Fishery Management Report No. 19-07

2017 Prince William Sound Area Finfish Management Report

by

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

Symbols and Abbreviations

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

Weights and measures (metric)

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

Weights and measures (English)

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

Time and temperature

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

Physics and chemistry

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

General

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

Mathematics, statistics

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

FISHERY MANAGEMENT REPORT NO. 19-07

2017 PRINCE WILLIAM SOUND AREA FINFISH MANAGEMENT REPORT

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

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ABSTRACT

The 2017 Prince William Sound (PWS) management area commercial salmon harvest was approximately 56.02 million fish. The harvest included 16,000 Chinook *Oncorhynchus tshawytscha*, 1.45 million sockeye *O. nerka*, 562,000 coho salmon *O. kisutch*, 48.59 million pink *O. gorbuscha*, and 5.39 million chum *O. keta*. Approximately 50.21 million fish were harvested in the commercial common property fishery and 5.81 million fish sold for hatchery cost recovery. The estimated value, including hatchery sales, was approximately $128.34 million. During the 2017 season, 518 drift gillnet, 29 set gillnet, and 229 purse seine permit holders recorded at least 1 landing. Drift gillnet exvessel value was an estimated $38.89 million; set gillnet exvessel value was an estimated $1.57 million; and purse seine exvessel value was an estimated $71.28 million. Revenue generated from hatchery cost recovery and raceway sales was approximately $16.60 million. The PWS management area personal use and subsistence fisheries (including upper Copper River personal use and subsistence fisheries) harvested an approximate total of 198,000 fish in 2017. Approximately 12,200 subsistence and personal use permits were issued. The commercial Pacific herring *Clupea pallasii* fishery in the PWS management area was closed in 2017 for the 17th consecutive year because age structure and available surplus in the spawning biomass did not support a fishery.

Key words: Pacific salmon *Oncorhynchus* spp., Pacific herring *Clupea pallasii*, harvest, hatchery, annual management report AMR, Copper River, Prince William Sound

PRINCE WILLIAM SOUND MANAGEMENT AREA COMMERCIAL SALMON AND HERRING FISHERIES

OVERVIEW OF MANAGEMENT AREA

The Prince William Sound (PWS) management area, also known as Area E, encompasses all coastal waters and inland drainages entering the north central Gulf of Alaska between Cape Suckling and Cape Fairfield (Figure 1). Area E is divided into 11 districts that correspond to the local geography and distribution of the 5 species of salmon *Oncorhynchus* spp. harvested by the commercial fishery (Figure 2). The management objective for all districts is to achieve spawning escapement goals while allowing for the orderly harvest of fish surplus to spawning requirements. The Alaska Department of Fish and Game (ADF&G) follows regulatory plans to manage fisheries and allow private non-profit (PNP) hatcheries to achieve cost-recovery and broodstock objectives.

Six hatcheries contribute to the area's fisheries. Gulkana, Cannery Creek, Armin F. Koernig, Wally Noerenberg, and Main Bay hatcheries are operated by Prince William Sound Aquaculture Corporation (PWSAC). Gulkana Hatchery (GH) in Paxson augments production of sockeye salmon *Oncorhynchus nerka* to the Copper River. Cannery Creek Hatchery (CCH), located on the north shore of the sound, and Armin F. Koernig Hatchery (AFK) in the southwestern sound produce pink salmon *O. gorbuscha*; Wally Noerenberg Hatchery (WNH) in the northwestern sound produces pink, chum *O. keta*, and coho *O. kisutch* salmon; and Main Bay Hatchery (MBH) in the western sound produces sockeye salmon. Valdez Fisheries Development Association (VFDA) produces pink and coho salmon at the Solomon Gulch Hatchery (SGH) in Port Valdez.

ADF&G forecasts PWS wild salmon runs, and hatchery run projections are provided by PWSAC and VFDA and are summarized in hatchery annual management plans (AMP). Hatchery AMPs provide guidance for the harvest management of PWS hatchery returns and are referenced throughout this document (reports are on file with PNP Hatchery Program Coordinator, Alaska Department of Fish and Game, Juneau, Alaska --PWSAC 2017a and VFDA 2017a). PWS hatchery permit holders are required (AS 16.10.470) to submit an annual report to ADF&G that includes details of egg takes, releases, and adult returns (reports are on file with PNP Hatchery

Program Coordinator, Alaska Department of Fish and Game, Juneau, Alaska --PWSAC 2017b and VFDA 2017b) and are summarized in Stopha (2017).

Salmon may be harvest using purse seine, drift gillnet, and set gillnet; however, not all gear types are allowed in all districts. Drift gillnets are the most numerous and are allowed in the Bering River, Copper River, Coghill, Unakwik, and Eshamy Districts. Set gillnet gear is allowed only in the Eshamy District. Purse seine gear is allowed in the Eastern, Northern, Unakwik, Coghill, Northwestern, Southwestern, Montague, and Southeastern Districts.

The *Prince William Sound Management and Allocation Plan* (5 AAC 24.370) aims to provide a fair and reasonable allocation of harvest of enhanced salmon across gear types and thereby easing conflict between user groups. ADF&G calculated the exvessel value percentages for each gear group using the Commercial Operators Annual Report (COAR) area specific prices and weights and ADF&G harvest estimates of PWSAC enhanced fish by species and gear type. If the set gillnet gear group exceeds 5% of the 5-year average value of PWSAC enhanced stocks, they are limited to no more than 36 hours of fishing time per week beginning July 10 in the year following this calculation. If the drift gillnet gear group harvest value is 45% or less, then in the year following the calculation, the drift gillnet gear group shall have exclusive access to the Port Chalmers Subdistrict to harvest enhanced salmon returns from June 1 through July 30, during fishing periods established by emergency order. If the purse seine gear group harvest value is 45% or less, then in the year following the current calculations, the purse seine gear group shall have exclusive access to the Esther Subdistrict to harvest enhanced salmon returns from June 1 through July 20, during fishing periods established by emergency order.

The *Prince William Sound Herring Management Plan* (5 AAC 27.365) is intended to provide an optimum sustained yield and an equitable allocation for all user groups in PWS. The management objective for PWS herring is to target fisheries on a high-quality herring while maintaining a threshold spawning biomass. When Pacific herring *Clupea pallasii* spawning biomass allows for a commercial fishery, an annual harvest level is determined for each of the 5 commercial fisheries: purse seine sac roe, gillnet sac roe, spawn-on-kelp not in pounds, spawn-on-kelp in pounds, and herring food/bait fishery.

OVERVIEW OF AREAWIDE SALMON AND HERRING FISHERIES

The 2017 PWS management area commercial salmon harvest was 55.99 million fish. The harvest included approximately 15,200 Chinook *O. tshawytscha,* 1.44 million sockeye, 559,000 coho, 48.59 million pink, and 5.39 million chum salmon (Table 1; Figure 3). Combined area hatchery runs of sockeye, coho, and pink salmon were below forecast; combined area hatchery runs of chum salmon were above forecast (Appendix E1). Approximately 50.17 million fish were attributed to the commercial common property fishery (CCPF) and 5.81 million fish were harvested in the hatchery cost-recovery fishery (Table 1). Preliminary exvessel value from the CCPF are $71.28 million (63.8%) for purse seine, $38.78 million (34.8%) for drift gillnet, and $1.56 million (1.4%) for set gillnet (Table 2; Figure 4). The average price per pound paid to fishermen was above the 10-year (2007–2016) average for all species of salmon harvested in PWS (Table 3). The purse seine exvessel value was the third highest in the last 10 years and above the 10-year average. Drift gillnet and set gillnet exvessel values were below the 10-year average and the lowest for set gillnet since 2008 (Table 4).

No commercial herring fisheries occurred in 2017 because the projected spawning biomass for spring 2017 was well below the regulatory minimum spawning biomass of 22,000 short tons. Aerial surveys resulted in the lowest estimate of annual mile days of spawn on record (1974–2017, Appendices G1 and G2).

SALMON SEASON SUMMARY BY DISTRICT

COPPER RIVER DISTRICT

The Copper River District includes all waters of the Gulf of Alaska between Hook Point and Point Martin (Figure 1). The 2007–2016 average commercial harvest from the Copper River District was 15,400 Chinook, 1.43 million sockeye, and 206,000 coho salmon. The 1992–2016 25-year average was 33,400 Chinook, 1.44 million sockeye, and 272,000 coho salmon. The 2017 harvest was 13,800 Chinook, 586,000 sockeye, and 306,000 coho salmon (Appendix A4).

ADF&G, with direction from the Alaska Board of Fisheries (BOF), manages salmon runs to the Copper River District to assure sustained yield and meet all user group allocations, as outlined in 5 AAC 24.360, *Copper River District Salmon Management Plan*. In 2003, the Chinook salmon spawning escapement goal was changed to 24,000 or more fish (Table 5; Bue et al. 2002). At the December 2011 BOF meeting, the *Copper River Chinook Salmon Management Plan* was amended to limit the number of commercial openings inside of the barrier islands in Statistical Weeks 20 and 21 to no more than 1 during the entire 2 week period to increase the probability of achieving the Chinook salmon escapement goal.

Management tools such as inriver sonar, aerial surveys, Chinook salmon mark–recapture estimates, and harvest data provide fishery managers with indices of abundance used to manage Copper River fisheries. ADF&G relies primarily on the inriver passage index provided by dual-frequency identification sonar (DIDSON) units at Miles Lake (e.g., Malherek et al. 2015) to manage the commercial fishery and provide for upriver escapement and fishery allocations. Additionally, upper river aerial surveys, thermal and strontium chloride marked otolith, weir, and tower data provide information about ADF&G success meeting the *Copper River District Salmon Management Plan*.

The Copper River District commercial fishing season opens in mid-May and commercial fishing periods are established inseason by emergency order (EO). Fishing time has steadily been reduced over the years in response to increased efficiency of the commercial fleet and reallocations by the BOF.

The current sustainable escapement goal (SEG) is a range of 360,000–750,000 wild sockeye salmon for the upper Copper River (Moffitt et al. 2014).

The components of the 2017 inriver goal from 5 AAC 24.360 were as follows:

- Spawning escapement: 360,000
- Other salmon: 17,500 salmon
- Subsistence harvest: 77,900 salmon
- Personal use harvest: 130,300 salmon
- Sport fishery: 15,000 salmon
- Gulkana Hatchery broodstock: 20,000 sockeye salmon (estimated annually)
- Gulkana Hatchery surplus: 69,000 sockeye salmon (estimated annually)
- Total: 690,000

The daily inriver goal is the number of salmon needed to pass the Miles Lake sonar to meet the overall inriver goal. For 6 of the 7 inriver goal components, the daily inriver goal is calculated using both wild and enhanced salmon run timing. The subsistence harvest component, however, is calculated using only wild stock run timing. This is required by AS 16.05.940(33), which states: "subsistence uses means the noncommercial, customary and traditional uses of *wild*, renewable resources...."

Preseason Outlook and Harvest Strategy

The 2017 commercial harvest forecast for the Copper River District was 3,500 Chinook, 889,000 sockeye, and 207,000 coho salmon (Appendix A9). The GH enhanced sockeye salmon run was forecast by ADF&G to be 300,000 fish. This number equated to a sonar goal of 638,000 salmon by July 28, which was the season ending date for sonar counting at Miles Lake in 2017 (Appendix A6).

During years when Miles Lake sonar is not operational prior to the first opening, early season management of the Copper River District is based on harvest. Environmental conditions, fishing effort, and harvest consistency throughout the period are also taken into account. In late May, sonar counts and commercial harvest information become the primary factors governing management of the fishery. By mid-June, aerial indices of sockeye salmon escapement in Copper River Delta systems are also considered when scheduling commercial fishing periods. Because of the many spawning systems in the Copper River Delta, an actual weekly escapement index of selected sockeye and coho salmon systems is compared to an anticipated weekly escapement index. The SEG range for Copper River Delta sockeye salmon stocks is 55,000–130,000 fish (Table 5; Bue et al. 2002).

Typically, coho salmon management begins in the second week of August. The historical precedent is to provide an initial single 24-hour period per week. If harvest or aerial survey numbers warrant, the duration of this fishing period may be increased to 36, 48, or 60 hours, or a second fishing period may be added during the week. Aerial escapement indices for the early portion of the coho salmon run probably underestimate salmon abundance due to other species of salmon remaining in tributaries, making accurate species identification problematic. Additionally, stormy fall weather makes weekly survey flights difficult. The SEG range for the Copper River Delta is 32,000–67,000 coho salmon (Table 5; Bue et al. 2002).

Sockeye and Chinook Salmon Fishery Season Summary

The 2017 Copper River sockeye salmon total run was 1.39 million fish: 586,000 (42.0%) commercially were harvested and sold, 192,000 (13.8%) were harvested by upriver subsistence and personal use fishermen, and an estimated 11,700 (0.8%) were harvested by upriver sport fishermen. Harvest distributions among other harvest categories were consistent with past years. Upriver and Copper River Delta wild sockeye salmon escapement was 577,000 (41.4%) fish, and 17,100 (1.2%) fish returned to the GH sites (Appendix A1). Overall, 1.12 million (80.0%) of the sockeye salmon originated from upriver wild stock systems, 214,000 (15.4%) from Copper River Delta wild stock systems, and 65,000 (4.7%) came from the GH (Appendix A2).

The 2017 Chinook salmon total run was 56,100 fish; 13,800 (24.7%) were commercially harvested and sold, 800 (1.5%) were harvested through educational and subsistence permits in the Copper River District, and 700 (1.3%) were retained by commercial permit holders as homepack. A total of 5,300 (9.5%) were harvested by upriver personal use and subsistence users,

an estimated 900 (1.5%) were harvested by sport fishermen, and the remaining 34,600 (61.6%) represent spawning escapement (Appendix A3). Spawning escapement was 44.2% above the lower bound SEG of 24,000 for Copper River Chinook salmon.

The Copper River commercial common property sockeye salmon harvest of 586,000 was 34.1% below the projected 889,000 harvest and 58.9% below the 10-year average of 1.43 million sockeye salmon. The commercial harvest of 13,800 Chinook salmon was 10.0% below the 10-year average of 15,400 fish. The overall commercial harvest of Chinook salmon was the ninth lowest since 1971 (Appendix A4). The overall commercial sockeye salmon harvest from the Copper River District was the ninth lowest harvest since 1971. In general, the Copper River District run entry was well distributed from the center of the district to the east. Fishing and harvest effort concentrated nearshore in this portion of the district, and there was poorer fishing offshore and in the western portion of the district.

A total of 493 of 532 drift gillnet permits were active in the Copper River District in 2017. Fishing effort and harvest peaked during the fourth fishing period that began May 29 when 454 permits harvested 44,800 sockeye salmon (Appendix A5).

The 2017 cumulative Miles Lake sonar count on July 28 (last day of operation) was 723,400 salmon, which was within the range of the inriver goal and approximately 288,000 fish below the long-term average (1978–2016; Appendices A6–A8).

Final escapement index count for the Copper River Delta systems was 56,500 sockeye salmon which was above the SEG range of 55,000–130,000 fish (Table 5; Appendix A10) and 27,900 fish below the desired long-term average. However, poor survey conditions probably contributed to the lower counts and the actual escapement was probably closer to the long-term average. Since 2007, the escapement index has ranged from a low of 51,600 in 2016 to a high of 88,300 in 2007 (Appendix A11). The management objective of meeting the long-term average escapement of 84,400 sockeye salmon for Copper River Delta was also not achieved and may be due in part to increased commercial fishing effort on the GH sockeye salmon run. In 2017, there were 2 aerial surveys of upper Copper River index streams conducted to evaluate distribution of sockeye salmon (Appendix A12).

Based on otolith mark analysis, an estimated 32,300 GH sockeye salmon were harvested in the Copper River District commercial fishery in 2017, which was the second lowest harvest in the last 30 years (Appendix E2). This was well below the 10-year average commercial harvest of 211,000 GH sockeye salmon (Appendix E3). Additionally, there were an estimated 6,620 MBH sockeye salmon in the Copper River District commercial harvest (Appendix E2).

In 2017, the sockeye salmon run produced by the Gulkana hatcheries totaled 65,000 fish (Appendix E3). This was 76.6% below the PWSAC total run forecast of 278,000 fish (PWSAC 2017a). A total of 17,100 sockeye salmon were reported as collected for broodstock or escaped into the watershed (Appendix E3). Of these fish, 8,870 were harvested for broodstock and an estimated 8,210 sockeye salmon returned to release locations and were not harvested (PWSAC 2017b).

Miles Lake sonar became partially operational May 11 when the north bank was operated daily for short periods. The first observed salmon were enumerated on May 16, when the north bank passed 35 fish. The Miles Lake sonar became fully operational May 18 (Appendices A6 and A7).

Regulation 5 AAC 24.361 states that ADF&G will manage all Copper River fisheries (commercial, sport, personal use, and subsistence) to achieve a sustainable escapement goal of 24,000 or more Chinook salmon. The 2017 Copper River Chinook salmon total run forecast was 29,000 fish (range 3,000–55,000 fish) based on the 2016 run, which was the smallest since 1980. Due to the extremely poor Chinook salmon forecast, closed waters described in 5 AAC 24.350(1)(B) were expanded to include inside waters west of Grass Island Bar and east of Kokinhenik Bar, essentially closing all waters inside the barrier islands across the entire district. The reduction in channelized shallow water fishing area was intended to reduce Chinook salmon harvest potential to allow a more aggressive sockeye salmon fishery in outside waters. These closures were maintained through June 18, affecting the first 9 fishing periods, which was 7 fishing periods beyond the regulatory requirement in 5 AAC 24.361(b). The season start day was delayed from May 15 to May 18, fishing period frequency was limited to 2 per week, and duration was maintained at 12 or fewer hours per period through late June. Through the end of July, the commercial fishery was open 403 hours, which was 264 hours less than the 10-year average (Appendix A5). Upriver sport, personal use, and subsistence fisheries were also restricted in 2017. Actual Chinook salmon harvest in the commercial fishery was above semi-weekly harvest projections throughout the season. Upriver harvest was also higher than projected.

The first Copper River District commercial fishing period on Thursday, May 18 was 12 hours and 426 commercial drift gillnet permit holders fished. Harvest from this period was 38,500 sockeye salmon and 2,000 Chinook salmon. Processors reported paying a grounds base price of up to approximately $11.00 per pound for Chinook and $8.00 per pound for sockeye salmon. Harvest increased during the following 12-hour period when 396 permit holders landed and sold 56,000 sockeye and 1,980 Chinook salmon (Appendices A5 and A9). Increased sockeye salmon run entry through the east and central portion of the district, outside of the barrier islands, accounted for a majority of the harvest.

Spring tides with a range of 12–14 feet began May 21, the day before the second opening. These large tidal cycles typically contribute to salmon movement and passage, frequently correlating to above-expected commercial harvests and counts at the Miles Lake sonar station. Along with cool weather and steady water levels on the river, these tides helped push inriver passage above the maximum daily inriver target 5 days later (Appendices A6 and A7).

The third period was announced Wednesday, May 24, and Miles Lake sonar had been counting for 6 full days. A cumulative count of approximately 15,000 salmon (actual plus projected for the current day) versus a minimum escapement objective of 16,300 salmon, which indicated an average to small run (Appendix A7). In response, fishing time for the third period was maintained at 12 hours. Sockeye salmon harvest of 38,400 fish from this period was 35.9% less than the expected harvest. Chinook salmon harvest of 1,200 fish was roughly 5 times expected (Appendices A5 and A9). The mix of sonar counts, below average sockeye, and above average Chinook salmon harvests indicated that a conservative management approach was still warranted. The Chinook salmon inside closure area remained expanded despite higher than projected Chinook salmon commercial harvest. Uncertainty about run strength at this point in the season supported the continuation of this closure.

These harvest trends – below projected sockeye and above projected Chinook salmon harvest – continued into the first half of June. Sockeye salmon harvest steadily declined through June 19. Also during this fishing period, fishing effort declined by nearly 80 permits from the previous

fishing period. Chinook salmon harvest also declined over this time period, but individual period harvest averaged 4 times the projected harvest (Appendix A9). With this larger than projected harvest and the Chinook salmon run approaching 90% complete, the run appeared to be on track to meet inriver harvest and escapement objectives. This, combined with reduced fishing effort and Miles Lake sonar passage that fluctuated around the minimum daily objective through the middle of June, prompted an expansion to 24-hour fishing periods, which was still a continuation of a reduced fishing time schedule, but not as conservative as early in the season. In addition to the expanded fishing time, suspension of the inside waters closure starting June 19 was warranted (Appendices A5–A7).

Participation in the fishery declined from over 400 permits at the beginning of June to approximately 100 boats by the middle of July due to a combination of weak sockeye salmon harvest and fishermen leaving the district to participate in fisheries on the western side of PWS. (Appendix A5).

Aerial surveys became an increasingly important sockeye salmon management tool during late June and throughout much of July. The Copper River Delta aerial survey index was near the lower end of the escapement index range during mid-June (Appendix A10). Fishing time was increased from 12 hours to 24 hours per period beginning June 22 to match exploitation potential with decreased fishing effort and meter adequate sockeye salmon escapement into delta systems (Appendices A5 and A10). Gulkana Hatchery contribution estimates were also a critical management tool during June and July and allowed tracking of hatchery run strength relative to wild stock run strength.

The decision to maintain a consistent and conservative fishing schedule was tied to low numbers of GH sockeye salmon in the harvest and below average Copper River Delta sockeye salmon escapement indices through the beginning of July (Appendices A5 and A10). This strategy was supported by historical run timing of wild and enhanced stocks and by low numbers of marked GH fish harvested in the commercial fishery. GH sockeye salmon were near peak abundance in the fishery, representing an average of 28.9% of the harvest through the historical average time period of peak abundance, during the last week of June and first week of July. During the fishing period that started July 6, the GH sockeye salmon proportion climbed to 24.4% and then showed a general declining trend over the next 2 weeks. Near projected sonar passage and aerial survey indices within the lower end of the escapement index range (during surveys with good observational conditions), along with strong wild stock sockeye salmon contributions in the fishery allowed for 24- and 36-hour periods through the third week of July (Appendices A6, A7, A10, and E2).

Copper River Delta survey conditions were marginal at times from mid-July through mid-August. The sockeye salmon escapement index fluctuated near the minimum index through mid-August, which warranted the eventual reduction of fishing time to 12 hours per period starting July 24 and continued through the beginning of coho salmon season in mid-August (Appendices A5 and A10). Fleet participation declined from mid-July through mid-August from an average of 81 permits to an average of 56 permits. Low fleet participation in the fishery during this period was largely the result of low harvest rates and high fuel prices.

Typically, 5-year-old sockeye salmon make up 70–85% of the Copper River run and 5-year-old Chinook salmon make up 50–80% of the run. The majority of the sockeye salmon harvested commercially (62.4%) were 5-year-old fish from brood year 2012, followed by 4-year-old fish

(35.0%) and 6-year-old fish (2.5%). Just over half of the sockeye salmon harvested (53.0%) were male (Appendix A13). The majority of commercially harvested Chinook salmon (44.3%) were 5-year-old fish from brood year 2012, followed by 6-year-old fish (37.8%), and 4-year-old fish (16.9%). Approximately 0.9% of the run were 7-year-old fish and 0.1% of the run were 3-year-old fish. More than half of the Chinook salmon harvested (69.7%) were male (Appendix A14). Genetic analysis indicated that roughly 7% of Chinook salmon harvested in the Copper River District in 2017 originated out of area. Out of area fish originated from Southeast Alaska, British Columbia, Washington, Oregon, and Idaho.

Coho Salmon Fishery Season Summary

The 2017 coho salmon run was estimated to be 415,000 fish (Appendix A15). Total run size for coho salmon in the Copper River does not include upriver spawning escapement because the number of coho salmon migrating upriver was not assessed. In the lower Copper River state managed fisheries, a total of 306,000 coho salmon were harvested and sold commercially; 1,900 were reported retained as homepack; 43 fish were harvested from the Copper River District in the subsistence gillnet fishery; and an estimated 17,900 were harvested by sport fisherman on the Copper River Delta near Cordova. In the upper Copper River fisheries, 723 were harvested by personal use and subsistence dip net fishermen in the Chitina Subdistrict; 69 were harvested in the Glennallen Subdistrict dip net and fish wheel subsistence fisheries; and an estimated 30 fish were harvested by upriver sport fisherman. Finally, 705 coho salmon were harvested in the federally-managed Copper River Delta subsistence fishery (Appendices A15 and F6). The Copper River Delta spawning escapement index was 87,500 coho salmon and was above the SEG index range of 32,000–67,000 (Appendix A16). This index value was slightly higher than the 2009–2015 low index values (Table 5; Appendix A17).

The coho salmon commercial harvest of 308,000 was above the harvest projection of 207,000 fish (Appendix A9). Peak fishing effort for the coho salmon season occurred August 31 when 218 permit holders delivered 34,100 coho salmon. Peak harvest occurred during the periods between September 7 and September 15, when an average 193 permit holders delivered an average of 44,100 coho salmon in each of these periods (Appendix A5). Rough seas and inclement weather probably had a consistently negative impact on harvest levels of coho salmon.

Coho salmon harvest first exceeded sockeye salmon harvest August 14 thus facilitating the beginning of coho salmon season (Appendix A5). This shift in species harvest was 1 week later than the previous year and a sign of average coho salmon run timing. Harvest from the August 14 fishing period was 2,900 coho salmon and 56 permit holders reported deliveries. This period yielded a harvest that was 88.4% less than the projected weekly harvest of 24,900 coho salmon and prompted a fishery closure for the rest of the week (Appendices A5 and A9). The 24-hour fishing period that started August 21 resulted in 19,900 coho salmon delivered by 178 permit holders (Appendix A5). An aerial survey flown during the week ending September 2 under poor conditions produced a count of 3,400 coho salmon in index streams, which was below the lower end of the target range for this week (Appendix A16). Effort declined slightly and harvest increased during the fishing period starting August 28 and 154 permit holders harvested 26,900 coho salmon. During the next fishing period, effort and harvest increased and 218 permit holders harvested 34,100 coho salmon. The actual harvest for this statistical week totaled 61,000 compared to an expected harvest of 46,500 fish. An aerial survey flown on September 12 under good conditions documented 31,900 coho salmon in index streams, which was near the index for the date. The escapement index remained within the escapement index range for the next survey

and allowed the fishery to remain on a schedule of at least 48 hours per week until the season closed October 10 (Appendices A5, A9, and A16).

Harvest averaged 40,100 coho salmon per period and effort averaged 270 permits per period during the first 3 weeks of September. Harvest increased from double to more than 4 times the historical harvest average by the end of this 3-week stretch. All major processors stopped buying fish prior to the September 21 fishing period when 9,000 coho salmon were harvested. Because the major processors were done buying, effort and harvest declined during the last weeks of the season and commercial fishing in the Cooper River District concluded October 10 (Appendices A5 and A9).

Inclement weather in the fishing district and Copper River Delta hampered the aerial survey program throughout coho salmon season. No surveys were flown during statistical weeks ending August 19, August 26, September 9, September 30, or October 14. Escapements observed during the surveys that were completed, combined with effort and harvest data, provided enough information to continue a regular fishing schedule throughout most of the season (Appendices A9 and A16).

The majority of the coho salmon harvested commercially (60.7%) were 3-year-old fish; 4-year-old (36.9%) and 5-year-old (2.4%) fish contributed most of the remaining harvest. An estimated 54.9% of the coho salmon harvested were male (Appendix A18).

BERING RIVER DISTRICT

Preseason Outlook and Harvest Strategy

Historically, this district has opened to sockeye salmon harvest in early June and is managed concurrently with the Copper River District (Appendix A19). Given that there has been little available sockeye salmon in surplus to escapement needs in recent years, ADF&G announced at the preseason fishermen's meeting that the district would probably not open until escapement levels were within the weekly escapement index range.

Sockeye Salmon Season Summary

In an effort to reduce enforcement concerns associated with the line fishery on the eastern edge of the Copper River District, the western edge of the Bering River District was opened concurrently with the start of Copper River District periods starting May 18. Whenever possible, openings in the Bering River District are concurrent with openings in the Copper River District, but limited escapement data warranted a precautionary approach. To provide some information with minimal potential for a large harvest, the area open to commercial salmon fishing was reduced to waters west of 144°33.60′W between June 15 and June 28 (Appendix A20). The first aerial survey of the Bering River District was flown during the week ending June 17. The total index count from this survey was 1,500 sockeye salmon, below the escapement index range of 4,000–8,900 sockeye salmon for this date. Because the escapement count was below the index range, the fishing area open on the western edge of the district was reduced. The next survey was flown during the week ending June 24 and resulted in an escapement count of 8,100, which was within the escapement index range for the week (Appendix A20). Sockeye salmon harvest during the reduced area Bering River District fishery was 0 fish (Appendix A21).

The third aerial survey flown under good observational conditions was conducted the week ending July 8. The escapement index of 15,800 sockeye salmon was between the lower

anticipated (11,000) and average (17,700) index for the week. Sockeye salmon escapement was stable through the fourth and fifth survey. The index counts during these surveys were 15,000 and 15,500 fish, respectively, representing the end of peak sockeye salmon abundance for the season (Appendix A20).

Due to inaccurate reporting, it is often difficult to estimate Bering River District harvest inseason. Often, a fisherman will deliver catch from the Bering River District to a tender in the Copper River District and the harvest will be reported in the Copper River District. This error is often resolved when fish tickets are entered.

The final sockeye salmon escapement index was 19,100 fish (4,100 above the SEG lower bound of 15,000 fish). Total sockeye salmon harvest in the district was 2,600 fish (Appendices A20 and A21).

Coho Salmon Season Summary

Late-season weather conditions prohibited several aerial surveys in the Bering River District. For the eighth year in a row, the Bering River District coho salmon run was late, but final escapement was within the SEG range for the district (Appendix A22). Commercial harvest of 119,000 was the largest since 1995 and well above the 10-year average (Appendix A19).

Harvest from the period that began August 21 was 600 coho salmon and 6 permit holders participated in the fishery. Low effort was not unusual for this time period because most effort was focused on earlier-timed coho salmon stocks in the Copper River District from mid-to-late-August. Harvest and effort remained low the following week when an average of 13 permit holders delivered an average total of 3,800 coho salmon per fishing period. Harvest increased dramatically during the first week of September when an average of 21,800 coho salmon was harvested per fishing period by an average of 59 permit holders. The number of fish harvested was almost 6 times the previous week and effort was more than 4 times greater, which indicated that run entry was increasing quickly (Appendix A21). Due to weather, a comprehensive survey of Bering River District index systems was not possible until mid-September. A survey flown during the week ending September 16 observed 21,000 coho salmon versus an anticipated range of 7,000–17,700 fish (Appendix A22). This survey corroborated the pattern of continued strong run entry that was apparent in the commercial fishery.

An aerial survey flown the week ending September 23 yielded an index of 27,000 coho salmon, which was more than double the upper end of the range of 5,000–12,800 for the week (Appendix A22). This was the peak of observed escapement in 2017. Aerial survey indices in some index systems continued to rise through the end of the season, though poor weather and high turbidity prevented several surveys from taking place. The total drainage escapement index for the season was 30,700 coho salmon versus an SEG range of 13,000–33,000 (Appendix A22).

The coho salmon fishing period schedule in the Bering River District followed the schedule implemented in the Copper River District. Harvest and effort followed a similar pattern to aerial survey observations and peaked about 2 to 3 weeks before the highest escapement observation. The Bering River District experienced high fishing pressure during the 2017 season. This season a total of 114 permits fished with peak effort of 65 permits during the 24-hour period that began September 7 and harvested 20,800 coho salmon. Peak harvest occurred 2 fishing periods later on September 14, when 23,800 coho salmon were harvested by 61 permit holders. Harvest and

effort declined rapidly after the September 18 fishing period and only 7,250 coho salmon were harvested after this date (Appendix A20).

COGHILL DISTRICT

Preseason Outlook and Harvest Strategy

The forecast point estimate for 2017 Coghill Lake sockeye salmon total run was 74,000 fish, with a range of 50,000–130,000. Meeting the median historical escapement estimate of 30,000 sockeye salmon (SEG range of 20,000–60,000; Table 5; Fair et al. 2011) would leave 44,000 fish (forecast range 20,000–100,000) for the common property fishery (Moffitt and Haught 2017). The enhanced chum salmon run to WNH was forecast to be 1.97 million fish. PWSAC's projection for cost-recovery and broodstock requirements was approximately 818,000 fish, leaving 1.15 million chum salmon for the CCPF. An estimated 230,000 coho salmon were projected to return to WNH. A total of 2,700 were anticipated to be harvested for broodstock, and the remaining 227,300 fish would be available to the CCPF (PWSAC 2017a).

Season Summary

Early season management of the Coghill District is largely based on Coghill Lake wild sockeye salmon escapement past the Coghill River weir. Escapement was assessed June 7–July 27, 2017. Daily passage rates did not exceed 400 sockeye salmon until June 25, but only 3 days in the 2017 season saw sockeye salmon daily run entry below 400 fish after this date (Appendices B1 and B2). Peak daily sockeye salmon passage occurred July 20, when 4,758 passed the weir (Appendix B1). The final sockeye salmon escapement count into Coghill Lake was 50,312 sockeye salmon which was well within the SEG range of 20,000–60,000 fish (Table 5; Appendices B1 and B3). A total of 387,538 pink salmon passed the Coghill River weir in 2017 (Appendix B1) and Coghill District escapement goals were met for chum and pink salmon.

Total combined CCPF purse seine and drift gillnet salmon harvest for the Coghill District was 116,800 sockeye (95.7% drift gillnet), 14,400 coho (98.6% drift gillnet), 1.05 million pink (60.4% drift gillnet), and 3.07 million chum salmon (72.1% drift gillnet) (Table 1; Appendices B6 and D5). Total Coghill District commercial drift gillnet harvest was 111,718 sockeye, 14,200 coho, 635,500 pink, and 2.21 million chum salmon harvested by 397 permit holders (Table 1; Appendices B4 and B6).

In 2017, PWSAC reported a WNH chum salmon purse seine cost-recovery harvest of 447,700 fish, raceway sales of 141,800 fish, and broodstock carcass sales of 153,600 fish (Appendix E5; PWSAC 2017b). The broodstock goal for chum salmon was 194,000 fish (PWSAC 2017a). Of the 153,600 chum salmon collected for broodstock, 136,800 were viable. PWSAC estimated that 2,000 chum salmon were not harvested. PWSAC reported harvest of 1,329 viable coho salmon as part of broodstock collection and 1,300 coho salmon were lost due to holding mortalities (PWSAC 2017b). The broodstock goal for coho salmon was 2,700 fish (PWSAC 2017a).

Based on otolith thermal mark data, enhanced salmon made up an estimated 79.2% of the sockeye, 29.3% of the pink, and 95.7% of the chum salmon harvested by the CCPF in the Coghill District (Appendices E6–E8). An estimated 92,418 (79.2%) MBH and 24,300 (20.8%) wild sockeye were harvested in the Coghill District commercial fishery for a total of 116,800 sockeye salmon (Appendix E6). Of the 1.05 million pink salmon harvested in this district by the CCPF, 54,300 (5.2%) were released at WNH, 63,400 (6.0%) were released at CCH, and 183,900 (17.5%) were released at SGH (Appendix E7). Of the 3.07 million chum salmon harvested in the

Coghill District in the CCPF, approximately 2.9 million (95.7%) originated from WNH, AFK, and the Port Chalmers remote release sites (Appendix E8).

The Coghill District drift gillnet fishery began June 1, and 2 weekly periods coincided with openings in the Copper River and Eshamy Districts. Initially, a single 36-hour period was opened in the Coghill District, excluding a portion of the WNH special harvest area (SHA), June 1. From June 5 through June 9, two 24-hour periods were opened in Coghill District, excluding the WNH SHA and terminal harvest area (THA). Beginning June 12, fishing area and time was adjusted to reduce wild sockeye salmon harvest and focus fishing effort on enhanced chum salmon in portions of the Granite Bay and Esther Subdistricts, including the WNH SHA and THA.

By June 22, sockeye salmon passage at the Coghill weir was within anticipated levels based on a 3-year running average. However, PWSAC required an expanded area to expedite cost recovery and gauge run entry into the THA. For this reason, fishing time and area continued at a reduced level through July 2. Beginning July 10, time and area was liberalized to include portions the WNH SHA and subdistricts outside of Esther and Granite Bay due to the increasing strength of hatchery chum salmon and wild sockeye salmon abundance indices. By July 13, a cumulative 32,200 sockeye salmon had passed the Coghill weir, which assured the median historical escapement had been achieved. From July 13 through September 5, 500 hours were fished in the Coghill District, excluding the WNH THA and SHA due to limited concerns for escapement in other areas of the district. No harvest was reported from September 18 through the end of the season September 28 (Appendix B4).

Peak drift gillnet fishing effort and chum salmon harvest occurred during the 60-hour period beginning July 10 when 297 permit holders harvested 17,800 sockeye salmon and 345,400 chum salmon. This period was also the peak drift gillnet sockeye salmon harvest (Appendix B4). Overall, 111,700 sockeye salmon and 2.21 million chum salmon were harvested by 397 drift gillnet permit holders during the 2017 season. This was 73.8% and 143.5% of the 10-year average harvest of 151,400 sockeye salmon and 1.54 million chum salmon, respectively. The 2017 harvest of 14,200 coho salmon by the drift gillnet fleet was 29.9% of the 10-year average of 47,400 fish (Appendix B6).

The majority of sockeye salmon that passed the Coghill weir (55.7%) were 4-year-old fish, with 4-year-old (33.5%) and 3-year-old (9.7%) fish contributing to most of the remaining escapement. An estimated 59.6% of the sockeye salmon sampled were male (Appendix B7). No age compositions were completed for commercially harvested sockeye salmon in the Coghill District in 2017.

UNAKWIK DISTRICT

Preseason Outlook and Harvest Strategy

Unakwik District, located in the northern portion of Unakwik Inlet, is the smallest district in the PWS management area. Both drift gillnet and purse seine gears are allowed during all fishing periods. CCH, a pink salmon hatchery, borders the southern boundary of the district. This district was established for management of sockeye salmon runs to Cowpen and Miners lakes. Escapement enumeration is by aerial survey; however, water is quite turbid in Miners Lake. The management strategy in this district has been adjusted in recent years, reducing period duration to allow for uncertainty in sockeye salmon stock assessment.

Season Summary

Unakwik District opened for the 2017 fishing season June 19 and followed a schedule of 2 evenly spaced periods per week, concurrent with other districts in PWS, until the district closed for the season on July 25 (Appendix B8). The total 2017 Unakwik District drift gillnet CCPF harvest was 600 sockeye, 200 pink, and 60 chum salmon by 4 permit holders. This translates to 18.6%, 141.5%, and 33.0% of the 10-year averages for sockeye, pink, and chum salmon, respectively (Appendix B9). Purse seine effort, peak harvest, and season total harvest are confidential due to low participation (Appendix B8).

ESHAMY DISTRICT

Preseason Outlook and Harvest Strategy

No preseason forecast of the sockeye salmon run to Eshamy Lake was developed in 2017. PWSAC projected the total run of enhanced sockeye salmon to MBH to be 1.16 million fish, of which, 8,940 fish were required for broodstock and the remaining 1.14 million fish would be available for harvest in the CCPF (Table 6; PWSAC 2017a). According to the *Prince William Sound Management and Salmon Enhancement Allocation Plan* (5 AAC 24.370), fishing time for the set gillnet group was limited to 36 hours per week beginning July 10.

Season Summary

The 2017 total Eshamy District CCPF harvest was 606,000 sockeye, 3,900 coho, 359,600 pink, and 121,000 chum salmon (Table 1; Appendices C1–C3). A total of 338 drift gillnet permit holders and 29 set gillnet permit holders participated in the Eshamy District fishery in 2017. Drift gillnet harvests of 424,00 sockeye and 103,400 chum salmon were below the 10-year averages of 687,000 sockeye and 191,700 chum salmon (Appendix C3). Coho and pink salmon drift gillnet harvests were well above the 10-year averages of 2,100 and 99,100 fish, respectively. Set gillnet harvests of 181,900 sockeye, 220 coho, and 17,600 chum salmon were all below the 10-year averages of 234,700 sockeye, 260 coho, and 34,400 chum salmon (Appendix C3). The 37,600 pink salmon harvest by the set gillnet gear group was above the 10-year average of 18,200 fish (Appendix C3). PWSAC harvested 9,500 sockeye salmon for broodstock, of which, 6,400 were viable (Appendix E12; PWSAC 2017b). Additionally, an estimated 39,100 jack sockeye salmon went unharvested and were ultimately culled due to lack of market (PWSAC 2017b).

Thermal marked otolith contributions estimated that 91.1% (552,100 fish) of the sockeye salmon commercially harvested in the Eshamy District in 2017 were of MBH origin (Appendix E9). Although returning hatchery fish were from release years of average size, the 2017 return was well under the MBH run forecast and much lower than the 10-year average (Appendices E13 and E14). Only 24.8% of chum salmon harvested in the Eshamy District in 2017 were from wild stocks and the remaining chum salmon harvests were attributed to AFK (18.8%), WNH (55.4%), and Port Chalmers (1.0%, Appendix E11). Pink salmon harvested in the Eshamy District were predominantly wild stocks (72.9%) and most fish were assumed to be returning to streams outside of the district (Appendix E10).

Sockeye salmon began arriving at the MBH in late May and a schedule of 2 fishing periods per week was initiated June 1. The entire Eshamy District was initially opened to commercial fishing for a 36-hour period to allow the fleet to focus on the enhanced run to MBH while the run timing

overlap with Eshamy River wild sockeye salmon was minimal. Fishing time was reduced to 24 hours in the Eshamy District in the second period (June 5) through the eighth period (June 27; Appendix C1). To allow wild stock returns to Coghill Lake, fishing time was reduced to 12-hour periods in Eshamy District and 24 hour periods in the Main Bay Subdistrict on June 19 to reduce wild sockeye harvest and target MBH origin fish. The Eshamy District, excluding the Main Bay Subdistrict, was further reduced to 6-hour periods from June 26 to July 4 to reduce wild sockeye salmon harvests and promote entry into Main Bay.

The alternating gear zone (AGZ) was closed to commercial fishing July 7 due to slow entry of hatchery sockeye salmon into Main Bay. The entire Main Bay Subdistrict was closed to commercial fishing from July 10 to July 13 for PWSAC to collect broodstock. The AGZ re-opened July 17 until the close of the season.

Once hatchery broodstock needs were achieved, wild sockeye, pink, and chum salmon escapements to the Eshamy District and other areas of PWS warranted conservative fishing time in the outer Eshamy District. From July 24 until the close of the season September 1, the Eshamy District was limited to 2 weekly periods of 24 hours. During this time, the Eshamy District, excluding the Main Bay Subdistrict, alternated between being open, closed, and limited to waters north of Loomis Creek to temper harvest of fish bound for other areas, while still allowing some fishing opportunity.

Peak sockeye salmon effort and harvest occurred during a 32-hour period beginning June 29 when 27 set gillnet and 220 drift gillnet permit holders harvested 20,500 and 86,700 sockeye salmon, respectively (Appendices C1 and C2). Chum salmon harvest peaked during this period and total CCPF harvest was 25,500 chum salmon. Peak pink salmon harvest occurred during the 24-hour period beginning August 7 when 65 drift gillnet and 4 set gillnet permit holders harvested a total of 57,800 pink salmon (Appendices C1 and C2). Peak effort in the district occurred during a 36-hour period beginning June 27; 193 drift gillnet and 28 set gillnet permit holders participated.

Wild sockeye salmon stock harvest proportions fluctuated throughout the season, beginning at about 8.3% from June 1 through June 13 before dropping to between 1.0% and 3.2% from June 15 to July 4. Beginning July 6, wild sockeye salmon contributions increased to 12.0% and stayed at relatively high levels (as high as 29.7%) until August 4 (Appendix E9). After August 4, all harvested sockeye salmon in the Eshamy District are apportions to wild stocks.

The majority of the sockeye salmon harvested commercially (79.9%) were 5-year-old fish; 4-year-old (19.0%) and 3-year-old (1.2%) fish contributed the remaining harvest. An estimated 51.6% of the sockeye salmon harvested were female (Appendix C4).

GENERAL PURSE SEINE DISTRICTS

The general purse seine districts are managed to achieve wild pink and chum salmon escapement goals by district and allow the orderly harvest of surplus wild and enhanced stocks. Run projections are the basis for early inseason management of all districts. Escapement of pink and chum salmon is monitored throughout the season by weekly aerial surveys of 134 index streams. Pink and chum salmon escapement trends determine the area and duration of fishing periods within districts. Inseason modifications to harvest projections, season opening dates, and strategies for weekly fishing periods occur as fisheries develop and wild salmon escapement goals are met.

The 2017 pink salmon preseason forecast was for an above average run with liberal time and area fishing opportunity expected if returns developed as strong as expected. The 2017 pink salmon total run forecast for PWS was 67.16 million fish, of which, 58.92 million were expected to be available for CCPF harvest. This estimate included 21.01 million wild stock fish, 18.75 million VFDA fish, and 27.40 million PWSAC hatchery fish. Approximately 3.30 million (18%) of the VFDA's Solomon Gulch Hatchery pink salmon return was needed for cost recovery and broodstock, leaving 15.48 million for CCPF. Approximately 3.20 million (12%) of the PWSAC hatcheries pink salmon return was needed for cost recovery and broodstock. The remaining 24.20 million PWSAC pink salmon will be available for common property harvest based on ADF&G's forecast of 21.10 million fish, there is a potential CCPF of 19.65 million wild pink salmon and 1.45 million for escapement.

The 2017 chum salmon forecast total run in PWS was 3.17 million fish. The majority, 2.80 million (70%), are from PWSAC hatchery production and 456,000 fish returned to the Armin F. Koernig hatchery (AFK). The purse seine gear group had access to the Port Chalmers Subdistrict in 2017 under the *Prince William Sound Management and Salmon Enhancement Allocation Plan*. Based on ADF&G's wild chum salmon forecast of 371,000 fish, there was a potential common property harvest of 171,000 wild chum salmon. ADF&G managed for each district's escapement goal, and aimed for each district's long-term average, for a combined total of 200,000 fish (Table 5).

2017 SEASON SUMMARY

The 2017 commercial harvest of 48.52 million pink salmon in PWS was the seventh highest since 1995 (Appendix D3). Purse seine CCPF salmon harvest was 44.99 million fish, composed of 360 Chinook, 118,700 sockeye, 81,600 coho, 42.47 million pink, and 2.32 million chum salmon (Table 1; Appendix D2). The CCPF harvest of 43.46 million pink salmon was the sixth highest odd-year harvest in the last 20 years, but was 28% below the 58.92 million CCPF preseason forecast (Appendix D4). PWS purse seine CCPF fishery participation was 229 permits in 2017 (Table 1). Total PWS pink salmon CCPF harvest was 48.59 million fish, including 5.05 million fish for hatchery cost recovery (3.49 million for PWSAC and 1.56 million for VFDA). Pink salmon thermal marked otolith contribution estimates from CCPF harvests were 45.3% wild stock fish, 30.1% SGH fish, and 24.6% PWSAC fish (Appendix E17).

Aerial surveys in PWS were flown into mid-September to ensure that the broad range of pink and chum salmon run timing was represented in the escapement index. Wild stock pink salmon escapement indices in 2017 supported openings outside of hatchery subdistricts starting in mid-July and running through the remainder of the season. The 2017 PWS pink salmon escapement aerial index was 2.49 million (Appendix D1). Chum salmon escapement goals were also achieved in all districts (Appendix D1).

It was estimated that hatchery pink salmon represented 56.5% of the total run of 51.1 million fish (harvest, broodstock, and escapement); VFDA and PWSAC contributed 28.7% and 27.9%, respectively. Wild stock pink salmon harvest of 19.94 million fish combined with an escapement index of 2.49 million resulted in a total wild pink salmon return of 22.43 million fish. VFDA cost recovery and broodstock harvest of 1.56 million fish was approximately 10.7% of the total pink salmon run of 14.65 million fish to SGH (VFDA 2017b). PWSAC cost recovery and broodstock harvest of 3.49 million fish was approximately 24.7% of the total PWSAC pink salmon run of

14.21 million PWSAC hatchery fish. Pink salmon egg-take goals were met at all facilities in 2017 (PWSAC 2017b).

EASTERN DISTRICT

Eastern District chum and pink salmon escapement indices were less than the odd 10-year average for much of the 2017 season but within the expected range (Appendices D6 and D7). The Eastern District pink salmon escapement index of 624,500 fish was slightly below the upper bound of the district's odd-year SEG index range of 310,000–640,000 fish. The Eastern District chum salmon escapement index of 85,600 fish was above the district's lower bound SEG of 50,000 fish (Appendix D1).

VFDA pink salmon cost-recovery harvest began June 30 and was conducted throughout Port Valdez in 2017. The Eastern District CCPF first opened for 12-hour periods in waters outside of Port Valdez and Valdez Arm June 22 and June 29 resulted in a harvest of 56,700 pink salmon (Appendix E15). Initial VFDA cost recovery progress was slow, but pink salmon run entry and cost recovery progress increased rapidly from July 7 through July 9. On July 9, VFDA recommended Port Valdez and Valdez Arm fisheries target SGH enhanced pink salmon during a 14-hour period on July 10 and 95% of VFDA's cost-recovery goal harvest was completed as of July 9. Eastern District CCPF targeting VFDA pink salmon started July 10 and harvested 2.53 million fish. Run entry of VFDA pink salmon was stronger than average and CCPF fisheries were opened daily within Port Valdez and Valdez Arm from July 10 through July 17. Aerial surveys and contribution reports July 13 and July 14 indicated significant wild stocks returning to eastern PWS; subsequently much of eastern PWS was opened through July 17 for wild stock opportunity (Appendix E15). VFDA recommended that CCPF within Valdez Arm and Port Valdez be closed July 18 and July 19 to aid SGH broodstock collection. CCPF were reopened again throughout the Eastern District targeting VFDA and wild stock pink salmon, from July 20 through July 24. The Eastern District was closed to CCPF opportunities from July 25 through July 27 in order to ensure SGH's broodstock goal and wild stock escapement goals would be met. From July 28 through the end of the season, CCPF periods were kept on an every other day schedule when possible to allow adequate wild stock escapement. The total Eastern District pink salmon CCPF harvest was 17.63 million fish. VFDA pink salmon contributed nearly 57.7%, or 10.17 million of the total Eastern District CCPF harvest (Appendix E15). The PWS total VFDA return (CCPF, cost recovery, and brood stock) was 14.65 million fish, which was 21.8% below the forecast of 18.75 million fish.

VFDA harvested a total of 1.04 million pink salmon for cost-recovery and an additional 144,300 fish via the SGH fishway, for a total cost-recovery harvest of 1.19 million pink salmon. VFDA reported that 376,900 pink salmon were utilized at SGH for broodstock, and an additional 23,000 fish went unharvested (VFDA 2017b). Pink salmon egg-take operations at SGH were successful in 2017; VFDA reached its 2017 pink salmon egg-take goal at SGH August 22, which was comparable to the 10-year average end date of August 21 (VFDA 2017a).

The 2017 SGH coho salmon run was also below forecast and few surplus fish were available for CCPF harvest. Enhanced coho salmon runs to SGH have been less than the preseason forecast 7 out of the past 10 years. VFDA reached its 2017 coho salmon egg-take goal at SGH on October 17. VFDA harvested 30,307 coho salmon for cost-recovery from the SGH fishway and utilized an additional 1,383 fish for broodstock (VFDA 2017b).

There were 42 Eastern District CCPF fishing periods in 2017 and 229 purse seine permit holders reported deliveries (Table 1). Eastern District CCPF harvest was 93 Chinook, 15,000 sockeye, 45,900 coho, 17.63 million pink, and 293,200 chum salmon (Table 1). Eastern District CCPF pink salmon harvest included 57.7% VFDA fish, 41.4% wild fish, and 0.8% PWSAC fish (Appendix E15).

NORTHERN DISTRICT

The Northern District pink salmon escapement indices were above the 10-year average for the 2017 season (Appendix D6). Northern District chum salmon escapement indices were within the expected range for the 2017 season. The Northern District pink salmon escapement index of 445,858 fish was above the odd-year SEG of 140,000 fish (range: 90,000–180,000 fish). The Northern District chum salmon escapement index of 34,516 fish was above the district's lower bound SEG of 20,000 fish (Appendix D1).

The 2017 CCH pink salmon forecast was 8.30 million fish of which 357,000 pink salmon were needed for broodstock and 647,000 were needed for cost recovery; leaving 7.29 million pink salmon for CCPF harvest (PWSAC 2017a).

The Northern District CCPF began with one 12-hour period on June 22 to provide opportunity for early season pink and chum salmon and to gauge run entry. Aerial surveys conducted July 10 and July 13 indicated above average wild stocks returning to northern PWS. Daily fishing periods ran concurrently with Port Valdez fisheries targeting SGH pink salmon from July 13 to July 18 and yielded a harvest of 1.22 million fish of which 39% were VFDA fish (Appendix E16). Northern District pink salmon harvest increased in late July and peaked the first week of August with an average daily harvest of 360,000 fish. During that time, an average of 43% of the harvest was wild pink salmon harvested primarily in the eastern portion of the district. From July 28 through August 16, CCPF periods were kept on an every other day schedule when possible to allow adequate wild stock escapement. Fishery performance indicators combined with inadequate broodstock acquisition at PWSAC hatcheries led to an extended closure of the PWS purse seine fishery starting August 16. An aerial survey of PWSAC hatcheries on August 24 indicated that broodstock goals at AFK, CCH, and WNH were close to being met. Waters of the Northern District were reopened to daily periods on August 26 and remained open through the end of the season (Appendix E16).

PWSAC harvested 141,800 pink salmon via the CCH fishway for cost-recovery. PWSAC utilized 419,800 fish at CCH for broodstock, and an additional 5,400 fish went unharvested (PWSAC 2017a-b). Pink salmon egg-take operations at CCH were successful when the egg-take goal was achieved on September 19 (PWSAC 2017a). The 2017 CCH pink salmon run of 6.74 million fish was 19% less than PWSAC's preseason projection of 8.30 million fish.

In 2017, a total of 208 purse seine permits reported harvest (Table 1). Northern District CCPF harvest was 8 Chinook, 17,200 sockeye, 6,000 coho, 7.42 million pink, and 90,800 chum salmon (Table 1). Northern District pink salmon harvest included 41.2% CCH fish, 37.9% wild fish, 17.7% SGH fish, 2.7% WNH fish, and 0.5% AFK fish (Appendix E16). The 2017 CCH pink salmon CCPF harvest of 6.18 million fish was slightly below the PWSAC's total preseason projection of 7.29 million fish.

COGHILL DISTRICT

Coghill District chum and pink salmon escapement indices were less than the odd 10-year average for much of the 2017 season but was within the expected range (Appendices D6 and D7). The Coghill District pink salmon escapement index of 187,200 fish was within the district's odd-year SEG index range of 60,000–250,000 fish. The Coghill District chum salmon escapement index of 13,666 fish was above the district's lower bound SEG of 8,000 fish (Appendix D1).

PWSAC's 2017 preseason forecast for pink salmon returning to WNH was 10.40 million fish. PWSAC's 2017 pink salmon requirements for WNH included a broodstock goal of 283,000 fish and a cost-recovery goal of 810,000 fish. The preseason forecast for CCPF harvest of WNH pink salmon was 9.31 million fish (PWSAC 2017a).

Purse seine fishing in the Coghill District began July 15 with a 14-hour period in the WNH SHA followed by similar daily periods in the WNH SHA through July 21 and resulted in a harvest of 818,500 chum salmon. These periods were the result of a buildup of poor quality chum salmon in the WNH terminal area and subsequent loss of drift gillnet market for these fish. The majority of the purse seine harvest in the Coghill District in 2017 was from these early fishing periods.

The Coghill District CCPF consisted of 14-hour periods spaced 1 or 2 days apart from July 22 to August 16 (Appendices E6–E8). Peak pink salmon harvest occurred during the period beginning July 21 with a harvest of 176,500 fish, which were 85.4% wild stock (Appendices B5 and E7). Fishery performance indicators combined with inadequate broodstock acquisition at PWSAC hatcheries led to an extended closure of the Coghill District starting August 16. Waters of the Coghill District were reopened for daily periods August 24 and remained open through the end of the season. Due to the low abundance of WNH pink salmon, harvest was minimal throughout the rest of the season.

PWSAC harvested a total of 559,500 pink salmon for cost-recovery and an additional 161,900 fish via the WNH fishway, for a total cost-recovery harvest of 721,300 pink salmon. PWSAC reported that 349,100 pink salmon were utilized at SGH for broodstock, and an additional 3,000 fish went unharvested (PWSAC 2017b). Pink salmon egg-take operations at WNH were successful in 2017; PWSAC reached its 2017 pink salmon egg-take goal at WNH on September 7. The 2017 WNH pink salmon run of 2.52 million fish was 75.7% less than PWSAC's preseason projection of 10.40 million fish.

In 2017, a total of 88 commercial purse seine permit holders reported harvest (Table 1; Appendix B5). Coghill District purse seine CCPF harvest was 0 Chinook, 5,000 sockeye, 200 coho, 417,300 pink, and 856,600 chum salmon (Table 1). Coghill District pink salmon harvest included 70.7% wild fish, 17.5% SGH fish, and 6.0% CCH fish, 5.2% WNH fish, and 0.7 % AFK fish (Appendix E7).

NORTHWESTERN DISTRICT

The Northwestern District pink salmon escapement indices were above the 10-year average in 2017 (Appendix D6). Northwestern District chum salmon escapement indices were within the expected range in 2017. The Northwestern District pink salmon escapement index of 259,500 fish was more than double the odd-year SEG range of 50,000–110,000 fish. The Northwestern

District chum salmon escapement index of 7,400 fish was greater than the district's lower bound SEG of 5,000 fish (Appendix D1).

Purse seine fishing targeting pink salmon in the Northwestern District began July 16. Aerial surveys conducted on July 17 indicated above average wild stocks returning to the Northwestern PWS. The Northwestern District pink salmon CCPF consisted of daily periods spaced 1 to 3 days apart from July 18 through the end of the season. Peak harvest occurred August 1 with a harvest of 344,700 fish composed of 100% wild pink salmon.

In 2017, a total of 64 commercial purse seine permit holders reported harvest in 2017 (Table 1; Appendix B5). Northwestern District purse seine CCPF harvest was 1 Chinook, 20,600 sockeye, 1,200 coho, 1.51 million pink, and 45,000 chum salmon (Table 1). Northwestern District pink salmon harvest included 97.8% wild fish, 2.0% WNH fish, and 0.2% AFK fish (Appendix E17).

SOUTHWESTERN DISTRICT

Southwestern District pink salmon escapement indices were less than the odd 10-year average for much of the 2017 season but were within the expected range. The Southwestern District pink salmon escapement index of 212,000 fish was above the district's odd-year SEG range of 70,000–190,000 fish. There is no chum salmon escapement goal for the Southwestern District.

PWSAC's 2017 preseason forecast for pink salmon returning to AFK was 8.70 million fish. PWSAC's 2017 pink salmon requirements for AFK included a broodstock goal of 341,000 fish and a cost-recovery goal of 678,000 fish. The preseason forecast for CCPF harvest of AFK pink salmon was 7.68 million fish. PWSAC's 2017 preseason forecast for chum salmon returning to AFK was 456,000 fish, all of which were projected to be available for CCPF harvest (PWSAC 2017a).

Fishing to target enhanced chum salmon at the AFK THA and SHA started June 1 with a weekly schedule of 60 hour and 84-hour purse seine fishing periods, which continued until June 12. From June 12 through July 19 fishing periods were gradually restricted from every other day daily 12-hour periods to three 8-hour periods a week to limit incidental catch of wild salmon destined for other areas of PWS. The AFK THA and SHA harvest during that time was 417,000 chum (including 17,700 wild stock chum salmon), and 36,600 sockeye salmon (including 5,800 wild stock sockeye salmon assumed to be Coghill origin based on run timing (Appendix E18).

Pink salmon Southwestern District CCPF total harvest was 11.57 million fish (Appendix E19). This mixed stock harvest was composed of 36.8% wild, 25% AFK, 21.9% CCH, 8.8% WNH, and 7.6% SGH fish. This distribution of stocks was the result of conducting the fishery in the Southwestern District, which was the primary migration corridor for pink salmon traveling to other areas of PWS.

Purse seine fishing targeting pink salmon in the Southwestern District began July 21 with a 14-hour period to gauge hatchery and wild pink salmon run entry into the Southwestern District, followed by a similar daily period on July 24 with a cumulative harvest of 1.09 million pink salmon. PWSAC began cost recovery at AFK on July 26 and finished August 11. The Southwestern District pink salmon CCPF consisted of daily periods spaced 1 or 2 days apart from August 1 to August 16 (Appendix E19). Peak harvest occurred August 12 with a harvest of 1.59 million fish composed of 40.6% AFK pink salmon. Fishery performance indicators combined with inadequate broodstock acquisition at PWSAC hatcheries led to an extended

closure of the Southwestern District starting August 16. Waters of the Southwestern District were reopened August 26 and remained open consistently through the end of the season.

PWSAC harvested a total of 1.34 million pink salmon for cost recovery and an additional 179,000 fish via the AFK fishway, for a total cost-recovery harvest of 1.53 million pink salmon. PWSAC reported that 348,000 pink salmon were utilized at SGH for broodstock, and an additional 5,000 fish went unharvested (PWSAC 2017b). Pink salmon egg-take operations at AFK were successful in 2017; PWSAC reached its 2017 pink salmon egg-take goal at AFK September 14. The 2017 AFK pink salmon run of 6.24 million fish was 28% less than PWSAC's preseason projection of 8.70 million fish.

The 2017 Southwestern District CCPF harvest by 204 permits was 150 Chinook, 50,500 sockeye, 20,200 coho, 11.57 million pink, and 445,100 chum salmon (Table 1). The 2017 Southwestern District chum salmon harvest included 74.6% AFK fish, 12.1% WNH fish, 7.9% Port Chalmers, and 5.5% wild fish (Appendix E20). Southwestern District sockeye salmon harvest in 2017 included 73.6% MBH fish and 26.4% wild fish (Appendix E18). The total CCPF harvest estimate of 331,800 AFK enhanced chum salmon was less than the preseason forecast harvest of 454,000 fish. Hatchery chum salmon returns to AFK have been less than the preseason forecast 8 of the last 10 years.

MONTAGUE DISTRICT

Montague District pink salmon escapement indices escapement indices were below the 10-year average for the 2017 season (Appendix D6). The Montague District pink salmon escapement index of 237,900 fish was slightly above the midpoint of the district's odd-year SEG range of 140,000–280,000 fish. There is no chum salmon escapement goal for the Montague District.

PWSAC forecast a run of 383,000 chum salmon to Port Chalmers Subdistrict in 2017 (PWSAC 2017a). The 5-year rolling average allocation calculation used to guide 2017 fisheries management was 53.0% purse seine, 47.0% drift gillnet, and 5.1% set gillnet. Based on the *Prince William Sound Management and Allocation Plan* (5 AAC 24.370), the purse seine fleet had exclusive access to the Port Chalmers Subdistrict in 2017.

Fishing to target enhanced chum salmon at Port Chalmers started June 1 with a weekly schedule of 60 hour and 84-hour purse seine fishing periods, which continued until June 11. Due to increasing catches of chum salmon destined for other areas of PWS, from June 12 through July 18 fishing periods were varied in time and area to focus harvest on chum salmon returning to Port Chalmers. The 2017 chum salmon harvest during peak historical run timing for hatchery chum salmon (June 1–July 30) was 528,400 fish, which was 38.0% above forecast and 94.4% above the 5-year average of 271,700 fish (Appendix B11). Out of a total Montague District CCPF harvest of 540,200 chum salmon, thermal mark contributions estimated 186,900 (35.0%) were released at Port Chalmers, and 87,500 (16.2%) were released at AFK. Wild chum salmon harvest composed 8.4% (45,200 fish) of the total harvest (Appendix E21). Early season effort peaked during the June 26–28 period when 61 permit holders reported deliveries. Another peak in effort occurred July 8 when 89 permits fished (Appendix B10).

Purse seine fishing targeting pink salmon in the Montague District began July 21 to gauge hatchery and wild pink salmon run entry in to the Montague District, followed by a similar daily period on July 24. The Montague District pink salmon CCPF consisted of daily periods spaced 1

to 3 days apart from July 28 through the end of the season. Peak harvest occurred on August 10 with a harvest of 439,341 fish composed of 74.5% wild pink salmon (Appendix E22).

The 2017 Montague District CCPF harvest by 158 permits was 100 Chinook, 9,700 sockeye, 7,300 coho, 3.24 million pink, and 539,300 chum salmon (Table 1). Montague District's 2017 pink salmon CCPF harvest included 65.3% wild, 15.9% SGH, 11.9% CCH, 4.2% AFK and 2.7% WNH fish (Appendix E22).

SOUTHEASTERN DISTRICT

Southeastern District chum and pink salmon escapement indices were less than the odd 10-year average for much of the 2017 season but were within the expected range (Appendices D6 and D7). The Southeastern District pink salmon escapement index of 529,000 fish was within the district's odd-year SEG range of 270,000–620,000 fish. The Southeastern District chum salmon escapement index of 49,400 fish was 6 times greater than the district's lower bound SEG of 8,000 fish (Appendix D1).

The Southeastern District commercial fishing season began with 12-hour periods on June 22 and June 29. The purpose of these openers was to provide opportunity on early season pink and chum salmon harvest and to gauge run entry. The Southeastern District was opened concurrently with Eastern District fisheries throughout the season targeting wild and hatchery stocks. The Southeastern District pink salmon CCPF consisted of daily periods spaced 1 or 2 days apart from July 13 through the end of the season. Peak harvest occurred July 28 with a harvest of 190,400 pink salmon.

The 2017 Southeastern District CCPF harvest by 69 permits was 5 Chinook, 7800 sockeye, 800 coho, 676,100 pink, and 51,800 chum salmon (Table 1). Southeastern District pink salmon harvest included 98.9% wild fish, 1.1% SGH fish, 0.1% CCH fish (Appendix E17).

PRINCE WILLIAM SOUND AND COPPER RIVER SUBSISTENCE, PERSONAL USE, AND HOME PACK FISHERIES

The PWS Subsistence Management Area includes all waters of Alaska between the longitude of Cape Fairfield and the longitude of Cape Suckling. State of Alaska subsistence fishing permits are not required for marine finfish other than salmon. Lingcod *Ophiodon elongatus* may be taken for subsistence purposes only from July 1 through December 31. Herring, smelt, rockfish *Sebastes* spp., and other groundfish may also be harvested for subsistence purposes in the PWS Area. Herring spawn-on-kelp may be taken for subsistence purposes as described in 5 AAC 01.610(d)(1)(2); therein, herring spawn-on-kelp may be taken above water from March 15 through June 15 or harvested using dive gear only during fishing periods open for the wild herring spawn-on-kelp commercial fishery. For a detailed history of regulation governing the subsistence fisheries within the Copper River and Prince William Sound, see Botz and Somerville (2011).

LOWER COPPER RIVER AND PRINCE WILLIAM SOUND

Subsistence fishing is allowed 7 days per week in the Copper River District and general PWS subsistence districts from May 15 until 2 days before the opening of the commercial fishery. Boundary lines for Copper River District and general PWS District subsistence fishing are the

same as those in the commercial fishery (Appendix F1). Once the commercial season has commenced, subsistence fishing is generally allowed only during commercial fishing periods. Regulation stipulates that 2 days after the closure of the Copper River District and general PWS Districts to commercial salmon fishing for the season, subsistence fishing is allowed, 7 days a week, until September 30. Within the Copper River District, drift gillnets are the only legal gear and nets may have a maximum length of 50 fathoms with a maximum mesh size of 6 inches prior to July 15. Within PWS general subsistence districts, 50 fathom gillnet or seine may be used depending on the legal commercial gear standard within a commercial fishing district.

In 2017, 450 subsistence permits were issued for the Copper River District, of which 6 (7.6%) were not returned. Of the 450 permits issued, 151 permit holders reported not fishing. A harvest of 778 Chinook, 2,450 sockeye, and 43 coho salmon was reported from the 265 permits that reported fishing (Appendix F2). In addition, 6 subsistence permits were issued for the PWS general subsistence district, of which 5 were returned, 2 permit holders reported not fishing, and 3 permit holders reported a harvest of 16 sockeye salmon (Appendix F3). Overall, 472 Alaskan residences in 24 communities received permits for the PWS saltwater subsistence fisheries and harvested a total of 3,560 fish (Appendix F4).

During the 2017 commercial fishing season in the Copper River District, 8,300 sockeye, 700 Chinook, and 2,000 coho salmon were reported as retained for personal use by 363 commercial permit holders (Appendices A1, A3, A15, and F5). In PWS Districts, 169 commercial permit holders reported retaining 3,400 sockeye, 100 Chinook, 500 pink, 500 coho, and 100 chum salmon as homepack from their commercial harvests (Appendix F5). Overall in Area E, 451 commercial permit holders from 27 Alaska communities and the other 49 states reported retaining 16,100 salmon as homepack from their commercial catches (Appendix F4).

In 2005, the federal government began issuing permits to allow subsistence harvests on federal lands in PWS and the lower Copper River area. Legal gear types are dip net, rod and reel, and spear. In 2017, an estimated 106 federal permits were issued; 51 permits harvested 154 sockeye and 688 coho salmon (Appendix F6).

TATITLEK AND CHENEGA AREA SUBSISTENCE FISHERIES

Two subsistence areas were established in 1988 to provide opportunities for customary and traditional use of salmon by residents of the Tatitlek and Chenega villages. The Chenega area includes the entirety of the Southwestern District, as described in 5 AAC 24.200 (i), as well as a portion of the Montague District along the northwestern shore of Green Island from the westernmost tip to the northernmost tip of the island (5 AAC 01.648(a)). The Tatitlek subsistence area is located south of the Valdez Nonsubsistence Area described in 5 AAC 99.015(a)(5) and encompasses portions of the Northern and Eastern Districts (5 AAC 01.648(b)) (Appendix F1).

Permit holders are allowed to fish 7 days per week in these areas from May 15, until 2 days before the initial commercial fishing period in the associated commercial fishing districts. Once the commercial fishing season is established, area and time within the subsistence areas is defined by the area and time in the associated commercial fishing district. After a 2-day wait after the closure of the commercial fishing season in the associated commercial fishing district, subsistence fisheries are open 7 days per week until October 31.

In 2017, six permits were issued for the Chenega subsistence area, of which 3 were returned. Of those returned permits, 2 reported fishing and 1 reported not fishing for a total harvest of 100 sockeye and 60 chum salmon. In the Tatitlek area, 7 permits were issued of which 5 were returned. Of those returned permits, 4 reported fishing and 1 reported not fishing for a total harvest of 50 sockeye and 50 coho salmon (Appendix F7).

UPPER COPPER RIVER

In 2017, combined upriver subsistence and personal use sockeye salmon harvest (federal and state) totaled 191,000 fish, almost 150,000 fish less than the 2015 record harvest. From 2007 to 2016 the combined upriver subsistence and personal use sockeye salmon harvest (federal and state) ranged from 140,000 fish (in 2008) to 334,000 fish (in 2015), for a 10-year average of 224,000 sockeye salmon (Appendix A1). A general increasing trend in subsistence and personal use harvest is reflected annually through additions to the inriver goal within the allocated ranges for each fishery.

Glennallen Subdistrict Subsistence Fishery

The Glennallen Subdistrict is that portion of the mainstem Copper River upstream of the McCarthy Bridge to the mouth of the Slana River (Appendix F8). This subdistrict is open June 1 through September 30 for continuous fishing. Fish wheels and dip nets are legal gear. Participants must be Alaska residents and are allowed 1 permit per household per year, and the permit identifies the single gear type to be used. Total annual harvest, assuming that additional salmon were requested by the permit holder, cannot exceed 200 salmon for a household of 1 and 500 salmon for a household of 2 or more. No more than 5 Chinook salmon may be taken by each dip net permit holder. Both tips of the caudal fin must be clipped on all harvested salmon. Subsistence permits with completed harvest information, are required to be returned to ADF&G by October 31 of each year.

In 2017, a total of 1,264 dip net permits and 368 fish wheel permits were issued to subsistence users in the Glennallen Subdistrict. Of these, 311 (19.1%) permits were not returned. A combined total estimate of 2,900 Chinook, 41,600 sockeye, and 68 coho salmon were harvested in the Glennallen Subdistrict. Comparatively, the 10-year average was 2,250 Chinook and 65,600 sockeye, and 246 coho salmon for this subdistrict. Fish wheel effort has remained somewhat constant over the last 10 years, with an average number of 604 permits issued. The number of dip net permits issued has increased over the past few years. The 10-year average of 796 dip net permits is 63.0% less than the number of permits issued in 2017 (Appendix F11). Historically, sockeye salmon dominate the harvest, representing approximately 96.7% of the estimated harvest in the Glennallen Subdistrict subsistence fishery, followed by Chinook and coho salmon (Appendices A1, A3, A15, and F11). Harvest from the Glennallen Subdistrict subsistence fisheries was approximately 7.7% GH sockeye salmon (Appendix E4).

In 2002, the federal government began issuing permits to allow subsistence harvests on federal lands in the Glennallen Subdistrict. Legal types of fishing gear are dip net, fish wheel, rod and reel, and spear. In 2017, a total of 338 federal permits were issued for the Glennallen Subdistrict. Of these, 283 permits were returned. A total of 399 Chinook, 15,433 sockeye, and 1 coho salmon were reported harvested (Appendix F6).

Batzulnetas Subsistence Fishery

The Batzulnetas fishery, as described in 5 AAC 01.647(i), encompasses all waters from the regulatory markers near the mouth of Tanada Creek and approximately one-half mile downstream from that mouth and in Tanada Creek between ADF&G regulatory markers identifying the open waters of the creek. Salmon may be taken, as established by EO, starting June 1 when fishing periods are limited to one 48-hour period per week; beginning in July, fishing time is increased to one 84-hour period each week until September 1, when the fishery closes. There was 1 permit issued in 2017 and no harvest reported (Appendices A1 and F9).

Chitina Subdistrict Personal Use Fishery

The Chitina Subdistrict is the portion of the main stem Copper River from the downstream edge of the McCarthy Road Bridge to a marker 200 yards above Haley Creek (Appendix F10). Regulations for the Chitina Subdistrict personal use fishery remain similar to the Glennallen subsistence fishery regulations, with 3 exceptions: 1) permit holders are required to possess a sport fishing license, 2) permit holders are only allowed to take salmon using dip net, and 3) permit holders are limited to 1 Chinook salmon per household. In December 2014, the Alaska BOF changed annual bag limits from 15 salmon for a household of 1 and 30 salmon for a household of 2 or more individuals to 25 salmon for the head of a household and 10 salmon for each dependent of the permit holder. In addition, the BOF removed the allowance of supplemental permits for 10 additional fish that were given to permit holders that already achieved their annual limit when ADF&G determined a weekly harvestable surplus of 50,000 salmon were in the Chitina Subdistrict. Inseason adjustments to the fishery, as necessitated by fluctuations in salmon escapement, were made by EO.

In 2017, there were 9 EOs issued to make adjustments to the dip net fishery. The first period started Thursday, June 8, and the last emergency order period closed Thursday, August 31. The fishery was then open continuously from September 1 to September 30. Based on the low preseason Chinook salmon forecast, the personal use fishery was closed to Chinook salmon retention at the beginning of the season. Higher than anticipated Chinook salmon commercial harvest rates and escapement indices from Native Village of Eyak's fish wheel mark–recapture program led to the Chinook salmon personal use fishery opening to retention starting June 19. There were 9,490 permits issued for the Chitina personal use fishery in 2017. Of these, 1,830 (19.2%) were not returned. The number of permits issued was above the 10-year average of 10,000 permits issued (Appendix F11). Expanded harvest for the Chitina Subdistrict personal use fishery in 2017 was 1,960 Chinook, 133,000 sockeye, and 715 coho salmon. The 10-year average expanded harvests were 2,000 Chinook, 125,000 sockeye, and 1,050 coho salmon (Appendices A1, A3, A18, and F11). Harvest from the Chitina Subdistrict personal use fishery was approximately 7.7% GH sockeye salmon (Appendix E4).

In 2002, the federal government began issuing permits to allow subsistence harvests on federal lands in the Chitina Subdistrict. Federal subsistence users are allowed to use either a dip net or fish wheel in the Chitina Subdistrict. In 2017, an estimated total of 132 federal permits were issued, of which 104 were returned. The reported harvest was 12 Chinook, 1,454 sockeye, and 7 coho salmon (Appendix F6).

2017 PRINCE WILLIAM SOUND HERRING FISHERIES

The Prince William Sound herring management area encompasses all coastal waters of the Gulf of Alaska between Cape Suckling and Cape Fairfield, extending offshore to 59°N latitude. During the spring season, 2 fisheries target herring for sac roe using either purse seine or gillnet gear, and 2 spawn-on-kelp fisheries harvest either naturally occurring spawn-on-kelp or spawn-on-kelp suspended in pounds. A food and bait herring fishery may occur in the fall. Of the 5 herring fisheries, only the wild spawn-on-kelp and the food/bait fishery are open entry fisheries. Each of these fisheries is managed depending on observed herring population size and age structure. For additional background, including a review of historical and recent PWS herring management, harvest strategies, and harvest by fishery and gear, see Botz et al. (2013).

SEASON SUMMARY

Based on herring stock assessment information, all Pacific herring fisheries were closed in 2017. An age structured assessment model projection was not completed for 2017; however, aerial survey estimates of mile-days of spawn and biomass indicated the population was below the regulatory threshold (Appendices G1 and G2).

Net sampling and aerial surveys were used in 2017 to assess herring biomass, disease prevalence, age composition, and growth. In April 2017, the ADF&G vessel R/V *Solstice* searched for herring to sample for age, sex, size, and disease assessment. Broad scale surveys were conducted in eastern PWS including Sheep Bay, Port Gravina, Port Fidalgo, and Rocky Bay. The Prince William Sound Science Center collected acoustics data, resulting in a 2017 PWS herring biomass estimate of 9,896 tons. Age composition of samples collected with purse seine, castnet, and gillnet were dominated by 3- and 4-year-old fish (Appendix G3). Sample composition ranged from 33% to 69% age 3, and 18% to 30 % age 4.

Herring disease assessment has been included as part of the annual age, sex, and size assessment completed each spring since 1993, mostly as part of research funded by the Exxon Valdez Trustee Council. In adult herring, the prevalence of *Ichthyophonus hoferi* was within the normal range, approximately 17% in Southeast PWS. No results are currently available for viral hemorrhagic septicemia virus (VHSV) or viral erythrocytic necrosis virus (VENV).

ADF&G conducted 22 aerial surveys between March 22 and May 6, 2017. Prince William Sound herring schools observed in 2017 were less aggregated, and smaller than observed in recent years. Spawn was documented in eastern PWS near Knowles Head and Red Head (April 13–17); on the north shore of Hawkins Island near Canoe Passage (April 15–21); and near Kayak and Wigham Island (April 14). Preliminary mile-days of milt were estimated at 8.12 mile-days in the Southeast Area (Appendix G1). No spawn was documented in other areas of PWS Sound (Appendix G4). This was the fewest mile-days of spawn observed since 1973 and no spawn was documented in Port Fidalgo, Fairmont Bay, Naked Island, Green Island, or Montague Island.

2017–2018 HERRING SEASON OUTLOOK

Given the PWS herring spawning population, current fish size, and age structure, a commercial harvest will not occur in 2018. Consecutive years of low recruitment will further delay the recovery of the herring population to a biomass large enough to support a sustainable commercial harvest.

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REFERENCES CITED

Bue, B. G., J. J. Hasbrouck, and M. J. Evenson. 2002. Escapement goal review of Copper and Bering Rivers, and Prince William Sound Pacific salmon stocks, report to the Alaska Board of Fisheries. Alaska Department of Fish and Game, Regional Information Report 2A02-35, Anchorage.

Botz, J., and M. A. Somerville. 2011. Management of salmon stocks in the Copper River, report to the Alaska Board of Fisheries: December 2–7, 2011, Valdez, Alaska. Alaska Department of Fish and Game, Special Publication No. 11-13, Anchorage.

Botz, J., T. Sheridan, A. Wiese, H. Scannell, R. Brenner, and S. Moffitt. 2013. 2011 Prince William Sound area finfish management report. Alaska Department of Fish and Game, Fishery Management Report No. 13-11, Anchorage.

COAR (Commercial Operators Annual Reports). 2011. Commercial fishing reporting system. Alaska Department of Fish and Game. http://www.adfg.alaska.gov/index.cfm?adfg=fishlicense.coar

Fair, L. F., S. D. Moffitt, M. J. Evenson, and J. W. Erickson. 2011. Escapement goal review of Copper and Bering rivers, and Prince William Sound Pacific salmon stocks, 2011. Alaska Department of Fish and Game, Fishery Manuscript No. 11-07, Anchorage.

Malherek. D., R. Johnson, and J. Bell. 2015. Using hydroacoustic methods to enumerate migrating salmon in the Copper River, Miles Lake sonar project. 2008-2010. Alaska Department of Fish and Game, Fishery Data Series No. 15-23, Anchorage.

Moffitt, S. D., R. E. Brenner, J. W. Erickson, M. J. Evenson, R. A. Clark, and T. R. McKinley. 2014. Escapement goal review of Copper and Bering rivers, and Prince William Sound Pacific salmon stocks, 2014. Alaska Department of Fish and Game, Fishery Manuscript No. 14–05, Anchorage.

Moffitt, S., and S. Haught. 2017. 2017 Prince William Sound and Copper River salmon detailed forecast. Alaska Department of Fish and Game, News Release 1/20/2017, Cordova.

PWSAC (Prince William Sound Aquaculture Corporation). 2017a. 2017 annual management plans-AFK, CCH, GH, MBH, and WNH. Alaska Department of Fish and Game, Division of Commercial Fisheries, PNP Hatchery Program, Juneau. http://www.adfg.alaska.gov/index.cfm?adfg=fishingHatcheriesPlanning.annual (Accessed: December 6, 2017).

PWSAC (Prince William Sound Aquaculture Corporation). 2017b. 2017 annual reports- AFK, CCH, GHI, GHII, MBH, and WNH. Alaska Department of Fish and Game, Division of Commercial Fisheries, PNP Hatchery Program, Juneau.

Stopha, M. 2017. Alaska fisheries enhancement annual report 2016. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 5J17-04, Juneau.

VFDA (Valdez Fisheries Development Association, Inc.). 2017a. 2017 annual management plan, Solomon Gulch Hatchery, Valdez Fisheries Development Association, Inc. Alaska Department of Fish and Game, Division of Commercial Fisheries, PNP Hatchery Program, Juneau. http://www.adfg.alaska.gov/index.cfm?adfg=fishingHatcheriesPlanning.annual (Accessed December 6, 2017).

VFDA (Valdez Fisheries Development Association, Inc.). 2017b. 2017 Solomon Gulch Hatchery annual report. Alaska Department of Fish and Game, Division of Commercial Fisheries, PNP Hatchery Program, Juneau.

TABLES AND FIGURES

Table 1.–Prince William Sound Area commercial salmon harvest by gear type and district, 2017.

District	Permits	Chinook	Sockeye	Coho	Pink	Chum	Total
Eastern	229	93	14,953	45,867	17,631,836	293,214	17,985,963
Northern	208	8	17,111	5,983	7,420,481	90,792	7,534,441
Coghill	88	0	5,043	205	417,327	856,613	1,279,188
Northwestern	64	1	20,554	1,188	1,507,563	45,022	1,574,328
Southwestern	204	152	50,505	20,239	11,574,563	445,083	12,090,542
Montague	158	97	9,732	7,310	3,238,571	539,260	3,794,970
Southeastern	69	5	757	833	676,089	51,827	729,511
Unakwik[a]	1	0	0	0	0	0	0
Purse seine total		356	118,721	81,625	42,466,430	2,321,811	44,988,943
Bering River	114	36	2,578	119,295	105	15	121,824
Copper River	493	13,834	586,079	308,232	69,675	13,019	988,284
Coghill	397	74	111,718	14,406	635,571	2,210,220	2,971,654
Northwestern	5	0	95	35	5,802	104	6,036
Eshamy	339	63	424,049	3,790	322,036	103,464	853,225
Unakwik	4	0	551	0	196	56	803
Drift gillnet total		14,007	1,125,070	443,310	1,032,770	2,326,669	4,941,826
Eshamy	34	13	181,949	216	37,633	17,583	237,394
Set gillnet total		13	181,949	216	37,633	17,583	237,394
Solomon Gulch	1	0	0	31,179	1,568,247	0	1,599,426
Cannery Creek	1	0	0	0	556,253	0	556,253
Wally Noerenberg	1	0	0	0	1,062,669	724,750	1,787,419
Main Bay	1	0	0	0	0	0	0
Armin F. Koernig	1	0	0	0	1,866,288	0	1,866,288
Hatchery total [b]		0	0	31,179	5,053,457	724,750	5,809,386
Test fishery	0	0	0	0	0	0	0
Home pack	452	831	11,721	2,625	921	239	16,337
Confiscated fish	0	0	0	0	0	0	0
Donated fish	0	0	0	0	0	0	0
Misc. total		831	11,721	2,625	921	239	16,337
Prince William Sound total		15,207	1,437,461	558,955	48,591,211	5,391,052	55,993,886

[a] Hatchery sales for hatchery operating costs.

[b] Less than 3 permits fished. Results are confidential.

Table 2.–Mean price and estimated exvessel value of the total commercial salmon harvest by gear type, Prince William Sound Area, 2017.

Purse seine [a]					
Species	Fish ticket number	Fish ticket pounds	Average weight	Price	Value
Chinook	356	3,929	11.04	$1.24	$4,872
Sockeye	118,721	691,579	5.83	$1.61	$1,113,442
Coho	81,625	563,418	6.90	$0.94	$529,613
Pink	42,466,430	165,000,927	3.89	$0.35	$57,750,324
Chum	2,321,811	16,973,026	7.31	$0.70	$11,881,118
	44,988,943	183,232,879			$71,279,369

Drift gillnet [a]					
Species	Number	Pounds	Average weight	Price	Value
Chinook	14,007	287,540	20.53	$7.26	$2,087,540
Sockeye	1,125,070	6,426,796	5.71	$2.81	$18,059,297
Coho	443,310	3,658,563	8.25	$1.39	$5,085,403
Pink	1,032,770	3,904,959	3.78	$0.28	$1,093,388
Chum	2,326,669	17,790,449	7.65	$0.70	$12,453,314
	4,941,826	32,068,307			$38,778,942

Set gillnet [a]					
Species	Number	Pounds	Average weight	Price	Value
Chinook	13	140	10.77	$3.06	$428
Sockeye	181,949	930,457	5.11	$1.54	$1,432,904
Coho	216	1,333	6.17	$0.76	$1,013
Pink	37,633	146,700	3.90	$0.29	$42,543
Chum	17,583	131,011	7.45	$0.65	$85,157
	237,394	1,209,641			$1,562,046

Hatchery sales [a]					
Species	Number	Pounds	Average weight	Price	Value
Chinook	0	0	0	$0.00	$0
Sockeye	0	0	0	$0.00	$0
Coho	31,179	271,339	7.63	$1.15	$312,040
Pink	5,053,457	18,467,891	3.6	$0.63	$11,634,771
Chum	724,750	5,672,469	7.45	$0.82	$4,651,425
	5,809,386	24,411,699			$16,598,236

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Table 2.–Page 2 of 2.

Combined

Species	Fish ticket number	Fish ticket pounds	Average weight	Price	Value
Chinook	14,376	291,609	20.28	$7.18	$2,092,841
Sockeye	1,425,740	8,048,832	5.65	$2.56	$20,605,642
Coho	556,330	4,494,653	8.08	$1.32	$5,928,068
Pink	48,590,290	187,520,477	3.86	$0.38	$70,521,027
Chum	5,390,813	40,566,955	7.53	$0.72	$29,071,014
	55,977,549	240,922,526			128,218,593

Gear type	Value of catch	No. of permits	Average earnings
Purse seine	$71,279,369	229	$311,264
Drift gillnet	$38,778,942	518	$74,863
Set gillnet	$1,562,046	29	$53,864
Subtotal Value of CPF catch	$111,620,357		
Hatchery	$16,598,236		
Grand Total	$128,218,593		

[a] Number and pounds from fish ticket data. Value from statewide season summary. Personal use/homepack not included.

Table 3.–Average price paid to permit holders for salmon, Prince William Sound Area, 1990–2017.

	Chinook salmon		Sockeye salmon			Coho salmon			Pink salmon			Chum salmon		
	Gillnet		Gillnet			Gillnet			Gillnet			Gillnet		
Year	Copper and Bering	PWS	Copper and Bering	PWS	Purse seine	Copper and Bering	PWS	Purse seine	Copper and Bering	PWS	Purse seine	Copper and Bering	PWS	Purse seine
1990	$2.24	$1.45	$2.13	$1.59	$1.50	$0.97	$0.69	$0.50	NA	$0.30	$0.30	NA	$0.70	$0.70
1991	$1.65	$1.00	$1.28	$1.28	$1.00	$0.65	$0.44	$0.45	NA	$0.12	$0.12	NA	$0.40	$0.40
1992	$2.50	$1.55	$2.50	$1.55	$1.55	$0.90	$0.90	$0.90	NA	$0.18	$0.18	NA	$0.55	$0.55
1993	$1.82	$0.97	$1.32	$0.87	$0.83	$0.80	$0.66	$0.54	NA	$0.17	$0.16	NA	$0.71	$0.36
1994	$1.43	$0.84	$1.27	$1.16	$0.89	$0.74	$0.67	$0.54	NA	$0.11	$0.16	NA	$0.32	$0.24
1995	$2.19	$0.79	$1.67	$1.07	$0.86	$0.52	$0.37	$0.39	NA	$0.18	$0.18	NA	$0.39	$0.28
1996	$1.96	$0.68	$1.38	$0.85	$0.73	$0.53	$0.24	$0.36	NA	$0.04	$0.07	NA	$0.14	$0.13
1997	$2.00	$1.00	$0.88	$0.85	$0.85	$0.30	$0.25	$0.30	NA	$0.07	$0.12	NA	$0.25	$0.30
1998	$2.07	$1.25	$1.49	$1.11	$1.01	$0.46	$0.41	$0.31	NA	$0.14	$0.12	NA	$0.21	$0.27
1999	$3.44	$0.50	$1.84	$0.89	$0.98	$0.58	$0.23	$0.49	NA	$0.06	$0.10	NA	$0.15	$0.27
2000	$4.02	$4.04	$1.72	$1.38	$0.90	$0.57	$0.56	$0.42	NA	$0.11	$0.15	NA	$0.26	$0.28
2001	$3.30	$1.94	$1.35	$0.77	$0.74	$0.32	$0.20	$0.26	NA	$0.05	$0.13	NA	$0.38	$0.37
2002	$3.34	$1.26	$1.29	$1.14	$0.57	$0.35	$0.09	$0.25	NA	$0.05	$0.09	NA	$0.15	$0.15
2003	$3.48	$0.00	$1.16	$0.80	$0.71	$0.48	$0.48	$0.42	NA	$0.06	$0.07	NA	$0.17	$0.17
2004	$4.69	$1.38	$1.81	$0.85	$0.55	$0.69	$0.28	$0.42	NA	$0.04	$0.10	NA	$0.23	$0.18
2005	$4.70	$0.00	$1.79	$0.92	$0.54	$0.83	$0.69	$0.10	NA	$0.05	$0.08	NA	$0.28	$0.18
2006	$5.03	$1.20	$1.83	$1.15	$1.05	$0.92	$0.67	$0.60	NA	$0.11	$0.16	NA	$0.37	$0.33
2007	$4.50	$2.70	$1.81	$1.04	$0.82	$0.90	$0.30	$0.59	NA	$0.11	$0.17	NA	$0.33	$0.37
2008	$5.96	$1.04	$3.12	$1.24	$1.17	$1.23	$1.24	$1.12	$0.27	$0.33	$0.34	$0.21	$0.55	$0.57
2009	$5.29	$2.06	$2.09	$1.42	$1.32	$1.30	$1.13	$0.42	$0.22	$0.27	$0.24	$0.28	$0.52	$0.53
2010	$5.50	$2.13	$2.58	$1.72	$1.79	$1.27	$0.58	$0.70	$0.29	$0.34	$0.35	$0.36	$0.80	$0.78
2011 [a]	$5.66	$3.97	$2.08	$1.56	$1.43	$1.24	$1.09	$1.04	$0.31	$0.40	$0.45	$0.38	$0.90	$0.86
2012	$5.39	$1.44	$1.94	$1.40	$1.42	$1.10	$1.04	$0.69	$0.29	$0.38	$0.42	$0.28	$0.66	$0.68
2013	$5.79	$2.83	$2.47	$1.86	$1.69	$1.39	$1.29	$0.95	$0.27	$0.35	$0.42	$0.11	$0.57	$0.59
2014	$6.43	$2.94	$2.44	$1.97	$1.90	$1.17	$1.00	$0.81	$0.13	$0.30	$0.29	$0.22	$0.68	$0.65
2015	$5.76	$1.33	$2.42	$1.40	$1.38	$0.74	$0.19	$0.29	$0.10	$0.17	$0.20	$0.19	$0.53	$0.49
2016	$6.06	$3.93	$2.57	$1.82	$1.54	$1.47	$0.97	$0.79	$0.16	$0.19	$0.28	$0.41	$0.56	$0.60
10-year average	$5.63	$2.44	$2.35	$1.54	$1.45	$1.18	$0.88	$0.74	$0.23	$0.28	$0.32	$0.27	$0.61	$0.61
2017	$7.29	$3.06	$3.71	$1.85	$1.61	$1.41	$1.14	$0.94	$0.29	$0.28	$0.35	$0.21	$0.70	$0.70

Note: These prices are based on weighted average prices given voluntarily by processors and hatchery operators and do not represent prices reported in the Commercial Operators Annual Report (COAR). These prices are estimates and do not reflect postseason adjustments and bonuses. Caution should be used when estimating values from these prices.

[a] Values are from COAR (2011).

Table 4.–Estimated exvessel value of the total commercial salmon harvest by gear type and 10-year average, Prince William Sound Area, 2007–2017.

Purse seine Species	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	10-year avg.	2017
Chinook	$9,330	$2,487	$985	$634	$6,120	$3,279	$15,444	$11,317	$6,990	$879	$5,747	$4,872
Sockeye	$338,262	$540,113	$584,595	$705,231	$560,497	$1,449,007	$796,220	$646,931	$1,766,313	$551,225	$793,839	$1,113,442
Coho	$546,805	$2,056,932	$22,522	$48,476	$633,076	$117,259	$1,608,923	$192,659	$83,371	$194,322	$550,435	$529,613
Pink	$28,839,799	$39,059,344	$7,890,237	$78,063,374	$35,834,331	$37,732,043	$100,334,069	$36,393,753	$60,318,284	$9,196,452	$43,366,169	$57,750,324
Chum	$3,499,189	$8,002,952	$1,123,335	$1,019,498	$691,520	$2,450,017	$2,157,525	$1,901,811	$1,436,478	$1,603,442	$2,388,577	$11,881,118
	$33,233,386	$49,661,828	$9,621,674	$79,837,212	$37,725,543	$41,751,606	$104,912,182	$39,146,471	$63,611,435	$11,546,319	$47,104,766	$71,279,369
Drift gillnet Species												
Chinook	$3,886,795	$1,511,402	$956,053	$1,025,380	$2,148,066	$1,352,540	$973,720	$1,175,457	$2,250,068	$1,344,847	$1,662,433	$2,087,540
Sockeye	$26,169,047	$11,533,354	$17,386,798	$18,486,735	$36,356,087	$37,444,516	$29,389,403	$40,966,814	$29,962,566	$20,497,184	$26,819,250	$18,059,297
Coho	$1,391,204	$3,937,198	$3,197,336	$3,523,008	$2,031,963	$1,646,222	$3,986,567	$5,138,204	$862,745	$5,955,839	$3,167,029	$5,085,403
Pink	$82,356	$1,195,812	$363,373	$3,446,356	$1,025,474	$1,659,983	$2,465,469	$1,361,065	$569,851	$76,420	$1,224,616	$1,093,388
Chum	$2,542,327	$10,853,908	$9,227,837	$11,973,968	$8,669,206	$13,170,829	$11,654,134	$3,728,785	$3,426,951	$6,902,037	$8,214,998	$12,453,314
	$34,071,729	$29,031,674	$31,131,396	$38,455,447	$50,230,797	$55,274,091	$48,469,293	$52,370,325	$37,072,182	$34,776,326	$41,088,326	$38,778,942
Set gillnet Species												
Chinook	$1,267	$533	$1,302	$756	$1,832	$230	$3,015	$769	$1,239	$2,695	$1,364	$428
Sockeye	$1,318,799	$1,238,739	$1,451,897	$3,103,081	$2,993,318	$2,454,505	$2,278,575	$2,887,961	$1,888,979	$1,993,811	$2,160,967	$1,432,904
Coho	$873	$1,414	$241	$250	$2,297	$509	$2,556	$451	$1,015	$54	$966	$1,013
Pink	$5,416	$20,966	$3,419	$20,573	$21,931	$28,480	$17,062	$35,588	$14,827	$5,826	$17,409	$42,543
Chum	$53,380	$231,785	$197,332	$450,989	$163,884	$121,995	$188,004	$106,662	$69,027	$99,124	$168,218	$85,157
	$1,379,735	$1,493,437	$1,654,191	$3,575,649	$3,183,261	$2,605,720	$2,489,211	$3,031,431	$1,975,088	$2,101,510	$2,348,923	$1,562,046
Hatchery sales Species												
Chinook	0	0	0	0	0	0	59	0	0	0	6	$0
Sockeye	2,173,808	1,790,819	0	1,088,363	0	0	7,749	110	0	1,160,000	622,085	$0
Coho	102,792	161,995	67,879	145,267	44,808	280,215	217	214,752	19,035	30,000	106,696	$312,040
Pink	7,300,390	6,809,392	7,574,535	5,208,870	8,911,203	11,867,472	12,381,620	8,765,309	10,482,055	9,873,200	8,917,405	$11,634,771
Chum	2,893,174	2,105,903	2,465,426	1,816,012	2,894,835	2,802,681	2,952,252	3,424,927	1,573,976	3,457,442	2,638,663	$4,651,425
	$12,470,164	$10,868,110	$10,107,840	$8,258,512	$11,850,846	$14,950,368	$15,341,896	$12,405,098	$12,075,066	$14,520,642	$12,284,854	$16,598,236

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Table 4.–Page 2 of 2.

Other gear Species	2007	2008	2009	2010	2011 [a]	2012[a]	2013[a]	2014	2015	2016	10-year avg.	2017
Chinook	$0	$0	$0	$0	$0	$0	$0	$0	$0	0	$0	$0
Sockeye	$0	$0	$0	$0	$16	$159	$0	$0	$0	$241	$42	$0
Coho	$0	$0	$0	$0	$0	$0	$0	$0	$0	0	$0	$0
Pink	$0	$0	$0	$0	$11,123	$27	$0	$0	$0	0	$1,115	$0
Chum	$0	$0	$0	$0	$1,169	$1,090	$243	$0	$0	$2,979	$548	$0
	$0	$0	$0	$0	$12,308	$1,275	$243	$0	$0	$3,220	$1,705	$0
Average earnings												
Purse seine	$447,404	$352,212	$518,423	$216,813	$206,151	$186,391	$497,214	$176,335	$289,143	$54,982	$294,507	$311,264
Drift gillnet	$57,375	$57,262	$75,255	$96,784	$97,916	$105,889	$92,853	$99,753	$71,293	$67,266	$82,165	$74,863
Set gillnet	$57,440	$59,737	$132,431	$109,768	$109,768	$89,852	$88,900	$104,532	$63,713	$72,466	$88,861	$53,864
Number of permits fished												
Purse seine	111	141	154	174	183	224	211	222	220	210	185	229
Drift gillnet	506	507	511	519	513	522	522	525	520	517	516	518
Set gillnet	26	25	27	29	29	29	28	29	31	29	28	29

[a] Confiscated fish.

Table 5.–Spawning escapement goals for Prince William Sound Area salmon stocks, 2017.

Species/stock	Goal Lower	Goal Upper	Long-term target [a]	Type [b]	Year implemented [c]	Evaluation method
Chinook salmon						
Copper River	24,000 and up		27,000	SEG [d]	2003	Mark-recapture
Coho salmon						
Bering River	13,000 – 33,000		Not used	SEG	2003	Aerial surveys
Copper River Delta	32,000 – 67,000		Not used	SEG	2003	Aerial surveys
Sockeye salmon						
Bering River	15,000 – 33,000		Not used	SEG	2012	Aerial surveys
Upper Copper River [e]	360,000 – 750,000		450,000	SEG	2012	DIDSON sonar
Copper River Delta [f]	55,000 – 130,000		84,500	SEG	2003	Aerial surveys
Coghill Lake	20,000 – 60,000		Not used	SEG	2012	Weir
Eshamy Lake	13,000 – 28,000		Not used	BEG	2009	Video
Pink Salmon [g]						
Even-year Brood line						
Eastern District	250,000 – 580,000		390,000	SEG	2012	Aerial surveys
Northern/Unakwik Districts	140,000 – 210,000		160,000	SEG	2012	Aerial surveys
Coghill District	60,000 – 150,000		100,000	SEG	2012	Aerial surveys
Northwestern District	70,000 – 140,000		100,000	SEG	2012	Aerial surveys
Eshamy District	3,000 – 11,000		6,000	SEG	2012	Aerial surveys
Southwestern District	70,000 – 160,000		130,000	SEG	2012	Aerial surveys
Montague District	50,000 – 140,000		70,000	SEG	2012	Aerial surveys
Southeastern District	150,000 – 310,000		200,000	SEG	2012	Aerial surveys
Odd–year Brood line						
Eastern District	310,000 – 640,000		410,000	SEG	2013	Aerial surveys
Northern/Unakwik Districts	90,000 – 180,000		130,000	SEG	2013	Aerial surveys
Coghill District	60,000 – 250,000		130,000	SEG	2013	Aerial surveys
Northwestern District	50,000 – 110,000		80,000	SEG	2013	Aerial surveys
Eshamy District	4,000 – 11,000		9,000	SEG	2013	Aerial surveys
Southwestern District	70,000 – 190,000		120,000	SEG	2013	Aerial surveys
Montague District	140,000 – 280,000		210,000	SEG	2013	Aerial surveys
Southeastern District	270,000 – 620,000		360,000	SEG	2013	Aerial surveys
Chum salmon [h]						
Eastern District	50,000 and up		103,100	SEG [d]	2006	Aerial surveys
Northern District	20,000 and up		40,100	SEG [d]	2006	Aerial surveys
Coghill District	8,000 and up		18,750	SEG [d]	2006	Aerial surveys
Northwestern District	5,000 and up		13,000	SEG [d]	2006	Aerial surveys
Southeastern District	8,000 and up		25,000	SEG [d]	2006	Aerial surveys

Note: DIDSON is dual-frequency identification sonar.

[a] Managed for escapements that on average match the historical average escapement listed. However, long-term targets for pink salmon are the median escapement values.

[b] Goal types include biological escapement goal (BEG) and sustainable escapement goal (SEG) as defined in 5 AAC 39.222 Policy for the management of sustainable salmon fisheries.

[c] Goals are generally adopted the year before they are implemented.

[d] Goals are lower bound SEG goals (5 AAC 39.222).

[e] The Upper Copper River is managed for an inriver goal evaluated by the Miles Lake sonar. Upriver harvests and hatchery contributions are subtracted to estimate the spawning escapement.

[f] Copper River Delta sockeye salmon goal is managed for escapements that, on average, match the long-term escapement index of 84,500.

[g] Pink and chum salmon escapements are indexed by the area under the curve (AUC) of weekly aerial surveys adjusted for stream life.

[h] There are no chum salmon goals for Unakwik, Eshamy, Southwestern, or Montague Districts, but streams are surveyed.

Table 6.–Preseason harvest projections for the 2017 common property salmon fishery by district and species, Prince William Sound Area.

		Chinook		Sockeye		Coho [c]		Pink		Chum	
District/facility [a]	Forecast type [b]	Point estimate	Range	Point estimate	Range	Point estimate	Range	Point estimate	Range	Point estimate	Range
Copper River [d]	CPF harvest	5	0 – 31	890	490 – 1,300	207	170 – 244				
Bering River [e]	CPF harvest			4	2 – 7	48	35 – 61				
Coghill [f]	CPF harvest			44	20 – 100						
Eshamy [f]	CPF harvest			NA	NA – NA						
Unakwik [g]	CPF harvest			3	1 – 5						
General districts	CPF harvest							19,650	12,800 – 26,500	171	41 – 301
Total wild stock		5	0 – 31	941	513 – 1,412	255	205 – 305	19,650	12,800 – 26,500	171	41 – 301
SGH	CPF harvest					40		15,477			
AFK	CPF harvest							7,194		456	
WNH [h]	CPF harvest					227		9,307		1,535	
CCH	CPF harvest							7,296			
MBH [i]	CPF harvest			1,138							
GH	CPF harvest			210	110 – 300						
Total hatchery				1,348		267		39,274		1,991	
Total hatchery and wild		4		2,289		522		58,924		2,162	

Note: All values are in thousands. NA is not available. Harvest estimates are made only for areas and species that constitute a significant portion of the catch. Prince William Sound Area hatchery facility abbreviations include SGH (Solomon Gulch Hatchery), AFK (Armin F. Koernig Hatchery), WNH (Wally Noerenberg Hatchery), CCH (Cannery Creek Hatchery), MBH (Main Bay Hatchery), and GH (Gulkana Hatchery).

[a] Formal forecast procedures are used for estimating wild stock runs of pink and chum salmon in PWS. Hatchery contributions are based on known fry releases and average marine survival rates.

[b] Alaska Department of Fish and Game (ADF&G) provides common property fishery (CPF) harvest forecasts for all wild stocks and Gulkana Hatchery sockeye salmon. Hatchery operators provide CPF forecasts for PWS hatchery runs and Gulkana Hatchery sockeye salmon. Harvest projections do not include salmon harvested by hatcheries for cost recovery.

[c] ADF&G provides commercial common property (CCPF) harvest forecasts for Copper River and Bering River Districts coho salmon runs.

[d] Formalized sibling model forecast procedures are used for Copper River sockeye salmon runs. Copper River Chinook and coho salmon harvest estimates are based on the mean annual harvest (5 year for Chinook and 10 year for coho salmon).

[e] Bering River coho and sockeye salmon harvest estimates are based on 10-year mean annual harvest.

[f] Formalized sibling model forecast procedures are used for Coghill and Eshamy Districts sockeye salmon runs. Coghill District's wild pink and chum salmon harvests are included in the "General (PWS) Districts" projection.

[g] Unakwik District sockeye salmon harvest estimate is based on the 10-year mean annual harvest.

[h] Wally Noerenberg Hatchery chum and coho salmon harvest estimates include all on-site and remote release runs.

[i] Main Bay Hatchery sockeye salmon harvest estimate includes all on-site and remote release runs.

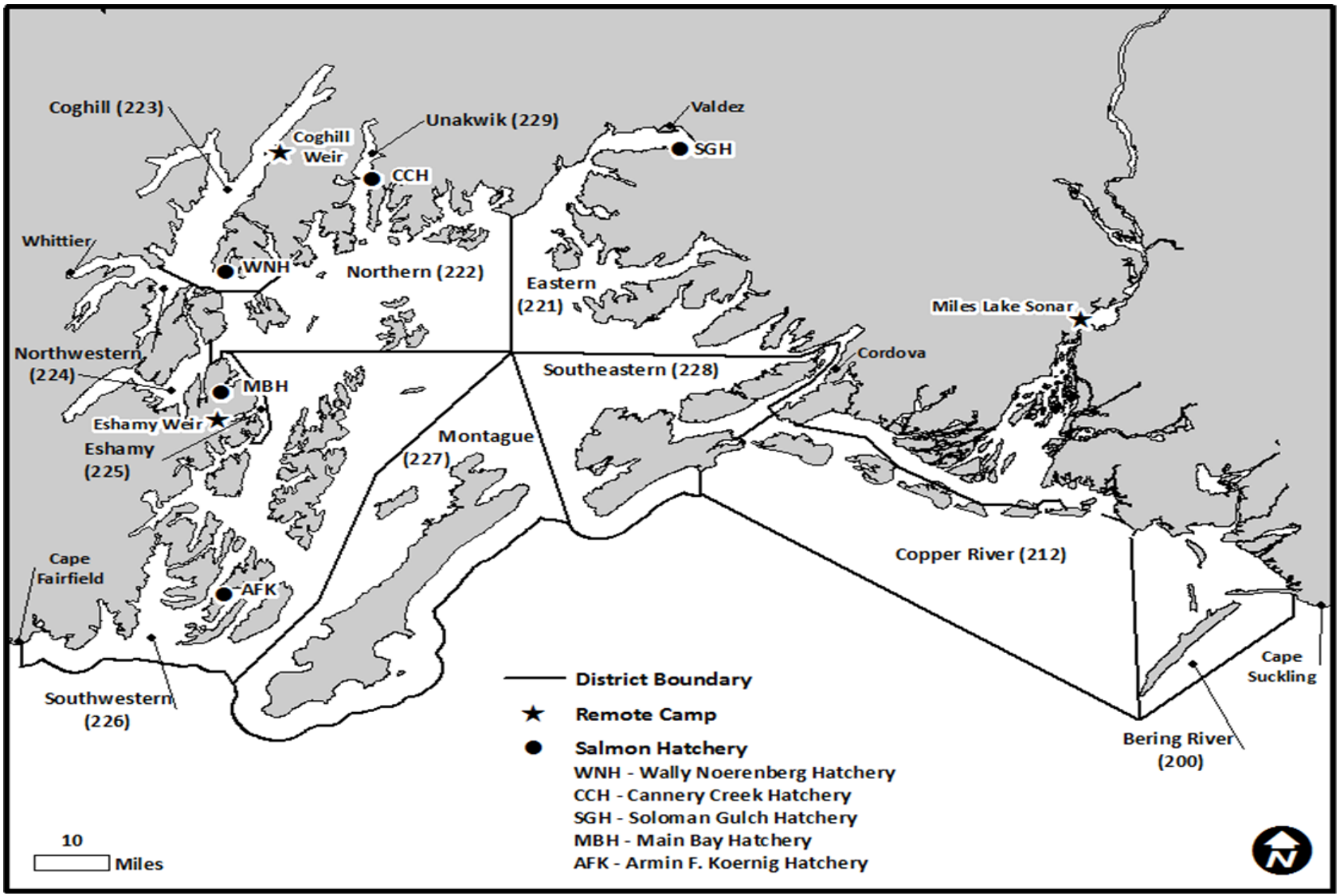

Figure 1.–Prince William Sound Area showing commercial fishing districts, salmon hatcheries, weir locations, and Miles Lake sonar camp.

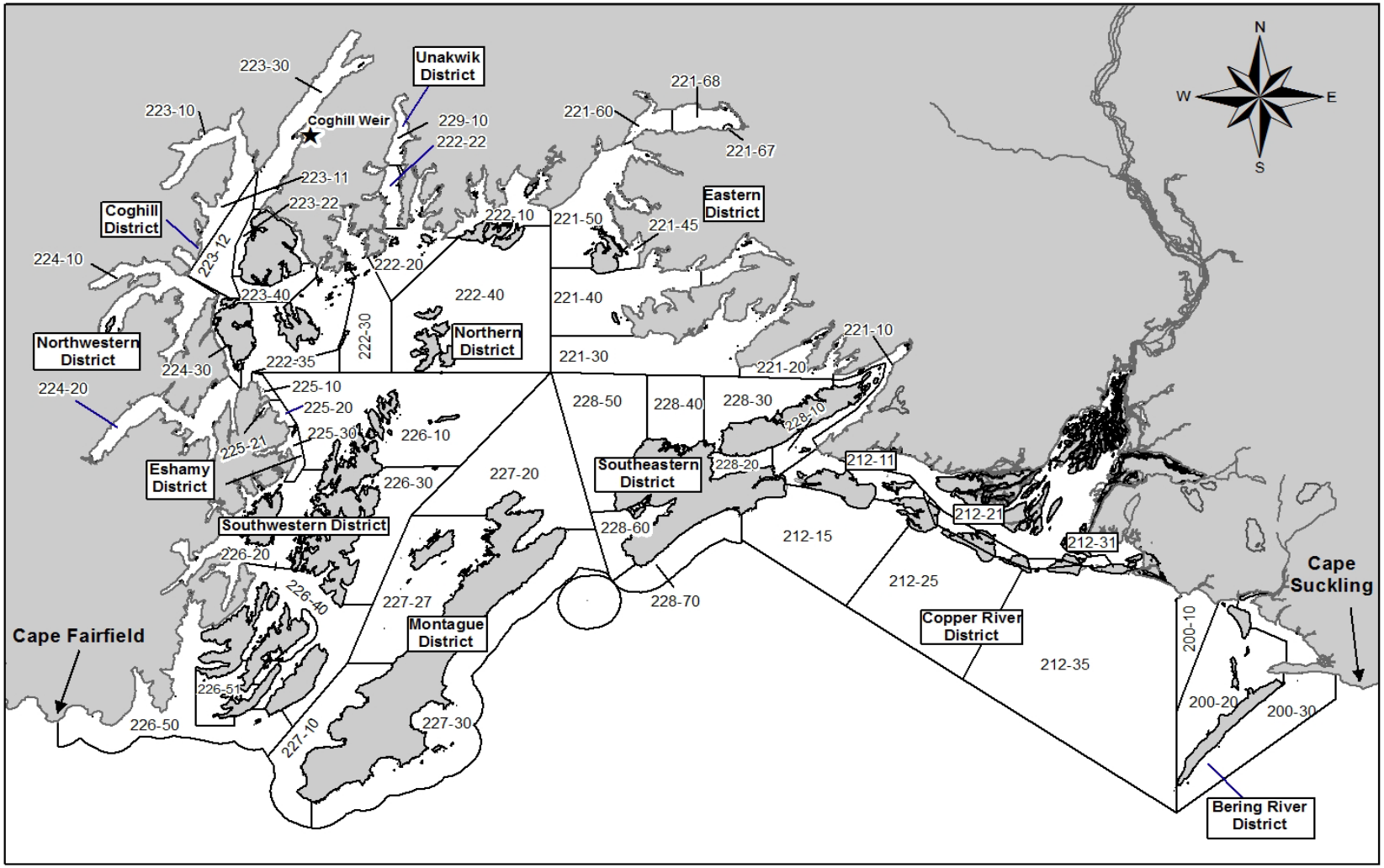

Figure 2.–Prince William Sound Area showing commercial fishing districts and statistical reporting areas.

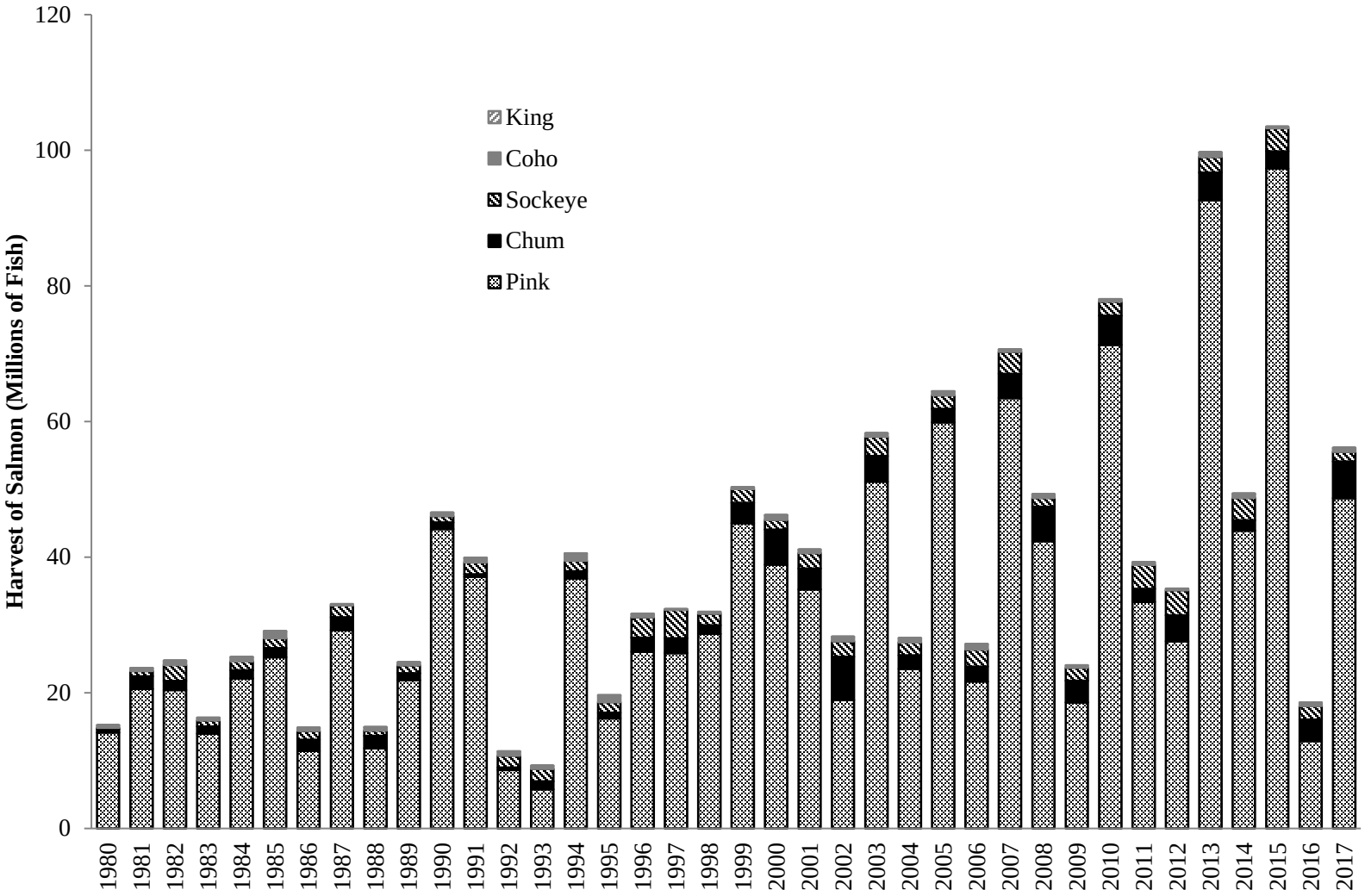

Figure 3.–Commercial salmon harvests in Prince William Sound Area, 1980–2017.

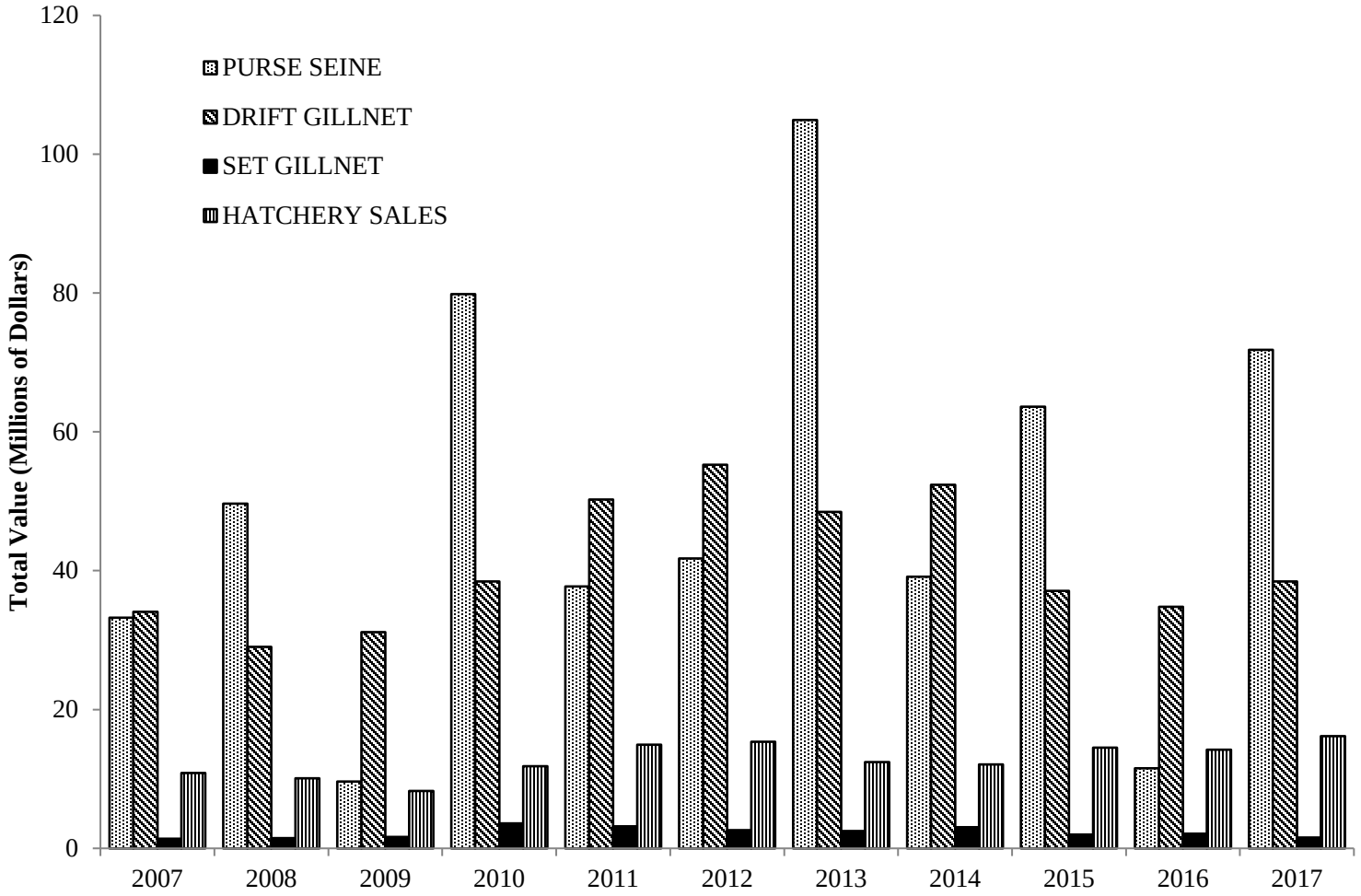

Figure 4.–Exvessel value of the commercial salmon harvest in the Prince William Sound Area by gear type, 2007–2017.

APPENDIX A: COPPER RIVER

Appendix A1.–Total estimated sockeye salmon runs to the Copper River by end user or destination and the 10-year average, 2007–2017.

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	10-year average	2017
Commercial harvest[a]	1,901,773	320,815	896,621	636,214	2,052,432	1,866,541	1,608,117	2,050,007	1,750,762	1,175,100	1,425,838	586,079
Commercial, homepack[a]	2,023	2,172	6,528	7,064	9,070	7,985	9,448	12,072	10,590	9,598	7,655	8,289
Commercial, donated[a]	180	80	47	0	0	0	0	0	0	0	31	0
Educational drift gillnet permit[a]	62	29	8	61	23	200	152	186	91	203	102	217
Subsistence (Cordova, drift gillnet)[b]	6,148	3,969	1,764	1,980	1,783	4,270	5,639	1,675	1,403	1,075	2,971	2,448
Federal Subsistence (PWS/Chugach Nat'l Forest, dip net, spear, rod and reel)[b]	36	32	46	36	35	64	102	76	152	110	69	154
Subsistence (Batzulnetas, dip net, fish wheel or spear)[b]	1	1	0	106	9	101	867	116	0	0	120	0
Subsistence (Glennallen Subdistrict, dip net, fish wheel or spear)[c]	65,714	43,157	46,849	70,719	59,622	76,305	73,728	75,501	81,800	62,474	65,587	41,570
Federal subsistence (Glennallen Subdistrict, dip net, fish wheel or spear)[d]	15,225	11,347	11,822	12,835	15,753	16,487	17,060	23,034	26,897	19,365	16,983	16,251
Personal use reported (Chitina Subdistrict, dip net)[c]	125,126	81,359	90,035	138,487	128,052	127,143	180,663	157,215	223,080	148,982	140,014	132,694
Federal subsistence (Chitina Subdistrict, dip net)[d]	929	789	817	2,061	1,933	915	2,252	1,664	2,345	1,321	1,503	1,600
Upriver sport harvest[e]	23,028	11,431	13,415	14,743	7,727	23,404	26,611	18,005	9,489	7,538	15,539	11,677
Delta sport harvest[e]	1,704	1,225	959	1,342	838	764	386	87	130	201	764	154
Upriver spawning escapement [f]	612,065	480,597	468,724	502,995	607,657	953,245	860,929	864,988	930,060	513,563	679,482	462,790
Delta spawning escapement [g]	176,570	135,900	138,584	167,810	153,014	133,700	151,410	128,410	132,390	103,100	142,089	113,900
Hatchery broodstock/excess[h]	28,648	45,022	43,409	157,980	59,589	65,348	72,369	53,737	40,123	32,341	59,857	17,083
Total estimated sockeye salmon run size	2,959,232	1,137,925	1,719,628	1,714,433	3,097,537	3,276,472	3,009,733	3,386,773	3,209,312	2,074,971	2,558,602	1,393,942

[a] Numbers are from fish ticket data. Homepack numbers for sockeye salmon are voluntarily reported, but are legally required.

[b] Data are reported harvest from returned state and federal subsistence permits.

[c] Data are expanded harvest from returned state and federal subsistence permits.

[d] Data are reported harvest (2002–2004) and expanded harvest (2005–2014) from returned state and federal subsistence permits.

[e] Upriver and Copper River Delta sport harvest data are from statewide sport fish harvest surveys.

[f] Beginning in 1999, sockeye salmon spawning escapement was based on the total number of fish past the Miles Lake sonar minus the Chinook salmon inriver midpoint abundance estimate, upriver subsistence, personal use, sport, hatchery broodstock, and onsite hatchery surplus. Prior to 1999, upriver spawning escapement was based on the Miles Lake sonar passage (sockeye salmon only) minus upriver subsistence, personal use, sport, hatchery broodstock, and onsite hatchery surplus. The number of sockeye salmon past the Miles Lake sonar was determined by multiplying the total number of fish past the sonar by the percentage of sockeye salmon in the total upriver subsistence and personal use fisheries.

[g] Delta spawning escapement estimated by doubling the peak aerial survey index.

[h] Hatchery broodstock and onsite excess are from the PWSAC annual reports.

Appendix A2.–Total estimated sockeye salmon runs to the Copper River by origin and the 10-year average, 2007–2017.

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	10-year average	2017
Upriver wild contribution [a]	2,264,569	852,316	1,260,717	991,791	2,004,078	2,503,278	2,224,817	2,633,272	2,679,815	1,608,098	1,902,275	1,115,060
Delta wild contribution [b]	564,546	202,811	324,744	289,313	512,515	333,445	351,004	350,493	310,313	259,058	349,824	213,816
Gulkana contributions [c]	132,633	86,095	136,443	434,891	580,944	439,749	433,912	403,008	219,184	207,815	307,467	65,067
Total estimated sockeye salmon run size	2,961,748	1,141,223	1,721,904	1,715,995	3,097,537	3,276,472	3,009,733	3,386,773	3,209,312	2,074,971	2,559,567	1,393,942

[a] Beginning in 1999, the upriver wild sockeye contribution was estimated as the sum of the total number of sockeye salmon past the Miles Lake sonar (total number of fish past the Miles Lake sonar minus the Chinook salmon inriver abundance estimate) and sockeye salmon captured in the Copper River commercial and subsistence harvests minus Gulkana Hatchery contributions to the Copper River (CR) commercial and subsistence fisheries, CR Delta wild stock, and CR Delta sport harvests. Prior to 1999, upriver wild sockeye salmon contribution was estimated as the sum of the total number of sockeye salmon past the Miles Lake sonar (total number of fish past the Miles Lake sonar multiplied by the percent of sockeye salmon harvested in upriver subsistence fisheries) and sockeye salmon captured in the CR commercial and subsistence harvests minus Gulkana Hatchery contributions to the CR commercial and subsistence fisheries, delta wild stock, and delta sport harvests.

[b] Delta wild sockeye salmon contribution was estimated as the total CR District harvest multiplied by proportion CR Delta sockeye salmon (delta escapement divided by the total number of sockeye salmon passed the Miles Lake sonar plus CR Delta escapement) then adding CR Delta escapement and CR Delta sport harvest.

[c] Gulkana Hatchery sockeye salmon contributions from 1995 to 2003 are based on coded wire tag–recovery; contributions from 2004 to 2011 are based on strontium marks from commercial, personal use, subsistence samples applied to reported harvest, and the historical average of mainstem and upper Copper River sport harvest multiplied by Gulkana Hatchery percent in personal use and subsistence fisheries. Gulkana Hatchery personal use and subsistence contribution estimates were calculated with reported harvest.

Appendix A3.–Total estimated Chinook salmon run to the Copper River by end user or destination and the 10-year average, 2007–2017.

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	10-year average	2017
Commercial harvest[a]	39,095	11,437	9,457	9,645	18,500	11,764	8,826	10,207	22,506	12,348	15,379	13,834
Commercial, homepack[a]	1,019	537	876	906	1,282	853	564	768	1,145	727	868	744
Commercial, donated[a]	0	4	0	0	0	0	0	0	0	0	0	0
Educational drift gillnet permit[a]	70	47	50	31	6	6	55	36	50	86	44	50
Subsistence (Cordova, drift gillnet)[b]	1,145	470	212	276	212	237	854	153	167	73	380	778
Subsistence (Batzulnetas, dip net, fish wheel or spear)[b]	0	0	0	0	0	0	0	0	0	0	0	0
Subsistence (Glennallen Subdistrict, dip net, fish wheel or spear)[c]	3,276	2,381	2,493	2,099	2,319	2,095	2,148	1,365	2,212	2,075	2,246	2,906
Federal Subsistence (Glennallen Subdistrict, dip net, fish wheel or spear)[d]	663	837	549	326	744	415	374	420	402	396	513	431
Personal Use harvests (Chitina Subdistrict, dip net)[c]	2,694	1,999	214	700	1,067	567	744	719	1,570	711	1,099	1,961
Federal Subsistence (Chitina Subdistrict, dip net)[d]	28	23	9	18	13	5	18	14	15	15	16	12
Sport harvest[e]	5,123	3,618	1,355	2,409	1,753	459	285	931	1,343	327	1,760	867
Upriver spawning escapement [f]	34,565	32,485	27,781	16,771	27,993	27,911	29,012	20,709	26,764	12,485	25,648	34,580
Total estimated Chinook salmon run size	87,678	53,838	42,996	33,181	53,889	44,312	42,880	35,322	56,174	29,243	47,951	56,131

[a] Numbers are from fish ticket data.

[b] Data are reported harvest from returned state and federal subsistence permits.

[c] Data are expanded harvest from returned state and federal subsistence permits.

[d] Data are reported harvest (2002–2004) and expanded harvest (2005–2011) from returned state and federal subsistence permits.

[e] Upriver Chinook salmon sport harvest only; there is no Copper River Delta Chinook salmon sport harvest. The sport harvest numbers are generated from the statewide sport fish harvest survey.

[f] Upriver Chinook salmon spawning escapement was estimated using the inriver abundance estimate and subtracting subsistence, personal use, and sport Chinook salmon harvests. Beginning in 1999, inriver abundance estimates were calculated using mark–recapture studies; prior to 1999 inriver abundance estimates were calculated using aerial and foot surveys.

Appendix A4.–Total commercial salmon harvest by species in the Copper River District, 1971–2017.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1971	16,486	616,801	208,915	1,762	5,287	849,251
1972	22,250	727,144	103,021	2,304	717	855,436
1973	19,947	332,816	132,164	8,964	10,173	504,064
1974	18,980	607,766	46,625	9,839	664	683,874
1975	19,644	335,384	53,805	236	807	409,876
1976	31,479	865,195	111,900	3,392	178	1,012,144
1977	21,722	602,737	131,356	23,185	335	779,335
1978	29,062	249,872	220,338	3,512	2,233	505,017
1979	17,678	80,528	194,885	1,295	107	294,493
1980	8,454	18,908	225,299	3,966	198	256,825
1981	20,178	477,662	310,154	23,952	1,799	833,745
1982	47,362	1,177,632	454,763	7,154	1,177	1,688,088
1983	50,022	626,735	234,243	7,345	2,217	920,562
1984	38,957	900,043	382,432	32,194	6,935	1,360,561
1985	42,214	927,553	587,990	19,061	5,966	1,582,784
1986	40,670	780,808	295,980	3,016	17,614	1,138,088
1987	41,001	1,180,782	111,599	31,635	14,796	1,379,813
1988	30,741	576,950	315,568	2,775	11,022	937,056
1989	30,863	1,025,923	194,454	25,877	5,845	1,282,962
1990	21,702	844,778	246,797	1,596	7,545	1,122,418
1991	34,787	1,206,811	385,086	1,246	20,220	1,648,150
1992	39,810	970,938	291,627	1,664	5,807	1,309,846
1993	29,727	1,398,234	281,469	9,579	13,002	1,732,011
1994	47,061	1,152,220	677,633	12,079	19,055	1,908,048
1995	65,675	1,271,822	542,658	19,809	56,100	1,956,064
1996	55,646	2,356,365	193,042	6,372	25,533	2,636,958
1997	51,273	2,955,431	18,656	8,483	2,465	3,036,308
1998	68,827	1,341,692	108,232	20,829	5,022	1,544,602
1999	62,337	1,682,559	153,061	10,205	25,321	1,933,483
2000	31,259	880,334	304,944	9,804	5,363	1,231,704
2001	39,524	1,323,577	251,473	9,387	2,789	1,626,750
2002	38,734	1,248,503	504,223	3,677	31,627	1,826,764
2003	47,721	1,188,052	363,489	12,934	10,110	1,622,306
2004	38,191	1,048,004	467,859	5,175	3,386	1,562,615
2005	34,624	1,331,664	263,465	34,987	3,515	1,668,255
2006	30,278	1,496,754	318,285	30,844	17,203	1,893,364
2007	39,095	1,901,773	117,182	80,715	9,657	2,148,422
2008	11,437	320,815	202,621	1,437	1,279	537,589
2009	9,457	896,621	207,776	16,759	8,629	1,139,242
2010	9,645	636,214	210,621	21,149	15,694	893,323
2011	18,500	2,052,432	127,511	24,050	13,231	2,235,724
2012	11,764	1,866,541	130,261	6,011	2,733	2,017,310
2013	8,826	1,608,117	244,985	65,366	10,169	1,937,463
2014	10,207	2,050,007	315,776	43,534	11,703	2,431,227
2015	22,506	1,750,762	136,981	84,692	15,650	2,010,591
2016	12,348	1,175,100	367,630	34,430	5,476	1,594,984
10-year average	15,379	1,425,838	206,134	37,814	9,422	1,694,588
25-year average	33,379	1,436,181	272,058	22,959	12,821	1,777,398
2017	13,834	586,079	306,287	69,213	12,871	988,284

Appendix A5.–Copper River District commercial drift gillnet salmon harvest by period, 2017.

						Chinook		Sockeye		Coho		Pink		Chum	
Period [a]	Date	News release dates[b]	Hours	Permits fished	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
01[c]	05/18–05/18	05/03	12	426	523	2,065	41,396	38,491	201,348	0	0	0	0	176	1,317
02[c]	05/22–05/22	05/20	12	396	479	1,984	41,138	56,018	295,563	1	4	1	5	796	4,959
03[c]	05/25–05/25	05/24	9	351	392	1,203	23,989	38,366	207,784	0	0	0	0	188	1,311
04[c]	05/29–05/29	05/27	10	454	506	2,140	44,753	39,629	213,913	1	6	0	0	398	2,791
05[c]	06/01–06/01	05/31	12	415	493	2,107	43,030	46,299	257,041	0	0	2	9	1,588	10,562
06[c]	06/05–06/05	06/03	12	329	390	1,408	27,821	42,189	238,954	4	26	0	0	141	1,030
07[c]	06/08–06/08	06/07	12	373	431	1,228	27,001	40,249	228,537	1	9	1	3	1,137	7,160
08[c]	06/12–06/12	06/10	12	358	410	486	10,202	38,669	215,845	7	48	2	10	3,719	23,241
09[c]	06/15–06/15	06/14	12	319	366	312	6,472	32,233	179,582	7	49	1	3	969	6,310
10	06/19–06/19	06/17	12	241	270	357	7,829	18,810	104,821	3	22	1	4	443	3,205
11	06/22–06/23	06/21	24	177	267	261	5,503	34,753	194,427	19	136	23	86	1,037	6,158
12	06/26–06/27	06/24	24	151	202	122	2,877	24,427	138,353	53	405	111	459	945	6,665
13	06/29–06/30	06/28	24	65	84	33	572	10,846	60,302	2	13	35	159	139	957
14	07/03–07/04	07/01	24	108	144	51	1,097	20,315	115,521	32	250	217	956	145	1,014
15	07/06–07/07	07/05	24	123	158	31	565	17,303	97,189	10	76	631	2,449	342	2,143
16	07/10–07/11	07/08	36	82	125	13	270	15,037	84,908	17	108	1,329	4,916	104	601
17	07/13–07/14	07/12	36	82	117	11	220	16,143	94,382	19	150	3,156	11,901	107	677
18	07/17–07/18	07/15	24	100	115	5	73	10,301	58,021	39	305	5,544	19,775	62	429
19	07/20–07/21	07/19	24	56	61	1	9	9,161	51,848	99	731	2,792	10,664	49	334
20	07/24–07/24	07/22	12	90	93			8,350	46,841	268	1,957	5,040	20,191	98	696
21	07/27–07/28	07/26	24	87	105	3	73	8,677	50,935	760	5,832	18,361	65,425	118	783
22	07/31–07/31	07/29	12	73	79	1	19	5,769	33,994	890	6,567	9,349	36,505	45	244
23	08/03–08/03	08/02	12	66	71	3	25	3,926	23,144	1,007	7,481	6,898	26,721	16	107
24	08/07–08/07	08/05	12	55	63	4	56	3,476	20,522	1,053	7,825	7,780	30,029	44	311
25	08/10–08/10	08/09	12	47	50	1	12	2,274	13,314	1,240	9,512	4,119	16,627	35	239
26	08/14–08/15	08/12	24	56	59	1	12	1,828	10,380	2,886	23,213	3,520	13,885	19	135
27	08/21–08/22	08/19	24	178	221	2	31	1,650	9,688	19,922	153,032	220	797	7	51
28	08/28–08/29	08/25	24	154	186	0	0	307	1,737	26,905	215,136	16	60	0	0
29	08/31–09/01	08/29	24	218	262	0	0	296	1,665	34,066	288,373	11	41	0	0
30	09/04–09/05	09/01	24	178	251	1	10	110	609	39,149	325,633	18	67	1	6

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Period [a]	Date	News release dates[b]	Hours	Permits fished	Landings	Chinook		Sockeye		Coho		Pink		Chum	
						Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
31	09/07–09/08	09/06	24	207	275	0	0	125	722	44,267	366,427	13	48	0	0
32	09/11–09/12	09/09	24	164	240	0	0	30	166	42,468	350,933	4	12	0	0
33	09/14–09/15	09/13	36	209	300	0	0	19	114	45,460	384,568	18	63	3	18
34	09/18–09/19	09/13	36	174	282	0	0	1	7	29,017	241,975	0	0	0	0
35	09/21–09/22	09/20	36	101	117	0	0	2	10	9,058	75,988	0	0	0	0
36	09/25–09/26	09/20	36	56	56	0	0	0	0	6,599	54,900	0	0	0	0
37	09/28–09/29	09/27	36	14	14	0	0	0	0	645	5,498	0	0	0	0
38	10/02–10/10	10/02	204	4	4	0	0	0	0	313	2,653	0	0	0	0
Total				493	8,261	13,834	285,055	586,079	3,252,187	306,287	2,529,841	69,213	261,870	12,871	83,454
Average weights							20.61		5.55		8.26		3.78		6.48

Note: En dash indicates confidential data. Additional information relevant to each fishing period, including area opened to fishing, may be found on the applicable news release (NR) available through ADF&G's Commercial Fishing News Release System at http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main. Required parameters to search the ADF&G Commercial Fishing News Release System include: Effective Year = 2015; Species Group = Salmon; Management Area = Prince William Sound.

[a] Unless otherwise noted, all waters available to commercial salmon fishing were open in the Copper River District.

[b] Queries made through the ADF&G Commercial Fishing News Release System will provide results sorted by Publication Date.

[c] Waters of the inside closure area described in 5 AAC 24.350(1)(B) were closed for all or a portion of the fishing period, see corresponding news release for more detail.

Appendix A6.–Daily salmon counts at Miles Lake sonar, 2017.

		Daily sonar counts						Minimum inriver passage objective		Maximum inriver passage objective	
Date	Water level	North bank	South bank	Daily	Cumulative	0600 count	Projected daily	Daily	Cumulative	Daily	Cumulative
05/11 [a]	N/A	0	N/A	0	0	0	0	NA	NA	NA	NA
05/12 [b]	N/A	0	N/A	0	0	0	0	NA	NA	NA	NA
05/13 [c]	N/A	0	N/A	0	0	0	0	NA	NA	NA	NA
05/14	N/A	0	N/A	0	0	0	0	NA	NA	NA	NA
05/15	N/A	N/A	N/A	0	0	0	0	NA	NA	NA	NA
05/16 [d]	N/A	35	N/A	35	35	0	0	NA	NA	NA	NA
05/17 [e]	39.50	78	N/A	78	113	0	0	NA	NA	NA	NA
05/18 [f]	39.50	504	636	1,140	1,253	0	0	77	77	121	121
05/19	39.47	963	1,244	2,207	3,460	780	3,120	498	575	780	900
05/20	39.41	1,230	894	2,124	5,584	402	1,608	740	1,315	1,158	2,059
05/21	39.35	986	654	1,640	7,224	450	1,800	1,764	3,079	2,761	4,820
05/22	39.48	678	906	1,584	8,808	222	888	3,223	6,303	5,045	9,865
05/23	39.60	1,644	1,068	2,712	11,520	558	2,232	4,632	10,935	7,251	17,116
05/24	39.53	3,164	3,240	6,404	17,924	768	3,072	5,400	16,336	8,453	25,569
05/25	39.57	9,036	9,131	18,167	36,091	2,160	8,640	8,009	24,344	12,536	38,104
05/26	39.63	13,938	24,270	38,208	74,299	6,912	27,648	9,227	33,571	14,442	52,547
05/27	39.51	10,235	18,065	28,300	102,599	6,833	27,332	9,830	43,401	15,385	67,932
05/28	39.40	7,932	13,644	21,576	124,175	6,480	25,920	11,376	54,777	17,806	85,738
05/29	39.37	4,080	10,476	14,556	138,731	3,744	14,976	13,447	68,224	21,047	106,785
05/30	39.37	5,019	7,490	12,509	151,240	2,988	11,952	13,522	81,746	21,165	127,950
05/31	39.36	5,364	9,510	14,874	166,114	3,204	12,816	14,222	95,968	22,260	150,210
06/01	39.52	7,488	8,916	16,404	182,518	4,788	19,152	15,293	111,261	23,937	174,147
06/02	39.69	5,315	10,506	15,821	198,339	3,420	13,680	17,009	128,269	26,622	200,769
06/03	39.93	5,184	14,232	19,416	217,755	4,188	16,752	15,752	144,021	24,656	225,425
06/04	40.27	8,004	9,504	17,508	235,263	4,068	16,272	16,951	160,972	26,532	251,957
06/05	40.57	5,846	7,141	12,987	248,250	2,724	10,896	16,218	177,190	25,385	277,342
06/06	40.55	5,304	7,662	12,966	261,216	2,910	11,640	16,622	193,813	26,018	303,359
06/07	40.62	5,052	10,176	15,228	276,444	3,042	12,168	14,473	208,285	22,653	326,012
06/08	40.77	6,702	11,646	18,348	294,792	4,392	17,568	15,899	224,184	24,885	350,897
06/09	41.05	3,456	9,078	12,534	307,326	2,754	11,016	14,812	238,996	23,183	374,081
06/10	41.61	3,276	9,882	13,158	320,484	2,610	10,440	14,635	253,631	22,906	396,987

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Date	Water level	Daily sonar counts: North bank	South bank	Daily	Cumulative	0600 count	Projected daily	Minimum inriver passage objective: Daily	Minimum inriver passage objective: Cumulative	Maximum inriver passage objective: Daily	Maximum inriver passage objective: Cumulative
06/11	42.15	2,784	8,406	11,190	331,674	2,994	11,976	13,668	267,298	21,393	418,380
06/12	42.42	2,790	6,936	9,726	341,400	1,998	7,992	12,750	280,049	19,957	438,337
06/13	42.38	2,262	7,698	9,960	351,360	2,310	9,240	11,162	291,211	17,471	455,808
06/14	42.12	3,174	8,550	11,724	363,084	2,382	9,528	9,267	300,478	14,505	470,313
06/15	41.83	2,430	9,236	11,666	374,750	2,940	11,760	9,579	310,057	14,993	485,306
06/16	41.58	2,001	7,434	9,435	384,185	1,812	7,248	9,419	319,475	14,742	500,049
06/17	41.43	1,704	12,528	14,232	398,417	2,508	10,032	8,908	328,384	13,943	513,992
06/18	41.29	2,622	12,336	14,958	413,375	3,672	14,688	9,532	337,916	14,920	528,911
06/19	41.25	2,061	12,144	14,205	427,580	3,330	13,320	9,701	347,616	15,184	544,095
06/20	41.28	2,478	12,438	14,916	442,496	3,198	12,792	9,112	356,728	14,261	558,357
06/21	41.51	1,746	12,510	14,256	456,752	3,450	13,800	8,556	365,284	13,392	571,748
06/22	41.62	2,407	7,230	9,637	466,389	2,472	9,888	9,172	374,456	14,357	586,105
06/23	41.54	1,134	8,088	9,222	475,611	2,202	8,808	8,749	383,205	13,693	599,798
06/24	41.57	1,290	8,328	9,618	485,229	2,034	8,136	8,473	391,678	13,262	613,061
06/25	41.73	1,498	7,182	8,680	493,909	2,358	9,432	8,191	399,868	12,820	625,881
06/26	41.99	1,512	4,596	6,108	500,017	1,536	6,144	7,792	407,660	12,196	638,077
06/27	42.28	1,722	5,304	7,026	507,043	1,332	5,328	7,623	415,283	11,931	650,008
06/28	42.42	2,100	5,076	7,176	514,219	1,482	5,928	6,922	422,204	10,834	660,842
06/29	42.39	2,484	5,580	8,064	522,283	2,304	9,216	7,480	429,685	11,708	672,550
06/30	42.37	2,076	5,556	7,632	529,915	1,680	6,720	7,804	437,489	12,216	684,766
07/01	42.24	912	6,060	6,972	536,887	1,740	6,960	7,763	445,252	12,150	696,916
07/02	42.13	1,591	7,344	8,935	545,822	2,442	9,768	7,141	452,393	11,178	708,094
07/03	42.23	2,070	8,596	10,666	556,488	2,418	9,672	6,923	459,316	10,836	718,930
07/04	42.38	2,436	7,518	9,954	566,442	2,382	9,528	6,868	466,184	10,750	729,680
07/05	42.39	3,018	7,788	10,806	577,248	1,914	7,656	6,305	472,489	9,869	739,548
07/06	42.35	3,522	9,516	13,038	590,286	2,364	9,456	6,106	478,595	9,557	749,106
07/07	42.50	2,424	11,280	13,704	603,990	2,532	10,128	6,952	485,548	10,882	759,987
07/08	42.69	1,392	7,254	8,646	612,636	2,598	10,392	6,962	492,510	10,898	770,885
07/09	42.99	1,302	4,308	5,610	618,246	1,578	6,312	6,576	499,086	10,293	781,179
07/10	43.17	1,914	3,360	5,274	623,520	1,020	4,080	6,878	505,964	10,765	791,944
07/11	43.07	1,860	3,234	5,094	628,614	1,122	4,488	7,343	513,307	11,493	803,437
07/12	42.77	2,142	5,130	7,272	635,886	1,152	4,608	7,295	520,602	11,418	814,855
07/13	42.57	3,516	4,770	8,286	644,172	1,482	5,928	7,399	528,001	11,581	826,436

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Date	Water level	Daily sonar counts: North bank	South bank	Daily	Cumulative	0600 count	Projected daily	Minimum inriver passage objective: Daily	Cumulative	Maximum inriver passage objective: Daily	Cumulative
07/14	42.83	2,991	6,330	9,321	653,493	2,580	10,320	7,990	535,991	12,507	838,942
07/15	43.13	1,746	4,938	6,684	660,177	1,176	4,704	8,222	544,213	12,869	851,812
07/16	43.25	1,260	4,356	5,616	665,793	1,110	4,440	7,811	552,024	12,226	864,037
07/17	43.27	1,215	3,846	5,061	670,854	1,092	4,368	7,610	559,634	11,911	875,948
07/18	43.35	1,446	4,062	5,508	676,362	1,074	4,296	8,631	568,265	13,510	889,458
07/19	43.31	1,356	4,536	5,892	682,254	594	2,376	8,022	576,287	12,556	902,015
07/20	43.20	1,614	4,212	5,826	688,080	948	3,792	7,546	583,834	11,812	913,826
07/21	43.06	1,500	4,248	5,748	693,828	1,518	6,072	7,902	591,736	12,368	926,195
07/22	43.05	1,656	4,530	6,186	700,014	1,266	5,064	7,481	599,216	11,709	937,904
07/23	43.15	1,572	5,124	6,696	706,710	1,008	4,032	6,416	605,632	10,043	947,946
07/24	43.38	1,014	2,778	3,792	710,502	1,020	4,080	6,674	612,306	10,446	958,392
07/25	43.48	966	2,748	3,714	714,216	690	2,760	6,620	618,926	10,362	968,754
07/26	43.46	822	2,520	3,342	717,558	912	3,648	6,545	625,471	10,245	978,998
07/27	43.35	906	1,866	2,772	720,330	942	3,768	6,436	631,907	10,074	989,072
07/28	43.28	768	2,328	3,096	723,426	702	2,808	6,251	638,158	9,784	998,857

Note: Anticipated counts are not available prior to May 15 because the sonar was deployed prior to this date only during 2003, 2004, 2005.

[a] North bank was deployed for 5 hours.

[b] North bank was deployed for 7 hours.

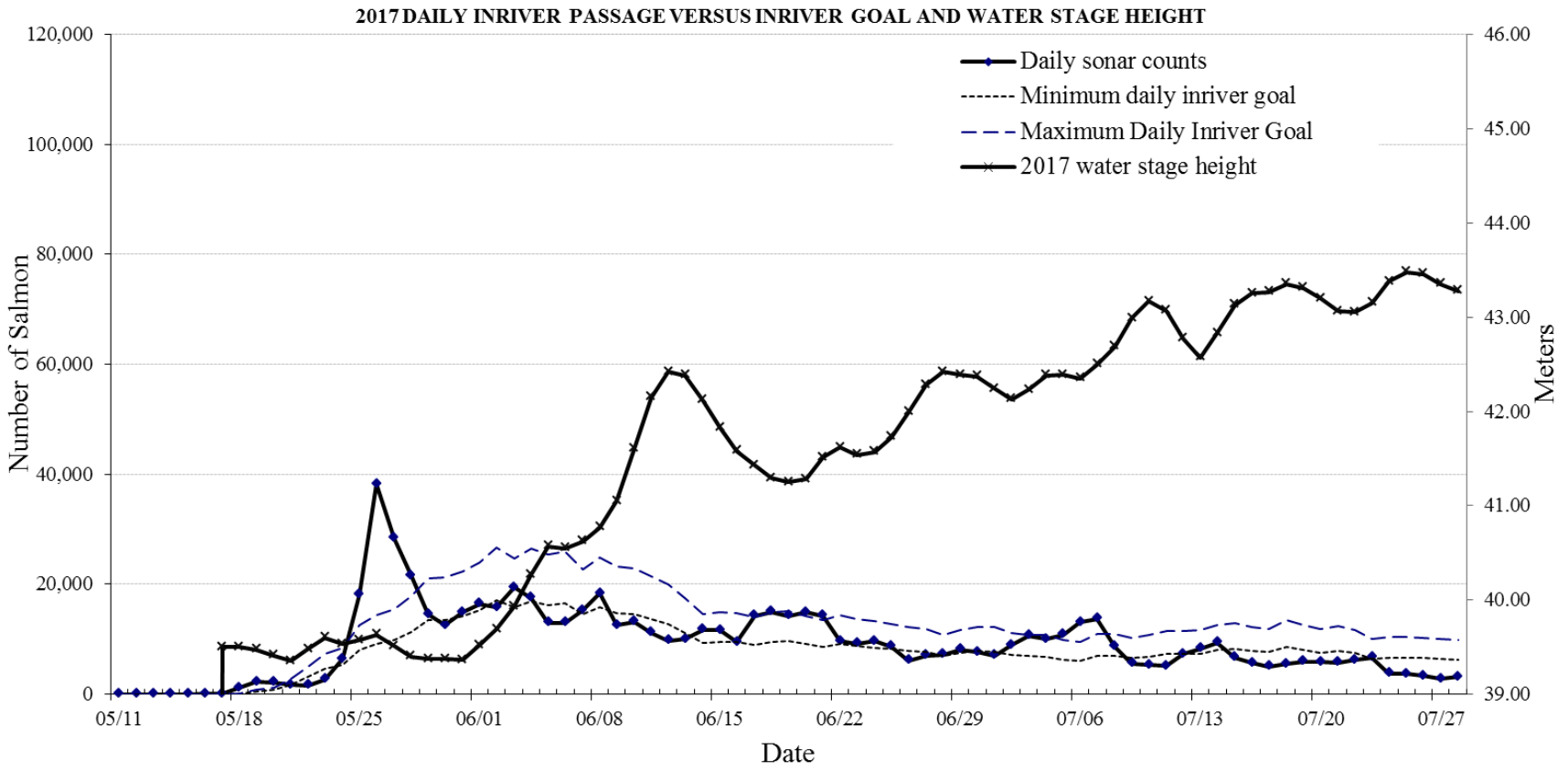
[c] North bank was deployed for 8 hours.

[d] North bank was deployed for 10 hours.

[e] North bank was deployed for 11 hours.

[f] North bank was deployed for 14 hours and south bank was deployed for 12 hours.

Appendix A7.–Minimum and maximum inriver sonar goal and water stage height versus actual daily salmon passage, Miles Lake sonar, 2017.



Appendix A8.–Inriver salmon passage at the Miles Lake sonar, 1978–2017.

Year	Total	Rank
1978	107,011	38
1979	328,090	37
1980	374,091	36
1981	576,681	30
1982	517,885	33
1983	592,563	29
1984	618,732	26
1985	466,190	35
1986	481,628	34
1987	523,022	32
1988	528,940	31
1989	643,367	22
1990	624,922	25
1991	593,185	28
1992	604,898	27
1993	819,700	16
1994	738,011	18
1995	637,293	23
1996	907,267	10
1997	1,164,791	5
1998	865,896	12
1999	850,597	14
2000	636,837	24
2001	878,205	11
2002	830,263	15
2003	747,091	17
2004	684,103	21
2005	855,125	13
2006	959,706	6
2007	919,601	8
2008	718,344	19
2009	709,748	20
2010	923,811	7
2011	914,231	9
2012	1,294,400	2
2013	1,267,060	3
2014	1,218,418	4
2015	1,346,100	1
2016	801,593	17
10-year average	1,011,331	
2017	723,426	20

Appendix A9.–Projected and actual semi-weekly sockeye and Chinook salmon harvest and weekly coho salmon harvest in the Copper River District drift gillnet fishery, 2017.

Semi-weekly date		Fishing time (hours)	Projected sockeye salmon harvest [a]	Actual sockeye salmon harvest	Projected Chinook salmon harvest[b]	Actual Chinook salmon harvest	Projected coho salmon harvest [c]	Actual coho salmon harvest
5/13	Sat	0	0	0	0	0	0	0
5/17	Wed	0	8,187	0	391	0		
5/20	Sat	12	32,219	38,491	435	2,065	1	0
5/24	Wed	9	69,528	56,018	589	1,984		
5/27	Sat	10	59,882	38,366	260	1,203	9	1
5/31	Wed	12	88,642	39,629	428	2,140		
6/03	Sat	12	53,461	46,299	360	2,107	25	1
6/07	Wed	12	72,414	42,189	343	1,408		
6/10	Sat	12	35,978	40,249	149	1,228	40	5
6/14	Wed	12	47,999	38,669	180	486		
6/17	Sat	12	33,669	32,233	121	312	47	14
6/21	Wed	12	45,120	18,810	97	357		
6/24	Sat	24	29,846	34,753	45	261	180	22
6/28	Wed	24	44,796	24,427	35	122		
7/01	Sat	24	32,110	10,846	18	33	265	55
7/05	Wed	24	41,209	20,315	18	51		
7/08	Sat	24	33,245	17,303	11	31	411	42
7/12	Wed	36	40,437	15,037	6	13		
7/15	Sat	36	25,798	16,143	4	11	905	36
7/19	Wed	24	30,540	10,301	3	5		
7/22	Sat	24	18,085	9,161	2	1	1,349	138
7/26	Wed	12	15,870	8,350	1	0		
7/29	Sat	24	7,681	8,677	1	3	1,806	1,028
8/02	Wed	12	9,297	5,769	1	1		
8/05	Sat	12	3,580	3,926	0	3	4,222	1,897
8/09	Wed	12	4,198	3,476	1	4		

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Semi-weekly Date		Fishing time (hours)	Projected sockeye salmon harvest [a]	Actual sockeye salmon harvest	Projected Chinook salmon harvest[b]	Actual Chinook salmon harvest	Projected coho salmon harvest [c]	Actual coho salmon harvest
8/12	Sat	12	2,203	2,274	0	1	10,943	2,293
8/16	Wed	24	1,845	1,828	0	1		
8/19	Sat	0		0	0	0	24,949	2,886
8/23	Wed	24	795	1,650	0	2		
8/26	Sat	0		0	0	0	39,839	19,922
8/30	Wed	24	492	307	0	0		
9/02	Sat	24	343	296	0	0	46,469	60,971
9/06	Wed	24	226	110	0	1		
9/09	Sat	24	115	125	0	0	37,532	83,416
9/13	Wed	24	104	30	0	0		
9/16	Sat	36	44	19	0	0	26,108	87,928
9/20	Wed	36	18	1	0	0		
9/23	Sat	36	9	2	0	0	9,137	38,075
9/27	Wed	36	12	0	0	0		
9/30	Sat	36	2	0	0	0	2,300	7,244
10/04	Wed	65	0	0	0	0		
10/08	Sat	72	0	0	0	0	437	313
10/11	Wed	67	0	0	0	0		
Total		991	890,000	586,079	3,500	13,834	206,974	306,287

[a] Sockeye salmon projected harvest was based on the midpoint preseason forecast (890,000) and the 1998–2007 harvest timing.

[b] Chinook salmon projected harvest was based on the preseason harvest forecast (3,500) and the 1998–2007 harvest timing. This harvest forecast is the total run forecast minus the lower bound sustainable escapement goal (SEG) multiplied by the mean commercial exploitation rate. Therefore, the Chinook salmon harvest should be considered a maximum harvest because the escapement goal is a lower bound SEG.

[c] Coho salmon projected harvest was based on the midpoint preseason harvest forecast (207,000) and the 1973–2009 harvest timing.

Appendix A10.–Aerial escapement indices by statistical week and location for sockeye salmon returning to the Copper River Delta, 2017.

System [a]	Weekly escapement indices (statistical week ending date listed)[b] 06/17	06/24	07/08	07/15	07/22	08/05	08/12	09/23	Site[c]	System[d]	Anticipated, (by drainage)
Eyak River											
Eyak River	100	700	850	650	830	1,000	200		1,000	10,800	9,972 to 23,571
West Shore Beaches	1,500	100	1,000	800	1,500	900	NS	40	1,500		
East Shore Beaches	300	1,500	500	600	2,730	4,500	4,000		4,500		
Middle Arm Beaches [e]	100	700	600	1,800	1,200	1,500	500	350	1,800		
North Shore Beaches	0	0	150	NS	100	2,000	100		2,000		
Hatchery Creek Delta	0	500	1,500	NS	1,100	400	200		1,500	1,800	
Hatchery Creek	0	100	300	NS	300	200	400		300		
Power Creek Delta	0	400	100	NS	200	400	200		100	800	
Power Creek	0	100	700	NS	700	700	600		700		
Ibeck Creek											
Ibeck Creek	NS	NS	NS	NS	NS	NS	NS	0		0	
Alaganik Slough											
Alaganik Slough	0	3,500	1,600	1,800	300	1,800	1,800		1,800	7,300	8,359 to 19,758
McKinley Lake	NS	NS	4,000	1,550	3,000	250	400	200	400		
Salmon Creek West Fork	0	0	0	350	1,500	2,700	3,000		3,000		
Salmon Creek East Fork	0	0	0	100	900	1,350	2,100		2,100		
26/27 Mile Creek											
26/27 Mile Creek	0	0	30	500	700	600	295		700	700	2,182 to 5,157
39 Mile Creek											
39 Mile Creek	0	0	150	400	850	2,000	2,200		2,200	2,200	5,772 to 13,642
Goat Mountain											
Goat Mountain Creek	0	150	300	150	150	100	200		300	300	549 to 1,298
Pleasant Creek											
Pleasant Creek	6,000	7,300	8,050	6,300	3,850	NS	100		8,050	8,050	1,075 to 2,542
Martin River											
Martin River - Lower	NS	NS	NS	NS	NS	NS	NS		0	0	
Ragged Point River	0	20	50	450	800	600	150	50	150	2,100	
Ragged Point Lake Outlet	0	0	0	10	30	100	50		50		
Ragged Point Lake	0	0	0	0	420	800	1,900	500	1,900		
Martin River - Upper [e]	300	200	800	410	225	150	300	50	300	300	
Martin Lake Outlet	500	300	200	200	50	50	50		50	6,950	17,598 to 41,596
Martin Lake	100	4,000	3,000	1,810	2,700	1,350	1,050		2,700		

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System [a]	Weekly escapement indices (statistical week ending date listed)[b] 06/17	06/24	07/08	07/15	07/22	08/05	08/12	09/23	Site[c]	System[d]	Anticipated, (by drainage)		
Martin Lake Feeders	4	2,500	3,700	1,520	3,300	1,900	1,215				Martin Lake Feeders		4
Pothole River	NS	NS	NS	200	500	150	300	150			Pothole River		NS
Pothole Lake	NS	NS	NS	0	400	300	200	900			Pothole Lake		NS
Little Martin River	0	0	25	0	0	400	30				Little Martin River		0
Little Martin Lake	0	0	100	750	1,000	1,500	1,000				Little Martin Lake		0
Tokun													
Tokun Springs	0	600	500	900	700	400	500	25	900	8,800	5,352	to	12,649
Tokun River	200	400	1,000	800	300	900	430	60	900				
Tokun Lake Outlet	4,000	3,000	2,000	1,000	100	200	200	400	1,000				
Tokun Lake	0	1,500	5,000	6,000	3,600	3,000	2,000	2,700	6,000				
Martin River Slough													
Martin River Slough	4,200	4,500	3,000	1,500	2,200	NS	1,300		4,500	4,500	4,141	to	9,787
Total	17,304	32,070	39,205	30,550	36,235	32,200	26,970	5,425	56,500	56,500			
Lower SEG	14,273	17,627	30,055	31,424	32,059	24,976	26,465	6,776					55,000
Average SEG, (avg. proj. esc.)	21,902	27,050	46,121	48,222	49,196	38,326	40,611	10,398					84,400
Upper SEG	33,736	41,665	71,040	74,276	75,775	59,034	62,553	16,016					130,000

[a] The system represents the majority of known sockeye salmon spawning locations within the Copper River Delta.

[b] The surveys provide information about the relative strength of escapement among years and within a year, time to spawning sites and relative escapement strength among sites. The indices are not intended to provide an actual estimate of escapement but have served that purpose in the absence of any other escapement estimating method.

[c] Where the survey site is a terminal spawning area, the peak count is used. However, if the site is a schooling area for migratory fish bound for sites further upstream, the count which minimizes possible duplicate of counts across dates is selected.

[d] The sum of the indices by site within a system.

[e] Site typically has a protracted run timing or 2 temporally segregated spawning populations at 1 location. Aerial counts from more than 1 day may be used in the escapement index if the surveyor indicates these counts represented different fish.

Appendix A11.–Copper River and Bering River area sockeye salmon escapement indices, 2007–2017.

Stream/Lake [a,]	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	10-yr Average	2017
Eyak Lake	28,640	9,290	11,980	25,000	22,775	23,350	19,205	20,400	14,400	12,700	18,774	10,800
Hatchery Creek	980	560	680	870	100	1,000	300	300	1,400	500	669	1,800
Power Creek	1,030	220	260	1,853	2,600	3,300	1,000	750	1,450	3,200	1,566	800
Ibeck Creek	142	41	100	10	475	870	200	400	800	50	309	0
McKinley Lake	3,740	3,510	3,520	2,980	3,950	7,750	5,700	5,575	1,800	700	3,923	2,200
Salmon Creek	2,630	820	500	1,370	1,910	75	2,200	75	5,500	3,800	1,888	5,100
26/27 Mile Creek	700	8	0	0	870	350	950	750	920	900	545	700
39 Mile Creek	2,710	2,950	160	620	1,500	3,000	2,000	1,075	2,400	2,500	1,892	2,200
Goat Mountain	363	100	30	140	50	1,925	300	900	950	200	496	300
Pleasant Creek	4,860	4,920	2,610	3,460	7,600	2,300	5,900	4,700	8,300	2,020	4,667	8,050
Martin River	9,270	6,440	2,610	2,992	2,300	0	150	500	0	1,000	2,526	300
Ragged Pt. River/Lake	3,870	3,430	610	1,010	2,700	2,500	3,500	1,700	3,000	3,200	2,552	2,100
Martin Lake	4,200	8,970	19,071	19,660	10,200	3,850	22,000	16,085	100	10,100	11,424	6,050
Pothole Lake	2,430	5,800	2,540	4,440	0	6,900	900	250	15,420	0	3,868	900
Little Martin Lake	450	1,060	421	680	3,700	3,510	5,800	2,050	6,000	1,530	2,520	1,900
Tokun Lake/River	16,920	18,321	22,680	15,480	9,637	5,500	4,000	5,825	2,650	5,550	10,656	8,800
Martin River Slough	5,350	900	1,520	2,270	2,000	670	1,600	2,870	1,575	3,600	2,236	4,500
Copper River Delta Total	88,285	67,340	69,292	82,835	72,367	66,850	75,705	64,205	66,665	51,550	70,509	56,500
Upper Copper River [b]	624,438	491,516	477,327	524,692	621,545	970,622	889,939	885,024	930,095	513,563	692,876	463,176
Copper River District Total	712,723	558,856	546,619	607,527	693,912	1,037,472	965,644	949,229	996,760	565,113	763,386	519,676
Bering River/Lake	8,550	17,545	11,250	3,280	15,060	15,950	19,100	13,600	20,400	15,300	14,004	15,750
Shepherd Creek	0	180	91	46	4,800	1,400	750	750	625	700	934	2,075
Stillwater Creek	450	111	190	81	175	170	1,200	100	500	100	308	900
Kushtaka Lake	40	100	90	140	530	370	850	35	180	190	253	90
Katalla River	12,130	260	1,850	820	7,965	400	2,000	400	1,000	100	2,693	300
Bering River Area Total	21,170	18,196	13,471	4,367	28,530	18,290	23,900	14,885	22,705	16,390	18,190	19,115
Copper/Bering River Total	733,893	577,052	560,090	611,894	722,442	1,055,762	989,544	963,714	1,018,465	581,503	781,436	538,791

[a] This table is based on peak aerial survey indices and sonar counts for the majority of known sockeye salmon spawning areas in the Copper and Bering river deltas. These indices are not intended to provide a true estimate of total escapement but rather a comparable index, based upon the best data available, across years.

[b] Upriver escapement index from Miles Lake sonar counts minus Chinook salmon inriver abundance estimate, upriver harvests, and hatchery escapement and broodstock.

Appendix A12.–Aerial survey indices of sockeye salmon escapement to the upper Copper River drainage, 2002–2017.

	Yearly survey indices [a]																
Location	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Indices [b]
Mentasta Lake	5,400	4,800	6,000	7,090	7,790	8,507	3,379	3,320	2,870	27,000	9,000	6,000	10,100	4,230	2,700	10,000	3,277
Fish Creek–Mentasta	900	–	–	3,330	3,700	323	1,440	680	400	91	300	900	350	800	175	600	963
Bad Crossing 1 & 2	157	90	30	5,120	620	1,683	520	1,691	1,390	742	261	4,100	470	4,650	5	2,625	2,604
Suslota Lake	1,500	2,750	1,975	1,230	1,300	30	86	320	6	350	55	500	2,500	5,500	2,300	200	1,416
Tanada Lake	950	0	3,950	683	30	563	986	1,290	NS	800	1,715	2,600	1,000	1,100	1,300	1,150	3,849
Dickey Lake	0	0	10	55	185	71	37	20	3	59	26	30	251	300	80	5	115
Keg Creek	30	38	0	7	190	0	1	423	0	0	15	15	10	5	0	20	725
Swede Lake	150	325	225	7	2,570	731	343	109	320	137	400	60	175	160	85	30	531
Mahlo Creek	5,000	6,850	500	1,950	5,000	14,512	10,261	11,735	4,570	292	10,100	3,800	7,600	6,700	650	1,300	2,648
Mendeltna Creek	1,875	1,200	50	318	700	473	727	1,945	1,550	760	1,085	850	300	1,050	335	166	2,470
St. Anne Creek	3,500	3,750	970	1,692	6,560	11,970	14,000	8,123	2,420	1,751	5,800	3,200	1,650	2,600	515	770	4,888
Tonsina Lake	–	–	0	–	20	20	3	0	–	0	15	0	0	0	0	10	1,080
Long Lake	–	–	–	–	1,400	505	382	14	10	290	375	5	10	20	0	1	1,577
Tana River	–	250	–	–	1,392	312	434	19	100	40	410	65	145	83	97	50	1,345
Salmon Creek (Bremner)	1,400	300	–	217	790	750	3,500	530	340	276	1,000	1,500	610	400	400	300	825
Fish Lake	125	1,300	0	281	7,250	1,066	158	0	89	1,008	35	20	4	6	60	0	6,418
Mud Creek.– Summit Lake	2,800	3,900	40	–	1,800	2,705	11,410	0	2,759	211	870	600	320	225	100	90	7,445
Paxson Inlet–Mud Creek	4,800	2,800	2,200	363	2,470	9,317	4,665	2,720	2,301	1,520	7,900	9,900	3,100	850	500	3,500	6,560
Mud Creek and Lake	30	75	5	145	310	2	10	0	20	2	10	11	100	30	6	0	172
Paxson Lake Outlet	140	–	5	155	270	324	596	0	560	1,700	350	2,000	350	125	100	50	2,661
Totals	28,757	28,428	15,960	22,643	44,347	53,864	52,938	32,939	19,708	37,029	39,722	36,156	29,045	28,834	9,408	20,867	51,569

[a] Escapement numbers are based on peak aerial survey indices and weir counts from the majority of known spawning areas in the upper Copper River drainage. The indices are not intended to provide true estimates of escapement for these stocks, but rather a comparable index, based on the best data available, across years. Missing counts are generally a result of bad weather, high water or other factors that prevented surveys for a given year.

[b] Calculated using the 1983–1992 average.

Appendix A13.–Estimated age and sex composition of sockeye salmon harvested in the Copper River District commercial common property drift gillnet fishery, 2017.

Strata combined:	05/14 – 09/22	Brood year and age class									
Sampling dates:	05/19 – 07/04	2014		2013		2012			2011		
Sample size:	3,732	0.2	1.1	0.3	1.2	0.4	1.3	2.2	1.4	2.3	Total
Female	Percentage of sample	0	0.1	8.4	6.9	0.0	32.7	0.0	0.9	0.2	49
	Number in harvest	75	514	49,248	40,402	0	191,493	111	5,195	1,324	288,362
Male	Percentage of sample	0	0.0	10.5	9.1	0.4	29.3	0.0	0.7	0.7	50.8
	Number in harvest	544	111	61,774	53,085	2,205	171,735	0	4,167	4,096	297,717
Total	Percentage of sample	0	0.1	18.9	16.0	0.4	62.0	0.0	1.6	0.9	100.0
	Number in harvest	619	625	111,022	93,487	2,205	363,229	111	9,361	5,420	586,079
	Standard error	316	380	5,862	3,586	1,830	6,878	111	2,129	2,580	

Appendix A14.–Estimated age and sex composition of Chinook salmon harvested in the Copper River District commercial common property drift gillnet fishery, 2017.

Strata combined:	05/14 – 09/05	Brood year and age class										
Sampling dates:	05/18 – 06/12	2014		2013		2012		2011		2010		
Sample size:	1,610	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	1.5	2.4	Total
Total	Percentage of sample	0.1	0.1	16.7	0.1	44.1	0.2	37.7	0.2	0.7	0.2	100.0
	Number in harvest	18	16	2,313	10	6,106	21	5,209	22	92	26	13,834
	Standard error	13	12	135	10	178	15	174	16	31	15	

Note: Sex could not be determined for some fish and therefore is not included.

Appendix A15.–Total estimated coho salmon run to the Copper River by end user or destination and the 10-year average, 2007–2017.

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	10-year average	2017
Commercial harvest[a]	117,182	202,621	207,776	210,621	127,511	130,261	244,985	315,776	136,981	367,630	206,134	306,287
Commercial, homepack[a]	340	423	767	1,026	543	1,037	249	1,146	1,423	1,353	831	1,945
Commercial, donated[a]	0	154	0	0	0	0	0	0	0	0	15	0
Educational drift gillnet permit[a]	0	0	0	0	0	0	0	0	0	0	0	0
Subsistence (Cordova, drift gillnet)[b]	15	53	22	27	34	0	1	0	10	2	16	43
Federal subsistence (PWS/Chugach Nat'l Forest, dip net, spear, rod and reel)[b]	68	119	185	68	581	392	310	630	878	606	384	688
Subsistence (Batzulnetas, fish wheel, dip net or spear)[b]	NA	NA	0	0	0	0	0	0	0	0	0	0
Subsistence (Glennallen Subdistrict, dip net or fish wheel)[c]	238	493	228	293	372	335	144	233	77	45	246	68
Federal subsistence (Glennallen Subdistrict, dip net or fish wheel)[d]	34	156	34	81	223	173	21	29	78	11	88	1
Personal use (Chitina Subdistrict, dip net)[c]	1,742	2,711	1,712	2,013	1,702	1,385	797	1,129	841	1,182	1,521	715
Federal subsistence (Chitina Subdistrict, dip net)[d]	40	74	11	30	10	8	8	69	14	11	28	8
Delta sport harvest[e]	6,749	7,706	14,384	15,752	14,283	15,230	17,053	16,137	24,515	19,235	15,104	17,915
Upriver sport harvest[e]	0	57	36	114	21	0	0	89	0	30	35	30
Upriver spawning escapement [f]	–	–	–	–	–	–	–	–	–	–	–	–
Delta spawning escapement[g]	102,430	153,784	82,588	82,154	76,290	74,020	69,360	86,020	83,330	152,400	96,238	87,520
Total estimated coho salmon run size	228,838	368,351	307,743	312,179	221,570	222,841	332,928	421,258	248,147	542,505	320,631	415,220

[a] Numbers are from fish ticket data.

[b] Data are reported harvest from returned state and federal subsistence permits.

[c] Data are expanded harvest from returned state and federal subsistence permits.

[d] Data are reported harvest (2002–2004) and expanded harvest (2005–2011) from returned state and federal subsistence permits.

[e] Upper Copper River and Copper River Delta sport harvest data are from statewide sport fish harvest surveys.

[f] Numbers of upriver coho salmon spawners are unavailable.

[g] The Copper River Delta spawning escapement index is calculated by doubling the final peak aerial survey index.

Appendix A16.–Aerial escapement indices by statistical week and location for the coho salmon run to Copper River Delta, 2017.

		Weekly escapement indices (statistical week ending date)[b]						
Drainage	System[a]	9/2	9/16	9/23	10/7	Site[c]	System[d]	Anticipated (by drainage)
Eyak River	Eyak River	600	50	NS	100	100	900	6,916
	East Shore Beaches	200	200	0	300	300		
	West Shore Beaches	NS	500	200	200	200		
	Middle Arm Beaches	NS	500	0	200	200		
	North Shore Beaches	NS	0	0	100	100		
	Hatchery Creek Delta	NS	300	NS	50	50	550	
	Hatchery Creek	NS	300	NS	500	500		
	Power Creek Delta	NS	300	275	50	50	1,050	
	Power Creek	NS	200	NS	1,000	1,000		
Ibeck Creek	Ibeck Creek	1,200	6,300	3,800	8,100	8,100	8,100	6,227
Scott River	Scott Lake	0	50	NS	200	200	200	1,429
	Scott River	0	0	NS	0	0		
	Elsner Lake [e]	0	0	NS	0	0		
Alaganik Slough	Alaganik Slough	0	400	NS	100	100		2,591
	18/20 Mile Creek	10	1,000	260	700	700	700	
	McKinley Lake	NS	0	60	100	100	200	
	Salmon Creek West Fork	NS	500	80	100	100	2,350	
	Salmon Creek East Fork	NS	250	NS	2,250	2,250		
26/27 Mile Creek	26/27 Mile Creek	0	450	2,700	1,400	2,700	2,700	829
39 Mile Creek	39 Mile Creek	50	1,700	NS	1,600	1,700	1,700	3,831
Goat Mountain Cr.	Goat Mountain Creek	15	600	NS	700	700	700	1,181
Pleasant Creek	Pleasant Creek	50	1,550	785	1,650	1,650	1,650	
Martin River	Martin River - Lower	NS	NS	NS	NS	NS	1,200	6,522
	Ragged Point River	75	200	0	860	860	1,160	849
	Ragged Point Lake Outlet	NS	150	0	100	100		
	Ragged Point Lake	NS	0	50	200	200		
	Martin River - Upper	1,100	2,500	NS	1,200	1,200		

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Drainage	System[a]	Weekly escapement indices (statistical week ending date)[b] 9/2	9/16	9/23	10/7	Site[c]	System[d]	Anticipated (by drainage)
Martin River	Martin Lake Outlet	0	600	150	100	100	1,750	1,936
	Martin Lake	20	450	150	1,000	1,000		
	Martin Lake Feeders	0	100	200	650	650		
	Pothole River	NS	50	75	1,000	1,000	2,500	1,370
	Pothole Lake	NS	1,000	NS	1,500	1,500		
	Little Martin River	90	9,300	5,500	8,800	9,300	9,300	5,413
	Little Martin Lake	NS	0	0	100	0		
Tokun	Tokun Springs	NS	300	NS	500	500	1,400	1,376
	Tokun River	NS	100	100	350	100		
	Tokun Lake Outlet	NS	600	NS	100	600		
	Tokun Lake	NS	200	NS	200	200		
Martin River Slough	Martin River Slough	NS	1,200	1,650	5,850	5,850	5,850	9,531
Copper River aerial survey daily total		3,410	31,900	16,035	41,910	43,760	43,760	
Lower SEG		16,147	18,286	16,908	17,896			32,000
Average SEG, (average projected escapement)		25,229	28,571	26,418	27,962			50,000
Upper SEG		33,807	38,285	35,401	37,470			67,000

[a] The system represents the majority of known coho salmon spawning locations in the Copper River Delta.

[b] The surveys provide information about the relative strength of escapement among years and within a year, time to spawning sites and relative escapement strength among sites. The indices are not intended to provide an actual estimate of escapement but have served that purpose in the absence of any other escapement estimating method.

[c] Where the survey site is a terminal spawning area the peak count is used. However, if the site is a schooling area for migratory fish bound for further sites upstream, the count which minimizes possible duplication of counts across dates is selected.

[d] The sum of the index counts by site within the index systems.

[e] This stream is not included in the estimated delta-wide escapement; it is a non-index stream.

Appendix A17.–Copper River Delta and Bering River coho salmon escapement indices, 2007–2017.

Stream/Lake [a,b]	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	10-yr Average	2017
Eyak Lake	5,810	17,030	950	13,360	640	3,950	3,880	4,450	5,075	3,200	5,835	900
Hatchery Creek	710	370	2,320	640	2,000	100	40	1,300	950	500	893	550
Power Creek	800	1,140	990	350	2,520	150	50	760	225	4,500	1,149	1,050
Ibeck Creek	13,200	10,265	9,963	3,381	14,200	7,600	9,150	12,500	8,100	31,500	11,986	8,100
Scott & Elsner River [c]	1,520	3,281	1,170	700	380	575	50	360	100	200	834	200
18/20 Mile	550	161	150	144	310	450	120	400	600	250	314	700
McKinley Lake	280	300	450	630	75	100	400	450	300	650	364	200
Salmon Creek	150	700	1,540	730	1,620	1,300	850	1,950	1,900	2,500	1,324	2,350
26/27 Mile	480	10	100	0	1,150	475	1,800	1,600	290	4,000	991	2,700
39 Mile	3,300	5,460	1,570	1,340	2,800	2,400	2,300	2,600	1,700	7,500	3,097	1,700
Goat Mountain	1,400	920	1,220	331	210	400	900	1,200	350	250	718	700
Pleasant Creek	500	2,800	680	1,700	245	440	1,500	1,110	400	1,850	1,123	1,650
Martin River	8,830	9,323	1,651	5,560	2,100	1,420	350	3,820	4,475	6,000	4,353	1,200
Ragged Point River/Lake	260	302	590	690	1,100	4,000	2,500	1,050	3,600	1,050	1,514	1,160
Martin Lake	4,775	2,770	1,360	3,511	450	2,350	2,750	2,150	3,250	1,100	2,447	1,750
Pothole Lake	870	3,661	2,750	2,000	1,400	2,300	120	550	750	800	1,520	2,500
Little Martin Lake	2,700	8,760	2,810	460	4,500	4,700	3,800	2,900	4,750	2,300	3,768	9,300
Tokun River/Lake	830	3,020	850	1,370	1,350	3,200	620	1,175	1,050	900	1,437	1,400
Martin River Slough	5,770	7,780	10,180	4,180	1,475	1,400	3,500	4,075	4,300	7,350	5,001	5,850
Copper River Delta Total	52,735	78,053	41,294	41,077	38,525	37,310	34,680	44,400	42,165	76,400	48,664	43,960
Katalla River	8,900	5,510	3,340	1,590	1,430	950	800	1,550	1,000	750	2,582	3,300
Bering River/Lake	13,052	4,910	8,491	6,320	5,520	5,700	7,750	10,675	4,300	2,300	6,902	3,150
Dick Creek	1,660	530	1,410	1,210	2,050	2,000	2,800	1,300	1,750	0	1,471	700
Shepherd Creek	60	130	370	10	20	150	0	0	0	8,000	874	NS
Nichawak River	3,200	11,900	10,120	4,690	6,800	3,750	3,800	6,500	5,100	300	5,616	1,000
Gandil River	640	2,650	840	1,610	820	500	1,100	1,500	700	8,500	1,886	10,500
Controller Bay	5,680	7,332	4,251	6,330	2,250	2,555	2,570	4,950	2,700	6,300	4,492	12,000
Bering River Area Total	33,192	32,962	28,822	21,760	18,890	15,605	18,820	26,475	15,550	26,150	23,823	30,650
Copper/Bering Total	85,927	111,015	70,116	62,837	57,415	52,915	53,500	70,875	57,715	102,550	72,487	74,610

[a] This table is based on peak aerial survey index counts from the majority of known coho salmon spawning areas in the Copper and Bering river deltas. These indices are not intended to provide a true estimate of total escapement but a comparable index, based upon the best data available, across years.

[b] The stream/lake in this table represents combined survey sites corresponding to the system designations for the current year survey results.

[c] Not an index stream.

Appendix A18.–Estimated age and sex composition of coho salmon harvested in the Copper River District commercial common property drift gillnet fishery, 2017.

Strata combined:	05/22 – 10/10	Brood year and age class			
Sampling dates:	08/22 – 09/20	2014	2013	2012	
Sample size:	897	1.1	2.1	3.1	Total
Female	Percentage of sample	26.4	17.5	1.2	45.1
	Number in harvest	80,748	53,714	3,815	138,277
Male	Percentage of sample	34.4	19.4	1.1	54.9
	Number in harvest	105,278	59,295	3,436	168,010
Total	Percentage of sample	60.7	36.9	2.4	100.0
	Number in harvest	186,026	113,010	7,251	306,287
	Standard error	6,262	6,162	2,063	

Appendix A19.–Total commercial salmon harvest by species in the Bering River District, 1974–2017.

Year		Chinook	Sockeye	Coho	Pink	Chum	Total
1974		32	4,208	28,615	7	2	32,864
1975		162	21,637	24,162	0	0	45,961
1976		228	30,908	42,423	43	1	73,603
1977		127	14,445	47,218	192	221	62,203
1978		331	33,554	91,097	266	2,391	127,639
1979		385	139,015	114,046	6,895	23,094	283,435
1980	[a]	0	0	108,872	0	0	108,872
1981		200	55,585	82,626	9,882	8,307	156,600
1982		254	129,667	144,752	47	333	275,053
1983		610	179,273	117,669	851	4,615	303,018
1984	[b]	330	91,784	214,632	309	20,408	327,463
1985	[b]	215	26,561	419,276	214	9,642	455,908
1986	[c]	128	19,038	115,809	15	243	135,233
1987	[c]	34	16,926	15,864	54	7	32,885
1988	[c]	19	7,152	86,539	23	181	93,914
1989	[c]	30	9,225	26,952	7	2	36,216
1990	[c]	14	8,332	42,952	2	1	51,301
1991	[c]	28	19,181	110,951	4	195	130,359
1992	[c]	21	19,721	125,616	4	1	145,363
1993	[c]	130	33,951	115,833	82	22	150,018
1994	[c]	121	27,926	259,003	34	63	287,147
1995	[c]	44	21,585	282,045	26	229	303,929
1996	[c]	111	37,712	93,763	0	30	131,616
1997	[c]	23	9,651	97	2	0	9,773
1998	[c]	70	8,439	12,284	5	2	20,800
1999	[c]	42	13,697	9,852	204	96	23,891
2000	[c]	5	1,279	56,329	0	0	57,613
2001	[c]	76	5,450	2,715	0	0	8,241
2002	[c]	14	235	108,522	0	0	108,771
2003	[c]	151	18,266	59,481	33	0	77,931
2004	[c]	87	13,165	95,595	2	21	108,870
2005	[c]	277	77,464	43,030	9,327	14	130,112
2006	[c]	238	36,867	56,713	54	39	93,911
2007	[c]	88	16,470	9,305	6	1	25,870
2008	[c]	42	1,175	40,380	8	1	65,601
2009	[c]	15	4,157	45,522	1	5	49,700
2010	[c]	0	51	80,560	2	0	80,613
2011	[c]	1	6	19,956	8	0	19,971
2012	[c]	1	0	46,169	1	0	46,171
2013	[c]	16	3,286	46,959	2	16	50,279
2014	[c]	0	50	97,637	4	0	97,691
2015	[c]	13	2,137	12,106	10	1	14,267
2016		52	9,809	80,094	22	122	90,099
10-year average		45	7,187	52,330	11	18	59,591
2017	[c]	36	2,578	119,090	105	15	121,824

[a] In 1980 fishing was prohibited before August 11.

[b] A new Kayak Island Subdistrict management plan that allowed earlier opening date (June 10) and set a closure of the subdistrict on July 10 or when a total of 93,000 sockeye salmon were harvested.

[c] The Alaska Board of Fisheries closed the Kayak Island Subdistrict due to interceptions of non-local stocks.

Appendix A20.–Bering River District commercial drift gillnet salmon harvest by period, 2017.

Period	Date	News release dates	Hours	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
						Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
01	05/18–05/18	05/03	12	19	19	31	706	2,353	11,090	0	0	0	0	0	0
02	05/22–05/22	05/20	12	0	0	0	0	0	0	0	0	0	0	0	0
03	05/25–05/25	05/24	9	0	0	0	0	0	0	0	0	0	0	0	0
04	05/29–05/29	05/27	10	0	0	0	0	0	0	0	0	0	0	0	0
05	06/01–06/01	05/31	12	0	0	0	0	0	0	0	0	0	0	0	0
06	06/05–06/05	06/03	12	2	2	1	7	71	403	0	0	0	0	0	0
07	06/08–06/08	06/07	12	0	0	0	0	0	0	0	0	0	0	0	0
08	06/12–06/12	06/10	12	0	0	0	0	0	0	0	0	0	0	0	0
09	06/15–06/15	06/14	12	0	0	0	0	0	0	0	0	0	0	0	0
10	06/19–06/19	06/17	12	0	0	0	0	0	0	0	0	0	0	0	0
11	06/22–06/23	06/21	24	0	0	0	0	0	0	0	0	0	0	0	0
12	06/26–06/27	06/24	24	0	0	0	0	0	0	0	0	0	0	0	0
13	06/29–06/30	06/28	24	0	0	0	0	0	0	0	0	0	0	0	0
14	07/03–07/04	07/01	24	0	0	0	0	0	0	0	0	0	0	0	0
15	07/06–07/07	07/05	24	0	0	0	0	0	0	0	0	0	0	0	0
16	07/10–07/11	07/08	36	0	0	0	0	0	0	0	0	0	0	0	0
17	07/13–07/14	07/12	36	0	0	0	0	0	0	0	0	0	0	0	0
18	07/17–07/18	07/15	24	0	0	0	0	0	0	0	0	0	0	0	0
19	07/20–07/21	07/19	24	0	0	0	0	0	0	0	0	0	0	0	0
20	07/24–07/24	07/22	12	0	0	0	0	0	0	0	0	0	0	0	0
21	07/27–07/28	07/26	24	0	0	0	0	0	0	0	0	0	0	0	0
22	07/31–07/31	07/29	12	0	0	0	0	0	0	0	0	0	0	0	0
23	08/03–08/03	08/02	12	0	0	0	0	0	0	0	0	0	0	0	0
24	08/07–08/07	08/05	12	0	0	0	0	0	0	0	0	0	0	0	0
25	08/10–08/10	08/09	12	0	0	0	0	0	0	0	0	0	0	0	0
26	08/14–08/15	08/12	24	2	2	4	54	122	707	321	2,721	51	202	14	102

-continued-

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Period	Date	News release dates	Hours	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
						Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
27	08/21–08/22	08/19	24	6	7	0	0	7	41	603	4,453	2	8	1	4
28	08/28–08/29	08/25	24	7	12	0	0	3	19	1,723	14,208	5	15	0	0
29	08/31–09/01	08/29	24	18	29	0	0	12	68	5,870	49,509	10	38	0	0
30	09/04–09/05	09/01	24	53	84	0	0	0	0	22,732	193,108	7	24	0	0
31	09/07–09/08	09/06	24	65	118	0	0	2	12	20,798	177,280	7	24	0	0
32	09/11–09/12	09/09	24	49	98	0	0	2	12	19,546	165,930	7	24	0	0
33	09/14–09/15	09/13	36	61	120	0	0	4	24	23,743	199,726	11	35	0	0
34	09/18–09/19	09/13	36	57	118	0	0	2	12	16,504	135,645	5	20	0	0
35	09/21–09/22	09/20	36	30	48	0	0	0	0	6,103	50,451	0	0	0	0
36	09/25–09/26	09/20	36	7	11	0	0	0	0	1,147	9,190	0	0	0	0
37	09/28–09/29	09/27	36	0	0	0	0	0	0	0	0	0	0	0	0
38	10/02–10/10	10/02	204	0	0	0	0	0	0	0	0	0	0	0	0
Total			991	114	668	36	767	2,578	12,388	119,090	1,002,221	105	390	15	106
Average weights							21.31		4.81		8.42		3.71		7.07

Note: En dashes indicate confidential data. Additional information relevant to each fishing period, including area opened to fishing, may be found on the applicable news release (NR) available through ADF&G's Commercial Fishing News Release System at http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main. Required parameters for searching the ADF&G Commercial Fishing News Release System include: Effective Year = 2013; Species Group = Salmon; Management Area = Prince William Sound. Queries made through the ADF&G Commercial Fishing News Release System will provide results sorted by Publication Date.

Appendix A21.–Aerial escapement indices by statistical week and location for sockeye salmon returning to the Bering River District, 2017.

Drainage	System[a]	Weekly escapement indices (Statistical week ending date listed)[b] 6/17	6/24	7/8	7/15	7/22	8/12	9/23	Site[c]	System[d]	Anticipated (by drainage)
Bering River	Bering River	475	900	350	130	250	30	0	350	15,750	21,903
	Bering Lake	1,000	7,200	5,400	3,000	4,100	1,000	175	5,400		
	Dick Creek	0	0	10,000	10,500	8,200	3,100	350	10,000		
	Shepherd Creek Lagoon	NS	NS	NS	50	0	200	NS	200	2,075	4,375
	Shepherd Creek	NS	NS	NS	1,000	2,400	1,800	NS	1,800		
	Carbon Creek	NS	NS	NS	20	20	75	NS	75		
	Clear Creek	NS	NS	NS	50	250	900	NS	900	900	1,197
	Kushtaka Lake	NS	NS	NS	0	10	50	NS	50	90	
	Shockum Creek	NS	NS	NS	0	0	40	NS	40		1,226
Katalla River	Katalla River [e]	0	20	NS	250	300	0	50	300	300	
Bering River District weekly index		1,475	8,120	15,750	15,000	15,530	7,195	575	19,115	19,115	
Lower SEG		4,048	6,092	11,051	11,004	9,401	2,416	565			15,000
Average SEG, (average projected esc.)		6,477	9,747	17,682	17,606	15,042	3,866	903			24,000
Upper SEG		8,906	13,402	24,313	24,208	20,683	5,316	1,242			33,000

Note: NS signifies that no survey was flown.

[a] Survey systems represent the majority of known sockeye salmon spawning locations in the Bering River drainage.

[b] Surveys provide information about the relative strength of escapement among years and within a year, time for spawning sites and relative escapement strength among sites. The indices are not intended to provide an actual estimate of escapement but have served that purpose in the absence of any other escapement estimating method.

[c] When the survey site is a terminal spawning area the peak count is used. However, if the site is a schooling area for migratory fish bound for sites further upstream, the index count which minimizes duplicate counts across dates is selected.

[d] The sum of the index counts by site within a system.

[e] This stream is not included in the indexed escapement for the Bering River drainage; it is a non-index stream.

Appendix A22.–Aerial escapement indices by statistical week and location for coho salmon returning to the Bering River District, 2017.

		Weekly escapement indices (Statistical week ending date listed)[b]						
Drainage	System[a]	9/16	9/23	10/7	10/14	Site[c]	System[d]	Anticipated, (by drainage)
Bering River	Bering River[e]	550	280	NS	NS	550	3,150	7,720
	Bering Lake	2,600	2,100	NS	120	2,600		
	Dick Creek	700	450	500	50	700	700	
	Shepherd Creek - Lagoon	NS	NS	NS	NS	NS	0	
	Shepherd Creek	NS	NS	NS	NS	NS		
	Carbon Creek [f]	NS	NS	NS	NS	NS		
Katalla River	Katalla River	600	2,900	3,300	NS	3,300	3,300	4,993
Lower Bering River	Gandil River	150	450	NS	1,000	1,000	1,000	2,910
	Nichawak River	7,700	10,500	NS	8,250	10,500	10,500	
Controller Bay	Campbell River	7,700	9,900	NS	7,000	9,900	12,000	7,378
	Edwardes River	500	450	NS	1,650	1,650		
	Okalee River	450	NS	NS	300	450		
	Other Clear Streams [f]	0	0	NS	0	0		
Bering River District weekly index		20,950	27,030	3,800	18,370	30,650	30,650	
Lower SEG		6,969	5,041	5,156	1,042			13,000
Average SEG, (average projected escapement)		12,330	8,919	9,122	1,844			23,001
Upper SEG		17,691	12,797	13,089	2,645			33,000

Note: NS signifies that no survey was flown.

[a] Survey systems represent the majority of known coho salmon spawning locations in the Bering River drainage.

[b] Surveys provide information about the relative strength of escapement among years and within a year, time for spawning sites and relative escapement strength among sites. The indices are not intended to provide an actual estimate of escapement but have served that purpose in the absence of any other escapement estimating method.

[c] When the survey site is a terminal spawning area the peak count is used. However, if the site is a schooling area for migratory fish bound for sites further upstream, the index count which minimizes duplicate counts across dates is selected.

[d] The sum of the index counts by site within a system

[e] Counts include coho salmon observed in the Don Miller Hill tributaries.

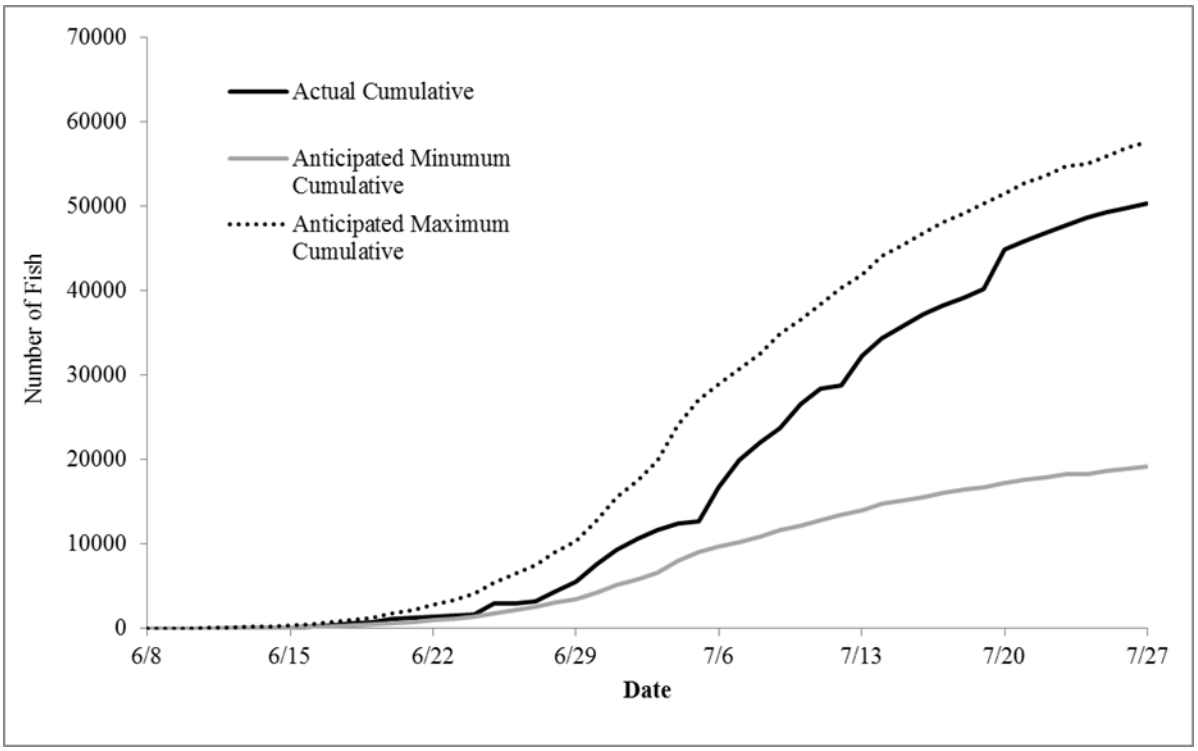
[f] This stream is not included in the indexed escapement delta-wide; it is a non-index stream.

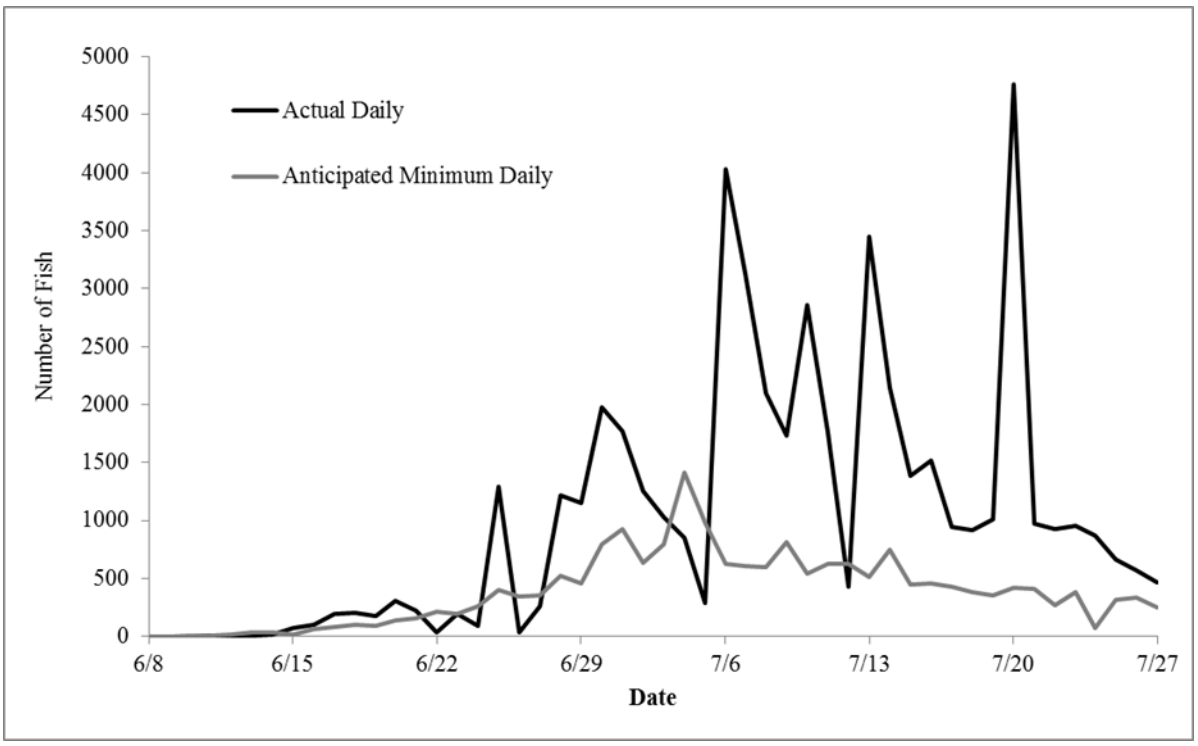
APPENDIX B: COGHILL DISTRICT, UNAKWIK DISTRICT AND PORT CHALMERS SUBDISTRICT

Appendix B1.–Daily and cumulative salmon escapement through the Coghill River weir, 2017.

	Sockeye salmon		Pink salmon			Sockeye salmon		Pink salmon	
Date	Daily	Cumulative	Daily	Cumulative	Date	Daily	Cumulative	Daily	Cumulative
06/08	0	0	0	0	07/03	1,027	11,597	11	34
06/09	0	0	0	0	07/04	849	12,446	12	46
06/10	0	0	0	0	07/05	288	12,734	12	58
06/11	7	7	0	0	07/06	4,030	16,764	234	292
06/12	0	7	0	0	07/07	3,126	19,890	650	942
06/13	5	12	0	0	07/08	2,095	21,985	484	1,426
06/14	15	27	0	0	07/09	1,735	23,720	774	2,200
06/15	73	100	0	0	07/10	2,856	26,576	4,457	6,657
06/16	96	196	0	0	07/11	1,764	28,340	4,019	10,676
06/17	197	393	0	0	07/12	432	28,772	1,458	12,134
06/18	206	599	0	0	07/13	3,448	32,220	29,076	41,210
06/19	179	778	0	0	07/14	2,147	34,367	43,628	84,838
06/20	309	1,087	0	0	07/15	1,388	35,755	40,199	125,037
06/21	220	1,307	0	0	07/16	1,513	37,268	35,580	160,617
06/22	32	1,339	0	0	07/17	947	38,215	26,809	187,426
06/23	198	1,537	0	0	07/18	914	39,129	24,364	211,790
06/24	94	1,631	0	0	07/19	1,010	40,139	28,446	240,236
06/25	1,287	2,918	0	0	07/20	4,758	44,897	14,390	254,626
06/26	37	2,955	1	1	07/21	975	45,872	14,796	269,422
06/27	255	3,210	0	1	07/22	924	46,796	22,995	292,417
06/28	1,212	4,422	1	2	07/23	956	47,752	21,255	313,672
06/29	1,150	5,572	11	13	07/24	868	48,620	26,573	340,245
06/30	1,979	7,551	7	20	07/25	658	49,278	15,709	355,954
07/01	1,767	9,318	0	20	07/26	565	49,843	16,037	371,991
07/02	1,252	10,570	3	23	07/27	469	50,312	15,547	387,538

Appendix B2.–Anticipated cumulative and daily sockeye salmon escapement based on 3-year running averages versus actual escapement through Coghill River weir, 2017.





Appendix B3.–Salmon escapement by species in the Coghill District, 1971–2017.

Year	Sockeye[a]	Pink[b]	Chum[b]	Year	Sockeye[a]	Pink[b]	Chum[b]
1971	15,000	62,160	6,600	1995	30,382	46,029	11,596
1972	51,000	30,960	28,160	1996	38,693	104,781	19,669
1973	55,000	493,780	72,610	1997	35,517	52,961	3,101
1974	22,333	56,940	29,280	1998	28,923	85,968	22,764
1975	34,855	452,430	3,640	1999	59,311	168,816	5,057
1976	9,056	53,908	31,398	2000	28,446	223,646	20,488
1977	31,562	320,680	79,957	2001	38,558	148,665	13,388
1978	42,284	67,084	15,966	2002	28,323	54,882	7,430
1979	48,281	125,544	7,823	2003	75,427	375,147	19,729
1980	142,253	148,066	20,919	2004	30,569	36,717	5,000
1981	156,112	140,436	2,389	2005	30,313	528,264	11,979
1982	180,314	309,202	21,586	2006	23,479	145,511	15,900
1983	38,783	284,164	55,127	2007	70,001	197,405	14,052
1984	63,622	365,226	13,500	2008	29,298	145,177	39,660
1985	163,311	238,728	14,514	2009	23,186	125,907	5,208
1986	71,095	109,798	16,300	2010	24,312	355,108	51,589
1987	187,263	67,761	22,472	2011	102,359	257,020	16,368
1988	72,052	42,985	42,536	2012	72,678	172,611	10,281
1989	37,751	48,802	22,434	2013	17,231	640,414	11,369
1990	8,949	45,558	20,494	2014	21,836	63,290	9,491
1991	9,752	84,790	7,055	2015	13,584	801,201	15,444
1992	29,642	23,122	7,583	2016	8,708	171,362	15,444
1993	9,232	41,666	7,404	10-year average	38,319	292,949	18,891
1994	7,264	65,648	14,176	2017	50,312	187,159	13,666

[a] Escapement count of sockeye salmon past the Coghill River weir.

[b] Pink and chum salmon escapements indexed for streams by aerial survey. Historical data revised in 1990.

Appendix B4.–Coghill District commercial common property drift gillnet salmon harvest by period, 2017.

		NR		Permits		Chinook		Sockeye		Coho		Pink		Chum	
Period	Date	Date	Hours	fished	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1	6/1–6/2	5/20	36	48	95	8	125	206	1,251	0	0	0	0	5,951	48,543
2	6/5–6/6	6/3	24	59	105	4	59	300	1,763	0	0	0	0	8,086	66,143
3	6/8–6/9	6/7	24	27	48	4	65	165	1,004	0	0	0	0	2,849	24,310
4	6/12–6/13	6/10	24	43	86	2	39	885	5,158	0	0	0	0	8,379	69,737
5	6/15–6/16	6/14	24	83	135	8	80	1,440	8,847	0	0	0	0	10,334	84,100
6	6/19–6/20	6/17	24	131	262	10	154	2,688	15,783	0	0	1	4	37,523	307,128
7	6/22–6/23	6/21	24	165	385	2	19	3,500	21,300	0	0	10	44	67,461	536,660
8	6/26–6/28	6/24	48	259	1,010	0	0	11,381	66,532	4	31	9	34	283,181	2,244,664
9	6/29	6/28	14	226	500	1	16	5,301	29,900	4	26	183	733	114,513	879,839
10	6/30	6/28	14	192	283	0	0	1,890	11,342	0	0	24	85	44,903	348,728
11	7/1	6/28	14	227	367	1	15	1,393	8,595	0	0	34	141	79,770	610,784
12	7/2	7/1	14	140	283	1	28	1,591	9,347	0	0	53	192	66,709	513,217
13	7/3–7/5	7/1	48	277	1,143	3	56	7,167	44,272	65	389	722	2,894	297,021	2,316,405
14	7/6–7/8	7/5	48	297	1,062	1	17	7,069	42,560	8	62	18,284	75,294	269,836	2,074,018
15	7/9	7/7	14	218	540	2	48	6,126	36,994	10	74	17,731	72,185	213,447	1,621,490
16	7/10–7/12	7/8	60	297	1,006	6	98	17,810	99,971	15	113	53,614	199,290	345,381	2,587,018
17	7/13–7/16	7/12	84	245	846	10	143	16,388	97,626	60	509	74,154	318,497	190,784	1,370,362
18	7/17–7/19	7/15	60	141	497	6	69	7,974	47,784	151	1,072	85,960	335,299	96,042	726,834
19	7/20–7/23	7/19	84	117	382	2	14	8,060	47,967	163	1,235	88,971	363,761	44,065	334,459
20	7/24	7/23	14	43	74	0	0	2,411	13,746	35	283	23,405	86,113	7,719	52,789
21	7/28	7/27	14	33	43	0	0	1,128	6,726	68	633	15,901	51,360	2,255	16,241
22	7/30	7/29	14	32	59	0	0	1,599	8,899	78	529	24,965	94,713	3,201	24,397
23	8/1	7/31	14	69	97	0	0	1,975	11,200	259	1,723	36,436	130,351	3,374	25,227
24	8/4	8/2	14	69	86	0	0	1,000	6,063	396	2,657	25,293	90,585	2,184	16,320
25	8/6	8/5	14	39	50	3	40	579	3,383	247	1,750	21,027	71,662	1,310	9,721
26	8/8	8/5	14	73	88	0	0	747	4,588	488	3,438	30,422	108,603	1,499	10,867
27	8/10	8/9	14	31	46	0	0	238	1,412	171	1,222	27,792	98,389	575	4,023
28	8/12	8/11	14	47	73	0	0	266	1,546	560	3,799	24,634	91,390	1,033	5,767
29	8/14	8/12	14	32	37	0	0	177	1,038	214	1,465	15,755	57,134	364	2,525
30	8/15	8/14	12	35	48	0	0	110	659	236	1,577	22,327	82,287	175	1,234
31	8/16	8/14	12	33	41	0	0	153	837	378	2,448	23,140	92,597	251	1,698
32-38	8/24–9/2								No harvest reported						
39	9/4–9/5	9/1	24	12	20	0	0	1	6	1,435	10,731	1,984	6,347	3	21

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Period	Date	NR Date	Hours	Permits fished	Landings	Chinook Number	Chinook Pounds	Sockeye Number	Sockeye Pounds	Coho Number	Coho Pounds	Pink Number	Pink Pounds	Chum Number	Chum Pounds
40	9/7–9/9	9/5	48	19	54	0	0	0	0	5,765	40,222	2,529	9,473	0	0
41	9/11–9/13	9/9	48	19	43	0	0	0	0	3,355	24,155	159	564	0	0
42-45	9/18–9/28	No harvest reported													
Total				397	9,894	74	1,085	111,718	658,099	14,165	100,143	635,519	2,440,021	2,210,178	16,935,269
Average weights							14.7		5.9		7.1		3.8		7.7

Note: Additional information relevant to each fishing period, including area opened to fishing, may be found on the applicable news release (NR) available through ADF&G's Commercial Fishing News Release System at http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main. Required parameters for searching the ADF&G Commercial Fishing News Release System include: Effective Year = 2017; Species Group = Salmon; Management Area = Prince William Sound. Queries made through the ADF&G Commercial Fishing News Release System will provide results sorted by Publication Date.

Appendix B5.–Coghill District commercial common property purse seine salmon harvest by period, 2017.

		NR				Chinook		Sockeye		Coho		Pink		Chum	
Period	Date	Date	Hours	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
17	7/15	7/14	14	55	81	0	0	0	0	0	0	2,548	11,234	497,820	3,480,419
18	7/18	7/17	14	46	63	0	0	675	4,000	9	72	75,844	336,643	274,637	1,816,032
19	7/21–7/23	7/20	68	21	46	0	0	3,143	18,879	47	289	176,481	708,855	74,874	523,734
20	7/24	7/23	14	7	7	0	0	376	2,344	14	78	47,791	181,610	6,122	46,530
21	7/28	7/27	14	3	3	0	0	278	1,721	62	340	24,623	97,749	699	4,682
22	7/30	7/29	14	6	7	0	0	510	3,048	22	156	43,040	171,941	2,345	14,807
23-30	8/1–8/15									No harvest reported					
31	8/16	8/14	12	9	9	0	0	61	341	51	366	47,000	175,615	116	792
32-38	8/24–9/2									No harvest reported					
Total				89	216	0	0	5,043	30,333	205	1,301	417,327	1,683,647	856,613	5,886,996
Average weight									6.0		6.3		4.0		6.9

Note: Additional information relevant to each fishing period, including area opened to fishing, may be found on the applicable news release (NR) available through ADF&G's Commercial Fishing News Release System at http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main. Required parameters for searching the ADF&G Commercial Fishing News Release System include: Effective Year = 2017; Species Group = Salmon; Management Area = Prince William Sound. Queries made through the ADF&G Commercial Fishing News Release System will provide results sorted by Publication Date.

Appendix B6.–Commercial common property harvest by species in the Coghill District, 2007–2017.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
			Drift gillnet			
2007	89	173,430	60,982	65,407	858,179	1,158,087
2008	103	177,974	80,527	854,465	2,308,231	3,421,300
2009	174	103,415	19,168	276,925	1,323,728	1,723,410
2010	206	87,465	5,498	3,333,106	2,512,005	5,938,280
2011	220	198,376	79,419	722,248	1,092,917	2,093,180
2012	147	383,289	7,724	1,125,888	2,256,983	3,774,031
2013	259	93,734	62,968	2,450,108	2,100,394	4,707,463
2014	76	159,167	151,723	1,096,425	642,964	2,050,355
2015	93	74,416	6,094	655,320	778,112	1,816,842
2016	82	63,125	5	8,962	1,530,937	1,603,111
10-year average	145	151,439	47,411	1,058,885	1,540,445	2,828,606
2017	74	111,718	14,165	635,519	2,210,178	2,971,654
			Purse seine			
2007	9	12,472	24,602	2,334,590	318,626	2,690,299
2008	14	551	36,831	6,585,095	9,358	6,631,849
2009	3	1,337	1,758	1,028,789	12,926	1,044,813
2010	0	779	434	10,919,455	3,207	10,923,875
2011	4	843	16,565	1,674,736	166	1,692,314
2012	15	16,055	10,203	3,987,252	284,931	4,298,457
2013	33	1,978	7,573	6,690,850	70,271	6,770,705
2014	0	299	8,536	901,916	325	911,076
2015	0	2,120	1,215	5,601,620	121,213	5,726,168
2016	0	44	6	4,583	100,547	105,180
10-year average	8	3,648	10,772	3,972,889	92,157	4,079,474
2017	0	5,043	205	417,327	856,613	1,279,188
			Combined purse seine and drift gillnet			
2007	98	185,902	85,584	2,399,997	1,176,804	3,848,385
2008	117	178,525	117,358	7,439,560	2,317,589	10,053,149
2009	177	104,752	20,926	1,305,714	1,336,654	2,768,223
2010	206	88,244	5,932	14,252,561	2,515,212	16,862,155
2011	224	199,219	95,984	2,396,984	1,093,083	3,785,494
2012	162	436,182	10,993	3,430,252	2,455,993	6,333,582
2013	292	95,712	70,541	9,140,958	2,170,665	11,478,168
2014	76	159,466	160,259	1,998,341	643,289	2,961,431
2015	93	76,536	7,309	6,256,940	899,325	7,240,203
2016	82	63,169	11	13,545	1,631,484	1,708,291
10-year average	153	158,771	57,490	4,863,485	1,624,010	6,703,908
2017	74	116,761	14,370	1,052,846	3,066,791	4,250,842

Appendix B7.–Estimated age and sex composition of escaped sockeye salmon through Coghill weir, 2017.

		Brood year and age class									
		2014	2013		2012		2011			2010	
		1.1	1.2	2.1	1.3	2.2	1.4	2.3	3.2	3.3	Total
Strata dates:	06/11 – 07/27										
Sampling date:	06/26 – 07/14										
Sample size:	958										
Female	Percentage of sample	0.3	19.6	0.0	19.5	0.4	0.1	0.3	0.1	0.0	40.4
	Number in escapement	158	9,873	0	9,821	210	53	158	53	0	20,324
Male	Percentage of sample	9.4	36.1	0.4	13.5	0.1	0.0	0.0	0.0	0.1	59.6
	Number in escapement	4,727	18,171	210	6,775	53	0	0	0	53	29,988
Total	Percentage of sample	9.7	55.7	0.4	33.0	0.5	0.1	0.3	0.1	0.1	100.0
	Number in escapement	4,884	28,044	210	16,596	263	53	158	53	53	50,312
	Standard error	482	808	105	765	117	53	91	53	53	

Appendix B8.–Commercial common property salmon harvest by period in the Unakwik District drift gillnet and purse seine fisheries, 2017.

Period	Date	NR Date	Hours	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
						Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
						Drift gillnet									
1	6/19–6/20	6/17	24	2	3					Confidential					
2	6/22–6/23	6/21	24	2	3					Confidential					
3	6/26–6/27									No harvest reported					
4	6/29–6/30									No harvest reported					
5	7/3–7/4	7/1	24	1	1					Confidential					
6	7/6–7/7									No harvest reported					
7	7/10–7/11	7/7	36	1	1					Confidential					
8-9	7/13–7/18									No harvest reported					
10	7/20–7/21	7/19	36	1	1					Confidential					
11	7/24–7/25									No harvest reported					
Total				4	9	0	0	551	2,698	0	0	196	927	56	440
						Purse seine									
1	6/19–6/20									No harvest reported					
2	6/22–6/23									No harvest reported					
3	6/26–6/27									No harvest reported					
4	6/29–6/30	6/28	24	1	1					Confidential					
5	7/3–7/4									No harvest reported					
6	7/6–7/7									No harvest reported					
7	7/10–7/11									No harvest reported					
8-9	7/13–7/18									No harvest reported					
10	7/20–7/21									No harvest reported					
11	7/24–7/25									No harvest reported					
Total				1	1					Confidential					

Note: Additional information relevant to each fishing period, including area opened to fishing, may be found on the applicable news release (NR) available through ADF&G's Commercial Fishing News Release System at http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main. Required parameters for searching the ADF&G Commercial Fishing News Release System include: Effective Year = 2016; Species Group = Salmon; Management Area = Prince William Sound. Queries made through the ADF&G Commercial Fishing News Release System will provide results sorted by Publication Date. Three permits or less were fished. Period results are confidential.

Appendix B9.–Commercial common property salmon harvest by species in the Unakwik District, 2007–2017.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
			Drift gillnet			
2007	1	15,146	0	0	222	15,369
2008	0	389	0	878	58	1,325
2009	1	1,975	0	0	374	2,350
2010	0	15	0	0	0	15
2011	0	1,390	0	1	30	1,421
2012	0	6,207	4	246	264	6,723
2013	1	776	0	203	217	1,008
2014	0	459	0	3	30	492
2015	1	2,958	0	55	23	3,037
2016	0	259	0	0	481	740
10-year average	0	2,957	0	139	170	3,248
2017	0	551	0	196	56	803
			Purse seine			
2007	0	547	0	0	4	551
2008	0	0	0	0	0	0
2009	0	1,153	0	0	10	1,163
2010	1	31	0	34	26	92
2011	0	0	0	0	0	0
2012	0	370	0	18	148	536
2013	0	2,815	1	8,199	159	3,056
2014	1	686	0	2	243	932
2015	7	1,994	0	346	245	2,592
2016			Confidential			
10-year average	1	844	0	955	93	991
2017			Confidential			
			Combined purse seine and drift gillnet			
2007	1	15,693	0	0	226	15,920
2008	0	389	0	878	58	1,325
2009	1	3,128	0	0	384	3,513
2010	1	46	0	34	26	107
2011	0	1,390	0	1	30	1,421
2012	0	6,577	4	264	412	7,257
2013	1	3,591	1	284	187	4,064
2014	1	1,145	0	5	273	1,424
2015	8	4,952	0	401	268	5,629
2016	0	259	0	0	481	740
10-year average	1	3,717	1	187	235	4,140
2017			Confidential			

Note: Less than 3 permits fished. Results are confidential.

Appendix B10.–Port Chalmers commercial common property purse seine harvest of salmon by period, 2017.

						Chinook		Sockeye		Coho		Pink		Chum	
Period	Date	NR date	Hours	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1	6/1–6/4	5/31	84	6	10	5	57	4	21	0	0	8	52	470	3,963
2	6/5–6/7	6/3	60	6	7	0	0	5	27	0	0	0	0	479	4,184
3	6/8–6/11	6/3	84	34	65	4	35	764	4,647	5	29	331	1,427	96,198	734,077
4	6/12–6/14	6/7	48	51	74	15	109	1,088	6,812	0	0	417	1,953	116,621	866,880
5	06/16	6/14	12	21	22	21	256	3	18	0	0	2	7	3,881	32,309
6	6/19–6/20	6/17	24	38	41	34	401	262	1,597	0	0	526	2,445	12,634	95,976
7	6/22–6/24	6/21	48	59	76	13	177	1,234	7,701	24	245	9,409	40,235	80,093	647,201
8	6/26–6/28	6/24	48	61	93	2	40	350	2,185	54	418	3,634	16,323	59,368	469,580
9	6/29	6/28	12	14	15	0	0	8	48	0	0	139	506	10,605	90,124
10	7/1	6/29	12	22	26	0	0	4	26	0	0	188	910	7,437	58,866
11	7/3	7/1	12	22	22	0	0	369	2,272	3	23	37,059	167,736	10,051	79,224
12	7/6	7/5	12	78	82	0	0	614	3,657	51	394	108,822	526,929	53,554	408,441
13	7/8	7/5	12	89	92	0	0	411	2,411	66	517	92,456	430,183	32,179	228,862
14	7/10	7/8	12	7	7	0	0	129	771	0	0	30,892	121,033	11,438	78,617
15	7/11	7/10	12	10	10	2	42	136	808	0	0	56,701	226,105	8,332	62,035
16	7/12	7/11	12	7	7	0	0	188	1,148	0	0	71,906	323,668	3,800	27,667
17	7/13	7/12	12	3	3	0	0	10	55	5	31	2,480	11,160	53	440
18	7/14	7/13	12	2	4	Confidential									
19	7/15	7/14	14	6	8	0	0	212	1192	43	365	56,802	231,028	2,538	18,889
20	7/16	7/15	14	1	1	Confidential									
21	7/17	7/16	14	3	3	0	0	0	0	0	0	31,856	127,423	3,197	22,378
22	7/18	7/17	14	16	26	0	0	368	2,286	46	276	173,620	772,268	3,514	27,266
23	7/21					No harvest reported									
24	7/24	7/23	14	3	3	0	0	145	871	7	53	40,696	162,782	723	5,064
25	7/28	7/27	14	15	19	1	8	466	2,820	189	1,107	134,889	518,782	1,685	12,351
26	7/30	7/29	14	12	14	0	0	276	1,292	55	357	132,133	541,188	434	3,132
27	8/1	7/31	14	18	20	0	0	151	855	403	2,414	160,521	662,129	703	4,999
28	8/4	8/2	14	41	41	0	0	327	1,829	656	3,855	337,729	1,290,528	1,735	11,969

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Period	Date	NR date	Hours	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
						Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
29	8/6	8/5	14	17	19	0	0	30	178	347	2,067	156,785	602,881	240	1,625
30	8/8	8/5	14	18	22	0	0	81	437	333	1,920	195,529	750,524	376	2,535
31	8/10	8/9	14	17	29	0	0	178	914	419	2,312	297,745	1,102,296	690	4,688
32	8/14	8/12	14	16	17	0	0	16	77	114	905	80,283	295,683	93	643
33	8/16	8/14	12	12	12	0	0	132	639	447	3,107	126,992	492,690	273	1,958
34	8/20	8/19	12	39	39	0	0	1,159	4,151	428	2,643	87,824	314,634	290	1,984
35	8/22	8/21	12	32	32	0	0	78	395	857	5,006	157,324	538,332	204	1,438
36	8/24	8/23	12	17	17	0	0	66	315	993	6,640	90,749	293,875	214	1,485
37	8/26	8/25	12	3	3	0	0	1	3	835	4,998	32,307	109,954	186	1,206
38-49	8/28–9/16									No harvest reported					
Total				160	979	97	1,125	9,275	52,582	6,380	39,682	2,718,232	10,715,768	533,387	4,076,305
Average weight							11.6		5.7		6.2		3.9		7.6

Note: Additional information relevant to each fishing period, including area opened to fishing, may be found on the applicable news release (NR) available through ADF&G's Commercial Fishing News Release System at http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main. Required parameters for searching the ADF&G Commercial Fishing News Release System include: Effective Year = 2017; Species Group = Salmon; Management Area = Prince William Sound. Queries made through the ADF&G Commercial Fishing News Release System will provide results sorted by Publication Date.

Appendix B11.–Total commercial common property harvest by species in the Port Chalmers Subdistrict, June 1–July 30, 2012–2017.

			Numbers of fish					
Year	Permits	Gear type	Chinook	Sockeye	Coho	Pink	Chum	Total
2012	54	Drift gillnet	46	486	27	13,525	325,137	339,221
2013	151	Drift gillnet	140	2,077	255	28,097	483,633	514,202
2014	113	Purse seine	247	9,743	7,077	3,025,399	186,600	3,229,066
2015	102	Drift gillnet	87	9,751	697	58,371	166,949	235,855
2016	132	Drift gillnet	81	3,009	13	19,360	196,377	218,840
5-year average	110		120	5,013	1,614	628,950	271,739	907,437
2017	143	Purse seine	97	7,045	527	990,829	528,381	1,526,879

APPENDIX C: ESHAMY DISTRICT

Appendix C1.–Total drift gillnet common property salmon harvest by period in the Eshamy District, 2017.

		NR				Chinook		Sockeye		Coho		Pink		Chum	
Period	Date	Date	Hours	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1	6/1–6/2	5/31	36	5	6	1	10	144	899	0	0	0	0	78	519
2	6/5–6/6	6/3	24	10	16	3	74	472	3,023	0	0	0	0	621	4,988
3	6/8–6/9	6/7	24	38	74	4	32	3,088	19,474	0	0	0	0	2,028	16,108
4	6/12–6/13	6/10	24	74	148	4	58	10,648	66,135	0	0	0	0	3,678	27,490
5	6/15–6/16	6/14	24	97	172	2	18	18,698	117,739	1	7	0	0	4,208	30,989
6	6/19–6/20	6/17	24	145	265	6	72	34,114	216,679	1	5	4	18	7,007	52,472
7	6/22–6/23	6/21	24	173	334	5	88	33,057	205,836	6	32	94	345	17,419	135,379
8	6/26–6/27	6/24	24	98	223	1	25	50,998	310,002	0	0	40	153	3,837	29,045
9	6/29–6/30	6/28	32	220	500	32	150	86,710	534,545	8	77	1,108	4,304	22,873	170,035
10	7/3–7/4	7/1	24	161	247	0	0	23,834	144,928	3	22	1,373	5,433	8,284	61,090
11	7/6–7/7	7/5	24	80	143	0	0	15,777	91,898	1	7	6,435	26,250	5,585	42,164
12	7/10	7/8	12	36	60	2	62	5,649	32,969	27	210	7,821	33,147	3,050	21,499
13	7/13	7/12	12	26	44	0	0	4,238	24,163	14	100	8,972	33,659	2,122	14,979
14	7/17–7/18	7/15	36	74	181	0	0	20,836	112,872	182	1,408	36,970	149,812	7,345	52,572
15	7/20–7/21	7/19	36	52	108	0	0	61,558	315,429	76	596	4,409	16,592	1,059	7,780
16	7/24–7/25	7/22	24	46	105	0	0	12,452	70,355	325	2,009	33,853	125,733	5,718	42,418
17	7/27–7/28	7/26	24	71	130	0	0	18,500	100,417	241	1,611	26,955	100,828	2,852	19,690
18	7/31–8/1	7/29	24	35	61	0	0	5,762	30,203	145	1,008	11,412	43,315	634	4,435
19	8/3–8/4	8/2	24	65	128	1	28	13,445	79,362	675	4,615	47,475	160,311	2,176	16,250
20	8/7–8/8	8/5	24	73	140	1	8	2,484	14,269	650	4,528	55,316	185,801	1,308	9,347
21	8/10–8/11	8/9	24	41	90	0	0	1,127	6,780	779	5,752	40,737	152,899	895	6,316
22	8/14–8/15								No harvest reported						
23	8/17–8/18	8/16	24	43	84	1	8	431	2,610	580	4,003	37,822	141,199	664	4,753
24	8/21–8/22	8/19	24	4	4	0	0	27	166	19	151	1,139	4,550	4	28
25-27	8/24–9/1								No harvest reported						
Total				339	3,263	63	633	424,049	2,500,753	3,733	26,141	321,935	1,184,349	103,445	770,346
Average weight							10.0		5.9		7.0		3.7		7.4

Note: Additional information relevant to each fishing period, including area opened to fishing, may be found on the applicable news release (NR) available through ADF&G's Commercial Fishing News Release System at http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main. Required parameters for searching the ADF&G Commercial Fishing News Release System include: Effective Year = 2017; Species Group = Salmon; Management Area = Prince William Sound. Queries made through the ADF&G Commercial Fishing News Release System will provide results sorted by Publication Date.

Appendix C2.–Total set gillnet common property salmon harvest by period in the Eshamy District, 2017.

		NR				Chinook		Sockeye		Coho		Pink		Chum	
Period	Date	Date	Hours	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1	6/1–6/2	5/31	36	11	29	1	14	1,004	4,845	0	0	0	0	34	310
2	6/5–6/6	6/3	24	16	33	3	25	1,106	5,291	0	0	0	0	112	1,054
3	6/8–6/9	6/7	24	20	32	1	15	1,533	7,387	0	0	0	0	82	708
4	6/12–6/13	6/10	24	23	60	1	5	5,295	25,936	0	0	0	0	99	780
5	6/15–6/16	6/14	24	25	72	0	0	10,046	54,249	0	0	0	0	375	2,842
6	6/19–6/20	6/17	24	26	86	0	0	19,627	100,125	1	7	1	4	362	2,758
7	6/22–6/23	6/21	24	28	86	0	0	11,946	66,699	0	0	10	40	1,144	9,327
8	6/26–6/27	6/24	24	27	105	0	0	27,324	134,482	0	0	15	76	859	6,158
9	6/29–6/30	6/28	32	27	119	0	0	20,514	113,889	3	18	94	493	2,606	18,908
10	7/3–7/4	7/1	24	29	99	0	0	18,176	98,292	1	8	312	1,615	2,150	15,681
11	7/6–7/7	7/5	24	28	100	0	0	17,019	90,962	4	26	1,922	8,725	2,671	20,664
12	7/10	7/8	12	28	70	0	0	7,853	40,470	11	69	6,170	25,762	2,846	20,602
13	7/13	7/12	12	27	74	0	0	8,476	39,075	34	211	8,317	31,761	1,452	10,724
14	7/17–7/18	7/15	36	22	87	1	4	14,761	66,812	100	613	7,468	28,255	1,400	10,663
15	7/20–7/21	7/19	36	13	25	0	0	2,419	10,886	9	57	751	2,787	152	1,166
16	7/24–7/25	7/22	24	8	36	0	0	8,867	40,381	28	163	4,818	17,582	657	4,931
17	7/27–7/28	7/26	24	3	14	0	0	1,620	8,457	4	24	1,656	7,573	352	2,082
18	7/31–8/1	7/29	24	3	14	0	0	3,713	18,226	2	14	566	2,202	52	408
19	8/3–8/4	8/2	24	5	11	0	0	480	3,052	13	82	2,587	8,246	107	802
20	8/7–8/8	8/5	24	4	11	0	0	161	893	5	35	2,514	9,854	31	201
21	8/10–8/11	8/9	24	1	3					Confidential					
22-27	8/14–9/1									No harvest reported					
Total				29	1,166	7	63	181,949	930,457	216	1,333	37,633	146,700	17,583	131,011
Average weight							9.0		5.1		6.2		3.9		7.5

Note: Additional information relevant to each fishing period, including area opened to fishing, may be found on the applicable news release (NR) available through ADF&G's Commercial Fishing News Release System at http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main. Required parameters for searching the ADF&G Commercial Fishing News Release System include: Effective Year = 2017; Species Group = Salmon; Management Area = Prince William Sound. Queries made through the ADF&G Commercial Fishing News Release System will provide results sorted by Publication Date.

Appendix C3.–Total commercial common property harvest by species in the Eshamy District, 2007–2017.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
			Drift gillnet			
2007	27	538,183	2,556	42,822	81,410	664,998
2008	48	560,869	1,930	103,325	251,493	917,665
2009	67	539,293	1,695	77,539	286,361	904,955
2010	91	940,640	1,367	117,249	521,032	1,580,379
2011	129	901,279	6,159	78,762	95,991	1,082,320
2012	52	987,678	192	88,951	254,774	1,331,647
2013	74	336,061	1,724	62,176	184,334	584,369
2014	35	761,315	607	189,940	77,719	1,029,616
2015	92	860,637	4,611	178,336	85,864	1,129,540
2016	40	443,723	362	51,872	78,409	574,484
10-year average	66	686,968	2,120	99,097	191,739	979,997
2017	63	424,049	3,733	321,935	103,445	853,225
			Set gillnet			
2007	18	196,537	365	13,796	24,651	235,367
2008	18	162,403	151	20,455	53,627	236,654
2009	47	152,642	49	4,251	50,748	207,737
2010	17	282,329	69	16,764	80,469	379,648
2011	37	312,659	612	17,629	25,350	356,287
2012	14	294,632	97	17,311	24,368	336,422
2013	59	203,019	360	19,114	42,630	265,182
2014	22	259,568	65	35,681	20,921	316,257
2015	61	265,575	839	29,070	21.696	295,567
2016	33	218,013	13	8,011	20,831	246,901
10-year average	33	234,738	262	18,208	34,362	287,602
2017	7	181,949	216	37,633	17,583	237,388
			Combined set gillnet and drift gillnet			
2007	45	734,720	2,921	56,618	106,061	900,365
2008	66	723,272	2,081	123,780	305,120	1,154,319
2009	114	691,935	1,744	81,790	337,109	1,112,692
2010	108	1,222,969	1,436	134,013	601,501	1,960,027
2011	166	1,213,938	6,771	96,391	121,341	1,438,607
2012	66	1,282,310	289	106,262	279,142	1,668,069
2013	133	539,080	2,084	81,290	226,964	849,551
2014	57	1,020,883	672	225,621	98,640	1,345,873
2015	153	1,126,212	5,450	207,406	107,560	1,425,107
2016	73	661,736	375	59,883	99,240	821,385
10-year average	98	921,706	2,382	117,305	228,268	1,267,600
2017	70	605,998	3,949	359,568	121,028	1,090,613

Appendix C4.–Estimated age and sex composition of sockeye salmon harvested in the Eshamy District commercial gillnet fishery, 2017.

		Brood year and age class				
		2014	2013		2012	
		1.1	0.3	1.2	1.3	Total
Strata combined:	06/01 – 08/22					
Sampling dates:	06/13 – 07/05					
Sample size:	777					
Female	Percentage of sample	0.1	0.0	9.5	42.0	51.6
	Number in harvest	595	0	57,644	254,714	312,953
Male	Percentage of sample	1.1	0.1	9.3	37.8	48.4
	Number in harvest	6,498	595	56,594	229,358	293,045
Total	Percentage of sample	1.2	0.1	18.9	79.9	100.0
	Number in harvest	7,093	595	114,238	484,072	605,998
	Standard error	4,613	595	14,268	14,738	

APPENDIX D: PURSE SEINE FISHERIES PINK AND CHUM SALMON ESCAPEMENT

Appendix D1.–Aerial escapement indices for pink and chum salmon by district, Prince William Sound, 2017.

Pink salmon

District [a]	Escapement midpoint	Odd-year escapement goal range	1977–2013 mean index	Observed escapement index [b]	Deviation from midpoint
Eastern	390,000	250,000 – 580,000	344,388	663,113	70.0%
Northern	160,000	140,000 – 210,000	143,201	150,767	-5.8%
Coghill	100,000	60,000 – 150,000	105,293	171,362	71.4%
Northwestern	100,000	70,000 – 140,000	102,740	171,633	71.6%
Eshamy	6,000	3,000 – 11,000	6,122		
Southwestern	130,000	70,000 – 160,000	124,354		
Montague	70,000	50,000 – 140,000	75,503		
Southeastern	200,000	150,000 – 310,000	198,810	169,660	-15.2%
Total	1,156,000		1,100,411	1,326,535	14.8%

Chum salmon

District	Escapement range [c]	1976–2015 mean index	Observed escapement index [b]	Deviation from lower range
Eastern	50,000 and up	124,887	112,142	124.3%
Northern	20,000 and up	46,954	43,179	115.9%
Coghill	8,000 and up	20,711	15,444	93.1%
Northwestern	5,000 and up	15,745	7,321	46.4%
Eshamy [d]	None	95	0	NA
Southwestern [d]	None	3,324	1,923	NA
Montague [d]	None	5,945	18,769	NA
Southeastern	8,000 and up	39,038	52,031	550.4%
Total [e]	91,000 and up	247,335	230,117	152.9%

[a] Escapement index total includes indices from Eastern, Northern, Coghill, Northwestern, and Southeastern districts. Only Eastern, Northern, and Northwestern had reasonable temporal survey coverage. The Coghill and Northwestern districts had limited temporal coverage, but the indices were within the SEG range, so they are included in the total.

[b] AUC counts adjusted for the average proportion of the 214 index streams represented by the 129 index streams surveyed 3 or more times in 2015.

[c] Escapement goal changed to a lower range value with no upper end after the 2005 escapement goal review.

[d] Escapement goal removed in 2003 after review.

[e] Totals exclude districts without escapement goals (Eshamy, Southwestern, and Montague districts). Index total includes indices from Eastern, Northern, Coghill, Northwestern, and Southeastern districts.

Appendix D2.–Prince William Sound commercial common property purse seine harvest by day, 2017.

			Chinook		Sockeye		Coho		Pink		Chum	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
06/01	7	10	0	0	68	340	0	0	8	52	1,086	9,760
06/02	7	7	3	27	1	5	0	0	0	0	241	2,340
06/03	0	0	0	0	0	0	0	0	0	0	0	0
06/04	8	9	2	30	102	490	0	0	0	0	529	3,707
06/05	16	17	9	123	509	2,883	0	0	3	9	2,026	15,960
06/06	0	0	0	0	0	0	0	0	0	0	0	0
06/07	0	0	0	0	0	0	0	0	0	0	0	0
06/08	25	27	2	20	488	2,944	0	0	8	38	22,843	174,443
06/09	3	3	0	0	52	349	5	29	73	340	2,195	19,011
06/10	33	37	11	111	1,395	8,446	0	0	225	963	61,498	470,006
06/11	9	9	0	0	126	692	0	0	47	173	13,613	102,288
06/12	42	50	1	5	1,256	7,796	0	0	451	2,065	93,478	692,573
06/13	13	13	0	0	30	192	0	0	10	43	16,017	125,381
06/14	37	38	14	104	1,777	11,323	1	11	49	217	15,498	114,419
06/15	0	0	0	0	0	0	0	0	0	0	0	0
06/16	54	54	22	266	1,579	9,563	0	0	4	18	8,891	71,050
06/17	0	0	0	0	0	0	0	0	0	0	0	0
06/18	0	0	0	0	0	0	0	0	0	0	0	0
06/19	60	61	34	401	2,334	13,866	0	0	339	1,359	35,573	273,894
06/20	10	10	0	0	147	900	0	0	194	1,107	3,864	31,713
06/21	0	0	0	0	0	0	0	0	0	0	0	0
06/22	106	110	34	343	4,836	28,323	21	126	7,296	32,464	107,408	908,269
06/23	40	43	2	40	849	5,217	16	205	7,372	29,674	39,788	300,776
06/24	69	72	3	15	1,564	9,648	2	10	870	4,293	48,546	404,618
06/25	0	0	0	0	0	0	0	0	0	0	0	0
06/26	88	101	1	22	1,300	7,833	65	476	3,539	16,101	77,828	611,347
06/27	16	16	1	18	30	202	0	0	239	1,018	5,831	47,633
06/28	18	18	0	0	39	267	0	0	166	959	8,880	73,114
06/29	140	143	12	156	3,385	20,842	42	248	52,577	252,137	92,965	741,925
06/30	0	0	0	0	0	0	0	0	0	0	0	0
07/01	77	82	0	0	4,206	23,543	7	48	4,114	19,615	53,511	403,963
07/02	0	0	0	0	0	0	0	0	0	0	0	0
07/03	79	83	0	0	2,177	12,678	3	23	50,572	226,950	51,515	378,112
07/04	0	0	0	0	0	0	0	0	0	0	0	0
07/05	0	0	0	0	0	0	0	0	0	0	0	0
07/06	120	122	0	0	1,705	10,158	30	206	127,149	629,412	80,554	609,683
07/07	0	0	0	0	0	0	0	0	0	0	0	0
07/08	118	119	0	0	1,302	7,844	76	605	107,046	495,606	42,313	302,557
07/09	0	0	0	0	0	0	0	0	0	0	0	0

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			Chinook		Sockeye		Coho		Pink		Chum	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
07/10	205	327	2	25	1,764	10,439	86	683	2,584,353	11,078,936	26,597	186,088
07/11	203	221	2	42	534	3,068	36	248	1,208,445	5,094,839	18,367	126,477
07/12	200	215	0	0	448	2,770	6	31	948,574	3,867,188	13,818	93,169
07/13	202	271	3	68	1,079	6,423	138	984	1,875,364	7,898,885	14,554	113,442
07/14	199	213	2	44	2,261	14,462	123	920	1,163,451	4,922,744	42,696	327,649
07/15	158	188	0	0	559	3,262	45	374	408,981	1,669,701	487,690	3,408,615
07/16	194	209	0	0	2,192	12,976	73	441	1,449,006	5,881,306	46,215	328,460
07/17	202	233	11	161	1,169	6,842	177	1,075	1,024,797	4,085,031	148,680	1,031,299
07/18	135	172	0	0	6,347	37,021	792	5,311	739,467	3,232,286	182,783	1,209,492
07/19	0	0	0	0	0	0	0	0	0	0	0	0
07/20	161	168	4	68	1,846	10,824	100	649	827,005	3,120,324	13,612	103,134
07/21	212	278	81	722	14,305	85,270	1,262	8,348	1,799,040	7,272,953	100,863	754,373
07/22	8	9	0	0	673	4,176	0	0	38,506	146,563	21,248	126,954
07/23	149	158	0	0	2,536	14,668	135	863	686,236	2,606,875	19,445	139,542
07/24	214	248	3	44	12,871	76,703	1,069	6,552	1,434,200	5,702,005	41,558	311,394
07/25	0	0	0	0	0	0	0	0	0	0	0	0
07/26	0	0	0	0	0	0	0	0	0	0	0	0
07/27	0	0	0	0	0	0	0	0	0	0	0	0
07/28	216	248	8	129	9,256	54,878	1,613	10,337	1,654,141	6,449,549	44,602	313,065
07/29	0	0	0	0	0	0	0	0	0	0	0	0
07/30	212	253	1	10	8,864	48,518	1,869	13,216	1,747,319	7,017,202	34,346	244,145
07/31	0	0	0	0	0	0	0	0	0	0	0	0
08/01	218	261	13	114	5,875	35,034	2,845	18,370	1,824,575	7,147,375	28,559	216,478
08/02	0	0	0	0	0	0	0	0	0	0	0	0
08/03	0	0	0	0	0	0	0	0	0	0	0	0
08/04	219	257	2	38	2,797	15,501	2,645	17,707	1,751,717	6,917,119	29,262	208,441
08/05	0	0	0	0	0	0	0	0	0	0	0	0
08/06	217	273	2	46	1,865	10,164	3,972	26,053	1,975,652	7,672,187	14,677	99,160
08/07	0	0	0	0	0	0	0	0	0	0	0	0
08/08	221	263	39	390	1,311	7,049	2,366	16,098	1,928,423	7,533,867	10,672	74,504
08/09	0	0	0	0	0	0	0	0	0	0	0	0
08/10	216	270	2	17	1,323	6,885	2,680	17,310	2,197,086	8,423,881	15,866	109,033
08/11	0	0	0	0	0	0	0	0	0	0	0	0
08/12	217	255	3	61	1,138	5,899	2,968	18,694	2,006,913	7,587,864	6,046	40,750
08/13	124	130	0	0	104	584	169	1,141	446,599	1,670,865	297	2,005
08/14	215	257	2	15	1,515	7,971	5,404	35,124	2,143,464	8,012,097	15,370	110,857
08/15	155	157	0	0	397	2,119	3,027	20,775	687,998	2,497,115	8,623	60,855
08/16	205	215	2	20	813	4,051	3,464	24,302	1,120,999	4,113,972	8,933	63,007

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			Chinook		Sockeye		Coho		Pink		Chum	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
08/17	0	0	0	0	0	0	0	0	0	0	0	0
08/18	143	144	1	10	181	1,068	4,118	27,588	368,064	1,356,090	12,691	92,906
08/19	0	0	0	0	0	0	0	0	0	0	0	0
08/20	161	163	1	10	1,389	5,269	5,659	38,009	544,872	1,910,841	9,715	67,901
08/21	0	0	0	0	0	0	0	0	0	0	0	0
08/22	133	133	0	0	319	1,695	7,734	50,276	457,730	1,558,589	7,428	51,118
08/23	0	0	0	0	0	0	0	0	0	0	0	0
08/24	70	70	1	10	232	1,227	6,573	47,002	270,658	913,601	3,233	22,664
08/25	0	0	0	0	0	0	0	0	0	0	0	0
08/26	106	116	0	0	361	1,811	4,027	27,768	996,420	3,385,472	1,246	7,981
08/27	0	0	0	0	0	0	0	0	0	0	0	0
08/28	77	105	1	25	253	1,233	2,588	18,498	1,156,326	3,990,014	827	5,714
08/29	0	0	0	0	0	0	0	0	0	0	0	0
08/30	69	80	0	0	88	443	644	4,157	750,911	2,544,163	216	1,427
08/31	60	61	0	0	48	234	324	2,230	402,728	1,284,863	272	1,417
09/01	38	49	0	0	53	241	1,260	7,660	548,912	1,793,356	138	913
09/02	26	31	0	0	44	242	604	4,550	443,725	1,393,534	152	958
09/03	10	10	0	0	2	10	386	3,056	94,757	310,863	28	192
09/04	12	12	0	0	2	8	140	983	71,615	245,131	1	8
09/05	33	34	0	0	16	85	8,217	66,055	153,107	447,231	357	2,178
09/06	19	19	15	141	20	90	1,426	14,245	81,085	246,170	104	600
08/24	2	2										[a]
08/25	3	3										[a]
Total	229	8,037	355	3,924	118,157	687,828	81,597	563,265	42,457,825	164,968,020	2,318,372	16,947,474
	Average weight			11.05		5.82		6.90		3.89		7.31

[a] Three permits or fewer were fished. Period results are confidential.

Appendix D3.–Area E commercial salmon harvest by species, excluding Copper River and Bering River districts, 1995–2017.

Year [a]	Chinook	Sockeye	Coho	Pink	Chum	Total
1995	1,365	230,057	140,314	16,045,396	702,216	17,119,348
1996	693	605,910	172,254	26,042,440	2,077,995	28,899,292
1997	1,186	1,167,473	64,363	25,828,078	2,224,728	29,285,828
1998	1,843	328,715	74,150	28,673,859	1,266,924	30,345,491
1999	1,047	309,337	27,325	45,020,990	2,935,337	48,294,036
2000	1,135	548,841	353,015	38,875,724	5,158,403	44,937,118
2001	853	932,120	234,826	35,237,137	3,097,007	39,501,943
2002	938	1,013,057	37,586	18,947,254	6,341,860	26,340,695
2003	278	1,519,582	98,947	51,962,716	3,794,772	57,376,295
2004	319	830,757	56,457	23,526,306	1,998,542	26,412,381
2005	349	577,681	225,157	59,900,319	2,095,957	62,799,463
2006	325	989,210	388,575	21,691,135	2,164,335	25,233,580
2007	873	1,310,694	202,153	63,389,073	3,569,303	68,472,096
2008	365	976,792	307,260	42,352,155	5,074,790	48,711,362
2009	416	1,011,990	46,580	18,984,542	3,213,483	23,257,011
2010	452	1,401,815	42,502	71,288,429	4,307,533	77,040,731
2011	679	1,480,499	223,462	33,379,352	1,901,131	36,985,123
2012	540	1,826,283	32,844	27,231,297	3,791,670	32,882,634
2013	1,426	713,862	327,345	92,416,738	4,060,287	97,519,658
2014	685	1,243,267	201,083	44,647,451	1,473,370	47,565,856
2015	882	1,637,486	74,470	97,258,288	2,496,756	101,467,915
2016	333	794,707	34,598	13,025,307	3,166,099	17,021,044
10-year average	665	1,239,743	149,230	50,397,263	3,305,442	55,092,343
2017	588	840,593	131,406	48,520,410	5,378,994	54,871,991

[a] Includes purse seine, drift gillnet, and set gillnet harvests. Also includes hatchery sales harvests, personal use, confiscated fish, donated and discarded fish, the surimi study fish, and special use educational permit harvests.

Appendix D4.–Prince William Sound commercial common property pink salmon harvest for all gear types, by district, 1995–2017.

Year	Eastern	Northern	Coghill	Northwestern	Eshamy	Southwestern	Montague	Southeastern	Total
1995	4,235,638	3,656,119	1,078,693	0	88,830	1,707,745	18,239	11,418	10,796,682
1996	6,076,471	5,042,415	1,543,869	0	35,691	5,052,789	0	0	17,751,235
1997	4,534,365	3,162,822	2,030,586	0	222,934	5,929,544	65,107	28,040	15,973,398
1998	2,231,061	5,037,668	3,228,761	0	134,984	8,435,431	430,252	350,081	19,848,238
1999	12,305,629	4,981,085	3,542,130	0	170,525	9,524,043	189,641	914,907	31,627,960
2000	9,819,466	4,093,620	3,359,542	17,223	514,258	9,308,399	87,634	549,763	27,749,905
2001	16,050,235	404,899	957,042	0	495,325	3,072,848	807,010	534,538	22,321,897
2002	355,964	594,245	1,277,637	0	186,786	5,710,938	32,857	1,075	8,159,502
2003	14,945,744	5,911,904	11,484,334	0	90,102	5,789,419	60,287	514,452	38,796,242
2004	9,512,987	45,355	43,690	0	107,487	1,628,219	102,352	260,992	11,701,082
2005	20,516,356	10,259,182	3,318,888	0	236,634	11,381,417	844,658	770,570	47,327,705
2006	5,712,890	1,331,776	1,373,036	0	110,625	3,269,037	144,417	21,805	11,963,586
2007	22,059,138	6,221,016	2,400,004	0	56,618	17,907,847	878,371	1,869,245	51,392,239
2008	10,829,504	8,548,368	7,439,560	0	123,780	7,548,950	216,013	0	34,706,175
2009	95,071	2,064,871	1,305,714	0	81,790	7,481,863	87,952	36,698	11,153,959
2010	16,423,602	17,916,866	14,252,563	0	134,734	16,978,392	15,985	19,293	65,741,435
2011	13,308,509	2,782,875	2,397,044	252,337	96,399	6,807,127	784,603	504,828	26,933,722
2012	10,611,728	3,677,106	3,433,740	87,010	106,269	5,722,240	200,600	225,255	24,063,948
2013	25,566,365	17,062,817	9,141,077	110,432	81,290	33,510,249	441,913	2,570,809	88,484,952
2014	19,853,828	5,024,240	1,998,341	70,684	225,641	8,958,165	3,044,491	19,949	39,195,339
2015	42,432,142	13,558,665	6,256,940	0	207,409	23,763,243	1,589,439	2,235,414	90,043,653
2016	7,536,833	417,218	13,556	172,360	59,894	345,842	19,360	37,970	8,603,033
10-year average	16,871,672	7,727,444	4,863,854	69,282	117,382	12,902,392	727,873	751,946	44,031,846
2017	17,632,123	7,420,481	1,051,864	1,513,574	359,688	11,574,563	3,238,571	676,089	43,466,953

Note: Includes purse seine, drift gillnet, and set gillnet harvests from all Prince William Sound districts; Unakwik harvests are included in the Northern District totals. Does not include hatchery cost recovery, confiscated, or test fishery harvests.

Appendix D5.–Prince William Sound commercial common property chum salmon harvest for all gear types, by district, 1995–2017.

Year	Eastern	Northern	Coghill	Northwestern	Eshamy	Southwestern	Montague	Southeastern	Total
1995	52,113	5,812	382,256	0	19,905	8,334	32	40	468,492
1996	340,398	11,432	613,432	0	32,828	13,222	0	0	1,011,312
1997	446,757	5,054	723,116	3	43,243	6,656	185,400	3,252	1,413,481
1998	107,854	57,088	368,921	0	557	4,063	204,536	4,685	747,704
1999	105,981	11,346	1,292,977	0	24,221	11,303	628,952	83,147	2,157,927
2000	240,299	9,894	1,645,145	581	39,828	428,665	992,253	71,565	3,428,230
2001	258,569	9,602	1,146,253	0	28,373	229,670	442,317	44,493	2,159,277
2002	9,811	9,516	2,455,237	0	127,271	54,845	1,071,478	32,776	3,760,934
2003	113,154	12,432	1,478,537	0	22,323	25,624	566,535	13,148	2,231,753
2004	102,067	322	921,002	0	53,609	338	342,968	49,560	1,469,866
2005	32,423	14,895	1,156,770	0	6,945	3,759	238,516	4,329	1,457,637
2006	113,079	51,650	563,802	0	40,724	107,569	445,762	17,171	1,339,757
2007	81,077	10,127	1,474,826	0	106,061	42,445	741,020	13,997	2,469,553
2008	20,808	38,583	2,317,589	0	305,120	517,449	1,233,909	0	4,433,458
2009	4,752	15,618	1,336,662	0	336,928	234,996	672,918	2,887	2,604,761
2010	14,383	2,464	2,515,238	0	610,573	166,464	243,606	0	3,552,728
2011	29,251	2,381	1,092,952	1,083	121,341	62,616	103,678	11,797	1,425,099
2012	102,192	2,152	2,457,115	37	279,149	164,913	325,417	35,560	3,366,535
2013	94,277	6,513	2,170,633	171	226,970	275,290	483,728	40,929	3,298,511
2014	101,443	2,511	643,327	5,884	98,664	66,261	187,016	12,749	1,117,855
2015	143,320	7,831	899,332	0	107,622	176,743	168,721	13,532	1,517,101
2016	56,570	7,386	1,631,485	4,126	99,249	210,600	196,688	325	2,206,429
10-year average	69,196	13,408	1,554,815	1,027	212,037	184,125	436,588	13,541	2,484,736
2017	293,242	90,858	3,066,829	45,126	121,049	445,083	540,230	51,827	4,654,244

Note: Includes purse seine, drift gillnet, and set gillnet harvests from all Prince William Sound districts; Unakwik harvests are included in the Northern District totals. Does not include hatchery cost recovery, confiscated, or test fishery harvests.

Appendix D6.–Prince William Sound pink salmon escapement indices by district, 1995–2017.

Year	Eastern	Northern [a]	Coghill	Northwestern	Eshamy	Southwestern	Montague	Southeastern	Total
1995	396,696	84,447	46,029	50,582	10,182	82,490	183,448	336,310	1,190,184
1996	584,236	218,022	104,781	86,709	3,000	63,337	92,966	330,285	1,483,336
1997	345,725	65,260	52,961	53,740	914	112,010	206,943	585,135	1,422,688
1998	377,700	213,288	85,968	97,485	4,644	280,335	161,275	199,410	1,420,105
1999	622,502	214,732	168,816	52,340	6,900	163,347	381,054	853,180	2,462,871
2000	554,984	168,247	223,646	66,078	4,286	131,648	227,881	282,258	1,659,028
2001	436,585	163,573	148,665	102,294	2,963	176,503	314,323	655,480	2,000,386
2002	226,068	138,204	54,882	50,981	1,397	35,554	71,461	364,630	943,177
2003	975,327	255,059	375,147	103,931	5,206	130,356	320,494	691,769	2,857,289
2004	724,663	158,958	79,010	51,306	2,300	108,192	183,891	687,903	1,996,223
2005	1,025,756	570,079	528,264	401,640	32,396	272,572	566,002	1,330,407	4,727,116
2006	248,592	208,397	145,511	127,836	11,247	118,205	149,798	178,009	1,187,595
2007	374,723	156,063	197,405	68,667	9,461	116,130	142,769	443,914	1,509,133
2008	193,844	141,396	145,177	141,787	579	70,291	56,999	112,347	862,419
2009	454,960	119,747	125,907	127,261	9,790	239,357	263,770	488,831	1,829,623
2010	490,952	287,570	335,108	211,709	9,585	126,489	144,821	310,676	1,916,910
2011	982,837	167,408	257,020	147,128	4,368	232,302	598,918	1,537,438	3,927,419
2012	301,709	106,568	172,611	117,795	1,052	90,156	77,756	258,047	1,125,693
2013	1,266,783	329,434	640,414	203,444	12,145	348,012	411,373	1,472,633	4,684,239
2014[b]	270,244	105,843	63,290	67,030	12,400	83,581	24,917	185,072	812,376
2015[c]	1,605,058	779,600	801,201	454,427	70,068	789,725	649,144	2,032,492	7,181,714
2016[d]	663,113	152,509	171,362	171,633	N/A	N/A	N/A	169,660	1,326,535
2017[d]	624,502	445,858	187,159	259,842	2,880	212,009	237,927	528,948	2,499,125
				Even-year 10-year average					
	405,187	168,098	147,657	110,364	5,277	116,050	122,089	274,801	1,325,006
				Odd-year 10-year average					
	809,026	282,095	329,580	171,487	15,421	258,031	385,479	1,009,128	3,260,248

Note: This does not represent the total spawning escapement but rather a comparable annual index.

[a] Northern District totals include both Northern and Unakwik District counts combined.

[b] Only 17 of 33 index streams in the Montague District were surveyed often enough (≥3) in 2014 to use with the area under the curve methodology.

[c] AUC counts adjusted for the average proportion of the 214 index streams represented by the 129 index streams surveyed 3 or more times in 2015.

[d] Escapement index total includes indices from Eastern, Northern, Coghill, Northwestern, and Southeastern districts. Only Eastern, Northern, and Northwestern had reasonable temporal survey coverage. The Coghill and Southeastern districts had limited temporal coverage, but the indices were within the SEG range, so they are included in the total.

Appendix D7.–Prince William Sound chum salmon escapement indices by district, 1995–2017.

Year	Eastern	Northern [a]	Coghill	Northwestern	Southeastern
1995	75,655	28,899	11,596	4,883	23,200
1996	137,908	55,568	19,669	24,405	47,334
1997	93,146	19,429	3,101	8,387	43,274
1998	86,227	28,867	22,764	7,553	52,103
1999	242,713	36,691	5,057	4,544	36,181
2000	196,253	23,655	20,488	10,150	34,969
2001	198,683	75,473	13,388	6,373	37,526
2002	94,046	30,531	7,430	16,194	104,906
2003	198,921	44,272	19,729	12,736	116,131
2004	108,833	42,456	9,685	10,371	42,344
2005	113,135	30,657	11,979	12,696	25,547
2006	109,403	52,069	15,900	25,860	26,739
2007	123,814	49,669	14,052	10,778	60,464
2008	74,740	38,791	39,660	28,051	21,614
2009	100,309	22,063	6,150	12,293	106,284
2010	91,514	38,207	51,589	30,074	85,138
2011	196,933	52,474	16,368	11,447	91,218
2012	61,969	14,680	10,281	7,072	20,467
2013	119,110	34,240	11,369	4,746	35,942
2014	93,491	27,680	9,491	5,041	30,177
2015[c]	112,142	43,179	15,444	7,321	52,031
2016[c]	93,491	27,680	9,491	5,831	30,177
10-year average	106,751	34,866	18,390	12,265	53,351
2017[b]	85,618	34,516	13,666	7,381	49,421

Note: Current goals are district-specific lower-bound sustainable escapement goals: Coghill >8,000; Eastern >50,000; Northern/Unakwik >20,000; Northwestern >5,000; Southeastern >8,000. This does not represent the total spawning escapement but rather a comparable annual index. Escapement indices do not represent the total spawning escapement but rather a comparable annual index.

[a] Northern District totals include both Northern and Unakwik District counts combined.

[b] AUC counts adjusted for the average proportion of the 214 index streams represented by the 129 index streams.

APPENDIX E: SALMON ENHANCEMENT

Appendix E1.–Historical harvest contributions, thermally marked otolith releases, and total returns of coho salmon to Prince William Sound hatcheries, brood years 1989–2014.

Solomon Gulch Hatchery

Brood year	Return year	Fry release	Hatchery contribution to the CCPF [a]	Hatchery contribution to subs/CPU harvest [b]	Hatchery contribution to sport harvest [c]	Hatchery contribution to broodstock esc. [d]	Hatchery contribution to cost recovery [e]	Total hatchery return	Estimated marine survival
1989	1992	993,633	5,000	369	17,789	2,651	26,776	52,585	5.29%
1990	1993	1,226,044	102	305	12,979	1,658	2,343	17,387	1.42%
1991	1994	461,388	0	143	19,012	11,376	22,091	52,622	11.41%
1992	1995	915,087	78,006	0	37,474	16,045	21,592	153,117	16.73%
1993	1996	1,325,316	87,360	38	43,467	21,772	13,713	166,350	12.55%
1994	1997	1,875,823	47,500	45	36,520	13,605	9,818	107,488	5.73%
1995	1998	1,315,183	23,717	321	37,126	3,880	19,068	84,112	6.40%
1996	1999	1,748,486	67,232	541	36,310	2,541	12,679	119,303	6.82%
1997	2000	1,863,528	342,490	468	68,014	1,625	24,887	437,484	23.48%
1998	2001	1,625,599	147,000	230	60,975	1,778	25,595	235,578	14.49%
1999	2002	1,519,328	25,017	136	31,017	21,323	8,000	85,493	5.63%
2000	2003	1,821,889	63,132	185	78,162	17,379	4,087	162,945	8.94%
2001	2004	1,275,145	26,711	315	59,331	2,585	9,897	98,839	7.75%
2002	2005	1,442,274	129,966	286	67,000	2,102	30,686	230,040	15.95%
2003	2006	1,968,366	210,382	18	61,298	2,455	16,172	290,325	14.75%
2004	2007	1,511,592	58,299	0	74,616	3,564	17,748	154,227	10.20%
2005	2008	1,973,604	154,383	0	59,313	3,101	22,356	239,153	12.12%
2006	2009	1,828,100	914	131	43,651	3,955	17,424	66,075	3.61%
2007	2010	1,525,927	2,918	189	70,531	2,847	43,722	120,207	7.88%
2008	2011	1,915,058	28,412	883	50,801	7,145	38,285	125,526	6.55%
2009	2012	2,111,389	914	75	12,873	2,458	454	16,774	0.79%
2010	2013	1,879,768	153,819	277	55,844	7,071	39,946	256,957	13.67%
2011	2014	1,657,016	1,327	103	6,044	1,804	1,139	10,416	0.63%
2012	2015	1,810,315	32,108	40	24,920	2,722	14,571	74,361	4.11%
2013	2016	1,869,354	7,034	0	31,390	2,722	14,571	55,717	2.98%
2014	2017	1,913,395	6,440	0	10,284	4,623	1,620	22,967	1.20%

-continued-

Wally Noerenberg Hatchery

Brood year	Return year	Fry release	Hatchery contribution to the CCPF [a]	Hatchery contribution to subs/homepack harvest [b]	Hatchery contribution to sport harvest [c]	Hatchery contribution to broodstock esc. [d]	Hatchery contribution to cost recovery [e]	Total hatchery return	Estimated marine survival
1989	1992	2,223,282	114,165	20	1,411	0	46,121	161,717	7.27%
1990	1993	1,831,198	39,658	51	1,608	4,857	1,532	47,706	2.61%
1991	1994	1,303,077	81,396	65	3,061	5,439	13,258	103,220	7.92%
1992	1995	1,483,936	34,680	57	1,690	4,964	5,152	46,543	3.14%
1993	1996	2,063,934	26,245	8	3,851	4,081	39,506	73,690	3.57%
1994	1997	275,406	5,626	26	2,084	5,674	0	13,410	4.87%
1995	1998	203,651	2,800	35	3,327	1,541	0	7,703	3.78%
1996	1999	407,715	338	66	2,658	2,533	0	5,595	1.37%
1997	2000	1,068,338	111,256	197	7,963	2,551	0	121,966	11.42%
1998	2001	375,670	2,488	98	15,490	3,277	0	21,353	5.68%
1999	2002	219,967	3,215	105	21,283	2,389	0	26,991	12.27%
2000	2003	485,834	9,624	133	21,444	1,314	0	32,515	6.69%
2001	2004	920,858	9,333	37	19,852	150	637	30,009	3.26%
2002	2005	989,383	53,257	178	34,587	11,450	19	99,492	10.06%
2003	2006	1,057,922	113,997	20	19,973	17,079	0	151,069	14.28%
2004	2007	1,052,897	84,867	36	31,745	2,129	11,975	130,752	12.42%
2005	2008	1,850,000	116,641	90	19,738	2,609	267	139,345	7.53%
2006	2009	1,930,000	20,209	52	16,751	2,064	0	39,076	2.02%
2007	2010	226,000	5,215	9	20,569	1,399	0	27,192	12.03%
2008	2011	3,490,000	95,267	274	26,062	7,374	678	129,655	3.72%
2009	2012	3,480,000	10,276	123	7,625	558	0	18,582	0.53%
2010	2013	1,018,000	69,824	64	21,185	2,293	0	93,366	9.17%
2011	2014	3,210,000	165,600	292	11,314	6,584	10,877	194,667	6.06%
2012	2015	907,000	6,592	115	17,351	3,084	0	27,142	2.99%
2013	2016	370,000	347	292	100	245	0	984	0.27%
2014	2017	3,090,000	14,406	0	100	3,814	0	18,320	0.59%

[a] Commercial common property fishery (CCPF).

[b] Subsistence and commercial personal use harvest (homepack).

[c] No hatchery contribution sampling occurs in the sport fishery. These estimates apply a fixed proportion of Solomon Gulch Hatchery or Wally Noerenberg Hatchery production to sport harvest by reporting area.

[d] Broodstock escapements include all fish remaining after commercial harvests—i.e., fish used for brood, watershed spawners, predation behind the barrier seine, and fish remaining in front of the hatchery.

[e] Hatchery cost recovery is the whole fish purse seine and raceway effort and does not include carcass sales from viable broodstock.

Appendix E2.–Sockeye salmon hatchery and wild stock contributions to the Copper River drift gillnet commercial common property fishery by period, 2017.

			Origin							
			Gulkana		Main Bay		Hatchery	Wild		
Dates	Period	Hours	Number	Percent	Number	Percent	Total	Number	Percent	Total
05/18 – 05/18	1 [a]	12	0	0.0%	0	0.0%	0	38,491	100.0%	38,491
05/22 – 05/22	2 [a]	12	0	0.0%	0	0.0%	0	56,018	100.0%	56,018
05/25 – 05/25	3 [a]	9	0	0.0%	0	0.0%	0	38,366	100.0%	38,366
05/29 – 05/29	4 [a]	10	0	0.0%	0	0.0%	0	39,629	100.0%	39,629
06/01 – 06/01	5 [a]	12	0	0.0%	0	0.0%	0	46,299	100.0%	46,299
06/05 – 06/05	6 [a]	12	0	0.0%	0	0.0%	0	42,189	100.0%	42,189
06/08 – 06/08	7 [a]	12	0	0.0%	0	0.0%	0	40,249	100.0%	40,249
06/12 – 06/12	8	12	0	0.0%	1,275	3.3%	1,275	37,394	96.7%	38,669
06/15 – 06/15	9	12	2,964	9.2%	0	0.0%	2,964	29,269	90.8%	32,233
06/19 – 06/19	10	12	1,176	6.3%	196	1.0%	1,372	17,438	92.7%	18,810
06/22 – 06/23	11	24	2,673	7.7%	446	1.3%	3,119	31,634	91.0%	34,753
06/26 – 06/27	12	24	4,465	18.3%	1,839	7.5%	6,304	18,123	74.2%	24,427
06/29 – 06/30	13	24	1,469	13.5%	565	5.2%	2,034	8,812	81.2%	10,846
07/03 – 07/04	14	24	4,867	24.0%	1,481	7.3%	6,348	13,967	68.8%	20,315
07/06 – 07/07	15	24	4,230	24.4%	192	1.1%	4,422	12,881	74.4%	17,303
07/10 – 07/11	16	36	2,593	17.2%	519	3.5%	3,112	11,926	79.3%	15,038
07/13 – 07/14	17	36	2,430	15.1%	0	0.0%	2,430	13,713	84.9%	16,143
07/17 – 07/18	18	24	1,689	16.4%	0	0.0%	1,689	8,612	83.6%	10,301
07/20 – 07/21	19	24	1,290	14.1%	0	0.0%	1,290	7,871	85.9%	9,161
07/24 – 07/24	20	12	1,735	20.8%	108	1.3%	1,843	6,506	77.9%	8,349
07/27 – 07/28	21	24	711	8.2%	0	0.0%	711	7,966	91.8%	8,677
07/31 – 07/31	22 [a]	12	0	0.0%	0	0.0%	0	5,769	100.0%	5,769
08/03 – 08/03	23 [a]	12	0	0.0%	0	0.0%	0	3,926	100.0%	3,926
08/07 – 08/07	24 [a]	12	0	0.0%	0	0.0%	0	3,476	100.0%	3,476
08/10 – 08/10	25 [a]	12	0	0.0%	0	0.0%	0	2,274	100.0%	2,274
08/14 – 08/15	26 [a]	24	0	0.0%	0	0.0%	0	1,828	100.0%	1,828
08/21 – 08/22	27 [a]	24	0	0.0%	0	0.0%	0	1,650	100.0%	1,650
08/28 – 08/29	28 [a]	24	0	0.0%	0	0.0%	0	307	100.0%	307
08/31 – 09/01	29 [a]	24	0	0.0%	0	0.0%	0	296	100.0%	296
09/04 – 09/05	30 [a]	24	0	0.0%	0	0.0%	0	110	100.0%	110
09/07 – 09/08	31 [a]	24	0	0.0%	0	0.0%	0	125	100.0%	125
09/11 – 09/12	32 [a]	24	0	0.0%	0	0.0%	0	30	100.0%	30
09/14 – 09/15	33 [a]	36	0	0.0%	0	0.0%	0	19	100.0%	19
09/18 – 09/19	34 [a]	36	0	0.0%	0	0.0%	0	1	100.0%	1
09/21 – 09/22	35 [a]	36	0	0.0%	0	0.0%	0	2	100.0%	2
09/25 – 09/26	36 [b]	36	0	0.0%	0	0.0%	0	0	0.0%	0
09/28 – 09/29	37 [b]	36	0	0.0%	0	0.0%	0	0	0.0%	0
10/02 – 10/10	38–40 [b]	36	0	0.0%	0	0.0%	0	0	0.0%	0
Total		1,260	32,292	5.5%	6,621	1.1%	38,913	547,166	93.4%	586,079

Note: Total harvest data from fish tickets as of 15 February 2018.

[a] No samples collected; proportions from Period 8 used to estimate contributions.

[b] No reported harvest.

Appendix E3.–Gulkana Hatchery sockeye salmon harvests and total contribution, 1977–2017.

	Hatchery contributions				Total
Year	Commercial[a]	Subsistence/ personal use[b]	Sport[c]	Broodstock/ escapement[d]	hatchery run
1977	183	12	0	122	318
1978	720	74	2	1,300	2,095
1979	900	393	9	3,425	4,724
1980	350	589	34	4,250	5,211
1981	3,600	478	13	4,650	8,736
1982	3,600	322	6	5,740	9,666
1983	6,600	1,167	23	8,396	16,177
1984	5,318	450	14	4,846	10,623
1985	31,955	2,121	114	24,021	58,170
1986	30,404	2,667	113	25,408	58,592
1987	47,347	3,071	184	25,505	76,105
1988	92,552	9,351	257	94,563	196,726
1989	175,643	13,734	531	120,872	310,781
1990	64,917	7,203	209	55,431	127,760
1991	102,009	9,449	220	63,400	175,078
1992	87,120	11,455	257	84,000	182,832
1993	149,844	14,812	370	17,600	182,625
1994	94,656	9,157	158	40,736	144,707
1995	147,844	15,289	342	45,733	209,208
1996	314,916	16,144	849	151,762	483,671
1997	266,724	8,857	189	92,745	368,515
1998	524,985	31,824	1,038	106,954	664,801
1999	945,287	42,281	868	109,663	1,098,099
2000	366,372	34,113	1,006	75,385	476,876
2001	196,326	35,699	356	75,620	308,001
2002	335,451	28,305	586	62,361	426,665
2003	138,056	19,513	284	45,024	202,845
2004	59,540	27,117	184	6,618	93,438
2005	95,897	28,031	225	92,455	216,583
2006	163,691	26,860	182	97,192	287,906
2007	94,232	9,656	97	28,648	132,625
2008	21,669	19,175	229	44,865	85,916
2009	59,948	29,355	376	43,409	133,047
2010	207,915	68,180	816	157,980	434,608
2011	487,916	33,113	326	59,589	580,917
2012	330,402	43,549	450	65,348	439,688
2013	318,212	45,800	541	72,369	436,788
2014	297,943	44,918	222	53,737	396,990
2015	137,414	48,887	85	40,123	226,509
2016	157,035	18,156	283	32,341	207,815
10-year average	211,269	36,079	353	59,841	307,500
2017	32,292	14,793	197	17,083	64,365

[a] Commercial contributions are from strontium marks (2004–current), coded wire tags (1995–2003), and fry to adult survival, age composition at return, and exploitation rate (1977–1994).

[b] Subsistence and personal use contributions are from strontium marks (2004–current), coded wire tags (1995–2003), and fry to adult survival, age composition at return, and exploitation rate (1977–1994).

[c] Sport fishery contributions are the sum of sport harvest from Copper River mainstem and Gulkana River multiplied by Gulkana Hatchery contribution percentage to the Glennallen subsistence and Chitina personal use fisheries for that year.

[d] Broodstock and escapement contributions are based on survey of release sites and hatchery reporting.

Appendix E4.–Gulkana Hatchery salmon fry releases, 1974–2017.

	Chinook salmon			Sockeye salmon					
Release year	Monsoon Lake	Gulkana River (E. Fork)	Total Chinook salmon released	Gulkana I & II (Paxson Lake)	Summit Lake	Crosswind Lake	Harding Lake	Ten Mile Lake	Total sockeye salmon released
1974				79,691				99,620	179,311
1975				785,110				101,446	886,556
1976				626,007				101,600	727,607
1977				516,326				112,248	628,574
1978				479,864				104,058	583,922
1979				940,666				99,589	1,040,255
1980				1,105,397	1,340,660				2,446,057
1981				3,388,682	1,860,491				5,249,173
1982				5,985,270	2,047,947				8,033,217
1983				5,470,056	4,312,628				9,782,684
1984				6,079,838	4,739,293				10,819,131
1985				10,130,942	9,296,882	1,419,095			20,846,919
1986				8,586,509	14,999,085				23,585,594
1987				9,905,907	12,491,826				22,397,733
1988		1,388	1,388	6,389,963	12,026,642	2,487,396	503,375		21,407,376
1989	15,977		15,977	10,870,655	12,004,491	3,130,373	515,046		26,520,565
1990				14,127,313	6,445,011	4,906,005	505,305		25,983,634
1991	26,209		26,209	11,288,721	6,109,833	5,469,759			22,868,313
1992	30,488	34,842	65,330	11,640,000	7,049,000	8,420,000			27,109,000
1993				5,866,230	2,661,549	5,627,346			14,155,125
1994				11,008,964	7,637,009	9,144,382			27,790,355
1995				12,345,894	7,418,311	9,973,600			29,737,805
1996				12,241,896	8,400,148	9,732,911			30,374,955
1997				12,286,366	8,987,213	10,516,107			31,789,686
1998				11,589,845	10,162,655	10,512,299			32,264,799
1999				11,551,836	9,191,217	9,984,392			30,727,445
2000				10,705,795	3,300,504	8,331,080			22,337,379
2001				7,870,334	493,516	5,585,665			13,949,515
2002				11,922,685	5,805,231	8,174,754			25,902,670
2003				11,284,330	6,599,519	8,360,966			26,244,815
2004				12,408,512	6,574,962	8,359,115			27,342,589
2005				3,308,065	0	3,703,295			7,011,360
2006				5,523,920	4,681,325	10,017,211			20,222,456
2007				6,000,000	6,000,000	10,000,000			22,000,000
2008				6,000,000	6,000,000	9,980,000			21,980,000
2009				6,000,000	6,000,000	10,000,000			22,000,000
2010				6,010,000	6,000,000	10,000,000			22,010,000
2011				6,000,000	5,980,000	10,000,000			21,980,000
2012				7,340,000	5,950,000	9,570,000			22,860,000
2013				6,000,000	6,000,000	6,560,000			18,560,000
2014				6,000,000	6,000,000	10,000,000			22,000,000
2015				5,997,000	5,990,000	10,000,000			21,987,000
2016				6,004,000	0	10,000,000			16,004,000
10-year average				6,135,100	5,392,000	8,611,000			21,139,400
2017				4,660,000	0	9,690,000			14,350,000

Appendix E5.–Daily chum and coho salmon sales and sex ratios, sales summary, and broodstock summary at the Wally Noerenberg Hatchery, 2017.

	Chum salmon					Coho salmon	
Date	% Female	Sales harvest[a]	Sales harvest cumulative	Brood stock[b]	Brood stock cumulative	Sales harvest	Sales harvest cumulative
06/15	–	24,293	24,293	0	0	ND	ND
06/16	–	45,694	69,987	0	0	ND	ND
06/17	–	49,204	119,191	0	0	ND	ND
06/18	–	59,619	178,810	0	0	ND	ND
06/19	–	45,442	224,252	0	0	ND	ND
06/20	–	49,914	274,166	0	0	ND	ND
06/21	–	0	274,166	0	0	ND	ND
06/22	–	28,947	303,113	0	0	ND	ND
06/23	–	27,089	330,202	0	0	ND	ND
06/24	–	117,477	447,679	0	0	ND	ND
06/25	–	0	447,679	0	0	ND	ND
06/26	–	0	447,679	0	0	ND	ND
06/27	–	0	447,679	0	0	ND	ND
06/28	–	0	447,679	0	0	ND	ND
06/29	–	0	447,679	0	0	ND	ND
06/30	–	0	447,679	0	0	ND	ND
07/01	–	0	447,679	0	0	ND	ND
07/02	–	0	447,679	0	0	ND	ND
07/03	–	0	447,679	0	0	ND	ND
07/04	–	0	447,679	0	0	ND	ND
07/05	–	0	447,679	0	0	ND	ND
07/06	–	0	447,679	0	0	ND	ND
07/07	–	1,117	448,796	13,719	13,719	ND	ND
07/08	–	900	449,696	12,523	26,242	ND	ND
07/09	–	755	450,451	14,332	40,574	ND	ND
07/10	–	1,021	451,472	14,200	54,774	ND	ND
07/11	–	752	452,224	14,547	69,321	ND	ND
07/12	–	723	452,947	12,859	82,180	ND	ND
07/13	–	738	453,685	12,605	94,785	ND	ND
07/14	–	959	454,644	14,331	109,116	ND	ND
07/15	–	1,297	455,941	11,548	120,664	ND	ND
07/16	–	1,584	457,525	11,601	132,265	ND	ND
07/17	–	3,187	460,712	12,102	144,367	ND	ND
07/18	–	7,268	467,980	9,261	153,628	ND	ND
07/19	–	14,178	482,158	0	153,628	ND	ND
07/20	–	20,239	502,397	0	153,628	ND	ND
07/21	–	18,920	521,317	0	153,628	ND	ND
07/22	–	18,296	539,613	0	153,628	ND	ND
07/23	–	14,574	554,187	0	153,628	ND	ND
07/24	–	11,404	565,591	0	153,628	ND	ND
07/25	–	10,825	576,416	0	153,628	ND	ND
07/26	–	8,625	585,041	0	153,628	ND	ND
07/27	–	4,456	589,497	0	153,628	ND	ND

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Hatchery escapement summary[c]	Chum salmon	Coho salmon
Purse seine whole fish harvest	447,679	0
Raceway harvest[d]	141,818	0
Viable broodstock (spawned, eggs in incubators)	136,843	6
Unviable broodstock (green/over-ripe/bad)	15,288	20
Unspawned fish (e.g. excess males/females)	1,216	1,154
Holding mortalities (raceway, pen mortalities)	281	1,311
Estimated unharvested return[e]	2,000	0
Estimated total run to hatchery site	745,125	3,814

Sales summary	Chum salmon	Coho salmon
Purse seine whole fish sales	447,679	0
Raceway sales[f]	141,818	0
Carcass sales[g]	153,628	3,814
Total sales	743,125	3,814

[a] Daily whole fish from purse seine and raceway harvests as reported inseason and on fish tickets.

[b] Broodstock daily totals from PWSAC egg-take log.

[c] Determined by fish tickets, PWSAC egg-take log, and annual reports (PWSAC 2017b).

[d] Raceway harvest includes whole fish as well as roe extraction not conducted as egg take.

[e] Fish remaining in saltwater and freshwater after all hatchery harvest is complete.

[f] Sum of raceway harvest, unviable broodstock and unspawned fish.

[g] Represents the sale of “viable broodstock” carcasses.

Appendix E6.–Sockeye salmon hatchery and wild stock contributions to the Coghill District commercial common property fishery by period, 2017.

Dates	Period	Hours	Origin					
			Main Bay		Hatchery	Wild		
			Number	Percent	Total	Number	Percent	Total
06/01 – 06/01	1	36 [a]	200	97.09%	200	6	2.91%	206
06/05 – 06/05	2	24 [a]	291	97.16%	342	9	2.56%	352
06/08 – 06/08	3	24 [a]	160	96.97%	160	5	3.03%	165
06/12 – 06/12	4	24 [a]	859	97.06%	859	26	2.94%	885
06/15 – 06/16	5	24	1,398	97.08%	1,398	42	2.92%	1,440
06/19 – 06/20	6	24	2,240	83.32%	2,348	448	15.90%	2,818
06/22 – 06/23	7	24	3,250	92.86%	3,250	250	7.14%	3,500
06/26 – 06/28	8	48	9,278	81.52%	9,278	2,103	18.48%	11,381
06/29 – 06/29	9	14	3,913	73.82%	3,913	1,388	26.18%	5,301
06/30 – 06/30	10	14 [b]	1,414	74.81%	1,414	476	25.19%	1,890
07/01 – 07/01	11	14	1,057	75.88%	1,057	336	24.12%	1,393
07/02 – 07/02	12	14	1,282	80.58%	1,282	309	19.42%	1,591
07/03 – 07/05	13	48	6,111	85.27%	6,111	1,056	14.73%	7,167
07/06 – 07/08	14	48	6,048	85.56%	6,048	1,021	14.44%	7,069
07/09 – 07/09	15	14	5,064	82.66%	5,064	1,062	17.34%	6,126
07/10 – 07/12	16	60	12,884	72.34%	12,884	4,926	27.66%	17,810
07/13 – 07/16	17	84 [b]	12,917	78.82%	12,917	3,471	21.18%	16,388
07/17 – 07/19	18	60 [b]	6,817	78.82%	6,776	1,832	21.31%	8,597
07/20 – 07/23	19	84 [b]	8,830	78.82%	8,864	2,373	21.10%	11,246
07/24 – 07/24	20	14	2,377	85.29%	2,377	410	14.71%	2,787
07/28 – 07/28	21	14 [c]	1,199	85.28%	1,199	207	14.72%	1,406
07/30 – 07/30	22	14 [c]	1,799	85.30%	1,688	310	15.66%	1,979
08/01 – 08/01	23	14 [c]	1,685	85.28%	1,680	290	14.72%	1,970
08/04 – 08/04	24	14 [c]	853	85.30%	853	147	14.70%	1,000
08/06 – 08/06	25	14 [c]	494	85.32%	494	85	14.68%	579
08/08 – 08/08	26	14 [d]	0	0.00%	0	747	100.00%	747
08/10 – 08/10	27	14 [d]	0	0.00%	0	238	100.00%	238
08/12 – 08/12	28	14 [d]	0	0.00%	0	266	100.00%	266
08/14 – 08/14	29	14 [d]	0	0.00%	0	177	100.00%	177
08/15 – 08/15	30	12 [d]	0	0.00%	0	110	100.00%	110
08/16 – 08/16	31	12 [d]	0	0.00%	0	214	100.00%	214

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Dates	Period	Hours	Origin					
			Main Bay		Hatchery	Wild		
			No.	Percent	Total	No.	Percent	Total
08/24 – 09/28	32–45	12-84 [d,e]	0	0.00%	0	1	100.00%	1
Total			92,420	79.1%	92,456	24,341	20.8%	116,799

Note: Samples were not processed for SrCl mark identification, so the Gulkana Hatchery contribution is unknown. All fish without a thermal mark are assumed to be of wild origin.

[a] No samples collected; proportions are from following period sampled.

[b] No samples collected; proportions are the average from the previous and following periods sampled.

[c] No samples collected; proportions are from previous period sampled.

[d] No samples collected; assumed wild origin.

[e] No harvest reported.

Appendix E7.–Pink salmon hatchery and wild stock contributions to the Coghill District commercial common property fishery by period, 2017.

Dates	Period	Hours	Origin											
			Solomon Gulch		Cannery Creek		Wally Noerenberg		A.F. Koernig		Hatchery	Wild		
			Number	Percent	Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
06/01 – 06/02	1	36 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
06/05 – 06/06	2	24 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	8,266	100.0%	8,266
06/08 – 06/09	3	24 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
06/12 – 06/13	4	24 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
06/15 – 06/16	5	24 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
06/19 – 06/20	6	24 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	4,119	100.0%	4,119
06/22 – 06/23	7	24 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	10	100.0%	10
06/26 – 06/28	8	48 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	9	100.0%	9
06/29 – 06/29	9	14 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	1,939	100.0%	1,939
06/30 – 06/30	10	14 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	24	100.0%	24
07/01 – 07/01	11	14 [b]	20	58.8%	0	0.0%	0	0.0%	0	0.0%	20	14	41.2%	34
07/02 – 07/02	12	14 [b]	31	58.5%	0	0.0%	0	0.0%	0	0.0%	31	22	41.5%	53
07/03 – 07/05	13	48 [b]	421	58.3%	0	0.0%	0	0.0%	0	0.0%	421	301	41.7%	722
07/06 – 07/08	14	48	10,666	58.3%	0	0.0%	0	0.0%	0	0.0%	10,666	7,618	41.7%	18,284
07/09 – 07/09	15	14	3,591	20.3%	0	0.0%	224	1.3%	0	0.0%	3,816	13,915	78.5%	17,731
07/10 – 07/12	16	60	10,016	18.7%	0	0.0%	0	0.0%	0	0.0%	10,016	43,598	81.3%	53,614
07/13 – 07/16	17	84	9,272	12.4%	824	1.1%	0	0.0%	0	0.0%	9,883	65,063	86.8%	74,946
07/17 – 07/19	18	60	6,885	4.5%	1,633	1.1%	4,900	3.2%	0	0.0%	13,067	140,471	91.5%	153,538
07/20 – 07/23	19	84	0	0.0%	0	0.0%	38,712	14.6%	0	0.0%	38,712	226,740	85.4%	265,452
07/24 – 07/24	20	14	6,329	8.9%	3,164	4.4%	7,911	11.1%	0	0.0%	17,403	53,793	75.6%	71,196
07/28 – 07/28	21	14 [c]	9,350	23.1%	4,079	10.1%	2,251	5.6%	397	1.0%	16,077	24,447	60.3%	40,524
07/30 – 07/30	22	14	25,335	39.7%	10,021	15.7%	0	0.0%	1,253	2.0%	35,075	28,812	45.1%	63,887
08/01 – 08/01	23	14 [d]	13,574	38.3%	5,553	15.7%	0	0.0%	694	2.0%	19,436	15,966	45.1%	35,402
08/04 – 08/04	24	14 [d]	9,423	37.3%	3,968	15.7%	0	0.0%	496	2.0%	13,886	11,407	45.1%	25,293
08/06 – 08/06	25	14 [d]	7,834	37.3%	3,298	15.7%	0	0.0%	412	2.0%	11,544	9,483	45.1%	21,027
08/08 – 08/08	26	14 [d]	11,334	37.3%	4,772	15.7%	0	0.0%	597	2.0%	16,702	13,720	45.1%	30,422
08/10 – 08/10	27	14 [d]	10,354	37.3%	4,360	15.7%	0	0.0%	545	2.0%	15,258	12,534	45.1%	27,792
08/12 – 08/12	28	14 [d]	9,177	37.3%	3,864	15.7%	0	0.0%	483	2.0%	13,525	11,109	45.1%	24,634
08/14 – 08/14	29	14 [d]	5,870	37.3%	2,471	15.7%	0	0.0%	309	2.0%	8,650	7,105	45.1%	15,755
08/15 – 08/15	30	12 [d]	8,318	37.3%	3,502	15.7%	0	0.0%	438	2.0%	12,258	10,069	45.1%	22,327

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Dates	Period	Hours	Origin											
			Solomon Gulch		Cannery Creek		Wally Noerenberg		A.F. Koernig		Hatchery	Wild		
			Number	Percent	Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
08/16 – 08/16	31	12 [d]	26,131	37.3%	11,002	15.69%	0	0.00%	1,375	1.96%	38,508	31,632	45.1%	70,140
08/24 – 08/24	32	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/26 – 08/26	33	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/28 – 08/28	34	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/30 – 08/30	35	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/31 – 08/31	36	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/01 – 09/01	37	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/02 – 09/02	38	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/04 – 09/05	39	24 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	1,984	100.0%	1,984
09/07 – 09/09	40	48 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	2,529	100.0%	2,529
09/11 – 09/13	41	48 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	159	100.0%	159
09/14 – 09/16	42	48 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/18 – 09/20	43	48 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/21 – 09/24	44	84 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/25 – 09/28	45	84 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Totals			183,928	17.5%	63,428	6.0%	54,262	5.2%	7,100	0.7%	308,718	744,128	70.7%	1,052,846

Note: SGH = Solomon Gulch Hatchery, CCH = Cannery Creek Hatchery, WNH = Wally Noerenberg Hatchery, and AFK = Armin F. Koernig Hatchery.

[a] No samples collected; all fish assumed to be of wild origin.

[b] No samples collected; proportions from following period sampled.

[c] No samples collected; proportions are an average of previous and following periods sampled.

[d] No samples collected; proportions from previous period sampled.

[e] No harvest reported.

Appendix E8.–Chum salmon hatchery and wild stock contributions to the Coghill District commercial common property harvest, 2017.

Dates	Period	Hours	Origin									
			Wally Noerenberg		Port Chalmers		Armin F Koernig		Hatchery	Wild		
			Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
06/01 – 06/02	1	36 [a]	5,147	86.5%	804	13.5%	0	0.0%	5,951	0	0.0%	5,951
06/05 – 06/06	2	24 [a]	6,993	86.5%	1,093	13.5%	0	0.0%	8,086	0	0.0%	8,086
06/08 – 06/09	3	24 [a]	2,464	86.5%	385	13.5%	0	0.0%	2,849	0	0.0%	2,849
06/12 – 06/13	4	24	7,247	86.5%	1,132	13.5%	0	0.0%	8,379	0	0.0%	8,379
06/15 – 06/16	5	24	9,019	87.3%	564	5.5%	376	3.6%	9,958	376	3.6%	10,334
06/19 – 06/20	6	24	31,269	83.3%	3,752	10.0%	834	2.2%	35,855	1,668	4.4%	37,523
06/22 – 06/23	7	24 [b]	56,762	84.1%	5,549	8.2%	2,563	3.8%	64,874	2,587	3.8%	67,461
06/26 – 06/28	8	48	240,552	84.9%	18,270	6.5%	15,225	5.4%	274,046	9,135	3.2%	283,181
06/29 – 06/29	9	14	100,048	87.4%	4,822	4.2%	2,411	2.1%	107,281	7,232	6.3%	114,513
06/30 – 06/30	10	14	39,046	87.0%	2,928	6.5%	488	1.1%	42,463	2,440	5.4%	44,903
07/01 – 07/01	11	14	75,879	95.1%	1,946	2.4%	1,946	2.4%	79,770	0	0.0%	79,770
07/02 – 07/02	12	14	61,741	92.6%	4,258	6.4%	710	1.1%	66,709	0	0.0%	66,709
07/03 – 07/05	13	48	290,421	97.8%	3,300	1.1%	3,300	1.1%	297,021	0	0.0%	297,021
07/06 – 07/08	14	48	246,114	91.2%	11,861	4.4%	2,965	1.1%	260,940	8,896	3.3%	269,836
07/09 – 07/09	15	14	199,527	93.5%	4,640	2.2%	4,640	2.2%	208,807	4,640	2.2%	213,447
07/10 – 07/12	16	60	327,203	94.7%	3,636	1.1%	0	0.0%	330,839	14,542	4.2%	345,381
07/13 – 07/16	17	84	631,895	91.8%	24,304	3.5%	8,101	1.2%	664,300	24,304	3.5%	688,604
07/17 – 07/19	18	60	342,165	92.3%	4,073	1.1%	0	0.0%	346,239	24,440	6.6%	370,679
07/20 – 07/23	19	84	93,083	78.3%	0	0.0%	2,586	2.2%	95,668	23,271	19.6%	118,939
07/24 – 07/24	20	14	10,300	74.4%	0	0.0%	0	0.0%	10,300	3,541	25.6%	13,841
07/28 – 07/28	21	14 [c]	2,198	74.4%	0	0.0%	0	0.0%	2,198	756	25.6%	2,954
07/30 – 07/30	22	14 [c]	4,127	74.4%	0	0.0%	0	0.0%	4,127	1,419	25.6%	5,546
08/01 – 08/01	23	14 [c]	2,511	74.4%	0	0.0%	0	0.0%	2,511	863	25.6%	3,374
08/04 – 08/04	24	14 [c]	1,625	74.4%	0	0.0%	0	0.0%	1,625	559	25.6%	2,184
08/06 – 08/06	25	14 [c]	975	74.4%	0	0.0%	0	0.0%	975	335	25.6%	1,310
08/08 – 08/08	26	14 [c]	1,116	74.4%	0	0.0%	0	0.0%	1,116	383	25.6%	1,499
08/10 – 08/10	27	14 [c]	428	74.4%	0	0.0%	0	0.0%	428	147	25.6%	575
08/12 – 08/12	28	14 [c]	769	74.4%	0	0.0%	0	0.0%	769	264	25.6%	1,033
08/14 – 08/14	29	14 [c]	271	74.5%	0	0.0%	0	0.0%	271	93	25.5%	364
08/15 – 08/15	30	12 [c]	130	74.3%	0	0.0%	0	0.0%	130	45	25.7%	175

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			Origin									
			Wally Noerenberg		Port Chalmers		Armin F Koernig		Hatchery	Wild		
Dates	Period	Hours	Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
08/16 – 09/28	31–45	12-84 [d,e]	0	0.0%	0	0.0%	0	0.0%	0	370	100.0%	370
Total			2,791,025	91.0%	65,304	2.1%	46,145	1.5%	2,934,485	132,306	4.3%	3,066,791

Note: WNH = Wally Noerenberg Hatchery, AFK = Armin F. Koernig Hatchery. Fish ticket data as of 5 January 2018.

[a] No samples collected; proportions are from the following period sampled.

[b] No samples collected; proportions are the average of the previous and following periods sampled.

[c] No samples collected; proportions are from the previous sampled period.

[d] No samples collected, wild origin assumed.

[e] No harvest reported.

Appendix E9.–Sockeye salmon hatchery and wild stock contributions to the Eshamy District commercial common property fishery by period, 2017.

Dates	Period	Hours		Main Bay Number	Main Bay Percent	Hatchery total	Wild Number	Wild Percent	Total
06/01 – 06/02	1	36	[a]	1,052	91.6%	1,052	96	8.4%	1,148
06/05 – 06/06	2	24	[a]	1,447	91.7%	1,447	132	8.4%	1,578
06/08 – 06/09	3	24	[a]	4,236	91.7%	4,236	385	8.3%	4,621
06/12 – 06/13	4	24		14,614	91.7%	14,614	1,329	8.3%	15,943
06/15 – 06/16	5	24		28,445	99.0%	28,445	299	1.0%	28,744
06/19 – 06/20	6	24		53,175	98.9%	53,175	566	1.1%	53,741
06/22 – 06/23	7	24		43,582	96.8%	43,582	1,421	3.2%	45,003
06/26 – 06/27	8	24		78,322	100.0%	78,322	0	0.0%	78,322
06/29 – 06/30	9	32		104,967	97.9%	104,967	2,257	2.1%	107,224
07/03 – 07/04	10	24		41,107	97.9%	41,107	903	2.1%	42,010
07/06 – 07/07	11	24		28,875	88.0%	28,875	3,921	12.0%	32,796
07/10 – 07/10	12	12	[b]	11,757	87.1%	11,757	1,745	12.9%	13,502
07/13 – 07/13	13	12		10,948	86.1%	10,948	1,766	13.9%	12,714
07/17 – 07/18	14	36		25,029	70.3%	25,029	10,568	29.7%	35,597
07/20 – 07/21	15	36	[b]	50,038	78.2%	50,038	13,939	21.8%	63,977
07/24 – 07/25	16	24	[b]	16,674	78.2%	16,674	4,645	21.8%	21,319
07/27 – 07/28	17	24		17,326	86.1%	17,326	2,794	13.9%	20,120
07/31 – 08/01	18	24	[b]	8,239	87.0%	8,239	1,236	13.0%	9,475
08/03 – 08/04	19	24		12,227	87.8%	12,227	1,698	12.2%	13,925
08/07 – 08/08	20	24	[c]	0	0.0%	0	2,645	100.0%	2,645
08/10 – 08/11	21	24	[c]	0	0.0%	0	1,136	100.0%	1,136
08/14 – 08/15	22	24	[e]	0	0.0%	0	0	0.0%	0
08/17 – 08/18	23	24	[c]	0	0.0%	0	431	100.0%	431
08/21 – 08/22	24	24	[d]	[d]	0.0%	[d]	[d]	0.0%	[d]
08/24 – 08/25	25	24	[e]	0	0.0%	0	0	0.0%	0
08/28 – 08/29	26	24	[e]	0	0.0%	0	0	0.0%	0
08/31 – 09/01	27	24	[e]	0	0.0%	0	0	0.0%	0
Total				552,060	91.1%	552,059	53,939	8.9%	605,998

Note: Fish ticket data as of 15 January 2018. Samples were not processed for SrCl mark identification, so the Gulkana Hatchery contribution is unknown. MAINBAY11B, MBH14A, MBH14B, MBH14D marks not seen in 2017 samples.

[a] No samples collected; proportions from period 4 samples.

[b] No samples collected; proportions are the average of the prior and following sampled period.

[c] No samples collected; wild origin assumed.

[d] Two or fewer permits fished; results are confidential.

[e] No harvest reported.

Appendix E10.–Pink salmon hatchery and wild stock contributions to the Eshamy District commercial common property fishery by period, 2017.

			Origin											
			Solomon Gulch		Cannery Creek		Wally Noerenberg		A.F. Koernig		Hatchery	Wild		
Dates	Period	Hours	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Total	Number	Percent	Total
06/01 – 06/02	1	36 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
06/05 – 06/06	2	24 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
06/08 – 06/09	3	24 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
06/12 – 06/13	4	24 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
06/15 – 06/16	5	24 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
06/19 – 06/20	6	24 [b]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	5	100.0%	5
06/22 – 06/23	7	24 [b]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	104	100.0%	104
06/26 – 06/27	8	24 [b]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	55	100.0%	55
06/29 – 06/30	9	32 [b]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	1,202	100.0%	1,202
07/03 – 07/04	10	24 [c]	234	13.9%	0	0.0%	0	0.0%	0	0.0%	234	1,451	86.1%	1,685
07/06 – 07/07	11	24 [c]	1,161	13.9%	0	0.0%	0	0.0%	0	0.0%	1,161	7,196	86.1%	8,357
07/10 – 07/10	12	12 [c]	1,943	13.9%	0	0.0%	0	0.0%	0	0.0%	1,943	12,048	86.1%	13,991
07/13 – 07/13	13	12	2,401	13.9%	0	0.0%	0	0.0%	0	0.0%	2,401	14,888	86.1%	17,289
07/17 – 07/18	14	36	0	0.0%	0	0.0%	4,643	0.0%	0	0.0%	4,643	39,795	89.6%	44,438
07/20 – 07/21	15	36 [d]	215	4.2%	0	0.0%	305	5.9%	0	0.0%	520	4,640	89.9%	5,160
07/24 – 07/25	16	24 [d]	1,611	4.2%	0	0.0%	2,289	5.9%	0	0.0%	3,900	34,771	89.9%	38,671
07/27 – 07/28	17	24	2,384	8.3%	0	0.0%	397	1.4%	0	0.0%	2,782	25,829	90.3%	28,611
07/31 – 08/01	18	24 [d]	806	6.7%	921	7.7%	697	5.8%	614	5.1%	3,039	8,939	74.6%	11,978
08/03 – 08/04	19	24	2,567	5.1%	7,702	15.4%	5,135	10.3%	5,135	10.3%	20,538	29,524	59.0%	50,062
08/07 – 08/08	20	24 [e]	2,966	5.1%	8,897	15.4%	5,931	10.3%	5,931	10.3%	23,725	34,105	59.0%	57,830
08/10 – 08/11	21	24 [e]	2,111	5.1%	6,334	15.4%	4,222	10.3%	4,222	10.3%	16,890	24,279	59.0%	41,169
08/14 – 08/15	22	24 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/17 – 08/18	23	24 [e]	1,940	5.1%	5,819	15.4%	3,879	10.3%	3,879	10.3%	15,517	22,305	59.0%	37,822
08/21 – 08/22	24	24 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	1,139	100.0%	1,139
08/24 – 08/25	25	24 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/28 – 09/01	26-27	24 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Total			20,339	5.7%	29,673	8.3%	27,498	7.6%	19,781	5.5%	97,291	262,275	72.9%	359,568

Note: SGH = Solomon Gulch Hatchery, CCH = Cannery Creek Hatchery, WNH = Wally Noerenberg Hatchery, and AFK = Armin F. Koernig Hatchery.

[a] No harvest reported.

[b] No samples collected; wild origin assumed.

[c] No samples collected; proportions from the following sampled period.

[d] No samples collected; proportions are an average of the pervious and following periods sampled.

[e] No samples collected; proportions from the previous sampled period.

Appendix E11.–Chum salmon hatchery and wild stock contributions to the Eshamy District commercial common property fishery by period, 2017.

			Hatchery marks[a]									
			Wally Noerenberg		Port Chalmers		Armin F Koernig		Hatchery	Wild		
Dates	Period	Hours	Number	Percent	Number	Percent	Number	Percent	Total	Number	Percent	Total
06/01 – 06/02	1	36 [a]	90	80.4%	0	0.0%	10	8.9%	100	12	10.7%	112
06/05 – 06/06	2	48 [a]	586	79.9%	0	0.0%	65	8.9%	652	81	11.1%	733
06/08 – 06/09	3	36 [a]	1,688	80.0%	0	0.0%	188	8.9%	1,876	234	11.1%	2,110
06/12 – 06/13	4	36	3,022	80.0%	0	0.0%	336	8.9%	3,357	420	11.1%	3,777
06/15 – 06/16	5	36	4,328	94.4%	0	0.0%	191	4.2%	4,519	64	1.4%	4,583
06/19 – 06/20	6	36	5,579	75.7%	0	0.0%	1,053	14.3%	6,632	737	10.0%	7,369
06/22 – 06/23	7	36	17,810	95.9%	0	0.0%	251	1.4%	18,061	502	2.7%	18,563
06/26 – 06/27	8	48	3,626	77.2%	0	0.0%	476	10.1%	4,102	594	12.6%	4,696
06/29 – 06/30	9	36	20,383	80.0%	268	1.1%	2,682	10.5%	23,333	2,146	8.4%	25,479
07/03 – 07/04	10	48	7,599	72.8%	0	0.0%	454	4.4%	8,052	2,382	22.8%	10,434
07/06 – 07/07	11	36	5,657	68.5%	0	0.0%	153	1.9%	5,810	2,446	29.6%	8,256
07/10 – 07/10	12	36 [b]	3,056	51.8%	0	0.0%	134	2.3%	3,190	2,706	45.9%	5,896
07/13 – 07/13	13	36 [b]	1,852	51.8%	0	0.0%	81	2.3%	1,934	1,640	45.9%	3,574
07/17 – 07/18	14	84	3,073	35.1%	0	0.0%	236	2.7%	3,309	5,436	62.2%	8,745
07/20 – 07/21	15	60 [a]	425	35.1%	0	0.0%	33	2.7%	458	753	62.2%	1,211
07/24 – 07/25	16	84 [a]	2,240	35.1%	0	0.0%	172	2.7%	2,412	3,963	62.2%	6,375
07/27 – 07/28	17	60 [a]	1,126	35.1%	0	0.0%	87	2.7%	1,212	1,992	62.2%	3,204
07/31 – 08/01	18	48 [a]	241	0.0%	0	0.0%	19	0.0%	260	426	0.0%	686
08/03 – 08/04	19	48 [a]	802	0.0%	0	0.0%	62	0.0%	864	1,419	0.0%	2,283
08/07 – 08/08	20	48 [a]	470	0.0%	0	0.0%	36	0.0%	507	832	0.0%	1,339
08/10 – 08/11	21	48 [a]	329	0.0%	0	0.0%	25	0.0%	354	581	0.0%	935
08/14 – 08/15	22	48 [c]	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/17 – 08/18	23	24 [d]	0	0.0%	0	0.0%	0	0.0%	0	664	0.0%	664
08/21 – 08/22	24	24 [d,e]	[e]	0.0%	[e]	0.0%	[e]	0.0%	[e]	[e]	0.0%	[e]
08/24 – 08/25	25	24 [c]	0	0.0%	0	0.0%		0.0%			0.0%	[f]

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			Hatchery marks[a]									
			Wally Noerenberg		Port Chalmers		Armin F Koernig		Hatchery	Wild		
Dates	Period	Hours	Number	Percent	Number	Percent	Number	Percent	Total	Number	Percent	Total
08/28 – 09/01	26–27	24 [c]	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Total			83,982	69.4%	268	0.2%	6,744	5.6%	90,993	30,035	24.8%	121,028

Note: WNH = Wally Noerenberg Hatchery, AFK = Armin F. Koernig Hatchery.

[a] No samples collected; proportions are from the previous period sampled.

[b] No samples collected; proportions are the average of the previous and following periods sampled.

[c] No harvest reported.

[d] No samples collected; wild origin assumed.

[e] Two or fewer permits fished; results are confidential.

Appendix E12.–Daily salmon sales and sex ratios, sales summary, and broodstock summary at the Main Bay Hatchery, 2017.

	Sockeye salmon				
Date	% Female	Sales harvest[a]	Sales harvest cumulative	Broodstock[b]	Broodstock cumulative
06/30		0	0	0	0
07/01	0.0%	0	0	1	1
07/02	66.7%	0	0	3	4
07/03	16.7%	0	0	6	10
07/04	11.1%	0	0	9	19
07/05	60.9%	0	0	23	42
07/06	50.0%	0	0	22	64
07/07	55.3%	0	0	38	102
07/08	58.5%	0	0	53	155
07/09	74.4%	0	0	43	198
07/10	65.6%	0	0	32	230
07/11	64.1%	0	0	39	269
07/12	54.5%	0	0	101	370
07/13	53.4%	0	0	116	486
07/14	100.0%	0	0	32	518
07/15		0	0	0	518
07/16		0	0	0	518
07/17		0	0	0	518
07/18		0	0	0	518
07/19		0	0	0	518
07/20		0	0	0	518
07/21		0	0	0	518
07/22		0	0	0	518
07/23		0	0	0	518
07/24		0	0	0	518
07/25		0	0	0	518
07/26		0	0	0	518
07/27	73.3%	0	0	15	533
07/28	100.0%	0	0	5	538
07/29		0	0	0	538
07/30	0.0%	0	0	6	544
07/31	54.2%	0	0	439	983
08/01	68.4%	0	0	19	1,002
08/02	58.6%	0	0	607	1,609
08/03	0.0%	0	0	8	1,617
08/04	59.2%	0	0	590	2,207
08/05	75.0%	0	0	20	2,227
08/06	59.5%	0	0	1,008	3,235
08/07	37.5%	0	0	8	3,243
08/08	59.9%	0	0	831	4,074
08/09	63.2%	0	0	19	4,093
08/10	57.7%	0	0	600	4,693
08/11	45.5%	0	0	11	4,704

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	Sockeye salmon				
Date	% Female	Sales harvest[a]	Sales harvest cumulative	Broodstock[b]	Broodstock cumulative
08/12	56.7%	0	0	610	5,314
08/13	33.3%	0	0	24	5,338
08/14	56.2%	0	0	820	6,158
08/15	33.3%	0	0	75	6,233
08/16	57.4%	0	0	594	6,827
08/17	53.3%	0	0	15	6,842
08/18	55.6%	0	0	630	7,472
08/19	58.7%	0	0	414	7,886
08/20	71.7%	0	0	1,572	9,458
08/21		0	0	0	9,458
Hatchery escapement summary[c]					
Purse seine whole fish harvest					0
Raceway harvest[d]				0	0
Viable broodstock (spawned, eggs in incubators)					6,443
Unviable broodstock (green/over-ripe/bad)					225
Unspawned fish (e.g., excess males/females)					2,389
Holding mortalities (raceway, pen mortalities)					401
Estimated unharvested return[e]					39,077
Estimated total run to hatchery site					48,535
Sales summary					
Purse seine whole fish sales					0
Raceway sales[f]					0
Carcass sales[g]					0
Total sales					0

[a] Whole fish from purse seine and raceway sales.

[b] Broodstock daily harvest numbers include viable broodstock, unviable broodstock, unspawned fish, and holding mortalities.

[c] Determined by fish tickets and PWSAC eggtake log, and annual report (PWSAC 2017b).

[d] Raceway harvest includes whole fish as well as roe extraction not conducted as egg take.

[e] Fish remaining in saltwater and fresh water after all hatchery harvest is complete.

[f] Sum of raceway harvest, unviable broodstock and unspawned fish.

[g] Represents the sale of viable broodstock carcasses.

Appendix E13.–Main Bay sockeye salmon harvests and total contribution, 1990–2017.

	Hatchery contributions[a]					Total
Year	Commercial	Subsistence/ homepack	Sport	Broodstock/ escapement	Cost recovery	hatchery contribution
1990	9,000	8	0	0	0	9,008
1991	480,200	260	0	4,700	0	485,160
1992	368,427	395	0	6,185	158,893	533,900
1993	208,709	656	0	8,020	97,594	314,979
1994	214,737	181	0	72,335	85,511	372,764
1995	134,778	114	0	11,148	62,782	208,822
1996	406,100	120	935	7,979	83,430	498,564
1997	845,871	147	1,031	16,498	236,031	1,099,578
1998	128,702	133	1,746	10,596	111,026	252,203
1999	143,511	187	2,207	7,104	0	153,008
2000	339,305	75	1,835	5,426	0	346,641
2001	770,884	170	2,861	10,508	50,458	834,881
2002	846,534	17	3,566	7,352	93,794	951,263
2003	1,047,133	229	4,731	6,878	366,768	1,425,739
2004	355,821	506	4,160	17,578	279,139	657,205
2005	233,089	531	2,884	44,366	188,904	469,774
2006	668,780	203	2,568	15,854	350,742	1,038,147
2007	819,244	290	6,290	20,285	321,330	1,167,439
2008	835,241	344	3,482	15,659	0	854,727
2009	756,130	244	5,473	10,815	131,553	903,971
2010	1,347,644	1,013	2,980	18,196	0	1,366,340
2011	1,274,096	983	3,291	12,810	0	1,291,180
2012	1,271,314	1,542	3,033	19,173	40	1,295,103
2013	639,157	1,333	5,420	189,059	0	834,969
2014	1,189,499	3,485	9,361	84,324	0	1,281,347
2015	1,331,675	2,332	5,574	31,255	180,516	1,551,352
2016	778,515	1,777	4,926	9,846	0	795,064
10-year average	1,024,252	1,334	4,983	41,142	63,344	1,134,149
2017	552,059	3,404	5,663	48,535	0	609,661

[a] Commercial harvest estimates are from otolith marks. Sport harvest is the 5-year averages from PWS sport fishing surveys and commercial harvest contribution proportions. Subsistence/personal use estimates are derived from commercial harvest proportions. Broodstock/escapement and hatchery cost recovery are assumed to be 100% MBH origin.

Appendix E14.–Main Bay Hatchery salmon fry releases, 1983–2017.

		Sockeye salmon				Pink salmon	Chum salmon
Release year	Primary return years	Coghill Lake stock	Eshamy Lake stock	Eyak Lake stock	Total released [a]	Total released	Total released
1983						25,751,531	8,644,179
1984						41,945,403	7,490,291
1985						29,286,498	11,033,065
1986	1987, 1988					32,728,663	5,258,175
1987	1988, 1989					2,660,000	76,646,750
1988	1989, 1990	330,025			330,025		
1989	1991, 1990	3,925,357			3,925,357	10,200,000	
1990	1992, 1993	2,616,498			2,616,498		
1991	1993, 1994	1,960,774	1,843,176		3,803,950		
1992	1994, 1995	1,546,929	2,475,390	47,609	4,069,928		
1993	1995, 1996	3,288,689	966,750	63,822	4,319,261		
1994	1996, 1997	3,289,824	691,633		3,981,457		
1995	1997, 1998	4,049,763	1,546,011	90,348	5,686,122		
1996	1998, 1999	4,194,174	114,475	82,514	4,391,163		
1997	1999, 2000	239,023	845,190	131,503	1,215,716		
1998	2000, 2001		2,485,000	181,000	2,666,000		
1999	2001, 2002		4,165,786	2,913,460	7,079,246		
2000	2002, 2003	8,401,117			8,401,117		
2001	2003, 2004	7,612,350			7,612,350		
2002	2004, 2005	7,858,190			7,858,190		
2003	2005, 2006	6,576,535			6,576,535		
2004	2006, 2007	9,057,829			9,057,829		
2005	2007, 2008	10,868,642			10,868,642		
2006	2008, 2009	9,516,461			9,516,461		
2007	2009, 2010	9,393,000			9,393,000		
2008	2010, 2011	9,384,000			9,384,000		
2009	2011, 2012	9,419,000			9,419,000		
2010	2012, 2013	8,160,000			8,160,000		
2011	2013, 2014	8,680,000			8,680,000		
2012	2014, 2015	11,040,000			11,040,000		
2013	2015, 2016	11,500,000			11,500,000		
2014	2016, 2017	11,460,000			11,460,000		
2015	2017, 2018	10,730,000			10,730,000		
2016	2018, 2019	10,040,000			10,040,000		
10-year average		9,980,600			9,980,600		
2017	2019, 2020	10,504,000			10,504,000		

[a] Totals do not include releases at other locations, such as Coghill, Davis, Eshamy, Esther Pass, Eyak, Marsha, Pass, Solf, or Esther Pass lakes.

Appendix E15.–Pink salmon hatchery and wild stock contributions to the Eastern District commercial common property fishery by period, 2017.

Dates	Period	Hours	Origin											
			Solomon Gulch		Cannery Creek		Wally Noerenberg		A.F. Koernig		Hatchery	Wild		
			Number	Percent	Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
06/22 – 06/22	1	12	233	4.5%	0	0.0%	0	0.0%	0	0.0%	233	4,894	95.5%	5,127
06/29 – 06/29	2	12	9,124	17.7%	0	0.0%	0	0.0%	0	0.0%	9,124	42,402	82.3%	51,526
07/10 – 07/10	3	14	2,315,732	91.5%	0	0.0%	0	0.0%	0	0.0%	2,315,732	215,417	8.5%	2,531,149
07/11 – 07/11	4	14 [a]	1,047,885	91.1%	0	0.0%	0	0.0%	0	0.0%	1,047,885	102,914	8.9%	1,150,799
07/12 – 07/12	5	14	788,615	90.6%	0	0.0%	0	0.0%	0	0.0%	788,615	81,581	9.4%	870,196
07/13 – 07/13	6	14	1,180,078	71.6%	0	0.0%	0	0.0%	0	0.0%	1,180,078	468,561	28.4%	1,648,639
07/14 – 07/14	7	14	395,991	44.2%	0	0.0%	0	0.0%	0	0.0%	395,991	499,703	55.8%	895,694
07/15 – 07/15	8	14 [a]	216,805	63.6%	0	0.0%	1,777	0.5%	0	0.0%	219,321	121,807	35.7%	341,128
07/16 – 07/16	9	14	823,214	83.3%	0	0.0%	10,290	1.0%	0	0.0%	833,504	154,353	15.6%	987,857
07/17 – 07/17	10	14	571,288	76.0%	0	0.0%	0	0.0%	0	0.0%	571,288	179,995	24.0%	751,283
07/20 – 07/20	11	14	569,161	77.9%	0	0.0%	0	0.0%	0	0.0%	569,161	161,519	22.1%	730,680
07/21 – 07/21	12	14	194,769	29.9%	0	0.0%	0	0.0%	0	0.0%	194,769	456,701	70.1%	651,470
07/23 – 07/23	13	14	437,516	66.3%	0	0.0%	0	0.0%	0	0.0%	437,516	222,231	33.7%	659,747
07/24 – 07/24	14	14	55,226	14.6%	0	0.0%	0	0.0%	0	0.0%	55,058	322,480	85.4%	377,538
07/28 – 07/28	15	14	157,981	34.4%	0	0.0%	0	0.0%	0	0.0%	157,981	301,601	65.6%	459,582
07/30 – 07/30	16	14	308,111	51.0%	0	0.0%	0	0.0%	0	0.0%	308,111	295,535	49.0%	603,646
08/01 – 08/01	17	14	329,203	58.1%	12,193	2.2%	0	0.0%	0	0.0%	341,395	225,565	39.8%	566,960
08/04 – 08/04	18	14	257,147	43.2%	12,544	2.1%	0	0.0%	0	0.0%	269,691	326,137	54.7%	595,828
08/06 – 08/06	19	14 [a]	166,893	33.0%	5,318	1.1%	2,631	0.5%	0	0.0%	174,842	330,324	65.4%	505,166
08/08 – 08/08	20	14	118,601	22.9%	0	0.0%	5,391	1.0%	0	0.0%	123,992	393,539	76.0%	517,531
08/10 – 08/10	21	14	66,768	14.6%	9,538	2.1%	0	0.0%	4,769	1.0%	81,076	376,765	82.3%	457,841
08/12 – 08/12	22	14 [a]	10,149	14.1%	1,128	1.6%	376	0.5%	376	0.5%	12,028	60,141	83.3%	72,169
08/14 – 08/14	23	14	67,001	13.5%	5,154	1.0%	5,154	1.0%	0	0.0%	77,309	417,469	84.4%	494,778
08/15 – 08/15	24	12 [a]	28,567	9.9%	10,525	3.6%	3,007	1.0%	0	0.0%	42,099	246,581	85.4%	288,680
08/16 – 08/16	25	12	10,440	6.2%	10,440	6.2%	1,740	1.0%	0	0.0%	22,620	144,421	86.5%	167,041
08/18 – 08/18	26	12	22,696	6.3%	22,696	6.3%	0	0.0%	0	0.0%	45,391	313,957	87.4%	359,348
08/20 – 08/20	27	12	11,785	3.1%	7,857	2.1%	0	0.0%	0	0.0%	19,642	357,481	94.8%	377,123
08/22 – 08/22	28	12	12,105	4.2%	9,078	3.1%	0	0.0%	0	0.0%	21,183	269,326	92.7%	290,509
08/24 – 08/24	29	12	3,363	2.2%	6,726	4.3%	1,681	1.1%	0	0.0%	11,770	144,602	92.5%	156,372

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Appendix E15.–Page 2 of 2.

Dates	Period	Hours	Origin: Solomon Gulch Number	Solomon Gulch Percent	Cannery Creek Number	Cannery Creek Percent	Wally Noerenberg Number	Wally Noerenberg Percent	A.F. Koernig Number	A.F. Koernig Percent	Hatchery total	Wild Number	Wild Percent	Total
08/26 – 08/26	30	12	0	0.0%	1,083	4.4%	0	0.0%	0	0.0%	1,083	23,279	95.6%	24,362
08/28 – 08/28	31	12 [b]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	29,929	100.0%	29,929
08/30 – 08/30	32	12 [c]	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]	[c]	0.0%	[c]
08/31 – 08/31	33	12 [b]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	11,588	100.0%	11,588
09/01 – 09/01	34	12 [d]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/02 – 09/02	35	12 [d]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/03 – 09/03	36	12 [d]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/04 – 09/04	37	12 [d]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/05 – 09/05	38	12 [c]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	107	100.0%	107
09/06 – 09/06	39	12 [c]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	126	100.0%	126
09/07 – 09/16	40-42	204 [d]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Total			10,176,450	57.7%	114,278	0.6%	32,041	0.2%	5,145	0.0%	10,327,914	7,303,922	41.4%	17,631,836

Note: SGH = Solomon Gulch Hatchery, CCH = Cannery Creek Hatchery, WNH = Wally Noerenberg Hatchery, and AFK=Armin F. Koernig Hatchery. Fish ticket data as of 5 January 2018.

[a] No samples collected; proportions are an average of the prior sampled period and the following sampled period.

[b] No samples collected, wild origin assumed.

[c] Two or fewer permits fished; results are confidential.

[d] No harvest reported.

Appendix E16.–Pink salmon hatchery and wild stock contributions to the Northern District commercial common property fishery by period, 2017.

Dates	Period	Hours	Origin											
			Solomon Gulch		Cannery Creek		Wally Noerenberg		A.F. Koernig		Hatchery	Wild		
			Number	Percent	Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
06/22 – 06/22	1	12 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/13 – 07/13	2	14 [b]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	211,531	100.0%	211,531
07/14 – 07/14	3	14	42,837	20.0%	0	0.0%	0	0.0%	0	0.0%	42,837	171,348	80.0%	214,185
07/16 – 07/16	4	14	214,965	51.6%	0	0.0%	0	0.0%	0	0.0%	214,965	201,803	48.4%	416,768
07/17 – 07/17	5	14	152,099	68.4%	0	0.0%	0	0.0%	0	0.0%	152,099	70,199	31.6%	222,298
07/18 – 07/18	6	14	65,478	40.4%	0	0.0%	0	0.0%	1,723	1.1%	67,201	94,770	58.5%	161,971
07/21 – 07/21	7	14	166,611	42.7%	4,064	1.0%	4,064	1.0%	0	0.0%	174,738	215,375	55.2%	390,113
07/24 – 07/24	8	14	60,004	24.5%	28,698	11.7%	2,609	1.1%	0	0.0%	91,311	153,924	62.8%	245,235
07/28 – 07/28	9	14	198,183	29.5%	35,390	5.3%	21,234	3.2%	7,078	1.1%	261,884	410,521	61.1%	672,405
07/30 – 07/30	10	14	146,377	27.7%	123,857	23.4%	5,630	1.1%	0	0.0%	275,864	253,345	47.9%	529,209
08/01 – 08/01	11	14	91,360	42.0%	24,692	11.4%	0	0.0%	2,469	1.1%	118,521	98,767	45.5%	217,288
08/04 – 08/04	12	14	44,595	14.7%	191,121	63.2%	3,185	1.1%	0	0.0%	238,902	63,707	21.1%	302,609
08/06 – 08/06	13	14	24,197	4.2%	459,740	79.2%	18,148	3.1%	0	0.0%	502,084	78,640	13.5%	580,724
08/08 – 08/08	14	14	30,438	6.4%	309,458	64.9%	5,073	1.1%	0	0.0%	344,969	131,900	27.7%	476,869
08/10 – 08/10	15	14	20,917	3.1%	453,207	67.7%	62,752	9.4%	0	0.0%	536,876	132,476	19.8%	669,352
08/12 – 08/12	16	14	10,208	3.2%	221,177	68.4%	27,222	8.4%	0	0.0%	258,606	64,652	20.0%	323,258
08/13 – 08/13	17	14	0	0.0%	196,324	86.3%	0	0.0%	0	0.0%	196,324	31,125	13.7%	227,449
08/14 – 08/14	18	14	14,237	3.1%	265,750	58.3%	4,746	1.0%	18,982	4.2%	303,714	151,857	33.3%	455,571
08/15 – 08/15	19	12 [c]	9,728	2.8%	225,069	63.7%	10,254	2.9%	7,362	2.1%	252,414	100,965	28.6%	353,379
08/16 – 08/16	20	12	4,137	2.4%	119,982	69.0%	8,275	4.8%	0	0.0%	132,394	41,373	23.8%	173,767
08/26 – 08/26	21	12 [d,e]	[d]	0.0%	[d]	0.0%	[d]	0.0%	[d]	0.0%	[d]	[d]	0.0%	[d]
08/28 – 08/28	22	12 [c]	472	2.4%	13,702	69.0%	945	4.8%	0	0.0%	15,119	4,725	23.8%	19,844
08/30 – 08/30	23	12 [e]	6,215	2.4%	180,232	69.0%	12,430	4.8%	0	0.0%	198,877	62,149	23.8%	261,026
08/31 – 08/31	24	12 [e]	2,770	2.4%	80,330	69.0%	5,540	4.8%	0	0.0%	88,640	27,700	23.8%	116,340
09/01 – 09/01	25	12 [e]	3,384	2.4%	98,142	69.0%	6,768	4.8%	0	0.0%	108,295	33,842	23.8%	142,137

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Appendix E16.–Page 2 of 2.

Dates	Period	Hours	Origin											
			Solomon Gulch		Cannery Creek		Wally Noerenberg		A.F. Koernig		Hatchery	Wild		
			Number	Percent	Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
09/02 – 09/02	26	12 [e]	704	2.4%	20,404	69.0%	1,407	4.8%	0	0.0%	22,515	7,036	23.8%	29,551
09/03 – 09/03	27	12 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/04 – 09/04	28	12 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/05 – 09/05	29	12 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/06 – 09/06	30	12 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/07 – 09/09	31	60 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/10 – 09/16	32–33	144 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Totals			1,310,096	17.7%	3,056,587	41.2%	200,643	2.7%	0	0.0%	4,601,616	2,815,540	37.9%	7,420,481

Note: SGH = Solomon Gulch Hatchery, CCH = Cannery Creek Hatchery, WNH = Wally Noerenberg Hatchery, and AFK=Armin F. Koernig Hatchery. Fish ticket data as of 5 January 2018.

[a] No harvest reported.

[b] No samples collected; wild origin assumed.

[c] No samples collected, proportions are an average of the prior sampled period and the following sampled period.

[d] Two or fewer permits fished; results are confidential.

[e] No samples collected; proportions from the previous period.

Appendix E17.–Pink salmon hatchery and wild stock contributions to Prince William Sound, Bering, and Copper River commercial common property fishery, 2017.

		Origin											
		Solomon Gulch		Cannery Creek		Wally Noerenberg		A.F. Koernig		Hatchery	Wild		
Districts	Sample	Number	Percent	Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
Bering River	200 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	105	100.0%	105
Copper River	212 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	69,213	100.0%	69,213
Eastern	221	10,176,450	57.7%	114,278	0.6%	32,041	0.2%	5,145	0.0%	10,327,914	7,303,922	41.4%	17,631,836
Northern	222	1,310,096	17.7%	3,056,587	41.2%	200,643	2.7%	37,614	0.5%	4,604,941	2,815,540	37.9%	7,420,481
Coghill	223	183,928	17.5%	63,428	6.0%	54,262	5.2%	7,100	0.7%	308,718	744,128	70.7%	1,052,846
Northwestern	224	0	0.0%	0	0.0%	30,277	2.0%	3,380	0.2%	33,657	1,479,708	97.8%	1,513,365
Eshamy	225	20,340	5.7%	29,673	8.3%	27,499	7.6%	19,782	5.5%	97,293	262,275	72.9%	359,568
Southwestern	226	877,801	7.6%	2,531,613	21.9%	1,016,574	8.8%	2,890,293	25.0%	7,316,281	4,258,282	36.8%	11,574,563
Montague	227	514,870	15.9%	384,310	11.9%	86,832	2.7%	137,269	4.2%	1,123,281	2,115,290	65.3%	3,238,571
Southeastern	228	7,144	1.1%	595	0.1%	0	0.0%	0	0.0%	7,739	668,350	98.9%	676,089
Unakwik	229 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	209	100.0%	209
Total		13,090,630	30.1%	6,180,484	14.2%	1,448,128	3.4%	3,100,583	7.2%	23,819,824	19,717,022	45.3%	43,536,846

Note: SGH = Solomon Gulch Hatchery, CCH = Cannery Creek Hatchery, WNH = Wally Noerenberg Hatchery, and AFK = Armin F. Koernig Hatchery. Fish ticket data as of February 8, 2018.

[a] No samples collected; all harvest allocated to wild stocks.

Appendix E18.–Sockeye salmon hatchery and wild stock contributions to the Southwestern District commercial common property fishery by period, 2017.

			Origin						
			Main Bay		Hatchery		Wild		
Dates	Period	Hours	Number	Percent	Total		Number	Percent	Total
06/01 – 06/04	1	84 [a]	159	0.0%	0	0.0%	8	0.0%	167
06/05 – 06/07	2	60	479	95.0%	28	5.6%	7	1.4%	504
06/08 – 06/11	3	84 [b]	1,252	96.5%	123	9.5%	31	2.4%	1,297
06/12 – 06/12	4	12 [b,c]	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]
06/14 – 06/14	5	12 [b]	1,687	96.5%	4,341	248.3%	411	23.5%	1,748
06/16 – 06/16	6	12	1,544	98.0%	4,585	290.9%	406	25.8%	1,576
06/19 – 06/19	7	8	2,220	97.2%	5,775	253.0%	87	3.8%	2,283
06/22 – 06/22	8	8	3,556	88.9%	1,435	35.9%	29	0.7%	4,001
06/24 – 06/24	9	8	1,359	92.7%	5,888	401.6%	153	10.4%	1,466
06/26 – 06/26	10	8	957	93.9%	9,941	975.6%	117	11.5%	1,019
06/29 – 06/29	11	8	2,433	94.4%	8,876	344.6%	209	8.1%	2,576
07/01 – 07/01	12	8	3,833	91.2%	1,803	42.9%	258	6.1%	4,202
07/03 – 07/03	13	8	1,302	71.0%	2,594	141.4%	371	20.2%	1,835
07/06 – 07/06	14	8	855	77.6%	1,092	99.1%	156	14.2%	1,102
07/08 – 07/08	15	8 [b]	663	74.4%	419	47.0%	60	6.7%	891
07/10 – 07/10	16	12 [c]	558	71.2%	352	44.9%	9	1.1%	784
07/11 – 07/11	17	12 [b,c]	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]
07/12 – 07/12	18	12 [b,c]	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]
07/13 – 07/13	19	12 [b,c]	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]
07/14 – 07/14	20	12 [b,c]	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]
07/15 – 07/15	21	14 [b,c]	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]
07/16 – 07/16	22	14 [b,c]	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]
07/17 – 07/17	23	14 [b,c]	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]
07/18 – 07/18	24	14 [b,c]	487	70.4%	487	70.4%	205	29.6%	692
07/20 – 07/20	25	14 [b]	1,026	70.5%	1,026	70.5%	430	29.5%	1,456
07/21 – 07/21	26	14	5,002	69.8%	5,002	69.8%	2,168	30.2%	7,170
07/24 – 07/24	27	14 [b]	5,063	65.1%	5,063	65.1%	2,709	34.9%	7,772
08/01 – 08/01	28	14 [b]	350	65.1%	350	65.1%	188	34.9%	538
08/04 – 08/04	29	14 [b]	263	65.1%	263	65.1%	141	34.9%	404
08/06 – 08/06	30	14	588	60.6%	588	60.6%	383	39.4%	971

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Dates			Period	Hours	Main Bay Number	Main Bay Percent	Hatchery total		Wild Number	Wild Percent	Total
08/08	–	08/08	31	14	156	24.7%	156	24.7%	476	75.3%	632
08/10	–	08/10	32	14 [d]	0	0.0%	0	0.0%	355	100.0%	355
08/12	–	08/12	33	14 [d]	0	0.0%	0	0.0%	985	100.0%	985
08/13	–	08/13	34	14 [d]	0	0.0%	0	0.0%	100	100.0%	100
08/14	–	08/14	35	14 [d]	0	0.0%	0	0.0%	1,010	100.0%	1,010
08/16	–	08/16	36	12 [d]	0	0.0%	0	0.0%	285	100.0%	285
08/26	–	08/26	37	12 [d]	0	0.0%	0	0.0%	325	100.0%	325
08/28	–	08/28	38	12 [d]	0	0.0%	0	0.0%	231	100.0%	231
08/30	–	08/30	39	12 [d]	0	0.0%	0	0.0%	78	100.0%	78
08/31	–	08/31	40	12 [d]	0	0.0%	0	0.0%	38	100.0%	38
09/01	–	09/01	41	12 [d]	0	0.0%	0	0.0%	47	100.0%	47
09/02	–	09/02	42	12 [d]	0	0.0%	0	0.0%	44	100.0%	44
09/03	–	09/03	43	12 [d]	0	0.0%	0	0.0%	2	100.0%	2
09/04	–	09/04	44	12 [d]	0	0.0%	0	0.0%	2	100.0%	2
09/05	–	09/05	45	12 [d]	0	0.0%	0	0.0%	16	100.0%	16
09/06	–	09/06	46	12 [d]	0	0.0%	0	0.0%	20	100.0%	20
09/07	–	09/09	47	60 [d]	0	0.0%	0	0.0%	50	100.0%	50
09/10	–	09/16	48–49	144	0	0.0%	0	0.0%	0	0.0%	0
Total					37,266	73.8%	37,266	73.8%	13,239	26.2%	50,505

Note: Total harvest data from fish tickets as of January 5, 2018. Samples were not processed for SrCl mark identification, so the Gulkana Hatchery contribution is unknown.

[a] No samples collected; proportions are from following sampled period.

[b] No samples collected; proportions are the average from the previous and following sampled periods.

[c] Two or fewer permits fished; results are confidential.

[d] No samples collected; wild origin assumed.

Appendix E19.–Pink salmon hatchery and wild stock contributions to the Southwestern District commercial common property fishery by period, 2017.

Dates	Period	Hours	Origin											
			Solomon Gulch		Cannery Creek		Wally Noerenberg		A.F. Koernig		Hatchery	Wild		
			Number	Percent	Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
06/01 – 06/04	1	84 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
06/05 – 06/07	2	60 [b]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	3	0.0%	3
06/08 – 06/11	3	84 [b]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	22	100.0%	22
06/12 – 06/12	4	12 [c]	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]	[c]	0.0%	[c]
06/14 – 06/14	5	12 [b]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	49	100.0%	49
06/16 – 06/16	6	12 [b]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	2	100.0%	2
06/19 – 06/19	7	8 [b]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	39	100.0%	39
06/22 – 06/22	8	8 [b]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	212	0.0%	212
06/24 – 06/24	9	8 [b]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	396	100.0%	396
06/26 – 06/26	10	8 [b]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	310	100.0%	310
06/29 – 06/29	11	8 [b]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	517	100.0%	517
07/01 – 07/01	12	8 [b]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	3,919	100.0%	3,919
07/03 – 07/03	13	8	9,199	67.7%	0	0.0%	0	0.0%	0	0.0%	9,199	4,380	32.3%	13,579
07/06 – 07/06	14	8	11,874	54.1%	0	0.0%	0	0.0%	0	0.0%	11,874	10,068	45.9%	21,942
07/08 – 07/08	15	8	4,147	0.0%	0	0.0%	0	0.0%	154	0.0%	4,300	10,290	0.0%	14,590
07/10 – 07/10	16	12	10,279	46.1%	0	0.0%	0	0.0%	501	2.2%	10,780	11,532	51.7%	22,312
07/11 – 07/11	17	12 [c,d]	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]	[c]	0.0%	[c]
07/12 – 07/12	18	12 [c,d]	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]	[c]	0.0%	[c]
07/13 – 07/13	19	12 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/14 – 07/14	20	12 [c,d]	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]	[c]	0.0%	[c]
07/15 – 07/15	21	14 [c,d]	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]	[c]	0.0%	[c]
07/16 – 07/16	22	14 [c]	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]	[c]	0.0%	[c]
07/17 – 07/17	23	14 [c]	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]	[c]	0.0%	[c]
07/18 – 07/18	24	14 [d]	8,481	29.4%	361	1.2%	0	0.0%	10,471	36.3%	19,312	9,573	33.1%	28,885
07/20 – 07/20	25	14	7,224	7.5%	2,408	2.5%	0	0.0%	69,836	72.5%	79,468	16,857	17.5%	96,325
07/21 – 07/21	26	14	127,209	25.3%	5,300	1.1%	10,601	2.1%	116,609	23.2%	259,719	243,818	48.4%	503,537
07/24 – 07/24	27	14	167,774	28.4%	6,214	1.1%	31,069	5.3%	192,629	32.6%	397,687	192,629	32.6%	590,316
08/01 – 08/01	28	14	68,184	17.7%	16,043	4.2%	16,043	4.2%	108,293	28.1%	208,564	176,477	45.8%	385,041
08/04 – 08/04	29	14	47,515	15.6%	6,335	2.1%	25,341	8.3%	41,179	13.5%	120,370	183,723	60.4%	304,093

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Dates	Period	Hours	Origin											
			Solomon Gulch		Cannery Creek		Wally Noerenberg		A.F. Koernig		Hatchery	Wild		
			Number	Percent	Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
08/06 – 08/06	30	14	88,244	13.5%	101,820	15.6%	74,668	11.5%	135,760	20.8%	400,491	251,155	38.5%	651,646
08/08 – 08/08	31	14	63,733	9.4%	63,733	9.4%	49,570	7.3%	177,037	26.0%	354,074	325,748	47.9%	679,822
08/10 – 08/10	32	14	26,395	4.2%	131,976	21.1%	39,593	6.3%	178,168	28.4%	376,132	250,754	40.0%	626,886
08/12 – 08/12	33	14	49,864	3.1%	249,321	15.6%	132,971	8.3%	648,234	40.6%	1,080,391	515,263	32.3%	1,595,654
08/13 – 08/13	34	14	0	0.0%	18,784	8.6%	18,784	8.6%	118,967	54.3%	156,536	62,614	28.6%	219,150
08/14 – 08/14	35	14	78,212	7.3%	301,676	28.1%	78,212	7.3%	256,983	24.0%	715,083	357,541	33.3%	1,072,624
08/16 – 08/16	36	12	30,049	5.3%	192,315	33.7%	60,098	10.5%	114,187	20.0%	396,650	174,285	30.5%	570,935
08/26 – 08/26	37	12	0	0.0%	228,079	24.5%	118,998	12.8%	208,246	22.3%	555,323	376,826	40.4%	932,149
08/28 – 08/28	38	12	35,020	3.2%	385,224	34.7%	140,081	12.6%	151,755	13.7%	712,081	396,897	35.8%	1,108,978
08/30 – 08/30	39	12	5,153	1.1%	211,287	43.2%	56,687	11.6%	92,760	18.9%	365,888	123,680	25.3%	489,568
08/31 – 08/31	40	12 [e]	2,893	1.1%	118,598	43.2%	31,819	11.6%	52,067	18.9%	205,377	69,423	25.3%	274,800
09/01 – 09/01	41	12 [e]	4,282	1.1%	175,556	43.2%	47,100	11.6%	77,073	18.9%	304,011	102,764	25.3%	406,775
09/02 – 09/02	42	12 [e]	4,360	1.1%	178,749	43.2%	47,957	11.6%	78,475	18.9%	309,541	104,633	25.3%	414,174
09/03 – 09/03	43	12 [e]	997	1.1%	40,895	43.2%	10,972	11.6%	17,954	18.9%	70,818	23,939	25.3%	94,757
09/04 – 09/04	44	12 [e]	754	1.1%	30,908	43.2%	8,292	11.6%	13,569	18.9%	53,523	18,092	25.3%	71,615
09/05 – 09/05	45	12 [e]	1,611	1.1%	66,032	43.2%	17,716	11.6%	28,989	18.9%	114,347	38,653	25.3%	153,000
09/06 – 09/06	46	12 [b]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	80,959	100.0%	80,959
09/07 – 09/09	47	60 [b]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	82,253	100.0%	82,253
09/10 – 09/16	48-49	144 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Totals			877,801	7.6%	2,531,613	21.9%	1,016,574	8.8%	2,890,293	25.0%	7,316,281	4,258,282	36.8%	11,574,563

Note: SGH = Solomon Gulch Hatchery, CCH = Cannery Creek Hatchery, WNH = Wally Noerenberg Hatchery, and AFK=Armin F. Koernig Hatchery. Fish ticket data as of January 5, 2018.

[a] No samples collected; wild origin assumed.

[b] No samples collected, proportions are an average of the prior sampled period and the following sampled period.

[c] Two or fewer permits fished; results are confidential.

[d] No samples collected; proportions from the previous period.

[e] No harvest reported.

Appendix E20.–Chum salmon hatchery and wild stock contributions to commercial common property fisheries by period and mark identification, Southwestern District, 2017.

				Hatchery marks[a]										
				Wally Noerenberg		Port Chalmers		Armin F Koernig		Hatchery		Wild		
Dates		Period	Hours	Number	Percent	Number	Percent	Number	Percent	Total		Number	Percent	Total
06/01	06/04	1	84 [a]	61	4.4%	102	7.4%	1,223	88.2%	1,386	100.0%	0	0.0%	1,386
06/05	06/07	2	60 [a]	68	4.4%	114	7.4%	1,365	88.2%	1,547	100.0%	0	0.0%	1,547
06/08	06/11	3	84 [a]	132	4.4%	219	7.4%	2,630	88.2%	2,981	100.0%	0	0.0%	2,981
06/12	06/12	4	12 [a,b]	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]
06/14	06/14	5	12 [a]	334	4.4%	557	7.4%	6,681	88.2%	7,572	100.0%	0	0.0%	7,572
06/16	06/16	6	12 [a]	221	4.4%	368	7.4%	4,421	88.2%	5,010	100.0%	0	0.0%	5,010
06/19	06/19	7	8	1,261	4.4%	2,102	7.4%	25,225	88.2%	28,588	100.0%	0	0.0%	28,588
06/22	06/22	8	8	0	0.0%	6,890	12.1%	49,480	86.8%	56,370	98.9%	626	1.1%	56,996
06/24	06/24	9	8	3,820	8.8%	4,297	9.9%	33,898	78.0%	42,015	96.7%	1,432	3.3%	43,447
06/26	06/26	10	8	393	1.2%	2,359	7.1%	29,882	90.5%	32,635	98.8%	393	1.2%	33,028
06/29	06/29	11	8	673	1.1%	3,364	5.4%	56,509	90.3%	60,545	96.8%	2,018	3.2%	62,563
07/01	07/01	12	8	0	0.0%	5,585	12.2%	36,300	79.6%	41,885	91.8%	3,723	8.2%	45,608
07/03	07/03	13	8 [c]	262	0.6%	3,549	8.7%	34,596	84.7%	38,407	94.0%	2,454	6.0%	40,861
07/06	07/06	14	8	346	1.3%	1,385	5.1%	24,233	89.7%	25,963	96.2%	1,039	3.8%	27,002
07/08	07/08	15	8	108	1.1%	862	8.5%	8,840	87.2%	9,811	96.8%	323	3.2%	10,134
07/10	07/10	16	12 [c]	4,270	39.9%	617	5.8%	4,827	45.1%	9,715	90.8%	981	9.2%	10,696
07/11	07/11	17	12 [c,b]	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]
07/12	07/12	18	12 [c,b]	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]
07/13	07/13	19	12 [c]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
07/14	07/14	20	12 [c,b]	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]
07/15	07/15	21	14 [c,b]	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]
07/16	07/16	22	14 [c,b]	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]
07/17	07/17	23	14 [c,b]	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]
07/18	07/18	24	14 [c,b]	1,023	78.8%	39	3.0%	39	3.0%	1,102	84.8%	197	15.2%	1,299
07/20	07/20	25	14 [d]	2,392	78.8%	92	3.0%	92	3.0%	2,576	84.8%	460	15.2%	3,036
07/21	07/21	26	14 [d]	8,528	78.8%	328	3.0%	328	3.0%	9,184	84.8%	1,640	15.2%	10,824
07/24	07/24	27	14 [d]	9,441	78.8%	363	3.0%	363	3.0%	10,167	84.8%	1,816	15.2%	11,983
08/01	08/01	28	14 [d]	872	78.8%	34	3.0%	34	3.0%	939	84.8%	168	15.2%	1,107
08/04	08/04	29	14 [d]	801	78.8%	31	3.0%	31	3.0%	863	84.8%	154	15.2%	1,017

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Dates	Period	Hours	Origin										
			Port Chalmers		Wally Noerenberg		Armin F Koernig		Hatchery		Wild		
			Number	Percent	Number	Percent	Number	Percent	total		Number	Percent	Total
08/08 – 08/08	31	14 [d]	1,135	78.8%	44	3.0%	44	3.0%	1,223	84.8%	218	15.2%	1,441
08/10 – 08/10	32	14 [d]	821	78.8%	32	3.0%	32	3.0%	884	84.8%	158	15.2%	1,042
08/12 – 08/12	33	14 [d]	1,995	78.8%	77	3.0%	77	3.0%	2,148	84.8%	384	15.2%	2,532
08/13 – 08/13	34	14 [d]	207	78.8%	8	3.0%	8	3.0%	223	84.8%	40	15.2%	263
08/14 – 08/14	35	14 [d]	1,750	78.8%	67	3.0%	67	3.0%	1,884	84.8%	337	15.2%	2,221
08/16 – 08/16	36	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	884	100.0%	884
08/26 – 08/26	37	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	564	100.0%	564
08/28 – 08/28	38	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	349	100.0%	349
08/30 – 08/30	39	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	177	100.0%	177
08/31 – 08/31	40	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	256	100.0%	256
09/01 – 09/01	41	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	132	100.0%	132
09/02 – 09/02	42	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	152	100.0%	152
09/03 – 09/03	43	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	28	100.0%	28
09/04 – 09/04	44	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	1
09/05 – 09/05	45	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	357	100.0%	357
09/06 – 09/06	46	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	104	100.0%	104
09/07 – 09/09	47	60 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	94	100.0%	94
09/10 – 09/16	48	144 [f]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
Total			53,853	12.1%	34,951	7.9%	331,818	74.6%	420,622	94.5%	24,461	5.5%	445,083

Note: WNH = Wally Noerenberg Hatchery, AFK = Armin F. Koernig Hatchery. Fish ticket data as of January 5, 2018.

[a] No samples collected; proportions are from the following period samples.

[b] Two or fewer permits fished; results are confidential.

[c] No samples collected; proportions are the average of previous and following periods sampled.

[d] No samples collected; proportions are from previous period sampled.

[e] No samples collected; wild origin assumed.

[f] No harvest reported.

Appendix E21.–Chum salmon hatchery and wild stock contributions to commercial common property fisheries by period and mark identification, Montague District, 2017.

Dates	Period	Hours	Origin									
			Wally Noerenberg		Port Chalmers		Armin F Koernig		Hatchery	Wild		
			Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
06/01 – 06/04	1	84 [a]	357	76.0%	20	4.3%	39	8.3%	416	54	11.5%	470
06/05 – 06/07	2	60 [a]	364	76.0%	20	4.2%	40	8.4%	424	55	11.5%	479
06/08 – 06/11	3	84	73,888	76.0%	4,049	4.2%	8,097	8.3%	86,034	11,134	11.5%	97,168
06/12 – 06/14	4	48	78,161	67.0%	6,203	5.3%	12,406	10.6%	96,771	19,850	17.0%	116,621
06/16 – 06/16	5	12 [b]	2,293	59.1%	961	24.8%	252	6.5%	3,506	375	9.7%	3,881
06/19 – 06/20	6	24	6,464	51.2%	5,582	44.2%	294	2.3%	12,340	294	2.3%	12,634
06/22 – 06/24	7	48	32,037	40.0%	41,648	52.0%	3,204	4.0%	76,568	3,190	4.0%	80,093
06/26 – 06/28	8	48	2587	4.3%	55630	93.5%	1294	2.2%	59511	0	0.0%	59511
06/29 – 06/29	9	12 [b]	988	9.3%	9,047	85.3%	418	3.9%	10454	152	1.4%	10605
07/01 – 07/01	10	12	1,129	14.3%	6,097	77.1%	452	5.7%	7,677	226	2.9%	7,903
07/03 – 07/03	11	12	770	6.8%	10,016	88.6%	514	4.5%	10,654	0	0.0%	11,300
07/06 – 07/06	12	12	14,281	26.7%	10,711	20.0%	28,562	53.3%	53,554	0	0.0%	53,554
07/08 – 07/08	13	12	1,788	5.6%	23,240	72.2%	3,575	11.1%	28,604	3,575	11.1%	32,179
07/10 – 07/10	14	12 [b]	1,112	9.7%	4,289	37.5%	5,242	45.8%	10,644	794	6.9%	11,438
07/11 – 07/11	15	12 [b]	810	9.7%	3,125	37.5%	3,819	45.8%	7,753	579	6.9%	8,332
07/12 – 07/12	16	12 [b]	369	9.7%	1,425	37.5%	1,742	45.8%	3,536	264	6.9%	3,800
07/13 – 07/13	17	12 [b]	5	9.4%	20	37.7%	24	45.3%	49	4	7.5%	53
07/14 – 07/14	18	12 [b,c]	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]	[c]	0.0%	[c]
07/15 – 07/15	19	14 [b]	247	9.7%	952	37.5%	1,163	45.8%	2,362	176	6.9%	2,538
07/16 – 07/16	20	14 [b,c]	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]	[c]	0.0%	[c]
07/17 – 07/17	21	14 [c]	444	13.9%	89	2.8%	2,575	80.5%	3,108	89	2.8%	3,197
07/18 – 07/18	22	14 [d]	488	13.9%	98	2.8%	2,831	80.6%	3,416	98	2.8%	3,514
07/21 – 07/21	23	12 [d]	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/24 – 07/24	24	14 [c,e]	100	13.8%	20	2.8%	582	80.5%	703	20	2.8%	723
07/28 – 07/28	25	14 [d]	520	13.9%	104	2.8%	3,014	80.6%	1,638	47	1.3%	3,741
07/30 – 07/30	26	14 [d]	74	13.8%	15	2.8%	432	80.6%	521	15	2.8%	536
08/01 – 08/01	27	14 [d]	191	13.9%	38	2.8%	1,109	80.5%	1,339	38	2.8%	1,377
08/04 – 08/04	28	14 [d]	291	13.9%	58	2.8%	1,689	80.5%	2,039	58	2.8%	2,097
08/06 – 08/06	29	14 [e]	0	0.0%	0	0.0%	0	0.0%	0	458	100.0%	458
08/08 – 08/08	30	14 [e]	0	0.0%	0	0.0%	0	0.0%	0	376	100.0%	376

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Dates	Period	Hours	Origin									
			Port Chalmers		Wally Noerenberg		Armin F Koernig		Hatchery	Wild		
			Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
08/10 – 08/10	31	60 [a]	0	0.0%	0	0.0%	0	0.0%	0	859	100.0%	859
08/14 – 08/14	32	84 [a]	0	0.0%	0	0.0%	0	0.0%	0	281	100.0%	281
08/16 – 08/16	33	60 [a]	0	0.0%	0	0.0%	0	0.0%	0	359	100.0%	359
08/20 – 08/20	34	84	0	0.0%	0	0.0%	0	0.0%	0	390	100.0%	390
08/22 – 08/22	35	60	0	0.0%	0	0.0%	0	0.0%	0	241	100.0%	241
08/24 – 08/24	36	84	0	0.0%	0	0.0%	0	0.0%	0	237	100.0%	237
08/26 – 08/26	37	60	0	0.0%	0	0.0%	0	0.0%	0	186	100.0%	186
08/28 – 08/28	38	84	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/30 – 08/30	39	60	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/31 – 09/06	40–46	84	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/07 – 09/16	47–49	60	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Total			186,868	34.6%	220,646	40.8%	87,540	16.2%	495,054	45,176	8.4%	540,230

Note: WNH = Wally Noerenberg Hatchery, AFK = Armin F. Koernig Hatchery. Fish ticket data as of January 5, 2018.

[a] No samples collected; proportions are from the following period sampled.

[b] No samples collected; proportions are the average of the previous and following periods sampled.

[c] Two or fewer permits fished; results are confidential.

[d] No samples collected; proportions are from previous period sampled.

[e] No samples collected, wild origin assumed.

Appendix E22.–Pink salmon hatchery and wild stock contributions to commercial common property fisheries by period and mark identification, Montague District, 2017.

Dates	Period	Hours	Origin											
			Solomon Gulch		Cannery Creek		Wally Noerenberg		A.F. Koernig		Hatchery	Wild		
			Number	Percent	Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
06/01 – 06/04	1	84 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	8	0.0%	8
06/05 – 06/07	2	60 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
06/08 – 06/11	3	84 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	331	0.0%	331
06/12 – 06/14	4	48 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	417	100.0%	417
06/16 – 06/16	5	12 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	2	100.0%	2
06/19 – 06/20	6	24 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	526	100.0%	526
06/22 – 06/24	7	48	1,283	13.6%	0	0.0%	0	0.0%	0	0.0%	1,283	8,126	86.4%	9,409
06/26 – 06/28	8	48 [b]	1,366	37.6%	0	0.0%	0	0.0%	0	0.0%	1,366	2,268	62.4%	3,634
06/29 – 06/29	9	12 [b]	52	37.4%	0	0.0%	0	0.0%	0	0.0%	52	87	62.6%	139
07/01 – 07/01	10	12 [b]	73	37.4%	0	0.0%	0	0.0%	0	0.0%	73	122	62.6%	195
07/03 – 07/03	11	12	22,765	61.5%	0	0.0%	0	0.0%	0	0.0%	22,765	14,228	38.5%	36,993
07/06 – 07/06	12	12	52,940	48.6%	0	0.0%	0	0.0%	0	0.0%	52,940	55,882	51.4%	108,822
07/08 – 07/08	13	12	36,597	39.6%	0	0.0%	0	0.0%	0	0.0%	36,597	55,859	60.4%	92,456
07/10 – 07/10	14	12	15,040	48.7%	0	0.0%	0	0.0%	0	0.0%	15,040	15,852	51.3%	30,892
07/11 – 07/11	15	12 [b]	22,265	39.3%	0	0.0%	0	0.0%	0	0.0%	22,265	34,436	60.7%	56,701
07/12 – 07/12	16	12 [b]	28,236	39.3%	0	0.0%	0	0.0%	0	0.0%	28,236	43,670	60.7%	71,906
07/13 – 07/13	17	12 [b]	974	39.3%	0	0.0%	0	0.0%	0	0.0%	974	1,506	60.7%	2,480
07/14 – 07/14	18	12 [b,c]	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]	[c]	0.0%	[c]
07/15 – 07/15	19	14	16,956	29.9%	0	0.0%	0	0.0%	0	0.0%	16,956	39,846	70.1%	56,802
07/16 – 07/16	20	14 [b,c]	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]	0.0%	[c]	[c]	0.0%	[c]
07/17 – 07/17	21	14	3,540	11.1%	0	0.0%	885	2.8%	17,698	55.6%	22,122	9,734	30.6%	31,856
07/18 – 07/18	22	14	95,034	54.7%	0	0.0%	1,828	1.1%	9,138	5.3%	106,000	67,620	38.9%	173,620
07/21 – 07/21	23	12 [d]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/24 – 07/24	24	14 [b]	16,766	41.2%	216	0.5%	214	0.5%	1,287	3.2%	18,484	22,212	54.6%	40,696
07/28 – 07/28	25	14	38,356	27.7%	1,475	1.1%	0	0.0%	1,475	1.1%	41,307	97,365	70.2%	138,672
07/30 – 07/30	26	14	37,617	24.0%	3,271	2.1%	1,636	1.0%	3,271	2.1%	45,795	111,217	70.8%	157,012
08/01 – 08/01	27	14	32,203	13.5%	16,102	6.7%	5,367	2.2%	24,153	10.1%	77,825	161,017	67.4%	238,842
08/04 – 08/04	28	14	23,988	6.2%	35,982	9.4%	35,982	9.4%	35,982	9.4%	131,935	251,877	65.6%	383,812
08/06 – 08/06	29	14	16,631	8.5%	10,394	5.3%	2,079	1.1%	4,158	2.1%	33,262	162,153	83.0%	195,415
08/08 – 08/08	30	14 [b]	12,481	6.4%	23,921	12.2%	2,080	1.1%	3,120	1.6%	41,602	153,927	78.7%	195,529

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Dates	Period	Hours	Origin: Solomon Gulch Number	Solomon Gulch Percent	Cannery Creek Number	Cannery Creek Percent	Wally Noerenberg Number	Wally Noerenberg Percent	A.F. Koernig Number	A.F. Koernig Percent	Hatchery total	Wild Number	Wild Percent	Total
08/10 – 08/10	31	14	18,695	4.3%	84,129	19.1%	4,674	1.1%	4,674	1.1%	112,172	327,169	74.5%	439,341
08/14 – 08/14	32	14	7,562	6.2%	12,604	10.4%	1,260	1.0%	5,041	4.2%	26,467	94,527	78.1%	120,994
08/16 – 08/16	33	12	1,580	1.0%	25,288	16.7%	3,161	2.1%	14,224	9.4%	44,253	107,472	70.8%	151,725
08/20 – 08/20	34	12	3,569	2.1%	44,614	26.6%	5,354	3.2%	3,569	2.1%	57,106	110,643	66.0%	167,749
08/22 – 08/22	35	12	1,812	1.1%	63,414	38.0%	10,871	6.5%	5,435	3.3%	81,532	85,156	51.1%	166,688
08/24 – 08/24	36	12	1,501	1.2%	49,546	41.3%	9,008	7.5%	3,003	2.5%	63,058	57,053	47.5%	120,111
08/26 – 08/26	37	12 [d]	404	1.3%	13,327	41.3%	2,423	7.5%	808	2.5%	16,961	15,346	47.5%	32,307
08/28 – 08/28	38	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/30 – 08/30	39	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/31 – 08/31	40	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/01 – 09/01	41	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/02 – 09/02	42	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/03 – 09/03	43	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/04 – 09/04	44	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/05 – 09/05	45	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/06 – 09/06	46	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/07 – 09/09	47	60 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/10 – 09/16	48–49	144 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Total			514,870	15.9%	384,310	11.9%	86,832	2.7%	137,269	4.2%	1,123,281	2,115,290	65.3%	3,238,571

Note: WNH = Wally Noerenberg Hatchery, AFK = Armin F. Koernig Hatchery. Fish ticket data as of January 5, 2018.

[a] No samples collected; assumed wild origin.

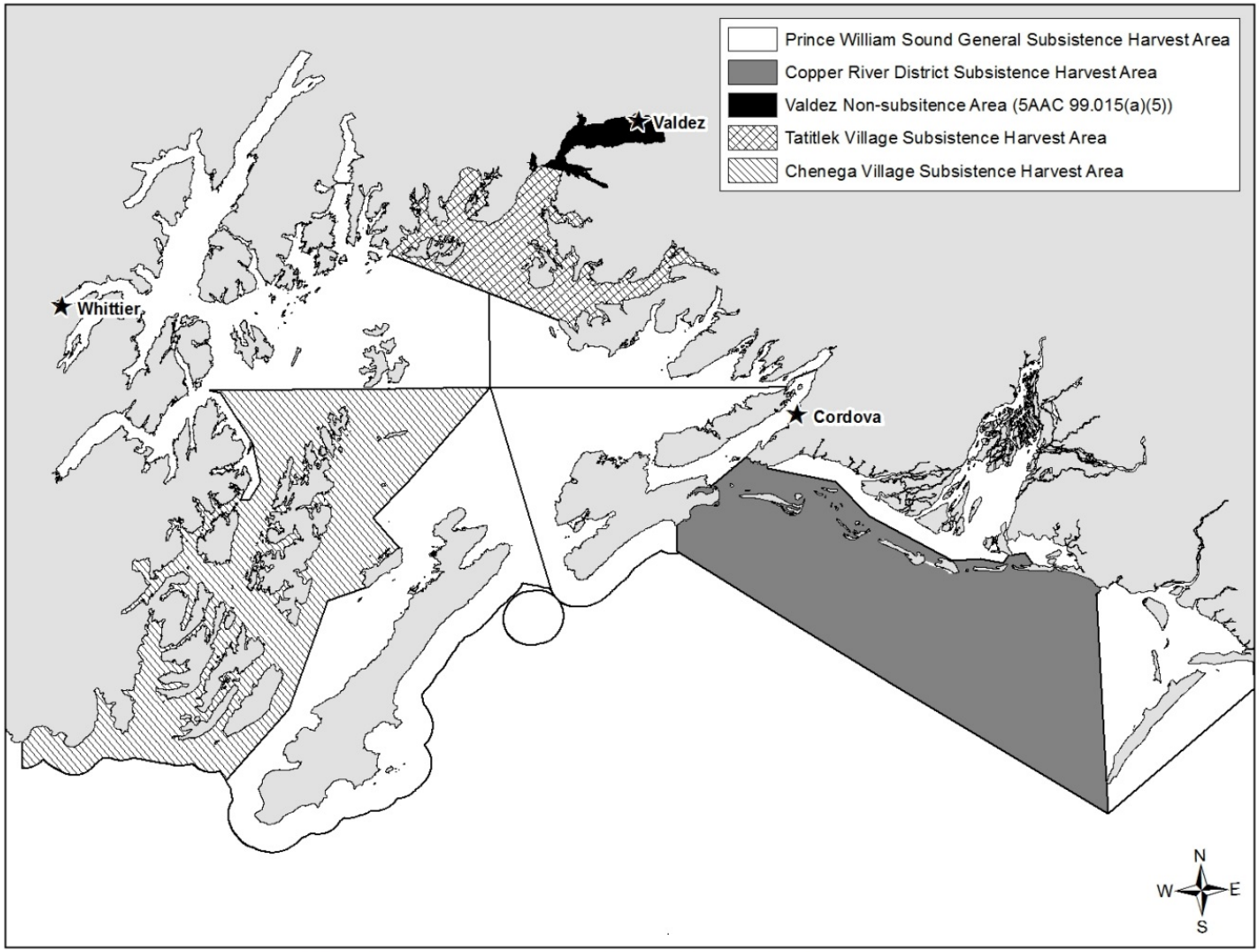
[b] No samples collected; proportions are the average of the previous and following periods sampled.

[c] Two or fewer permits fished; results are confidential.

[d] No samples collected; proportions are from previous period sampled.

[e] No harvest reported.

APPENDIX F: SUBSISTENCE AND COMMERCIAL HOMEPACK SALMON HARVEST



Appendix F1.–Map of Prince William Sound Subsistence areas.

Appendix F2.–Salmon harvest and effort in the Copper River District subsistence drift gillnet fishery, 1961–2017.

	Permits				Reported harvest			
Year	Issued	Returned	Fished	Not fished [a]	Chinook	Sockeye	Coho	Total
1961	14	0	0	0	60	137	99	296
1962	14	0	0	0	44	135	3	182
1963	8	0	0	0	3	13	157	173
1964	5	0	0	2	14	0	0	14
1965	31	20	15	5	12	459	85	556
1966	45	31	21	10	47	175	0	222
1967	61	56	37	19	83	153	0	236
1968	17	15	7	8	11	36	0	47
1969	49	33	20	13	16	63	85	164
1970	32	27	24	3	66	179	0	245
1971	29	26	17	9	10	32	4	46
1972	104	80	75	5	149	569	53	771
1973	94	89	89	NA	153	326	180	659
1974	9	5	3	2	5	4	2	11
1975	2	2	2	NA	0	5	0	5
1976	27	14	14	NA	1	10	0	11
1977	23	22	22	NA	10	71	0	81
1978	34	28	9	19	37	18	12	67
1979	49	41	21	20	45	26	17	88
1980	39	35	18	17	19	27	17	63
1981	72	51	30	21	48	145	104	297
1982	108	90	48	42	60	634	106	800
1983	87	73	31	42	79	107	57	243
1984	118	104	57	47	68	324	135	527
1985	94	94	67	27	88	261	83	432
1986	88	85	57	28	86	348	47	481
1987	95	89	39	50	49	359	14	422
1988	114	97	57	40	59	226	42	327
1989	75	64	32	32	56	339	51	446
1990	88	76	40	39	60	469	82	611
1991	129	115	71	44	136	830	38	1,004
1992	126	114	67	47	142	785	42	969
1993	111	93	50	43	120	428	29	577
1994	101	97	60	37	164	474	67	705
1995	126	113	72	41	154	692	31	877
1996	176	158	101	57	276	969	47	1,292
1997	269	243	165	78	200	1,001	1,777	2,978
1998	245	231	144	87	295	850	680	1,825
1999	294	275	175	100	353	1,330	682	2,365
2000	416	400	293	107	689	4,360	44	5,093
2001	468	439	288	151	826	3,072	70	3,968
2002	355	331	199	132	549	3,067	28	3,644
2003	384	365	225	140	710	1,607	36	2,353
2004	511	482	321	161	1,106	1,822	46	2,974
2005	237	224	121	103	260	830	15	1,105

-continued-

	Permits				Reported harvest			
Year	Issued	Returned	Fished	Not fished[a]	Chinook	Sockeye	Coho	Total
2006	421	399	300	121	779	4,355	1	5,135
2007	469	440	295	145	1,145	6,148	15	7,308
2008	506	480	248	232	470	3,969	53	4,492
2009	323	293	128	165	212	1,764	22	1,998
2010	325	314	139	175	276	1,980	27	2,283
2011	273	263	113	150	212	1,783	34	2,029
2012	378	357	204	153	237	4,270	0	4,507
2013	531	492	321	171	854	5,639	1	6,494
2014	288	269	101	168	153	1,675	0	1,828
2015	241	231	97	134	167	1,403	10	1,580
2016	195	189	77	112	73	1,075	2	1,150
10-year average	371	350	193	159	441	3,266	16	3,722
2017	450	416	265	151	778	2,448	43	3,269

[a] As reported on returned permits.

Appendix F3.–Salmon harvest and effort in the Prince William Sound general area subsistence fishery, 1966–2017.

	Permits				Reported harvest[a]						
Year	Issued	Returned	Fished	Not fished[b]	Chinook	Sockeye	Coho	Pink	Chum	Unknown	Total
1966	3	3	0	0	0	3	19	20	50	0	92
1967	4	3	0	0	0	0	4	4	0	0	8
1968	4	3	0	0	0	0	20	156	0	22	198
1969	7	3	0	0	0	0	16	0	0	0	16
1970	1	1	0	0	0	0	0	0	0	0	0
1971	3	2	0	0	0	0	0	46	0	0	46
1972	0	0	0	0	0	0	0	0	0	0	0
1973	19	16	0	0	0	0	289	0	0	0	289
1974	3	1	0	0	0	0	0	0	0	0	0
1975	2	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0
1977	4	4	0	0	0	0	0	0	0	0	0
1978	3	2	0	0	0	0	0	0	0	0	0
1979	15	2	0	0	0	0	0	0	0	0	0
1980	26	15	0	0	0	7	6	0	0	0	13
1981	12	8	0	0	0	3	29	0	2	0	34
1982	35	27	0	0	0	84	4	31	24	0	143
1983	26	21	0	0	0	22	36	9	79	0	146
1984	8	8	0	0	0	10	0	11	2	0	23
1985	22	16	0	0	1	27	16	14	26	0	84
1986	25	14	0	0	0	5	15	0	0	0	20
1987	18	17	0	0	5	31	6	0	16	0	58
1988	7	7	0	0	2	51	7	10	9	0	79
1989	11	7	0	0	0	0	0	0	3	0	3
1990	8	7	0	0	0	0	7	4	0	0	11
1991	9	5	2	3	0	2	0	0	0	0	2
1992	10	6	1	5	0	20	0	0	0	0	20
1993	6	6	4	2	1	104	10	0	0	0	115
1994	5	4	2	2	0	0	0	0	0	0	0
1995	4	2	0	2	0	0	0	0	0	0	0
1996	10	7	0	7	0	0	0	0	0	0	0
1997	4	3	1	2	0	3	0	0	0	0	3
1998	4	3	0	3	0	0	0	0	0	0	0
1999	3	3	0	3	0	0	0	0	0	0	0
2000	3	3	0	3	0	0	0	0	0	0	0

-continued-

	Permits				Reported harvest[a]						
Year	Issued	Returned	Fished	Not fished[b]	Chinook	Sockeye	Coho	Pink	Chum	Unknown	Total
2001	5	5	0	5	0	0	0	0	0	0	0
2002	11	9	2	7	0	31	0	9	7	0	47
2003	3	3	0	3	0	48	0	0	3	0	51
2004	12	11	5	6	0	8	0	0	3	0	11
2005	14	13	1	12	0	4	0	0	0	0	4
2006	11	9	2	7	0	20	0	30	0	0	50
2007	3	3	1	2	0	30	0	0	0	0	30
2008	11	10	4	6	1	32	0	0	0	0	33
2009	1	1	0	1	0	0	0	0	0	0	0
2010	2	2	1	1	0	0	0	0	0	0	0
2011	4	4	3	1	29	40	1	5	10	0	85
2012	14	12	6	6	0	40	0	0	22	0	62
2013	8	8	7	1	0	12	0	0	24	5	41
2014	23	21	2	19	0	3	0	0	0	0	3
2015	25	23	10	13	4	115	0	0	3	0	122
2016	5	5	1	4	0	1	0	0	0	0	1
10-year average	10	9	4	5	3	27	0	1	6	1	38
2017	6	5	3	2	0	16	0	0	0	0	16

[a] Reported harvest only and includes harvest from Prince William Sound, exclusive of the Copper River District and customary and traditional subsistence locations within PWS.

[b] As reported on returned permits.

Appendix F4.–Area E commercial homepack and subsistence harvests by permit holder community of residence, 2017.

	Commercial homepack[a]						
Community	Permits	Chinook	Sockeye	Coho	Pink	Chum	Total
Anchor Point	2	0	24	1	30	0	55
Anchorage	19	26	1,089	81	13	9	1,218
Chugiak	2	1	9	28	12	0	50
Copper Center	1	0	4	0	0	0	4
Cordova	201	473	5,024	850	160	149	6,656
Delta Junction	3	3	34	9	0	0	46
Eagle River	3	5	186	0	0	0	191
Fairbanks	2	7	10	59	0	0	76
Girdwood	11	20	131	54	0	0	205
Haines	1	1	0	0	0	0	1
Homer	44	51	772	166	312	0	1,301
Juneau	1	2	0	0	0	0	2
Kasilof	4	7	3	0	0	11	21
Kenai	3	3	25	0	0	0	28
Kodiak	2	0	0	37	0	0	37
Moose Pass	2	2	44	7	0	0	53
Palmer	2	2	21	6	0	0	29
Petersburg	1	0	14	0	0	0	14
Seldovia	1	0	1	0	0	0	1
Seward	11	14	47	120	43	17	241
Sitka	1	0	1	8	0	0	9
Soldotna	2	3	35	27	0	0	65
Sterling	4	11	55	15	0	0	81
Sutton	1	0	10	0	0	0	10
Valdez	4	10	102	45	250	2	409
Wasilla	22	23	797	160	6	21	1,007
Willow	3	5	115	0	8	3	131
USA Balance	87	120	2,778	818	87	27	3,830
Unknown	11	36	257	80	0	1	374
Total	451	825	11,588	2,571	921	240	16,145

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	Area E Subsistence[b]						
Community	Permits	Chinook	Sockeye	Coho	Pink	Chum	Total
Anchorage	27	35	223	0	0	0	258
Chenega Bay	2	0	105	0	0	61	166
Chugiak	1	0	0	0	0	0	0
Copper Center	1	0	0	0	0	0	0
Cordova	363	654	1789	43	2	3	2,491
Eagle River	2	0	0	0	0	0	0
Fairbanks	2	6	23	0	0	0	29
Girdwood	3	0	0	0	0	0	0
Homer	13	23	167	0	0	0	190
Hoonah	1	0	0	0	0	0	0
Juneau	1	5	2	0	0	0	7
Kasilof	2	0	0	0	0	0	0
Kenai	1	0	0	0	0	0	0
North Pole	1	0	0	40	0	0	40
Palmer	2	0	30	0	0	0	30
Seldovia	1	0	0	0	0	0	0
Seward	4	8	2	0	0	0	10
Seward Hwy	1	0	0	0	0	0	0
Soldotna	1	0	4	0	0	0	4
Sterling	3	5	55	0	0	0	60
Tatitlek	7	10	98	15	0	0	123
Valdez	8	8	23	0	0	0	31
Wasilla	23	24	78	0	0	0	102
Willow	2	0	15	0	0	0	15
Total	472	778	2,614	98	2	64	3,556

[a] Homepack fish are defined in 5 AAC 39.010 as finfish retained from lawfully taken commercial catch for that fisherman's own use.

[b] Combined harvests from the Copper River District, Tatitlek, Chenega, and PWS subsistence areas. Includes permit holders who reported not or unsuccessful fishing.

Appendix F5.–Salmon retained from the commercial harvest for personal use (homepack) by district, species, and gear type, in Prince William Sound and the Copper River and Bering River districts, 1997–2017.

Prince William Sound (drift gillnet, set gillnet, and purse seine)																
		Chinook			Sockeye			Coho			Pink			Chum		
Year	Permits	Seine	Drift gillnet	Set gillnet	Seine	Drift gillnet	Set gillnet	Seine	Drift gillnet	Set gillnet	Seine	Drift gillnet	Set gillnet	Seine	Drift gillnet	Set gillnet
1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1998	14	0	18	0	19	28	0	18	0	0	0	0	0	0	4	0
1999	6	0	5	1	18	43	0	13	0	0	0	0	0	0	0	0
2000	9	1	1	0	4	47	0	0	2	0	0	0	0	0	6	0
2001	11	1	6	1	0	46	18	0	20	0	0	0	0	0	2	0
2002	8	0	6	5	0	51	5	0	0	0	0	0	0	0	0	0
2003	14	0	24	0	0	23	0	0	0	0	0	0	0	0	1	0
2004	4	0	0	0	0	129	0	0	0	0	0	0	0	0	1	0
2005	5	0	1	0	0	60	0	0	107	0	0	0	0	0	20	0
2006	7	2	0	0	0	58	0	0	19	0	0	7	0	0	2	0
2007	9	1	7	0	0	63	1	0	13	0	0	7	0	0	1	0
2008	18	3	65	1	0	171	72	0	26	0	0	0	0	0	0	0
2009	16	0	4	0	0	104	7	0	30	0	0	0	0	0	8	0
2010	85	0	51	0	2	1,062	55	51	9	0	0	5	0	0	70	0
2011	78	0	62	2	73	670	268	350	249	0	0	68	0	0	21	0
2012	144	11	76	0	143	2,359	318	78	183	0	83	3,495	0	55	1,197	0
2013	111	0	65	24	50	1,049	228	25	39	0	0	119	0	0	28	0
2014	81	7	38	10	168	1,146	301	17	1,500	0	0	20	0	11	62	0
2015	76	5	34	9	401	1,017	965	23	67	0	0	3	0	4	49	20
2016	62	9	25	10	316	878	696	60	1	0	13	22	0	7	10	0
10-year average	68	3	46	5	55	828	156	65	256	0	10	464	0	8	173	0
2017	169	37	42	6	218	1,908	1,306	177	298	0	287	153	19	28	61	2

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Copper River District (all drift gillnet)				
Year	Permits	Chinook	Sockeye	Coho
1997	284	1,243	0	0
1998	309	1,411	1,435	14
1999	297	1,115	1,333	36
2000	245	740	651	0
2001	289	935	2,113	24
2002	247	773	1,138	187
2003	287	1,073	4,077	0
2004	174	539	525	2
2005	228	760	1,785	119
2006	264	779	1,539	137
2007	280	1,019	2,023	340
2008	223	537	2,172	423
2009	328	876	6,528	767
2010	333	906	7,064	1,026
2011	336	1,282	9,070	543
2012	378	853	7,985	1,037
2013	331	564	9,448	249
2014	386	768	12,072	1,146
2015	359	1,145	10,590	1,423
2016	340	727	9,598	1,353
10-year average	329	868	7,655	831
2017	363	744	8,289	1,945

Bering River District (all drift gillnet)				
Year	Permits	Chinook	Sockeye	Coho
1997	1	3	0	0
1998	5	7	0	0
1999	2	2	20	102
2000	1	3	0	0
2001	2	2	0	0
2002	1	1	0	0
2003	6	6	52	0
2004	2	0	1	10
2005	2	2	0	0
2006	4	9	6	0
2007	2	2	0	0
2008	4	9	6	0
2009	1	0	0	20
2010	5	0	0	82
2011	1	0	0	10
2012	4	1	0	155
2013	2	4	35	0
2014	3	0	0	42
2015	1	0	0	10
2016	0	0	0	0
10-year average	2	2	4	32
2017	16	0	0	205

Appendix F6.–Salmon harvest and effort in the PWS and upper Copper River Federal subsistence fisheries, 2007–2017.

	Permits				Reported harvest[a]			
Year	Issued	Returned	Fished	Not fished[b]	Chinook	Sockeye	Coho	Total
				Chitina Subdistrict				
2007	98	87	74	12	26	929	40	995
2008	82	70	38	0	22	789	74	885
2009	68	62	39	23	8	817	11	836
2010	92	79	38	41	17	2,061	31	2,109
2011	84	68	42	26	13	1,693	8	1,714
2012	89	80	33	47	5	865	8	878
2013	99	85	39	46	17	1,946	8	1,971
2014	113	103	49	54	13	1,509	68	1,590
2015	111	100	52	48	13	2,171	14	2,198
2016	128	95	43	52	15	1,321	11	1,347
5-year average	108	93	43	49	13	1,562	22	1,597
2017	132	104	47	57	12	1,454	7	1,473
				Glennallen Subdistrict				
2007	281	238	224	14	569	15,225	34	15,828
2008	270	219	139	0	705	11,347	156	12,208
2009	277	227	170	57	494	11,822	34	12,350
2010	270	236	175	61	300	12,835	64	13,199
2011	280	240	173	67	698	13,774	176	14,648
2012	277	244	169	75	370	14,425	142	14,937
2013	274	236	160	76	329	15,372	20	15,721
2014	314	279	206	73	370	21,013	23	21,406
2015	325	286	210	76	369	24,058	78	24,505
2016	320	246	176	75	336	15,017	9	15,362
5-year average	302	258	184	75	355	17,977	54	18,386
2017	338	283	212	71	399	15,433	1	15,833
				PWS/Chugach Subdistrict				
2007	33	33	17	16	0	36	68	104
2008	45	45	23	22	0	32	119	151
2009	39	38	22	16	0	46	185	231
2010	52	52	35	17	0	36	68	104
2011	69	55	50	5	0	35	581	616
2012	66	53	30	23	0	64	392	456
2013	65	46	29	17	0	102	310	412
2014	89	76	0	0	0	76	630	706
2015	102	68	50	15	0	152	878	1,030
2016	110	63	51	16	0	234	555	789
5-year average	65	50	27	10	0	90	566	656
2017	106	NA	51	NA	0	154	688	842

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				Total federal subsistence harvests				
Year	Issued	Returned	Fished	Not fished[b]	Chinook	Sockeye	Coho	Total
2007	412	358	315	NA	595	16,190	142	16,927
2008	397	334	200	NA	727	12,168	349	13,244
2009	384	327	231	96	502	12,685	230	13,417
2010	414	367	248	119	317	14,932	163	15,412
2011	433	363	265	98	711	15,502	765	16,978
2012	432	377	232	145	375	15,354	542	16,271
2013	438	367	228	139	346	17,420	338	18,104
2014	516	458	255	127	383	22,598	721	23,702
2015	538	454	312	139	382	26,381	970	27,733
2016	558	404	270	143	351	16,572	575	17,498
5-year average	496	412	259	139	367	19,665	629	20,662
2017	576	387	310	128	411	17,041	696	18,148

Note: NA = data not available

[a] Reported harvest only.

[b] As reported on returned permits.

Appendix F7.–Salmon harvest and effort in the Tatitlek and Chenega subsistence fisheries, 1997–2017.

	Permits				Reported harvest[a]						
Year	Issued	Returned	Fished	Not fished[b]	Chinook	Sockeye	Coho	Pink	Chum	Unk.	Total
					Tatitlek						
1997	6	4	3	1	0	107	45	0	54	0	206
1998	11	4	3	1	0	2	321	4	28	0	355
1999	17	10	8	2	0	344	541	31	31	0	947
2000	12	3	3	0	0	140	468	40	40	0	688
2001	14	9	8	1	0	114	230	60	12	0	416
2002	19	6	5	1	0	375	136	28	36	0	575
2003	15	8	6	2	0	81	185	20	12	0	298
2004	18	12	9	3	2	322	315	46	28	0	713
2005	16	3	2	1	0	98	286	200	16	0	600
2006	12	2	1	1	0	3	18	35	25	0	81
2007	14	0	0	0	NR	NR	NR	NR	NR	NR	0
2008	2	1	1	0	0	60	0	0	0	0	60
2009	12	4	3	1	0	170	131	0	0	0	301
2010	8	5	5	0	0	165	142	50	10	0	367
2011	10	4	4	0	0	922	536	0	22	0	1,480
2012	32	7	6	1	15	728	75	0	0	0	818
2013	22	11	8	3	0	613	277	0	129	0	1,019
2014	7	5	2	3	0	46	103	0	0	0	149
2015	16	4	4	0	12	110	143	0	8	0	273
2016	5	5	0	5	0	0	0	0	0	0	0
10-year average	13	5	3	1	3	313	156	6	19	0	496
2017	7	5	4	1	0	45	55	0	0	0	100

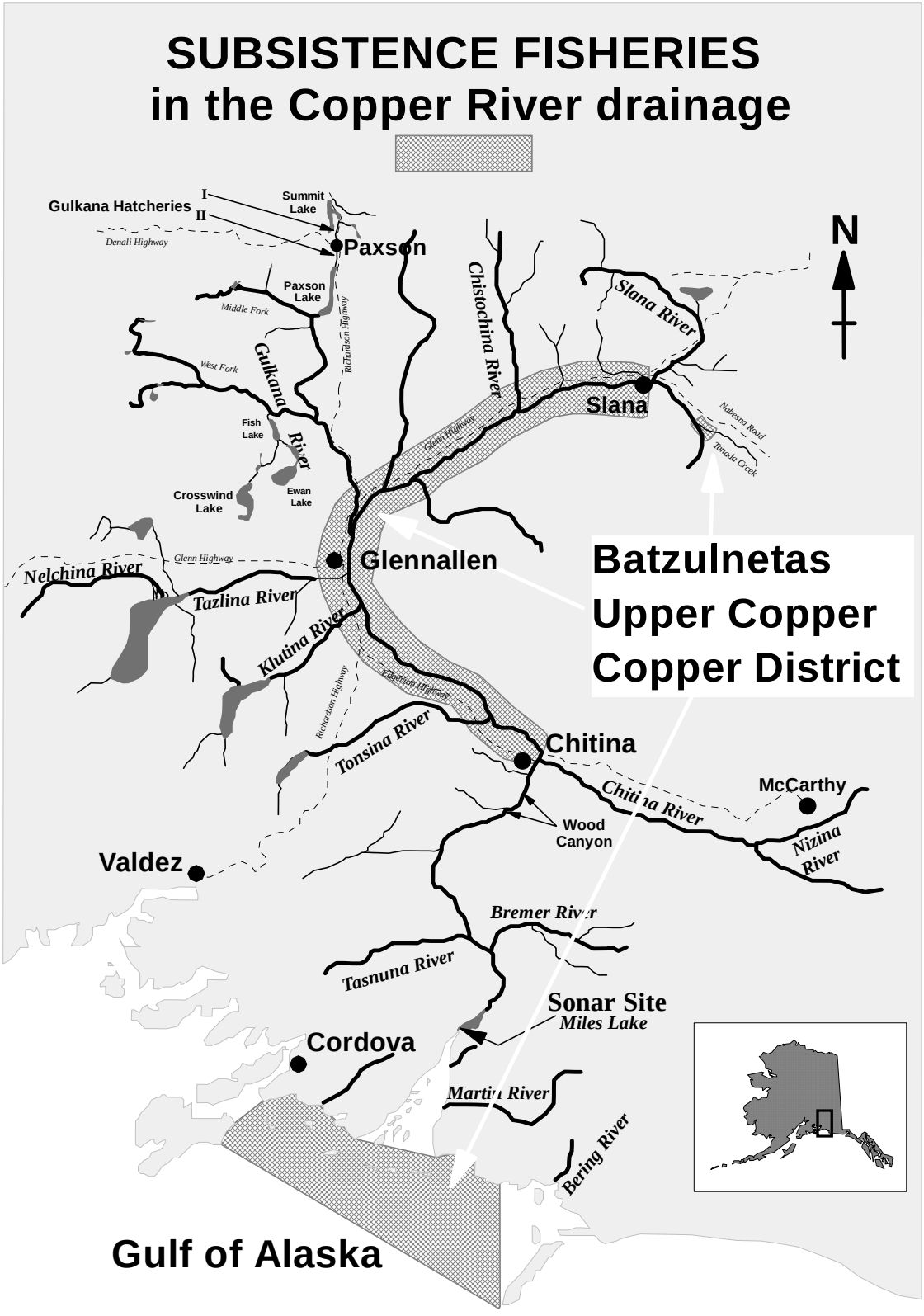
-continued-

Year	Permits				Reported harvest[a]						
	Issued	Returned	Fished	Not fished[b]	Chinook	Sockeye	Coho	Pink	Chum	Unk.	Total
					Chenega						
1997	5	4	4	0	44	193	30	110	272	0	649
1998	4	3	3	0	13	114	20	65	119	0	331
1999	14	10	7	3	57	499	62	168	101	0	887
2000	12	8	6	2	24	39	229	211	143	0	646
2001	16	9	8	1	2	119	92	95	146	0	454
2002	10	5	4	1	10	142	123	83	60	0	418
2003	13	7	5	2	6	219	156	149	147	0	677
2004	8	5	4	1	3	535	44	56	84	0	722
2005	13	8	6	2	10	516	84	124	174	0	908
2006	11	6	4	2	0	159	1	28	111	0	299
2007	4	3	2	1	2	293	27	4	55	0	381
2008	15	3	1	2	4	97	75	70	30	0	276
2009	4	4	3	1	2	168	26	5	84	0	285
2010	9	5	5	0	0	55	0	6	87	0	148
2011	17	11	8	3	2	134	26	50	60	0	272
2012	23	14	6	8	0	603	20	0	77	1	701
2013	13	4	3	1	0	19	0	0	63	0	82
2014	10	5	2	3	0	0	0	10	0	0	10
2015	21	4	1	3	56	0	35	0	12	0	103
2016	7	6	1	5	0	32	1	0	0	0	33
10-year average	12	6	3	3	7	140	21	15	47	0	229
2017	6	3	2	1	0	105	0	0	61	0	166

[a] Reported harvest only.

[b] As reported on returned subsistence permits.

Appendix F8.–Map of the subsistence salmon fisheries on the Copper River.



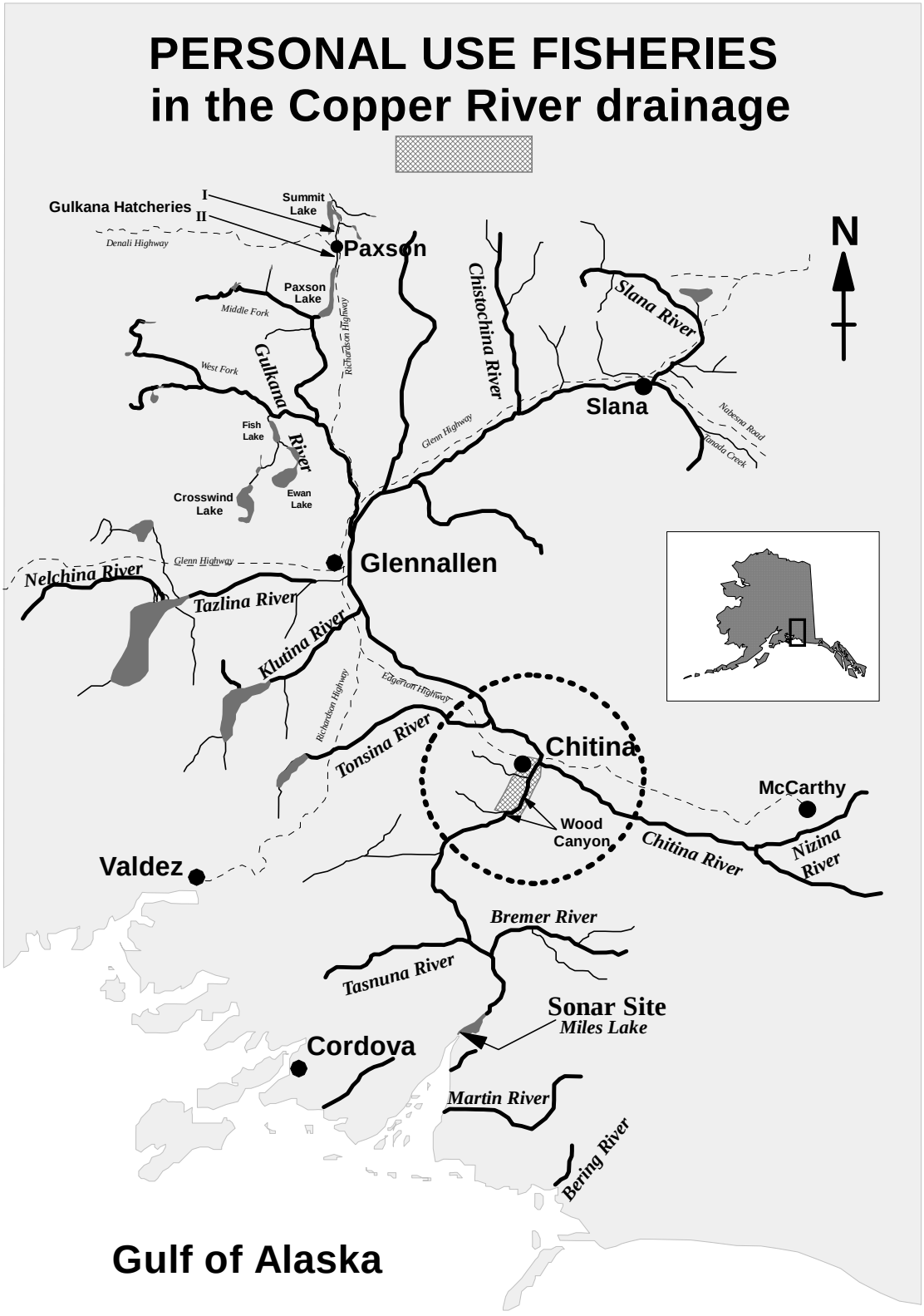
Appendix F9.–Salmon harvest and effort in the Batzulnetas subsistence harvests, 1987–2017.

	Permits				Reported harvest[a]			
Year	Issued	Returned	Fished	Not fished[b]	Chinook	Sockeye	Coho	Total
1987	0	0	0	0	0	22	0	22
1988	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0
1993	1	0	0	0	0	160	0	160
1994	5	0	0	0	0	997	0	997
1995	4	0	0	0	0	16	0	16
1996	0	0	0	0	0	0	0	0
1997	3	0	0	0	0	427	0	427
1998	1	0	0	0	0	582	0	582
1999	1	0	0	0	0	55	0	55
2000	0	0	0	0	0	0	0	0
2001	0	0	0	0	0	62	0	62
2002	1	1	1	0	0	208	0	208
2003	1	1	1	0	0	164	0	164
2004	1	1	1	0	0	182	0	182
2005	1	1	0	1	0	0	0	0
2006	0	NA	NA	NA	0	0	0	0
2007	1	1	1	0	0	1	0	1
2008	1	1	1	0	0	1	0	1
2009	0	0	0	0	0	0	0	0
2010	3	3	3	0	0	106	0	106
2011	3	2	2	0	0	9	0	9
2012	3	2	1	1	1	101	1	103
2013	3	3	3	0	2	867	2	871
2014	2	1	1	1	3	116	3	122
2015	4	4	0	4	0	0	0	0
2016	0	0	0	0	0	0	0	0
10-year average	2	2	1	1	1	120	1	121
2017	1	0	0	0	0	0	0	0

[a] Harvest reported on subsistence permits.

[b] As reported on returned permits.

Appendix F10.–Map of the personal use salmon fishery on the Copper River.



Appendix F11.–Personal use and subsistence salmon harvests by year, district and gear types for the Upper Copper River subsistence and personal use fisheries, 2002–2017.

					Reported harvest				Expanded harvest					
			Permits		Salmon				Salmon				Other species	
Year	District	Gear	Issued	Returned	Chinook	Sockeye	Coho	Total	Chinook	Sockeye	Coho	Total	Steelhead	Other
2002	Glennallen	Dip net	469	384	409	6,855	142	7,406	470	7,641	148	8,259	0	0
	Glennallen	Fish wheel	662	626	3,015	41,037	382	44,434	3,183	43,209	382	46,774	25	0
	Chitina	Dip net	6,805	5,733	1,745	75,747	1,712	79,204	2,023	85,968	1,934	89,925	0	317
	Total		7,936	6,743	5,169	123,639	2,236	131,044	5,676	136,818	2,464	144,958	25	317
2003	Glennallen	Dip net	399	343	318	6,132	58	6,508	345	6,934	58	7,337	1	0
	Glennallen	Fish wheel	613	580	2,077	38,077	392	40,546	2,193	40,073	409	42,675	42	0
	Chitina	Dip net	6,418	5,438	1,644	71,053	2,168	74,865	1,903	80,796	2,533	85,232	0	264
	Total		7,430	6,361	4,039	115,262	2,618	121,919	4,441	127,803	3,000	135,244	43	264
2004	Glennallen	Dip net	330	262	273	4,851	76	5,200	310	5,315	112	5,737	3	0
	Glennallen	Fish wheel	626	594	2,893	47,279	465	50,637	3,036	50,195	465	53,696	61	0
	Chitina	Dip net	8,386	6,855	2,108	93,182	2,304	97,594	2,495	107,312	2,860	112,667	0	509
	Total		9,342	7,711	5,274	145,312	2,845	153,431	5,841	162,822	3,437	172,100	64	509
2005	Glennallen	Dip net	363	303	264	6,305	0	6,569	310	7,486	0	7,796	0	0
	Glennallen	Fish wheel	598	557	1,816	54,661	97	56,574	1,919	56,727	154	58,800	19	0
	Chitina	Dip net	8,230	6,937	1,773	106,797	1,562	110,132	2,043	120,013	1,869	123,925	0	478
	Total		9,191	7,797	3,853	167,763	1,659	173,275	4,272	184,226	2,023	190,521	19	478
2006	Glennallen	Dip net	338	273	266	6,243	10	6,519	335	7,170	10	7,515	0	1
	Glennallen	Fish wheel	646	605	2,178	46,516	200	48,894	2,434	50,540	202	53,176	0	82
	Chitina	Dip net	8,566	6,762	2,071	102,443	1,886	106,400	2,663	123,261	2,715	128,639	0	464
	Total		9,550	7,640	4,515	155,202	2,096	161,813	5,432	180,971	2,927	189,330	0	547

-continued-

					Reported harvest				Expanded harvest					
			Permits		Salmon				Salmon				Other species	
Year	District	Gear	Issued	Returned	Chinook	Sockeye	Coho	Total	Chinook	Sockeye	Coho	Total	Steelhead	Other
2007	Glennallen	Dip net	467	383	432	8,155	28	8,615	496	9,416	28	9,940	0	1
	Glennallen	Fish wheel	707	654	2,674	53,322	203	56,199	2,780	56,298	210	59,288	0	55
	Chitina	Dip net	8,490	7,187	2,388	112,753	1,492	116,633	2,694	125,126	1,742	129,562	0	660
	Total		9,664	8,224	5,494	174,230	1,723	181,447	5,970	190,840	1,980	198,790	0	716
2008	Glennallen	Dip net	536	447	445	6,517	35	6,997	496	7,177	35	7,708	0	0
	Glennallen	Fish wheel	650	600	1,793	33,687	447	35,927	1,885	35,980	458	38,323	0	75
	Chitina	Dip net	8,258	6,861	1,690	70,597	2,346	74,633	1,999	81,359	2,711	86,069	0	407
	Total		9,444	7,908	3,928	110,801	2,828	117,557	4,380	124,516	3,204	132,100	0	482
2009	Glennallen	Dip net	469	391	342	6,030	8	6,380	394	6,950	19	7,363	0	1
	Glennallen	Fish wheel	621	575	1,988	37,708	186	39,882	2,099	39,899	209	42,207	0	72
	Chitina	Dip net	7,958	6,908	199	81,432	1,452	83,083	214	90,035	1,712	91,961	0	267
	Total		9,048	7,874	2,529	125,170	1,646	129,345	2,707	136,884	1,940	141,531	0	340
2010	Glennallen	Dip net	620	510	126	384	0	0	9,970	7,757	0	17,727	0	325
	Glennallen	Fish wheel	701	647	1,360	54,490	228	56,078	1,427	57,717	228	59,372	0	148
	Chitina	Dip net	9,970	7,757	587	116,790	1,592	118,969	700	138,487	2,013	141,200	0	365
	Total		11,291	8,914	2,073	171,664	1,820	175,047	12,097	203,961	2,241	218,299	0	838
2011	Glennallen	Dip net	617	530	681	13,034	63	13,778	734	14,454	68	15,256	0	0
	Glennallen	Fish wheel	689	625	1,518	41,009	283	42,810	1,585	45,168	304	47,057	0	164
	Chitina	Dip net	9,217	7,566	924	114,164	1,512	116,600	1,067	128,052	1,702	130,821	0	444
	Total		10,523	8,721	3,123	168,207	1,858	173,188	3,386	187,674	2,074	193,134	0	608
2012	Glennallen	Dip net	867	699	516	17,860	50	18,426	591	21,198	59	21,848	0	4
	Glennallen	Fish wheel	660	612	1,407	50,269	229	51,905	1,504	55,107	276	56,887	0	112
	Chitina	Dip net	10,016	8,030	496	109,777	1,132	111,405	567	127,143	1,385	129,095	0	267
	Total		11,543	9,341	2,419	177,906	1,411	181,736	2,662	203,448	1,720	207,830	0	383
2013	Glennallen	Dip net	808	667	794	22,924	55	23,773	902	25,879	79	26,860	4	0
	Glennallen	Fish wheel	531	494	1,169	44,201	63	45,433	1,246	47,849	64	49,159	22	25
	Chitina	Dip net	10,424	8,482	620	151,658	719	152,997	744	180,663	797	182,204	0	700
	Total		11,763	9,643	2,583	218,783	837	222,203	2,892	254,391	941	258,224	26	725

-continued-

					Reported harvest				Expanded harvest					
			Permits		Salmon				Salmon				Other species	
Year	District	Gear	Issued	Returned	Chinook	Sockeye	Coho	Total	Chinook	Sockeye	Coho	Total	Steelhead	Other
2014	Glennallen	Dip net	1,148	918	551	24,736	169	25,456	675	29,914	174	30,763	0	3
	Glennallen	Fish wheel	508	461	652	42,027	57	42,736	690	45,587	59	46,336	0	29
	Chitina	Dip net	11,618	9,332	652	137,179	854	138,685	719	157,215	1,129	159,063	0	329
	Total		13,274	10,711	1,855	203,942	1,080	206,877	2,084	232,716	1,362	236,162	0	361
2015	Glennallen	Dip net	1,128	909	1,087	29,092	26	30,205	1,297	35,416	32	36,745	0	0
	Glennallen	Fish wheel	503	455	870	43,316	45	44,231	915	46,384	45	47,344	0	217
	Chitina	Dip net	12,635	10,509	1,305	186,485	797	188,587	1,570	223,080	841	225,491	0	1,341
	Total		14,266	11,873	3,262	258,893	868	263,023	3,782	304,880	918	309,580	0	1,558
2016	Glennallen	Dip net	1,300	1,030	833	22,525	20	23,378	1,002	26,301	20	27,323	0	0
	Glennallen	Fish wheel	469	413	930	31,703	25	32,658	1,073	36,173	25	37,271	0	391
	Chitina	Dip net	11,394	9,302	563	126,528	1,027	128,118	711	148,982	1,182	150,875	0	605
	Total		13,163	10,745	2,326	180,756	1,072	184,154	2,786	211,456	1,227	215,469	0	996
2006-2015 10-year average	Glennallen	Dip net	796	648	581	15,126	45	15,701	1,656	18,446	51	20,153	0	33
	Glennallen	Fish wheel	604	554	1,436	43,173	177	44,786	1,520	46,616	188	48,324	2	129
	Chitina	Dip net	9,998	8,193	942	120,736	1,292	122,971	1,099	140,014	1,521	142,634	0	539
	Total		11,398	9,395	2,959	179,035	1,514	183,458	4,275	205,077	1,761	211,112	3	701
2017	Glennallen	Dip net	1,264	1,005	1,695	16,499	51	18,245	2,014	19,599	61	21,674	0	5
	Glennallen	Fish wheel	368	316	751	18,495	6	19,252	892	21,971	7	22,870	7	293
	Chitina	Dip net	9,490	7,665	1,709	113,202	532	115,443	1,961	132,694	715	135,370	0	673
	Total		11,122	8,986	4,155	148,196	589	152,940	4,867	174,264	783	179,914	7	971

APPENDIX G: HERRING

Appendix G1.–Annual Pacific herring biomass indices for Prince William Sound Area harvest management years 1973–2017.

		Aerial survey estimates			Peak spring
Harvest management year	Use and harvest mortality (tons) [a]	Peak biomass (tons)[b]	Maximum observed biomass (tons)[c]	Mile-days of spawn[d]	acoustic biomass estimate (tons)
1973–1974	6,375	41,080	102,150	96.0	ND
1974–1975	5,854	ND	ND	54.0	ND
1975–1976	2,584	7,330	25,270	41.2	ND
1976–1977	2,267	16,830	15,150	78.2	ND
1977–1978	1,391	13,410	37,850	50.8	ND
1978–1979	4,138	42,100	101,920	89.0	ND
1979–1980	6,323	62,110	148,270	95.5	ND
1980–1981	14,124	77,810	162,970	144.0	ND
1981–1982	7,861	68,790	85,910	85.5	ND
1982–1983	3,181	41,850	104,145	93.5	ND
1983–1984	6,604	58,870	178,650	104.8	ND
1984–1985	7,679	20,830	65,690	156.7	ND
1985–1986	11,180	15,180	65,030	146.8	ND
1986–1987	6,281	26,530	56,745	186.8	ND
1987–1988	9,871	34,270	81,545	269.8	ND
1988–1989	[e]	56,915	188,928	228.1	ND
1989–1990	10,103	57,900	114,733	164.4	ND
1990–1991	15,196	42,765	143,495	71.5	ND
1991–1992	20,752	53,835	139,729	119.8	ND
1992–1993	2,360	20,725	121,015	50.3	ND
1993–1994	151	19,640	155,199	23.1	ND
1994–1995	0	7,113	21,110	28.2	14,639
1995–1996	0	10,691	40,874	37.3	25,346
1996–1997	5,170	10,858	97,289	64.3	44,083
1997–1998	3,849	13,817	76,966	62.0	19,456
1998–1999	49	6,366	13,430	40.7	22,397
1999–2000	0	1,610	4,446	31.7	8,024

-continued-

Harvest management year	Use and harvest mortality (tons) [a]	Aerial survey estimates: Peak biomass (tons)[b]	Aerial survey estimates: Maximum observed biomass (tons)[c]	Aerial survey estimates: Mile-days of spawn[d]	Peak spring acoustic biomass estimate (tons)
2000–2001	0	587	1,075	14.8	7,035
2001–2002	0	646	1,433	23.6	11,791
2002–2003	0	5,600	8,951	26.1	29,864
2003–2004	0	12,305	17,650	30.4	21,046
2004–2005	0	4,773	5,230	31.7	16,800[f]
2005–2006	0	540	609	21.7	7,600[f]
2006–2007	0	770	1,615	18.3	10,700[f]
2007–2008	0	10,700	13,740	33.2	23,300[f]
2008–2009	0	1,933	2,913	29.8	16,900[f]
2009–2010	0	4,180	15,160	32.7	28,500[f]
2010–2011	0	7,570	14,380	26.2	24,000[f]
2011–2012	0	1,960	7,360	39.3	30,000[f]
2012–2013	0	1,720	5,837	29.3	2,4200[f]
2013–2014	0	2,722	9,441	36.6	22,000[f]
2014–2015	0	3,540	11,032	21.6	NA[g]
2015–2016	0	746	2,175	9.89	3,453
2016–2017	0	580	1,883	8.12	9,896

Note: All biomass estimates are in short tons (2,000 lb) and all linear extent of milt estimates are in statute miles.

[a] Represents the common property seine and gillnet sac roe harvest, and equivalent use of herring in closed pound spawn-on-kelp fisheries.

[b] Largest single day aerial estimate of herring biomass. Does not include Kayak Island estimates.

[c] The sum of all daily aerial biomass estimates for a given year. Does not include Kayak Island estimates.

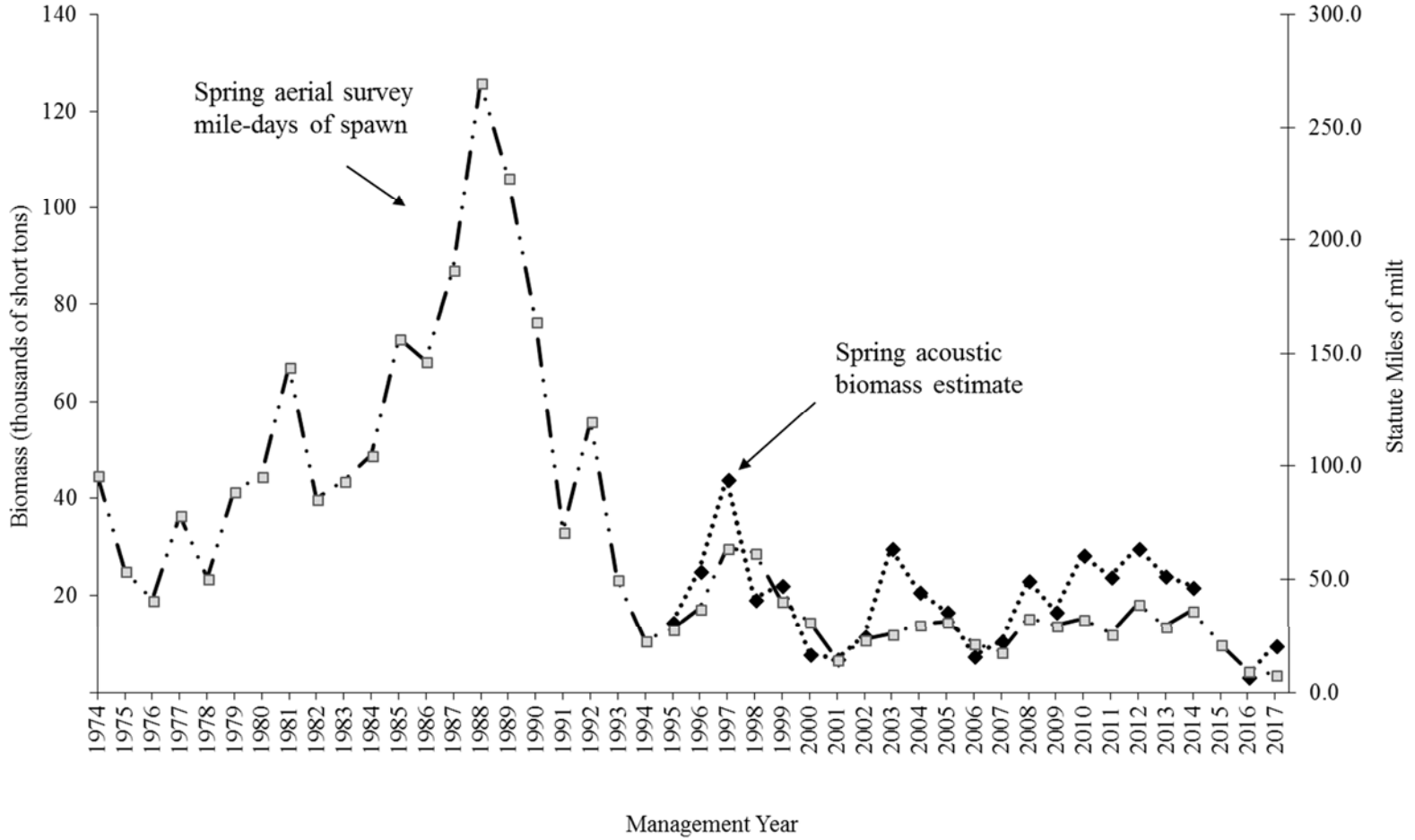
[d] Sum of the daily observed linear miles of herring milt calculated in ArcMap from digitized hand-annotated paper maps and data collected electronically.

[e] All herring commercial fisheries in PWS were closed in the spring of 1989 because of the potential for the contamination of harvests from the T/V Exxon Valdez oil spill.

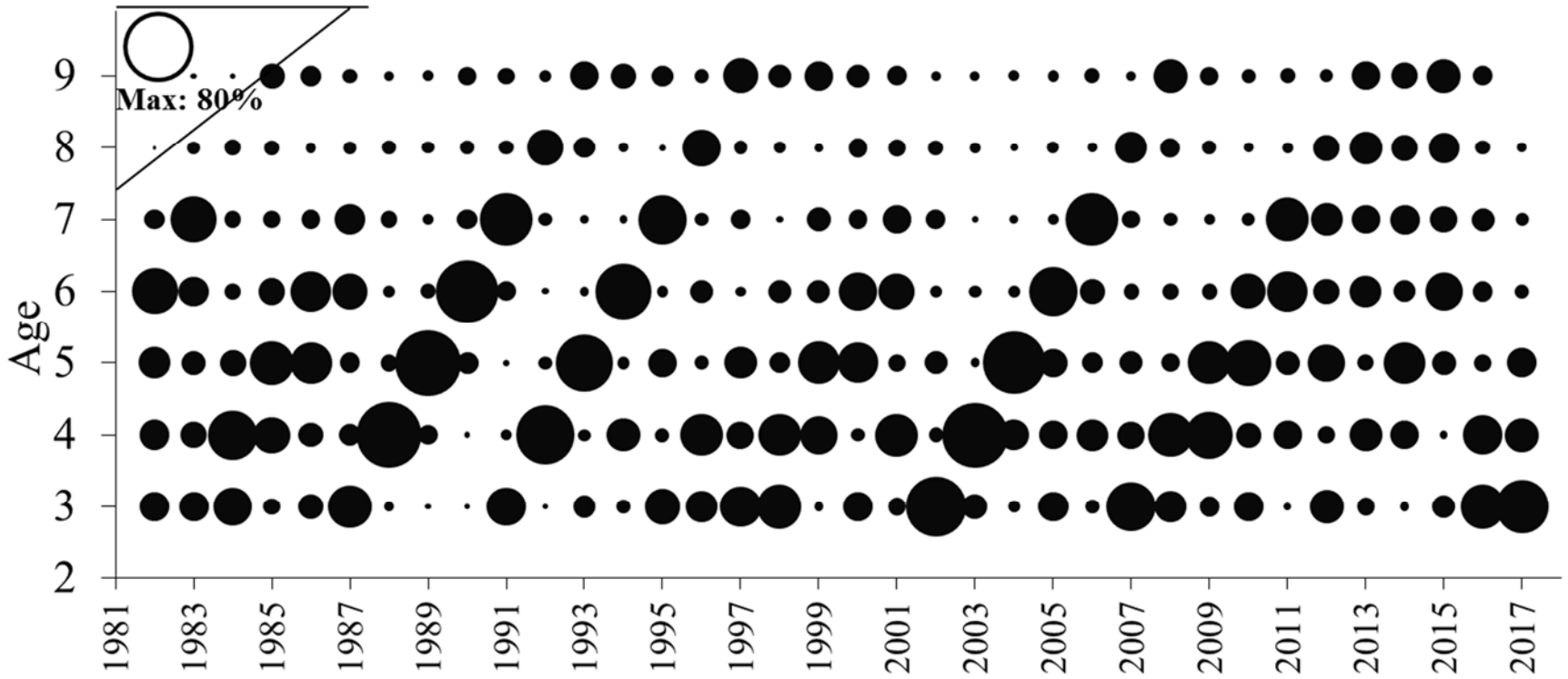
[f] Acoustics estimates for 2005–2014 are from ADF&G surveys only and are not adjusted for maturity or subsequent harvest. Therefore, they represent the total biomass and not the spawning biomass.

[g] Estimates are not available.

Appendix G2.–Prince William Sound Area annual Pacific herring biomass indices by management year, 1973–2017.



Appendix G3.–Pacific herring percentage contribution by number of each age group to the spring run biomass, 1982–2017.



Appendix G4.–Location of spawning herring and miles of spawn observed during aerial surveys in the Prince William Sound Area, 2017.