

**Annual Management Report of the 2021 Southeast  
Alaska Commercial Purse Seine and Drift Gillnet  
Fisheries**

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Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



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Weights and measures (metric)		General		Mathematics, statistics	
centimeter	cm	Alaska Administrative Code		all standard mathematical signs, symbols and abbreviations	
deciliter	dL		AAC		
gram	g	all commonly accepted abbreviations	e.g., Mr., Mrs., AM, PM, etc.	alternate hypothesis	H <sub>A</sub>
hectare	ha			base of natural logarithm	<i>e</i>
kilogram	kg	all commonly accepted		catch per unit effort	CPUE
kilometer	km	professional titles	e.g., Dr., Ph.D., R.N., etc.	coefficient of variation	CV
liter	L			common test statistics	(F, t, $\chi^2$ , etc.)
meter	m	at	@	confidence interval	CI
milliliter	mL	compass directions:		correlation coefficient (multiple)	R
millimeter	mm	east	E	correlation coefficient (simple)	r
<b>Weights and measures (English)</b>		north	N	covariance	cov
cubic feet per second	ft <sup>3</sup> /s	south	S	degree (angular)	°
foot	ft	west	W	degrees of freedom	df
gallon	gal	copyright	©	expected value	<i>E</i>
inch	in	corporate suffixes:		greater than	>
mile	mi	Company	Co.	greater than or equal to	≥
nautical mile	nmi	Corporation	Corp.	harvest per unit effort	HPUE
ounce	oz	Incorporated	Inc.	less than	<
pound	lb	Limited	Ltd.	less than or equal to	≤
quart	qt	District of Columbia	D.C.	logarithm (natural)	ln
yard	yd	et alii (and others)	et al.	logarithm (base 10)	log
<b>Time and temperature</b>		et cetera (and so forth)	etc.	logarithm (specify base)	log <sub>2</sub> , etc.
day	d	exempli gratia (for example)	e.g.	minute (angular)	'
degrees Celsius	°C	Federal Information		not significant	NS
degrees Fahrenheit	°F	Code	FIC	null hypothesis	H <sub>0</sub>
degrees kelvin	K	id est (that is)	i.e.	percent	%
hour	h	latitude or longitude	lat or long	probability	P
minute	min	monetary symbols (U.S.)	\$, ¢	probability of a type I error (rejection of the null hypothesis when true)	$\alpha$
second	s	months (tables and figures): first three letters	Jan,...,Dec	probability of a type II error (acceptance of the null hypothesis when false)	$\beta$
<b>Physics and chemistry</b>		registered trademark	®	second (angular)	"
all atomic symbols		trademark	™	standard deviation	SD
alternating current	AC	United States (adjective)	U.S.	standard error	SE
ampere	A	United States of America (noun)	USA	variance	
calorie	cal	U.S.C.	United States Code	population sample	Var var
direct current	DC	U.S. state	use two-letter abbreviations (e.g., AK, WA)		
hertz	Hz				
horsepower	hp				
hydrogen ion activity (negative log of)	pH				
parts per million	ppm				
parts per thousand	ppt, ‰				
volts	V				
watts	W				

***FISHERY MANAGEMENT REPORT NO. 22-25***

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ALASKA COMMERCIAL PURSE SEINE AND DRIFT GILLNET  
FISHERIES**

by

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# ABSTRACT

A total of 58.9 million salmon were harvested in commercial salmon fisheries in the Southeast Alaska and Yakutat Region in 2021. The harvest by purse seine gear of 51.9 million fish included traditional fisheries (46.9 million), hatchery terminal areas (1.4 million), and Annette Islands Reserve (2.7 million). Common property purse seine harvests of 48.2 million salmon were above the recent average harvest of 35.6 million and ranked as the 16th largest since 1960. The drift gillnet gear harvest of 2.9 million fish included traditional areas (1.8 million), hatchery terminal harvest areas (0.9 million), and Annette Islands Reserve (0.3 million). Common property drift gillnet harvests of 2.6 million salmon were below the recent average harvest of 4.6 million and ranked as the 36th largest since 1960. The fish ticket estimates for 2021 exvessel value are \$71.3 million for common property purse seine fisheries and \$15.3 million for common property drift gillnet fisheries.

**Keywords:** 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 2021 Southeast Alaska commercial salmon net fisheries, including the purse seine, drift gillnet, terminal harvest area, hatchery cost recovery, United States–Canada transboundary rivers (TBR), and Annette Islands Reserve (AIR) 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 (2011–2020) or the long-term average (1960–2020). 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 2021 Southeast Alaska regional salmon fisheries (Conrad and Thynes 2022), and summaries of the 2021 Southeast Alaska regional troll fisheries (Hagerman et al. 2022) and the 2021 Yakutat Area set gillnet fisheries (Hoffman and Christian 2022) are published as separate reports and together describe the 2021 commercial salmon season.

# SOUTHEAST ALASKA PURSE SEINE FISHERIES

During the years following Alaska statehood (1960–2020), 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; therefore, most management actions are based on inseason assessments of the abundance of pink salmon. Since 1962, the average percentage of all-gear harvest taken by the common property purse seine fishery, by species, has been 6% of Chinook salmon (*O. tshawytscha*), 43% of sockeye salmon (*O. nerka*), 16% of coho salmon (*O. kisutch*), 89% of pink salmon, and 55% of chum salmon (*O. keta*) harvests (Conrad and Thynes 2022). Long-term average species composition of the common property purse seine fishery harvest has been 1% Chinook, 4% sockeye, 6% coho, 72% pink, and 16% 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 2021, common property purse seining occurred in 9 terminal harvest areas (THA; Figure 2). Traditional purse

seine fisheries, fisheries in THAs, hatchery cost-recovery fisheries, Canadian TBR fisheries, and the AIR fisheries are discussed in separate sections of this report.

Districts 1 through 7 (southern Southeast Alaska) and Districts 9 through 14 (northern Southeast Alaska) 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 seiners can move freely between districts. Efforts are made to coordinate management actions regionally to account for purse seine effort distribution and strength of salmon runs. Inseason assessments of pink salmon run strengths are determined from a combination of escapement information obtained from aerial surveys, foot surveys, harvests, and 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 2021, expectations were for an average pink salmon and weak hatchery-produced (hatchery) chum salmon runs. The regional all-gear salmon harvest forecast for the 2021 season was 40.3 million fish, including 28 million pink and 9 million chum salmon (Brenner et al. 2021). The combined hatchery forecasts were for a total hatchery-produced salmon run of 8.9 million fish with an expected common property harvest of 5.9 million salmon. Final regional, all-gear salmon harvest was 58.9 million fish, including 48.5 million pink and 7.4 million chum salmon (Conrad and Thynes 2022)

Total salmon harvest in 2021 by purse seine gear was 51.9 million fish, and the total common property purse seine harvest was 48.2 million salmon (Table 2). Common property fisheries included traditional wild stock fisheries and THA fisheries where fishery participants competed to harvest surplus runs. The total common property purse seine harvest included 21,000 Chinook, 794,000 sockeye, 302,000 coho, 44.5 million pink, and 2.6 million chum salmon. Historical common property purse seine harvests in traditional and THA fisheries from 1960 to 2021 are presented in Table 1, along with comparisons to the long-term 60-year average, from 1960 to 2020, and the recent 10-year average from 2011 to 2020. The 2021 common property purse seine harvest was above the recent average of 35.5 million fish and ranks as the 16th largest common property purse seine harvest in the 62-year period since 1960.

Initial exvessel values based on prices reported on fish tickets for the purse seine fishery, as well as other fisheries in the region for comparison, are presented in this report (Table 3). The 2021 purse seine fishery value of \$71.3 million accounts for 47% of the total commercial value of salmon harvests in Southeast Alaska. Trends in value of the common property purse seine fishery following limited entry in 1975 are also presented (Table 4 and Figure 3). The exvessel value of the 2021 purse seine fishery was near the recent average of \$70.1 million. Total value includes \$50.7 million for southern Southeast Alaska (Districts 1–7), \$11.7 million for northern Southeast Alaska (Districts 9–14), and \$8.9 million for THA purse seine fisheries (Table 3). Initial estimates for value of purse seine harvests by species based on prices from fish tickets indicate that chum salmon were worth \$17.1 million, pink salmon were worth \$43.7 million, sockeye salmon were worth \$8.2 million, Chinook salmon were worth \$1.0 million, and coho salmon were worth \$1.3 million (Table 3).

The 2021 common property purse seine total harvest in northern Southeast Alaska was 11.1 million fish, ranking 28th in the 62-year period since 1960 (Table 5). Harvest in southern Southeast Alaska was 37.2 million fish, ranking 10th since 1960 (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 harvest was 20.5 million fish above forecast in 2021. Purse seine common property pink salmon harvest of 44.5 million fish was above the recent average of 30.8 million. Regional common property purse seine chum salmon harvest of 2.6 million fish was below the recent average of 3.9 million fish. Sockeye salmon harvests of 794,000 fish was above the recent and long-term averages. Coho salmon harvest of 77,000 fish was below the long-term and recent averages. Chinook salmon harvest was above the long-term average but below the recent average.

Table 2 presents a detailed breakdown of the 2021 purse seine harvests by species, fishery type, and district. Common property harvests include 46.9 million fish in traditional areas and 1.4 million fish in hatchery terminal areas. Purse seine harvest reported from the AIR totaled 2.7 million salmon. Miscellaneous harvests of 68,000 salmon included test fisheries authorized by ADF&G and illegally harvested fish confiscated by the Alaska Wildlife Troopers (AWT). Of the 46.8 million salmon harvested in traditional purse seine fisheries, 37.1 million were harvested in southern Southeast districts and 9.7 million were harvested in northern Southeast districts. At the district level, the largest harvest took place in District 4, followed by Districts 1, 2, 3, and 12.

This report includes summaries of the 2021 purse seine fisheries dates and times for northern Southeast Alaska (Table 7), southern Southeast Alaska (Table 8), and THAs (Table 9). Following some earlier openings in THAs, the 2021 purse seine fishery began Sunday, June 20, with a combination of traditional areas and THAs in Districts 2 and 12. Openings on this date included District 2 shoreline outside Kendrick Bay and the Point Augusta index fishery. Concurrent purse seine and drift gillnet openings occurred from June 1 through June 12 in both the Carroll Inlet and Anita Bay THAs. Rotational net fisheries began June 13 in the Carroll Inlet and Anita Bay THAs, June 19 in the Neets Bay THA, and June 2 in the Deep Inlet THA. In the other THAs, the only net gear allowed is purse seine gear. The Kendrick Bay THA was open continuously beginning June 15. Twice weekly purse seine openings began June 20 in the Southeast Cove and Thomas Bay THAs and ended August 2 for Southeast Cove, and August 6 for Thomas Bay. Crawford Inlet THA purse seine openings began August 25 and ended September 25. Hidden Falls THA was not opened for common property seine harvest in 2021.

The traditional summer pink salmon season ended September 4. There were limited fall chum salmon openings in 2021; Cholmondeley Sound and District 2 was opened for 2 openings with conservative lines. Concurrent gear openings resumed late in the season in the Anita Bay THA through November 10 with minimal harvest and effort.

During the 2021 purse seine fishery, 208 permits were fished (Conrad and Thynes 2022). Effort in 2021 increased by 8 permits compared to 2020. 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 was reduced by an additional 64 permits due to a second buyback program.

This report presents summary information for pink salmon escapements by subregion, district, and stock group (Tables 10–12). Summary information for chum and sockeye salmon escapements are also presented (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 (called “king salmon” in regulatory language) 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 fishery. 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 Chinook salmon over 28 inches in length fall under the terms of the PST and are referred to as treaty Chinook salmon. The BOF adopted the Chinook salmon harvest guidelines as part of an overall allocation scheme among commercial and sport users resulting from implementation of the PST. 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 pre-treaty hatchery production and estimation error. The purse seine harvest allocation in 2021 was 8,650 treaty Chinook salmon.

The primary management tool used to limit purse seine harvests to fall within the Chinook salmon harvest allocation is to establish fishing periods by emergency order when large (28 inches or larger for purse seine and troll) 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 the total salmon harvest 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 during the period when harvest rates for other species are high. Once the Chinook salmon purse seine allocation is harvested, nonretention is required.

In 2018, the BOF 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.

The total 2021 common property purse seine harvest (traditional and THA) of Chinook salmon was 20,900 fish, of which 17,300 fish were reported as 28 inches or larger and 3,600 fish as less than 28 inches (Table 1). The estimated purse seine harvest of Alaska hatchery Chinook salmon is 12,500 fish. Of these Alaska hatchery fish, 10,400 are designated as “hatchery add-on” Chinook salmon that do not count against the seasonal harvest guideline. For all districts, 6,900 Chinook salmon were caught in traditional fisheries, and 10,400 fish were caught in hatchery terminal area fisheries. The total large Chinook salmon harvest of 17,300 fish, minus the add-on Chinook salmon harvest, translates into a treaty Chinook salmon harvest of 6,900 fish. The treaty Chinook salmon harvest by purse seine gear in the AIR fishery was 478 fish for a total treaty Chinook salmon harvest of 7,300 fish, just under 1,500 fish below 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 abundance but

also includes fisheries in THAs (Figure 2). In 2021, traditional and THA purse seine harvests in northern Southeast Alaska totaled 11.1 million fish and included 2,800 Chinook, 54,000 sockeye, 47,000 coho, 9.5 million pink, and 1.5 million chum salmon (Tables 2 and 5). The total salmon harvest was below the recent and long-term averages and ranked 28th out of 62 years since 1960. Harvests of all individual salmon species were all below recent and long-term averages.

## **Northern Southeast Alaska Inside Fisheries**

### ***District 9***

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

Section 9-A includes 2 separate stock groups with separate management approaches. The northern portion of Section 9-A (statistical area 109-20) is managed for middle run pink salmon primarily returning to Red Bluff Bay. The southern portion of Section 9-A (statistical area 109-10) is managed for late-run pink salmon returning to streams between Patterson Bay and Little Port Walter. Section 9-A was not opened during the 2021 season due to poor pink salmon runs throughout the area. The pink salmon escapement estimate for Section 9-A was mixed with the Red Bluff Bay stock group achieving the management target and the Southeast Baranof stock group failing to meet the lower end of the management target (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 2021. Point Gardner and Kingsmill Point test fisheries are annual programs that assess pink and chum salmon abundance and run timing. 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 runs 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) 27 and occurred 1 day per week for 5 weeks. Test fishing at Kingsmill Point began in SW 28 and occurred 1 day per week for 4 weeks.

Pink salmon runs in Section 9-B were expected to be weak based on parent year escapements near the lower end of escapement goal ranges throughout the district. Aerial surveys were conducted throughout the season beginning July 13 (SW 29). The Kingsmill Point test fishery results were inconsistent throughout the 4 fishing periods. The test fishery harvest was average in SW 28, well below average in SW 29, above average in SW 30 and below average in SW 31. The Point Gardener test fishery began in SW 27, and, as with the Kingsmill test fishery, harvests were inconsistent throughout the 5 test fishing periods. In SW 27, the first Petersburg area test fishing period of 2021, harvests were above the 10-year average. SW 28 and 29 were both below the 10-year average, SW 30 was well above average, and SW 31 was well below. However, the percentage of male pink salmon was generally above average in both locations for the duration

of each test fishery. The percentage of males declines through the season as the pink salmon run develops and the test fishery results suggest that it represented the early portion of the 2021 run.

During an aerial survey on July 31, a strong showing of fish was observed in bays and along the southern shoreline of Admiralty Island. As a result, Section 9-B was opened in SW 32 for 39 hours beginning on Monday, August 2 (Table 7), within 3.0 nmi of the Admiralty Island shoreline with the majority of Eliza Harbor closed to provide a buffer for escapement. Effort was low with 3 vessels harvesting 114,000 pink and 430 chum salmon. A second 39-hour opener was permitted in SW 32 beginning Friday, August 6 (Table 7). Area was expanded to include the western Kuiu Island shoreline north of Point Cosmos in addition to the Admiralty Island shoreline. Eliza Harbor, Security Cove, Southeast Cove, Keku Strait, Bay of Pillars, Rowan Bay, and Tebenkof Bay were closed to allow fish already in those bays the opportunity to escape. Effort increased greatly with the expansion of open area, with 28 boats harvesting 730,000 pink and 4,300 chum salmon.

In SW 33, there were two 39-hour openings (Table 7), and open area in Section 9-B was expanded south to include the entire section, while closing off bays, except for a portion of Tebenkof Bay to allow for escapement. In addition to those bays previously mentioned, closed areas were expanded to include Port Malmesbury and Gedney Harbor. Aerial surveys continued to observe strong showings of fish along the south side of Admiralty Island and in the Kingsmill Point area of Kuiu, so a midweek opening of 39 hours was permitted with area in Eliza Harbor expanded to allow the fleet to access a build-up of pink salmon within the bay. In the first SW 33 fishing period, 17 vessels participated, harvesting 170,000 pink and 3,700 chum salmon. In the SW 33 midweek opening, 12 vessels participated and harvested 185,000 pink and 2,700 chum salmon.

In SW 34, escapement was continuing at a desirable pace and because of the 2-day on/2-day off rotation (Table 7), a one 39-hour opening was permitted with the same area open as in the first SW 33 period. The fleet had good catches in Eliza Harbor the previous week so most of the bay was closed again to allow the remaining fish to contribute to escapement. Fourteen vessels participated in SW 34 with 270,000 pink and 3,800 chum salmon harvested.

In SW 35, there were two 39-hour openings (Table 7). The Admiralty Island shoreline was opened as well as the Kuiu Island shoreline south of Point Ellis. Effort was low for both openers. The first opening had 3 vessels participate for a harvest of 24,000 pink and 220 chum salmon. The second opening was confidential due to low effort. Lines and effort remained consistent for the final 2 openings in SW 36 (Table 7). There were 4 boats participating for a total harvest of 81,000 pink and 520 chum salmon. The second opener of SW 36 is confidential due to low effort.

The total harvest for Section 9-B was 1.95 million pink salmon, which compares to the long-term average of 1.97 million and is ranked 21st since statehood. Harvests of other species included 20 Chinook, 5,400 sockeye, 11,000 coho, and 20,000 chum salmon (Table 2). The Section 9-B pink salmon escapement index of 865,000 fish was within the management target range of 500,000 to 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 9 nmi 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 2021, pink salmon runs to District 10 were expected to provide very limited, if any, pink salmon fisheries based on parent-year escapements. Since recent escapements to the district had not been within the escapement goal range, management emphasis in 2021 was in meeting the goals. Escapement had not been achieved since 2017 for the entire district, and not since 2015 for the Houghton stock group.

Results from the Point Gardner test fishery and aerial surveys indicated better pink salmon abundance in District 10 than recent runs. In SW 31, a 15-hour opening was permitted on Monday, July 26 (Table 7), south of the latitude of Gambier Island Light with restrictions closing Gambier and Pybus Bays to provide for escapement. This was the first time since 2018 commercial fishing was permitted in District 10. Thirteen vessels participated but harvest was low at 34,000 pink and 30 chum salmon. Due to low harvest rates and concern for Seymour Canal stocks not meeting escapement goals, no other opportunity was warranted in 2021. The total pink salmon harvest for District 10 was 34,000 fish. Harvest of other species was 200 sockeye, 700 coho, and 30 chum salmon. Pink salmon escapement goals were met or exceeded in 2021 (Table 2). Overall, the District 10 pink salmon escapement index of 915,000 index fish was within the management target range of 590,000 to 1,410,000 index fish and achieved districtwide escapements for the first time since 2015 (Table 12).

### ***District 11***

Sections 11-A and 11-D are designated purse seine areas that may be opened by emergency order (Figure 1). Since statehood, the first opening in Section 11-A was in 2012 when common property fisheries targeting hatchery chum salmon returning to the Amalga Harbor THA began. Section 11-D, Seymour Canal, has opened infrequently because Seymour Canal pink and chum salmon stocks are harvested in the Districts 12, 9, and 10 purse seine fisheries. In 2021, purse seine openings were not provided in Seymour Canal due to poor escapement development, and no openings were provided in the Amalga Harbor THA due to a weak hatchery chum salmon run. Seymour Canal, with an escapement index of 96,000 pink salmon, was below the management target range of 150,000 to 370,000 index fish but was over twice the parent year escapement index (Table 12). The Stephens Passage stock group, with an escapement index of 168,000 index fish, was within the management target range of 100,000 to 230,000 index fish (Table 12) for the first time since 2017.

### ***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). In 2021, only the Point Augusta Index area and Kelp Bay were opened along the Baranof and Chichagof shorelines due to a weak early run of pink salmon. Beginning in August, with a robust mid run of pink salmon, the west and southwest Admiralty Island shorelines were opened. The District 12 common property commercial purse seine fishery harvested 5.0 million pink and 43,000 chum salmon (Table 2). The pink salmon harvest was 115% of the recent average harvest and the chum salmon harvest was 26% of the recent average harvest.

## **Point Augusta Index Area and Eastern Chichagof Island**

The District 12 traditional purse seine fishery in upper Chatham Strait opened in SW 26 on Sunday, June 20, in the Point Augusta index area for 15 hours (Table 7). The Point Augusta index area openings are intended to provide information on early pink salmon run strength and timing. Due to the poor parent year escapements, fishery openings were conservative and based on developing escapements.

The Point Augusta Index Area fishery takes place along a 1 nmi 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 2021, there were six 15-hour openings, from June 20 to July 18 (Table 7), that served as index fisheries with the area open within 0.5 nmi from shore. Pink salmon harvests in the index area were less than the recent average in all but one of these fisheries: July 11 (SW 29). With the exception of the initial opening on June 20 (SW 26) that received no effort, effort was below average in SWs 27 and 28, and above average for the remaining index openings. The final Index Area only opening occurred on July 18 in SW 30 after improving escapements in Port Frederick in District 14 and a strong pink salmon run in the Taku River led to additional open areas in Districts 12 and 14. Due to poorly developing escapements along the Eastern Chichagof Island shoreline, the Point Augusta Index Area was held to 0.5 nmi offshore until August 3 (SW 32) when the northern Chichagof shoreline adjacent to the Point Augusta area was opened. Subsequent openings were held to 1 nmi offshore to pass fish to the eastern Chichagof and Baranof Island systems whose escapements were developing slowly. The 2021 Point Augusta purse seine harvest for the 6 open index periods totaled 194,000 pink salmon (69% of the 282,000 fish recent average harvest for the same time period), and 11,000 chum salmon (32% of the 35,000 fish recent average harvest). The results from the Point Augusta Index Area fishery, the Hawk Inlet test fishery, and observations of traveling fish and development of escapements indicated the early component of the pink salmon run to northern Southeast Alaska inside (NSEI) waters was weak, but the mid-run component was robust, providing for further fisheries focused on harvesting pink salmon surplus to escapement needs in NSEI waters.

Tenakee Inlet pink salmon runs were weak in 2021. With very poor pink salmon parent-year escapements and weak results from the Point August Index fishery, no purse seine opportunity was provided in Tenakee Inlet. The 2021 pink salmon escapement index for this stock group of 213,000 index fish was within the management target range of 210,000–510,000 index fish (Table 12) and was over 5 times the 2019 parent-year index—the lowest index count for Tenakee Inlet since 2000.

Fish returning to Freshwater Bay and streams entering Chatham Strait along the eastern shoreline of Chichagof Island make up the Freshwater Bay stock group. The 2021 index count for the Freshwater Bay stock group of 84,000 pink salmon was within the management target range of 70,000–160,000 index fish (Table 12), and nearly 3 times the parent year index count. 2021 was the first year the index count for the Freshwater Bay stock group was within the management target range since 2011.

## **Hawk Inlet Shoreline**

The northwestern shoreline of Admiralty Island between Point Marsden and Funter Bay is known as the Hawk Inlet shoreline. Salmon stocks returning 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, as well as small systems in northern Chatham Strait important to local subsistence fisheries. The Hawk Inlet shoreline was closed by regulation during July between 1984 and 1988. In 1989, the BOF adopted 5 AAC 33.366 *Northern Southeast Seine Salmon Fishery Management Plans* which 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 north of Point Marsden in July when a harvestable surplus of pink salmon is observed. The BOF also specified that ADF&G must take into consideration conservation concerns for all species in the area when considering openings. In January 2006, the BOF further clarified that the sockeye salmon harvest limit be applied to only wild fish. In 2015, the BOF included the wild sockeye salmon harvests from the Amalga Harbor THA hatchery chum salmon fishery in the Hawk Inlet shoreline wild sockeye salmon harvest limit described in *Northern Southeast Seine Salmon Fishery Management Plans*. In 2018, the BOF removed the Amalga Harbor THA 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 meeting scheduled for January 2021 when the *Northern Southeast Seine Salmon Fishery Management Plans* 2020 sunset clause would be in front of the BOF was postponed due to the global COVID-19 pandemic, and the BOF extended the sunset clause through the 2021 season.

Since 1989, the fishery has opened in 17 of 32 years. A variety of factors and run strength assessments were used by ADF&G to help determine whether prosecuting a July purse seine fishery on this shoreline was warranted and how the fishery was structured. The assessment methods used by ADF&G to determine whether a harvestable surplus of pink salmon exists were as follows:

- Parent-year pink salmon escapements—overall escapement index value of the northern southeast inside subregion 2019 parent-year escapement fell below the escapement goal range. In this subregion, 19 of the 21 pink salmon stock groups were below management targets, and 2 stock groups were within the targets (Table 12).
- Hawk Inlet standardized test fishery—weekly pink salmon harvests were below average in all 4 standard weeks (SWs 26–29) in 2021; overall CPUE of pink salmon was 57% of the recent average. Standard test fishing occurred on June 26 and July 2, 9, and 16, 2021.
- Aerial surveys—early season pink salmon surveys conducted late June through early July indicated weak abundance but improved through July. On July 19 a good show of north bound pink salmon was observed along the Hawk Inlet shoreline, and on July 20 the show of north bound fish improved further. Additionally, steady movement of fish observed along the north shore of Icy Strait indicated continual migration of north bound pink salmon through the Icy Strait corridor.
- Drift gillnet pink salmon harvests—during SWs 28 and 29 (July 4–July 17), District 11 pink salmon harvests were 85% of the recent average and District 15 pink salmon harvests were 55% of the recent average. Daily pink salmon drift gillnet CPUE in Taku Inlet in D111 was average in SW 28 and above average in SW 29.
- Fish wheel catches—parent year 2019 Taku River fish wheel pink salmon catch was just above the recent odd-year average and the 2021 cumulative catch of pink salmon through

July 18 was 28% of average, through July 19 was 37% of average and through July 20 was 59% of average. In 2021, the Chilkat River fish wheel cumulative pink salmon catch through SW 29 was 16% of the recent odd-year average.

Overall assessment indicated below average run strength of northbound pink salmon along the Hawk Inlet shoreline in early July and rapidly increasing in run strength by mid-July. This suggested a weak early run with little to no surplus available, and a robust middle run of pink salmon that would provide a harvestable surplus in excess to escapement needs.

The department shall consider any possible conservation concerns for other salmon stocks, primarily sockeye salmon 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 primary sockeye salmon stocks transiting the Hawk Inlet shoreline during July include those originating from Chilkat 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 runs to the Chilkoot and Chilkat Lakes developed slowly. The Chilkoot Lake escapement projection met the lower bound of the sustainable escapement goal (SEG) range in mid-July and continued to improve through the rest of the season, with the final escapement above the SEG range. The Chilkat Lake DIDSON sonar counts never projected to achieve the biological escapement goal (BEG) range in 2021, with a final escapement of 97% of the lower bound of the BEG range. Taku River inseason abundance observed via cumulative fishwheel CPUE was below recent average in June and early July but shifted above average on July 20 and improved through the rest of the season. Inseason projections of terminal run strength of Taku River sockeye salmon were consistently well above the newly established BEG goal range.

The Hawk Inlet shoreline was opened for 8 hours on July 22 (Table 7) in the waters between Point Marsden and the latitude of Hanus Reef within 0.5 nmi of the Admiralty Island shoreline. The opening was based on observed rapidly increasing abundance of pink salmon along the Hawk Inlet shoreline in mid-July, the increasing CPUE of pink salmon in the Taku Inlet gillnet fishery and Taku River fishwheels suggesting a robust run of pink salmon to the Taku River, sockeye salmon tracking to meet escapement goals in the Taku and Chilkoot Rivers and it was early in the run timing for Chilkat sockeye salmon stocks. July 22 was also the final day of the truncated time period for the 15,000 wild sockeye salmon harvest limit described in *Northern Southeast seine salmon fishery management plans*. Otolith analysis from this opening indicated 18.3% of the sockeye salmon were enhanced Snettisham Hatchery origin resulting in a wild sockeye salmon harvest of 1,600 fish, well below the 15,000 wild sockeye salmon harvest limit through July 22.

The Hawk Inlet shoreline was opened again on July 29 (Table 7) with increased area and time. The open area was extended north to the latitude of Point Couverden within one-half mile of the Admiralty Island shoreline and open time increased to 15 hours. Harvest included 283,000 pink, 1,300 chum, and 2,000 sockeye salmon from 25 boats. The last opening of the Hawk Inlet shoreline was on August 2 and 3 (Table 7) in conjunction with the Admiralty Island shoreline south of Point Marsden. In statistical area 112-16, which includes the Hawk Inlet shoreline and the shoreline south of Point Marsden to Point Hepburn, 25 boats harvested 825,000 pink, 2,200 chum, and 12,800 sockeye salmon. Due to the substantial increase in sockeye salmon harvest and the Chilkat Lake sockeye salmon escapement projecting to not achieve the escapement goal, the Hawk Inlet shoreline was not opened for the remainder of the season.

## **West and Southwest Admiralty**

The west Admiralty Island shoreline south of Hawk Inlet initially opened on July 25 for a 15-hour opening (Table 7) within 1 nmi of the Admiralty Island shoreline from Point Marsden south to Point Hepburn. Due to the uncertainty in run strength based on the poor 2019 parent year escapements in the NSEI subdistrict, all subsequent openings in 2021 along this shoreline were limited to 1 nmi from shore to minimize the impact on fish migrating through the northern Chatham Strait corridor to other parts of the subregion. On July 30, the southern boundary was expanded to Fishery Point, and on August 2, the boundary was expanded further south to Parker Point. A total of two 15-hour openings and nine 39-hour openings were provided with the final opening on September 3 (Table 7). Peak effort and harvest occurred during the initial 39-hour beginning August 2 when the area south of Point Marsden was opened in conjunction with the Hawk Inlet shoreline with 26 boats harvesting 899,000 pink, 2,300 chum, and 13,000 sockeye salmon. Total pink salmon harvest for the West Admiralty fishery including the Hawk Inlet shoreline was 3.3 million fish, 71% of the 10-year average. Since 2011, the West Admiralty shoreline has only been opened in odd years due to the persistent poor performance of the even year pink salmon runs. The chum salmon harvest of 13,000 fish was 12% of the 10-year average and the sockeye salmon harvest of 29,000 fish was 68% of the 10-year average. The escapement index count for the West Admiralty stock group was 37,000 pink salmon, below the lower bound of the management target range of 50,000 to 120,000 index fish (Table 12) but was an improvement over the 2019 parent year index count.

Southwest Admiralty Island purse seine fisheries may occur south of Angoon in statistical areas 112-18 and 112-19, and often include openings inside Hood and Chaik Bays. Southwest Admiralty was initially opened August 11 for 39 hours within 1 nmi of the Admiralty Island shoreline. A total of seven 39-hour openings were provided with the final opening beginning September 3 (Table 7). Peak effort and harvest occurred during the initial 39-hour beginning August 10 when 16 boats harvested 332,000 pink, 6,200 chum, and 1,400 sockeye salmon. The escapement index for the southwest Admiralty stock group was 334,000 pink salmon, well above the management target range of 100,000 to 250,000 index fish (Table 12) and was over 5 times the 2019 parent year index count.

Subsistence salmon fisheries, particularly for sockeye salmon, are considered in the management of purse seine fisheries along the Admiralty Island shoreline. In recognition of the importance of these subsistence fisheries to Angoon residents, approximately 9 nmi 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.

## **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 ADF&G office. Within this area is the Hidden Falls THA as well as several productive pink and chum salmon systems in Kelp Bay. In early to mid-July, Ralph's Creek in the Middle Arm of Kelp Bay is monitored for summer chum salmon escapement. If chum salmon escapement is adequate in the 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; however, the actual boundaries chosen are also dependent on the run strength of Hidden Falls Hatchery chum salmon. In 2021, 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 was approximately 680 fish, well below the recent 10-year average of 5,400 fish. Pink salmon began to enter Kelp Bay in mid-July. By late July, aerial surveys indicated there were sufficient pink salmon present to allow limited seine opportunity. Kelp Bay was opened for two 15-hour fishing periods on July 29 and August 2 (Table 7). Salmon harvest from these periods is confidential. 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 2021. Although the pink salmon run improved from recent years, aerial survey observations indicated the pink salmon run was still relatively small and there was no harvestable surplus available. The escapement estimate of 322,000 index fish for this stock group was within the management target range (Table 12). Saook Bay and Rodman Bay contain the 2 most productive summer chum salmon systems in Section 13-C. Chum salmon escapements to both Saook and Rodman Bays were well below the recent averages for each system.

### ***District 14***

Several separate purse seine fisheries may occur in District 14 due to the large area of Icy Strait. Fishing areas open in District 14 in 2021 included the Whitestone shoreline, Port Althorp, and Idaho Inlet.

The Whitestone shoreline fishery, located along the northeast coast of Chichagof Island, 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. In 2021, the north Chichagof shoreline west of Spasski Island and the mouth of Port Frederick initially opened on July 22 with escapements to Port Frederick systems developing well. Three 15-hour openings (Table 7) were provided in this portion of the shoreline with peak effort and harvest occurring on the initial opening when 10 boats harvested 66,000 pink, 900 chum, and 700 sockeye salmon. Beginning August 2, the entire northeastern shore of Chichagof Island from Port Frederick to Point Augusta was opened for 39 hours within 1 nmi of shore to allow passage of migrating pink salmon stocks headed to the eastern shoreline of Chichagof and Baranof Islands. A total of seven 39-hour openings (Table 7) were provided in the full area, with peak effort and harvest occurring during the August 6 opener when 6 boats landed 148,000 pink, 550 chum, and 500 sockeye salmon. The pink salmon escapement index count for the north Chichagof stock group was 319,000 fish, above the management target range of 120,000 to 280,000 index fish (Table 12) and was over 7 times the 2019 parent year index count. Once the Whitestone shoreline is opened, the adjacent Point Augusta fishery in District 12 is no longer treated as an 'index fishery', their combined harvests better reflect the harvest from the northeastern shore of Chichagof Island. The 2021 combined season harvest from the Point Augusta and Whitestone shoreline beginning July 22 was 733,000 pink, 6,000 chum, and 4,000 sockeye salmon.

The Homeshore fishery on the north shore of Icy Strait was not opened in 2021. The pink salmon escapement index count for the Homeshore stock group was 26,000 index fish, below the management target range of 30,000 to 70,000 index fish (Table 12) but was 8 times the 2019 parent-year index count.

Idaho Inlet and Port Althorp in western District 14 are opens occasionally when run strength warrants. In 2021, these areas initially opened August 6 for 39 hours, and a total of six 39-hour openings were provided. The only reported effort and harvest occurred during the August 6 opening and is confidential.

## **Northern Southeast Alaska Outside Fisheries**

### ***Section 13-A***

Section 13-A includes the Lisianski Inlet, Portlock Harbor, Slocum Arm, and Salisbury Sound pink salmon stock groups. Additionally, 7 Northern Southeast Outside chum salmon index streams are located in this section. In 2021, pink salmon fisheries occurred in Portlock Harbor, Slocum Arm, Salisbury Sound, and Lisianski Inlet. Pink salmon runs to the Section 13-A stock groups, with the exception of the Slocum stock group, were below recent averages; however, pink salmon runs were improved relative to 2019 and 2020. All areas met or exceeded pink salmon escapement management targets (Table 12). The first common property purse seine opening in Section 13-A occurred on July 26 (Table 7). This first opening was offset later by 1 day with respect to the regional opening (occurred on Monday rather than Sunday) to increase fishing opportunity for the seine fleet. All other openings were commensurate with regional openings.

The Lisianski stock group has historically performed well during odd years. The Lisianski area first opened on July 26 and closed after the September 3 opening (Table 7). The harvest of approximately 278,000 pink salmon was below the recent average and was likely the result of low effort. Aerial surveys indicated pink salmon escapements to all 5 monitored systems were at or above recent averages. The final pink salmon escapement estimate of 488,000 index fish was well above the management target range (Table 12). This high level of escapement was driven by a large run of pink salmon to Lisianski River.

Portlock Harbor was first opened on July 26 and closed after the September 3 opening (Table 7). Pink salmon harvest was 179,000 fish. Although this level of harvest was below the recent average, it was much improved relative to 2019 and 2020. The 2021 pink salmon escapement index of 473,000 index fish was well above the management target range and higher than the recent average escapement of 443,000 fish (Table 12). The Portlock Harbor fishery harvested approximately 2,600 chum salmon. The chum salmon escapement estimate in Black River was 5,400 fish, below the recent average of 6,500 chum salmon.

Khaz Bay and Slocum Arm were first opened on July 26 and closed after the September 3 opening (Table 7). The total pink salmon harvest of 1.2 million fish was above the recent average of 1.1 million fish and was the largest harvest since 2017. The pink salmon escapement index estimate for this stock was within the management target range (Table 12). The total chum salmon harvest was 7,900 fish and chum salmon escapements to all 5 monitored systems were all well below recent 10-year averages.

Salisbury Sound first opened July 29 with openings continuing through August 18. Openings were commensurate with regional openings (Table 7). Although aerial surveys indicated adequate pink salmon escapement to most of the Salisbury Sound systems, management of the fishery was conservative to pass pink salmon through Salisbury Sound to Fish Bay and the Hoonah Sound and Peril Strait systems. The total pink salmon harvest was 379,000 fish, which was below the recent average harvest of 759,000 fish. The pink salmon escapement estimate for

the Salisbury stock group of 283,000 index fish was within the management target range (Table 12).

### ***Section 13-B***

Openings in Section 13-B may occur in 6 separate locations: 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 2 distinct purse seining areas—the southern and northern portions of Sitka Sound—that are managed differently due to the presence of hatchery fish. 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 Medveje Hatchery in Silver Bay and the Deep Inlet THA. The northern portion of Sitka Sound primarily consists of productive pink salmon systems, although hatchery chum salmon are still harvested in this area. Although there is no specific management plan for Eastern Channel purse seine fisheries, broodstock concerns and allocation of hatchery chum salmon are considered when providing traditional purse seine openings for pink salmon.

Sitka Sound did not open in 2021 for directed pink salmon or wild chum salmon fisheries (Table 7). Aerial survey observations indicated the pink salmon run to Sitka Sound was developing poorly and commercial opportunity was not warranted. Although there were no directed pink salmon openings in Sitka Sound, pink salmon were incidentally harvested in the Deep Inlet THA (purse seine, troll, and gillnet gear), Redoubt Bay, and in Silver Bay. An additional 45,000 pink salmon were harvested in these fisheries for the season. Aerial observations of abundance and harvest rates in northern Sitka Sound indicated wild chum salmon runs to Nakwasina Sound and Katlian Bay were weak. Pink salmon escapement failed to achieve the lower end of the management target range (Table 12). Both Nakwasina and Katlian Rivers had extremely poor runs of pink salmon this season, falling well below recent averages.

Whale Bay did not open for a directed pink salmon fishery in 2021 (Table 7). Aerial surveys indicated pink salmon runs were not adequate to provide for harvest opportunity. Pink salmon escapements to individual Whale Bay systems were well below recent averages. The final pink salmon escapement estimate for the Whale Bay stock group was 42,000 index fish, which was just above the lower end of the management target range (Table 12). There were no openings in Whale Bay specifically to harvest wild chum salmon returning to Great Arm systems. The peak estimate of chum salmon to the Whale Bay Great Arm head stream was 1,300 fish, which is below the recent 10-year average of 4,000 fish.

West Crawfish Inlet was not opened for a directed pink salmon harvest in 2021; however, it was opened 14 times to harvest Crawfish Inlet hatchery chum salmon that were building up at the head of the inlet. Aerial surveys indicated weak runs of pink salmon were returning to the 2 index systems. By late August, it was clear that the run had failed to improve. The pink salmon escapement index estimate was well below the management target range (Table 12). Approximately 1,000 pink salmon were harvested in openings designed to target hatchery chum salmon. The chum salmon peak escapement count from the West Crawfish head stream was 600 fish, which is below the recent 10-year average. Otolith samples from chum salmon were not taken in 2021 due to insufficient numbers of suitable chum salmon carcasses. Foot and aerial

surveys conducted in late August and early September suggested that few hatchery-produced chum salmon entered either of the West Crawlfish pink salmon index streams in 2021.

*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 salmon escapement projections in mid-July exceeded the 40,000 fish threshold, with actual escapement into Redoubt Lake exceeding 40,000 fish on August 6. Redoubt Bay was opened for purse seining on July 18. A total of 12 openings occurred until this area was closed after the August 18 opening (Table 7). Effort in the Redoubt Bay fishery was very low, and 600 sockeye salmon were harvested in southern Sitka Sound (not including harvest from the Deep Inlet THA) purse seine fisheries in 2021. The final weir count (all sizes) of sockeye salmon was 60,004 fish, which was above the optimal escapement goal range for Redoubt Lake of 7,000 to 25,000 sockeye salmon.

Aerial observations indicated there was insufficient sockeye salmon abundance in Redfish and Necker Bays in 2021 to provide purse seine opportunity.

### **Northern Southeast Alaska Fall Chum Salmon Fisheries**

Aerial surveys of Excursion Inlet in August and September indicated no excess chum salmon to escapement needs in the area. The 2021 peak chum salmon escapement index count of 1,900 fish was well below the 4,000–18,000 fish SEG escapement goal 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 2021, no surpluses of chum salmon were available for fall chum salmon fisheries. The peak aerial survey count of 5,500 chum salmon for Chaik Bay Creek was below the recent average of 8,500 fish. ADF&G 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 2021, these areas were not opened during the fall season because of low chum salmon runs to the area. Fall chum salmon escapements to Section 9-B were poor, with chum salmon escapements to Security Bay well below goal and escapements to Port Camden just above the lower bound of the escapement goal range (Table 13).

Directed chum salmon fisheries can occur in the waters of Sitka Sound targeting fall chum salmon runs 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 Rivers 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 2 directed fall chum salmon openings in 2021.

In 2021, common property purse seine harvest (traditional and THA) in southern Southeast Alaska was 37.2 million fish, which ranks 10th since 1960. Harvest included 14,000 Chinook, 740,000 sockeye, 252,000 coho, 35.1 million pink, and 1.1 million chum salmon (Tables 2 and 6).

## **Southern Southeast Alaska Outside Fisheries**

### ***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 where salmon bound for streams in Southeast Alaska and Canada are harvested. Prior to SW 31, District 4 is managed based on PST obligations and this time period is referred to as the treaty period. 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% of the Annual Allowable Harvest (AAH) of Nass and Skeena River 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 inriver escapement, whichever is less. Canada's Department of Fisheries and Oceans (DFO) 2021 preseason sockeye salmon run forecasts were for runs of 437,000 sockeye salmon to the Nass River and 1,697,000 sockeye salmon to the Skeena River. This produced an initial AAH estimate of approximately 25,000 Nass and Skeena Rivers sockeye salmon for the District 4 purse seine fishery.

Due to continuous high water and lagging escapement estimates for Skeena River sockeye salmon, the District 4 purse seine fishery did not open until July 11 (SW 29) and was limited to 8 hours (Table 8). During this opening, 37 vessels harvested 4,000 sockeye and 91,000 pink salmon. Due to the low sockeye salmon harvest and near average pink salmon harvest, District 4 was given a second 8-hour opening in SW 29 (Table 8) with 29 vessels harvesting 11,000 sockeye salmon and another 90,000 pink salmon. During early to mid-July, the high-water levels on both the Skeena and Nass Rivers began to decrease and the sockeye salmon escapements began to increase. Nass River sockeye salmon escapement had a dramatic increase with over 100,000 fish estimated to have passed the fish wheels over a 6-day period, July 9–14.

District 4 was open for another 8-hour opening in the beginning of SW 30 (Table 8) with 22 vessels harvesting 7,500 sockeye salmon and 80,000 pink salmon. A combination of pink salmon opportunity in the northern Chatham Strait corridor resulting in low effort, low harvest rates of sockeye salmon, and a significant storm forecasted for the potential midweek opening, District 4 was opened for a 15-hour midweek on Thursday, July 22 (Table 8) to finish out the treaty period. During this opening, 27 vessels harvested 26,000 sockeye and 320,000 pink salmon. The total treaty period sockeye harvest was 49,000 salmon.

The treaty period ended on July 24, and based on the high pink salmon harvest rates throughout the region and rapidly building pink salmon escapements to the inside waters of southern Southeast, the purse seine fishery began a 2-day on/2-day off rotational schedule in Districts 1–4 in SW 31 (Table 8). During SW 31, the first opening had 53 vessels harvest 525,000 pink



salmon. While the effort remained at 54 vessels for the second opening in SW 31, the harvest of pink salmon was extremely strong, with just over 2.0 million pink salmon harvested. The total harvest in SW 31 for the two 39-hour openings was 170,000 sockeye salmon, 30,000 coho salmon, 2.56 million pink salmon, and 56,000 chum salmon.

Harvest rates remained strong for pink salmon in SW 32 and the purse seine fishery was open for retention of Chinook salmon for the first opening of SW 32 in the outside waters of southern Southeast and throughout Northern Southeast. The purse seine fleets allocation of Chinook for 2021 was 8,800. The harvest of 6,400 chinook for the first 39-hour opening in SW 32 resulted in nonretention throughout the region for the remainder of the 2021 seine fishery. During the two 39-hour openings, 88 vessels harvested 6,400 Chinook, 139,000 sockeye, 18,000 coho, 4.9 million pink, and 50,000 chum salmon. SW 32 was the peak of pink salmon harvest and effort in District 4 for 2021. District 4 was open for another 39-hour period in SW 33 with 40 vessels harvesting 1.1 million pink, 43,000 sockeye, 4,000 coho, and 21,000 chum salmon. The second open period in SW 33 overlapped statistical weeks, beginning on Saturday and closing on Sunday in SW 34 (Table 8). Effort declined in SWs 33 and 34 due to declining pink harvest and pink salmon opportunities in other districts throughout the region. In SW 34, 25 vessels harvested 643,000 pink salmon, 56,000 sockeye, 4,000 coho, and 12,000 chum salmon during the Sunday portion and the other single 39-hour. Effort and harvest continued to decline through the end of the season. There were two 39-hour openings in SW 35 and SW 36 with 37 vessels harvesting 683,000 pink salmon for SW 35 and 22 vessels harvesting 235,000 pink salmon in SW 36.

Management actions were taken to maintain Alaska's treaty obligations during the treaty period. The District 4 purse seine fishery had 3 limited 8-hour openings and one 15-hour opening during the treaty period, which all occurred in SWs 29 and 30. The district remained closed during SW 28 (Table 8). Total fishing time during the treaty period was limited to 39 hours, below the 1985–2020 average of 61 hours. Total harvest during the treaty period was 49,000 sockeye, 24,000 coho, 583,000 pink, and 57,000 chum salmon by 49 purse seine vessels. This sockeye salmon harvest was 31% of the 1985–1998 average of 158,000 fish, 76% of the 1999–2008 average of 65,000 fish, and 131% of the recent average of 37,000 fish. The purse seine effort of 48 vessels was also low compared to the 1985–1998 average of 139 vessels, but comparable to the 1999–2008 average of 47 vessels and the recent average of 48 vessels. The total purse seine harvest in District 4 was 6,500 Chinook, 496,000 sockeye, 98,000 coho, 10.7 million pink, and 212,000 chum salmon harvested by 102 vessels (Table 2). Effort was also below the 1985–2020 average effort of 147 vessels.

In recent years, approximately 60% of sockeye salmon harvested during the treaty period have been of Nass and Skeena Rivers origin. In January 2021, the NBTC finalized the run reconstruction for 2020 and presented the preliminary run reconstruction for 2021 to the bilateral Northern Panel. For 2021, the preliminary run reconstruction allowed for an AAH of 27,671 fish, which is slightly above the preseason AAH of Nass and Skeena sockeye salmon. During the treaty period, Alaska harvested 32,312 Nass and Skeena River sockeye salmon. This resulted in an overage of 4,641 sockeye salmon for 2021 and a cumulative underage of 132,033 treaty sockeye since 1999.

## 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, and north of the U.S./Canada border in Dixon Entrance (Figure 1). Purse seining primarily takes place in the waters of Revillagigedo Channel (immediately south of Ketchikan) and along the Gravina Island shoreline in Clarence Strait as the season progresses and escapements begin to improve. Run timing to Revillagigedo Channel is mixed with both early, middle, and late timed pink salmon runs. The early timed pink salmon systems are large producers of pink salmon and provides some of the first opportunity in the Ketchikan Area for harvest of wild stock pink salmon.

The 2021 District 1 purse seine fishery pink salmon harvest was above the 1985–2020 average. Pink salmon runs in 2019 met their escapement goals in all stock groups and ocean conditions returned to more normal, favorable conditions in July and August of 2019, which set the stage for a strong return in 2021. (Table 12).

The District 1 purse seine fishery began July 4 in SW 28 with a 15-hour period (Table 8) and normal early-season lines that included the Percy Islands. During this opening, 55 vessels harvested 39,000 pink salmon, which was two-thirds of the recent average. Aerial surveys of the early-run pink salmon systems in Boca De Quadra and Smeaton Bay showed above average escapements for the timing and given the strong pink salmon harvest in District 7, District 1 opened for a 15-hour mid-week opening (Table 8) in a support role to District 7 with the expectation that effort would decrease. Effort decreased to 39 vessels for this opening while the harvest of pink salmon increased to 81,000 fish. Total harvest for SW 28 was 2,000 sockeye, 800 coho, 120,000 pink, and 13,000 chum salmon.

The next opening was for 15 hours on Sunday, July 11, in SW 29 (Table 8). Effort decreased to 26 vessels while harvest increased to 111,000 pink salmon. The decrease in effort coincided with the first limited 8-hour opening in District 4. Pink salmon escapements were building rapidly and were well above average for the timing in the early District 1 mainland systems, while the harvest remained average for SW 29. Effort increased with 67 vessels harvesting 298,000 pink salmon during the second 15-hour opening in SW 29. For this opening, total pink salmon harvest was slightly above average. Area restrictions at the mouth of Boca de Quadra to conserve Hugh Smith Lake sockeye salmon—which was projected to be well below the lower bound of the escapement goal—were first implemented in SW 29. Total harvest for SW 29 was 1,800 sockeye, 1,800 coho, 409,000 pink, and 14,000 chum salmon by 67 vessels.

Effort remained similar at 68 vessels during the first SW 30 opening. These 68 vessels harvested 633,000 pink salmon, almost 3 times the recent average total harvest, and the harvest per vessel more than twice the recent average. The second opening in SW 30 had the peak effort for the season in District 1, with 72 vessels fishing, and harvest dropped to 475,000 pink salmon. The total harvest for SW 30 was 6,000 sockeye, 5,100 coho, 1.1 million pink, and 47,000 chum salmon by 89 vessels. The Hugh Smith Lake sockeye closure in front of Boca de Quadra remained in effect during SW 30.

SW 31 was the start of a 2-day on/2-day off fishing schedule (Table 8). During this week it was becoming clear that Southern Southeast Alaska was experiencing a strong run of pink salmon. Open fishing areas were expanded in Districts 1 and 2 to provide additional opportunity to target

pink salmon. Effort in District 1 decreased to 57 vessels for the first 39-hour opening in SW 31 and harvest increased to 686,000 pink salmon. Increased area restrictions in front of Boca de Quadra to further conserve Hugh Smith Lake sockeye salmon were implemented in SW 31 because the run was only projecting to be 50% of the lower bound of the escapement goal range. During the second 39-hour opening in SW 31, effort decreased to 45 vessels and harvest decreased to 571,000 pink salmon. The total harvest in SW 31 was 25,000 sockeye, 7,700 coho, 1.3 million pink, and 43,000 chum salmon by 72 vessels.

District 1 was open for two 39-hour openings in SW 32 (Table 8). Area expansions continued this week with the northern portion of the Gravina Island shoreline opening, and also area in East Behm Canal to include waters south of a line from Fox Point to Roe Point. Area restrictions remained in place to conserve both Hugh Smith and McDonald Lakes stocks of sockeye salmon which resulted in lost opportunity to harvest excess pink salmon returning to the Boca de Quadra and West Behm Canal systems. Effort continued to decline in District 1 due good pink fishing in District 4, but the harvest per vessel was excellent with over 20,000 pink salmon per vessel. During the first opening, 37 vessels harvested 656,000 pink salmon, and 26 vessels harvested 615,000 pink salmon during the second opening. The total harvest in SW 32 was 16,700 sockeye, 5,300 coho, 1.3 million pink, and 18,000 chum salmon by 43 vessels.

An aerial survey of the East Behm Canal stock group conducted on August 12 showed extremely strong pink salmon escapement throughout the area with the index count already above the upper bound of the pink salmon escapement management target for the stock group. Given where the West Behm Canal stock group was currently at for pink salmon escapement and the volume of pink salmon still transiting through the Clarence Strait corridor, District 1 transitioned into a 3-day-on/1-day-off rotational fishery (Table 8) in an effort to harvest excess pink salmon to spawning requirements. The combination of increased time in the district and fishing in District 4 beginning to slow down, effort increased in District 1 with 32 vessels harvesting 919,000 pink salmon in the first 39-hour opening and 48 vessels harvested 1.5 million pink salmon in the second 63-hour opening. The Hugh Smith sockeye area restrictions were lifted for the second 3-day opening that began on Saturday, August 14. The total harvest in SW 33 was 10,300 sockeye, 4,500 coho, 1.5 million pink, and 14,000 chum salmon by 45 vessels.

There was only one 63-hour opening during SW 34 due to the cycle of the 3-day on/1-day off fishery, but the 3-day opening that began on Saturday of SW 33 carried over 2 days in SW 34 resulting in the district being open for 107 hours in SW 34 (Table 8). Effort and harvest continued to climb during the 63-hour SW 34 opening with 56 vessels harvesting 1.7 million pink salmon. The total harvest in SW 34 was 11,200 sockeye, 10,600 coho, 2.7 million pink, and 26,000 chum salmon by 59 vessels.

Effort in SW 35 started to decline and this trend continued through the end of the season. During the first opening of the week, 37 vessels harvested 716,000 pink salmon, which was again 3 days, and 21 vessels harvested 421,000 pink salmon during the second opening which was reduced back to a 2-day, 39-hour opening (Table 8). In the final 2 openings in SW 36, 19 vessels harvested 248,000 fish in the first opening and 16 vessels harvested 141,000 fish in the second to finish out the season.

In 2021, the District 1 traditional purse seine harvest of all salmon except chum salmon were above the 1985–2020 averages: pink salmon harvest of 9.85 million fish was 186%, chum salmon harvest of 201,000 fish was 70%, sockeye salmon harvest of 95,000 fish was 108%, and

coho salmon harvest of 54,000 fish was 152% of the average harvests since 1985 (Table 2). This was the 5th largest District 1 pink salmon harvest since statehood. District 1 was open for 17 fishing periods totaling 591 hours (Table 8). This was more than the recent average and higher than the 1985–2020 average of 421 hours. Indexed escapement to the district was 4.17 million pink salmon, above the management target range of 1.02–2.71 million index fish (Table 11). This large pink salmon escapement index was in part due to the large numbers of pink salmon observed in the Marten and Keta Rivers in Boca De Quadra which were influenced by restrictions in SWs 29–33 to conserve Hugh Smith Lake sockeye salmon. District 1 remained on Chinook salmon nonretention the entire season to conserve Unuk and Chickamin Chinook salmon.

The *McDonald Lake Sockeye Salmon Stock Status and Action Plan, 2018* (Walker et al. 2018) was in effect during the 2021 season. The action plan set specific time and area restrictions to conserve McDonald Lake sockeye when historically those fish are present in the fisheries. In the Ketchikan Management Area, the action plan states that the western shore of Gravina Island is to remain closed north of the latitude of Cone Point through stat week 31, as well as the Ship Island shoreline in District 2 through SW 32. In 2021, additional management action was taken beyond the scope of the action plan. The Ship Island shoreline, subdistrict 102-80, did not open for an additional 6 days after the stated time restriction in the action plan. Estimated escapement into McDonald Lake of 44,500 sockeye salmon was below the SEG range of 55,000 to 120,000 fish (Table 14) and makes this the 6th year in a row that McDonald Lake sockeye has not reached the lower bound of the escapement goal.

Management action was taken during the 2021 season closing area near Boca De Quadra during SWs 29 and 30, then increasing the closed area in SWs 31 through 33 due to a very poor run of Hugh Smith Lake sockeye salmon. In 2006, the BOF removed Hugh Smith Lake sockeye salmon as a stock of concern; however, ADF&G still maintains the option to impose closures if the inseason run size estimates falls short of the escapement goal range. The 2021 Hugh Smith Lake adult sockeye salmon escapement was 3,200 fish, well below the escapement goal range of 8,000 to 18,000 fish (Table 14). This is the 4th consecutive year that Hugh Smith sockeye salmon escapement has been below goal.

## ***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 4 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, Anita Bay, Nakat Inlet, and Neets Bay (Figure 2).

The waters of the Kendrick Bay THA opened by regulation continuously to purse seine harvest beginning Tuesday, June 15, in SW 25 (Table 9). A limited portion of lower District 2 was open beginning Sunday, June 20, in SW 26 (Table 8) to harvest hatchery summer chum salmon returning to Kendrick Bay. These openings target enhanced Kendrick Bay summer chum salmon at a time when few wild stock salmon are present and quality is at a maximum. Open area for

this fishery consists of waters in District 2 north of 54°47.08' N lat (approximately 0.5 nmi south of McLean Point Light) and south of the northernmost tip of Polk Island. Additionally, beginning in 2014 and continuing through 2021, waters were closed east of a line only allowing 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 (4 days) in duration, from Sunday through Wednesday each week for 3 to 4 weeks; however, in 2021, fishing time was restricted due to low expected runs of hatchery chum salmon and the recent increase in harvest of wild salmon. The area outside Kendrick Bay was open for 39 hours in SWs 26 and 27 (Table 8).

Sixteen purse seine vessels caught 9,000 chum salmon during the first 39-hour opening in SW 26 (Table 8) and as a precursor to the large pink salmon run, these 16 vessels harvested 102,000 pink salmon during SW 26. This was the largest SW 26 pink salmon harvest since statehood and 785% higher than the next highest SW 26 pink harvest of 14,000 in 2013. Harvest remained at 9,000 chum salmon by 37 vessels during the 39-hour opening in SW 27, and the unprecedented pink harvest from the previous week decreased to 4,000 pink salmon, which was below the recent average of 34,000 fish for the week. The traditional pink salmon fishery began in SW 28, and due to the low harvest rate of hatchery chum salmon, early access openings for chum salmon did not continue. Overall, 39 vessels harvested 18,000 chum salmon in the 2 early season Kendrick Bay purse seine openings.

The traditional purse seine fishery in District 2 targeting local stocks of pink salmon opened Sunday, July 4, in SW 28 for 15 hours (Table 8). In this opening, 17 vessels harvested 2,000 pink salmon. District 2 was open for two 15-hour openings each week from SW 28 through SW 30 (Table 8). Harvest was near recent average for this time period and in SW 31 District 2 shifted to a 2-day on/2-day off fishing schedule which continued to SW 33. Harvest increased dramatically during the second opening in SW 31 from 218,000 pink salmon harvested by 29 vessels to 868,000 pink salmon harvested by 47 vessels. During the second opening beginning July 29, the open area was expanded north to include the Lyman Anchorage shoreline south of Windfall Harbor. This was a very early opening for the Lyman shoreline to open as it typically does not open until August. The opening was based on aerial surveys showing strong pink salmon runs to both Kasaan Bay and Cholmondeley Sound and large volumes of pink salmon observed southbound in the middle of the Clarence Strait corridor along both the Lyman shoreline and the Ship Island shoreline. The total harvest in SW 31 was 12,000 sockeye, 9,700 coho, 1.1 million pink, and 31,000 chum salmon by 57 vessels.

Effort dropped slightly in the district during SW 32 as more vessels moved to District 4 due to strong harvests of pink salmon. CPUE for vessels that remained in District 2 was very high with 24,500 pink salmon per boat during the first opening and over 30,000 pink salmon per boat for the second opening in SW 32. The total harvest in SW 32 was 8,200 sockeye, 4,800 coho, 1.3 million pink, and 31,000 chum salmon. As in District 1, District 2 remained on Chinook nonretention during the SW 32 opening.

After aerial surveys in Cholmondeley Sound and portions of Kasaan Bay and Skowl Arm on August 12, District 2 was extended to a 3-day-on/1-day-off fishing schedule beginning August 14 in SW 33 that coincided with the District 1 fishing regime (Table 8). Similar to District 1, the second opening in SW 33 carried over into SW 34. The total harvest for SW 33 was 7,200 sockeye, 5,100 coho, 1.8 million pink, and 30,000 chum salmon by 51 vessels.

The 3-day on/1-day off fishing schedule remained through SW 34, and similar to District 1, the 3-day opening that began on Saturday of SW 33 carried over 2 days in SW 34 resulting in the district being open for 107 hours in SW 34 (Table 8). The total harvest in SW 34 was 9,900 sockeye, 5,100 coho, 1.35 million pink, and 18,000 chum salmon by 42 vessels.

Aerial surveys indicated very strong pink salmon escapements in Moira Sound and Cholmondeley Sound. This led to a terminal fishery inside Moira Sound beginning Sunday, August 22, that remained in place through SW 35, and a 1-day terminal fishery inside Cholmondeley sound on August 27. Both fisheries were open inside normal markers. The pink salmon management escapement target is 50,000 to 130,000 pink salmon for Moira Sound and the pink salmon terminal harvest in the Moira Sound terminal pink fishery was 137,000 pink salmon with an index escapement count of 141,000 pink salmon. The harvest of pink salmon in the terminal pink fishery in Cholmondeley Sound was 300,000 fish. Cholmondeley Sound was only open for 1 day on the inside to conserve early fall chum salmon that may be present in late August.

In SW 35, the fishery shifted back to a 2-day on/2-day off fishing schedule which continued through the end of the season. The District 2 purse seine fishery closed for directed pink salmon fishing on September 4 in SW 36 (Table 8). Effort peaked and dropped throughout the season, reaching highs of 45 vessels in SWs 31, 33, and 35, and dropping to the mid- to lower 20s between those peaks.

There were 17 traditional pink salmon fishery openings following the earlier, extended Kendrick Bay openings targeting enhanced summer chum salmon (Table 8). A total of 122 purse seine vessels fished District 2, less than the 1985–2020 average of 149 vessels. The district was open for purse seine harvest for a total of 693 hours during the 2021 season, which is above the recent 10-year average of 578 hours. This includes the early outside Kendrick Bay fishery.

District 2 traditional purse seine harvest of 7.7 million pink salmon (Table 2) was well above the 1985–2020 average of 3.8 million fish and was the 5th largest pink salmon harvest since statehood. Total harvest of 435,000 chum salmon was 93% of the 1985–2020 average of 466,000 fish. There were 2 fall openings in District 2 to target fall chum salmon (see *Southern Southeast Alaska Fall Chum Salmon Fishery* section). The District 2 traditional fishery sockeye salmon harvest of 69,000 fish was above the 1985–2020 average of 41,000 fish, the coho salmon harvest of 54,000 fish was above the average of 48,000 fish, and Chinook salmon was on nonretention for the duration of the season in an effort to conserve Unuk and Chickamin Rivers Chinook salmon stocks. Indexed escapement to the district of 1.52 million pink salmon was above the management target range of 290,000 to 770,000 index fish (Table 11).

### ***District 3***

District 3 encompasses all inside waters off the west coast of Prince of Wales Island, from a southern point at Point Marsh Light to Aneskett Point in 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 runs in District 3 are generally later, and the district historically opens in SW 30.

The District 3 purse seine fishery opened on Sunday, July 18, in SW 30 (Table 8) and was open for two 15-hour openings before shifting to a 2-day on/2-day off fishing schedule with the rest of the districts (Table 8). During the first 15-hour opening in SW 30, 9 vessels harvested 9,000 pink salmon. Effort and harvest dropped for the next 15-hour opening, with 5 vessels harvesting 1,000 pink salmon. Effort and harvest remained low through the second opening in SW 32, but then dramatically improved with 20 vessels harvesting 329,000 pink salmon during the second opening of the week. Aerial surveys at the beginning of SW 32 indicated average to above average pink salmon escapement for the timing in both Cordova Bay and middle District 3 systems in Section 3-B. With the strong runs to Districts 1 and 2, there was little concern about high effort in District 3. Open area remained slightly conservative in both Sections 3-A and 3-B to pass Hetta Lake sockeye salmon in Hetta Inlet in Section 3-A and Klawock Lake sockeye salmon in Section 3-B. Effort climbed steadily to peak in the second opening of SW 33 with 47 vessels harvesting 888,000 pink salmon. Effort then declined in SWs 34 and 35, with 29 vessels harvesting 516,000 pink salmon during the second opening of SW 35. For the next opening in SW 36, harvest per vessel dropped with 23 vessels harvesting 277,000 pink salmon, and for the second opening of the week and final opening of the season, 8 vessels fished and harvested 53,000 pink salmon. District 3 closed for the season on September 4, after a total of 13 openings totaling 459 hours of fishing time (Table 8).

District 3 purse seine pink salmon harvest of 4.1 million fish (Table 2) was above the 1985–2020 average of 3.7 million fish. Harvest of sockeye salmon was 28,000 fish or 126% of the 1985–2020 average of 22,000 fish; coho salmon harvest of 29,000 fish was 98% of the 1985–2020 average of 30,000 fish; chum salmon harvest of 154,000 fish was 148% of the 1985–2020 average of 104,000 fish; and Chinook salmon was on nonretention for most of the season with only 49 fish harvested in District 3 (Table 2). Indexed escapement of 2.57 million pink salmon was above the management target range of 0.95 to 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 2021. 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 2021, pink salmon runs to District 5 were expected to be good throughout the district based on parent-year escapements. District 5 was open for a total of ten 39-hour openings from SW 31 through SW 36 (Table 8). Effort in District 5 was low throughout the season.

The district opened for 39-hours in SW 31 beginning on Thursday, July 29 (Table 8). Open area was limited to Shakan Bay east of Station Island Light (the interior portion of the bay). Harvest is confidential due to low effort.

In SW 32, Lower Sumner Strait south of a line from Point Amelius to Barrier Island was opened for 39 hours beginning on Monday, August 2 (Table 8). Because of low effort and information

from aerial surveys indicating that escapement was occurring, another 39-hour period beginning Friday, August 6 (Table 8), was permitted in mid-week and area expanded to include Affleck Canal. The district was open on a two-day on/two-day off rotation until SW 36 (Table 8). However, Shipley Bay was closed to fishing in SW 34 and Affleck Canal was closed in SW 35 to provide for escapement.

In SW 36, the final District 5 39-hour open began on Friday, September 3 (Table 8), with the open area in lower Sumner Strait south of the latitude of Point Amelius. The final opening received zero effort which was consistent with low effort throughout the season.

The total District 5 harvest in 2021 was 285,000 pink salmon compared to the recent average of 412,000 fish and ranked 22 out of the 62 years since statehood (Table 2). Harvest of other species included 9,600 sockeye, 2,000 coho, and 6,200 chum salmon. Overall, the district pink salmon escapement of 411,000 index fish was within the management target range of 250,000 to 660,000 index fish (Table 12).

### ***District 6***

District 6 is divided into 4 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 gear. Sections 6-A and 6-B are drift gillnet only fishing areas.

The McDonald Lake action plan was in effect for the District 6 purse seine fishery in 2021. 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 to seine gear in SWs 29–31. Parent-year pink salmon escapements in District 6 were rated as good to excellent.

District 6 was opened for the first time in SW 31 for a 39-hour period beginning on Thursday, July 29 (Table 8) based on aerial survey observations of escapement. Area was restricted to Mosman Inlet, McHenry Inlet, and contiguous waters, east and north of a line from the east side of Cooney Cove to the easternmost tip of Stanhope Island to a point on Etolin Island. Burnett and Mosman Inlets were closed. Effort was low and harvest was confidential.

In SW 32, with escapement continuing, District 6 was open for two 39-hour periods; the first period began on Monday, August 2, and the second began on Thursday, August 5 (Table 8). Open area was expanded to north and east of a line between Point Stanhope and Lemesurier Point with Stikine Strait, Rocky Bay, and Mosman Inlet closed. Effort remained low and harvest is confidential.

In SW 33, Section 6-D was open for two 39-hour periods (Table 8) with area open south of the latitude of 55° 05.76' N lat on the Prince of Wales shoreline and open on the Etolin Island shoreline between Point Harrington and Point Stanhope. Additionally, because of aerial escapement observations Stikine Strait and Steamer Bay were also opened. Nineteen vessels harvested 448,000 pink salmon in the first SW 33 opening and 16 vessels harvested 222,000 pink salmon in the SW 33 midweek opening.



In SW 34, Sections 6-C and 6-D were opened for 39 hours beginning on Wednesday, August 18 (Table 8). The Section 6-D open area remained the same from SW 33 and there were no restrictions on the 6-C area. Eleven vessels harvested 164,000 pink salmon during the 2-day opener.

There were two 39-hour openings in SW 35 (Table 8). The first, beginning on Sunday, August 22, opened the same area as the previous opening. Another 39-hour midweek opening that began on Thursday, August 26, but closed Stikine Strait and Steamer Bay in 6-D to allow for escapement. Those areas remained closed through the end of the season.

The 2021 District 6 pink salmon harvest of 1,224,000 fish (Table 2) was well above the average of 551,000 fish and ranked 7th since statehood, and the harvest of 21,000 chum salmon was above the average of 16,900 fish.

The 2021 District 6 harvest of other salmon by species was 65 Chinook, 29,000 sockeye, and 10,400 coho salmon (above the average coho salmon harvest of 8,300 fish).

Pink salmon escapements in District 6 varied but all stock groups were within or above their target ranges. Pink salmon escapement for the district was 502,000 index fish, within the management target range of 210,000 to 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 2 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, whereas Section 7-B streams exhibit middle to late run timing. Section 7-A is known as the Anan fishery because 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 2021. The plan dictated Section 7-B would remain closed in SWs 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 2021 because Section 7-B opened in SW 31 by restricting open area to the easternmost part of Section 7-B.

In 2021, 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 two 15-hour openings south of the latitude of Point Warde in SW 28 (Table 8) on Sunday, July 4, with 19 vessels participating, and on Thursday, July 8 with 34 vessels participating. Pink salmon harvest was 64,400 fish above the recent average of 21,000 fish, and chum salmon harvest was 2,200 fish during the first opening. The second opening produced a harvest of 46,700 pink salmon (below the recent average of 85,000 fish) and 3,950 chum salmon.

In SW 29, Section 7-A opened on Sunday, July 11, for another 15-hour period with the same area restrictions as SW 28. Escapement to Anan Creek and a high male sex ratio was observed,

so another commercial opportunity was warranted. Effort was 24 boats; harvest remained steady at 46,000 pink salmon (above the recent average of 41,000 fish) and 7,800 chum salmon.

In SW 30, Section 7-A opened with the same area for 1 additional 15-hour opening on Sunday, July 18 (Table 8). Effort remained the same at 24 boats and harvest increased to 60,000 pink salmon compared to the 10-year average of 100,000 fish, and included 19,700 chum salmon. On July 20, an aerial survey revealed that escapement into Anan Creek had dropped off, and coupled with below average harvest levels, no further commercial opportunities in subdistrict 7-A were warranted.

Section 7-B was opened for the first time in SW 31 for 2 periods, the first on July 25 for 15 hours and the second beginning on July 29 for 39 hours (Table 8). During an aerial survey between the 2 periods, a strong showing of fish was observed in the Menefee Inlet area of subdistrict 7-A which was above the area open in 7-B, and which prompted an increase to a 39-hour period for the second opening of SW 31. Four boats participated in the first opening for a harvest of 41,000 pink and 5,000 chum salmon. Five boats participated in the second SW 31 opening for a harvest of 78,000 pink and 8,100 chum salmon.

In SW 32, the McDonald Lake action plan no longer restricted management actions so the open area was increased to all of Section 7-B. There were two 39-hour openings in SW 32 (Table 8). During the first opening 12 vessels participated and harvested 199,000 pink and 7,000 chum. In the second SW 32 opening, 5 boats participated harvesting 193,000 pink and 3,800 chum salmon. Meanwhile, the salmon observed during aerial surveys the previous week were distributing into Section 7-A tributaries in the Bradfield Canal area, including Anan Creek.

In SW 33, considering the aerial survey observations and expectations of low effort, Section 7-B was opened for two 39-hour periods (Table 8). Harvest in the first period was 173,000 pink salmon (compared to the recent average of 81,000) and 3,600 chum salmon with 8 vessels participating. In the second SW 33 period, 91,000 pink and 2,700 chum salmon were harvested with 3 boats participating.

The last Section 7-B fishing period of the 2021 season occurred in SW 34 for 39 hours beginning on Wednesday, August 18. Harvest was 59,000 pink salmon (compared to the recent average of 37,000) and 800 chum salmon with 6 vessels participating.

The 2021 District 7 seine harvest of 1.1 million pink salmon, compared to the recent average of 859,000 fish, ranked 19th since 1960. Harvest of other salmon included 300 Chinook, 12,800 sockeye, 3,800 coho and 64,700 chum salmon (Table 2). The majority of pink salmon harvests were from Section 7-B and included 834,000 fish. The majority of chum salmon harvests came from 7-A and included 34,000 chum salmon. Pink salmon indexed escapement of 431,000 indexed fish for the Anan stock group was within the management target range of 210,000 to 570,000 indexed fish. Pink salmon indexed escapement for the Union Bay stock group was 121,000 indexed fish, just above the management target range of 50,000 to 120,000 indexed fish for the stock group (Table 12). Overall, the district escapement of 552,000 was within the management target range of 260,000 to 690,000 fish (Table 11).

### **Southern Southeast Alaska Fall Chum Salmon Fishery**

There were limited fall chum openings in southern Southeast Alaska in 2021. Initial surveys to Cholmondeley Sound indicated average fall chum salmon abundance in Cholmondeley Sound and District 2 was opened for 2 openings with conservative lines. The first opening's harvest is

confidential because only 1 boat had minimal harvest and the opening on September 19 had no effort. Aerial survey estimates of fall chum salmon escapement in Cholmondeley Sound showed adequate escapement inside Cholmondeley Sound but with lack of interest and effort and very little harvest in the outer portion of the bay during the first opening it was clear that there was little to no new fall chum salmon entering Cholmondeley Sound and the fishery closed for the season. Aerial surveys continued through October 2. The combined peak survey of Disappearance and Lagoon Creeks was 55,000 chum salmon, which was above the escapement goal range of 30,000 to 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 2021 Southeast Alaska/Yakutat Salmon Troll Fisheries (Hagerman et al. 2022).

### **PINK SALMON**

Southeast Alaska pink salmon index streams are grouped into 3 stock groups that consist of aggregates of index streams across broad subregions: Southern Southeast, Northern Southeast Inside, and Northern Southeast Outside (Piston and Heintz 2020a). 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 2021 Southeast Alaska pink salmon escapement index of 15.67 million fish ranked 10th since 1960 (Figure 5). Biological escapement goals were met or exceeded in all 3 subregions of Southeast Alaska (Table 10). Management targets for pink salmon were met or exceeded for all 15 districts with management targets (Table 11) and, at a finer scale, for 40 of the 46 pink salmon stock groups (Table 12).

It is important to note that the Southeast Alaska pink salmon index does not provide an estimate of the total escapement, and its relationship with the total pink salmon escapement in Southeast Alaska is far from certain. An escapement estimate is a statistically reliable measure of escapement magnitude (i.e., the total number of fish in the escapement) and is much less than total or actual escapement. An escapement estimate is approximately in the same units as the estimates of harvest, and harvest estimates and escapement estimates can logically be added together to produce an estimate of total run size. Alternatively, an escapement index is a relative measure of escapement that is useful for year-to-year comparisons (Piston and Heintz 2020a).

### **Southern Southeast Subregion**

The Southern Southeast Subregion includes all the area from Sumner Strait south to Dixon Entrance (Districts 1–8). The 2021 pink salmon harvest of 38.1 million fish was 207% of the recent average (Figure 6). The escapement index value of 9.8 million was above the escapement goal range of 3.0 to 8.0 million index fish (Table 10, Figure 6). Escapement indices were within or exceeded management targets for 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 2021 pink salmon harvest of 8.0 million fish was 72% of the recent average (Figure 7). The escapement index value of 3.9 million fish was within the escapement goal range of 2.5 to 6.0 million index fish (Table 10, Figure 7). Escapement indices were within or above management targets for all 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 2021 pink salmon harvest of 2.4 million fish was 56% of the recent average (Figure 8). The escapement index value of 1.94 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 pink salmon stock groups within this subregion (Tables 11 and 12).

## **CHUM SALMON**

Southeast Alaska summer-run chum salmon index streams are grouped into 3 stock groups that make up aggregates of index streams across broad subregions: Southern Southeast, Northern Southeast Inside, and Northern Southeast Outside (Piston and Heintz 2020b). 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 2021 index count of 77,000 chum salmon in the Southern Southeast subregion was 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 2021 index count of 67,000 chum salmon was below the lower-bound SEG of 107,000 index fish (Table 13, Figure 9).

## **Northern Southeast Outside Subregion**

The Northern Southeast Outside Subregion includes 9 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 2021 index count of 11,600 chum salmon was below the lower bound SEG of 25,000 fish (Table 13, Figure 9).

## **Fall-Run Chum Salmon**

Fall chum salmon escapement goals were met for 3 of the 5 fall-run stocks with formal escapement goals in 2021 (Table 13). The escapement of 172,000 fish to the Chilkat River was within the SEG range of 75,000 to 250,000 fish; however, the harvest of 10,000 fall chum

salmon in Lynn Canal was well below average. The Excursion River escapement index of 1,900 fish was below the SEG range of 4,000 to 18,000 index fish and was the 3rd consecutive year below goal. The Cholmondeley Sound escapement index of 55,000 fish was above the upper bound of the SEG range of 30,000 to 48,000 index fish. The Port Camden index of 2,220 fish was within the SEG range of 2,000 to 7,000 index fish, and the Security Bay index of 3,000 fish was below the escapement goal range of 5,000 to 15,000 index fish.

## **SOCKEYE SALMON**

In 2021, sockeye salmon escapement goals were met for 9 of the 12 sockeye salmon systems in the region that currently have escapement goals (Table 14). The McDonald Lake escapement of 44,500 fish was below goal range and has now been below goal in 6 consecutive 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 3,200 sockeye salmon at Hugh Smith Lake was well below the optimal escapement goal range of 8,000 to 18,000 fish. The Chilkat Lake escapement of 65,000 fish was also below the BEG of 70,000 to 150,000 fish. Escapements were within goal ranges for Stikine River mainstem and Speel Lake. Escapements exceeded the upper bound of goal ranges for Chilkoot, Tahltan, and Redoubt Lakes, and the Taku River.

## **CHINOOK SALMON**

There are 11 Chinook salmon stocks in Southeast Alaska that are monitored for escapement. The 2 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. Escapements to these systems have been below their BEG ranges since 2016. The escapement to Andrew Creek on the lower Stikine River was also below goal and has now been below goal in 5 of the past 6 years. Chinook salmon escapements to 4 monitored systems in East Behm Canal and Boca de Quadra were generally poor although only 1 of the 4 monitored systems was below its BEG range. The 2021 Unuk River Chinook salmon escapement was within the BEG range, and this stock has been within goal range in 3 of the past 6 years. The Chilkat River escapement met the BEG range and has now met its goal in 3 consecutive years. Finally, the King Salmon River, a small river system located on Admiralty Island, had an estimated escapement of 134 fish, which was within the BEG range for only the 2nd time in the last 9 years.

## **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 2021, coho salmon escapements to northern inside areas were within goal ranges for 4 of 6 stocks: Auke Creek, and Taku, Berners, and Chilkat Rivers, whereas Montana and Peterson Creeks escapements were below their goal ranges. The Sitka survey index of 1,486 fish and the Ketchikan survey index of 21,006 coho salmon exceeded their escapement goal ranges. The escapement of 903 coho salmon at Hugh Smith Lake was within the BEG range of 500 to 1,600 fish.

## **SOUTHEAST ALASKA DRIFT GILLNET FISHERIES**

Drift gillnet fishing is allowed by regulation (5 AAC 33.310) 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) in Southeast Alaska (Figure 10). Regulations require that specific open areas and fishing periods within these districts and sections be established by emergency order. Drift gillnet openings may also be allowed in the Nakat Inlet, Carroll Inlet, Neets Bay, Anita Bay, Boat Harbor, Speel Arm, and Deep Inlet THAs (Figure 2). This section summarizes common property traditional drift gillnet fisheries during the 2021 season. THA, hatchery cost-recovery, and AIR fisheries are discussed in separate sections.

Drift gillnet openings targeting sockeye salmon began in SW 26 at noon on Sunday, June 20, in Districts 1, 6, 11, and 15 (Table 15). Drift gillnet fisheries targeted sockeye salmon during SWs 26–29 in District 1, SWs 26–31 in District 6, SWs 26–33 in District 11, and SWs 26–35 in District 15. The District 8 drift gillnet fishery was closed through SW 32 due to concerns initially for Stikine River Chinook salmon (SWs 26 and 27) and for Stikine River sockeye salmon, particularly the mainstem component of the run. Pink salmon runs 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 on or after SW 35 in Districts 1, 6, and 8, and SW 34 in Districts 11 and 15. Traditional drift gillnet fisheries occurred for 15 weeks in District 1 and 6, and 16 weeks in Districts 11 and 15. Drift gillnet fisheries in THAs 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).

The 2021 drift gillnet common property fisheries (traditional and THA) harvested 2.6 million salmon (Table 17). The 2021 drift gillnet harvest was the 36th highest since 1960. Common property harvests of 17,000 Chinook salmon accounted for 70% of the recent average of 25,000 fish; sockeye salmon harvest of 209,000 fish was 53% of the recent average of 395,000 fish; coho salmon harvest of 193,000 was 70% of the recent average of 275,000 fish; pink salmon harvest of 673,000 fish was 60% of the recent average of 1.1 million fish; and harvest of 1.5 million chum salmon was 55% of the recent average of 4.6 million fish. Common property drift gillnet harvest composition by species included 1% Chinook, 8% sockeye, 7% coho, 26% pink, and 58% chum salmon. Figure 11 shows historical trends of drift gillnet harvests by species since 1960. The most notable trend is continued large component of chum salmon in drift gillnet fishery harvests since 1992 that is largely attributable to hatchery production.

Drift gillnet harvests are presented by species, harvest type, and district (Table 18). Common property harvests include 1.8 million fish in traditional fisheries and 871,000 fish in hatchery THAs. Drift gillnet harvests from AIR totaled 254,000 salmon. Traditional drift gillnet salmon harvests by district included 387,000 fish from District 1, 421,000 fish from District 6, 69,000 fish from District 8, 390,000 fish from District 11, and 489,000 fish from District 15. Ranking 2021 traditional and terminal harvests among previous years since 1960, District 1 ranked 46th, District 6 ranked 43rd, District 8 ranked 34th, District 11 ranked 36th, and District 15 ranked 25th (Tables 19–23).

The 2021 drift gillnet fishery exvessel value was \$15.3 million based on fish tickets (Table 3). A time series of drift gillnet fishery exvessel values based on Commercial Fisheries Entry

Commission (CFEC) data is shown in Table 4 and Figure 12 (CFEC 2022). The 2021 value includes \$10.1 million of chum salmon, \$2.2 million of sockeye salmon, \$2.2 million of coho salmon, \$870,000 of pink salmon, and \$1.1 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 Chinook salmon to a percentage of the fluctuating annual all-gear quota, excluding directed fisheries in Districts 8 and 11, Alaska hatchery harvests above the pre-treaty 5,000 Chinook salmon 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 2021 drift gillnet harvest allocation was 5,950 treaty Chinook salmon.

The 2021 regional drift gillnet harvest of Chinook salmon totaled 18,000 fish with a common property drift gillnet harvest of 17,000 fish (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 the need to report large (in drift gillnet fishery, “large” Chinook salmon are  $\geq 660$  mm from mid eye to tail fork [METF], primarily age-1.3 fish) 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 12,900 large Chinook salmon, including harvests from the AIR. Total drift gillnet harvest of large Chinook salmon included an estimated 11,600 Alaska hatchery fish. The hatchery “add-on” was calculated at 11,000 fish resulting in 1,565 Chinook salmon designated as treaty harvest in traditional (non-TBR) fisheries, 225 fish as treaty harvest in the AIR drift gillnet fishery, and 150 fish as treaty harvest in the Taku and Stikine TBR fisheries, for a total treaty harvest of 1,940 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 salmon 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 1970s (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 Islands just north of the U.S./Canada border.

The District 1 drift gillnet fishery is 1 of 2 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 that the U.S. shall adhere to a harvest of 13.8% of the AAH of the Nass River sockeye salmon run.

The District 1 drift gillnet fishery opens by regulation on the 3rd Sunday in June. During early weeks of the fishery, management is based on run strength of Alaska wild stock chum salmon and Nass River sockeye salmon. In the 3rd week of July, when pink salmon stocks begin to enter the fishery in larger numbers, management 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 transitions to wild fall run coho salmon 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 run coho salmon.

## **2021 Fishery Overview**

In 2021, the District 1 drift gillnet fishery opened on June 20 in SW 26 (Table 15). The fishery was open a total of 1,584 hours, which was above the 1985–2020 average of 1,394 hours. The fishery was open 4 days each week from SWs 26 through 30, 5 days each week for SWs 31 through 36, and back to 4 days each week from SWs 37 through 40.

For the 2021 season, DFO forecasted a total run of 437,000 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 2021 Nass River sockeye salmon was 32,700 fish. Early inseason estimates of Nass River sockeye salmon abundance were lower than the preseason forecast; however, effort and total sockeye salmon harvest in the fishery were also extremely low and no time and area restrictions were warranted during the sockeye management period. The 2021 preliminary postseason Nass River total sockeye salmon run was estimated at 502,538 fish, which resulted in a final AAH of 41,750 sockeye salmon. The preliminary 2021 estimate of Nass River sockeye salmon harvested in the District 1 drift gillnet fishery was 14,671 fish.

The *District 1 Pink Salmon Management Plan* went into effect on July 18 (SW 30). Based on the pink salmon escapements and purse seine harvests, the District 1 purse seine fishery fished two 15-hour periods during SW 30. Therefore, the drift gillnet fishery continued with 4 days of fishing time. The District 1 purse seine fishery shifted to a 2-day on/2-day off fishing schedule in SW 31 due to a strong run of pink salmon to southern Southeast Alaska. This extended the drift gillnet fishery to 5 days of fishing time from SW 31 through SW 36. Pink salmon harvest and escapement remained well above average throughout the traditional purse seine fishing period keeping the *District 1 Pink Salmon Management Plan* in effect through SW 36. The District 1 purse seine fishery closed for the season in SW 36, which shifted the District 1 drift gillnet fishery to fall management.

Under fall management, the fishery is managed on the run strength of wild coho salmon. The coho salmon harvest remained near average leading into and throughout the fall management period. The Hugh Smith Lake coho salmon weir count, which is a long-term indicator stock on the south end, was tracking to reach the escapement goal range of 500 to 1,600 fish. Coho salmon are sampled for coded wire tags (CWT) to determine the percent of hatchery fish in the harvest. The percentage of hatchery coho salmon can range from 20% to as high as 90% in September. Inseason analysis showed an average hatchery contribution of coho salmon in SW 36 and 37, with an above average hatchery contribution of coho salmon from SWs 38–40 for 2021. This hatchery contribution, the Hugh Smith weir tracking being above the upper end of the



escapement goal range for coho salmon, and low effort justified fishing 4 days per week through SW 40.

## **2021 Harvest and Escapement Summary**

Total harvests of all salmon species and effort were below averages for the season. Traditional drift gillnet harvest of 21,600 sockeye salmon was 20% of the 1985–2020 average of 106,000 fish; pink salmon harvest of 144,000 fish was 30% of the 1985–2020 average of 474,000 fish; chum salmon harvest of 171,000 fish was 59% of the 1985–2020 average of 291,000 fish; coho salmon harvest of 47,000 fish was 100% of the 1985–2020 average of 47,000 fish; and Chinook salmon harvest of 1,900 fish was 126% of the 1985–2020 average of 1,500 fish (Table 19). A total of 52 drift gillnet vessels fished in the district, which is less than the recent average and 50% of the 1985–2020 average of 104 vessels.

Cumulative sockeye salmon harvest prior to the initiation of the *District 1 Pink Salmon Management Plan* in SW 30 was 8,000 fish, or about 37% of the total sockeye salmon harvest. Sockeye salmon harvest rates were well below average through SW 29, near average for SWs 30 and 31, well below average in SW 32, and then were near average for the rest of the season.

During SWs 31 through 33, a portion of District 1 was closed for Hugh Smith Lake sockeye salmon conservation. At the 2006 BOF meeting, 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 3,200 sockeye salmon, well below the escapement goal range of 8,000 to 18,000 fish (Table 14). This is the 4th consecutive year that Hugh Smith sockeye salmon has not met the lower bound of the escapement goal range.

Coho salmon escapements to systems in the Ketchikan Index Area were mixed but were above the upper end of the escapement goal range. The Ketchikan index area for coho is composed of 14 streams that are surveyed 2 to 3 times in October with aerial surveys conducted in a helicopter. In 2021, the Blossom River had an estimate of 9,000 coho salmon which is the largest historical count for this system. No coho were observed in Grant Creek or the Klahini River. The combined index count of 19,710 was above the upper end of the biological escapement goal range of 4,250–8,500 coho salmon.

## **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; because of this, 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 based on inseason abundance. In August, fishery management is based on pink salmon abundance and in

September, transitions to coho salmon management for the remainder of the season based on abundance of that species.

Districts 6 and 8 drift gillnet fisheries are mixed stock salmon 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 Lake. Stikine River Chinook salmon abundance is 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).

### **Chinook Salmon Fishery**

The 2021 preseason terminal run forecast for large Stikine River Chinook salmon was 9,900 fish, which was below levels necessary to achieve minimum escapement. The standard inriver 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 recapture assessment fishery conducted in Canada. An alternative method using daily catch and effort data from the Kakwan Point tagging site was evaluated to make weekly run size projections. However, estimates were not available inseason because of insufficient sample sizes. The postseason terminal run size estimate was 8,700 large Chinook salmon with an escapement estimate of 8,400 fish, below the escapement goal range of 14,000 to 28,000 fish.

Due to recent poor performance of Chinook salmon runs to the Stikine River and other Southeast Alaska stocks, restrictions were implemented in the Districts 6 and 8 drift gillnet fisheries to conserve Chinook salmon. The District 6 opening was delayed by 1 week and a 6-inch maximum mesh restriction was in place through SW 28. Due to conservative measures in place for both Chinook and sockeye salmon, the initial drift gillnet opening in District 8 was delayed until SW 33.

U.S. harvests of large Stikine River Chinook salmon in all District 8 fisheries were minimal. Since the District 8 drift gillnet fishery was closed through SW 29, there was no Chinook salmon harvested during the reporting period (through SW 29). Spring troll fisheries did not open in Districts 6 and 8, and the summer troll fishery opening on July 1 was closed to retention of Chinook salmon. The District 8 sport fishery implemented nonretention of Chinook salmon from April 1 through July 15; however, a small area in District 8, adjacent to City Creek in Petersburg, was open for retention of Chinook salmon beginning June 15, ostensibly to target Alaska hatchery Chinook salmon returning to this location. Harvest of Stikine River Chinook salmon in the sport fishery was estimated to be 88 fish. The U.S. subsistence Chinook salmon fishery was not opened in 2021. A total of 35 large fish were harvested incidentally during the subsistence sockeye salmon fishery. Cumulative U.S. District 8 harvest by all gear groups through SW 29 was estimated to be 123 Stikine River large Chinook salmon.

### **Sockeye Salmon Fishery**

The Stikine River sockeye salmon preseason forecast indicated a below average terminal run size of 56,000 fish, with a resulting U.S. allowable catch (AC) of 2,100 fish. Preseason forecasts were the primary basis of management during SWs 25–28. Weekly inseason estimates of terminal run size were first produced in SW 28 and were available during SWs 29–32. However, confidence in the models were low due to the lack of inseason data because models rely heavily on information from commercial fisheries, which were closed on both sides of the border in 2021.

Inseason abundance estimates were variable and ranged between 51,100 and 95,200 Stikine River sockeye salmon. The postseason Stikine River sockeye salmon terminal run size estimate of 83,800 fish resulted in a U.S. AC of 15,800 sockeye salmon. The total U.S. harvest estimated by GSI was 5,400 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, McDonald Lake sockeye salmon were designated a stock of management concern during the 2018 BOF meeting, and an action plan was developed to reduce harvest (Walker et al. 2018). The BOF adopted action plan for this stock of concern prescribed a maximum fishing time of 2 days per week in SWs 29–31 in District 6.

District 6 first opened in SW 26 at 12:00 noon on Sunday, June 20, for an initial 2-day period with a 6-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 was justified. Effort consisted of 4 boats in Clarence Strait (Subdistrict 106-30) and 15 boats in Sumner Strait (Subdistrict 106-41). An estimated 300 Stikine River sockeye salmon were harvested in SW 26.

In SW 27, District 6 opened for an initial 2-day period with a 6-inch maximum gillnet mesh restriction in place. On-the-grounds surveys indicated below average effort and sockeye salmon abundance well below average, which again, did not justify additional opportunity. Effort was 8 boats in Clarence Strait and 30 boats in Sumner Strait. An estimated 560 Stikine River sockeye salmon were harvested in SW 27. The first inseason forecast of Stikine River sockeye salmon terminal run size was generated this week using the Stikine Management Models (SMM) 1 and 3. Model 1 predicted a total run of 51,000 sockeye salmon with a U.S. AC of zero Tahltan and 1,700 mainstem sockeye salmon, and Model 3 forecasted a total run of 63,300 fish with a U.S. AC of 100 Tahltan and 3,900 mainstem sockeye salmon.

District 6 opened for an initial 2 days in SW 28 with a 6-inch mesh restriction in place. On-the-grounds surveys continued to indicate low sockeye salmon abundance. An estimated 820 Stikine River sockeye salmon were harvested this week. Effort included 22 boats in Sumner Strait and 17 boats in Clarence Strait. This week's SMMs forecasted a substantially larger run with Model 1 predicting 66,000 sockeye salmon with an AC of 180 Tahltan and 5,200 mainstem sockeye salmon, while Model 3 forecasted 82,500 fish with an AC of 4,900 Tahltan and 9,300 mainstem fish. However, these abundances of Stikine River sockeye salmon were not apparent in the District 6 fishery performance data. Model performance was still questionable this week and for the next few weeks as both SMMs run size projections continued to increase while fishery performance continued to lag. District 8 remained closed due to inseason indications of abundance in the District 6 fishery suggesting low numbers of sockeye and low confidence in the model predictions.

During SW 29, District 6 opened for an initial 2 days. On-the-grounds surveys continued to indicate well below average levels of sockeye salmon abundance. Opening time for District 6 was limited to 2 days per week in SWs 29–31 as per the McDonald Lake sockeye salmon action plan (Walker et al. 2018). An estimated 200 Stikine River sockeye salmon were harvested this week and the cumulative harvest through SW 29 was estimated to be 1,900 fish. Effort was

below average and included 24 boats in Clarence Strait and 12 boats in Sumner Strait. District 8 remained closed because of low levels of sockeye salmon abundance.

District 6 opened for a total of 2 days during SW 30. Harvest rates of sockeye salmon remained below average, whereas effort increased with 34 boats fishing in Clarence Strait and 17 boats in Sumner Strait. An estimated 460 Stikine River sockeye salmon were harvested this week with a cumulative harvest of 2,100 fish. Sockeye salmon abundance remained low and District 8 continued to be closed.

District 6 opened for 2 days during SW 31 for the final week of sockeye salmon management. Sockeye salmon harvest rates continued to be below average indicating low abundance. Effort was just above average with 46 boats fishing in Clarence Strait and 22 boats in Sumner Strait. An estimated 480 Stikine River sockeye salmon were harvested this week. Management actions for sockeye salmon continued in District 8 beyond SW 31 and District 8 remained closed until SW 33. An additional 1,400 Stikine sockeye salmon were harvested in Districts 6 and 8 for the remainder of the season.

The postseason terminal run size estimate for Stikine River sockeye salmon was 83,800 fish with a U.S. AC of 13,800 Tahltan and 2,000 mainstem fish. This estimate included the Districts 6 and 8 estimated Stikine River sockeye salmon harvest of 4,200 fish, U.S. inriver subsistence fishery estimated harvest of 1,200 fish, total Canadian inriver harvest of 4,700 fish in their commercial and food fisheries, Tahltan Lake weir count of 43,200 fish (Table 14), and the estimated mainstem escapement of 30,500 fish. The U.S. total harvest of 5,400 Stikine River sockeye salmon was below the U.S. AC of 15,800 fish and included 2,600 Tahltan and 2,800 mainstem fish. Stikine River sockeye salmon contributed to 10% of Districts 6 and 8 sockeye salmon harvest. The Canadian total harvest of 4,700 Stikine River Sockeye salmon was below the Canadian AC of 14,000 fish and included 4,100 Tahltan and 600 mainstem fish.

### **Pink Salmon Fishery**

During SWs 32–35, Districts 6 and 8 were managed on pink salmon abundance. A portion of Section 6-D in District 6 along the Etolin Island shoreline was closed by regulation to drift gillnet fishing from SW 32 through SW 35. District 6 opened for 3 days in SW 32, while District 8 remained closed. District 8 and District 6 opened concurrently in SW 33 for 4 days. Then both districts opened for 5 days in SW 34, then 4 days in SW 35. Effort in District 6 during SW 32 was 90 permits compared to the recent average of 67, in SW 33 it was 48 compared to the recent average of 61, in SW 34 it was 68 compared to the recent average of 57, and in SW 35 it was 65 compared to 63. Likewise, effort in District 8 was above average in SW 33 when 57 permits were fished compared to the recent average of 40, then dropped to 24 compared to the recent average of 31 in SW 34, and fell further to 19 compared to 26 in SW 35. Overall, 2021 pink salmon harvests and harvest rates were below average in both districts despite the high abundance of fish observed in adjacent purse seine fisheries and aerial surveys. The main reason for this was due to pink salmon returning smaller than average in size coupled with the fleet using larger mesh-gear than would normally be used to target pink salmon. Escapements for stock groups in both districts met or exceeded escapement goals.

### **Coho Salmon Fishery**

Management emphasis transitioned to wild coho salmon abundance in SW 36. Prior to SW 36, 38,700 coho salmon, or 38% of the District 6 total, had been harvested. One reason for reducing

the amount of fishing time in District 6 in SW 35 and after was the fairly high harvest rates of coho salmon compared to the relatively low rates of pink salmon harvest in spite of indications of a large pink run. Effort for SW 36 was average at 69 permits but dropped to below average for the remainder of the season with 55 permits fished in SW 37 compared to the recent average of 66, then to 23 permits compared to 32 in SW 39, and 13 compared to 17 in SW 40, the final week of the season. The hatchery contribution was approximately 4,800 fish 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 16,800 hatchery fish and 36,000 wild coho salmon. Harvest of wild coho salmon in District 8 during this period was below average with an estimated harvest of 6,600 fish. Similarly, the District 8 harvest of 2,500 hatchery produced coho was below average. Effort in District 8 was below average in SW 36 with 19 permits fished compared to the recent average of 26, followed by 27 compared to the recent average of 28 in SW 37, 22 compared to 20 in SW 38, and 11 compared to 13 in SW 39. Effort in the final week of the season (SW 40) is confidential. Both districts were open for 3 days during SWs 36–38, then for 2 days during the final 2 weeks (SWs 39 and 40). The 2021 drift gillnet season concluded at noon on Tuesday, September 28, in both districts.

### **Harvest and Effort Summary**

The 2021 District 6 drift gillnet fishery total harvest of 421,000 salmon was well below the recent average of 648,000 fish, and included 970 Chinook, 52,000 sockeye, 75,000 coho, 156,000 pink, and 137,000 chum salmon. Compared to recent averages, salmon harvests were below average for all 5 species (Table 20). An estimated 500 Chinook salmon (51%) in the District 6 harvest were of Alaska hatchery origin. An estimated 3,800 Stikine River sockeye salmon were harvested in District 6, representing 7% of the harvest. An estimated 21,600 coho salmon in the District 6 harvest (29%) were of Alaska hatchery origin.

Harvests of Stikine River sockeye salmon in the 2 major fishing areas of District 6 were markedly different. In the Sumner Strait fishery (Subdistrict 106-41), 33,000 sockeye salmon were harvested, of which 2,900 fish were estimated to be of Stikine River origin and contributed 9% of the total sockeye salmon harvest in that subdistrict. In the Clarence Strait fishery (Subdistrict 106-30), 18,900 sockeye salmon were harvested, of which 900 fish were estimated to be of Stikine River origin and contributed 5% of the total sockeye salmon harvest in that subdistrict.

The District 6 drift gillnet fishery was opened for 41 days from June 20 to September 28; this was below the recent average of 46 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 during SWs 32–35. Weekly participation started out below average through SW 30, then rose to above average for SW 31. Effort during the pink salmon management period (SWs 32 through 35) was above average and then dropped to below average for the remaining weeks of the coho management period. The number of permits ranged between 90 permits fished in SW 32 to 13 permits fished in SW 40. Total season effort of 2,212 boat days (number of permits multiplied by the number of days the fishery was open each week) was below the recent average of 2,491 boat-days.

Total salmon harvest in the District 8 drift gillnet fishery was also well below average and included 90 Chinook, 800 sockeye, 12,000 coho, 6,500 pink, and 49,000 chum salmon (Table 21). Compared to recent averages, salmon harvests were below average for all 5 species.

Due to the districtwide closure, no large Chinook were harvested through SW 29. An estimated 400 Stikine River sockeye salmon were harvested, which contributed 48% of the District 8 sockeye salmon harvest. An estimated 2,900 (24%) coho salmon harvested in District 8 were of Alaska hatchery origin.

The District 8 drift gillnet fishery was opened for a total of 26 days beginning August 8 and closed concurrently with District 6 on September 28 (Table 15). Total fishing time was below the recent average (46 days), excluding years with directed Chinook salmon fishing. Participation in District 8 was below average most weeks, except for SWs 33 and 38. The total season effort of 636 boat-days was well below the recent average of 1,554 boat-days.

### **Escapement Summary**

Stikine River large Chinook salmon escapement was estimated at 8,400 fish, below the escapement goal range of 14,000 to 28,000 large fish. The 2021 Little Tahltan weir count was 1,000 large fish, above the recent average of 700 large fish. Andrew Creek Chinook salmon escapement was below the 650 to 1,500 fish escapement goal range with an estimated escapement of 530 large fish, which is a slight improvement over 2020.

A total of 43,200 sockeye salmon were counted through the Tahltan Lake weir, which was above the escapement goal range of 18,000 to 30,000 fish. The Stikine River mainstem sockeye salmon escapement estimate of 30,500 fish was within its escapement goal range of 20,000 to 40,000 fish (Table 14).

Overall peak escapement counts of sockeye salmon to local island systems improved for 2021, with most counts near recent averages. Escapement of sockeye salmon to McDonald Lake also improved for 2021, with an estimate of 44,500 fish, but still fell below the escapement goal range of 55,000 to 120,000 fish (Table 14).

Pink salmon escapements were strong for Districts 6 and 8. The District 8 indexed escapement of 93,000 fish was above the management target range of 20,000 to 60,000 index fish. A 502,000 fish escapement index for District 6 was within its management target range of 210,000 to 570,000 index fish (Table 11).

Escapements of coho salmon are not typically 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 coho salmon escapement.

## **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. The Section 11-B fishery targets Chinook salmon in May and early June when the Taku River Chinook salmon run strength is sufficient, 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 from mid-July to mid-August when southern Stephens Passage pink salmon runs are sufficient. Management of sockeye and coho salmon fisheries are based on wild sockeye salmon runs in summer and wild coho salmon runs in fall. A stock assessment program

conducted at Canyon Island on the Taku River provides inseason run size estimates through a mark–recapture study for Chinook, sockeye, and coho salmon. Douglas Island Pink and Chum, Inc. (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. All averages referred to in the District 11 section are recent 10-year averages.

The PST directly affects management of this fishery because the Taku River is a major transboundary river extending into Canada that significantly contributes to the District 11 salmon harvest. The PST mandates the District 11 sockeye salmon fishery be managed primarily for Taku River spawning escapement needs. The Taku River sockeye salmon BEG, implemented in May of 2020, is 40,000 to 75,000 fish with a management objective of 58,000 fish based on revised historical run sizes resulting from the Transboundary Panel’s review of Taku River sockeye salmon assessment. Annex IV of the PST provides a sliding harvest share for Taku River sockeye salmon based on documented enhanced sockeye salmon runs resulting from joint U.S./Canada sockeye salmon enhancement projects in the Taku River drainage. This season’s runs of Taku River enhanced sockeye salmon resulted in 2021 harvest shares for Taku River sockeye salmon of 77% U.S. and 23% Canada.

The PST includes 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 to 90,000 fish and a management objective of 70,000 fish. Management intent of both countries in 2021 was to achieve the management objective and respective ACs 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 2021. The forecast of 10,300 Taku River large Chinook salmon provided no AC for either the U.S. or Canada. The forecast was well below the lower end of the escapement goal range and resulted in significant restrictions in the early District 11 directed sockeye salmon drift gillnet fishery with commercial troll, sport, and personal use fisheries also curtailed. Drift tangle nets were used near the Wright River to spaghetti- and radiotag fish to allow for a mark–recapture estimate, and potentially to give an indication of inseason run abundance based on CPUE; however, there were not enough years of CPUE data from the project to estimate run size with a high degree of confidence. The inriver assessment fishery which acts as a potential second event in the mark–recapture study, was not conducted by Canada in 2021 due to low forecast run size. Without a reliable method of estimating run size inseason, both the U.S. and Canada managed their early season sockeye salmon fisheries based on the preseason Chinook salmon forecast.

Management actions to conserve Taku River Chinook salmon occurred in District 11 and Canadian fisheries. Management actions in the District 11 drift gillnet fishery included 2-day fishing periods in Taku Inlet in SWs 26–29, a significant area closure including most of Taku Inlet and waters extending further south and west in SW 26, a closure line north of Point Cooper in SW 27, a 6-inch maximum mesh size restriction in place throughout the district in SWs 26–29, and night closures (10:00 PM to 4:00 AM) throughout the district in SWs 26–27. Canada delayed their first inriver directed sockeye salmon fishery opening by a week to SW 27 and then repealed the fishery for that week due to high water in the Taku River, so fishing started in SW 28 on July 5. Canada also implemented nonretention of all Chinook salmon in their

commercial and recreational fisheries and implemented a 5.5-inch maximum mesh size restriction through SW 30. 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 Southeast Alaska/Yakutat Chinook salmon. Nonretention of Chinook salmon in the sport fishery was in effect in northern inside waters from April 1 through June 14 and in upper Taku Inlet through June 30. The personal use sockeye salmon fishery in the U.S. portion of the Taku River was delayed by nearly 2 weeks and started on July 12. The 2021 GSI harvest estimates of Taku River large Chinook salmon in District 11 were 176 fish in the sport and 165 fish in commercial and personal use fisheries.

### **Sockeye Salmon Fishery**

The 2021 District 11 drift gillnet fishery began on June 20 in SW 26. Section 11-B was open for 2 days (Table 15), 80% of average, with a 6-inch maximum mesh size restriction, night closures in effect from 10:00 PM to 4:00 AM, and an area restriction closing waters in Taku Inlet north of Point Greely and west of a line of longitude running mid-inlet from the latitude of Point Greely to a point where it intersects with the Admiralty Island shoreline south of Grand Island. Effort was 37% of average for the week with 16 boats fishing. Sockeye salmon harvest was 14%, and CPUE was 52% of their recent averages. Total Chinook salmon harvest was 123 fish with no fish estimated as wild large fish based on inseason CWT analysis and age, sex, and length (ASL) sampling. Chum salmon harvest and CPUE were also far below the weekly average.

Section 11-B was opened for 2 days, 74% of average, in Taku Inlet (statistical area 111-32) and Stephens Passage (statistical area 111-31) in SW 27 with the northern line shifted to the latitude of Point Cooper in Taku Inlet, and gear and time restrictions throughout the district the same as the previous opening to minimize Chinook salmon interception. Nineteen boats, 28% of average, harvested 3,800 sockeye salmon. This weekly harvest was average, with CPUE nearly 5 times the recent average. The Stephens Passage sockeye CPUE was higher than in Taku Inlet which was likely related to the large volume of fresh water draining into the inlet with record discharge from the Taku River less than 24 hours after the fishery closure (137,000 ft<sup>3</sup>/s at 9:15 AM on June 30). Total Chinook salmon harvest was 183 fish of which an estimated 60 fish were wild large fish based on inseason CWT analysis and ASL sampling. Chum salmon harvest was 6% and CPUE was 37% of their weekly averages.

Section 11-B was again opened for 2 days, 69% of average, in SW 28, with no additional time granted. Chinook salmon conservation measures were again reduced this week with open waters extended north to the latitude of Jaw Point in Taku Inlet. The maximum mesh size restriction remained in place while night closures were no longer utilized. Participation increased from the previous week to 48 boats which is half the average. Sockeye salmon abundance remained strong in the fishery with the nearly 8,000 fish harvested at 90% of average and CPUE nearly 3 times the average. Otolith analysis indicated 4% of the sockeye salmon harvest from Taku Inlet was composed of TBR enhanced sockeye salmon from both Taku and Stikine Rivers projects while less than 1% were of Snettisham Hatchery origin. A Taku River sockeye salmon run size estimate was not produced due to high water hindering mark and recapture efforts; although based on the preseason terminal run forecast of 140,000 wild fish, an estimated 85% of the resulting U.S. weekly AC was harvested. Chinook salmon this week was 190 fish, of which an estimated 16 fish were wild large fish based on inseason CWT analysis and ASL sampling. Chum salmon harvest and CPUE increased from the previous week to 32% of average harvest and 95% of average CPUE.



Section 11-B was opened for 2 days, 63% of average, in SW 29 with the maximum mesh size restriction kept in place and the north line remaining at Jaw Point for Chinook salmon conservation. Extended time was anticipated this week, but not provided, because sockeye salmon CPUE fell to 70% of average. Effort consisted of 88 boats, 80% of average and harvest was 5,500 sockeye salmon, 37% of average. Otolith analysis indicated 10% of the sockeye salmon harvest from Taku Inlet and 31% from Stephens Passage were of Snettisham Hatchery origin. TBR enhanced sockeye salmon of Trapper, Tahltan, and Tatsamenie Lakes origin made up 9% of the harvest in Taku Inlet and 9% in Stephens Passage. The first Taku River sockeye salmon run size estimate was produced this week and projected a terminal run of 126,000 wild fish, or 90% of the preseason forecast, and an estimated 36% of the resulting U.S. weekly AC was harvested. Total Chinook salmon harvest was 52 fish, of which none were wild large fish based on inseason CWT analysis and ASL sampling. Chum salmon harvest and CPUE were 35% of average harvest and 65% of average CPUE.

Fishing time for SW 30 was set at 3 days, 88% of average, in both Taku Inlet and Stephens Passage with the northern line in Taku Inlet relaxed to the full extent and no maximum mesh size restriction in place. A 6-inch minimum mesh size restriction would typically be implemented south of Circle Point in Stephens Passage to minimize harvest of Port Snettisham wild sockeye salmon runs while still allowing opportunity to target enhanced chum salmon; however, this restriction was used sparingly for 1-day periods in SWs 30 and 31, in conjunction with opening the Limestone Inlet special harvest area (SHA) to the inner markers, and reduced time was utilized as the primary management tool. No time extension was given this week with poor sockeye salmon CPUE. Participation increased from the previous week to the highest level of the season with 98 boats making landings, 88% of average, although less than half this number of boats were fishing on the last morning of the opening. The sockeye salmon weekly harvest of 9,100 fish was 47% of average (56% of average in Taku Inlet and 23% in Stephens Passage) while CPUE was 60% of average (60% of average in Taku Inlet and 28% in Stephens Passage). Otolith analysis indicated 17% of the sockeye salmon harvest from Taku Inlet, and 19% from Stephens Passage, were of Snettisham Hatchery origin. TBR enhanced sockeye salmon of Tatsamenie, Trapper, and Tahltan Lakes origin made up 9% of the harvest in Taku Inlet, and Tatsamenie and Tahltan Lakes enhanced fish made up 6% in Stephens Passage. The weekly Taku River sockeye salmon terminal run size projection increased from the previous week to 180,000 wild fish, and an estimated 31% of the resulting U.S. weekly AC was harvested. The chum salmon harvest of 66,000 fish was the highest weekly harvest of the season and 72% of average while CPUE was 93% of average.

Fishing time for SW 31 was increased to 4 days in Taku Inlet and remained at 3 days in Stephens Passage to limit harvest of wild sockeye salmon returning to Port Snettisham. A 5th day was added in the waters of Taku Inlet north of Greely Point to target Taku River sockeye salmon with a large weekly catch allowance. The 5-day opening was 132% of average for the week and the only opening of the season with above average effort in terms of boat-days. Participation decreased from the previous week to 79 boats, 87% of average for the week, with only 18 boats observed fishing on the 4th day of the opening. The sockeye salmon harvest of 10,400 fish was the highest weekly harvest of the season and 68% of average (82% in Taku Inlet) while CPUE was 61% of average (66% in Taku Inlet). Otolith analysis indicated 11% of the sockeye salmon harvested in Taku Inlet and 21% from Stephens Passage were of Snettisham Hatchery origin. TBR enhanced sockeye salmon of Tatsamenie, Tahltan, and Trapper Lakes origin made up 9% of the harvest in Taku Inlet, and 9% of the harvest in Stephens Passage. The weekly Taku River

sockeye salmon terminal run size projection decreased slightly to 173,000 wild fish, and an estimated 31% of the resulting U.S. weekly AC harvested. Chum salmon harvest was 75% of average and CPUE was 71% of average.

Fishing time for SW 32 was identical to the previous week with 5 days fished in Taku Inlet, with the last day restricted to the waters north of Greely Point, and 3 days fished in Stephens Passage to attempt to realize a large catch allowance of Taku River sockeye salmon while minimizing harvest of Port Snettisham wild sockeye salmon. Just prior to the opening, a large pulse of Speel Lake sockeye salmon was counted through the weir and observed below the weir resulting in a rescinding of the planned minimum mesh size restriction south of Circle Point on the 3rd day of the opening. The 5-day opening was 135% of average for the week, and a further reduction in participation to 36 boats (half the average), with 5 boats fishing on the 4th day of the opening, resulted in effort in terms of boat days at 69% of average. Sockeye salmon harvest and CPUE were 31% and 47% of their averages throughout the district. Otolith analysis indicated 8% of the sockeye salmon harvested in Taku Inlet and 68% from Stephens Passage were of Snettisham Hatchery origin. TBR enhanced sockeye salmon of Tatsamenie, Trapper, and Tahltan Lakes origin made up 7% of the harvest in Taku Inlet, and Tatsamenie and Trapper Lakes enhanced fish made up 2% of the harvest in Stephens Passage. The weekly Taku River sockeye salmon terminal run size projection increased slightly to 176,000 wild fish, and an estimated 19% of the resulting U.S. weekly AC was harvested. Chum salmon harvest fell dramatically from the previous week and very few chum salmon were harvested in subsequent openings.

Fishing time for SW 33 was set at 4 days, 111% of average, in both Taku Inlet and Stephens Passage with no time extension provided. The lower bound of the Speel Lake sockeye salmon escapement goal range was counted through the weir near the beginning of the opening, so area was extended into the entrance of Port Snettisham on the 2nd day of the opening; but with broodstock goals still not achieved at Snettisham Hatchery, the Speel Arm THA remained closed. Participation again fell from the previous week to 16 boats, 26% of average, which was the lowest weekly proportion of the season. Sockeye salmon harvest and CPUE were 16% and 64% of their averages, respectively. Otolith analysis indicated 27% of the sockeye salmon harvest from Taku Inlet and 74% from Stephens Passage were of Snettisham Hatchery origin. TBR enhanced sockeye salmon of Tatsamenie and Trapper Lakes origin made up 5% of the harvest in Taku Inlet. The weekly Taku River sockeye salmon terminal run size projection decreased to 165,000 wild fish, and an estimated 16% of the resulting U.S. weekly AC was harvested. This was the last Taku River sockeye salmon run size estimate of the season and the last week of the sockeye salmon management period with coho salmon management starting in SW 34.

During the summer 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 DIPAC hatchery summer chum and sockeye salmon. Limestone Inlet remained closed to the outer markers, except for 2 days throughout the entire season, with relatively poor runs of both wild pink and enhanced chum salmon to the inlet. The Speel Arm THA (111-33) was opened minimally and the entrance to Port Snettisham (111-34) opened in SW 33 and remained open throughout the coho salmon management period. A 6-inch minimum mesh size restriction south of Circle Point was minimally utilized during the 2 total days that Limestone Inlet was open to the inner markers due to the small fleet size and low expectations of prosecuting a fishery in the Speel Arm THA. 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 several seasons to monitor escapement. No sockeye salmon were observed in the lake this season. Despite no sockeye salmon observed, it is assumed that adequate numbers of fish escaped through the District 11 fishery into the lake due to below average fishing time and effort in Stephens Passage throughout the sockeye management period and Speel Lake sockeye salmon escapement being near the upper end of the goal range.

### **Coho Salmon Fishery**

Fishing time for SW 34 was set for 3 days, 97% of average, in Taku Inlet and Stephens Passage as well as the entrance to Port Snettisham and a southern portion of the Speel Arm SHA. The waters of Speel Arm furthest from Snettisham Hatchery were open to provide some opportunity on returning Snettisham Hatchery sockeye salmon while allowing fish that had moved up farther into the arm to be utilized for brood stock. The fishery was delayed until Monday this week to avoid conflict with the annual Golden North Salmon Derby. Participation in the traditional fishery was 14 boats, 36% of average. Four boats fished inside the Speel Arm THA, harvesting 2,600 sockeye salmon, 76% of the total THA harvest for the season. Otolith sampling indicated 7% of the sockeye salmon harvest from Taku Inlet and 67% from Stephens Passage were of Snettisham Hatchery origin. TBR enhanced sockeye salmon of Tatsamenie and Trapper Lakes origin made up 6% of the harvest in Taku Inlet. This was the last week of otolith sampling sockeye salmon in District 11. The coho salmon harvest and CPUE were 26% and 71% of average, respectively. CWT analysis indicated 3% of the coho salmon harvest for the week was composed of Alaska hatchery fish. The coho salmon hatchery contribution in the District 11 gillnet harvest this season was once again composed nearly entirely of DIPAC fish returning to Gastineau Channel. The 2nd Taku River coho salmon inriver run size estimate, expanded by average run timing with harvest applied, projected a terminal run of 60,200 above-border fish, resulting in no U.S. AC.

Fishing time for SW 35 was again set at 3 days, 94% of average, throughout the district with the same area open inside Port Snettisham as the previous week. A total of 17 boats made landings in the traditional fishery throughout the opening, which was 45% of average. The Speel Arm THA attracted little participation for the remainder of the season. Coho salmon harvest and CPUE were 65% and 141% of average, respectively, buoyed by good fishery performance in Taku Inlet. CWT analysis indicated 37% of the approximate 2,700 coho salmon harvest for the week was composed of Alaska hatchery fish. The projected terminal run estimate for Taku River above-border coho salmon increased to 102,600 fish, providing a U.S. AC of over 17,000 fish.

Fishing time for SW 36 was set at 4 days, 118% of average, throughout the district with the same area open inside Port Snettisham as the previous week. A total of 23 boats, 66% of average, made landings with coho salmon harvest and CPUE at 100% and 138% of average, respectively. The 5,700 coho salmon harvested this week represented the largest weekly harvest of the season. CWT analysis indicated 46% of the coho salmon harvest for the week was composed of Alaska hatchery fish. The weekly projected terminal run estimate for Taku River above-border coho salmon decreased slightly to 99,500 fish providing an AC of 14,750 fish to both the U.S. and Canada.

Fishing time for SW 37 was again set at 4 days, 129% of average, throughout the district. The entirety of the Speel Arm THA was open concurrently with the traditional opening due to sockeye salmon broodstock goals being met at Snettisham Hatchery, although little attention was

paid at this late juncture in the season. Participation in the traditional fishery was similar to the previous week with 22 boats fishing, 75% of average. Coho salmon harvest was 94% of average while CPUE was 113% of average. CWT analysis indicated 33% of the coho salmon harvest was composed of Alaska hatchery fish. The weekly Taku River above-border coho salmon terminal run projection fell to 90,800 fish, providing an AC of 10,400 fish to both countries.

Fishing time for SW 38 was again set at 4 days, 138% of average, throughout the district with the Speel Arm THA opened concurrently for the final time this season. Participation in the traditional fishery decreased to 14 boats, which was 61% of average. Coho salmon harvest was 48% of average, whereas CPUE was 59% of average. CWT analysis indicated Alaska hatchery fish contributed 36% to the weekly coho salmon harvest. The weekly Taku River above-border coho salmon terminal run projection increased slightly to 91,800 fish providing an AC of 10,900 fish to both countries.

Fishing time for SWs 39–41 was set at 4 days each week throughout the district. Participation remained generally well below average each week, as did coho salmon harvest and CPUE. CWT analyses indicated 45% of the total harvest over these weeks was composed of Alaska hatchery fish. The weekly Taku River above-border coho salmon terminal run projection increased slightly to 94,000 fish in SW 39 and remained similar in SWs 40 and 41, providing an AC of 12,150 fish to both countries. District 11 closed for the season at noon on Thursday, October 7.

## **Harvest and Escapement Summary**

The 2021 District 11 traditional drift gillnet fishery was open for a total of 55 days from June 20 through October 7. Speel Arm THA weekly openings remained concurrent with traditional openings in SWs 34–38 and there was minor effort and harvest within the THA. Participation in the 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 2021 drift gillnet fishery was 1,687 boat-days, which was 57% of average.

Harvest in the District 11 drift gillnet fishery totaled 690 Chinook, 49,000 sockeye, 21,000 coho, 137,000 pink, and 186,000 chum salmon (Tables 22 and 27). Harvests for all species were below recent averages with only pink salmon harvest near average. Hatchery-produced salmon made up a substantial amount of the Chinook, sockeye, coho, and chum salmon harvest.

The District 11 drift gillnet Chinook salmon harvest of 700 fish in SWs 26–41, during the traditional sockeye and coho salmon management periods, was 56% of average (Table 22). Alaska hatchery fish contributed 58% of the harvest as estimated by CWT analysis. The 2021 GSI-based District 11 harvest estimates of Taku River large Chinook salmon are 176 fish in the sport and 165 fish in the drift gillnet and personal use fisheries. Canada's commercial harvest of Taku River large Chinook salmon was zero fish due to a nonretention policy; 290 large Chinook salmon were caught and released during their directed sockeye salmon fishery. The 2021 escapement estimate is 11,300 Taku River large Chinook salmon, below the escapement goal range of 19,000 to 36,000 fish and the 4th lowest escapement estimated since full stock assessment began in 1989, with the 5 lowest escapements occurring in the past 6 seasons.

The District 11 drift gillnet sockeye salmon harvest was 49,000 fish was 39% of average (Table 22) and the 2nd smallest harvest since 1988, with 2020 being the smallest. Domestic hatchery sockeye salmon began to contribute to the fishery during SW 28 and added a substantial proportion to harvests during SWs 29–34. Sockeye salmon from joint U.S./Canada fry-planting

programs at Tatsamenie, Tahltan, and Trapper Lakes contributed an estimated 3,100 fish. Contribution of DIPAC Snettisham Hatchery sockeye salmon is estimated to be 9,500 fish or 19% of the harvest. The PST harvest shares for the TAC of Taku River sockeye salmon in 2021 were 77% U.S. and 23% Canada based on enhanced salmon production. District 11 drift gillnet fisheries harvested an estimated 39,100 Taku River sockeye salmon, 24% of the 163,000 fish TAC, or 31% of the U.S. AC. The Canadian harvest of 18,500 Taku River sockeye salmon is 11% of the TAC or 49% of the Canadian AC. The Canadian fishery is covered in more detail in the *Canadian Transboundary River Fisheries* section of this report.

The estimate of Taku River sockeye salmon escapement was 161,000 fish, well above the newly adopted escapement goal range of 40,000 to 75,000 fish. Escapement of sockeye salmon into Speel Lake, enumerated through the weir, was 8,600 fish, and was near the upper end of the 4,000–9,000 fish escapement goal range. Sockeye salmon escapement into Crescent Lake was monitored via aerial surveys in 2021, with no fish observed during several flights. Although no formal goal exists for this system, the historical peak aerial survey count is 5,000 fish.

Coho salmon stocks harvested in District 11 include runs to the Taku River, Stephens Passage, Port Snettisham, local Juneau area streams, as well as to Alaska hatcheries and release sites. The drift gillnet coho salmon harvest of 21,000 fish was 67% of average. Alaska hatchery coho salmon accounted for 6,000 fish or 29% of the District 11 drift gillnet harvest. The above-border Taku River coho salmon escapement was estimated at 75,500 fish, within the escapement goal range of 50,000 to 90,000 fish and above the management objective of 70,000 fish. The District 11 drift gillnet fishery harvested an estimated 11,000 Taku River above-border coho salmon throughout the entire season with both the U.S. and Canada harvesting nearly 70% of their ACs after SW 33 during the coho accounting period. Coho salmon escapements to other streams in the district were mostly unknown.

The District 11 drift gillnet pink salmon harvest of 137,000 fish was 96% of average (Table 22). Pink salmon escapement to the Taku River was characterized as above average with the number of pink salmon caught at the Canyon Island fish wheels used as an index of escapement. The total of 26,950 pink salmon caught in the fish wheels was 159% of the 2019 parent-year catch, the fifth highest catch in the 38-year time series, and 164% of the 2011–2019 odd-year average. Comparisons to historical data are not as straightforward since the 2018 season 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 spinning less than 24 hours per day as they had in the past.

The District 11 drift gillnet harvest of 186,000 chum salmon was 38% of average (Table 22). Summer chum salmon made up 99.8% of the total chum salmon harvest. The summer chum salmon run is considered to last through mid-August (SW 33) and is composed almost entirely of hatchery fish. Chum salmon returning to DIPAC release sites in Gastineau Channel and Limestone Inlet contributed to a major portion of the harvest, but quantitative contribution estimates are not available. Fifty-five percent of the District 11 drift gillnet chum salmon harvest occurred in Taku Inlet and 45% in Stephens Passage. The harvest of 370 fall chum salmon from SW 34 to the end of the season was 15% of average, and the lowest harvest in at least the last 50 years. 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 caught in the fish wheels at Canyon Island is used as an index of escapement and the 29 fish caught in 2021 was 18% of average and the lowest catch in the 38-year time series. Chum salmon escapement to the Taku River was

characterized as well below average; the same caveats exist for comparing data from the last 3 seasons to the historical dataset outlined previously in the *Southeast Alaska Salmon Escapements > Pink Salmon* section.

## **DISTRICT 15: LYNN CANAL**

### **Fishery Overview**

The District 15 (Lynn Canal) commercial drift gillnet fishery operates in waters of Lynn Canal north of Little Island Light. District 15 includes Section 15-A (upper Lynn Canal), Section 15-C (lower Lynn Canal), and Section 15-B (Berners Bay). All 5 species of Pacific salmon are harvested in this fishery. Management is driven by the abundance of wild sockeye salmon through most of the summer before transitioning to fall run chum and coho salmon in late August. The fishery has historically targeted wild sockeye salmon from mid-June through September, with the harvest being predominantly Chilkoot Lake and Berners River sockeye salmon during early summer and Chilkat Lake sockeye salmon for the remainder of the season. Traditionally, sockeye salmon have mostly been harvested in Section 15-A, but in recent years, there has been increased harvest in Section 15-C. District 15 has 2 chum salmon fisheries: a summer fishery for hatchery chum salmon returning to the Boat Harbor THA, and wild fall chum salmon fishery for chum salmon returning to the Chilkat River. Since the early 2000s, fishing in Section 15-C has been focused on harvesting DIPAC hatchery-produced summer chum salmon returning to release sites in the Boat Harbor THA and the Amalga Harbor SHA from mid-June to mid-July. Harvest opportunities for hatchery summer chum salmon were limited during the first 4 weeks of the directed sockeye salmon fishery (SWs 26–29) due to conservation for wild Chinook salmon stocks returning to the Chilkat River. By late August, management emphasis shifts to fall chum and coho salmon abundance. Chilkat River and Berners Bay stocks compose the majority of the harvest.

The District 15 drift gillnet fishery 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 Ayiklutu (Seduction) Point through the first 2 weeks of the season and north of Glacier Point during the 3rd and 4th weeks 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 stock sockeye salmon fisheries is based primarily on escapements to Chilkat and Chilkoot Lakes measured by fish weir stock assessment projects. Fall coho and chum salmon fisheries are based on run strength to the Chilkat River basin assessed by fishery CPUE, 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 THA 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 referred to as “inside waters”. The remainder of the THA is considered “outside waters” and is opened with consideration of wild stock salmon abundance because of its location within a mixed stock fishery. Outside waters of the Boat Harbor THA area encompass statistical area 115-11 and are managed as a THA until mid-August. After the summer chum salmon hatchery run wanes, this area is managed in conjunction with Section 15-C as a traditional wild stock fishery. Historically,

the Boat Harbor THA (both inside and outside waters) were 1 subdistrict (115-11); however, in 2020, the THA was subdivided and a new statistical area (115-12) was established for the inside waters.

Escapements of Chinook salmon in the Chilkat River failed to achieve the lower bound of the escapement goal range in 6 out of 7 years from 2012 to 2018. As a result, Chilkat River Chinook salmon was designated a stock of management concern during the 2018 BOF meeting, and an action plan was developed by ADF&G to reduce the harvest and increase escapement. Subsequently, the BOF adopted the *Chilkat River and King Salmon River King Salmon Stock Status and Action Plan, 2018* (Lum and Fair 2018). This action plan outlines extensive management actions for the commercial, subsistence, and sport fisheries to reduce harvest rates of Chinook salmon stocks from the Chilkat and King Salmon Rivers. This year was the 4th consecutive year the District 15 fisheries have been managed under the action plan. Since the inception of the action plan, harvest rates of Chilkat River Chinook salmon have averaged 7%, down from an average of 26% prior to 2018. Although these management actions have been effective at reducing overall harvest rates of Chilkat River Chinook salmon, it limits harvest opportunities for targeted species such as wild sockeye and hatchery-produced chum salmon during the first 5 weeks of the District 15 commercial drift gillnet fisheries. In 2021, District 15 drift gillnet fisheries harvested 700 Chinook, 85,000 sockeye, 26,000 coho, 221,000 pink, and 532,000 chum salmon (Table 23). The harvests for all species were below recent averages except for pink salmon, which was near average.

### **Chinook Salmon Fishery**

There are no directed commercial drift gillnet Chinook salmon fisheries in District 15. Chilkat River Chinook salmon are harvested incidentally in the Lynn Canal drift gillnet fishery, Chilkat Inlet and River subsistence salmon fisheries, sport fishery, and commercial troll fishery. The 2021 Chilkat River Chinook salmon preseason total run size forecast was 1,500 large (ocean-age-3 and older) fish, and was below the lower bound of the escapement goal range of 1,750 to 3,500 fish. Given continued low productivity and poor stock status of Chilkat River Chinook salmon, a conservative approach was necessary for rebuilding these stocks. In 2018, under the first year of the action plan, harvest rates were still as high as 18% and the BEG was not achieved. In subsequent years (2019–2021), ADF&G implemented additional conservation measures that exceeded both the regulatory management plan and the action plan. As a result of these management actions (described in the sockeye salmon fishery section below), the District 15 drift gillnet fishery harvest rates on Chilkat River Chinook salmon were effectively reduced to 4.5% in 2019, 2.4% in 2020, and 3.5% in 2021, and the BEG was achieved in each those years. Since 2019, ADF&G has used GSI to estimate Chinook salmon stock composition in the District 15 drift gillnet fishery. In 2021, an estimated 28 Chilkat River Chinook salmon were harvested in the District 15 drift gillnet fishery based on GSI analysis.

### **Sockeye Salmon Fishery**

Preseason expectations for Chilkoot and Chilkat Rivers sockeye salmon were for average to below average runs based on parent-year escapements, zooplankton observations, and presmolt estimates. Due to the stock of concern status of Chilkat River Chinook salmon, the directed sockeye salmon fishery was restricted to minimize harvest of that stock. Restrictions included reduced time and area, gear restrictions, and night closures.

The 2021 District 15 drift gillnet fishery opened by regulation on June 20 in SW 26 (Table 15). Conservation measures varied throughout the season between Sections 15-A and 15-C. In Section 15-A, as per the action plan, commercial fishing was limited to 2 days a week south of Eldred Rock Lighthouse and east of a line from Eldred Rock Lighthouse to a point 2.0 nmi from the eastern shoreline of Lynn Canal, with a 6-inch maximum size mesh restriction during the first 5 weeks of the fishery (SWs 26–30). Additional restrictions to minimize harvest of juvenile Chilkat River Chinook salmon included night closures from 10:00 PM to 4:00 AM through SW 30. Management restrictions through SW 29 in Section 15-C included reduced time and area, gear restrictions, and night closures. Section 15-C (not including the Boat Harbor THA) fishing time was limited to 2 days a week and area was limited to the Postage Stamp during the first 4 weeks of the fishery (SW 26–29). The Postage Stamp includes waters south of the latitude of Vanderbilt Reef light and east of a line from Vanderbilt Reef Light to Little Island Light and is opened to provide harvest opportunities for hatchery chum salmon returning to the Boat Harbor THA and Amalga Harbor SHA. Night closures and a 6-inch maximum size mesh restriction were also implemented in Section 15-C through SW 29. Management restrictions for the outside waters of the Boat Harbor THA are discussed later in this report. After the Chilkat River Chinook salmon conservation measures were lifted, the District 15 drift gillnet fishery was managed based primarily on sockeye salmon abundance as indicated by sockeye salmon harvest and escapements to Chilkat and Chilkoot Rivers.

In Section 15-A, restrictions were liberalized after SW 30 and the fishing area was expanded north to Ayiklutu (Seduction) Point for 2 days the following week. The lower bound of the Chilkoot Lake sockeye salmon BEG was achieved on July 29 and additional time and area was warranted. Chilkoot Inlet north of Katzechin River flats light to the White Rock in Lutak Inlet opened for 2 days followed by a 1-day extension in SW 32. By August 8 (SW 33) sockeye counts through the Chilkoot River weir were approaching the upper bound of the SEG range. In response, the fishery was open from the Katzechin River flats light to the terminus of the Chilkoot River for 5 days. With indications of a weak Chilkat Lake sockeye salmon run, the line at Point Seduction was moved down to the southernmost tip of Talsani Island and that area was open for 2 days. This management decision was based on the Ayiklutu (Seduction) Point area being known as a milling ground and migration route for Chilkat Lake sockeye salmon.

In SW 34, sockeye salmon counts through the Chilkoot River weir were rapidly approaching the upper bound of the SEG and the fishery remained open to the terminus for another 5-day fishing period. The same area from Talsani Island to Sherman Rock was open for 2 days. In SW 35, sockeye salmon escapement to Chilkoot Lake exceeded the upper bound of the SEG range. An abnormally late, large number of Chilkoot Lake sockeye salmon returned in the beginning of September and resulted in the fishery remaining open to the terminus of the river for 5 days each week for another 4 weeks (SWs 35–38) to provide maximum opportunity to harvest sockeye salmon in excess to escapement needs.

Similar to 2020, the Chilkat Lake sockeye salmon run remained poor throughout the season and Chilkat Inlet was not open to commercial fishing in 2021. Escapement projection models indicated the lower bound of the BEG range would not be achieved, so extensive conservation measures were implemented during SWs 35 and 36 in order to pass as many Chilkat Lake sockeye salmon to the spawning grounds. All waters of Section 15-A (with the exception of Chilkoot and Lutak Inlets) were closed to commercial fishing during last 2 weeks of the sockeye salmon season. By SW 37, the Chilkat Lake sockeye salmon run was inriver and management



shifted to fall chum and coho salmon abundance. A total of 64,000 sockeye salmon were harvested in Section 15-A, 76% of the districtwide sockeye salmon harvest of 85,000 fish and 79% of the recent average.

In Section 15-C, most sockeye salmon were harvested incidentally in statistical areas 115-10 and 115-11 as gillnetters targeted DIPAC's hatchery summer chum salmon returning to the Boat Harbor THA. Conservative management actions were implemented during the first 4 weeks of the fishery (SWs 26–29) for Chilkat River Chinook salmon conservation. Restrictions included reduced time and area, 6-inch maximum mesh size restriction, and night closures. Fishing was limited to 2 days in the Postage Stamp during the first 3 weeks of the fishery (SWs 26–28). In SW 29, the Postage Stamp area was expanded north ~1.5 nmi to provide for a less combative fishery, while remaining conservative. The following week (SW 30), the same area initially opened for 2 days with no mesh restriction or night closures. With most of the Chilkat River Chinook salmon through lower Lynn Canal, and no sockeye salmon conservation concerns at that time, a 24-hour extension was granted. In SW 31, more area was open including all waters south of the latitude of Point Bridget for 2 days, followed by a 24-hour extension due to below average effort. The same area opened for 2 days the following week (SW 32). By mid-August, the Chilkat Lake DIDSON/weir count of 16,000 sockeye salmon was only 40% of the recent average (40,000 fish). As a result, ADF&G closed Section 15-C to commercial fishing during SWs 33 and 34, but left the Boat Harbor THA open to provide opportunity to harvest hatchery produced chum salmon. Section 15-C reopened for fall management in SW 35, but time and area remained conservative due to the later and weak run of Chilkat Lake sockeye salmon still transiting through lower Lynn Canal. A total of 15,000 sockeye salmon were harvested in Section 15-C, which was 18% of the districtwide harvest and 31% of the recent average.

### **Fall Coho and Chum Salmon Fishery**

Management of the District 15 fall fishery primarily focused on harvests of Chilkat River fall chum and coho salmon. 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. Fall chum and coho salmon have similar run timing and management actions consider both species. Additionally, sockeye salmon escapement to Chilkat Lake was considered during the fall fishery in Section 15-A as the late run timing of these fish overlap with coinciding Chilkat River coho and chum salmon runs. The fall fishery is managed by monitoring the chum and coho salmon catches in the Chilkat River fish wheels, and by stream surveys of the Chilkat River Basin. Fishery performance data is also taken into consideration.

Fall management started in SW 35 in Section 15-C to provide harvest opportunities for Berners Bay coho salmon and to assess the run strength of coho and chum salmon returning to the Chilkat River through fishery performance data. The first week of fall fishing opened with reduced time and area, in addition to a 6-inch minimum mesh size restriction to minimize harvest of Chilkat River sockeye salmon still migrating through lower Lynn Canal. Fishing was limited to an area 2 nmi east of Point Bridget to Vanderbilt Reef Light to Little Island Light for 2 days. Due to minimal fishing effort, a 24-hour extension was granted. In SW 36, all waters south of the latitude of Point Bridget opened for 2 days, followed by a 1-day extension. By SW 37, all waters of Section 15-C opened to commercial fishing initially for 2 days, followed by a 1-day extension. Section 15-A finally opened to fall fishing in SW 37 for 2 days in waters south of the latitude of Ayiklutu (Seduction) Point. A 1-day extension was also granted. The 6-inch minimum mesh size restriction was applied districtwide through SW 37. By SW 38, all restrictions were lifted, and

fishing opened for 3 days in waters south of Ayiklutu (Seduction) Point. The Mud Bay area opened in SW 39 to provide some opportunity on late run Chilkoot Lake sockeye salmon and Chilkoot Lake coho salmon, in addition to Chilkat River chum and coho salmon. By SW 39, the Chilkat River chum salmon SEG was achieved, and there were indications of a good coho salmon run. As a result, a portion of Chilkat Inlet opened to commercial fishing. The fishery was open to the latitude of Kochu Island for 3 days each week during the last 2 weeks of the season (SWs 40 and 41). During the last 4 weeks of the fishery (SWs 37–39), all waters of Section 15-C were open for 3 days each week. The 2021 total coho salmon harvest of 26,500 fish was 70% of the recent average and 51% of the long-term average (1960–2020) average (Table 23). During the fall fishery, 9,500 chum salmon were harvested, which was 18% of the total District 15 harvest.

## **Harvest and Effort Summary**

The District 15 traditional drift gillnet fishery was open for a total of 56 days from June 20 (SW 26) through October 6 (SW 41). Section 15-A was open for 56 days, 122% of the recent average, and Section 15-C was open for 36 days, 80% of the recent average (Table 15). A total of 166 drift gillnet permits participated in the 2021 fishery, 73% of the recent average. Districtwide fishing effort peaked in SW 29 with a total of 145 boats fishing, 92% of the recent average for that week. Participation in Section 15-A was above the recent average during the first 2 weeks of the fishery, then fell below average the rest of the season except for during SW 32 where there was a surge in effort of 87 boats targeting a late run of Chilkoot Lake sockeye salmon. Effort in Section 15-C was below the recent average throughout the fishing season. Effort typically declines in the fall due to foul weather. A peak effort of 55 permits fished in the fall during SW 38. Effort declined in subsequent weeks with a total of 11 permits fishing the final week of the season (SW 41). The total number of boat days in the traditional fisheries was 4,194 boat-days, 36% of the recent average.

The overall harvest in the 2021 District 15 drift gillnet common property fishery (traditional and terminal) was 865,000 salmon, an 83% increase from the 2020 harvest of 471,000 fish. The total harvest was 77% of the recent average and 107% of the long-term average (Tables 18 and 23). Total harvest by species included 700 Chinook, 85,000 sockeye, 26,000 coho, 221,000 pink, and 532,000 chum salmon (Table 23). Harvests for all species were below recent averages, except for pink salmon, which was near average.

The District 15 drift gillnet Chinook salmon harvest of 715 fish was 61% of the recent average. Peak Chinook salmon harvest generally corresponds with peak fishing effort targeting hatchery summer chum salmon in Section 15-C. The majority of Chinook salmon harvest (84%) occurred during the first 5 weeks of the season with a peak harvest of 250 fish occurring in the first week of the fishery (SW 26). This was the 3rd consecutive year tissue samples have been collected from Chinook salmon harvested in the District 15 commercial drift gillnet fishery to estimate stock composition. During SWs 26–32, 681 Chinook salmon were harvested and of those, 338 were sampled and 306 tissue samples were analyzed. The 2021 harvest of Chilkat River Chinook salmon in the District 15 gillnet fishery estimated by GSI was 28 fish.

The District 15 drift gillnet sockeye salmon harvest of 85,000 fish was 61% of the recent average (Table 23). Traditionally, the majority of sockeye salmon harvest occurs in Section 15-A, but with increasing effort in Section 15-C targeting hatchery chum salmon, sockeye salmon harvests have increased in recent years. In Section 15-A, 64,000 sockeye salmon were harvested, 76% of

the total District 15 sockeye salmon harvest; in Section 15-C, 15,000 sockeye salmon were harvested, 18% of the overall harvest; and 6,000 sockeye salmon were harvested in the Boat Harbor THA, 7% of the overall harvest. Peak harvest of 18,000 sockeye salmon were landed by 94 permits in SW 32, 93% of the recent average for that week. Since 2015, GSI analysis has been used to estimate the stock composition of commercial drift gillnet sockeye salmon harvest in District 15. Of the total District 15 sockeye salmon harvest, GIS determined stock composition estimates indicated 52,400 Chilkoot Lake, 10,300 Chilkat Lake, and 2,300 Chilkat River mainstem sockeye salmon contributed to the overall District 15 harvest. Other sockeye salmon stocks that contributed to the District 15 gillnet harvest included Stikine/Taku, Snettisham, and other origins.

Pink salmon returning to the Chilkat and Chilkoot Rivers have similar trends to other systems in northern Southeast Alaska because they have had an odd- versus even-year trend in brood year strength, particularly during the last decade. Pink salmon runs in odd years have been considerably higher than even years, and the 2021 run continued with that trend. Pink salmon are caught incidentally when the fleet is targeting sockeye salmon. The pink salmon harvest of 221,000 fish was near the recent average and 236% of the long-term average (Table 23).

Weekly chum salmon harvest was below average throughout the 2021 fishing season. The District 15 total chum salmon harvest of 532,000 fish was 47% of the recent average of 1.1 million fish. Most of the chum salmon harvest occurred in SWs 26–33 when boats targeted DIPAC hatchery fish returning to the Boat Harbor THA. Estimated DIPAC chum salmon contribution to the District 15 gillnet fishery was 515,000 fish, 99% of the total chum salmon harvest (Table 23).

Coho salmon can be harvested throughout the season in District 15 but are not targeted until mid-August. During the fall fishery coho salmon harvests were below average except for during SW 38 when a peak harvest of 11,000 fish were caught by 55 permit holders. The total District 15 coho salmon harvest of 26,000 fish was 70% of the recent average (Table 23), and Section 15-C contributed to 69% of the districtwide harvest.

## **Escapement Summary**

Formal escapement goals established for salmon in the Haines Management Area include Chilkat River Chinook salmon, Chilkat Lake sockeye salmon, Chilkoot Lake sockeye salmon (Table 14), Chilkat River chum and coho salmon, and Berners River coho salmon. The Chilkat River Chinook salmon stock is 1 of 4 stocks for which a full stock assessment is performed annually by ADF&G. This includes smolt and juvenile CWT and adult mark-recapture studies, and together provide Chinook salmon escapement estimates to the Chilkat River drainage. District 15 has 3 stock assessment projects to estimate escapements of Chilkat and Chilkoot Rivers sockeye salmon stocks. 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 that is used to estimate sockeye salmon escapements into Chilkat Lake, and the Chilkat River fish wheel project to monitor migration of all 5 species of salmon returning to the Chilkat River basin. ADF&G uses a combination of aerial and foot surveys to estimate coho salmon escapement to the Chilkat and Berners Rivers.

The 2021 final escapement estimate for Chilkat River Chinook salmon was 2,038 large fish and was within the BEG range of 1,750–3,500 fish. This marks the 3rd consecutive year the BEG has been achieved.

The Chilkoot Lake fish weir was installed on June 6 (SW 24). Weekly cumulative sockeye salmon counts were below average during the first 7 weeks of the run (SWs 24–30). During SW 31, sockeye salmon passage through the weir drastically increased and a peak weekly weir count of 22,000 fish brought the cumulative weir count to 49,600 fish, achieving the lower bound escapement range of 38,000 sockeye salmon. Sockeye salmon passage rates through the weir started to decline the following week (SW 32), as is typical; however, an abnormally large number of sockeye salmon were counted through the Chilkoot River in late August. In SW 35, 14,500 sockeye salmon were counted through the weir during this 1-week period, bringing the total weir count to ~87,000 sockeye salmon; this exceeded the upper bound of the SEG. Weir counts of sockeye salmon continued to be well above average throughout the remainder of the run until the weir was removed on September 12. The final 2021 sockeye salmon escapement estimate into Chilkoot Lake of 98,700 fish exceeded the escapement goal range of 38,000 to 86,000 fish (Table 14). Sockeye salmon escapement was 120% of the recent average of 82,300 fish. A total of 20 Chinook, 220 coho, 48,200 pink, and 1,200 chum salmon were also counted through the Chilkoot River weir.

The Chilkat Lake DIDSON sonar weir project began operation on June 20 (SW 26). Similar to 2020, daily DIDSON sonar counts of sockeye in 2021 started off slow and below the average daily and weekly counts and remained below average throughout the entire run. By the end of August, when typically, 50% of the run has passed through the weir, the cumulative weir count was 28,300 fish and below the recent average of 55,000 fish for this time of year. Several high-water events compromised the project, causing flow “reversals”. Reversals cause fish to back down the river and delay the upriver migration to Chilkat Lake. Weir counts were interpolated during those days to account for any fish that may have passed around the weir during high water. The final escapement estimate to Chilkat Lake was 65,200 sockeye salmon, below the lower bound of the escapement goal range of 70,000 to 150,000 fish (Table 14). This year’s sockeye salmon escapement was 67% of the recent average escapement of 97,000 fish. Daily weir counts fell below 1,000 fish/day by October 3, and the project ceased operations on October 13. A total of 8,200 coho salmon were estimated to have passed through the weir in 2021, but this estimate is not indicative of total escapement because the project is pulled before the coho salmon run is over.

Two fish wheels were deployed on June 1 and were operating by June 3. Historically, fish wheels have been located between Haines Highway mile posts 7 and 10 in the lower Chilkat River. In 2021, the 2 fish wheels were anchored in a predetermined site near mile post 9. Total catch by species in the Chilkat River fish wheels was 134 Chinook, 5,249 sockeye, 1,864 coho, 2,465 pink, and 2,589 chum salmon. Chinook and sockeye salmon catches were near average, coho salmon catches were slightly above average, and pink and chum catches were below average.

Chilkat River fish wheels are used to monitor relative abundance of salmon as they enter the lower Chilkat River drainage. Fish wheels provide sampling platforms for Chilkat River sockeye, chum, coho, and Chinook salmon. In addition, fall chum salmon escapement is measured by indexing the total fish wheel catch of this species. The index is based on a mark–recapture program conducted during 2001–2004 where it was estimated that the lower Chilkat River fish wheel project captures approximately 1.5% of the inriver run. The 2021 fall chum salmon fish wheel catch of 2,589 fish resulted in an estimated escapement of 167,000 fish and was within the

escapement goal range of 75,000 to 170,000 chum salmon (Table 13). The 2021 estimated escapement was 71% of recent average index estimate of 234,000 chum salmon.

There are no formal escapement goals for pink salmon in the Haines Management Area. Based on aerial surveys, fish wheel catches, and weir counts, the pink salmon runs to Upper Lynn Canal were characterized as average to above average. Chilkat River appeared to have an average run based on fish wheel catches. The Chilkoot River weir count of 48,213 pink salmon was slightly above the recent odd-year average. Aerial surveys conducted for the Endicott River, and Sullivan, Cowee, and Sawmill Creeks experienced above average returns.

The Haines Management Area has 2 formal escapement goals for coho salmon. Chilkat River and Berners Bay coho salmon. Escapement of coho salmon to the Chilkat River is estimated by conducting weekly foot or boat surveys during peak spawning. Peak survey counts are expanded to estimate total escapement. Based on the expansion of index surveys conducted throughout the Chilkat River drainage, 55,220 coho salmon returned to spawn in the Chilkat River drainage. This estimate was within the BEG range of 30,000–70,000 fish. Berners River coho salmon escapement estimate is based on aerial and foot surveys. This year's escapement estimate was 6,000 coho salmon and was near the midpoint of the escapement goal range of 3,600 to 8,100 fish.

## **SOUTHEAST ALASKA HATCHERY FISHERIES**

Privately operated hatcheries contributed Chinook, sockeye, coho, pink, and chum salmon to the 2021 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, AIR 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 wild stocks, although comigrating hatchery salmon contribute substantially to traditional fisheries harvests. As hatchery salmon enter terminal areas near hatchery release sites, fishery management is directed on harvest of surplus hatchery runs. 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 special harvest areas (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 hatchery chum and sockeye salmon harvests in fisheries, or to evaluate the performance of differentially marked groups returning to a release location. Thermal marking is advantageous because entire releases can be mass marked. Although there is currently no coordinated, regionwide program in place to sample and evaluate returning chum salmon, 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 Northern Southeast Regional Aquaculture Association (NSRAA) has sampled primarily in THA fisheries.

In 2021, of the 58.9 million total all-gear salmon harvest 81% were harvested in traditional purse seine and drift gillnet fisheries, 4% in common property terminal harvest area purse seine and drift gillnet fisheries, and 5% in cost recovery fisheries. Chum salmon compose the largest proportion of hatchery-produced salmon in numbers, pounds, and value. Of 7.4 million chum salmon harvested in 2021, 28% were harvested in traditional purse seine and drift gillnet fisheries, 34% were harvested in hatchery THA purse seine and drift gillnet fisheries, and 33% in cost-recovery (Conrad and Thynes 2022). The estimated hatchery contribution to common property purse seine and drift gillnet fisheries was 3.9 million fish accounting for 8% of overall purse seine and drift gillnet harvests and 24% of exvessel value. Proportions of hatchery salmon in the purse seine and drift gillnet harvests included the following: 75% of Chinook, 3% of sockeye, 27% of coho, <1% of pink, and 88% of chum salmon harvests (Wilson 2022).

## **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. Fisheries are intensively sampled for CWTs for harvest accounting and management purposes.

The 2021 composition of hatchery salmon in traditional purse seine and gillnet fisheries varied by species and by fishery. Chinook and coho salmon hatchery contributions are determined by CWT sampling. In 2021, Alaska hatchery contribution of Chinook salmon to the traditional purse seine fishery harvest was estimated to be 264 fish, which was 4% of the harvest (Table 24). The majority of the Chinook salmon harvested in purse seine fishery were from District 4 during a time period when there were low numbers of wild and hatchery stock Alaska Chinook salmon present. In the 2021 drift gillnet fishery, Alaska hatcheries contributed 2,200 Chinook salmon (52%) to the traditional drift gillnet fishery harvest (Table 25). Directed Chinook salmon drift gillnet fisheries did not occur in 2021, and time, area, and gear restrictions were applied to conserve wild stock Chinook salmon during openings directed at sockeye salmon harvests in Districts 6, 8, 11, and 15. Alaska hatchery contribution of coho salmon to the traditional purse seine harvest was estimated at 73,000 fish, or 25% of the harvest (Table 24). Alaska hatchery coho salmon contribution to the traditional drift gillnet fishery was estimated at 51,000 fish and was 28% of the harvest (Table 25; ADF&G CWT 2022).

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 in southern Southeast Alaska fisheries are sampled extensively by SSRAA, and harvests are sampled to a lesser degree in northern Southeast by NSRAA and DIPAC. Estimates of common property (both traditional and THA) harvests are developed annually 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 791,000 sockeye salmon harvested in traditional purse seine fisheries in 2021, almost all were from wild stocks (Tables 2 and 24). An estimated 5,162 hatchery sockeye salmon were harvested in purse seine fisheries.

An estimated 16,000 hatchery-produced sockeye salmon—8% of the total traditional drift gillnet harvest—were harvested in traditional drift gillnet fisheries in 2021 (Table 18). Contributions of hatchery sockeye salmon to traditional fisheries in 2021 included fish from Taku River (Tatsamenie and Trapper Lakes) and Stikine River (Tahltan Lake) enhancement projects. Enhanced TBR fish in the District 11 traditional drift gillnet fishery made up 6% of the total harvest. Harvest in the District 6 fishery included 1,200 sockeye salmon (2% of the total harvest) from the Tahltan Lake (Stikine River) sockeye enhancement project. Harvest in the District 8 fishery included 20 Tahltan Lake enhanced sockeye salmon (2% of the total harvest).

Hatchery pink salmon generally contribute little to traditional fisheries. Estimated harvest of hatchery pink salmon in traditional purse seine and drift gillnet fisheries was 194,000 fish, <1% of the harvest (Tables 24 and 25). Because pink salmon are generally not sampled, the basis of hatchery operators' estimates is uncertain.

The majority of chum salmon harvested in Southeast Alaska are from hatchery production. Hatchery harvest estimates are determined by 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. Estimated hatchery contributions to traditional fisheries are estimated at 894,000 chum salmon, or 69% of the harvest, in the purse seine fishery and 664,000 chum salmon, or 87% of the harvest, in the drift gillnet fishery (Tables 24 and 25).

## **TERMINAL HARVEST AREA HARVESTS**

### **THA Harvest Summary**

In 2020, 11 THAs were open for purse seine and drift gillnet fisheries (Tables 9 and 16). A total of 24,000 Chinook, 13,000 sockeye, 16,000 coho, 115,000 pink, and 1.9 million chum salmon were harvested. Common property purse seine fisheries harvested most of the overall chum salmon (67%) and common property drift gillnet fisheries harvested the most Chinook (55%), sockeye (79%), coho (76%), and pink (53%) salmon. Harvest in the Deep Inlet THA contributed the largest amount of chum salmon to overall common property purse seine harvest with 850,000 fish harvested (Table 26). The Deep Inlet THA also contributed the largest common property drift gillnet harvest of chum salmon with 356,000 chum salmon harvested (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 also provides some opportunity for common property harvest. Neets Bay is 1 of 2 primary locations where SSRAA's primary cost-recovery harvest takes place. The 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 July 6 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 chum or coho salmon common property fisheries. In Neets Bay, drift gillnet gear harvested 2,400 Chinook salmon and 120 chum salmon

(Table 27), and purse seine gear harvested 3,800 Chinook salmon and 2,900 chum salmon (Table 26) in common property fisheries for the season. Cost-recovery totals were 169,000 chum, 6,000 Chinook, and 42,500 coho salmon (Table 28).

Based on otolith sampling, SSRAA estimated the traditional commercial common property harvest for Neets Bay hatchery chum salmon for all gear groups was 53,000 summer chum and 4,300 fall chum salmon. The summer chum salmon total run of 236,000 fish was 31% of the preseason forecast of 768,000 fish. The fall chum salmon total run of 13,000 fish was 42% of the preseason forecast of 31,000 fish. The fall coho salmon total run of 127,500 fish was 113% of the preseason forecast of 113,100 fish. The Chinook salmon total run of 8,500 fish was 126% of the preseason forecast of 6,700 fish.

### **Nakat Inlet**

The Nakat Inlet THA (Subdistrict 101-10) opened by regulation on June 15 to drift gillnet and troll gear to harvest returning chum salmon produced by SSRAA and, with the exception of a 2-week cost recovery closure from July 11 through July 24, remained open on a continual basis through November 10 (Table 16). Harvest consisted of 260 sockeye, 6,200 coho, 3,900 pink, and 55,000 chum salmon (Table 27). An additional 124,000 chum salmon returning to Nakat Inlet were harvested outside the THA in the traditional common property fisheries (Tables 24 and 25). The total hatchery summer chum salmon run to Nakat Inlet was 180,000 fish, 56% of the preseason forecast of 321,000 chum salmon. The fall chum salmon total run of 6,600 fish was 133% of the preseason forecast of 5,000 chum salmon.

### **Carroll Inlet**

The Carroll Inlet THA (Subdistrict 101-48) was opened in 2021 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 gear from June 15 through June 30 (Tables 9 and 16). This was the 4th season that Carroll Inlet had returning hatchery Chinook salmon in recent years. Drift gillnet and purse seine harvested 1,700 Chinook salmon each (Tables 26 and 27). Harvest of nontarget salmon species was around 1% of the total harvest and was primarily chum salmon. The total Chinook salmon run to Carroll Inlet was estimated to be 5,900 fish.

### **Kendrick Bay**

The Kendrick Bay THA (Subdistrict 102-15) was opened in 2021 for purse seine gear to harvest returning chum salmon produced by SSRAA. Kendrick Bay opened by regulation on June 15 and, with the exception of a 2-week cost recovery closure from July 11 to July 24, remained open through September 30 (Table 9). Harvest consisted of 140 sockeye, 650 coho, 15,000 pink, and 12,000 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 4-day directed hatchery chum salmon fisheries prior to SW 28, June 21–July 1 (Tables 8 and 24). Harvest in those openings outside of normal common property openings totaled 18,000 chum salmon. Total hatchery summer chum salmon run for Kendrick Bay was 403,000 fish, which was 56% of the preseason forecast of 714,000 fish.



## **Anita Bay**

The Anita Bay THA (Subdistrict 107-35) was opened each year to harvest of hatchery-produced Chinook, chum, and coho salmon produced by SSRAA. These fish are predominantly harvested by the drift gillnet and purse seine gear groups. 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 typically not present in larger numbers until June, the THA opening was delayed until June 1. Anita Bay opened to net and troll gear concurrently from June 1 through June 12. From June 13 through July 12, the fishery operated on a rotational basis for purse seine and drift gillnet fleets, with the purse seine fleet fishing first in 2021 (Tables 9 and 16). The Anita Bay THA was closed to common property salmon fishing from July 13 through August 9 to facilitate cost-recovery efforts and reopened to common property net and troll fishing on August 10 with the net gear on a rotational schedule through August 31. 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 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 through 2020 and was in place again for 2021. The first drift gillnet and purse seine effort in Anita Bay occurred during SW 23. The last fishing effort recorded for the purse seine fleet occurred during SW 34, and the last recorded effort by the gillnet fleet occurred during SW 40. The purse seine fishery harvested 2,300 Chinook, 50 sockeye, 15 coho, 600 pink, and 3,000 chum salmon (Table 26). Drift gillnet harvest included 4,900 Chinook, 50 sockeye, 4,200 coho, 130 pink, and 46,000 chum salmon (Table 27). Total runs of hatchery salmon returning to Anita Bay were estimated to be 10,100 Chinook salmon (92% of forecast), 174,000 chum salmon (48% of forecast), and 5,600 coho salmon (47% of forecast).

## **Southeast Cove**

2021 was the 3rd 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 21 to common property purse seine and troll fisheries. Troll was open continuously, whereas purse seine was open on Sundays and Thursdays. The purse seine fishery was open from June 21 through August 5 (Table 9). The common property purse seine harvest was 46,000 chum salmon (Table 26) or about 29% of the forecast of 158,000 chum salmon. Minimal cost-recovery fishing occurred occur in 2021, harvesting 5,100 chum salmon (Table 28).

## **Thomas Bay**

The Thomas Bay THA (Subdistrict 110-12) was open to common property purse seine and troll fisheries to harvest the 3rd year of NSRAA-produced chum salmon returning to the THA. NSRAA was expecting a run of 132,000 chum salmon. THA boundaries were designed to minimize effects on recreational users and Dungeness crabbers 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 21 through August 5, for 15 hours each open period (Table 9). Effort was low throughout the season. The common property harvest was 83,000 chum salmon, representing about 63% of the forecast. No cost-recovery or broodstock collection took place in Thomas Bay THA during 2021 (Table 26).

## **Speel Arm**

The DIPAC forecast for total Snettisham Hatchery sockeye salmon runs (including Sweetheart Creek) for 2021 was 106,000 fish from their 2016 and 2017 brood year smolt releases. The BY2016 (5-year-old) fish return was expected to be 93% of the total run due to the near complete loss of the BY2017 fish to infectious hematopoietic necrosis virus. A fishery in Speel Arm THA (Subdistrict 111-33) would not be considered until the lower bound of the 4,000–9,000 Speel Lake sockeye salmon SEG was assured. The Speel Lake weir resumed operation in 2021 after not being operational in 2020 due to concerns of staffing the camp during the COVID-19 health emergency. The lower bound of the Speel Lake SEG range was realized in SW 33 in 2021; however, the broodstock goal at the Snettisham Hatchery was not met until much later resulting in minimal openings in time and area in the Speel Arm THA when hatchery fish were available. The total sockeye salmon harvest in the THA was 3,400 fish (Table 27) of which 76% was harvested in SW 34, with just the southern portion of the THA open concurrent with District 11 openings. The minimum mesh size restriction that is typically utilized south of Circle Point to conserve Speel and Crescent Lakes sockeye salmon was only implemented for 1 day in SWs 30 and 31, with well below average effort and time in Stephens Passage. An estimated 9,500 Snettisham Hatchery sockeye salmon were harvested in the District 11 common property drift gillnet fishery, with an additional 11,600 fish harvested for cost recovery at the hatchery (Table 28). The 2021 total run size of 44,000 Snettisham Hatchery sockeye salmon was 42% of forecast.

## **Amalga Harbor**

Since 2012, portions of Amalga Harbor THA (Subdistrict 111-55) in Section 11-A have been 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 THA fisheries were not opened in 2021 due to DIPAC not achieving their cost-recovery goals. The total Amalga Harbor chum salmon run was estimated to be 649,000 fish, which was above the 468,000 fish forecast.

## **Hidden Falls**

NSRAA forecasted a run to Hidden Falls THA of 34,000 coho, 700 Chinook, and 286,000 chum salmon for 2021. 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 (Hidden Falls THA), 112-21 (Kelp Bay), and 112-11 (Outer Kelp Bay) to provide needed revenue for hatchery operations. Due to the low projected run of chum salmon in 2021, Hidden Falls was managed to provide adequate broodstock. An inseason test fishery conducted by NSRAA indicated that no surplus chum salmon were available and no common property purse seine openings occurred within the Hidden Falls THA.

## **Medvejie/Deep Inlet**

NSRAA forecasted 2021 salmon runs to Medvejie Hatchery in Silver Bay and Deep Inlet THA of 17,600 Chinook, 95,000 coho salmon, and 1.6 million chum salmon. 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 conduct directed cost-recovery harvest operations in this area in 2021, except for an unanticipated cost-recovery opening to target hatchery chum near the mouth of Sawmill Creek in Silver Bay.

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 and 2020 seasons. The 1:1 ratio remained in place for the 2021 season. 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 2021 season. This action was taken to promote full utilization of salmon, prevent waste of salmon, determine harvest patterns of incidentally harvested coho and sockeye salmon, and provide ADF&G and NSRAA with full and accurate reporting of returns. Purse seine and drift gillnet permit holders were also required to retain all Chinook salmon harvested in the Deep Inlet THA. In 2021, drift gillnetters were required to fish with a minimum mesh size of 6 inches through June 19 to reduce harvest of local wild sockeye salmon returning to Silver Bay.

The common property rotational fishery began June 1 (Tables 9 and 16). The June fishing period primarily provides an opportunity to harvest Chinook salmon returning to Medvejie Hatchery and Deep Inlet. Due to coho and chum salmon broodstock concerns, the Deep Inlet THA was closed to common property harvest beginning on September 14 and remained closed through the remainder of the 2021 season. In the 2021 Deep Inlet THA drift gillnet fishery harvested 3,900 Chinook, 3,400 pink, and 356,000 chum salmon; and the purse seine fishery harvested 2,700 Chinook, 35,000 pink, and 850,000 chum salmon (Tables 26 and 27). The total chum salmon run to Deep Inlet and Medvejie Hatchery, including broodstock, was 2.1 million fish.

In late August, aerial surveys showed that there was a large build-up of hatchery produced chum salmon in the vicinity of Sawmill Creek in Silver Bay. NSRAA conducted a brief cost-recovery fishery. Following that effort, ADF&G, in consultation with NSRAA, opened a limited area fishery on September 2 in Silver Bay designed to harvest the hatchery produced chum salmon near Sawmill Creek. The chum salmon harvest from this fishery of 25,000 fish was less than expected.

## **Crawfish Inlet**

NSRAA forecasted 1,920,000 chum salmon to return to the Crawfish Inlet THA. The Crawfish Inlet THA 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 the traditional purse seine fishery area in West Crawfish Inlet. Common property purse seine openings in Crawfish Inlet THA and West Crawfish Inlet began on August 26 and continued through September 24. A total of 94,000 chum salmon were harvested in West Crawfish Inlet and 293,000 chum salmon were harvested in the Crawfish Inlet THA (Table 26). The total run of chum salmon to Crawfish Inlet was estimated to be 1.26 million fish.

## **Boat Harbor**

The Boat Harbor THA (Subdistricts 115-11 and 115-12) in Section 15-C is a release site for DIPAC hatchery-produced summer chum salmon. DIPAC forecasted a total chum salmon run of

656,000 fish to the Boat Harbor THA and Amalga Harbor SHA in 2021, with a projected contribution of 331,000 chum salmon for the District 15 commercial drift gillnet fishery.

Specific actions adopted by the BOF in 2018 to limit harvest of Chilkat River Chinook salmon affected hatchery chum salmon harvest opportunities for the 4th consecutive season. Conservation measures included reduced area and time, gear restrictions, and night closures in the outside waters of the Boat Harbor THA. The outside waters of the Boat Harbor THA were limited to within 1 nmi of the western shoreline 2 days a week for the first 2 weeks of the fishery (SWs 26 and 27). A 6-inch maximum mesh restriction and night closures were in place through SW 29. Inside waters of the Boat Harbor THA were open continuously without any restrictions. In SW 29 and 30, area and time increased in the Boat Harbor THA. Outside waters of the Boat Harbor THA expanded to the regulation area within 2 nmi of the western shoreline south of Lance Point for 4 days each week. The following 3 weeks (SWs 31–33), the fishery was open until further notice; however, fishing area was again reduced to within 1.0 nmi of the western shoreline. By SW 34, the summer chum salmon run to the Boat Harbor THA was nearly over, and the THA was managed in conjunction with the remainder of Section 15-C.

The Boat Harbor THA opened to commercial drift gillnet gear on June 20 (SW 26). Outside waters of the Boat Harbor THA was open for a total of 34 days (SWs 26–37) and the Boat Harbor proper area (inside waters) was open continuously for 82 days with no restrictions (SWs 26–41; Table 16).

Hatchery contributions of chum salmon from Boat Harbor and Amalga Harbor remote release sites contributed to the majority of the chum harvest in the District 15 drift gillnet fishery (based on otolith marking results) through statistical week 33 (August 14). The total common property chum salmon harvest in Section 15-C (including the Boat Harbor THA) was 522,000 fish and DIPAC's estimated chum salmon contribution of 515,000 fish was 97% of the total chum salmon harvest. In the Boat Harbor THA, harvests included 130 Chinook, 5,800 sockeye, 300 coho, 37,200 pink, and 220,000 chum salmon (Table 27).

## **HATCHERY COST-RECOVERY HARVESTS**

Hatchery cost-recovery harvests were reported by 5 private nonprofit hatchery permit holders from 22 locations during 2021 (Table 28). Total harvest was 3.0 million salmon, 88% of the recent average harvest of 3.4 million fish. Harvest included 21,400 Chinook, 13,900 sockeye, 118,000 coho, 420,000 pink, and 2.5 million chum salmon. Chum salmon made up 83% of the total cost-recovery harvest in the region in numbers of fish, and chum salmon harvest was 96% of the recent average. Cost-recovery harvests of all but pink salmon were below recent averages (Table 29).

Cost-recovery harvests for the 2021 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 most of their release sites including Carroll Inlet, Herring Bay, Nakat Inlet, Neets Bay, Kendrick Bay, Port Asumcion, Klawock River, Port Saint Nicholas, Burnett Inlet, Neck Lake, and Anita Bay SHAs. Total harvest for all 11 locations included 629,000 chum, 80,000 coho, and 18,000 Chinook salmon.

DIPAC conducted cost recovery at Macaulay Hatchery, Amalga Harbor, and Speel Arm SHAs. Total harvest for these locations included 683,000 chum, 14,000 sockeye, 15,000 coho, and 500 Chinook salmon.

NSRAA conducted cost recovery at Mist Cove, Gunnuk Creek, SE Cove, Hidden Falls, Deep Inlet/Silver Bay, and Crawfish Inlet SHAs. Total harvest for the 6 locations included 1.1 million chum, 19,000 coho, and 4,000 Chinook salmon. Beginning in 2012, NSRAA, working with the Alaska 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 2021, the NSRAA Board of Directors decided not to tax chum salmon harvested in Section 12-A statistical areas 112-22 (Hidden Falls 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 156,500 pink, 30,000 chum, 3,100 coho, and 8 Chinook salmon.

Sitka Sound Science Center (SSSC) conducted cost recovery at the Crescent Bay SHA. Total harvest was 239,000 pink, 42,000 chum, and 160 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. 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 U.S. and Canada 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 fish. Chinook salmon harvest share provisions were developed to acknowledge traditional harvests in fisheries that 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 food fishery, and Chinook salmon assessment (test) fishery. Finally, for each country, Chinook salmon TAC is split equally after escapement and base level catches are accounted. For sockeye salmon, the harvest sharing objective for the 2021 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 2 commercial fisheries, a First Nations food fishery, and assessment fisheries. The Lower River Commercial Fishery (LRCF) takes place immediately above the U.S./Canada border to about 9 nmi 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 130 nmi upriver near Telegraph Creek and usually consists of only 1 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 3 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 SWs 19 through 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 2021 due to expected low numbers of available Chinook salmon. The lower river sockeye salmon test fishery, used for sockeye salmon stock assessment purposes, takes place near the border and is typically fished from SWs 26 through 35. Because of a low preseason forecast, the lower river sockeye salmon test fishery was conducted as a nonlethal (catch and release) project in 2021. 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 2021 harvests from the combined Canada commercial, food, and sport fisheries in the Stikine River included 182 large and 333 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 182 large Chinook salmon was above their TAC of zero 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 Stikine Management Model (SMM) driving decisions beginning in SW 29. Starting in SW 29, weekly inputs of harvest, effort, and stock composition were entered into the SMM to provide a weekly forecast of run size and TAC.

Because of the low forecast, Canada's directed sockeye salmon commercial fisheries did not open in 2021. The LRCF was open for coho salmon fishing from SW 36 through SW 38. Weekly openings were 5 to 7 days in duration. The total directed sockeye salmon harvest in the LRCF was zero sockeye salmon; however, 611 fish were harvested in the directed coho salmon fishery. The URCF did not open in 2021. The food fishery harvested 4,100 sockeye salmon. Canada's total harvest of Stikine River sockeye salmon in 2021 was 4,700 fish, which was below the AC 14,000 Stikine River sockeye salmon and included 4,100 Tahltan and 600 mainstem fish.

Canada harvested a total of 4,500 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 enhanced adult sockeye salmon returning from the U.S./Canada fry planting program. For 2021, the TAC was shared at 77% U.S. and 23% Canada. The fishery is managed inseason based on wild fish, and postseason performance is based on all fish. 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 escapement goal range for Taku River sockeye salmon based on maximum sustained yield (MSY) prior to the 2020 fishing season. In May of 2020, after being elevated to the PSC Commissioners when the TBR Panel could not reach an agreement, it was agreed that beginning in the 2020 fishing season through 2028, the escapement goal range will be the MSY-based escapement goal range of 40,000 to 75,000 sockeye salmon and the management objective to determine the annual TAC for Taku River sockeye salmon will be 58,000 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. The Taku River Chinook salmon escapement goal range is 19,000 to 36,000 large fish with a management objective of 25,500 large fish. 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 management objective of 70,000 fish. The management intent for both countries in 2021 was to manage their fisheries to achieve the management objective and respective ACs of sockeye and coho salmon based on harvest sharing arrangements dictated by Paragraph 3(b)(iii) of Annex IV, Chapter 1 of the PST.

The 2021 Canadian Taku River commercial harvest was 18,300 sockeye and 10,900 coho salmon (Table 31). These harvests do not include recreational or Aboriginal fisheries. Nonretention of Chinook salmon was in place for both large and nonlarge fish. Sockeye salmon originating from Taku River fry plants contributed an estimated 900 fish to the harvest, accounting for 5% of the total sockeye salmon harvest. In 2021, the sockeye salmon harvest was 78% of the recent average, whereas coho salmon harvest was 111% of the recent average. The 58 days of commercial fishing for the season was 116% of the recent average, whereas the seasonal fishing effort of 250 permit-days was below average. The directed sockeye salmon fishery was delayed to SW 27 to minimize harvest of Chinook salmon, then the fishery was repealed for that week due to high water in the Taku River, so fishing started on July 5 in SW 28. The maximum allowable mesh size was 8.0 inches except for the period from July 5 (SW 28) through July 24 (SW 30), at which time it was reduced to 5.5 inches 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. The 2021 Taku River above-border run size estimate is 182,100 sockeye salmon, and the naturally spawning escapement is estimated at 161,300 fish with an additional 2,300 fish removed for broodstock. The new harvest-sharing arrangement of Taku River sockeye salmon allows either country, in addition to its share of the TAC, to harvest any projected sockeye salmon in excess of the management objective apportioned by run timing. Neither country could harvest their AC this season, so no surplus was harvested.

The sockeye salmon count through the Kuthai Lake weir was 26 fish, which is the 2nd lowest on record and 3% of the approximately 900 fish average. Several thousand sockeye salmon were observed stacked below the first major barrier on the Silver Salmon River in 2021. Studies are currently underway to assess and mitigate 8 identified potential migration obstacles in the Silver

Salmon River canyon below the lake that were enhanced in a 2007 flooding event. The sockeye salmon count through the King Salmon Lake weir was 6,800 fish, which was 159% of the recent average of 4,400 fish. The Little Trapper Lake weir count was 19,500 sockeye salmon, which was 260% of the recent average of 7,500 fish and the 4th highest count on record. The Tatsamenie Lake weir count of 25,600 sockeye salmon is 233% of the recent average of 11,000 fish and the 3rd highest count on record. In 2021, there were 1.9 million eggs and 426,000 eggs available after picking for sockeye salmon broodstock at Tatsamenie and Little Trapper Lakes, respectively.

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 8 (SW 28) until October 1 (SW 40) with fish wheels in operation throughout the entire period, although setnets were used to supplement catches starting on September 13 due to low water levels resulting in intermittent spinning of the fish wheels. Recovery occurred until September 29 (SW 40) in the Canada commercial fishery. The final inseason above-border coho salmon run estimate was 86,400 fish; subtracting the inriver catch of 10,900 fish leaves a spawning escapement estimate of 75,500 fish, landing within the newly adopted escapement goal range of 50,000 to 90,000 fish. The District 11 drift gillnet fishery harvested an estimated 9,700 Taku River above-border coho salmon after SW 33, similar to the 9,800 fish Canada harvested during the same time period, resulting in each country harvesting nearly 70% of their 14,300 fish ACs.

## **ANNETTE ISLANDS RESERVE FISHERIES**

Presidential proclamation established the Annette Islands Reserve (AIR) in 1916. It provides a 3,000-foot offshore zone wherein the members of the Metlakatla Indian Community (MIC) have exclusive fishing rights. Salmon are harvested by purse seine, gillnet, and troll gear. The MIC members 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 2021 AIR salmon harvest by all gears was reported as 1,600 Chinook, 13,300 sockeye, 25,100 coho, 2.7 million pink, and 134,000 chum salmon. The AIR reported drift gillnet fishery harvests of 800 Chinook, 2,800 sockeye, 14,500 coho, 148,000 pink, and 88,000 chum salmon (Table 32). Drift gillnet harvests were below recent averages for all salmon species. The low average pink salmon harvest for the drift gillnet fleet was a function of extremely small pink salmon and gear selectivity rather than a lack of abundance. Chinook salmon harvest was 79%, sockeye salmon harvest was 39%, coho salmon harvest was 49%, pink salmon harvest was 56%, and chum salmon harvest was 44% of recent averages. The AIR reported that purse seine fishery harvests were 480 Chinook, 10,500 sockeye, 9,200 coho, 2.6 million pink, and 46,200 chum salmon (Table 33). Purse seine harvests were all above the recent average for all salmon species except chum salmon, and the pink salmon harvest was the largest recorded purse seine pink salmon harvest by the AIR seine fleet. The purse seine harvest of pink salmon was 301% of the recent average of 859,000 fish (Table 33). AIR all-gear pink salmon harvest of 2.73 million fish, was 21% of total all-gear pink salmon harvests in District 1. AIR all-gear chum salmon harvest of 134,000 fish was 18% of total all-gear chum salmon harvests in District 1.



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## REFERENCES CITED

- ADF&G CWT (Alaska Department of Fish and Game Coded Wire Tag Laboratory). 2022. Mark, Tag and Age Laboratory online reports – Recoveries by fishery report. <https://mtalab.adfg.alaska.gov/CWT/reports/recovery.aspx> (accessed May 2022).
- Brenner, R. E., S. J. Larsen, A. R. Munro, and A. M. Carroll, editors. 2021. Run forecasts and harvest projections for 2021 Alaska salmon fisheries and review of the 2020 season. Alaska Department of Fish and Game, Special Publication No. 21-07, Anchorage.
- CFEC (Commercial Fisheries Entry Commission). 2021. Fishery statistics – Fishery participation and earnings – Basic information tables – salmon – Tables S01A, S03A, S05B, S15B, and S04D. [http://www.cfec.state.ak.us/fishery\\_statistics/earnings.htm](http://www.cfec.state.ak.us/fishery_statistics/earnings.htm) (accessed May 2022).
- Conrad, S., and T. Thynes. 2022. Overview of the 2021 Southeast Alaska and Yakutat commercial, personal use, and subsistence salmon fisheries. Alaska Department of Fish and Game, Fishery Management Report No. 22-05, Anchorage.
- Hagerman, G., M. Vaughn, and J. Priest. 2022. Annual management report for the 2021 Southeast Alaska/Yakutat salmon troll fisheries. Alaska Department of Fish and Game, Fishery Management Report No. 22-23, Anchorage.
- Hoffman, R. A. 2022. Annual Management Report of the 2021 Yakutat Area commercial salmon fisheries. Alaska Department of Fish and Game, Fishery Management Report No. 22-06, Anchorage.
- Lum, J. L., and L. Fair. 2018. Chilkat River and King Salmon River king salmon stock status and action plan 2018. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report No. 1J18-05, Douglas.
- Piston, A. W., and S. C. Heinl. 2020a. Pink salmon stock status and escapement goals in Southeast Alaska through 2019. Alaska Department of Fish and Game, Special Publication No. 20-09, Anchorage.
- Piston, A. W., and S. C. Heinl. 2020b. Chum salmon stock status and escapement goals in Southeast Alaska through 2019. Alaska Department of Fish and Game, Special Publication No. 20-10, Anchorage.
- Wilson, L. 2022. Alaska salmon fisheries enhancement program annual report 2021. Alaska Department of Fish and Game, Regional Information Report No. 5J22-02, Juneau.
- Walker, S., T. Thynes, D. Gray, K. S. Reppert, A. W. Piston, and S. C. Heinl. 2018. McDonald Lake sockeye salmon stock status and action plan 2018. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report No. 1J18-03, Douglas.
- Zadina, T. P., S. C. Heinl, A. J. McGregor, and H. J. Geiger. 2004. Pink salmon stock status and escapement goals in Southeast Alaska and Yakutat. Pages 263–316 [in] H. J. Geiger and S. McPherson, editors. Stock status and escapement goals for salmon stocks in Southeast Alaska. Alaska Department of Fish and Game, Divisions of Sport and Commercial Fisheries, Special Publication No. 04-02, Anchorage.

## **TABLES AND FIGURES**

Table 1.—Southeast Alaska traditional and terminal harvest areas purse seine salmon harvest in numbers of fish by species, 1960–2021.

Year	Chinook <sup>a</sup>	Jacks <sup>a</sup>	Sockeye	Coho	Pink	Chum	Total	Rank <sup>b</sup>
1960	6,509	—	358,697	125,871	2,572,279	726,017	3,789,373	62
1961	4,134	—	418,952	246,524	10,936,344	2,172,066	13,778,020	44
1962	10,145	—	411,748	239,382	10,139,595	1,593,386	12,394,256	47
1963	6,659	—	422,605	316,449	18,188,335	1,186,182	20,120,230	36
1964	16,819	—	570,250	506,341	17,305,646	1,661,431	20,060,487	37
1965	14,992	—	672,001	556,981	10,061,346	1,185,569	12,490,889	46
1966	11,874	—	480,024	451,888	18,906,895	2,846,425	22,697,106	35
1967	9,054	—	600,602	188,959	2,807,759	1,545,057	5,151,431	58
1968	13,335	—	494,851	463,270	24,083,473	2,251,556	27,306,485	28
1969	6,731	—	338,357	108,907	4,313,575	332,514	5,100,084	59
1970	5,909	—	308,198	293,435	9,589,943	1,919,378	12,116,863	50
1971	4,799	—	162,253	325,772	8,514,499	1,495,755	10,503,078	52
1972	16,730	—	324,893	385,221	11,363,527	2,168,632	14,259,003	43
1973	8,754	—	342,336	128,220	5,611,363	1,221,201	7,311,874	56
1974	6,750	—	236,064	166,836	4,174,551	988,297	5,572,498	57
1975	2,056	—	61,784	70,193	3,414,308	381,540	3,929,881	61
1976	1,428	—	135,192	87,344	4,290,526	511,827	5,026,317	60
1977	5,242	—	328,932	130,902	11,444,267	336,408	12,245,751	48
1978	13,972	—	272,197	242,961	18,545,091	521,880	19,596,101	38
1979	10,079	—	397,137	176,354	8,934,010	438,175	9,955,755	53
1980	11,701	—	510,956	184,570	11,869,988	1,002,478	13,579,693	45
1981	10,264	—	438,921	237,402	16,268,867	517,002	17,472,456	41
1982	30,529	—	445,385	397,349	22,048,891	828,444	23,750,598	33
1983	13,394	166	778,195	338,881	33,666,234	579,168	35,376,038	24
1984	20,762	—	457,160	350,017	21,070,834	2,433,749	24,332,522	31
1985	21,535	—	716,342	417,852	47,233,196	1,849,523	50,238,448	13
1986	12,113	1,158	587,730	568,410	42,788,318	2,198,907	46,156,636	18
1987	4,498	1,786	310,282	121,974	7,018,562	1,234,552	8,691,654	54
1988	11,137	1,028	654,748	157,003	8,825,252	1,625,435	11,274,603	51
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	27
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	25
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	26
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
1990	11,323	3,454	965,918	372,471	27,915,150	1,062,522	30,330,838	29
2000	20,703	1341	489,257	206,479	18,156,691	8,306,257	27,180,728	4
2001	19,730	2,584	1,013,151	542,643	61,951,322	4,436,178	67,965,608	19
2002	17,145	1,580	154,478	469,680	42,137,936	3,110,330	45,891,149	10
2003	24,054	1,182	681,418	394,168	49,894,749	4,336,128	55,331,699	14
2004	39,297	687	900,557	399,267	42,596,809	5,684,447	49,621,064	8
2005	19,694	727	898,515	341,295	55,746,479	2,817,026	59,823,736	42
2006	24,730	1,240	413,938	109,498	10,117,941	5,614,232	16,281,579	17
2007	27,092	1306	1,063,704	247,568	42,078,209	3,043,839	46,461,718	40
2008	15,488	530	74,389	208,196	14,297,381	3,215,231	17,811,215	20
2009	28,922	966	307,436	283,431	34,946,847	3,502,998	39,070,600	62

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Table 1.–Page 2 of 2.

Year	Chinook <sup>a</sup>	Jacks <sup>a</sup>	Sockeye	Coho	Pink	Chum	Total	Rank <sup>b</sup>
2010	16,248	461	151,434	193,223	20,630,148	3,234,846	24,226,360	32
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	30
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	22
2015	29,522	545	908,663	284,301	32,224,601	4,827,047	38,274,679	21
2016	27,363	195	610,532	257,065	15,388,943	3,108,581	19,392,679	39
2017	10,448	896	287,857	270,043	32,061,417	4,044,328	36,674,989	23
2018	16,139	613	230,931	154,176	6,850,978	4,985,011	12,237,848	49
2019	21,174	1,224	445,273	246,357	18,611,309	4,380,782	23,706,119	34
2020	16,611	1,748	237,220	76,706	5,958,004	2,012,622	8,302,911	55
2021	17,287	3,602	793,869	301,815	44,520,097	2,586,723	48,223,393	16
Averages								
1960–2020 <sup>c</sup>	15,580	994	580,567	317,846	26,715,862	2,988,537	30,619,385	
2011–2020 <sup>d</sup>	21,821	1,056	457,342	284,557	30,775,555	3,906,904	35,447,233	
Max harvest	39,297	6,265	1,690,471	967,691	88,764,579	9,406,979		
Max year	2004	1994	1993	1994	2013	1998		
Min harvest	1,428	166	61,784	70,193	2,572,279	332,514		
Min year	1976	1983	1975	1975	1960	1969		

Note: En dashes indicate no data.

<sup>a</sup> Chinook salmon are 28 inches or greater from tip of snout to tip of tail; “jacks” are less than 28 inches.

<sup>b</sup> Rank is based on total harvest for years 1960 to 2021.

<sup>c</sup> Equals the long-term average harvest.

<sup>d</sup> Equals the recent average harvest.

Table 2.—Southeast Alaska commercial purse seine salmon harvest in numbers of fish by district, fishery, and species, 2021.

Fishery	Chinook <sup>a</sup>	Jacks <sup>a</sup>	Sockeye	Coho	Pink	Chum	Total
District 1							
Traditional	9	958	94,591	54,394	9,854,467	200,944	10,205,363
Terminal Harvest Area	5,381	50	15	11	245	2,938	8,640
Annette Islands Reserve	478	25	10,516	9,188	2,584,339	46,151	2,650,697
District 2							
Traditional	0	800	69,461	54,035	7,741,394	435,263	8,300,953
Terminal Harvest Area	0	23	138	651	15,301	11,698	27,811
District 3							
Traditional	49	262	28,229	29,347	4,129,189	154,006	4,341,082
District 4							
Traditional	6,516	1,297	496,404	97,575	10,746,081	212,045	11,559,918
District 5							
Traditional	1	0	9,618	1,991	285,021	6,213	302,844
District 6							
Traditional	65	31	28,637	10,390	1,224,094	21,147	1,284,364
District 7							
Traditional	208	86	12,759	3,779	1,050,823	64,657	1,132,312
Terminal Harvest Area	2,218	75	47	14	589	2,985	5,928
District 9							
Traditional	12	9	5,373	11,061	1,951,579	20,446	1,988,480
Terminal Harvest Area	4	2	156	43	1,370	45,599	47,174
District 10							
Traditional	0	0	223	743	33,986	30	34,982
Terminal Harvest Area	5	2	60	8	468	82,590	83,133
District 11							
Terminal Harvest Area	NF	NF	NF	NF	NF	NF	NF
District 12							
Traditional	57	6	37,624	27,642	5,020,737	43,458	5,129,524
Terminal Harvest Area	NF	NF	NF	NF	NF	NF	NF
District 13							
Traditional	25	1	6,488	5,385	2,085,621	137,717	2,235,237
Terminal Harvest Area	2,736	0	2,231	3,129	36,507	1,142,684	1,187,287
District 14							
Traditional	1	0	1,815	1,617	342,625	2,303	348,361
Southern Subtotals							
Traditional	6,848	3,434	739,699	251,511	35,031,069	1,094,275	37,126,836
Terminal Area Harvest	7,599	148	200	676	16,135	17,621	42,379
Annette Islands Reserve	478	25	10,516	9,188	2,584,339	46,151	2,650,697
Subtotal	14,925	3,607	750,415	261,375	37,631,543	1,158,047	39,819,912
Northern Subtotals							
Traditional	95	16	51,523	46,448	9,434,548	203,954	9,736,584
Terminal Area Harvest	2,745	4	2,447	3,180	38,345	1,270,873	1,317,594
Subtotal	2,840	20	53,970	49,628	9,472,893	1,474,827	11,054,178
Total Southeast							
Traditional	6,943	3,450	791,222	297,959	44,465,617	1,298,229	46,863,420
Terminal Area Harvest	10,344	152	2,647	3,856	54,480	1,288,494	1,359,973
Subtotal (Traditional and THA)	17,287	3,602	793,869	301,815	44,520,097	2,586,723	48,223,393
Annette Islands Reserve	478	25	10,516	9,188	2,584,339	46,151	2,650,697
Miscellaneous	1	7	982	296	55,106	11,696	68,088
Total	26,229	4,391	806,655	354,035	47,175,251	3,557,582	51,924,143

Note: NF indicates no fishery.

<sup>a</sup> Chinook salmon are 28 inches or greater from the tip of snout to tip of tail; “jacks” are less than 28 inches.

Table 3.—Southeast Alaska commercial fisheries exvessel value estimated by prices reported on fish tickets by gear type, area, and species, 2021.

Fishery	Chinook	Sockeye	Coho	Pink	Chum	Total
<b>Purse Seine</b>						
Southern purse seine	\$336,115	\$7,690,886	\$1,051,972	\$34,030,385	\$7,573,308	\$50,682,666
Northern purse seine	\$1,318	\$473,258	\$231,940	\$9,638,864	\$1,346,199	\$11,691,579
Terminal purse seine	\$620,543	\$17,685	\$12,161	\$48,530	\$8,179,343	\$8,878,262
Total purse seine value	\$957,976	\$8,181,829	\$1,296,073	\$43,717,779	\$17,098,850	\$71,252,507
<b>Drift gillnet</b>						
Tree Point	\$103,466	\$222,327	\$450,960	\$152,054	\$1,228,471	\$2,157,277
Prince of Wales	\$37,940	\$510,084	\$818,316	\$214,897	\$1,061,973	\$2,643,210
Stikine	\$2,332	\$8,448	\$156,941	\$7,999	\$385,563	\$561,283
Taku-Snettisham	\$33,433	\$490,980	\$307,853	\$190,210	\$1,052,226	\$2,074,702
Lynn Canal	\$24,118	\$815,919	\$362,082	\$211,158	\$1,413,709	\$2,826,987
Terminal gillnet	\$902,410	\$106,057	\$156,349	\$93,375	\$4,994,691	\$4,994,691
Total drift gillnet value	\$1,103,698	\$2,153,815	\$2,252,501	\$869,693	\$10,136,634	\$15,258,150
<b>Set gillnet (Yakutat)</b>						
Set gillnet value	\$22,338	\$826,820	\$931,531	\$31,945	\$120	\$1,812,754
<b>Troll</b>						
Total troll value	\$13,619,636	\$47,858	\$13,316,703	\$134,041	\$5,088,742	\$32,206,980
Annette Islands Reserve	\$101,586	\$142,902	\$208,414	\$2,961,884	\$988,727	\$4,403,513
Hatchery cost recovery	\$446,976	\$119,454	\$1,412,365	\$593,588	\$23,648,907	\$26,221,290
Miscellaneous	\$46,446	\$9,345	\$32,456	\$59,986	\$65,515	\$213,749
Total salmon value	\$16,298,657	\$11,482,022	\$19,450,042	\$48,368,918	\$57,027,495	\$151,368,944

*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 commercial purse seine and drift gillnet fisheries exvessel values in dollars (common property harvest), 1975–2021.

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	\$30,751,155
2018	\$57,183,023	\$29,529,063
2019	\$51,575,975	\$20,158,393
2020	\$17,817,944	\$7,605,148
2021	\$71,252,207	\$15,258,150

Source: Data from CFEC basic information tables, 1975–2020 (CFEC 2022); 2021 is from fish ticket data.



Table 5.—Northern Southeast Alaska traditional and terminal harvest areas purse seine salmon harvest in numbers of fish by species, 1960–2021.

Year	Chinook <sup>a</sup>	Jacks <sup>a</sup>	Sockeye	Coho	Pink	Chum	Total	Rank <sup>b</sup>
1960	1,377	—	193,185	40,578	1,208,645	344,005	1,787,790	57
1961	2,738	—	306,490	98,626	7,545,647	1,276,238	9,229,739	30
1962	3,308	—	190,704	44,844	450,906	779,813	1,469,575	58
1963	3,992	—	241,483	146,899	13,772,188	697,716	14,862,278	18
1964	6,155	—	259,808	179,568	7,184,778	615,968	8,246,277	31
1965	6,451	—	353,618	243,509	5,106,087	949,074	6,658,739	34
1966	6,071	—	273,071	170,354	4,720,620	2,277,117	7,447,233	32
1967	2,349	—	213,594	120,294	2,358,831	1,317,519	4,012,587	47
1968	4,665	—	336,407	208,564	9,729,290	1,167,207	11,446,133	25
1969	4,173	—	270,123	86,679	3,453,722	297,047	4,111,744	45
1970	3,684	—	236,924	165,350	4,975,580	1,399,153	6,780,691	33
1971	2,595	—	113,129	127,503	2,912,899	866,426	4,022,552	46
1972	5,940	—	158,386	151,533	3,016,932	1,392,721	4,725,512	43
1973	4,062	—	175,093	56,225	1,741,275	635,178	2,611,833	51
1974	1,559	—	66,992	27,469	514,451	440,806	1,051,277	60
1975	108	—	5,286	2,185	585,919	66,959	660,457	61
1976	12	—	19,126	1,744	80,819	55,005	156,706	62
1977	233	—	17,676	21,403	2,068,591	30,357	2,138,260	53
1978	501	—	36,641	9,101	2,398,505	39,990	2,484,738	52
1979	797	—	36,311	19,990	3,198,769	226,125	3,481,992	49
1980	512	—	27,569	12,378	902,071	415,511	1,358,041	59
1981	2,280	—	60,750	44,016	4,428,712	282,754	4,818,512	40
1982	3,643	—	67,140	108,952	10,718,372	162,007	11,060,114	27
1983	2,672	106	60,516	54,457	5,323,586	271,365	5,712,702	37
1984	1,808	—	53,308	48,703	4,161,231	1,473,603	5,738,653	36
1985	7,996	—	99,242	77,561	19,343,125	1,011,367	20,539,291	12
1986	751	633	18,583	17,786	933,928	947,510	1,919,191	56
1987	643	1,038	77,112	28,425	3,852,989	833,647	4,793,854	41
1988	631	520	13,323	24,973	1,299,946	653,809	1,993,202	55
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	42
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	29
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	44
2009	6,460	479	65,475	36,611	10,603,951	2,427,762	13,140,738	22

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Table 5.–Page 2 of 2.

Year	Chinook <sup>a</sup>	Jacks <sup>a</sup>	Sockeye	Coho	Pink	Chum	Total	Rank <sup>b</sup>
2010	6,694	312	29,822	46,896	9,263,512	1,926,022	11,273,258	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	48
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	39
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	50
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	35
2019	3,145	83	60,309	53,618	2,488,255	3,050,684	5,656,094	38
2020	2,711	88	3,503	12,460	579,376	1,522,205	2,120,343	54
2021	2,840	20	53,970	49,628	9,472,893	1,474,827	11,054,178	28
Averages								
1960–2020 <sup>c</sup>	4,973	607	115,834	98,436	9,829,486	1,836,744	11,886,080	
2011–2020 <sup>d</sup>	4,442	385	79,106	89,255	14,222,642	2,330,322	16,726,152	
Max harvest	24,217	5,864	353,618	467,296	45,588,738	6,246,728		
Max year	1995	1994	1965	1994	2011	1996		
Min harvest	12	20	3,503	1,744	80,819	30,357		
Min year	1976	2021	2020	1976	1976	1977		

Note: En dashes indicate no data.

<sup>a</sup> Chinook salmon are 28 inches or greater from the tip of snout to tip of tail; “jacks” are less than 28 inches.

<sup>b</sup> Rank is based on total harvest for years 1960 to 2021.

<sup>c</sup> Equals the long-term average harvest.

<sup>d</sup> Equals the recent average harvest.

Table 6.—Southern Southeast Alaska traditional and terminal harvest areas purse seine salmon harvest in numbers of fish by species, 1960–2021.

Year	Chinook <sup>a</sup>	Jacks <sup>a</sup>	Sockeye	Coho	Pink	Chum	Total	Rank <sup>b</sup>
1960	5,132	—	165,512	85,293	1,363,634	382,012	2,001,583	60
1961	1,396	—	112,462	147,898	3,390,697	895,828	4,548,281	56
1962	6,837	—	221,044	194,538	9,688,689	813,573	10,924,681	41
1963	2,667	—	181,122	169,550	4,416,147	488,466	5,257,952	52
1964	10,664	—	310,442	326,773	10,120,868	1,045,463	11,814,210	39
1965	8,541	—	318,383	313,472	4,955,259	236,495	5,832,150	50
1966	5,803	—	206,953	281,534	14,186,275	569,308	15,249,873	31
1967	6,705	—	387,008	68,665	448,928	227,538	1,138,844	61
1968	8,670	—	158,444	254,706	14,354,183	1,084,349	15,860,352	30
1969	2,558	—	68,234	22,228	859,853	35,467	988,340	62
1970	2,225	—	71,274	128,085	4,614,363	520,040	5,335,987	51
1971	2,204	—	49,124	198,269	5,601,600	629,329	6,480,526	46
1972	10,773	—	166,415	233,542	8,343,196	774,356	9,528,282	43
1973	4,692	—	167,243	71,995	3,870,088	586,023	4,700,041	55
1974	5,191	—	169,072	139,367	3,660,100	547,491	4,521,221	57
1975	1,948	—	56,498	68,008	2,828,389	314,581	3,269,424	59
1976	1,416	—	116,066	85,600	4,209,707	456,822	4,869,611	53
1977	5,009	—	311,256	109,499	9,375,676	306,051	10,107,491	42
1978	13,471	—	235,556	233,860	16,146,586	481,890	17,111,363	27
1979	9,282	—	360,826	156,364	5,735,241	212,050	6,473,763	47
1980	11,189	—	483,387	172,192	10,967,917	586,967	12,221,652	38
1981	7,984	—	378,171	193,386	11,840,155	234,248	12,653,944	37
1982	26,886	—	378,245	288,397	11,330,519	666,437	12,690,484	36
1983	10,722	60	717,679	284,424	28,342,648	307,803	29,663,336	15
1984	18,954	—	403,852	301,314	16,909,603	960,146	18,593,869	25
1985	13,539	—	617,100	340,291	27,890,071	838,156	29,699,157	14
1986	11,362	525	569,147	550,624	41,854,390	1,251,397	44,237,445	4
1987	3,855	748	233,170	93,549	3,165,573	400,905	3,897,800	58
1988	10,506	508	641,425	132,030	7,525,306	971,626	9,281,401	45
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	19
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	24
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	20
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	28
1998	8027	142	625,115	303,297	21,734,084	4,606,653	27,277,318	17
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	34
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	21
2003	17,160	811	535,310	297,433	27,513,798	1,471,152	29,835,664	13
2004	30,307	91	577,068	232,532	19,526,353	1,585,466	21,951,817	22
2005	15,257	392	735,457	208,096	27,121,832	981,779	29,062,813	16
2006	19,472	184	346,241	62,628	2,569,607	1,803,244	4,801,376	54
2007	19,769	576	973,022	191,328	30,134,506	1,800,914	33,120,115	11
2008	7,681	233	68,758	190,350	12,322,831	882,609	13,472,462	33
2009	22,462	487	241,961	246,820	24,342,896	1,075,236	25,929,862	18

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Table 6.—Page 2 of 2.

Year	Chinook <sup>a</sup>	Jacks <sup>a</sup>	Sockeye	Coho	Pink	Chum	Total	Rank <sup>b</sup>
2010	9,554	149	121,612	146,327	11,366,636	1,308,824	12,953,102	35
2011	17,796	250	287,222	117,932	9,662,542	1,529,799	11,615,541	40
2012	15,092	529	148,047	263,193	17,328,907	2,790,613	20,546,381	23
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	12
2015	24,774	266	728,085	193,555	11,265,139	2,617,589	14,829,408	32
2016	25,722	166	597,067	245,909	13,823,407	2,080,832	16,773,103	29
2017	8,318	419	153,340	80,514	7,932,294	1,223,844	9,398,729	44
2018	10,675	371	196,901	104,696	4,588,464	1,318,914	6,220,021	48
2019	18,029	1,141	384,964	192,739	16,123,054	1,330,098	18,050,025	26
2020	13,900	1,660	233,717	64,246	5,378,628	490,417	6,182,568	49
2021	14,447	3,582	739,899	252,187	35,047,204	1,111,896	37,169,215	10
Averages								
1960–2020 <sup>c</sup>	10,607	386	464,732	219,407	16,886,321	1,151,764	18,733,217	
2011–2020 <sup>d</sup>	17,379	671	378,235	195,302	16,552,913	1,576,581	18,721,081	
Max harvest	30,307	3,582	1,528,318	550,624	52,085,357	4,606,653		
Max year	2004	2021	1993	1986	1996	1998		
Min harvest	858	60	49,124	22,228	448,928	35,467		
Min year	1995	1983	1971	1969	1967	1969		

Note: En dashes indicate no data.

<sup>a</sup> Chinook salmon are 28 inches or greater from the tip of snout to tip of tail; “jacks” are less than 28 inches.

<sup>b</sup> Rank is based on total harvest for years 1960 to 2021.

<sup>c</sup> Equals the long-term average harvest.

<sup>d</sup> Equals the recent average harvest.

Table 7.—Northern Southeast Alaska commercial purse seine fishing time in hours open per day by district and section (gray shaded cells indicate no fishery), 2021.

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

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Table 7.–Page 2 of 2.

Week	Date	Day	Districts (subdivided into sections)										
			9 A	9 B	10 All	12 A	12 B	13 A	13 B	13 C	14 A	14 B	14 C
33	8-Aug	Sun											
	9-Aug	Mon											
	10-Aug	Tue		19		19		19	19		19	19	
	11-Aug	Wed		20		20		20	20		20	20	
	12-Aug	Thu											
	13-Aug	Fri											
	14-Aug	Sat		19		19		19	19		19	19	
34	15-Aug	Sun		20		20		20	20		20	20	
	16-Aug	Mon											
	17-Aug	Tue											
	18-Aug	Wed		18		18		18	18		18	18	
	19-Aug	Thu		21		21		21	21		21	21	
	20-Aug	Fri											
	21-Aug	Sat											
35	22-Aug	Sun		18		18		18			18	18	
	23-Aug	Mon		21		21		21			21	21	
	24-Aug	Tue											
	25-Aug	Wed											
	26-Aug	Thu		18		18		18	12		18	18	
	27-Aug	Fri		21		21		21	12		21	21	
	28-Aug	Sat											
36	29-Aug	Sun							12				
	30-Aug	Mon		18		18		18			18	18	
	31-Aug	Tue		21		21		21			21	21	
	1-Sep	Wed											
	2-Sep	Thu							12				
	3-Sep	Fri		18		18		18	12			18	
	4-Sep	Sat		21		20		21				20	
37	5-Sep	Sun							12				
	6-Sep	Mon		18									
	7-Sep	Tue		21									
	8-Sep	Wed											
	9-Sep	Thu							12				
	10-Sep	Fri		18					12				
	11-Sep	Sat		21									
38	12-Sep	Sun							12				
	13-Sep	Mon											
	14-Sep	Tue											
	15-Sep	Wed											
	16-Sep	Thu							12				
	17-Sep	Fri							12				
	18-Sep	Sat											
39	19-Sep	Sun							12				
	20-Sep	Mon											
	21-Sep	Tue											
	22-Sep	Wed											
	23-Sep	Thu							12				
	24-Sep	Fri											
	25-Sep	Sat											

Table 8.—Southern Southeast Alaska commercial purse seine fishing time in hours open per day by district and section (gray shaded cells indicate no fishery), 2021.

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

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Table 8.–Page 2 of 3.

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

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Table 8.–Page 3 of 3.

Week	Date	Day	Districts (subdivided into sections)													
			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
36	29-Aug	Sun														
	30-Aug	Mon	18			18		18	18	18	18	18	18	18	18	18
	31-Aug	Tue	21			21		21	21	21	21	21	21	21	21	21
	1-Sep	Wed														
	2-Sep	Thu														
	3-Sep	Fri	18			18		18	18	18	18	18	18	18	18	18
	4-Sep	Sat	21			21		21	21	21	21	21	21	21	21	21
37	5-Sep	Sun														
	6-Sep	Mon														
	7-Sep	Tue														
	8-Sep	Wed														
	9-Sep	Thu														
	10-Sep	Fri														
	11-Sep	Sat														
38	12-Sep	Sun														
	13-Sep	Mon														
	14-Sep	Tue														
	15-Sep	Wed														
	16-Sep	Thu														
	17-Sep	Fri					12									
	18-Sep	Sat														
39	19-Sep	Sun					12									
	20-Sep	Mon														
	21-Sep	Tue														
	22-Sep	Wed														
	23-Sep	Thu														
	24-Sep	Fri														
	25-Sep	Sat														

Table 9.—Southeast Alaska hatchery terminal harvest areas commercial purse seine fishing time in hours open per day (gray shaded cells indicate no fishery), 2021.

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

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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
30	18-Jul	Sun					15	15				15
	19-Jul	Mon										
	20-Jul	Tue										
	21-Jul	Wed										
	22-Jul	Thu					15	15				15
	23-Jul	Fri										15
	24-Jul	Sat										
31	25-Jul	Sun			24		15	15				15
	26-Jul	Mon			24							
	27-Jul	Tue			24							
	28-Jul	Wed			24							
	29-Jul	Thu			24		15	15				15
	30-Jul	Fri			24							15
	31-Jul	Sat			24							
32	1-Aug	Sun			24		15	15				15
	2-Aug	Mon			24							
	3-Aug	Tue			24							
	4-Aug	Wed			24							
	5-Aug	Thu			24		15	15				15
	6-Aug	Fri			24							15
	7-Aug	Sat			24							
33	8-Aug	Sun			24							15
	9-Aug	Mon			24							
	10-Aug	Tue			24							
	11-Aug	Wed			24							
	12-Aug	Thu			24	12						15
	13-Aug	Fri			24	12						15
	14-Aug	Sat			24							
34	15-Aug	Sun			24							15
	16-Aug	Mon			24	12						
	17-Aug	Tue			24	12						
	18-Aug	Wed			24							
	19-Aug	Thu			24							15
	20-Aug	Fri			24	12						15
	21-Aug	Sat			24	12						
35	22-Aug	Sun			24							15
	23-Aug	Mon			24							
	24-Aug	Tue			24	12						
	25-Aug	Wed			24	12						
	26-Aug	Thu			24						12	15
	27-Aug	Fri			24						12	15
	28-Aug	Sat			24	12						
36	29-Aug	Sun			24	12					12	15
	30-Aug	Mon			24							
	31-Aug	Tue			24							
	1-Sep	Wed			24	24						
	2-Sep	Thu			24	24					12	15
	3-Sep	Fri			24	24					12	15
	4-Sep	Sat			24	24						

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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
37	5-Sep	Sun			24	24					12	15
	6-Sep	Mon			24	24						
	7-Sep	Tue			24	24						
	8-Sep	Wed			24	24						
	9-Sep	Thu			24	24					12	15
	10-Sep	Fri			24	24					12	15
	11-Sep	Sat			24	24						
38	12-Sep	Sun			24	24					12	15
	13-Sep	Mon			24	24						
	14-Sep	Tue			24	24						
	15-Sep	Wed			24	24						
	16-Sep	Thu			24	24					12	15
	17-Sep	Fri			24	24					12	15
	18-Sep	Sat			24	24						
39	19-Sep	Sun			24	24					12	15
	20-Sep	Mon			24	24						
	21-Sep	Tue			24	24						
	22-Sep	Wed			24	24						
	23-Sep	Thu			24	24					12	15
	24-Sep	Fri			24	24					12	15
	25-Sep	Sat			24	24						
40	26-Sep	Sun			24	24						
	27-Sep	Mon			24	24						
	28-Sep	Tue			24	24						
	29-Sep	Wed			24	24						
	30-Sep	Thu			12	24						
	1-Oct	Fri				24						
	2-Oct	Sat				24						
41	3-Oct	Sun				24						
	4-Oct	Mon				24						
	5-Oct	Tue				24						
	6-Oct	Wed				24						
	7-Oct	Thu				24						
	8-Oct	Fri				24						
	9-Oct	Sat				24						
42	10-Oct	Sun				24						
	11-Oct	Mon				24						
	12-Oct	Tue				24						
	13-Oct	Wed				24						
	14-Oct	Thu				24						
	15-Oct	Fri				24						
	16-Oct	Sat				24						
43	17-Oct	Sun				24						
	18-Oct	Mon				24						
	19-Oct	Tue				24						
	20-Oct	Wed				24						
	21-Oct	Thu				24						
	22-Oct	Fri				24						
	23-Oct	Sat				24						

-continued-

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
44	24-Oct	Sun				24						
	25-Oct	Mon				24						
	26-Oct	Tue				24						
	27-Oct	Wed				24						
	28-Oct	Thu				24						
	29-Oct	Fri				24						
	30-Oct	Sat				24						
45	31-Oct	Sun				24						
	1-Nov	Mon				24						
	2-Nov	Tue				24						
	3-Nov	Wed				24						
	4-Nov	Thu				24						
	5-Nov	Fri				24						
	6-Nov	Sat				24						
46	7-Nov	Sun				24						
	8-Nov	Mon				24						
	9-Nov	Tue				24						
	10-Nov	Wed				12						
	11-Nov	Thu										
	12-Nov	Fri										
	13-Nov	Sat										

Table 10.—Southeast Alaska pink salmon escapement indices and biological escapement goals by subregion (in millions of index fish), 2021.

Subregion	2021 Pink salmon index	Biological escapement goal	
		Lower Bound	Upper Bound
Southern Southeast	9.81	3.00	8.00
Northern Southeast Inside	3.91	2.50	6.00
Northern Southeast Outside	1.94	0.75	2.50
Total	15.67		

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, 2012–2021.

Subregion	District	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Lower management target	Upper management target
SSE	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	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	113		+	+	+		+					0.75	2.50

Note: SSE = Southern Southeast subregion; NSEI = Northern Southeast Inside subregion; 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, 2012–2021.

Subregion	District	Stock group	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Lower management target	Upper management target
SSE	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	Moirá		+				+	-			+	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	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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Subregion	District	Stock group	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	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	Homesore		+	-	+	-	-	-	-	-	-	0.03	0.07
NSEI	114	N Chichagof		+	-	+	-	+	-	-	-	+	0.11	0.27
NSEI	115	Upper Lynn Canal	+	+	-	+	-	+	-	-	-		0.03	0.07
NSEO	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

Note: SSE = Southern Southeast subregion; NSEI = Northern Southeast Inside subregion; NSEO = Northern Southeast Outside subregion.

Table 13.—Southeast Alaska chum salmon sustainable escapement goals and escapement indices (in thousands), 1980–2021.

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	—	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	—
2019	105	123	25	20	5	14	4	224
2020	70	60	16	30	2	12	0	23
2021	77	67	12	55	2	3	2	172
<u>Goal range:</u>								
Lower bound	62	107	25	30	2	5	4	75
Upper bound	—	—	—	48	7	15	18	250

Note: En dash indicates no data because there is no upper bound for those stocks. 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, 2021.

Stock	Goal type <sup>a</sup>	Estimated escapement or index	Escapement goal range	Comment	Enumeration method
Hugh Smith Lake	OEG	3,235	8,000–18,000	Below goal	Weir count
McDonald Lake	SEG	44,500	55,000–120,000	Below goal	Expanded foot survey
Stikine—mainstem <sup>b</sup>	SEG	30,447	20,000–40,000	–	Run Reconstruction
Stikine—Tahltan <sup>b</sup>	BEG	42,846	18,000–30,000	Above goal	Weir count
Speel Lake	BEG	8,643	4,000–9,000	–	Weir count
Taku—inriver <sup>b</sup>	SEG	161,348	40,000–75,000	Above goal	Mark–recapture
Redoubt Lake	OEG	60,004	7,000–25,000	Above goal	Weir count
Chilkoot Lake	SEG	98,672	38,000–86,000	Above goal	Weir count
Chilkat Lake	BEG	65,022	70,000–150,000	Below goal	Weir/Sonar count
Situk River	BEG	119,072	30,000–70,000	Above goal	Weir count
Klukshu River <sup>b</sup>	BEG	25,670	7,500–11,000	Above goal	Weir count
East Alsek River	BEG	29,700	9,000–24,000	Above goal	Peak aerial survey

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

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

Table 15.—Southeast Alaska commercial drift gillnet fishing time in hours open per day by district and section (gray shaded cells indicate no fishery), 2021.

			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
26	20-Jun	Sun		12	12	12			12		12		12
	21-Jun	Mon		24	24	24			24		24		24
	22-Jun	Tues		24	12	12			12		12		12
	23-Jun	Wed		24									
	24-Jun	Thu		12									
	25-Jun	Fri											
	26-Jun	Sat											
27	27-Jun	Sun		12	12	12			12		12		12
	28-Jun	Mon		24	24	24			24		24		24
	29-Jun	Tues		24	12	12			12		12		12
	30-Jun	Wed		24									
	1-Jul	Thu		12									
	2-Jul	Fri											
	3-Jul	Sat											
28	4-Jul	Sun		12	12	12			12		12		12
	5-Jul	Mon		24	24	24			24		24		24
	6-Jul	Tues		24	12	12			12		12		12
	7-Jul	Wed		24									
	8-Jul	Thu		12									
	9-Jul	Fri											
	10-Jul	Sat											
29	11-Jul	Sun		12	12	12			12		12		12
	12-Jul	Mon		24	24	24			24		24		24
	13-Jul	Tues		24	12	12			12		12		12
	14-Jul	Wed		24									
	15-Jul	Thu		12									
	16-Jul	Fri											
	17-Jul	Sat											
30	18-Jul	Sun		12	12	12			12		12		12
	19-Jul	Mon		24	24	24			24		24		24
	20-Jul	Tues		24	12	12			24		12		12
	21-Jul	Wed		24									
	22-Jul	Thu		12									
	23-Jul	Fri											
	24-Jul	Sat											
31	25-Jul	Sun		12	12	12			12		12		12
	26-Jul	Mon		24	24	24			24		24		24
	27-Jul	Tues		24	12	12			24		24		24
	28-Jul	Wed		24									
	29-Jul	Thu		24									
	30-Jul	Fri		12									
	31-Jul	Sat											
32	1-Aug	Sun		12	12	12			12		12		12
	2-Aug	Mon		24	24	24			24		24		24
	3-Aug	Tues		24	24	24			24		24		12
	4-Aug	Wed		24	12	12			24		24		
	5-Aug	Thu		24									
	6-Aug	Fri		12									
	7-Aug	Sat											

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Week	Date	Day	Districts (subdivided into sections)										
			1	1	6	6	8	8	11	11	15	15	15
			A	B	A/B/C	D	A	B	B	C	A	B	C
33	8-Aug	Sun		12	12		12	12	12		12		
	9-Aug	Mon		24	24		24	24	24		24		
	10-Aug	Tues		24	24		24	24	24		24		
	11-Aug	Wed		24	24		24	24	24		24		
	12-Aug	Thu		24	12		12	12	12		24		
	13-Aug	Fri		12							12		
	14-Aug	Sat											
34	15-Aug	Sun		12	12		12	12			12		
	16-Aug	Mon		24	24		24	24	12		24		12
	17-Aug	Tues		24	24		24	24	24		24		24
	18-Aug	Wed		24	24		24	24	24		24		24
	19-Aug	Thu		24	24		24	24	12		24		24
	20-Aug	Fri		12	12		12	12			12		12
	21-Aug	Sat											
35	22-Aug	Sun		12	12		12	12	12		12		12
	23-Aug	Mon		24	24		24	24	24		24		24
	24-Aug	Tues		24	24		24	24	24		24		24
	25-Aug	Wed		24	24		24	24	12		24		12
	26-Aug	Thu		24	12		12	12			24		
	27-Aug	Fri		12							12		
	28-Aug	Sat											
36	29-Aug	Sun		12	12		12	12	12		12		12
	30-Aug	Mon		24	24		24	24	24		24		24
	31-Aug	Tues		24	24		24	24	24		24		24
	1-Sep	Wed		24	12		12	12	24		24		12
	2-Sep	Thu		24					12		24		
	3-Sep	Fri		12							12		
	4-Sep	Sat											
37	5-Sep	Sun		12	12	12	12	12	12		12		12
	6-Sep	Mon		24	24	24	24	24	24		24		24
	7-Sep	Tues		24	24	24	24	24	24		24		24
	8-Sep	Wed		24	12	12	12	12	24		24		12
	9-Sep	Thu		12					12		24		
	10-Sep	Fri									12		
	11-Sep	Sat											
38	12-Sep	Sun		12	12	12	12	12	12		12		12
	13-Sep	Mon		24	24	24	24	24	24		24		24
	14-Sep	Tues		24	24	24	24	24	24		24		24
	15-Sep	Wed		24	12	12	12	12	24		24		12
	16-Sep	Thu		12					12		24		
	17-Sep	Fri									12		
	18-Sep	Sat											
39	19-Sep	Sun		12	12	12	12	12	12		12		12
	20-Sep	Mon		24	24	24	24	24	24		24		24
	21-Sep	Tues		24	12	12	12	12	24		24		24
	22-Sep	Wed		24					24		12		12
	23-Sep	Thu		12					12				
	24-Sep	Fri											
	25-Sep	Sat											

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			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
40	26-Sep	Sun		12	12	12	12	12	12		12		12
	27-Sep	Mon		24	24	24	24	24	24		24		24
	28-Sep	Tues		24	12	12	12	12	24		24		24
	29-Sep	Wed		24					24		12		12
	30-Sep	Thu		12					12				
	1-Oct	Fri											
	2-Oct	Sat											
41	3-Oct	Sun							12		12		12
	4-Oct	Mon							24		24		24
	5-Oct	Tues							24		24		24
	6-Oct	Wed							24		12		12
	7-Oct	Thu							12				
	8-Oct	Fri											
	9-Oct	Sat											

Table 16.—Southeast Alaska terminal harvest areas commercial drift gillnet fishing time in hours open per day (gray shaded cells indicate no fishery), 2021.

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

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

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Week	Date	Day	Nakat Inlet	Carroll Inlet	Neets Bay	Anita Bay	Speel Arm	Deep Inlet	Boat Harbor
37	5-Sep	Sun	24			24	12		12
	6-Sep	Mon	24			24	24	15	24
	7-Sep	Tue	24			24	24	15	24
	8-Sep	Wed	24			24	24	15	12
	9-Sep	Thu	24			24	12		
	10-Sep	Fri	24			24			
	11-Sep	Sat	24			24			
38	12-Sep	Sun	24			24	12		
	13-Sep	Mon	24			24	24	15	
	14-Sep	Tue	24			24	24	15	
	15-Sep	Wed	24			24	24	15	
	16-Sep	Thu	24			24	12		
	17-Sep	Fri	24			24			
	18-Sep	Sat	24			24			
39	19-Sep	Sun	24			24			
	20-Sep	Mon	24			24		15	
	21-Sep	Tue	24			24		15	
	22-Sep	Wed	24			24		15	
	23-Sep	Thu	24			24			
	24-Sep	Fri	24			24			
	25-Sep	Sat	24			24			
40	26-Sep	Sun	24			24			
	27-Sep	Mon	24			24			
	28-Sep	Tue	24			24			
	29-Sep	Wed	24			24			
	30-Sep	Thu	24			24			
	1-Oct	Fri	24			24			
	2-Oct	Sat	24			24			
41	3-Oct	Sun	24			24			
	4-Oct	Mon	24			24			
	5-Oct	Tue	24			24			
	6-Oct	Wed	24			24			
	7-Oct	Thu	24			24			
	8-Oct	Fri	24			24			
	9-Oct	Sat	24			24			
42	10-Oct	Sun	24			24			
	11-Oct	Mon	24			24			
	12-Oct	Tue	24			24			
	13-Oct	Wed	24			24			
	14-Oct	Thu	24			24			
	15-Oct	Fri	24			24			
	16-Oct	Sat	24			24			
43	17-Oct	Sun	24			24			
	18-Oct	Mon	24			24			
	19-Oct	Tue	24			24			
	20-Oct	Wed	24			24			
	21-Oct	Thu	24			24			
	22-Oct	Fri	24			24			
	23-Oct	Sat	24			24			

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Table 16.–Page 4 of 4.

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

Table 17.—Southeast Alaska traditional and terminal harvest areas drift gillnet salmon harvest in numbers of fish by species, 1960–2021.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Rank <sup>a</sup>
1960	11,523	127,058	37,986	55,984	199,887	432,438	62
1961	9,440	169,724	52,743	282,997	251,900	766,804	61
1962	10,161	233,082	98,404	435,132	233,421	1,010,200	58
1963	6,427	194,420	112,776	653,826	265,251	1,232,700	56
1964	9,371	246,250	172,411	753,312	250,045	1,431,389	53
1965	11,892	279,349	166,452	698,339	269,986	1,426,018	54
1966	12,527	334,702	155,922	790,314	365,070	1,658,535	49
1967	16,464	274,038	134,029	205,683	250,050	880,264	59
1968	12,902	245,865	202,955	607,275	363,713	1,432,710	52
1969	15,175	348,350	65,101	381,729	208,918	1,019,273	57
1970	9,449	240,538	163,354	848,425	494,294	1,756,060	47
1971	15,681	329,017	158,957	655,473	435,924	1,595,052	50
1972	25,125	450,148	274,206	444,375	744,933	1,938,787	43
1973	24,501	532,485	123,948	654,224	524,199	1,859,357	45
1974	15,483	364,312	186,482	338,346	666,313	1,570,936	51
1975	9,077	108,574	102,372	350,199	298,296	868,518	60
1976	7,224	322,017	155,968	384,349	503,230	1,372,788	55
1977	5,578	541,443	183,044	1,428,899	364,164	2,523,128	39
1978	8,266	358,917	221,134	812,947	288,959	1,690,223	48
1979	13,738	472,610	81,324	915,976	401,161	1,884,809	44
1980	5,433	408,296	109,516	1,107,273	548,674	2,179,192	40
1981	6,317	438,824	114,535	1,264,900	270,231	2,094,807	41
1982	14,710	749,348	194,424	569,351	448,332	1,976,165	42
1983	4,598	586,574	210,332	1,209,372	516,639	2,527,515	38
1984	10,338	593,319	191,023	1,307,853	1,030,346	3,132,879	31
1985	10,386	830,238	309,380	1,832,570	1,134,446	4,117,020	17
1986	8,441	658,611	395,889	1,282,418	815,813	3,161,172	30
1987	8,430	736,200	165,249	1,359,526	747,363	3,016,768	33
1988	9,079	600,925	163,808	688,750	1,144,856	2,607,418	37
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	18,457	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

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Table 17.–Page 2 of 2.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Rank <sup>a</sup>
2010	19,355	391,252	505,310	1,337,194	2,220,688	4,473,808	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	2,381,516	4,879,094	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	17,057	239,571	158,610	1,019,549	3,611,923	5,046,710	5
2018	21,276	226,707	258,883	556,370	2,526,020	3,589,256	29
2019	20,846	395,307	196,452	872,380	2,327,435	3,812,420	27
2020	19,493	102,330	124,806	501,173	1,061,927	1,809,729	46
2021	17,290	209,119	193,269	673,173	1,532,188	2,625,039	36
Averages							
1960–2020 <sup>b</sup>	16,260	488,280	254,769	965,857	1,336,580	3,061,745	
2011–2020 <sup>c</sup>	24,829	394,658	275,296	1,113,819	2,768,181	4,576,784	
Max harvest <sup>d</sup>	55,754	1,026,591	698,125	2,769,875	3,611,923		
Max year	2005	1996	1994	1989	2017		
Min harvest <sup>d</sup>	4,598	102,330	37,986	55,984	199,887		
Min year	1983	2020	1960	1960	1960		

*Note:* The data shown do not include Annette Islands Reserve harvests.

<sup>a</sup> Rank is based on total harvest for years 1960 to 2021.

<sup>b</sup> Equals the long-term average harvest.

<sup>c</sup> Equals the recent average harvest.

<sup>d</sup> Minimum and maximums are based on species harvest from 1960 to 2020.

Table 18.—Southeast Alaska commercial drift gillnet salmon harvest in numbers of salmon by area, harvest type, and species, 2021.

Fishery	Chinook	Sockeye	Coho	Pink	Chum	Total
District 1						
Traditional (Tree Point)	1,893	21,577	47,362	144,366	171,272	386,470
Terminal Harvest Area	4,210	259	6,210	3,918	55,560	70,157
Annette Islands Reserve	819	2,808	14,454	147,514	88,052	253,647
District 6						
Traditional (Prince of Wales)	965	51,776	74,756	156,483	136,560	420,540
District 7						
Terminal Harvest Area	4,857	45	4,209	130	45,736	54,977
District 8						
Traditional (Stikine)	93	815	12,140	6,482	49,371	68,901
District 11						
Traditional (Taku/Snettisham)	666	45,897	20,643	136,855	185,684	389,745
Terminal Harvest Area	22	3,440	144	464	25	4,095
District 13						
Terminal Harvest Area	3,869	661	1,379	3,463	355,537	364,909
District 15						
Traditional (Lynn Canal)	562	78,611	26,112	159,647	223,683	488,615
Terminal Harvest Area	153	6,038	314	61,365	308,760	376,630
Subtotals						
Traditional	4,179	198,676	181,013	603,833	766,570	1,754,271
Terminal Harvest Areas	13,111	10,443	12,256	69,340	765,618	870,768
Common Property Total	17,290	209,119	193,269	673,173	1,532,188	2,625,039
Annette Islands Reserve	819	2,808	14,454	147,514	88,052	253,647
Total	18,109	211,927	207,723	820,687	1,620,240	2,878,686

Table 19.—Southeast Alaska Portland Canal/Tree Point (District 1) traditional and terminal harvest area drift gillnet salmon harvest in numbers of salmon by species, 1960–2021.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Rank <sup>a</sup>
1960	1,214	14,281	4,312	19,823	98,971	138,601	62
1961	907	35,269	4,067	91,803	35,638	167,684	59
1962	1,498	41,178	12,110	156,302	36,596	247,684	53
1963	508	22,037	3,110	93,651	41,642	160,948	60
1964	1,098	47,070	15,707	162,476	79,156	305,507	52
1965	1,079	53,566	10,675	60,772	21,753	147,845	61
1966	642	66,063	9,362	275,634	32,818	384,519	50
1967	2,186	74,071	3,112	82,312	29,017	190,698	58
1968	589	67,095	17,032	271,972	96,305	452,993	47
1969	676	89,524	3,159	87,525	20,033	200,917	57
1970	337	52,634	16,390	516,021	67,709	653,091	38
1971	778	116,036	5,170	67,013	31,141	220,138	55
1972	1,298	134,544	35,694	178,570	156,770	506,876	44
1973	1,008	159,830	18,043	270,385	110,074	559,340	42
1974	776	113,465	21,327	166,739	81,751	384,058	51
1975	1,963	25,434	12,631	134,465	32,344	206,837	56
1976	1,816	118,910	17,564	224,619	39,472	402,381	49
1977	1,182	193,104	12,187	768,977	84,518	1,059,968	18
1978	2,591	153,409	47,797	531,879	116,731	852,407	32
1979	3,654	88,957	6,427	72,687	60,564	232,289	54
1980	1,531	109,383	19,329	675,422	153,827	959,492	23
1981	1,448	104,853	19,125	433,735	38,527	597,688	41
1982	3,522	190,840	27,833	348,769	84,537	655,501	37
1983	1,113	135,903	41,556	773,126	139,411	1,091,109	15
1984	1,494	88,431	35,436	720,706	227,817	1,073,884	16
1985	2,787	173,101	52,973	691,462	256,368	1,176,691	10
1986	1,271	145,707	63,030	906,384	286,910	1,403,302	4
1987	2,077	107,595	38,113	583,295	188,790	919,870	27
1988	2,041	116,245	17,213	231,484	550,701	917,684	28
1989	2,015	145,210	32,873	1,349,929	310,345	1,840,372	1
1990	1,714	85,770	42,926	580,782	176,184	887,376	30
1991	2,077	131,509	70,359	600,733	185,863	990,541	21
1992	1,061	244,650	40,064	581,244	288,478	1,155,497	11
1993	1,249	394,137	32,588	481,316	389,823	1,299,113	5
1994	959	100,458	47,336	264,755	526,314	939,822	25
1995	1,024	164,336	54,769	791,392	734,344	1,745,865	2
1996	1,257	212,477	33,215	371,049	629,553	1,247,551	7
1997	1,608	169,614	28,229	380,957	409,591	989,999	22
1998	1,160	160,657	60,548	650,268	556,143	1,428,776	3
1999	1,844	160,053	64,534	611,613	181,674	1,019,718	20
2000	1,196	94,720	19,577	424,672	218,818	758,983	34
2001	1,393	80,440	36,420	521,645	252,438	892,336	29
2002	1,127	121,116	68,724	515,395	174,794	881,156	31
2003	829	105,878	97,538	626,916	322,608	1,153,769	12
2004	2,069	142,763	50,820	409,429	327,439	932,520	26
2005	1,711	80,027	65,353	559,296	252,630	959,017	24
2006	2,271	63,368	31,271	216,779	297,660	611,349	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

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Table 19.–Page 2 of 2.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Rank <sup>a</sup>
2010	3,302	64,747	99,081	597,138	458,622	1,222,890	8
2011	4,661	91,825	36,183	357,811	566,508	1,056,988	19
2012	4,024	64,612	73,576	217,281	757,675	1,117,170	14
2013	4,483	55,948	111,133	763,434	329,680	1,264,678	6
2014	4,473	57,192	116,437	763,838	274,351	1,216,291	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
2020	6,207	9,596	20,909	194,279	210,970	441,961	47
2021	6,103	21,836	53,572	148,284	226,832	456,627	46
Averages							
1960–2020 <sup>b</sup>	2,087	100,767	38,595	403,002	250,279	794,731	
2011–2020 <sup>c</sup>	4,332	41,265	59,160	363,914	432,517	901,188	
Max harvest <sup>d</sup>	6,207	394,137	116,437	1,349,929	820,271		
Max year	2020	1993	2014	1989	2015		
Min harvest <sup>d</sup>	337	9,596	3,110	19,823	20,033		
Min year	1970	2020	1963	1960	1969		

*Note:* The data shown do not include Annette Islands Reserve harvests.

<sup>a</sup> Rank is based on total harvest for years 1960 to 2021.

<sup>b</sup> Equals the long-term average harvest.

<sup>c</sup> Equals the recent average harvest.

<sup>d</sup> Minimum and maximums are based on species harvest from 1960 to 2021.

Table 20.—Southeast Alaska Prince of Wales (District 6) traditional and terminal harvest area drift gillnet salmon harvest in numbers of salmon by species, 1960–2021.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Rank <sup>a</sup>
1960	46	10,354	336	1,246	502	12,484	62
1961	416	20,614	14,934	124,236	64,479	224,679	57
1962	1,308	47,033	42,276	256,620	59,119	406,356	44
1963	1,560	80,767	52,103	514,596	90,103	739,129	23
1964	2,082	76,541	64,654	443,086	44,218	630,581	31
1965	1,802	87,749	75,728	625,848	27,658	818,785	15
1966	1,665	89,847	62,823	400,932	40,756	596,023	35
1967	1,318	86,385	17,670	91,609	26,370	223,352	58
1968	1,316	64,671	67,151	169,107	61,366	363,611	46
1969	877	70,484	10,305	198,785	10,930	291,381	53
1970	782	42,809	35,188	95,173	32,245	206,197	59
1971	1,336	53,262	48,085	528,737	37,682	669,102	28
1972	2,548	101,958	92,283	89,510	72,389	358,688	47
1973	1,961	72,025	38,447	304,536	87,704	504,673	40
1974	1,929	57,498	45,595	104,596	50,402	260,020	55
1975	2,587	32,099	30,962	203,031	24,047	292,726	52
1976	386	15,493	19,126	139,641	6,868	181,514	61
1977	671	67,394	8,389	422,955	13,311	512,720	39
1978	2,682	41,574	55,578	224,715	16,545	341,094	48
1979	2,720	66,373	31,454	648,212	35,507	784,266	16
1980	580	107,422	16,666	45,662	26,291	196,621	60
1981	1,565	182,001	22,614	437,573	34,296	678,049	27
1982	1,671	193,817	45,218	26,087	18,906	285,699	54
1983	567	48,842	62,442	208,290	20,144	340,285	50
1984	895	91,664	48,244	343,633	70,599	555,035	37
1985	1,687	265,033	97,605	585,134	70,150	1,019,609	9
1986	1,705	145,714	205,598	308,942	82,621	744,580	21
1987	853	136,437	37,151	243,710	43,020	461,171	42
1988	2,961	92,532	14,419	69,619	69,675	249,206	56
1989	1,544	192,734	93,777	1,101,196	67,351	1,456,602	2
1990	2,108	185,808	167,196	319,216	73,238	747,566	20
1991	2,843	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	1,075	168,518	77,550	789,051	186,456	1,222,650	4
1998	518	113,435	273,197	502,655	332,022	1,221,827	5
1999	518	104,835	203,301	491,179	448,409	1,248,242	3
2000	1,220	90,076	96,207	156,619	199,836	543,958	38
2001	1,138	164,013	188,465	825,447	283,462	1,462,525	1
2002	446	56,135	226,560	82,951	112,541	478,633	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	1,572	110,192	114,440	461,187	198,564	885,955	11
2006	1,948	91,980	69,015	149,907	268,436	581,286	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	49
2009	2,138	111,984	144,569	143,589	287,707	689,987	26

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Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Rank <sup>a</sup>
2010	2,510	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	45
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	59,304	424,495	113,161	621,877	32
2020	1,182	11,314	43,850	127,583	143,577	327,506	51
2021	965	51,776	74,756	156,483	136,560	420,540	43
Averages							
1960–2020 <sup>b</sup>	1,552	102,057	104,541	313,487	118,991	640,629	
2011–2020 <sup>c</sup>	2,100	63,312	118,595	314,227	149,301	647,535	
Max harvest <sup>d</sup>	3,247	311,100	299,884	1,101,196	448,409		
Max year	2018	1996	1992	1989	1999		
Min harvest <sup>d</sup>	46	10,354	336	1,246	502		
Min year	1960	1960	1960	1960	1960		

<sup>a</sup> Rank is based on total harvest for years 1960 to 2021.

<sup>b</sup> Equals the long-term average harvest.

<sup>c</sup> Equals the recent average harvest.

<sup>d</sup> Minimum and maximums are based on species harvest from 1960 to 2021.

Table 21.—Southeast Alaska Stikine (District 8) traditional and terminal harvest area drift gillnet salmon harvest in numbers of salmon by species, 1962–2021.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Rank <sup>a</sup>
1962	618	4,430	3,921	2,889	2,035	13,893	54
1963	1,431	9,979	11,612	10,198	11,024	44,244	42
1964	2,911	20,299	29,388	114,555	10,771	177,924	20
1965	3,106	21,419	8,301	4,729	2,480	40,035	44
1966	4,516	36,710	16,493	61,908	17,730	137,357	26
1967	6,372	29,226	6,747	4,713	5,955	53,013	36
1968	4,604	14,594	36,407	91,028	14,537	161,170	23
1969	5,021	19,211	5,791	11,962	2,318	44,303	41
1970	3,199	15,121	18,529	20,523	12,304	69,676	33
1971	3,717	18,143	14,876	22,216	4,665	63,617	35
1972	9,342	51,725	38,440	17,197	17,442	134,146	27
1973	9,254	21,393	5,837	6,585	6,680	49,749	37
1974	8,199	2,428	16,021	4,188	2,107	32,943	46
1975	1,529	0	0	0	1	1,530	60
1976	1,123	18	6,074	722	124	8,061	57
1977	1,443	48,385	14,424	16,318	4,233	84,803	30
1978	531	56	32,650	1,157	1,001	35,395	45
1979	91	2,158	234	13,478	1,064	17,025	52
1980	631	14,053	2,946	7,224	6,910	31,764	47
1981	283	8,833	1,403	1,466	3,594	15,579	53
1982	1,052	7,136	20,003	16,174	734	45,099	40
1983	47	178	15,369	4,171	675	20,440	51
1984	14	1,290	5,141	4,960	1,892	13,297	56
1985	20	1,066	4,936	5,329	2,004	13,355	55
1986	109	4,187	14,324	4,968	5,943	29,531	48
1987	201	1,620	1,015	3,331	949	7,116	58
1988	776	1,246	12	145	3,129	5,308	59
1989	388	10,083	4,261	27,640	3,375	45,747	39
1990	682	11,580	8,218	13,822	9,386	43,688	43
1991	1,366	17,987	15,629	6,406	5,977	47,365	38
1992	1,045	52,717	22,127	66,742	15,458	158,089	24
1993	1,799	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	32
2001	7	610	10,731	11,012	5,397	27,757	50
2002	25	208	21,131	4,578	2,017	27,959	49
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

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Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Rank <sup>a</sup>
2010	2,356	32,949	42,986	59,832	50,600	188,726	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	13,568	49,027	177,119	257,814	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	31
2020	2,617	2,781	21,069	11,799	53,678	91,944	29
2021	93	815	12,140	6,482	49,371	68,901	34
Averages							
1962–2020 <sup>b</sup>	4,373	29,477	17,876	28,648	52,528	132,901	
2011–2020 <sup>c</sup>	6,939	23,632	21,991	38,978	135,316	226,856	
Max harvest <sup>d</sup>	30,033	154,150	44,891	116,026	343,827		
Max year	2006	1996	1994	2013	2006		
Min harvest <sup>d</sup>	7	0	0	0	1		
Min year	2001	1975	1975	1975	1975		

<sup>a</sup> Rank is based on total harvest for years 1962 to 2021. No harvest data for 1960 and 1961.

<sup>b</sup> Equals the long-term average harvest.

<sup>c</sup> Equals the recent average harvest.

<sup>d</sup> Minimum and maximums are based on species harvest from 1962 to 2021.

Table 22.—Southeast Alaska Taku/Snettisham (District 11) traditional and terminal harvest area drift gillnet salmon harvest in numbers of salmon by species, 1960–2021.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Rank <sup>a</sup>
1960	8,810	42,819	22,374	33,155	41,852	149,010	52
1961	7,434	45,981	15,486	41,455	24,433	134,789	55
1962	5,931	36,745	15,661	17,280	20,635	96,252	59
1963	2,652	24,119	10,855	21,692	20,114	79,432	60
1964	2,509	34,140	29,315	26,593	12,853	105,410	57
1965	4,170	27,569	32,667	2,768	11,533	78,707	61
1966	4,829	33,925	26,065	23,833	35,133	123,785	56
1967	5,417	17,735	40,391	12,372	22,834	98,749	58
1968	4,904	19,501	39,103	67,365	21,890	152,763	51
1969	6,986	41,222	10,802	74,178	15,046	148,234	53
1970	3,357	50,862	44,569	196,237	110,621	405,646	35
1971	6,945	66,261	41,588	31,296	90,964	237,054	45
1972	10,949	80,911	49,609	144,237	148,432	434,138	31
1973	9,799	85,402	35,453	58,186	109,245	298,085	42
1974	2,908	38,726	38,667	57,820	86,692	224,813	46
1975	2,182	32,550	1,185	9,567	2,678	48,162	62
1976	1,757	62,174	41,664	14,977	81,972	202,544	48
1977	1,068	72,030	54,929	88,904	60,964	277,895	43
1978	1,926	55,398	31,944	51,385	36,254	176,907	50
1979	3,701	122,148	16,194	152,836	61,194	356,073	38
1980	2,251	123,451	41,677	296,622	192,793	656,794	17
1981	1,721	49,942	26,711	254,856	76,438	409,668	34
1982	3,014	83,722	29,073	109,270	37,584	262,663	44
1983	888	31,821	21,455	66,239	15,264	135,667	54
1984	1,773	77,233	33,836	145,971	86,764	345,577	39
1985	2,632	88,093	55,518	311,305	106,900	564,448	23
1986	2,584	73,061	30,512	16,568	58,792	181,517	49
1987	2,076	75,212	35,219	363,439	121,660	597,606	20
1988	1,777	38,901	44,818	157,732	140,038	383,266	37
1989	1,811	74,019	51,812	180,639	36,979	345,260	40
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	41
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	1,698	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

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Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Rank <sup>a</sup>
2010	1,685	76,614	62,241	132,881	488,918	762,339	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	1,086	113,818	16,002	230,243	885,694	1,246,843	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
2020	1,094	28,233	15,863	65,353	109,516	220,059	47
2021	688	49,337	20,787	137,319	185,709	393,840	36
Averages							
1960–2020 <sup>b</sup>	3,610	100,322	40,098	115,348	228,211	487,589	
2010–2020 <sup>c</sup>	1,256	127,721	30,819	143,007	493,629	796,432	
Max harvest <sup>d</sup>	23,301	293,043	188,501	401,525	918,350		
Max year	2005	2001	1994	1994	2009		
Min harvest <sup>d</sup>	595	17,735	1,185	2,768	2,678		
Min year	1,685	76,614	62,241	132,881	488,918	762,339	12

<sup>a</sup> Rank is based on total harvest for years 1960 to 2021.

<sup>b</sup> Equals the long-term average harvest.

<sup>c</sup> Equals the recent average harvest.

<sup>d</sup> Minimum and maximums are based on species harvest from 1960 to 2021.

Table 23.—Southeast Alaska Lynn Canal (District 15) traditional and terminal harvest area drift gillnet salmon harvest in numbers of salmon by species, 1960–2021.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Rank <sup>a</sup>
1960	1,453	59,604	10,964	1,760	58,562	132,343	62
1961	683	67,860	18,256	25,503	127,350	239,652	59
1962	806	103,696	24,436	2,041	115,036	246,015	58
1963	276	57,518	35,096	13,689	102,368	208,947	61
1964	771	68,200	33,347	6,602	103,047	211,967	60
1965	1,735	89,046	39,081	4,222	206,562	340,646	51
1966	868	108,087	40,794	6,008	235,172	390,929	49
1967	1,171	66,621	66,109	14,677	165,874	314,452	55
1968	1,489	80,004	43,262	7,803	169,615	302,173	56
1969	1,615	127,895	35,034	9,020	160,569	334,133	53
1970	1,774	79,112	48,643	20,199	271,415	421,143	46
1971	2,905	75,315	49,238	6,211	271,472	405,141	47
1972	988	81,010	58,180	14,861	349,900	504,939	42
1973	2,479	193,835	26,168	14,532	210,496	447,510	45
1974	1,671	152,195	64,872	5,003	445,361	669,102	32
1975	816	18,491	57,594	3,136	239,226	319,263	54
1976	2,142	125,422	71,525	4,390	374,794	578,273	40
1977	1,214	160,420	91,503	131,745	201,138	586,020	39
1978	536	108,480	53,165	3,811	118,428	284,420	57
1979	3,572	192,974	27,015	28,763	242,832	495,156	43
1980	440	53,987	28,898	82,343	168,853	334,521	52
1981	1,300	93,195	44,682	137,270	117,376	393,823	48
1982	5,451	273,833	72,297	69,051	306,571	727,203	30
1983	1,983	369,830	69,510	157,546	341,145	940,014	22
1984	6,099	334,582	68,215	78,000	642,268	1,129,164	15
1985	3,260	302,940	98,301	239,081	699,000	1,342,582	9
1986	2,772	289,905	82,121	38,115	381,382	794,295	26
1987	3,223	415,336	53,751	165,751	392,938	1,030,999	19
1988	1,257	351,799	81,536	208,404	377,583	1,020,579	20
1989	1,955	471,914	50,307	110,454	123,631	758,261	27
1990	670	357,418	63,005	101,099	210,510	732,702	29
1991	746	308,731	129,232	5,474	210,547	654,730	33
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	41
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	28
1996	642	149,578	52,658	2,607	415,930	621,415	36
1997	838	118,828	15,572	53,437	462,330	651,005	34
1998	682	134,937	26,118	32,351	160,669	354,757	50
1999	559	163,560	35,350	62,737	351,251	613,457	37
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	31
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	38
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	35
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

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Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Rank <sup>a</sup>
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	1,148	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
2020	903	50,220	17,495	82,993	319,253	470,864	44
2021	715	84,649	26,426	221,012	532,443	865,245	25
Averages							
1960–2020 <sup>b</sup>	1,380	156,270	51,523	93,581	502,485	805,238	
2010–2020 <sup>c</sup>	1,182	137,879	37,788	223,175	1,137,712	1,537,736	
Max harvest <sup>d</sup>	6,099	471,914	140,764	629,209	1,575,039		
Max year	1984	1989	1994	2015	2017		
Min harvest <sup>d</sup>	276	18,491	10,964	1,760	58,562		
Min year	1963	1975	1960	1960	1960		

<sup>a</sup> Rank is based on total harvest for years 1960 to 2021.

<sup>b</sup> Equals the long-term average harvest.

<sup>c</sup> Equals the recent average harvest.

<sup>d</sup> Minimum and maximums are based on species harvest from 1960 to 2021.

Table 24.—Southeast Alaska traditional fisheries purse seine harvest of Alaska hatchery salmon, 1984–2021.

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	54,097	82,572	736,201	431,355	1,304,413
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	74,219	71,050	848,129	1,998,250	2,992,130
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	3,174	62,531	947,928	427,815	1,443,764
2003	2,506	9,596	76,331	501,841	659,213	1,249,487
2004	5,592	104,040	47,712	548,838	1,032,107	1,738,288
2005	3,363	38,670	49,554	771,627	637,771	1,500,985
2006	1,908	19,120	4,083	298,663	1,176,587	1,500,361
2007	1,543	23,771	27,642	583,766	1,009,730	1,646,452
2008	32	590	22,017	94,878	423,883	541,400
2009	1,655	5,935	27,846	645,379	919,671	1,600,486
2010	87	0	14,920	498,010	667,034	1,180,052
2011	2,169	31,278	91,526	703,544	1,061,093	1,889,611
2012	400	4,516	34,451	209,373	1,618,455	1,867,195
2013	634	11,320	130,721	1,378,121	1,542,587	3,063,383
2014	1,675	1,584	56,684	92,884	759,828	912,656
2015	468	21,955	39,711	269,871	1,163,004	1,495,010
2016	1,689	1,471	25,382	128,925	1,227,444	1,384,911
2017	285	12,259	21,262	646,091	181,276	861,172
2018	2	1,935	11,871	165,715	873,882	1,053,405
2019	1,455	480	30,117	100,733	1,567,277	1,700,061
2020	122	308	11,657	370,598	844,611	1,227,296
2021	264	5,162	73,017	143,153	893,917	1,115,513
Averages						
1990–2020	1,131	56,870	50,682	584,898	928,433	1,622,014
2010–2020 <sup>a</sup>	890	8,711	45,338	406,586	1,083,946	1,545,470
Max harvest <sup>b</sup>	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 <sup>b</sup>	2	0	4,083	26,339	124,547	541,397
Min year	2018	2010	2006	2020	1992	2008

Note: Alaska 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) less the harvests of assumed hatchery salmon in THA common property fisheries.

<sup>a</sup> Equals the recent average harvest.

<sup>b</sup> Minimum and maximums are based on species harvest from 1989 to 2021.



Table 25.—Southeast Alaska traditional fisheries drift gillnet harvest of hatchery salmon, 1984–2021.

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	336,805	651,475
1993	4,519	82,540	95,610	27,839	364,737	575,245
1994	4,561	101,443	75,976	21,870	757,958	961,808
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	2,104,591	2,293,924
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	6,294	51,491	19,328	0	1,782,447	1,859,561
2018	5,370	60,745	61,258	0	1,537,479	1,664,852
2019	6,767	36,560	37,605	4,801	1,004,720	1,090,453
2020	4,028	27,875	28,556	23,412	522,055	605,927
2021	2,168	16,046	50,567	51,040	664,205	784,026
Averages						
1990–2020	5,326	78,671	84,640	13,912	1,125,055	1,307,605
2010–2020 <sup>a</sup>	8,369	53,517	77,823	2,821	1,620,380	1,762,911
Max harvest <sup>b</sup>	15,988	200,760	180,951	160,257	2,406,835	2,589,632
Max year	2015	2004	1992	1989	2012	2012
Min harvest <sup>b</sup>	898	0	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) less the harvests of assumed hatchery salmon in THA common property fisheries. Minimum and maximums are based on species harvest from 1989 to 2021, with the exception of sockeye salmon, which is based on 1990 to 2021.

<sup>a</sup> Equals the recent average harvest.

<sup>b</sup> Minimum and maximums are based on species harvest from 1989 to 2021.

Table 26.—Southeast Alaska terminal harvest area (THA) purse seine harvests, 1990–2021.

THA Area	Year	Chinook <sup>a</sup>	Jacks <sup>a</sup>	Sockeye	Coho	Pink	Chum	Total
Nakat Inlet	1990	0	0	103	604	1,444	10,531	12,682
	1991	0	0	531	531	7,134	47,957	56,153
	1992	0	0	53	361	1,497	16,843	18,754
	1993	0	0	443	796	60,319	37,965	99,523
	1994	0	0	24	129	5,513	45,057	50,723
	1995	0	0	150	1,099	9,200	131,415	141,864
	1996	0	0	18	935	2,204	296,181	299,338
	1997	0	0	390	1,177	11,132	239,156	251,855
	1998	1	0	302	385	2,681	188,489	191,858
	1999	0	0	383	138	8,520	44,866	53,907
	2000	0	0	1,181	730	5,545	51,731	59,187
	2001	4	0	490	34	5,478	36,449	42,455
	2002	0	0	930	592	13,350	46,263	61,135
	2003	4	0	363	298	9,172	87,930	97,767
	2004	4	0	1,179	564	18,299	114,883	134,929
	2005	10	0	45	132	24,211	138,041	162,439
	2006	239	3	2,630	1,505	25,471	339,339	369,187
	2007	0	0	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	NF	NF	NF	NF	NF	NF	NF
	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	1,060	692	57,986	64,938
	2019	6,027	12	14	6	131	979	7,169
	2020	3,712	50	14	10	233	2,925	6,944
	2021	3,853	8	154	8,662	2,048	113,571	128,295
Average 1998–2020		3,853	7	154	8,662	2,048	113,571	134,310
Carroll Inlet	2018	367	0	0	6	0	162	535
	2019	1017	0	0	9	11	59	1,096
	2020	1,646	3	0	0	3	122	1,774
	2021	1,669	0	1	1	12	13	1,696
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

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THA Area	Year	Chinook <sup>a</sup>	Jacks <sup>a</sup>	Sockeye	Coho	Pink	Chum	Total
Kendrick Bay (cont)	2003	0	3	82	119	927	2,094	3,225
	2004	3	0	58	47	37	55	200
	2005	17	0	63	153	1,626	20,829	22,688
	2006	316	5	3,392	3,074	61,302	284,061	352,150
	2007	299	14	3,470	1,702	64,974	219,640	290,099
	2008	0	8	1,503	2,652	20,523	163,571	188,257
	2009	93	0	1,692	929	24,594	74,033	101,341
	2010	96	5	5,818	2,907	40,689	164,981	214,496
	2011	91	1	2,946	3,338	39,037	227,079	272,492
	2012	35	31	3,502	5,644	123,922	219,876	353,010
	2013	72	0	2,951	3,549	127,603	78,842	213,017
	2014	205	1	1,464	1,902	92,211	106,378	202,161
	2015	1	0	3,759	6,713	49,912	256,681	317,066
	2016	633	0	2,152	3,548	92,463	153,829	252,625
	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
	2020	1	10	513	420	8,356	62,482	71,782
	2021	0	23	138	651	15,301	11,698	27,811
Average 1994–2020		72	72	4	1,661	1,641	32,250	132,625
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
	2020	4,121	15	184	46	3,600	6,152	14,118
	2021	2,218	75	47	14	589	2,985	5,928
Average 2004–2020		3,239	128	235	264	9,921	85,486	99,273
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

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THA Area	Year	Chinook <sup>a</sup>	Jacks <sup>a</sup>	Sockeye	Coho	Pink	Chum	Total
SE Cove	2019	2	2	87	20	120	39,556	39,787
	2020	150	63	139	51	1,731	118,723	120,857
	2021	4	2	156	43	1,370	45,599	47,174
Thomas Bay	2019	**	**	**	**	**	**	**
	2020	24	10	41	8	1,129	55,705	56,917
	2021	5	2	60	8	468	82,590	83,133
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	NF	NF	NF	NF	NF	NF	NF
	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	NF	NF	NF	NF	NF	NF	NF
	2020	NF	NF	NF	NF	NF	NF	NF
	2021	NF	NF	NF	NF	NF	NF	NF
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	NF	NF	NF	NF	NF	NF	NF
	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	2,243	154,735	197,684	355,227
	2018	1,018	205	785	104	5,706	255,552	263,370
	2019	322	67	561	308	43,824	14,349	59,431
	2020	42	1	6	1	218	7,715	7,983
	2021	NF	NF	NF	NF	NF	NF	NF
Average 1990–2020		5,147	432	4,321	4,948	444,344	1,191,250	1,709,086
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

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THA Area	Year	Chinook <sup>a</sup>	Jacks <sup>a</sup>	Sockeye	Coho	Pink	Chum	Total
Deep Inlet (continued)	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
	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	903	0	1,532	9,573	160,544	750,771	923,323
	2018	4,438	6	8,143	29,896	160,681	959,896	1,163,060
	2019	2,425	6	9,803	13,772	81,976	755,947	863,929
	2020	2,408	5	1,462	6,337	63,779	402,142	476,133
	2021	2,736	0	2,110	3,083	35,382	850,112	893,423
Average 1992–2020		1,525	1,524	10	1,576	3,377	123,992	659,077
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
	2020	6	0	53	348	2,859	466,854	470,120
	2021							
<u>2021 Purse Seine THA Summary</u>								
Neets Bay	2021	3,712	50	14	10	233	2,925	6,944
Carroll Inlet	2021	1,669	0	1	1	12	13	1,696
Kendrick Bay	2021	0	23	138	651	15,301	11,698	27,811
Anita Bay	2021	2,218	75	47	14	589	2,985	5,928
SE Cove	2021	4	2	156	43	1,370	45,599	47,174
Thomas Bay	2021	5	2	60	8	468	82,590	83,133
Amalga Harbor	2021	NF	NF	NF	NF	NF	NF	NF
Hidden Falls	2021	NF	NF	NF	NF	NF	NF	NF
Deep Inlet	2021	2,736	0	2,110	3,083	35,382	850,112	893,423
Crawfish Inlet	2021	0	0	121	46	1,125	292,572	293,864
Total 2021 Purse Seine THA		10,344	152	2,647	3,856	54,480	1,288,494	1,359,973

Note: NF denotes no fishery occurred. Asterisks “\*\*\*” indicate confidential data.

<sup>a</sup> Chinook salmon are 28 inches or greater from the tip of snout to tip of tail; “jacks” are less than 28 inches.

Table 27.—Southeast Alaska terminal harvest area (THA) drift gillnet harvests, 1990–2020.

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
	2020	155	246	632	7,972	72,646	81,651
	2021	119	259	6,209	3,915	55,424	65,926
Average 1990–2020		49	61	734	2,859	11,797	86,898
Carroll Inlet	2018	72	0	0	0	22	94
	2019	582	0	0	0	3	585
	2020	989	0	2	29	72	1,092
	2021	1,737	0	0	0	13	1,750
Neets Bay	1998	62	6	1	37	7,693	7,799
	1999	NF	NF	NF	NF	NF	NF
	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

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THA Area	Year	Chinook	Sockeye	Coho	Pink	Chum	Total
Neets Bay (continued)	2019	3,092	5	0	44	428	3,569
	2020	3,251	0	0	0	2,169	5,420
	2021	2,354	0	1	3	123	2,481
Average 1998–2020		1,548	2	6,581	7	10,914	19,053
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	NF	NF	NF	NF	NF	NF
	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
	2020	3,849	29	2,744	183	15,034	21,839
	2021	4,857	45	4,209	130	45,736	54,977
Average 2002–2020		3,420	211	3,013	1,004	50,130	57,778
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

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Table 27.–Page 3 of 4.

THA Area	Year	Chinook	Sockeye	Coho	Pink	Chum	Total
Speel Arm (continued)	2002	10	25,615	641	1,062	915	28,243
	2003	2	32,727	631	1,771	454	35,585
	2004	54	42,502	480	4,368	370	47,774
	2005	6	18,781	564	1,265	490	21,106
	2006	19	127,746	723	6,890	1,115	136,493
	2007	NF	NF	NF	NF	NF	NF
	2008	NF	NF	NF	NF	NF	NF
	2009	NF	NF	NF	NF	NF	NF
	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	NF	NF	NF	NF	NF	NF
	2018	44	24,767	322	1,117	708	26,958
	2019	157	9,605	238	2,587	638	13,225
	2020	NF	NF	NF	NF	NF	NF
	2021	22	3,440	144	464	25	4,095
Average 1998–2020		28	32,216	418	2,696	525	35,882
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
	2020	3,641	157	2,876	18,983	209,899	235,556
	2021	3,869	661	1,379	3,463	355,537	364,909
Average 1993–2020		2,433	493	1,999	24,253	349,301	378,479

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Table 27.–Page 4 of 4.

THA Area	Year	Chinook	Sockeye	Coho	Pink	Chum	Total
Boat Harbor	1995	257	7,510	556	9,814	176,495	194,632
	1996	32	3,346	113	249	73,725	77,465
	1997	61	7,561	114	20,475	187,354	215,565
	1998	171	11,162	159	8,129	72,154	91,775
	1999	72	6,969	104	22,172	118,346	147,663
	2000	30	13,313	698	3,674	256,267	273,982
	2001	151	22,859	176	22,293	102,734	148,213
	2002	43	7,987	420	19,497	156,845	184,792
	2003	28	3,824	121	5,866	71,677	81,516
	2004	40	7,647	73	9,697	163,411	180,868
	2005	28	2,629	82	36,922	94,336	133,997
	2006	17	4,876	373	9,845	398,671	413,782
	2007	92	12,524	199	16,638	258,869	288,322
	2008	130	12,120	817	15,376	466,248	494,691
	2009	124	12,093	465	81,577	303,740	397,999
	2010	143	11,340	933	37,719	178,006	228,141
	2011	221	6,254	461	178,034	262,370	447,340
	2012	200	17,506	247	60,429	214,986	293,368
	2013	57	8,576	151	60,869	261,738	331,391
	2014	58	20,777	313	6,280	77,458	104,886
	2015	25	7,147	178	166,344	127,005	300,699
	2016	27	12,213	46	15,713	238,981	266,980
	2017	55	8,025	394	106,565	471,903	586,942
	2018	89	8,504	162	6,236	338,874	353,865
	2019	121	13,422	306	32,841	567,114	613,804
	2020	37	3,609	122	12,928	73,095	89,791
Average 1993–2020		89	9,761	299	37,161	219,708	267,018
<u>2021 Gillnet THA Summary</u>							
Nakat Inlet	2021	119	259	6,209	3,915	55,424	65,926
Carroll Inlet	2021	1,737	0	0	0	13	1.75
Neets Bay	2021	2,354	0	1	3	123	2,481
Anita Bay	2021	4,857	45	4,209	130	45,736	54,977
Speel Arm	2021	22	3,440	144	464	25	4,095
Deep Inlet	2021	3,869	661	1,379	3,463	355,537	364,909
Boat Harbor	2021	128	5,786	287	52,547	168,109	226,857
Total 2021 Gillnet THA		13,086	10,191	12,229	60,522	624,967	719,247

Note: NF denotes no fishery occurred.

Table 28.—Southeast Alaska private hatchery cost-recovery salmon harvest in numbers of fish by district, organization, special harvest area, and species, 2021.

District	Hatchery	Special Harvest Area	Chinook	Sockeye	Coho	Pink	Chum	Total
1	SSRAA	Carroll Inlet	3,228	0	0	4	0	3,232
1	SSRAA	Herring Bay	2,795	0	10,460	0	0	13,255
1	SSRAA	Nakat Inlet	1	8	5	214	6,997	7,225
1	SSRAA	Neets Bay	6,139	0	42,497	349	169,388	218,373
2	SSRAA	Kendrick Bay	2	14	47	60	39,205	39,328
3	SSRAA	Klawock River	0	0	12,822	0	0	12,822
3	SSRAA	Port Asumcion	0	0	29	178	171,089	171,296
3	SSRAA	Port Saint Nicholas	4,852	0	0	0	0	4,852
6	SSRAA	Burnett Inlet	0	0	1,180	3,401	174,814	179,395
6	SSRAA	Neck Lake	0	0	13,037	0	0	13,037
7	SSRAA	Anita Bay	662	4	344	114	67,359	68,483
9	AKI	Port Armstrong	8	6	3,091	156,429	30,030	189,564
9	NSRAA	Mist Cove	1	5	16,006	1,675	4	17,691
9	NSRAA	Gunnuk Creek	217	0	0	729	23,868	24,814
9	NSRAA	SE COVE	26	1	1	3	5,118	5,149
11	DIPAC	Amalga	10	1,203	43	7,807	458,077	467,140
11	DIPAC	Gastineau	511	0	15,131	122	225,342	241,106
11	DIPAC	Speel Arm	0	12,564	0	0	0	12,564
12	NSRAA	Hidden Falls	68	70	2,947	7,296	187,958	198,339
13	SSSC	Crescent Bay	11	14	156	238,800	41,883	280,864
13	NSRAA	Deep Inlet/Silver Bay	3,601	6	257	1,232	186,529	191,625
13	NSRAA	Crawfish Inlet	0	13	27	1,572	663,799	665,411
Total			22,132	13,908	118,080	419,985	2,451,460	3,025,565
Total by Organization			Chinook	Sockeye	Coho	Pink	Chum	Total
SSRAA			17,679	26	80,421	4,320	628,852	731,298
AKI			8	6	3,091	156,429	30,030	189,564
DIPAC			521	13,767	15,174	7,929	683,419	720,810
NSRAA			3,913	95	19,238	12,507	1,067,276	1,103,029
SSSC			11	14	156	238,800	41,883	280,864
Total			22,132	13,908	118,080	419,985	2,451,460	3,025,565

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 private hatchery cost recovery harvest in numbers of fish by species, 1977–2021.

Year	Chinook <sup>a</sup>	Jacks <sup>a</sup>	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	13,194	0	123,029	387,988	236,214	1,575,630	2,336,055
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	2,731,475	3,450,640
2017	12,725	0	135,018	122,289	641,437	3,092,685	4,004,154
2018	20,060	0	158,537	136,604	293,654	3,215,022	3,823,877
2019	31,326	410	97,181	181,360	322,560	2,259,828	2,892,665
2020	7,432	5	74,187	119,943	995,829	1,457,783	2,655,179
2021	21,375	757	13,908	118,080	419,985	2,451,460	3,025,565
Averages							
1977–2020	19,583	78	50,934	179,237	666,848	1,980,220	2,896,899
2011–2020	20,113	146	104,464	211,982	497,283	2,589,150	3,423,137

<sup>a</sup> Chinook salmon are 28 inches or greater from tip of snout to tip of tail; “jacks” are less than 28 inches.

Table 30.—Stikine River Canadian fisheries salmon harvests in numbers of fish by species, 1972–2021.

Year	Chinook		Sockeye	Coho	Pink	Chum	Total
	Large <sup>a</sup>	Jacks <sup>a</sup>					
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 <sup>b</sup>	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	2,146	660	51,082	6,475	362	193	60,918
2010	3,164	1,127	55,471	6,042	209	122	66,135
2011	3,141	1,769	61,947	6,128	3	99	73,087
2012	5,210	1,306	34,922	6,624	0	363	48,425
2013	3,370	1,622	36,371	8,100	161	461	50,085
2014	3,327	764	44,056	5,751	45	66	54,009
2015	4,258	1,621	61,911	5,652	297	167	73,906
2016	3,235	849	88,649	5,486	N/A	N/A	98,219
2017	603	811	43,657	5,514	N/A	N/A	50,585
2018	165	456	24,256	3,803	N/A	N/A	28,680
2019	333	237	16,425	5,228	N/A	N/A	22,223
2020	389	237	13,369	5,206	N/A	N/A	19,201
2021	182	333	5,105	4,521	N/A	N/A	10,141
Averages							
1986–2020 <sup>c</sup>	4,005	944	46,673	3,540	195	217	55,515
2011–2020	2,403	967	42,556	5,749	101	231	51,842

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

<sup>a</sup> “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., jacks are <660 mm METF or <735 mm METF—used when no data).

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

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

Table 31.—Taku River Canadian fisheries salmon harvests in numbers of fish by species, 1979–2021.

Year	Chinook		Sockeye	Coho	Pink	Chum	Total
	Large <sup>a</sup>	Jacks <sup>a</sup>					
1979 <sup>b</sup>	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	12,478	N/A	N/A	40,967
2012	2,965	607	30,113	14,072	N/A	N/A	47,757
2013	738	669	25,173	10,375	N/A	N/A	36,955
2014	2,472	657	17,795	16,568	N/A	N/A	37,492
2015	2,447	404	19,849	10,183	N/A	N/A	32,883
2016	1,630	349	37,434	11,520	N/A	N/A	50,933
2017	250	88	30,465	7,802	N/A	N/A	38,605
2018	7	19	17,976	9,505	N/A	N/A	27,507
2019	10	5	21,482	12,252	N/A	N/A	33,749
2020	94		11,780	7,036	N/A	N/A	18,910
2021	40	11	18,485	10,880	N/A	N/A	29,416
Averages							
1979–2019	2,170	427	22,834	7,319	2,280	1,476	35,517
2009–2019	1,389	385	23,661	11,179	N/A	N/A	36,576

<sup>a</sup> Chinook salmon are 28 inch or greater from tip of snout to tip of tail; “jacks” are less than 28 inches.

<sup>b</sup> 1979 is commercial catch only.

Table 32.—Annette Islands Reserve commercial drift gillnet salmon harvest in numbers of fish by species, 1980–2021.

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	485,459	98,023	638,556
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	58,332	382,408
2020	571	2,342	5,659	148,756	56,676	214,004
2021	819	2,808	14,454	147,514	88,052	253,647
Averages						
1980–2020	756	21,127	30,075	307,629	120,859	480,448
2011–2020	1,043	7,112	29,458	262,795	201,589	501,996
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 Islands Reserve commercial purse seine salmon harvest in numbers of fish by species, 1980–2021.

Year	Chinook <sup>a</sup>	Jacks <sup>a</sup>	Sockeye	Coho	Pink	Chum	Total
1980	3	0	1,861	909	464,336	17,272	484,381
1981	4	0	1,316	1,100	245,151	4,747	252,318
1982	18	0	2,430	3,024	422,196	12,635	440,303
1983	3	0	5,939	3,335	999,270	4,996	1,013,543
1984	15	0	9,559	11,288	502,465	27,055	550,382
1985	47	0	6,133	3,919	494,115	9,105	513,319
1986	19	0	5,500	20,309	851,282	13,938	891,048
1987	5	0	618	9,204	28,584	17,991	56,402
1988	5	0	2,373	1,431	491,507	11,503	506,819
1989	73	0	14,572	2,127	1,231,281	12,216	1,260,269
1990	34	0	7,732	6,863	478,392	8,349	501,370
1991	2,194	0	5,068	6,262	543,316	4,954	561,794
1992	315	0	3,417	16,736	338,375	11,727	370,570
1993	29	0	14,807	3,868	735,899	8,953	763,556
1994	15	0	5,157	2,409	158,961	3,135	169,677
1995	11	0	18,001	9,695	1,151,375	14,456	1,193,538
1996	1	0	7,310	5,548	728,714	10,905	752,478
1997	29	0	20,645	5,281	295,390	25,062	346,407
1998	34	0	5,005	10,455	363,480	39,083	418,057
1999	10	0	5,110	6,511	631,342	16,230	659,203
2000	2,202	0	10,727	4,016	713,056	32,176	762,177
2001	709	0	25,432	13,413	1,655,144	20,950	1,715,648
2002	550	0	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	0	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	0	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	0	12,031	4,989	498,932	142,056	658,428
2012	225	0	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	0	12,970	5,464	1,476,628	31,307	1,526,562
2015	752	0	20,837	10,249	632,022	259,504	923,364
2016	876	0	18,387	10,142	1,145,221	152,374	1,327,000
2017	510	0	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	0	7,887	3,433	932,514	39,437	983,459
2020	241	3	12,251	1,889	375,597	18,700	408,681
2021	478	25	10,516	9,188	2,584,339	46,151	2,650,697
Averages							
1980–2020	289	2	8,726	6,832	740,465	37,187	793,500
2011–2020	407	2	10,397	5,791	859,534	92,837	968,966
Max harvest	2202	7	25,432	20,309	2,584,339	259,504	2,891,793
Max year	2000	2009	2001	1986	2021	2015	2021
Min harvest	1	1	618	909	28,584	3,135	56,402
Min year	1996	2006	1987	1980	1987	1994	1987

<sup>a</sup> Chinook salmon are 28 inches or greater from tip of snout to tip of tail; “jacks” are less than 28 inches.

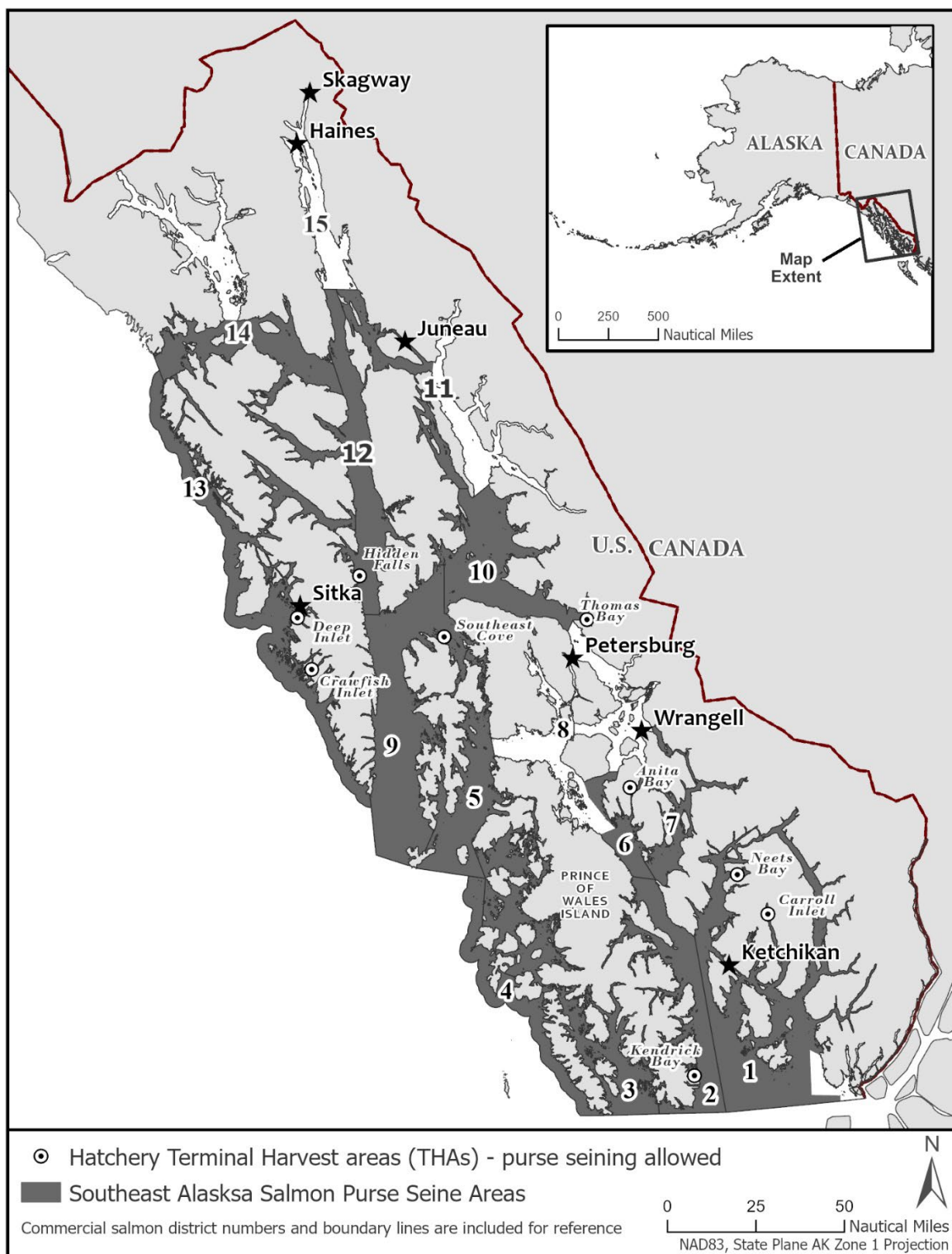


Figure 1.—Southeast Alaska traditional purse seine fishing areas.



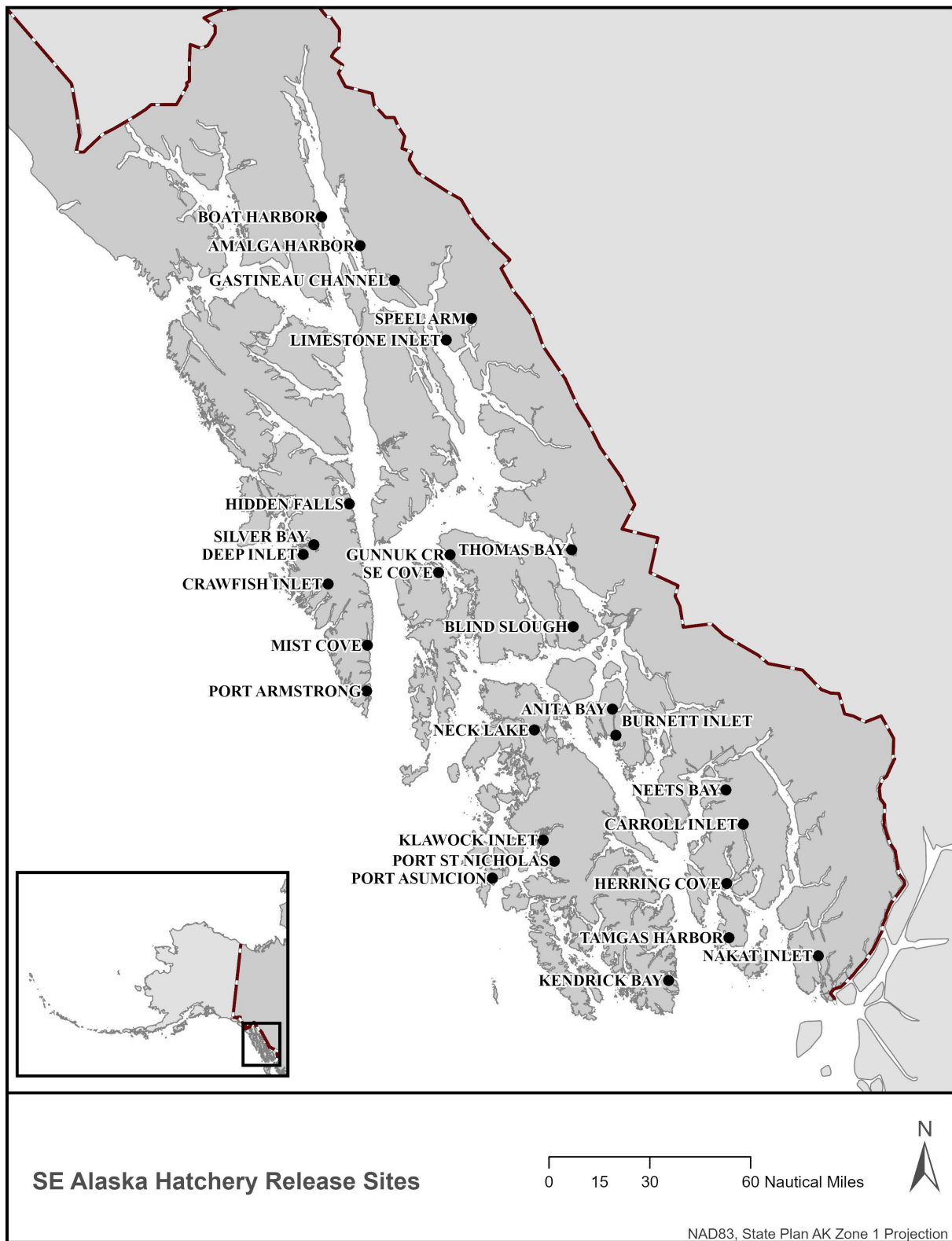


Figure 2.—Locations of hatchery release sites in Southeast Alaska.

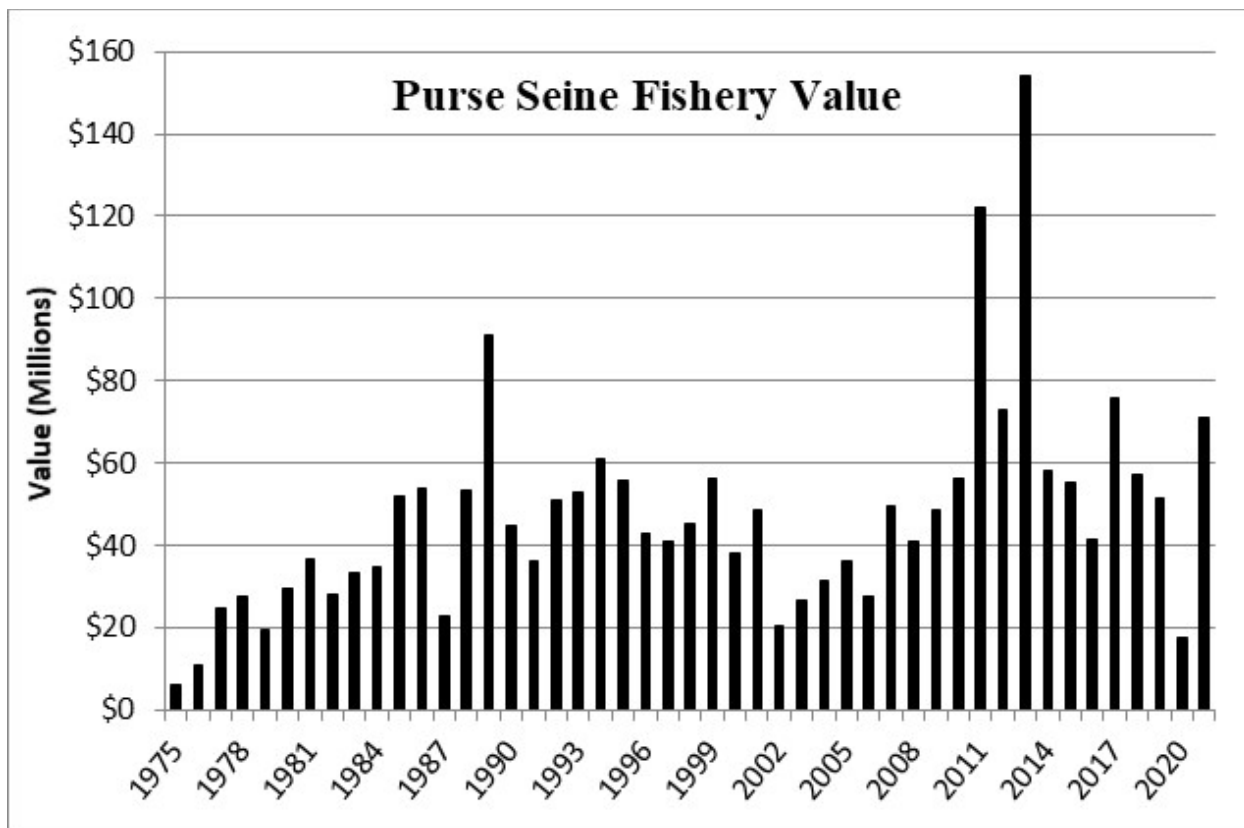


Figure 3.—Southeast Alaska purse seine fishery exvessel value in dollars (common property harvest), 1975–2021.

*Note:* 1975–2020 data from CFEC basic information tables (CFEC 2022) and 2021 data is from fish tickets.

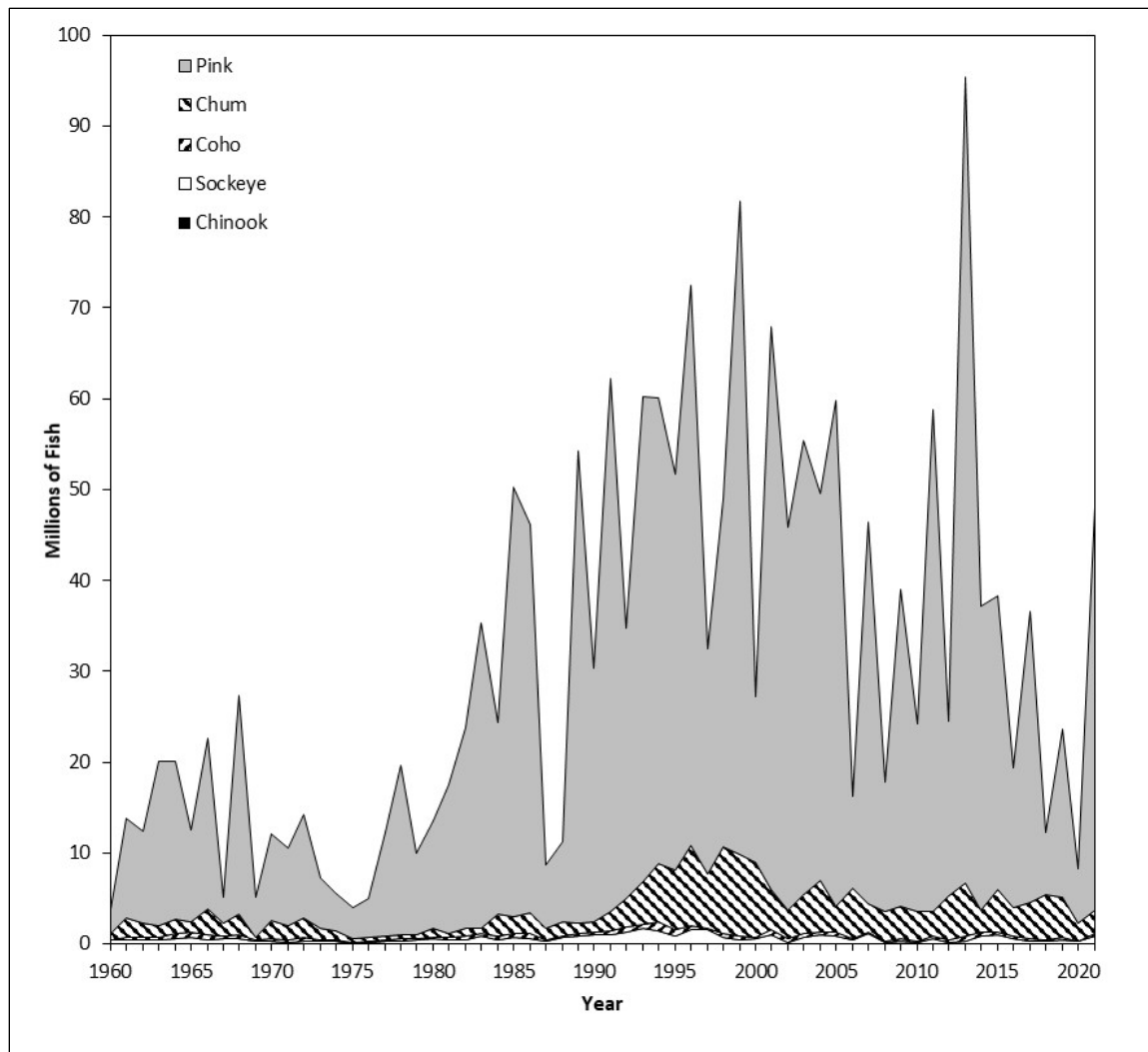


Figure 4.—Southeast Alaska Region common property purse seine salmon harvest (traditional and terminal harvest areas), in numbers of fish, for Chinook, pink, chum, coho, and sockeye salmon, 1960–2021.

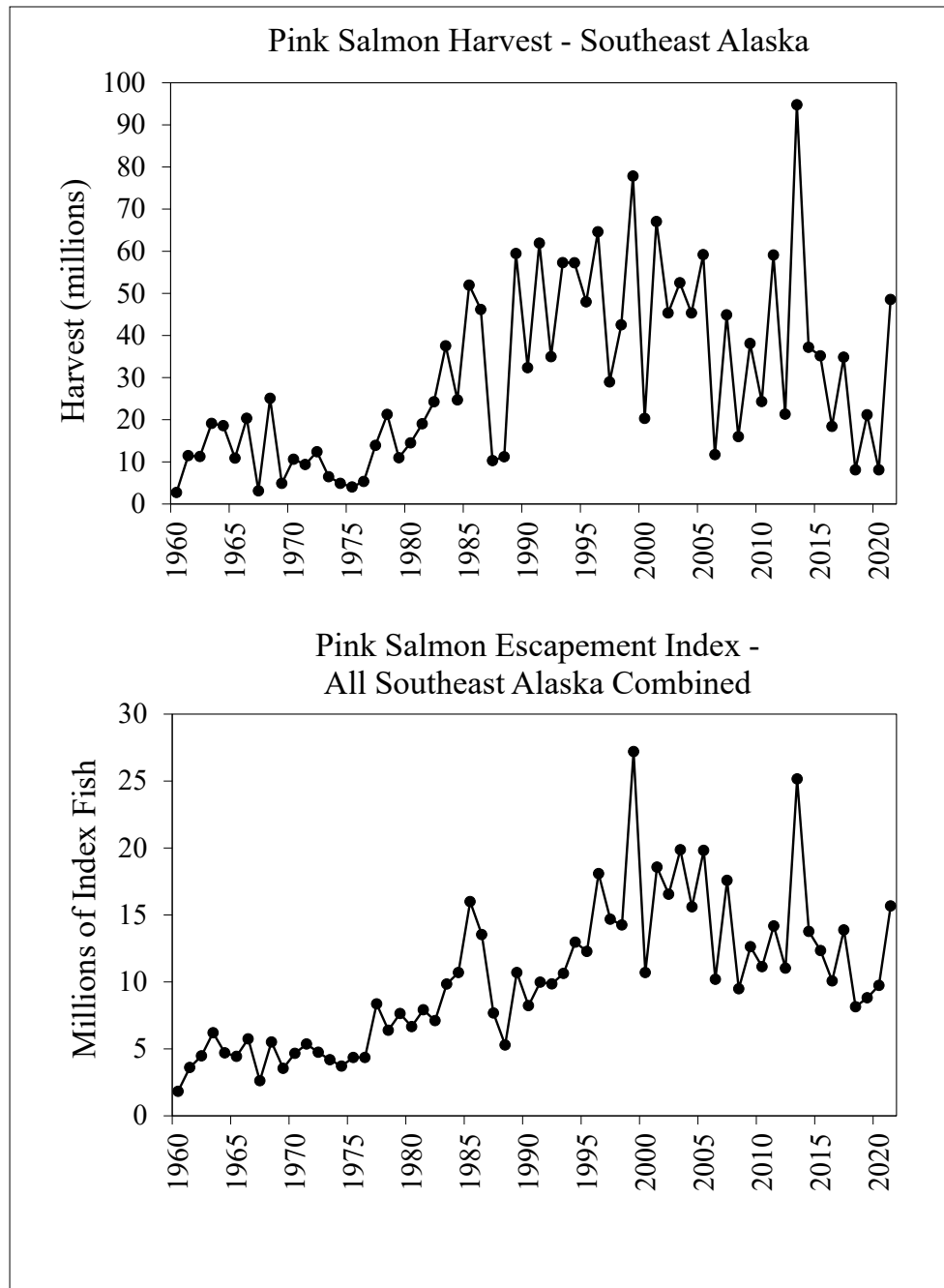


Figure 5.—Trends of pink salmon harvest and pink salmon escapement index for Southeast Alaska, all subregions combined, 1960–2021.

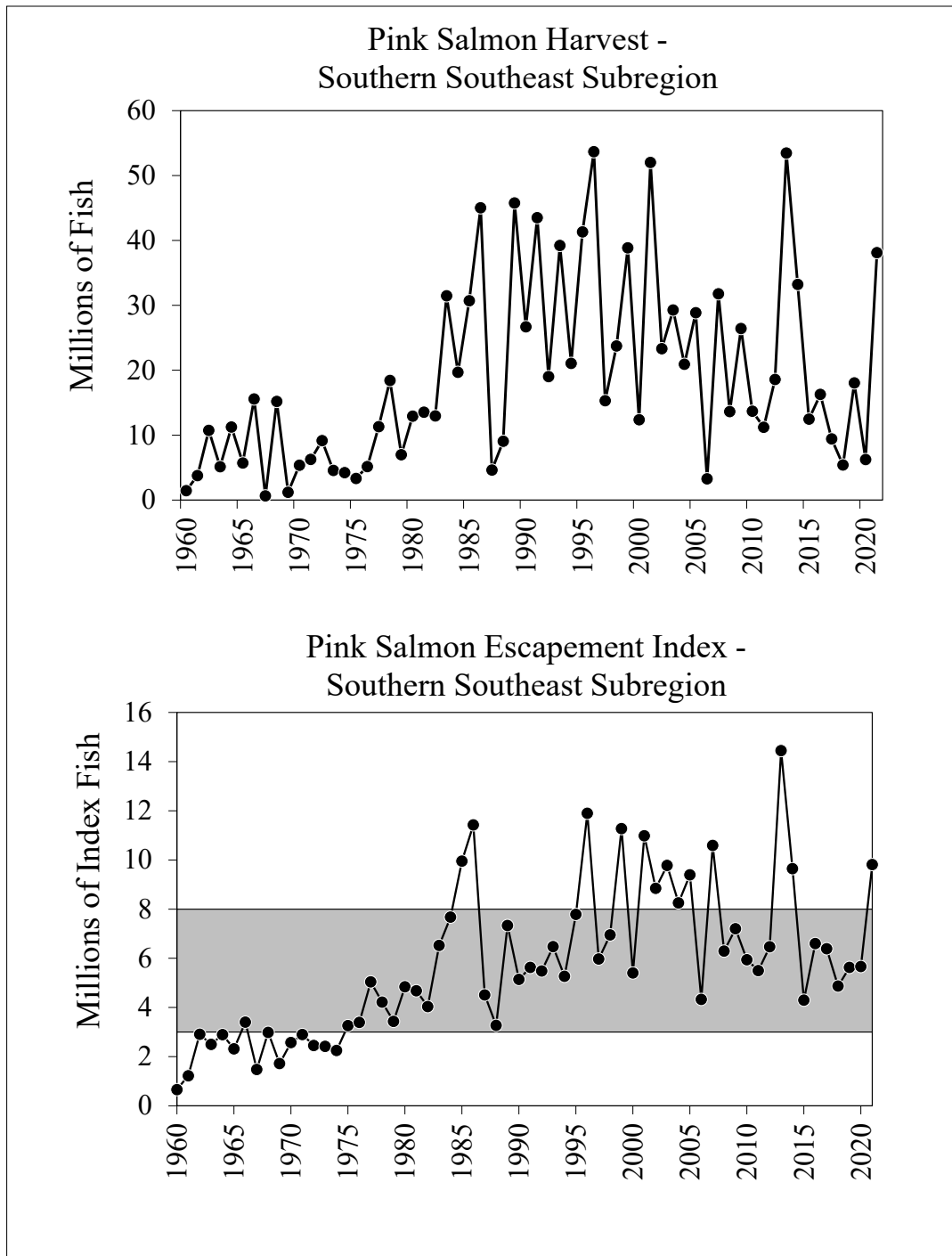


Figure 6.—Annual pink salmon harvest and escapement index for the Southern Southeast subregion, 1960–2021 (Districts 101-108). Shaded area shows the escapement goal range of 3.0 million to 8.0 million index fish.

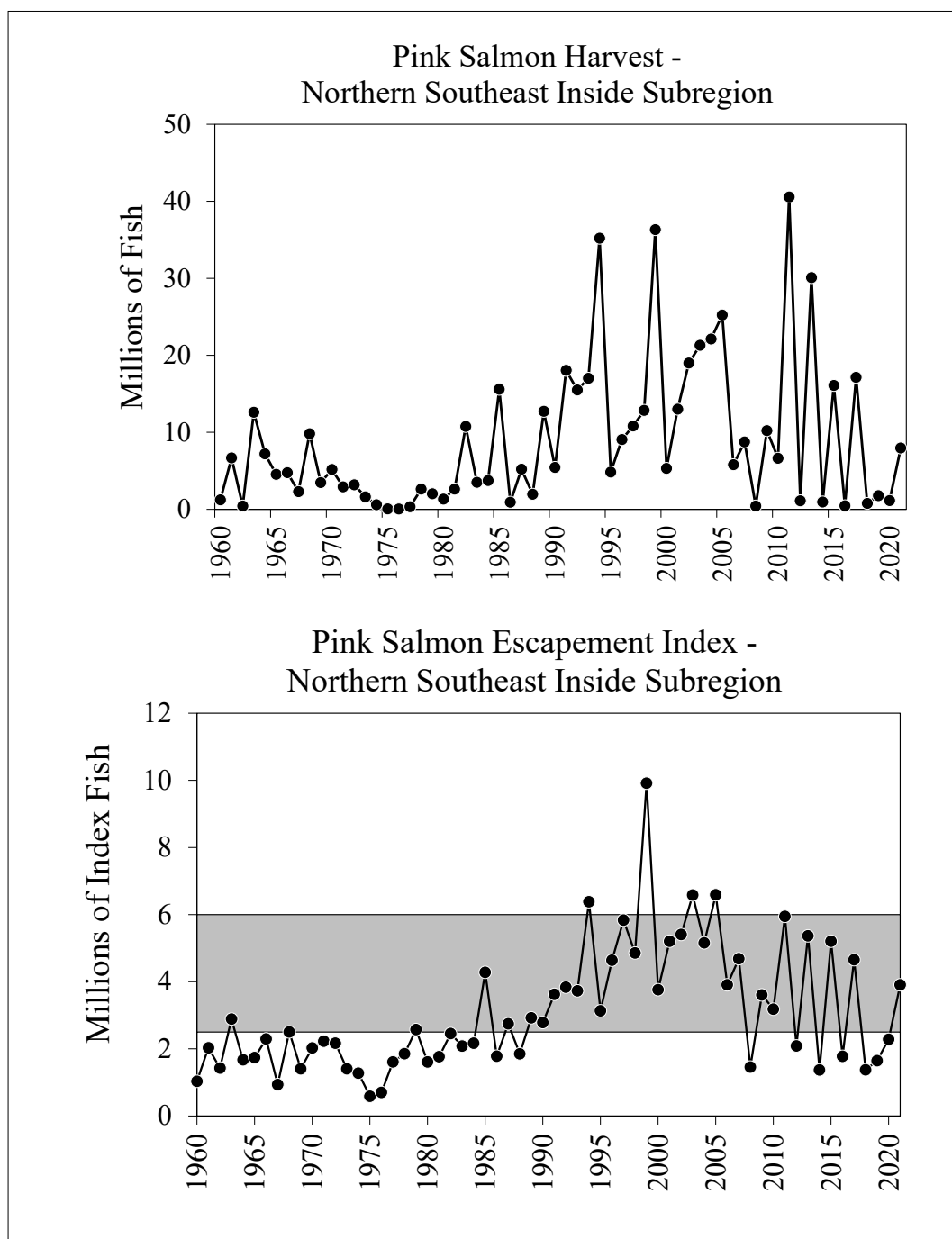


Figure 7.—Annual pink salmon harvest and escapement index for the Northern Southeast Inside subregion, 1960–2021 (Districts 109–112, 114–115, and 113, Subdistricts 51–59). The shaded area shows the escapement goal range of 2.5 million to 6.0 million index fish.

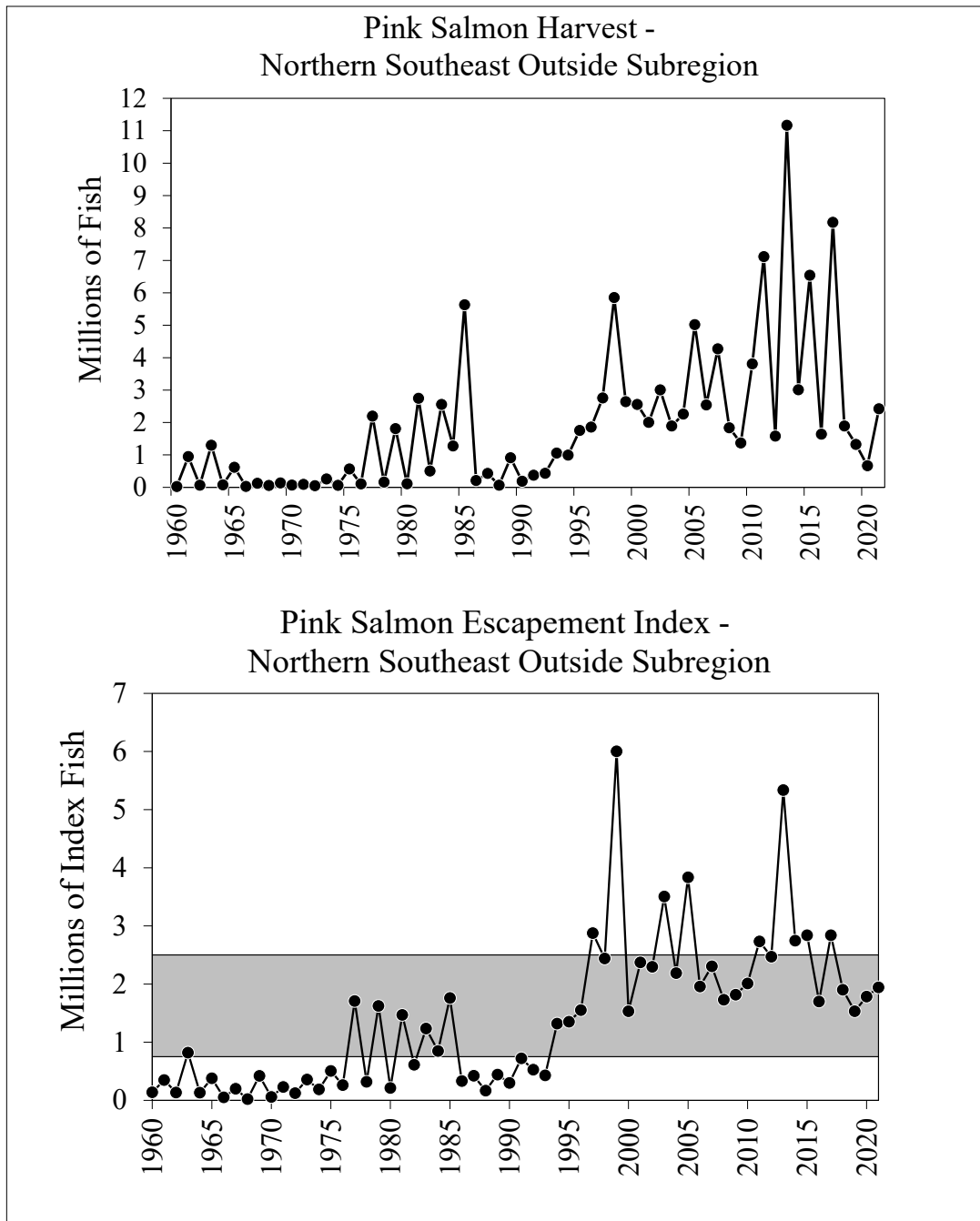


Figure 8.—Annual pink salmon harvest and escapement index for the Northern Southeast Outside subregion, 1960–2021 (District 113, subdistricts 22–44 and 62–96). Shaded area shows the escapement goal range of 0.75 million to 2.50 million index fish.

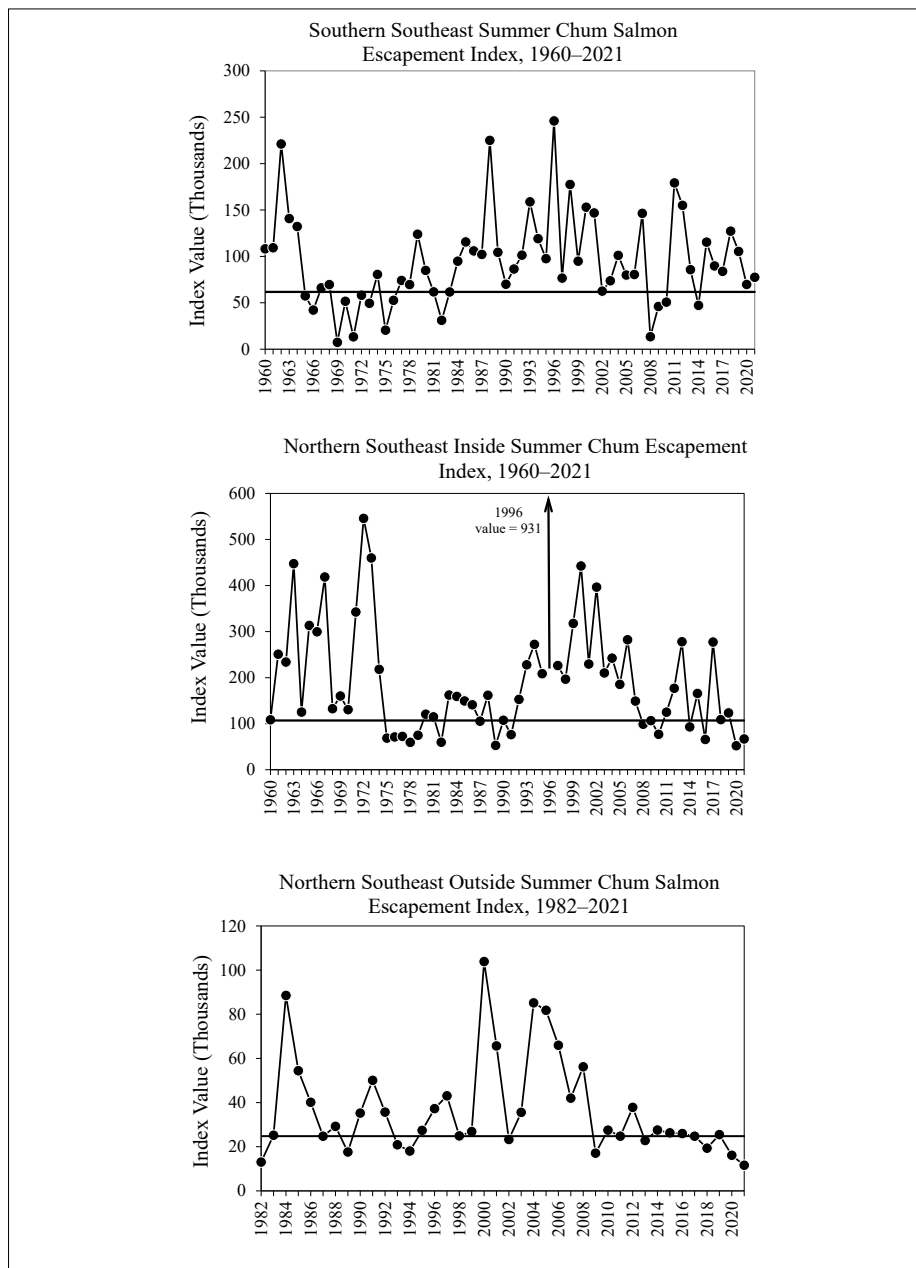


Figure 9.—Wild summer-run chum salmon escapement indices for the Southern Southeast stock group (1960–2021), Northern Southeast Inside stock group (1960–2021), and Northern Southeast Outside stock group (1982–2021). The solid lines show the sustainable escapement goal threshold for each stock.



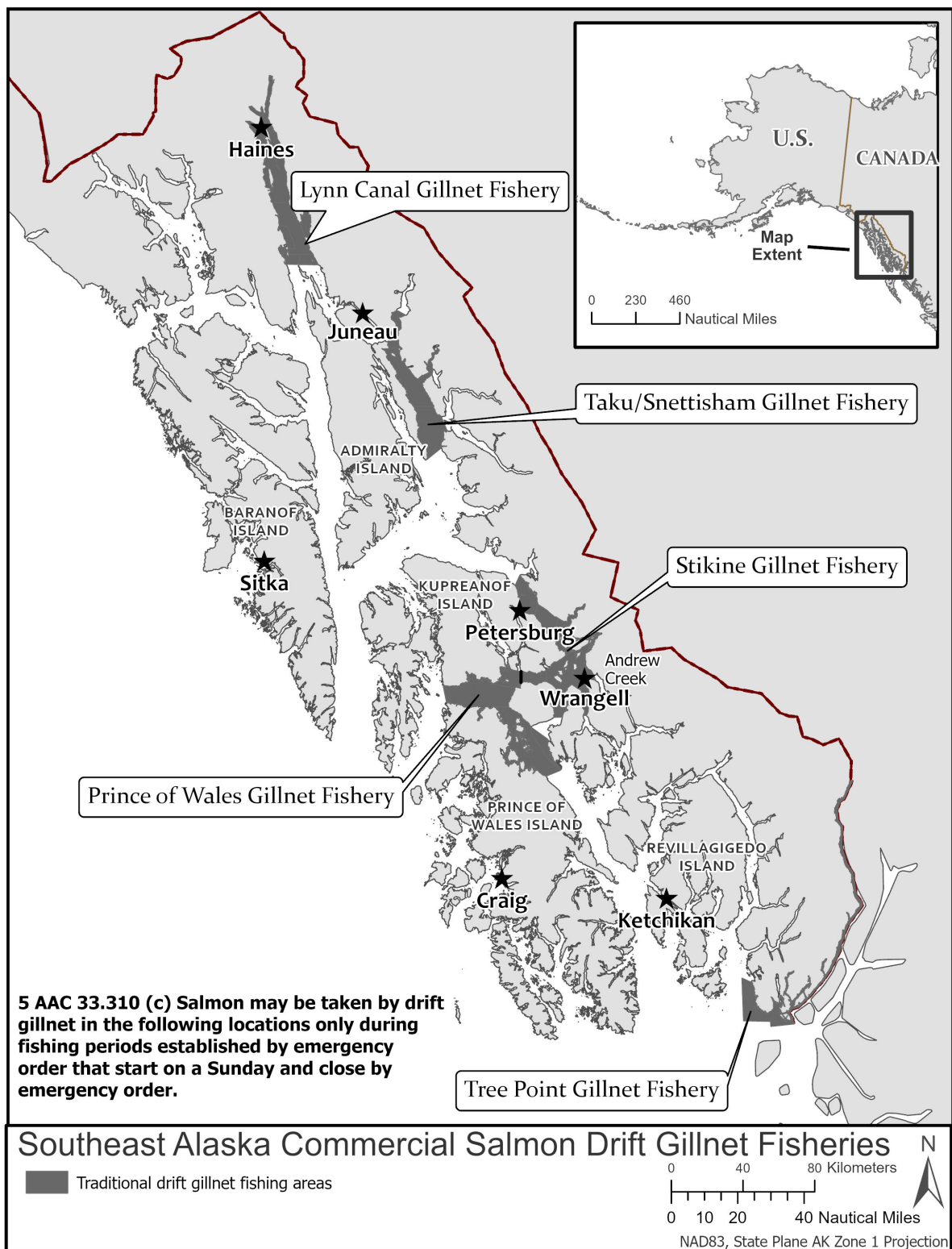


Figure 10.—Southeast Alaska traditional drift gillnet fishing areas.

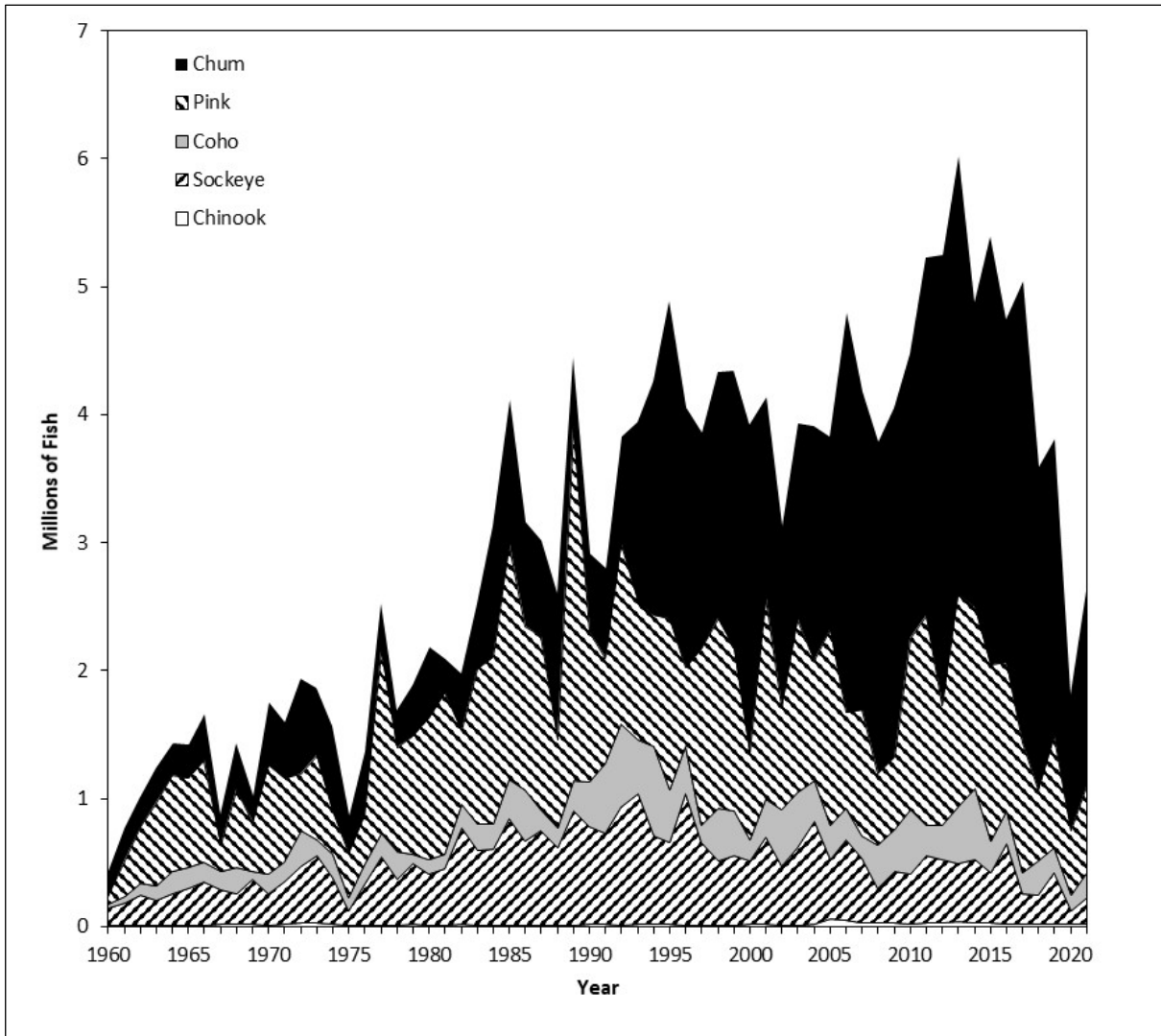


Figure 11.—Southeast Alaska commercial drift gillnet salmon harvest from traditional and terminal harvest areas in numbers of fish by species, 1960–2021.

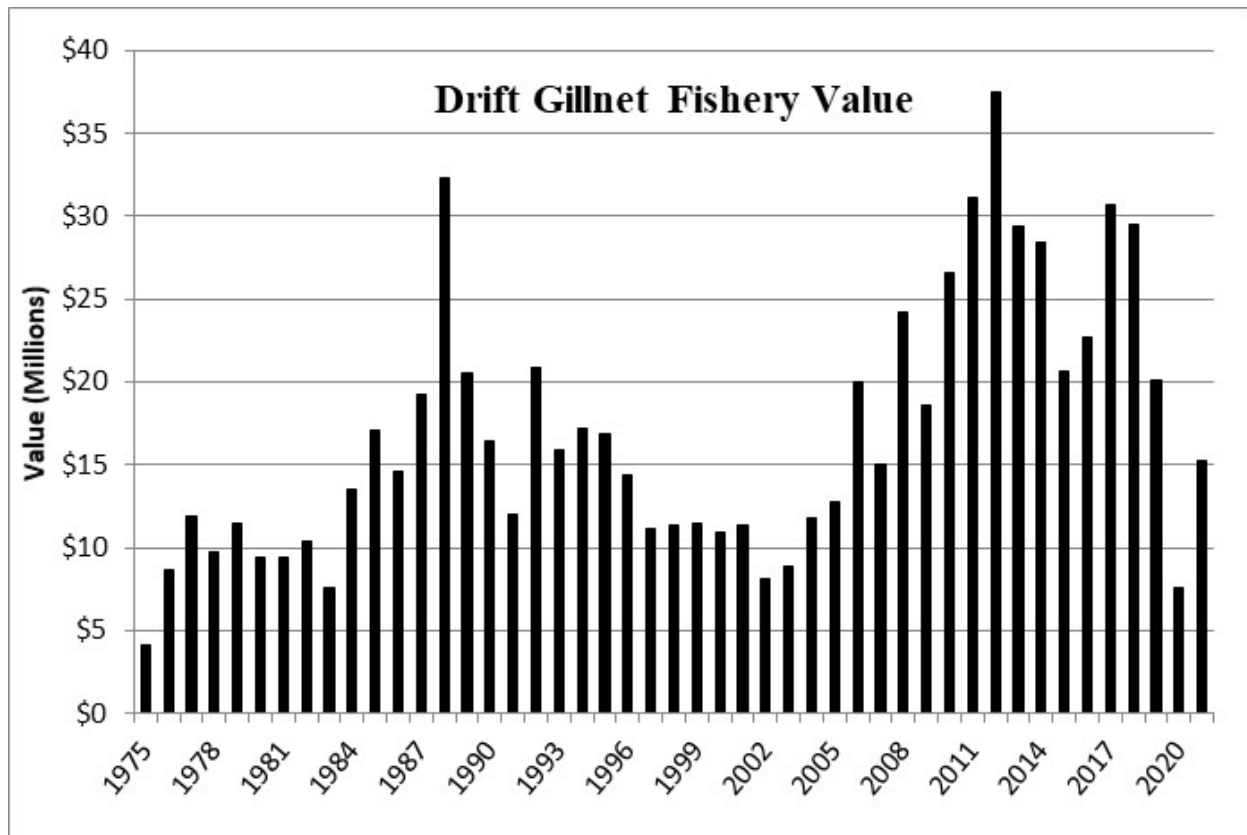


Figure 12.—Southeast Alaska drift gillnet fishery exvessel value in dollars (common property harvests), 1975–2021.

*Note:* 1975–2020 data from CFEC basic information tables (CFEC 2022) and 2021 data is from fish tickets.