32
2003	10,704	598,679	434,234	1,354,839	1,528,198	3,926,654	21
2004	20,148	798,096	316,192	944,447	1,835,679	3,914,562	23
2005	55,754	462,209	272,873	1,530,243	1,511,570	3,832,649	25
2006	47,202	625,667	252,449	744,048	3,126,853	4,796,219	8
2007	30,067	501,765	175,286	984,250	2,485,605	4,176,973	15
2008	32,044	264,877	337,447	560,612	2,592,212	3,787,192	28
2009	25,221	408,336	320,910	566,734	2,729,966	4,051,167	19
2010	19,112	391,225	505,278	1,337,098	2,220,619	4,473,583	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	7
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	9
2017	17,051	239,367	158,620	1,019,501	3,611,890	5,046,429	5
2018	21,276	226,707	258,883	556,370	2,526,020	3,589,256	29
2019	20,846	395,307	196,356	872,380	2,327,426	3,812,315	27
Averages							
1960-2018[b]	16,123	496,393	257,959	975,315	1,324,436	3,070,232	
2009-2018[c]	25,228	424,830	325,790	1,166,843	2,924,285	4,867,001	
Max harvest[d]	55,754	1,026,591	698,125	2,769,875	3,611,890	6,018,624	
Max year	2005	1996	1994	1989	2017	2013	
Min harvest[d]	4,598	108,574	37,986	55,984	199,887	432,438	
Min year	1983	1975	1960	1960	1960	1960	

[a] Rank is based on total harvest for years 1960 to 2019.

[b] Equals the long-term average harvest. Harvests from 1960 to 1986 are included in average but not shown in table.

[c] Equals the recent average harvest.

[d] Minimum and maximums are based on species harvest from 1960 to 2019.

Table 18.–Southeast Alaska commercial drift gillnet salmon harvest, in numbers of salmon, by area, harvest type, and species, 2019.

Fishery	Chinook	Sockeye	Coho	Pink	Chum	Total
District 1						
Traditional (Tree Point)	1,313	15,986	28,800	204,971	182,457	433,527
Terminal Harvest Area	3,741	223	9,056	7,660	89,816	110,496
Annette Island	505	2,255	14,169	307,147	58,249	382,325
District 6						
Traditional (Prince of Wales)	1,073	23,844	59,208	424,495	113,152	621,772
District 7						
Terminal Harvest Area	4,048	128	7,972	2564	47,149	61,861
District 8						
Traditional (Stikine)	4,253	6,591	9,478	10,884	50,653	81,859
District 11						
Traditional (Taku/Snettisham)	1201	95,421	23,235	69,137	245,962	434,956
Terminal Harvest Area	157	9,605	238	2,587	638	13,225
District 13						
Terminal Harvest Area	3,964	1976	10,646	6,511	421,556	444,653
District 15						
Traditional (Lynn Canal)	975	228,111	47,417	110,730	608,929	996,162
Terminal Harvest Area	121	13,422	306	32,841	567,114	613,804
Subtotals						
Traditional	8,815	369,953	168,138	820,217	1,201,153	2,568,276
Terminal Harvest Areas	12,031	25,354	28,218	52,163	1,126,273	1,244,039
Common Property Total	20,846	395,307	196,356	872,380	2,327,426	3,812,315
Hatchery Cost Recovery	0	0	43	0	5	48
Annette Island	505	2,255	14,169	307,147	58,249	382,325
Total	21,351	397,562	210,568	1,179,527	2,385,680	4,194,688

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, 1989–2019.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Rank[a]
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	1608	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	2271	63,368	31,271	216,779	297,660	611,349	40
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	4,026	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
2017	3,648	25,997	43,359	240,143	338,617	651,764	39
2018	4,310	20,812	44,120	124,356	306,100	499,698	45
2019	5,054	16,209	37,856	212,631	272,273	544,023	43
Averages							
1960-2018[b]	1,967	103,746	38,908	409,767	250,570	804,957	
2009-2018[c]	4,028	52,220	70,044	400,342	463,956	990,590	
Max harvest[d]	5,054	394,137	116,437	1,349,929	820,271	1,840,372	
Max year	2019	1993	2014	1989	2015	1989	
Min harvest[d]	337	14,281	3,110	19,823	20,033	138,601	
Min year	1970	1960	1963	1960	1969	1960	

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

[a] Rank is based on total harvest for years 1960 to 2019.

[b] Equals the long-term average harvest. Harvests from 1960 to 1986 are included in average but not shown in table.

[c] Equals the recent average harvest.

[d] Minimum and maximums are based on species harvest from 1960 to 2019.

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, 1989–2019.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Rank[a]
1989	1,544	192,734	93,777	1,101,196	67,351	1,456,602	2
1990	2108	185,808	167,196	319,216	73,238	747,566	20
1991	2,844	144,105	198,786	133,567	124,631	603,932	34
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	1075	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	38
2001	1138	164,013	188,465	825,447	283,462	1,462,525	1
2002	446	56,135	226,560	82,951	112,541	478,633	41
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	33
2005	1572	110,192	114,440	461,187	198,564	885,955	11
2006	1948	91,980	69,015	149,907	268,436	581,286	36
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	48
2009	2,138	111,984	144,569	143,589	287,707	689,987	26
2010	2,516	115,378	227,508	329,700	99,200	774,302	18
2011	3,008	146,069	117,860	337,169	158,096	762,202	19
2012	1,853	45,466	121,418	129,646	104,307	402,690	44
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
2017	1,521	45,005	49,382	302,033	234,349	632,290	30
2018	3,247	25,203	112,000	348,277	176,392	665,119	29
2019	1,073	23,844	59,208	424,495	113,152	621,772	32
Averages							
1960–2018[b]	1,567	104,921	106,337	314,757	118,673	646,254	
2009–2018[c]	2,339	82,533	145,487	306,348	162,318	699,026	
Max harvest[d]	3,247	311,100	299,884	1,101,196	448,409	1,462,525	
Max year	2018	1996	1992	1989	1999	2001	
Min harvest[d]	46	10,354	336	1,246	502	12,484	
Min year	1960	1960	1960	1960	1960	1960	

[a] Rank is based on total harvest for years 1960 to 2019.

[b] Equals the long-term average harvest. Harvests from 1960 to 1986 are included in average but not shown in table.

[c] Equals the recent average harvest.

[d] Minimum and maximums are based on species harvest from 1960 to 2019.

Table 21.–Southeast Alaska annual Stikine (District 8) traditional and terminal harvest area drift gillnet salmon harvest, in numbers of salmon, by species, 1989–2019.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Rank[a]
1989	388	10,083	4,261	27,640	3,375	45,747	37
1990	682	11,580	8,218	13,822	9386	43,688	41
1991	1366	17,987	15629	6406	5,977	47,365	36
1992	1045	52,717	22,127	66,742	15,458	158,089	24
1993	1799	76,874	14,307	39,661	22,504	155,145	25
1994	1,996	97,224	44,891	35,405	27,658	207,174	14
1995	1,702	76,756	17,834	37,788	54,296	188,376	18
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	15
1998	460	22,031	19,206	39,246	41,057	122,000	28
1999	1,049	36,601	28,437	48,552	117,196	231,835	12
2000	1,671	15,833	5,651	9,497	40,337	72,989	31
2001	7	610	10,731	11,012	5,397	27,757	48
2002	25	208	21,131	4,578	2,017	27,959	47
2003	312	42,158	38,795	76,113	51,701	209,079	13
2004	7,410	103,392	26,617	20,439	37,996	195,854	16
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	19
2009	2,830	36,680	30,860	27,010	190,800	288,180	8
2010	2,358	32,929	42,954	59,832	50,551	188,624	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	21
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
2017	3,818	14,282	13,592	49,027	177,119	257,838	11
2018	2,649	5,731	8,823	15,643	133,812	166,658	22
2019	4,253	6,591	9,478	10,884	50,653	81,859	30
Averages							
1960–2018[b]	4,405	30,346	17,967	29,255	52,540	134,514	
2009–2018[c]	6,771	29,655	26,320	45,394	149,018	257,158	
Max harvest[d]	30,033	154,150	44,891	116,026	343,827	526,398	
Max year	2006	1996	1994	2013	2006	2006	
Min harvest[d]	7	0	0	0	1	1,530	
Min year	2001	1975	1975	1975	1975	1975	

[a] Rank is based on total harvest for years 1962 to 2019. No harvest data for 1960 and 1961.

[b] Equals the long-term average harvest. Harvests from 1962 to 1986 are included in average but not shown in table.

[c] Equals the recent average harvest.

[d] Minimum and maximums are based on species harvest from 1962 to 2019.

Table 22.–Southeast Alaska annual Taku/Snettisham (District 11) traditional and terminal harvest area drift gillnet salmon harvest, in numbers of salmon, by species, 1989–2019.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Rank[a]
1989	1,811	74,019	51,812	180,639	36,979	345,260	39
1990	3,480	126,884	67,530	153,126	145,799	496,819	28
1991	3,214	109,471	126,576	74,170	160,422	473,853	29
1992	2,341	135,411	172,662	314,445	112,527	737,386	14
1993	6,748	171,383	65,539	17,083	166,478	427,231	32
1994	5,047	105,893	188,501	401,525	214,171	915,137	8
1995	4,660	103,362	83,606	41,228	349,949	582,805	22
1996	2,659	199,014	33,633	12,660	354,463	602,429	19
1997	2,804	94,745	3,515	51,424	176,864	329,352	40
1998	794	69,677	28,713	168,283	296,111	563,578	24
1999	1,949	79,686	17,308	59,316	429,359	587,618	21
2000	1,154	185,956	7,828	58,696	669,994	923,628	7
2001	1698	293,043	22,646	123,026	237,122	677,535	15
2002	1,850	204,103	40,464	78,624	231,936	556,977	25
2003	1,467	238,160	24,338	114,166	170,874	549,005	26
2004	2,345	283,756	45,769	154,640	131,757	618,267	18
2005	23,301	106,048	21,289	182,778	93,700	427,116	33
2006	11,261	262,527	60,145	191,992	382,952	908,877	9
2007	1,452	112,241	22,394	100,375	590,169	826,631	11
2008	2,193	116,693	37,349	90,162	774,095	1,020,492	5
2009	6,800	62,070	36,615	56,801	918,350	1,080,636	4
2010	1,685	76,607	62,241	132,785	488,898	762,216	12
2011	2,510	163,896	28,574	344,766	667,929	1,207,675	2
2012	1,291	140,898	24,115	193,969	566,741	927,014	6
2013	1,224	207,231	51,441	127,343	726,849	1,114,088	3
2014	1,471	126,738	54,186	29,190	291,409	502,994	27
2015	1,150	83,431	23,572	296,575	475,456	880,184	10
2016	595	215,049	35,037	46,604	448,284	745,569	13
2017	1,080	113,614	15,988	230,195	885,661	1,246,538	1
2018	783	92,889	35,930	24,300	517,812	671,714	16
2019	1,358	105,026	23,473	71,724	246,600	448,181	30
Averages							
1960–2018[b]	3,691	101,460	40,791	116,933	229,910	492,784	
2009–2018[c]	1,859	128,242	36,770	148,253	598,739	913,863	
Max harvest[d]	23,301	293,043	188,501	401,525	918,350	1,246,538	
Max year	2005	2001	1994	1994	2009	2017	
Min harvest[d]	595	17,735	1,185	2,768	2,678	48,162	
Min year	2016	1967	1975	1965	1975	1975	

[a] Rank is based on total harvest for years 1960 to 2019.

[b] Equals the long-term average harvest. Harvests from 1960 to 1986 are included in average but not shown in table.

[c] Equals the recent average harvest.

[d] Minimum and maximums are based on species harvest from 1960 to 2019.

Table 23.–Southeast Alaska annual Lynn Canal (District 15) traditional and terminal harvest area drift gillnet salmon harvest, in numbers of salmon, by species, 1989–2019.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Rank[a]
1989	1,955	471,914	50,307	110,454	123,631	758,261	26
1990	670	357,418	63,005	101,099	210,510	732,702	28
1991	746	308,731	129,232	5,474	210,547	654,730	32
1992	610	286,035	108,753	351,562	245,247	992,207	21
1993	741	173,113	59,952	11,336	306,566	551,708	40
1994	980	171,729	140,764	147,277	685,449	1,146,199	14
1995	831	88,676	79,949	15,613	568,368	753,437	27
1996	642	149,578	52,658	2,607	415,930	621,415	35
1997	838	118,828	15,572	53,437	462,330	651,005	33
1998	682	134,937	26,118	32,351	160,669	354,757	48
1999	559	163,560	35,350	62,737	351,251	613,457	36
2000	297	109,560	35,638	21,001	759,357	925,853	23
2001	1,672	147,811	34,606	67,718	445,578	697,385	30
2002	582	82,014	77,941	88,044	665,398	913,979	24
2003	663	95,111	59,742	53,621	394,250	603,387	37
2004	805	151,245	51,960	98,341	745,450	1,047,801	18
2005	710	65,469	27,947	209,833	326,895	630,854	34
2006	344	145,579	55,133	94,700	1,094,246	1,390,002	8
2007	1,063	156,936	18,177	89,782	823,999	1,089,957	17
2008	659	46,655	46,932	26,034	1,072,135	1,192,415	12
2009	681	126,594	35,820	163,057	845,710	1,171,862	13
2010	871	100,973	65,870	171,054	764,629	1,103,397	16
2011	1,178	63,788	33,776	508,930	1,115,821	1,723,493	4
2012	2,736	224,643	23,321	353,271	1,567,227	2,171,198	1
2013	1,149	122,103	68,009	127,703	1,509,501	1,828,465	3
2014	1,396	234,682	58,117	90,602	1,303,009	1,687,806	5
2015	523	131,577	23,456	629,209	836,831	1,621,596	6
2016	475	188,844	30,534	81,970	931,919	1,233,742	10
2017	1,205	39,716	29,790	191,251	1,575,039	1,837,001	2
2018	1,156	81,688	45,655	22,254	1,042,476	1,193,229	11
2019	1,096	241,533	47,723	143,571	1,176,043	1,609,966	7
Averages							
1960–2018[b]	1,393	156,622	52,164	92,913	494,175	797,266	
2009–2018[c]	1,137	131,461	41,435	233,930	1,149,216	1,557,179	
Max harvest[d]	6,099	471,914	140,764	629,209	1,575,039	2,171,198	
Max year	1984	1989	1994	2015	2017	2012	
Min harvest[d]	276	18,491	10,964	1,760	58,562	132,343	
Min year	1963	1975	1960	1960	1960	1960	

[a] Rank is based on total harvest for years 1960 to 2019.

[b] Equals the long-term average harvest. Harvests from 1960 to 1986 are included in average but not shown in table.

[c] Equals the recent average harvest.

[d] Minimum and maximums are based on species harvest from 1960 to 2019.

Table 24.–Southeast Alaska traditional fisheries purse seine harvest of hatchery salmon, 1984–2019.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1984	127	0	22,417	0	311,490	334,034
1985	901	0	42,712	66,897	168,370	278,880
1986	664	0	65,414	0	154,969	221,047
1987	104	0	7,653	0	111,837	119,593
1988	77	0	13,242	27,217	466,563	507,099
1989	180	0	22,353	414,977	242,175	679,685
1990	195	41,816	43,429	253,900	316,492	655,832
1991	491	51,484	59,649	545,809	595,058	1,252,491
1992	127	103,976	102,964	842,619	124,547	1,174,233
1993	1,726	275,876	33,421	356,673	243,083	910,779
1994	2,614	66,551	116,350	1,589,949	581,891	2,357,355
1995	188	54,081	82,572	736,201	431,355	1,304,397
1996	140	340,679	78,346	1,139,391	1,577,303	3,135,859
1997	409	175,713	33,502	702,832	1,573,049	2,485,505
1998	482	73,084	71,050	848,129	1,998,250	2,990,995
1999	368	71,138	66,038	824,262	1,915,729	2,877,535
2000	127	75,419	24,548	170,540	1,079,011	1,349,645
2001	296	139,987	73,267	1,164,761	552,383	1,930,694
2002	2,316	3,172	62,531	947,928	427,815	1,443,762
2003	2,506	9,594	76,331	501,841	659,213	1,249,485
2004	5,592	104,040	47,712	548,838	1,032,107	1,738,288
2005	3,363	38,668	49,554	771,627	637,771	1,500,983
2006	1,908	19,120	4,083	298,663	1,176,587	1,500,361
2007	1,543	23,770	27,642	583,766	1,009,730	1,646,451
2008	32	587	22,017	94,878	423,883	541,397
2009	1,655	5,888	27,846	645,379	919,671	1,600,439
2010	87	0	14,920	498,010	667,417	1,180,435
2011	2,169	31,145	91,526	703,544	1,061,093	1,889,478
2012	400	4,386	34,451	209,373	1,618,455	1,867,065
2013	634	11,131	130,721	1,378,121	1,542,587	3,063,194
2014	1,675	1,476	56,684	92,884	759,828	912,547
2015	468	20,677	39,711	269,871	1,163,004	1,493,732
2016	1,689	1,397	25,382	128,925	1,227,444	1,384,837
2017	285	12,232	21,262	646,091	181,276	861,145
2018	2	1,898	11,886	165,715	873,882	1,053,383
2019	1,455	466	30,171	100,733	1,567,276	1,700,100
Averages						
1989–2018	1,122	58,633	51,725	602,517	887,070	1,601,066
2009–2018[a]	906	9,023	45,439	473,791	1,001,466	1,530,625
Max harvest[b]	5,592	340,679	130,721	1,589,949	1,998,250	3,135,859
Max year	2004	1996	2013	1994	1998	1996
Min harvest[b]	2	0	4,083	92,884	124,547	541,397
Min year	2018	2010	2006	2014	1992	2008

Note: Hatchery Chinook and coho salmon were harvested beginning in 1977. Harvests estimates of Chinook and coho are based on CWT estimates. Harvests estimates of sockeye, pink, and chum salmon are based on hatchery operators' estimates of total purse seine common property harvest (traditional and THA/SHA) less the harvests of assumed hatchery salmon in THA/SHA common property fisheries.

[a] Equals the recent average harvest.

[b] Minimum and maximums are based on species harvest from 1989 to 2019.

Table 25.–Southeast Alaska traditional fisheries drift gillnet harvest of hatchery salmon, 1984–2019.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1984	407	0	18,787	0	71,710	90,904
1985	974	0	18,772	0	109,928	129,674
1986	1,189	0	51,543	0	82,791	135,523
1987	1,409	0	14,330	0	114,390	130,129
1988	1,442	0	8,203	19,373	272,340	301,357
1989	1,618	0	14,565	160,257	141,176	317,616
1990	2,692	71,498	63,845	28,802	105,025	271,862
1991	2,362	59,429	140,305	66,038	184,917	453,051
1992	2,327	101,099	180,951	30,293	336,808	651,478
1993	4,519	82,540	95,610	27,839	364,771	575,279
1994	4,561	101,443	75,976	21,870	758,153	962,003
1995	3,675	98,996	66,153	55,722	518,544	743,090
1996	2,728	130,638	75,364	142,700	1,157,414	1,508,843
1997	2,254	125,395	27,459	200	789,056	944,364
1998	1,129	128,767	127,074	9,200	625,375	891,546
1999	1,965	56,803	104,954	400	1,034,946	1,199,069
2000	2,939	72,707	58,723	20,000	1,175,490	1,329,858
2001	2,958	136,750	76,004	0	616,594	832,306
2002	898	55,519	92,203	0	727,014	875,634
2003	1,088	41,477	120,872	0	738,592	902,029
2004	4,425	200,760	59,608	0	763,933	1,028,726
2005	4,878	74,082	50,939	0	463,095	592,994
2006	7,999	105,824	43,035	0	1,718,311	1,875,169
2007	9,831	103,697	47,401	0	1,680,029	1,840,958
2008	9,142	65,869	95,344	0	1,627,275	1,797,630
2009	4,915	50,871	93,843	0	2,054,701	2,204,330
2010	4,118	39,484	149,958	0	1,233,096	1,426,656
2011	6,287	56,660	71,160	0	1,775,332	1,909,439
2012	7,933	80,003	94,861	0	2,406,835	2,589,632
2013	11,157	50,385	127,791	0	2,104,588	2,293,921
2014	10,029	75,223	180,833	0	1,714,004	1,980,088
2015	15,988	20,300	80,367	0	1,774,473	1,891,129
2016	9,840	75,924	76,474	0	1,581,867	1,744,105
2017	6,168	51,491	19,328	0	1,782,909	1,859,897
2018	5,360	60,745	61,289	0	1,537,479	1,664,873
2019	6,642	36,560	37,178	4,801	627,853	713,034
Averages						
1989–2018	5,193	79,146	85,743	18,777	1,116,393	1,305,252
2009–2018[a]	8,180	56,109	95,590	0	1,796,528	1,956,407
Max harvest[b]	15,988	200,760	180,951	160,257	2,406,835	2,589,632
Max year	2015	2004	1992	1989	2012	2012
Min harvest[b]	898	20,300	14,565	0	105,025	271,862
Min year	2002	2015	1989		1992	1990

Note: Hatchery Chinook and coho salmon were harvested beginning in 1977. Harvests estimates of Chinook and coho are based on CWT estimates. Harvests estimates of sockeye, pink, and chum salmon are based on hatchery operators' estimates of total drift gillnet common property harvest (traditional and THA/SHA) less the harvests of assumed hatchery salmon in THA/SHA common property fisheries.

[a] Equals the recent average harvest.

[b] Minimum and maximums are based on species harvest from 1989 to 2019 with the exception of sockeye salmon which is based on 1990 to 2019.

Table 26.–Annual common property purse seine harvests from terminal harvest areas (THA) in Southeast Alaska, 1990–2019.

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
	1999	N/F	N/F	N/F	N/F	N/F	N/F	N/F
	2000	23	0	0	0	8	984	1,015
	2001	NF	NF	NF	NF	NF	NF	NF
	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
	2017	2,531	0	27	7	32	7,847	10,444
	2018	5,159	4	37	1060	692	57,986	64,938
	2019	6,027	12	14	6	131	979	7,169
Average 1998–2018		3,753	7	169	9,573	2,255	125,244	141,001
Carroll Inlet	2018	367	0	0	6	0	162	535
	2019	1017	0	0	9	11	59	1,096
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

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Table 26.–Page 2 of 4.

THA Area	Year	Chinook[a]	Jacks[a]	Sockeye	Coho	Pink	Chum	Total
Kendrick Bay (cont)	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
	2017	10	0	1,010	1,783	3,994	137,605	144,402
	2018	0	2	1,783	988	14,415	152,084	169,272
	2019	59	11	862	753	16,248	82,627	100,560
Average 1994–2018		75	3	1,739	1,725	33,845	137,431	174,818
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	3,181	71	601	693	14,839	141,071	160,456
	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
	2017	4,485	334	245	30	4,647	104,979	114,720
	2018	5,149	96	212	111	5,866	59,111	70,545
	2019	1,748	29	320	187	27,040	80,990	110,314
Average 2004–2018		3,279	142	233	284	9,201	91,075	104,214
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	53	12	224	175	9,582	11,230
Port Armstrong	1995	0	0	16	6,685	306,796	61	313,558
SE Cove	2019	2	2	87	20	120	39556	39,787
Thomas Bay	2019	**	**	**	**	**	**	**
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

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Table 26.–Page 3 of 4.

THA Area	Year	Chinook[a]	Jacks[a]	Sockeye	Coho	Pink	Chum	Total
Amalga Harbor (cont)	2017	86	17	2,689	554	79,390	513,689	596,425
	2018	7	3	2,300	193	1,187	328,241	331,931
	2019	N/F	N/F	N/F	N/F	N/F	N/F	N/F
Average 2012–2018		49	6	2,638	217	23,396	433,911	460,217
Hidden Falls	1990	5	174	3,487	773	207,188	257,987	469,614
	1991	N/F	N/F	N/F	N/F	N/F	N/F	N/F
	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	2,670	243	2,302	2,648	98,367	652,879	759,109
	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
	2017	78	18	469	2243	154,735	197,684	355,227
	2018	1018	205	785	104	5,706	255,552	263,370
	2019	322	67	561	308	43,824	14,349	59,431
Average 1990–2018		5,318	436	4,579	5,142	466,040	1,242,221	1,723,735
Deep Inlet	1992	12	0	5	3,038	537	168,270	171,862
	1993	29	14	425	3,196	58,834	458,223	520,721
	1994	39	3	887	3,370	20,249	395,917	420,465
	1995	2,488	6	1,485	3,130	25,573	523,373	556,055
	1996	1,344	0	758	667	98,458	1,076,558	1,177,785
	1997	420	0	1,750	545	144,320	817,008	964,043
	1998	337	0	1,881	582	376,039	1,069,499	1,448,338
	1999	385	20	1,221	547	105,181	2,137,457	2,244,811
	2000	0	0	1,182	295	1,212	76,991	79,680
	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

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Table 26.–Page 4 of 4.

THA Area	Year	Chinook[a]	Jacks[a]	Sockeye	Coho	Pink	Chum	Total
Deep Inlet (cont)	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
	2017	902	0	1,532	9,578	160,544	750,296	922,852
	2018	4,438	6	8,143	29,896	160,681	959,896	1,163,060
Average 1992–2018		1,459	10	1276	2,885	127,782	665,086	798,010
Crawfish Inlet	2018	1	0	246	2,477	3,182	1,821,091	1,826,997
	2019	40	2	120	1,521	5,006	984,494	991,183

THA Area	Year	Chinook[a]	Jacks[a]	Sockeye	Coho	Pink	Chum	Total
2019 Purse Seine THA Summary								
Neets Bay	2019	6,027	12	14	6	131	979	7,169
Carroll Inlet	2019	1,017	0	0	9	11	59	1,096
Kendrick Bay	2019	59	11	862	753	16,248	82,627	100,560
Anita Bay	2019	1,748	29	320	187	27,040	80,990	110,314
SE Cove	2019	2	2	87	20	120	39,556	39,787
Thomas Bay	2019	**	**	**	**	**	**	**
Amalga Harbor	2019	N/F	N/F	N/F	N/F	N/F	N/F	N/F
Hidden Falls	2019	322	67	561	308	43,824	14,349	59,431
Deep Inlet	2019	2,425	6	9,803	13,772	81,976	755,947	863,929
Crawfish Inlet	2019	40	2	120	1,521	5,006	984,494	991,183
Total 2019 Purse Seine THA		11,640	129	11,767	16,576	174,356	1,959,001	2,173,469

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

** Confidential data

N/F denotes no fishery occurred.

Table 27.–Annual common property drift gillnet harvests from terminal harvest areas (THA) in Southeast Alaska, 1990–2019.

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	81,723	153,621
	2015	130	1,012	9,389	8,863	298,199	317,593
	2016	125	1,375	3,628	47,330	170,592	223,050
	2017	232	924	9,506	16,704	113,413	140,779
	2018	192	890	8,134	10,991	99,903	120,110
	2019	67	218	9,056	7,616	89,385	106,342
Average 1990–2018		49	716	2,327	11,283	80,791	96,026
Carroll Inlet	2018	72	0	0	0	22	94
	2019	582	0	0	0	3	585
Neets Bay	1998	62	6	1	37	7,693	7,799
	1999	N/F	N/F	N/F	N/F	N/F	N/F
	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
	2017	1,752	0	0	0	2,810	4,562
	2018	2,427	2	529	19	18,514	21,491
	2019	3,092	5	0	44	428	21,491
Average 1998–2018		1,386	2	7,239	6	11,876	20,508

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Table 27.–Page 2 of 4.

THA Area	Year	Chinook	Sockeye	Coho	Pink	Chum	Total
Wrangell Narrows	1990	0	3	2,961	30	6	3,000
	1991	787	1	626	1	1	1,416
	1992	NF	NF	NF	NF	NF	NF
	1993	3	11	1,820	39	34	1,907
	1994	0	28	4,830	397	195	5,450
	1995	NF	NF	NF	NF	NF	NF
	1996	0	0	489	0	0	489
Average 1990–1996		135	8	1,946	83	40	2,211
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
	1991	N/F	N/F	N/F	N/F	N/F	N/F
	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	3,934	296	7,168	1,502	61,812	74,712
	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
	2017	4,303	38	2,099	748	48,197	55,385
	2018	5,978	71	1,597	466	38,786	46,898
	2019	4,048	128	7,972	2,564	47,149	61,861
Average 2002–2018		3,358	227	2,737	960	52,370	59,651
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

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Table 27.–Page 3 of 4.

THA Area	Year	Chinook	Sockeye	Coho	Pink	Chum	Total
Speel Arm (cont)	2006	19	127,746	723	6,890	1,115	136,493
	2007	N/F	N/F	N/F	N/F	N/F	N/F
	2008	N/F	N/F	N/F	N/F	N/F	N/F
	2009	N/F	N/F	N/F	N/F	N/F	N/F
	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
	2018	44	24,767	322	1,117	708	26,958
	2015	67	28,335	403	7,950	275	37,030
	2016	13	66,732	592	1,936	668	69,941
	2017	N/F	N/F	N/F	N/F	N/F	N/F
	2018	44	24,767	322	1,117	708	26,958
	2019	157	9,605	238	2,587	638	13,225
Average 1998–2018		20	33,546	428	2,703	518	37,215
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
	2017	1,476	715	4,410	6,104	352,446	365,151
	2018	3,153	313	10,758	21,074	310,642	345,940
	2019	3,964	1,976	10,646	6,511	421,556	444,653
Average 1993–2018		2,328	448	1,633	25,138	351,884	381,431
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

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Table 27.–Page 4 of 4.

THA Area	Year	Chinook	Sockeye	Coho	Pink	Chum	Total
Boat Harbor (cont)	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
	2017	55	8,025	394	106,565	471,903	586,942
	2018	89	8,504	162	6,236	338,874	353,865
	2019	121	13,479	307	33,126	586,240	615,273
Average 1993–2018		90	9,865	306	38,351	211,341	259,953

2019 Gillnet THA Summary:							
Nakat Inlet	2019	67	218	9,056	7,616	89,385	106,342
Carroll Inlet	2019	582	0	0	0	0	585
Neets Bay	2019	3,092	5	0	44	428	3,569
Anita Bay	2019	4,048	128	7,972	2,564	47,149	61,861
Speel Arm	2019	157	9,605	238	2,587	638	13,225
Deep Inlet	2019	3,964	1,976	10,646	6,511	421,556	444,653
Boat Harbor	2019	121	13,422	306	32,841	567,114	613,804
Total 2019 Gillnet THA		11,328	11,449	25,354	28,218	52,163	1,126,270

N/F denotes no fishery occurred.

Table 28.–Southeast Alaska region private hatchery cost-recovery salmon harvest by district, organization, special harvest area, and species, 2019.

Hatchery	Special Harvest Area	Chinook	Sockeye	Coho	Pink	Chum	Total
SSRAA	Herring Cove	1,252	0	1,887	0	0	3,139
SSRAA	Neets Bay	526	5	19,551	114	165,442	185,638
SSRAA	Port Asumcion	0	0	43	0	5	48
SSRAA	Klawock River	0	0	25,960	0	0	25,960
SSRAA	Port Saint Nicholas	1,131	0	0	0	0	1,131
SSRAA	Burnett	0	0	8,791	0	63,556	72,347
SSRAA	Neck Lake	0	0	1,833	0	0	1,833
SSRAA	Anita Bay	0	0	0	0	1142	1,142
AKI	Port Armstrong	19,070	98	88,466	195,629	168,068	471,331
NSRAA	Mist Cove	0	0	18,599	57	0	18,656
NSRAA	SE COVE	20	97	13	1,505	853,017	854,652
DIPAC	Amalga	263	2,556	89	3,681	420,664	427,253
DIPAC	Gastineau	1,719	24	14,215	324	151,203	167,485
DIPAC	Speel Arm	0	94,367	0	0	0	94,367
NSRAA	Hidden Falls	1	5	1	0	205,117	205,124
SSSC	Crescent Bay	10	20	1663	111,820	27,712	141,225
NSRAA	Deep Inlet/Silver Bay	7,744	0	243	100	131,916	140,003
NSRAA	Crawfish Inlet	0	9	6	71	58,523	58,609
	Total	31,736	97,181	181,360	313,301	2,246,365	2,869,943

Total by Organization	Chinook	Sockeye	Coho	Pink	Chum	Total
SSRAA	2,909	5	58,065	114	230,145	291,238
AKI	19,070	98	88,466	195,629	168,068	471,331
DIPAC	1,982	96,947	14,304	4,005	571,867	689,105
NSRAA	7,765	111	18,862	1,733	1,248,573	1,277,044
SSSC	10	20	1,663	111,820	27,712	141,225
Total	31,736	97,181	181,360	313,301	2,246,365	2,869,943

Note: Permit holder organization acronyms and names are as follows:
SSRAA: Southern Southeast Regional Aquaculture Association
AKI: Armstrong Keta, Inc.
DIPAC: Douglas Island Pink and Chum, Inc.
NSRAA: Northern Southeast Regional Aquaculture Association
SSSC: Sitka Sound Science Center

Table 29.–Southeast Alaska region private hatchery cost recovery harvest in numbers by species, 1977–2019.

Year	Chinook[a]	Jacks[a]	Sockeye	Coho	Pink	Chum	Total
1977	0	0	0	0	92,459	0	92,459
1978	0	0	0	0	0	0	0
1979	0	0	0	5,893	29,555	0	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	17,233	213,371	192,512	441,961
1990	26,394	298	75	121,381	880,750	381,645	1,410,543
1991	22,716	0	1,478	292,100	1,111,148	376,313	1,803,755
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	17,680	70	3,322	188,847	3,459,436	1,717,481	5,386,836
1995	31,129	276	8,448	215,431	411,701	1,707,559	2,374,544
1996	33,496	0	6,636	166,941	609,316	4,536,244	5,352,633
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	31,636	1	107,244	268,171	267,913	4,353,396	5,028,361
2001	49,028	0	138,233	352,904	1,189,294	2,125,390	3,854,849
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	1,858,830	3,264,074
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	299,129	713,810	3,299,035	4,378,443
2011	40,574	727	22,001	232,531	698,067	4,087,184	5,081,084
2012	18,809	0	125,664	201,044	153,194	3,065,001	3,563,712
2013	30,443	222	49,609	285,491	968,118	2,099,940	3,433,823
2014	13,148	0	123,029	387,988	236,214	1,575,630	2,336,009
2015	17,456	65	111,381	221,087	333,233	2,306,954	2,990,176
2016	9,107	29	148,032	231,478	330,519	2,731,469	3,450,634
2017	12,725	0	135,018	122,289	641,437	3,094,798	4,006,267
2018	20,060	0	158,537	136,604	293,654	3,215,022	3,823,877
2019	31,326	410	97,181	181,360	313,301	2,246,365	2,869,943
Averages							
1977–2018	19,549	56	50,160	182,054	673,090	1,974,832	2,899,741
2009–2018	22,516	145	99,665	237,764	505,051	2,838,767	3,703,909

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

Table 30.–Annual Canada Stikine River harvests from all fisheries, 1972–2019.

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	4,282	1,596	61,911	5,652	297	167	73,905
2016	3,235	849	88,649	5,346	N/A	N/A	98,079
2017	603	811	43,657	5,502	N/A	N/A	50,573
2018	165	456	22,737	3,803	N/A	N/A	27,161
2019	333	237	16,424	5,228	N/A	N/A	22,222
Averages							
1986–2018[c]	3,290	719	37,580	3,364	405	236	45,554
2009–2018	2,889	1,117	50,080	5,953	154	210	60,293

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 harvest may not correspond with the estimated jack harvest 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 salmon averages only since 1986 when large fish and jacks were recorded separately in all fisheries.

Table 31.–Annual Canada Taku River harvests from all fisheries, 1979 to 2019.

Year	Chinook Large[a]	Chinook Jacks[a]	Sockeye	Coho	Pink	Chum	Total
1979[b]	397	0	13,578	6,006	13,661	15,474	49,116
1980	610	0	22,752	6,405	26,821	18,531	75,119
1981	459	0	10,922	3,607	10,771	5,591	31,350
1982	354	0	3,144	51	202	3	3,754
1983	465	4000	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	12478	N/A	N/A	40967
2012	2,965	607	30,113	14,072	N/A	N/A	47,757
2013	738	669	25,173	10,374	N/A	N/A	36,954
2014	2,472	657	17,795	16,568	N/A	N/A	37,492
2015	2,447	404	19,881	10,183	N/A	N/A	32,915
2016	1,630	349	37,311	11,520	N/A	N/A	50,810
2017	250	88	30,379	7,802	N/A	N/A	38,519
2018	7	19	17,974	9,505	N/A	N/A	27,505
2019	10	5	21,481	12,252	N/A	N/A	33,748
Averages							
1979–2018	2,221	427	23,100	7,326	2,280	1,476	35,917
2009–2018	2,629	529.9	23,509	11,668	N/A	N/A	38,336

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

b 1979 is commercial catch only.

Table 32.–Annette Island Reserve annual commercial drift gillnet salmon harvest in numbers by species, 1980–2019.

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	243,684	557,036
2017	1,039	5,200	29,278	151,587	187,774	374,878
2018	1,120	1,803	14,068	126,356	152,300	295,647
2019	505	2,255	14,169	307,147	58,249	382,325
Averages						
1980–2018	768	22,093	31,109	311,693	124,108	489,770
2009–2018	1,067	8,590	40,571	293,021	225,094	568,292
Max harvest	3,447	76,054	74,552	823,081	444,627	971,989
Max year	2001	1993	2010	1989	2015	1995
Min harvest	38	1,803	2,565	103,496	17,444	185,886
Min year	1980	2018	1980	2003	1983	2005

Table 33.–Annette Island Reserve annual commercial purse seine salmon harvest in numbers by species, 1980–2019.

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	2194	-	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
2017	510	-	6,075	6,584	727,606	61,314	802,089
2018	421	1	4,496	2,634	170,021	58,845	236,418
2019	188	-	7,887	3,433	932,514	39,437	983,459
Averages							
1980–2018	288	-	8,611	6,986	697,617	37,373	750,876
2009–2018	384	-	40,571	293,021	225,094	568,292	568,292
Max harvest	2,202	7	25,432	20,309	2,137,912	259,504	2,187,479
Max year	2000	2009	2001	1986	2013	2015	2013
Min harvest	1	1	618	909	28,584	3,135	56,402
Min year	1996	2006	1987	1980	1987	1994	1987

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

- No data for jack Chinook salmon.

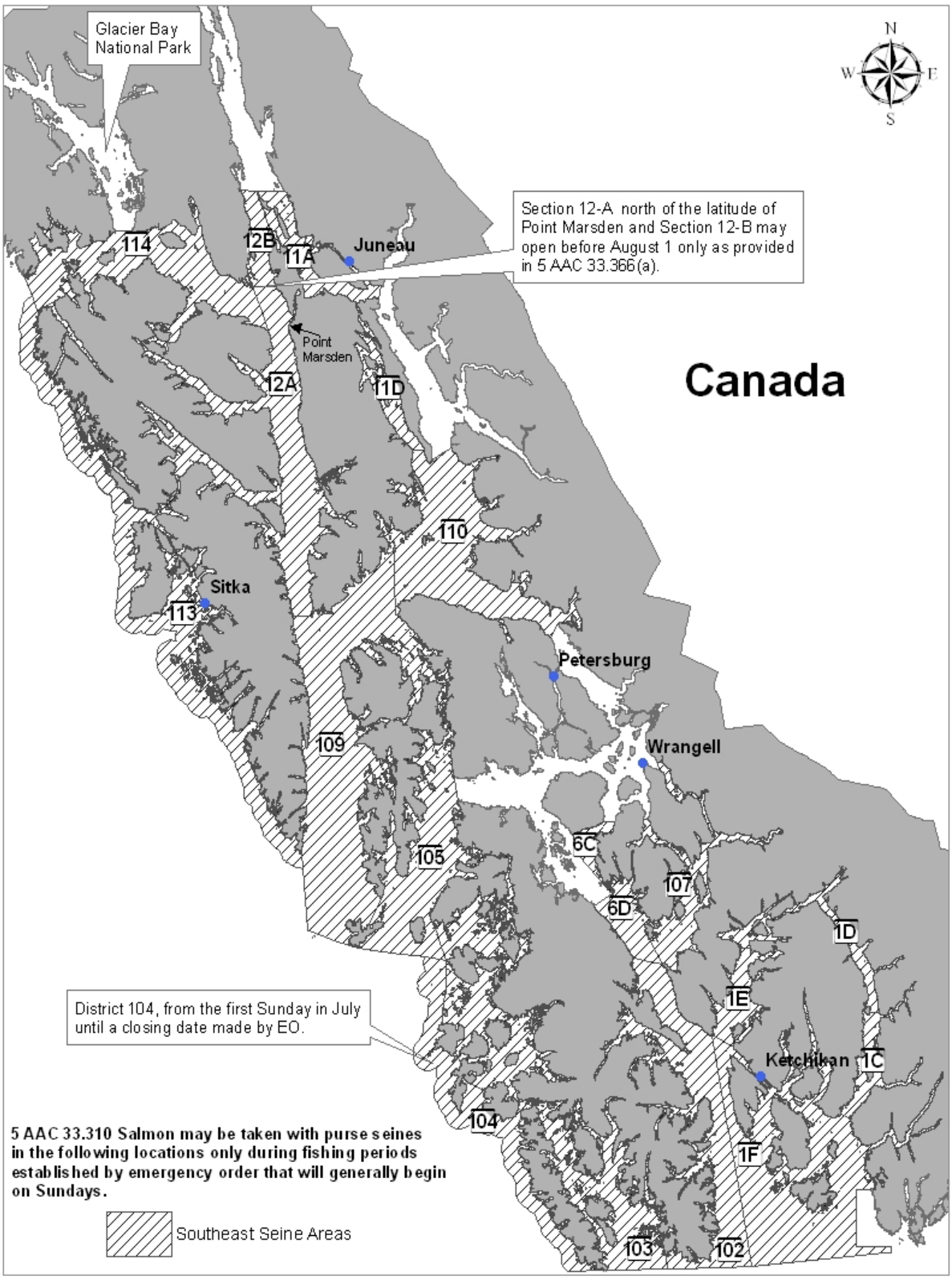

Figure 1.–Southeast Alaska purse seine fishing areas. Fishing periods and areas are determined by emergency order.

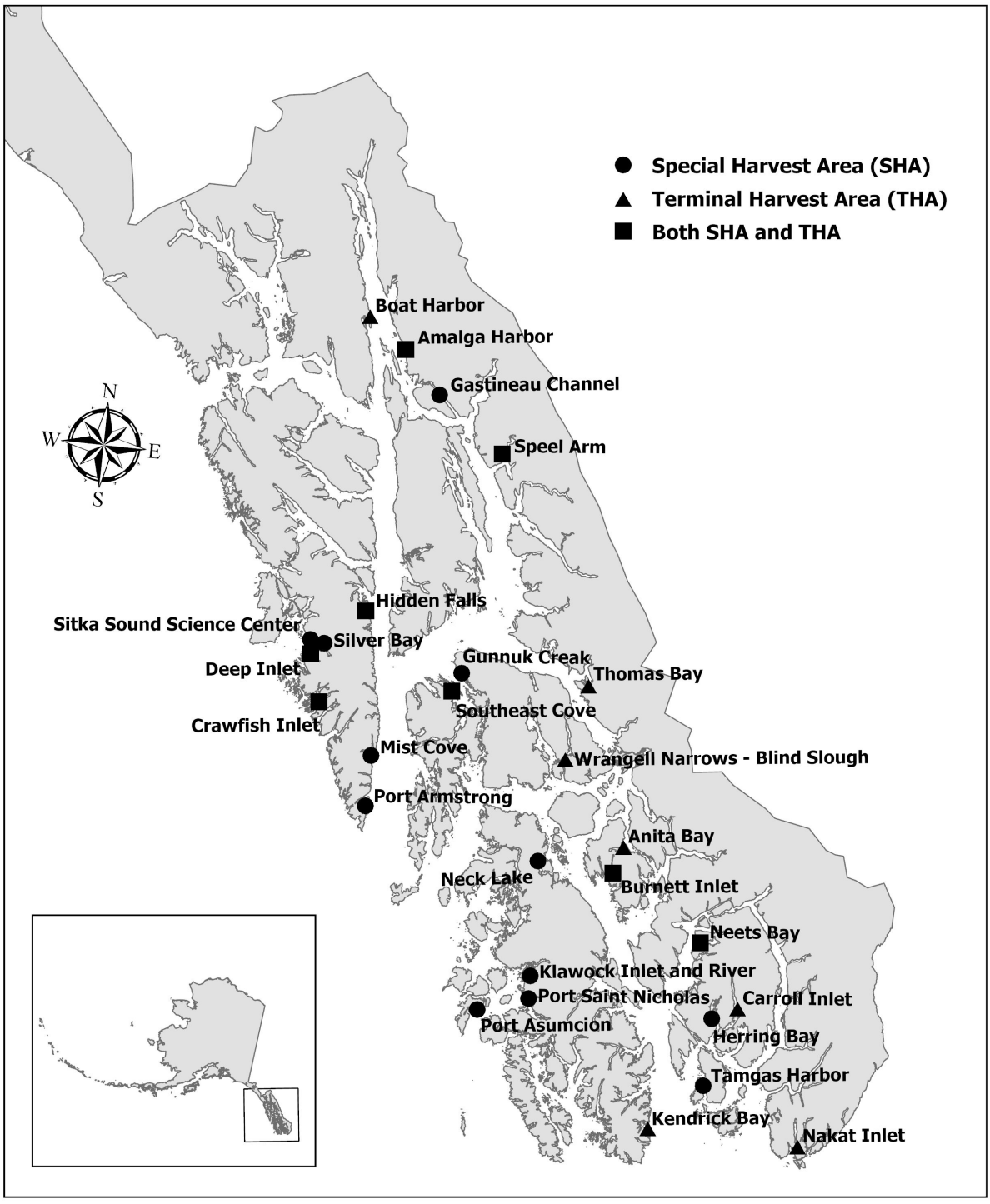

Figure 2.–Locations of terminal harvests in Southeast Alaska showing common property terminal harvest areas (THA), private hatchery cost-recovery special harvest areas (SHA), and areas with both harvest types.

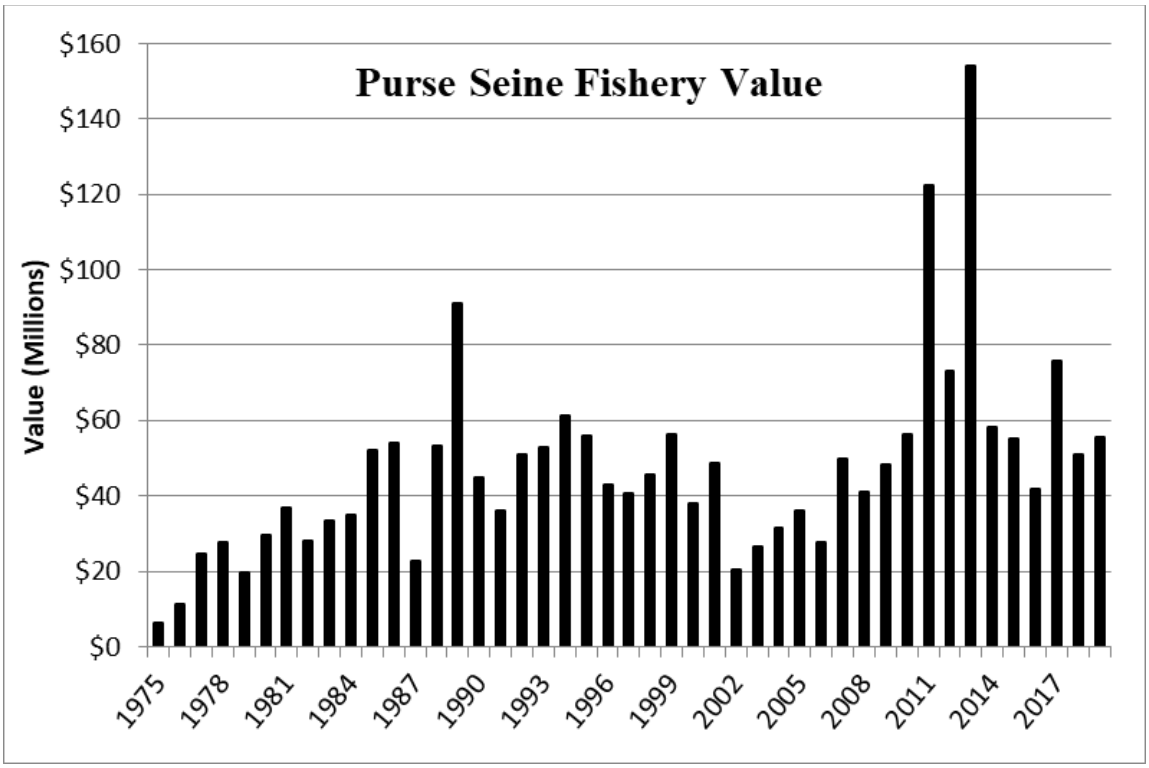

Figure 3.–Southeast Alaska purse seine fishery exvessel value in dollars (common property harvest), 1975–2019.

Note: Data from CFEC basic information tables, 1975–2018 (CFEC 2019). Fish ticket data for 2019.

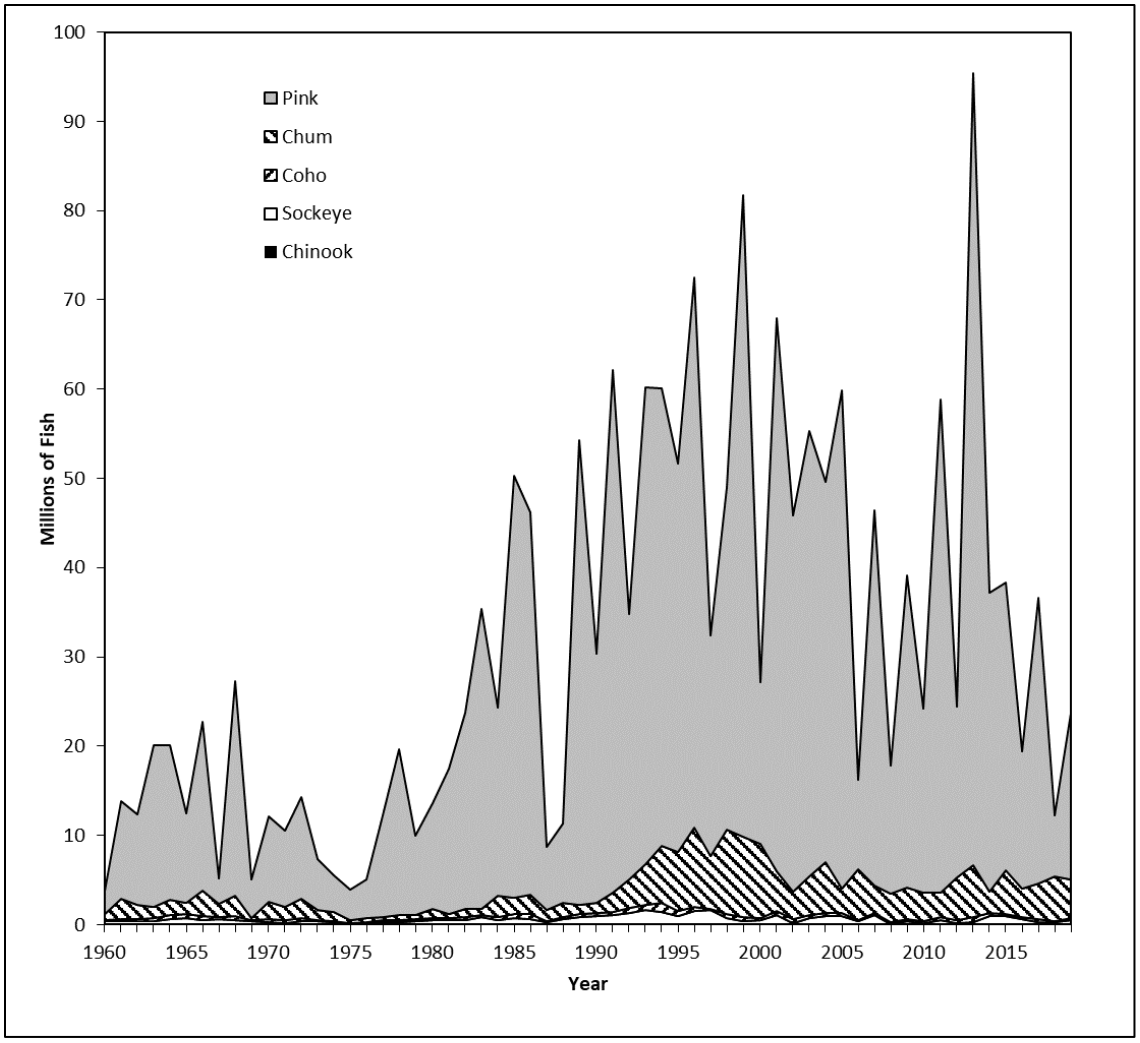

Figure 4.–Southeast Alaska Region annual common property purse seine salmon harvest (traditional and terminal harvest areas), in numbers of fish, for Chinook, pink, chum, coho, and sockeye salmon, 1960–2019.

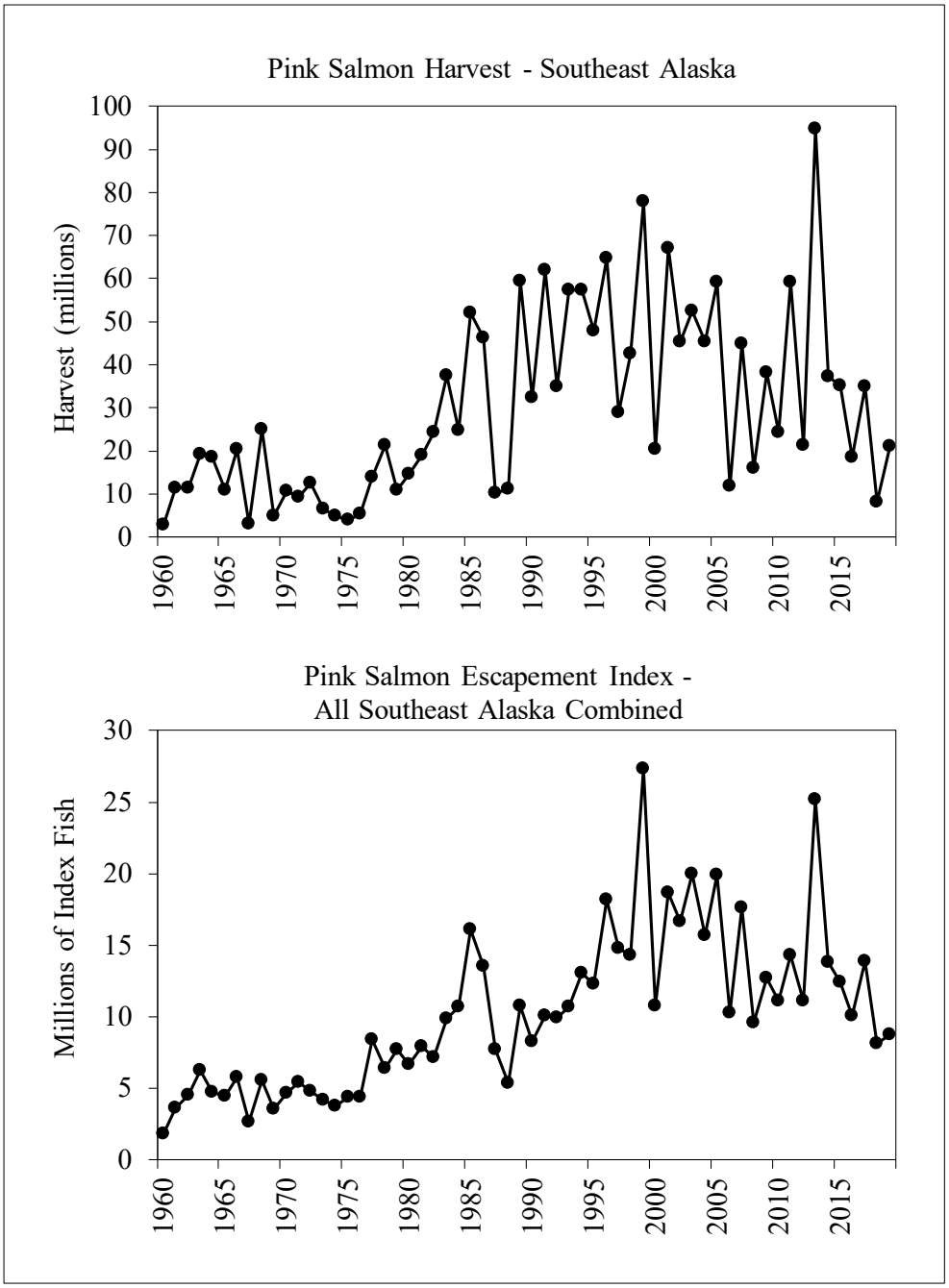

Figure 5.–Trends of pink salmon harvest and pink salmon escapement index for Southeast Alaska, all subregions combined, 1960–2019.

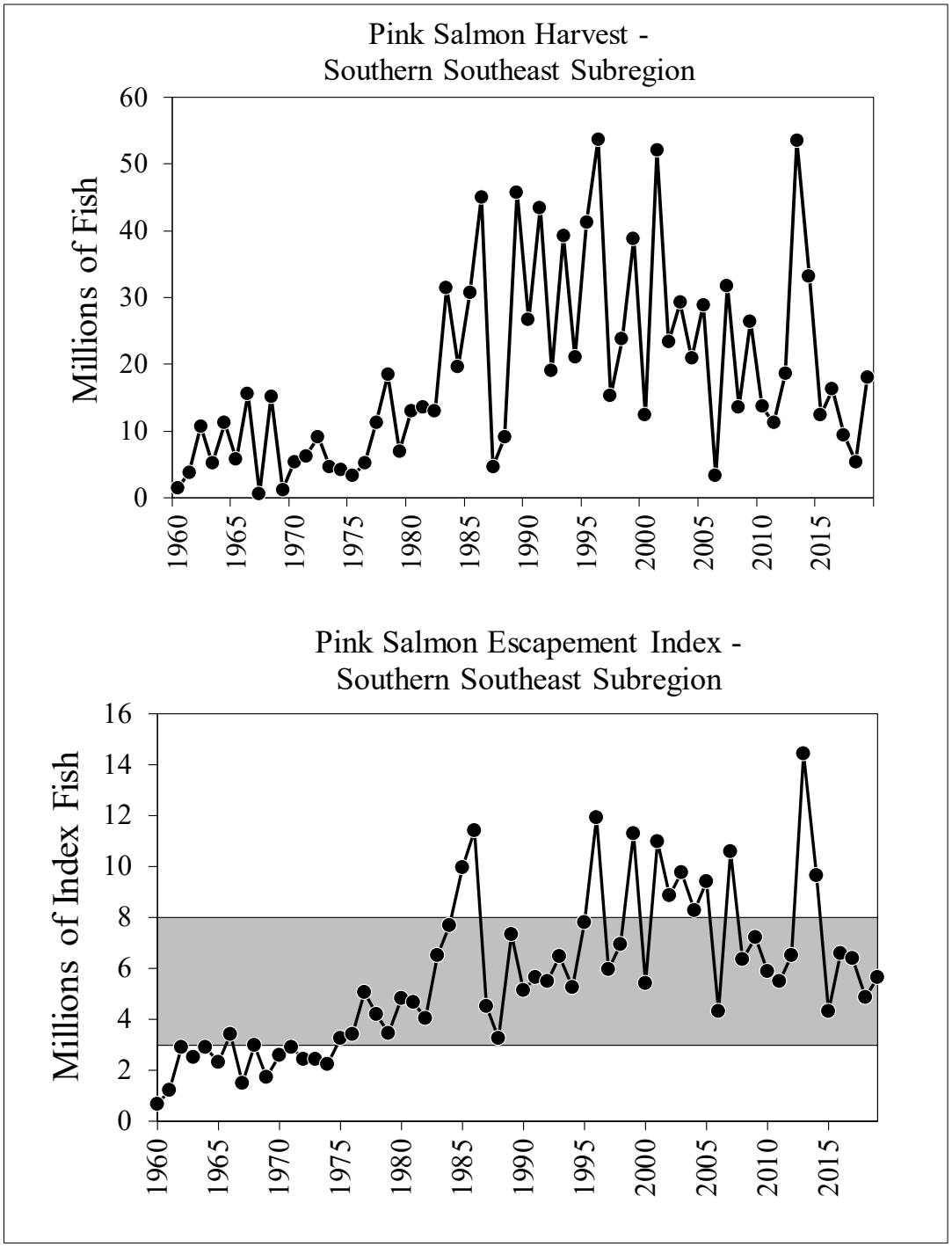

Figure 6.–Annual pink salmon harvest and escapement index for the Southern Southeast sub-region, 1960–2019 (Districts 101-108). The shaded area shows the escapement goal range of 3.0 million to 8.0 million index fish.

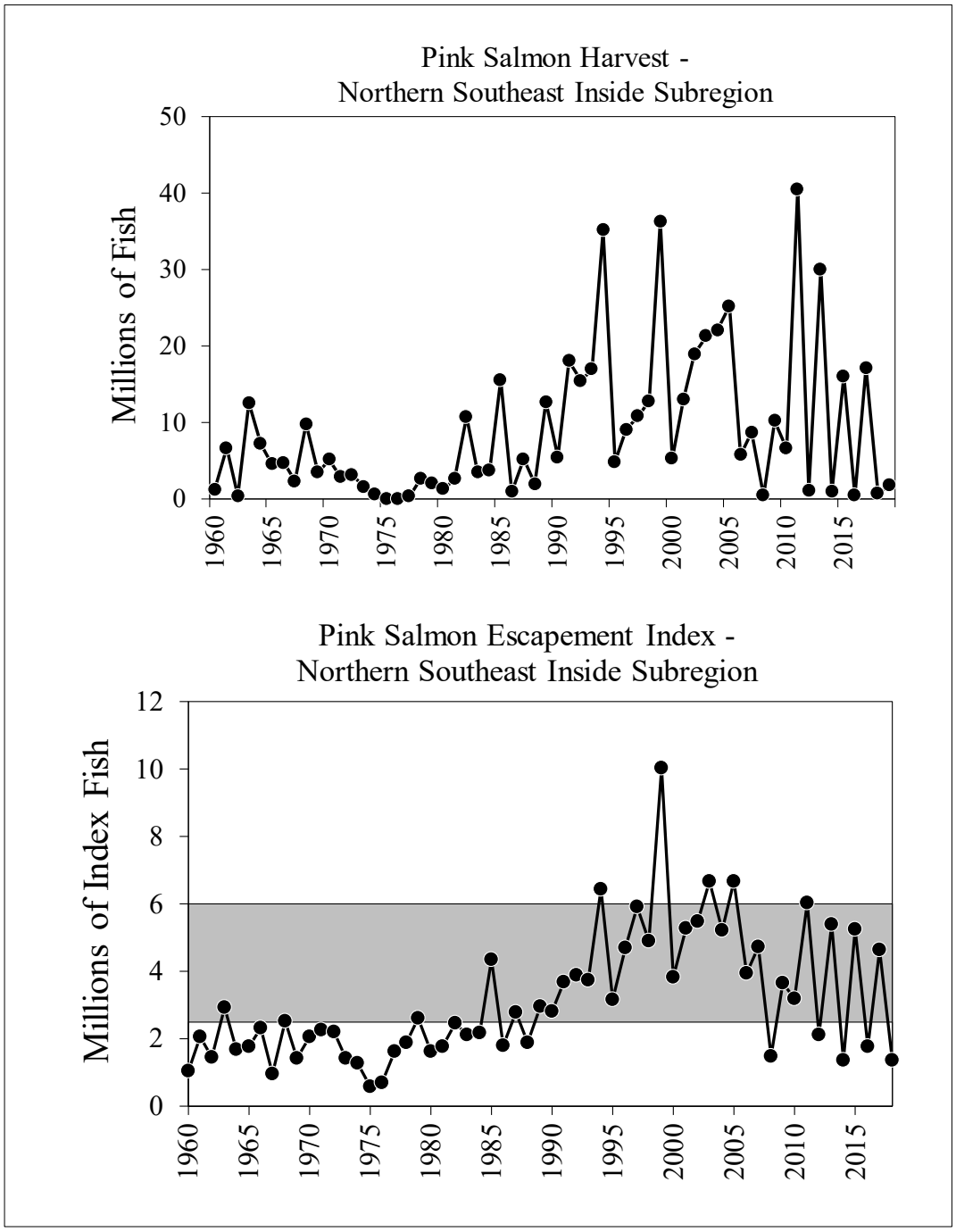

Figure 7.–Annual pink salmon harvest and escapement index for the Northern Southeast Inside sub-region, 1960–2019 (Districts 109–112, 114–115, and 113 subdistricts 51–59). The shaded area shows the escapement goal range of 2.5 million to 6.0 million index fish.

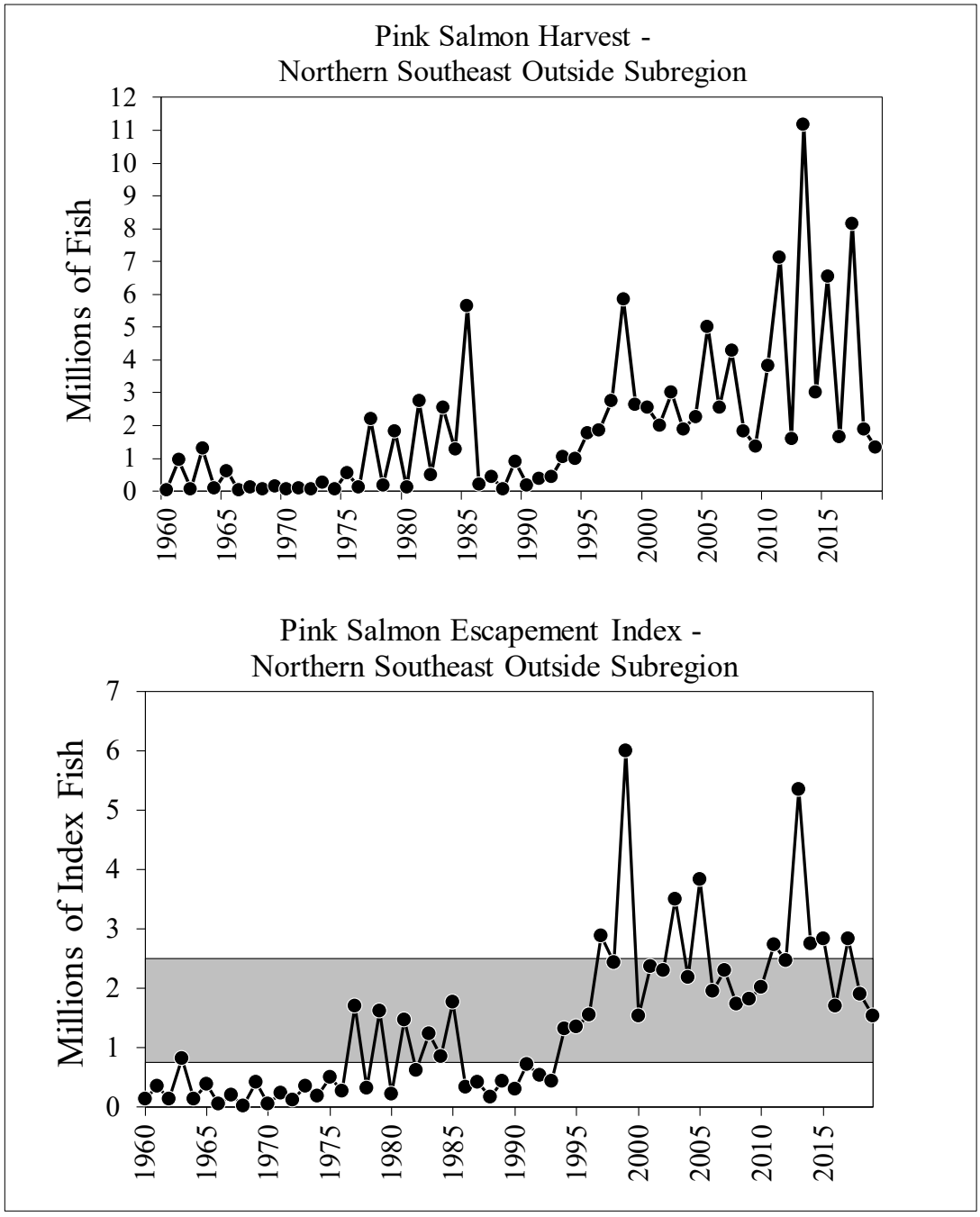

Figure 8.–Annual pink salmon harvest and escapement index for the Northern Southeast Outside sub-region, 1960–2019 (District 113, subdistricts 22–44 and 62–96). The shaded area shows the escapement goal range of 0.75 million to 2.50 million index fish.

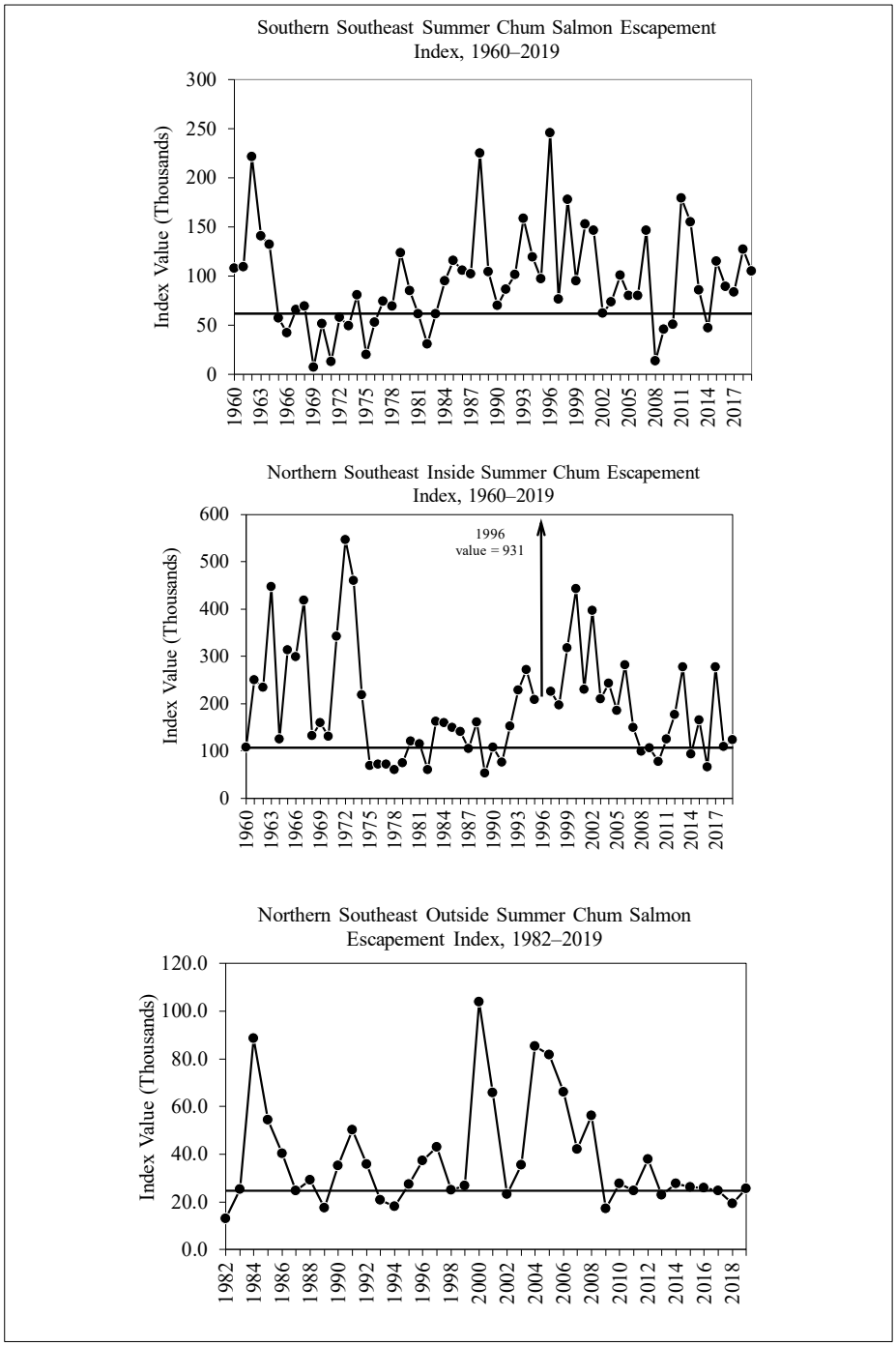

Figure 9.–Wild summer-run chum salmon escapement indices for the Southern Southeast stock group (1960–2019), Northern Southeast Inside stock group (1960–2019), and Northern Southeast Outside stock group (1982–2019). The solid lines show the sustainable escapement goal threshold for each stock.

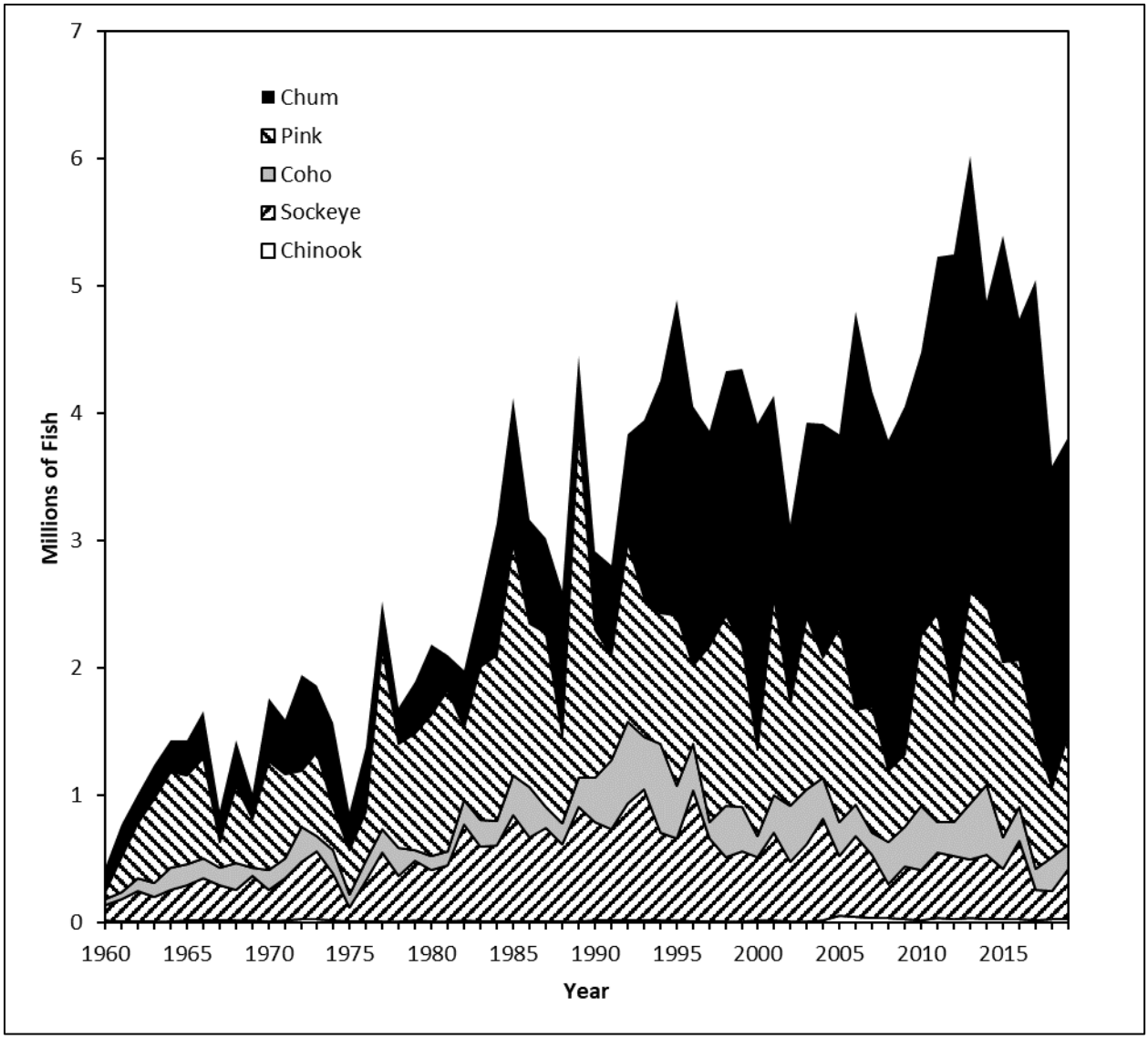

Figure 10.–Traditional drift gillnet fishing areas in Southeast Alaska.

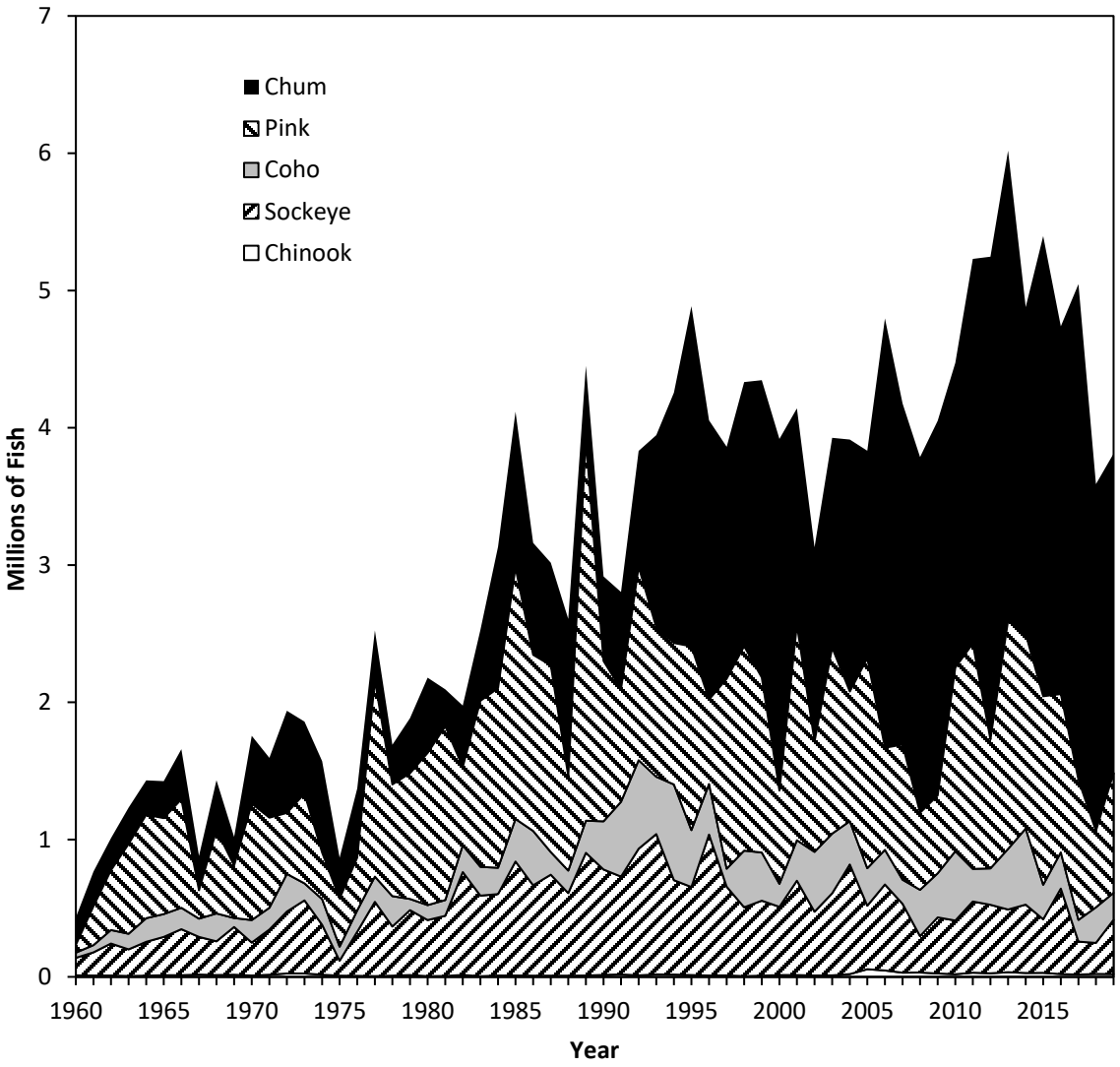

Figure 11.–Southeast Alaska annual total commercial drift gillnet salmon harvest from traditional and terminal harvest areas, in numbers, by species, 1960–2019.

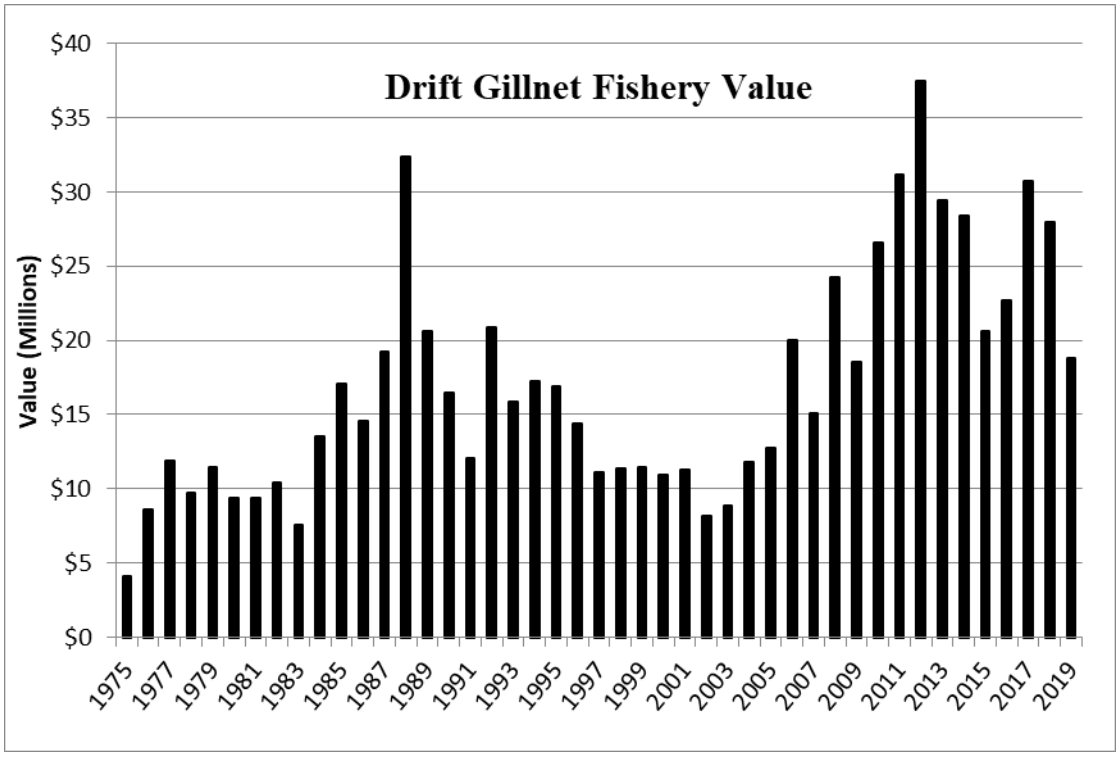

Figure 12.–Southeast Alaska drift gillnet fishery exvessel value in dollars (common property harvests), 1975–2019.

Note: Data from CFEC basic information tables, 1975–2018 (CFEC 2019). Fish ticket data for 2019.