Fishery Management Report No. 17-17

2015 Prince William Sound Area Finfish Management Report

by

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and

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

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Weights and measures (metric)

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. 17-17

2015 PRINCE WILLIAM SOUND AREA FINFISH MANAGEMENT REPORT

by
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ABSTRACT

The 2015 Prince William Sound (PWS) management area commercial salmon harvest was 103.49 million fish. The harvest included a record 97.33 million pink *Oncorhynchus gorbuscha*, 3.4 million sockeye *O. nerka*, 2.51 million chum *O. keta*, 225,000 coho *O. kisutch*, and 24,500 Chinook salmon *O. tshawytscha*. Approximately 95.1 million fish were commercial common property harvest, and 8.39 million fish were sold for hatchery cost recovery. Estimated value of the combined commercial salmon harvest, including hatchery sales, was approximately $117.18 million. During the 2015 season, 520 drift gillnet, 31 set gillnet, and 220 purse seine permit holders fished. Drift gillnet exvessel harvest value was an estimated $37.07 million (average permit earnings of $71,300); set gillnet exvessel harvest value was an estimated $1.98 million (average permit earnings at $63,700); and purse seine exvessel harvest value was an estimated $63.6 million (average permit earnings at $289,000). Revenue generated for hatchery operations was approximately $14.52 million. The PWS management area personal use and subsistence fisheries (including upper Copper River personal use and subsistence fisheries) harvested a total of 339,391 fish in 2015. For these fisheries, approximately 15,000 subsistence and personal use permits were issued to Alaska residents. The commercial Pacific herring *Clupea pallasii* fishery in the PWS management area was closed in 2015 for the 16th 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, area 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). In addition to PWS, the management area includes the Bering and Copper rivers and has a total adjacent land area of approximately 38,000 square miles.

The salmon management area is divided into 11 districts that correspond to the local geography and distribution of the 5 species of Pacific salmon *Oncorhynchus* spp. harvested by the commercial fishery (Figure 2). The management objective for all districts is the achievement of spawning escapement goals for the major salmon species and stock groupings while allowing for the orderly harvest of all fish surplus to spawning requirements. In addition, 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. Five are operated by the regional aquaculture association, 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) operates Solomon Gulch Hatchery (SGH) in Port Valdez and produces pink and coho salmon.

ADF&G forecasts PWS wild salmon runs, and PWS hatchery run projections are provided by PWSAC and VFDA and are summarized in hatchery *Annual Management Plans* (AMPs). 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). 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. Data provided through PWS hatchery operator annual reports are referenced throughout this document (reports are on file with PNP Hatchery Program Coordinator, Alaska Department of Fish and Game, Juneau, Alaska) and are summarized in Vercessi (2015). Additional information regarding hatchery production in PWS may be found in Sheridan et al. (2013) and Stopha (2013a-e).

Gear for the salmon fishery includes purse seine, drift gillnet, and set gillnet. Drift gillnet permits are the most numerous and are allowed in the Bering River, Copper River, Coghill, Unakwik, and Eshamy districts. In 2015 drift gillnet gear was permitted to harvest hatchery chum salmon in the Port Chalmers Subdistrict of the Montague District as stipulated in the *Prince William Sound Management and Allocation Plan* (5 AAC 24.370). 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.

As an avenue for the commercial fishing industry to formally provide management recommendations to ADF&G, representatives from PWS area processors, gear groups, and aquaculture associations sit on an advisory body known as the PWS Salmon Harvest Task Force (SHTF). When the SHTF does not meet, a less formal public "Fishermen's" meeting is held to discuss management strategy for the upcoming fishing season.

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, and spawn-on-kelp in pounds fisheries occurring in the spring, and herring food/bait fishery occurring in the fall. The guideline harvest level established by the *Prince William Sound Herring Management Plan*, 5 AAC 27.365, is intended to provide for 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 portion of the biomass and maintaining a threshold spawning biomass.

AREAWIDE SALMON AND HERRING FISHERIES

OVERVIEW

The 2015 PWS management area commercial salmon harvest was 103.49 million fish. The harvest included a record high 97.33 million pink, 3.40 million sockeye, 2.51 million chum, 225,000 coho, and 24,500 Chinook salmon (Table 1; Figure 3). Combined area hatchery runs of sockeye and pink salmon were above forecast; combined area hatchery runs of coho and chum salmon were below forecast (Appendix E1). Approximately 91.9% of the commercial harvest (95.10 million fish) was attributed to the commercial common property fishery (CCPF) and 8.1% (8.39 million fish) was attributed to the hatchery cost-recovery fishery (Table 1). The 2015 preliminary exvessel value estimates by gear group from the CCPF, including both wild and enhanced salmon, are $63.61 million (62%) for purse seine, $37.07 million (36.1%) for drift gillnet, and $1.98 million (1.9%) for set gillnet (Table 2; Figure 4). The average price per pound paid to fishermen was below the recent 10-year (2005–2014) average for all species except Chinook and sockeye salmon harvested in the Copper River District and purse seine harvested sockeye salmon (Table 3). The purse seine gear group harvest value was the third highest in the last 10 years, and 145% of the recent 10-year

average. Drift gillnet and set gillnet harvest values were 90.4% and 94.5% of the recent 10-year average, respectively and the lowest harvest value for both gear groups since 2009 (Table 4).

No commercial fisheries for herring occurred in 2015; the projected spawning biomass of 19,700 tons for spring 2015 was below the regulatory minimum spawning biomass of 22,000 tons. Aerial surveys resulted in the third lowest estimate of annual mile days of spawn (21.6) on record (1974–2015, Appendices G1 and G2). Given the current estimates of PWS herring spawning population size and age structure, a commercial harvest was not anticipated in 2015.

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). Average 10-year commercial harvest from the Copper River District for 2005–2014 was 18,383 Chinook, 1.42 million sockeye, and 214,000 coho salmon. The 25-year average for 1990–2014 was 34,200 Chinook, 1.40 million sockeye, and 277,000 coho salmon. The 2015 harvest was 22,500 Chinook, 1.75 million sockeye, and 137,000 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 this entire 2 week period to increase the probability of making the Chinook salmon escapement goal.

Achieving escapement goals and satisfying management plan provisions remain the primary management objectives of ADF&G. Management tools such as inriver sonar, aerial survey observations, Chinook salmon mark–recapture estimates, and harvest data provide ADF&G fishery managers with indices of abundance used to regulate 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 escapement observations, thermal and strontium chloride ($SrCl_2$) marked otolith data; and weir and tower data have provided supporting information on the relative success of ADF&G in meeting provisions of the *Copper River District Salmon Management Plan*.

In 2015, combined upriver subsistence and personal use sockeye salmon harvest (federal and state) totaled 334,000 fish, exceeding the previous record harvest by more than 50,000 fish. From 2005 to 2014 the combined upriver subsistence and personal use sockeye salmon harvest (federal and state) has ranged from 140,000 fish (in 2008) to 275,000 fish (in 2013), with a 10-year average of 208,000 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.

The Copper River District commercial fishing season opens in mid-May. Commercial fishing periods are established inseason by emergency order (EO). In general, fishing time has steadily

been reduced over the years in response to increased efficiency of the commercial fleet and reallocations by the BOF. Two evenly-spaced commercial fishing periods per week on Mondays and Thursdays has been the recent schedule and the duration of each fishing period dependent upon trends in escapement, harvest, and environmental conditions.

The current sustainable escapement goal (SEG) is a range of 360,000–750,000 wild sockeye salmon for the upper Copper River (Fair et al. 2011).

The components of the 2015 inriver goal from 5 AAC 24.360 were as follows:

- Spawning escapement: 360,000
- Other salmon: 17,500 salmon
- Subsistence harvest: 82,500 salmon
- Personal use harvest: 150,000 salmon
- Sport fishery: 15,000 salmon
- Gulkana Hatchery broodstock: 20,000 sockeye salmon (estimated annually)
- Gulkana Hatchery surplus: 114,000 sockeye salmon (estimated annually)
- Total: 759,000

The daily inriver goal is the anticipated number of salmon counted daily at the Miles Lake sonar necessary 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 2015 commercial harvest forecast for the Copper River District was 5,580 Chinook, 2.20 million sockeye, and 214,000 coho salmon (Appendix A9). The GH enhanced sockeye salmon run was forecast by ADF&G to be 330,000 fish (Table 6). PWSAC requires approximately 20,000 fish for broodstock, and ADF&G includes hatchery surplus in the inriver goal. All GH fish beyond these categories are available for commercial, subsistence, personal use, and sport harvests. The 2015 inriver goal for salmon passing the Miles Lake sonar was 759,000. This number equated to a sonar goal of 707,000 salmon by July 28, which was the season ending date for sonar counting at Miles Lake in 2015 (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 actual harvest versus anticipated 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 to 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 to 67,000 coho salmon (Table 5; Bue et al. 2002).

Sockeye and Chinook Salmon Fishery Season Summary

The 2015 Copper River sockeye salmon total run was 3.25 million fish, with 1.75 million (53.9%) commercially harvested, 334,000 (10.3%) harvested by upriver subsistence and personal use fishermen, and an estimated 22,700 (0.7%) harvested by upriver sport fishermen. Harvest distributions between other harvest categories were consistent with past years. Upriver and Copper River Delta wild sockeye salmon escapement was 1.09 million (33.5%) fish, and 40,100 (1.2%) fish returned to the GH sites (Appendix A1). Overall, 2.68 million (83.6%) of the sockeye salmon originated from upriver wild stock systems, 311,000 (9.68%) from Copper River Delta wild stock systems, and 217,000 (6.8%) came from the GH (Appendix A2).

The 2015 Chinook salmon total run was 56,200 fish with 22,500 (40.1%) commercially harvested, 217 (0.4%) harvested through educational and subsistence permits in the Copper River District, and 1,145 (2.0%) retained by commercial permit holders as homepack. A total of 4,200 (7.5%) were harvested by upriver personal use and subsistence users, an estimated 1,500 (2.7%) were harvested by sport fishermen, and the remaining 26,600 (47.4%) represent spawning escapement (Appendix A3). Spawning escapement was above the lower bound SEG of 24,000 for Copper River Chinook salmon.

The Copper River commercial common property sockeye salmon harvest of 1.75 million was 20.5% below the projected 2.20 million and 23.2% above the previous 10-year average of 1.42 million sockeye salmon. The commercial harvest of 22,500 Chinook salmon was 22.3% above the previous 10-year average of 18,400 fish. The overall commercial harvest of Chinook salmon was the nineteenth lowest since 1970 (Appendix A4). The overall commercial sockeye salmon harvest from the Copper River District was the seventh largest harvest in the history of the fishery.

A total of 515 drift gillnet permits were active in the Copper River District in 2015 out of 532 total permits. Fishing effort peaked during the second fishing period that began May 18 when 485 permits were fished, though harvest did not peak until the fourth period with 160,000 sockeye salmon (Appendix A5).

The 2015 cumulative Miles Lake sonar count on July 28 (last day of operation) was 1.35 million salmon, which was above the upper bound of the inriver goal, representing a record high cumulative count (Appendices A6 and A7). River height was below the historical minimum during the first few days of May, climbed above the historical maximum for a couple days at the start of June, and, with 1 period of brief exception, fluctuated around the average for the remainder of the season. The exception was a sharp increase in water stage height over a short period of time, July 26–29, when Van Cleave Lake, a glacier-dammed lake had a breakout event or Jökulhlaup, releasing large amounts of water into the Copper River from under Miles Glacier (Appendix A7).

Final escapement index count for the Copper River Delta systems was 66,700 sockeye salmon, within the SEG range of 55,000–130,000 fish (Appendix A11; Table 5) and 7,800 fish below the recent 10-year average. Since 2005, the escapement index has ranged from a low of 58,400 in 2005 to a high of 98,900 in 2006 (Appendix A12). However, the management objective of meeting the long-term average escapement of 84,400 sockeye salmon for Copper River Delta was not achieved and may be due in part to increased commercial fishing effort on the Gulkana Hatchery sockeye salmon run. This year 2 aerial surveys of upper Copper River index streams were conducted (Appendix A13).

Based on strontium chloride ($SrCl_2$) otolith mark analysis, an estimated 137,000 GH sockeye salmon were harvested in the Copper River District commercial fishery in 2015, accounting for 7.8% of the total sockeye salmon commercial harvest (Appendix E2). This is 44% less than the previous 10-year average commercial harvest of 208,000 GH sockeye salmon (Appendix E3). (Appendix E4). Additionally, there were an estimated 29,700 MBH sockeye salmon in the Copper River District commercial harvest (Appendix E2).

In 2015, the sockeye salmon run produced by the Gulkana hatcheries totaled 227,000 fish (Appendix E3). This was 45% below the PWSAC total run forecast of 407,000 fish (PWSAC 2015a). A total of 40,100 sockeye salmon were reported as collected for broodstock or escaped into the watershed. Of these fish, 11,500 were harvested for broodstock and an estimated 28,600 sockeye salmon returned to release locations and were not harvested (PWSAC 2015b).

Miles Lake sonar became fully operational on May 12, though the north bank had been operated daily for short periods starting May 8. The first observed salmon were enumerated on May 12, with the south bank passing 6 fish and the north bank passing 0 fish (Appendices A6 and A7).

Due to a poor Chinook salmon forecast, fourth lowest since 1980, inside waters as described in 5 AAC 24.350(1)(B) were closed for all or a portion of the first 10 periods, ending with the fishing period beginning June 11 (Appendix A5). This closure covered the majority of historical Chinook salmon run entry timing and was 7 fishing periods beyond the regulatory requirement in 5 AAC 24.361(b). Starting the second fishing period, the inside closure area was expanded to include waters inside the bar at Softuk and Little Softuk. This reduction in channelized shallow water fishing area was intended to reduce Chinook salmon harvest potential and allow for a more aggressive sockeye salmon fishery in outside waters. Actual Chinook salmon harvest was above inseason harvest projections throughout the season, but remained below levels that would indicate an above average run. This contrast with low preseason projections prompted ADF&G to open the inside waters for portions of fishing periods starting May 28. These inside openings were limited to a single 12-hour opening during the last week of May, a 24-hour opening during the first week of June, and a 12-hour and 36-hour opening during the second week of June.

The first Copper River District commercial fishing period on Thursday, May 14 was for 12-hours, and 459 commercial drift gillnet permit holders fished. Harvest from this period was 17,900 sockeye and 1,520 Chinook salmon. The anticipated harvest was 37,200 sockeye and 453 Chinook salmon (Appendices A5 and A9). Processors reported paying a grounds base price of approximately $8.25 per pound for Chinook and $5.20 per pound for sockeye salmon. Harvest increased during the following 24-hour period when 485 permit holders landed and sold 49,400 sockeye and 2,960 Chinook salmon (Appendices A5 and A9). Increased sockeye salmon run entry through the east and central portion of the district, outside the barrier islands, accounted for a majority of the harvest.

Spring tides with a range of 15 feet or greater began on May 16, 2 days preceding 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 warm weather and early ice-out in the river, these tides helped maintain a trend of above-maximum inriver passage that would continue throughout the entire season (Appendices A6 and A7).

The third period was announced Wednesday, May 20, and Miles Lake sonar had been counting for 9 full days. With a cumulative count of 54,100 salmon versus a maximum escapement objective of 18,200 salmon, it was clear that a large run was likely (Appendix A7). In response, fishing time for the third period was maintained at the extended duration of 24-hours. Sockeye salmon harvest of 63,900 fish from this period was less than half the expected harvest. Chinook salmon harvest of 2,460 fish was almost 1,800 fish above expected (Appendices A5 and A9). The continued mix of above anticipated sonar counts and below anticipated sockeye salmon harvest was perplexing, especially when considering that favorable weather to this point in the season had allowed consistent fishing near shore along the outer beaches of the barrier islands. With no indication that inriver passage was slowing down, the fishery continued to be liberalized over the coming fishing periods.

The fourth period occurred Monday, May 25 and was 36-hours in duration. Sockeye salmon harvest more than doubled the previous period and Chinook salmon harvest remained above expected. This most recent addition to the harvest trend prompted a twofold adaptive management approach at the close of the week. The district was opened for 2 back-to-back 24-hour periods and the inside closure area was opened for the first 12-hours of the Thursday, May 28 fishing period. When fishing time was expanded to keep pace with the sockeye salmon run, it also became clear the Chinook salmon run was stronger than anticipated and a stepwise approach to opening the inside waters of the district was continued.

This harvest trend – strong sockeye and Chinook salmon harvest – continued during most periods until effort dropped in late July. This, combined with Miles Lake sonar passage that stayed above the maximum objective throughout the entire season, prompted extended periods of either 36- or 48-hours in duration throughout the remainder of the run. Participation in the fishery remained near 300 or more permits until the thirteenth period on June 22 (Appendices A5, A8, and A10). Around this time, fishermen began leaving the Copper River District to participate in fisheries on the western side of PWS (primarily near MBH and WNH) in increasing numbers. In general, the Copper River District saw run entry shifted east in 2015, with fish and harvest effort concentrated on the east line and Martin Islands, and with poorer fishing offshore and in the western portion of the district.

The aerial survey program on the Copper River Delta began the second week of June. Aerial surveys became an increasingly important sockeye salmon management tool during late June and throughout much of July. The Copper River Delta aerial escapement survey weekly index was near the lower end of the anticipated range during the week ending June 20 (Appendix A12). Fishing time was reduced from 48–36 to 24 hours per period beginning June 22 to allow for adequate sockeye salmon escapement into delta systems (Appendices A5 and A11). Gulkana Hatchery contribution estimates were 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 moderately aggressive fishing schedule was tied to low, but increasing numbers of GH sockeye salmon, and higher than anticipated Copper River Delta sockeye salmon escapement indices, (Appendices A5 and A11). Fishing time and area were primarily based on inseason indices of available wild stock surplus and secondarily by abundance of GH sockeye salmon. This strategy was also supported by historical run timing of the wild and enhanced stocks and by increasing numbers of $SrCl_2$ marked GH fish harvested in the commercial fishery. GH sockeye salmon were near peak abundance in the fishery later than anticipated, only representing an average of 14.6% through the historical average time period of peak abundance, last week of June and first week of July. Starting with the fishing period on July 9, the GH sockeye salmon proportion climbed above 30% and peaked 2 weeks later than normal during the June 23 fishing period. The peak GH sockeye salmon harvest occurred over the July 9 and July 13 fishing periods (Appendix E2). Higher than anticipated sonar passage and aerial survey indices, along with strong sockeye salmon wild stock contributions in the fishery allowed for 36-hour periods throughout July.

Copper River Delta survey conditions remained good, and the sockeye salmon escapement index was ahead of lower anticipated index through mid-August, allowing for the continuation of a regular fishing schedule of 36-hour periods until the beginning of coho salmon season (Appendix A12). Fleet participation declined from mid-July through mid-August, from an average of 118 permits July 31–21 to an average of 55 permits August 10–14. Low fleet participation in the fishery in late July and early August was largely the result of a combination 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 (65.2%) were 5-year-old fish from brood year 2010, followed by 4-year-old fish (25.7%) and 6-year-old fish (9.1%). Half of the sockeye salmon harvested (50.1%) were males (Appendix A14). The majority of commercially harvested Chinook salmon (53.3%) were 5-year-old fish from brood year 2010, followed by 6-year-old fish (22.4%) and 4-year-old fish (22.2%). Approximately 1.6% of the run were 7-year-old fish and 0.4% of the run were 3-year-old fish from brood year 2012. Less than half of the Chinook salmon harvested (30.3%) were males (Appendix A15). Coded wire tag recoveries indicated that about 13.5% of Chinook salmon harvested in the Copper River District in 2015 originated out of area. Of these out of area fish, 46.5%, 18.1% and 14.9% originated in Oregon, British Columbia, and Washington, respectively.

Coho Salmon Fishery Season Summary

The 2015 coho salmon run was estimated to be 239,000 fish. Total run size for coho salmon in the Copper River does not include upriver spawning escapement because the number of coho salmon migrating upriver is not assessed. A total of 137,000 coho salmon were harvested and sold commercially; 1,420 were reported retained as homepack; 10 were harvested from the Copper River District in the subsistence gillnet fishery; 855 were harvested by personal use and subsistence dip net fishermen in the Chitina Subdistrict; 155 were harvested in the Glennallen Subdistrict dip net and fish wheel subsistence fisheries; an estimated 16,100 were harvested by sport fisherman on the Copper River Delta near Cordova; and an estimated 30 fish were harvested by upriver sport fisherman. Finally, 483 coho salmon were harvested in the federally-managed Copper River Delta subsistence fishery (Appendices A16 and F6). The Copper River Delta spawning escapement index was 42,200 coho salmon and was within the SEG index range of 32,000–67,000 (Appendix A16) This index value was below the midpoint of the SEG index

range but was somewhat higher than the low index values from 2009 to 2012 (Table 5; Appendix A17).

The coho salmon commercial harvest of 137,000 was 36.0% below the projected harvest of 214,000 fish (Appendix A9). Peak fishing effort and harvest for the coho salmon season was during the 24-hour period that occurred on August 31 when 179 permit holders delivered 27,000 coho salmon (Appendix A5). Rough seas and inclement weather probably had a negative impact on harvest levels of coho salmon.

The coho salmon season began on Monday, August 17, during statistical week 34 with a 24-hour period (Appendix A5). This was also the first period that coho salmon harvest came close to exceeding sockeye salmon harvest. Furthermore, this shift in species harvest dominance was 1 week later than the previous year, and an early sign of a smaller than anticipated coho salmon run. The district remained closed to fishing on Thursday, August 20, to allow for early season coho salmon escapement. An aerial survey flown during the week ending August 15 under good conditions produced a count of 1,300 coho salmon in index streams, which was below the target range for this statistical week (Appendix A17). Harvest from the August 17 fishing period was 2,000 coho salmon and 66 permit holders reported deliveries. This period yielded a harvest that was only 5.7% of the anticipated weekly harvest of 35,200 coho salmon and prompted a fishery closure for the rest of the week (Appendices A5 and A9). The 24-hour fishing period beginning on August 24 resulted in 14,000 coho salmon delivered by 177 permit holders (Appendix A5). The anticipated harvest for this statistical week was 45,900 coho salmon (Appendix A9). An aerial survey flown under good observational conditions on August 25 documented 17,000 coho salmon in index streams, which was above the average anticipated range for the date (Appendix A17). Effort and harvest increased the following fishing period, starting August 31, in which 179 permit holders sold 27,000 coho salmon. During the next period, effort and harvest decreased to 153 participating boats and 20,700 coho salmon harvested. The actual harvest for this statistical week totaled 47,700 versus an expected harvest of 44,300 fish. An aerial survey flown on September 2 under fair conditions documented 21,900 coho salmon in index streams, which was above the lower anticipated index for the date. The escapement index remained above the lower anticipated index for the remaining 2 surveys and allowed the fishery to remain on a schedule of 2 periods per week until the season closed October 10 (Appendices A5, A9, and A17).

Harvest and effort declined rapidly from Period 33 (September 7) to Periods 34–35 (September 10 and 14), and declined further during Period 36 (September 17). During the period beginning September 14, 84 permit holders harvested 19,300 coho salmon. This was the last substantial harvest of the season; a total of 8,590 coho salmon were harvested after this period, with fewer than 21 boats fishing during each opening. There was minimal effort and harvest from October 1 until the season end (Appendix A5).

As is typical, stormy 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 22, September 12, September 19, October 3, October 10, or October 17. However, above-minimum escapement trends observed during the surveys that were completed combined with low fishing effort provided enough information to continue a regular fishing schedule throughout most of the season (Appendices A9 and A17).

Coho salmon age composition estimates for the 2015 Copper River District commercial fishery are not yet available.

BERING RIVER DISTRICT

Preseason Outlook and Harvest Strategy

Historically this district has opened in early June to sockeye salmon harvest and is managed concurrently with the Copper River District. Given that the minimum sockeye salmon SEG of 20,000 (as measured by aerial survey) was not met between 2006 and 2010, ADF&G announced at the preseason fishermen's meeting that the district would probably not open until escapement levels were within the anticipated weekly escapement index.

Sockeye Salmon Season Summary

The first aerial survey of the Bering River District was flown during the week ending June 13. The total index count from this survey was 1,510 sockeye salmon, below the anticipated range of 3,250–7,150 sockeye salmon for this date (Appendix A20). Because the escapement count was below anticipated levels, the fishery remained closed the following week. The next survey was flown during the week ending June 20 and resulted in an index count of 3,020, below the anticipated range of 4,050–8,910. To provide some information with minimal potential for a large harvest, the district was opened for the season June 25 for a 12-hour period. Whenever possible, openings in the Bering River District are concurrent with openings in the Copper River District, but limited and poor escapement data warranted a precautionary approach. No harvest was reported for this fist fishing period of the season (Appendix A21).

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 third aerial survey was conducted the week ending June 27. The index of 11,500 sockeye salmon was above the average anticipated index of 9,750 for the week. Considering the improving escapement and that there would probably be limited fishing effort, the second period in the district was limited to 12-hours and occurred June 29. No harvest was reported from this period (Appendix A21).

Sockeye salmon escapement continued to increase through the fourth survey. The index of 16,400 was near the average anticipated index, and afterward the fishing schedule in the district was concurrent with the Copper River District. No harvest was reported until coho salmon season began in mid-August (Appendix A21).

Weekly escapement indices peaked at 20,900 fish on the fifth survey, remaining above the average anticipated index and within the weekly target range for the remainder of the sockeye salmon season. The final season index was 21,700 sockeye salmon; well above the 15,000 salmon lower SEG.

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 12,100 was the smallest since 2007 and was nearly 80% less than the 10-year average (Appendix A19).

Indices from an aerial survey flown the week ending August 15 were above the lower end of the anticipated range for the week (Appendix A22). Harvest from the period that began August 24 was 263 coho salmon with 4 permit holders participating (Appendix A21). This was not unusual for this time period because most effort is focused on earlier-timed coho salmon stocks in the Copper River District in mid-August.

The aerial survey flown the week ending August 29 yielded an index of 3,720 coho salmon, which was below the range of 4,000–10,200 for the date (Appendix A22). Harvest during the next statistical week was 7,870 coho salmon with 20 permits fishing during each of the fishing periods, which indicated that run entry was increasing (Appendix A21). This pattern continued during the next aerial survey; the index of 6,250 was below anticipated range for the date, but increasing towards the lower anticipated range for the date. Aerial survey indices continued to rise through the end of September, though poor weather prevented several surveys from taking place. The highest aerial survey index was observed the week ending September 26. At 14,700 coho salmon, the index from this survey was nearly 2,000 salmon above the upper end of the anticipated range for the date. The total drainage aerial index for the season was 15,600 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, peaking about 2 to 3 weeks before the highest escapement observation. The Bering River District experienced low fishing pressure during the 2015 season. Thirty permits fished the 24-hour period that began August 31, harvesting 3,900 coho salmon. Peak harvest occurred during the next fishing period, September 3, when 3,970 coho salmon were sold by 20 permit holders. Harvest and effort tapered rapidly during the next period, and less than 1,200 coho salmon were harvested after this period (Appendix A21).

COGHILL DISTRICT

Preseason Outlook and Harvest Strategy

The forecast point estimate for 2015 Coghill Lake sockeye salmon total run was 123,000 fish, with a range of 74,000–246,000. 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 93,000 fish (forecast range 74,000–246,000) for the common property fishery (Moffitt and Brenner 2015). The enhanced chum salmon run to WNH was forecast to be 1.33 million fish. PWSAC's projection for cost-recovery and broodstock requirements was approximately 812,000 fish, leaving 519,000 chum salmon for the CCPF. An estimated run of 56,700 coho salmon was projected to return to WNH. A total of 2,700 were anticipated to be harvested for broodstock, and the remaining 54,000 fish would be available to the CCPF.

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 from June 13 to July 26, 2015. Daily passage rates did not exceed 400 sockeye salmon until June 30 and, as in 2014, only 2 days of the season saw sockeye salmon daily run entry of over 1,000 fish. Coghill River sockeye salmon migration peaked July 3 and 4, when 3,887 passed the weir (Appendix B1). Pickets were removed from the weir July 17–July 19 due to high water; no counts are available for these dates. Two days of record pink salmon passage occurred in 2015 with 46,264 pink

salmon passing the weir on July 22 and 53,810 passing on July 26, the last day of weir operation in 2015. An estimated 376,727 pink salmon passed the Coghill River weir in 2015. Coghill District escapement goals for pink and chum salmon were met. The final sockeye salmon escapement count into Coghill Lake was 13,584 sockeye salmon; below the lower SEG bound of 20,000 fish (Table 5; Appendices B1–B3).

Total CCPF purse seine and drift gillnet combined salmon harvest for the Coghill District was 76,500 sockeye (97.2% drift gillnet), 899,325 chum salmon (86.5% drift gillnet), 6.26 million pink salmon (10.5% drift gillnet), and 7,300 coho salmon (83.4% drift gillnet) (Table 1). Total Coghill District commercial drift gillnet harvest was 74,400 sockeye, 778,100 chum, 655,300 pink, and 6,094 coho salmon, from 265 permit holders (Table 1; Appendices B4 and B5).

In 2015, PWSAC reported a WNH chum salmon purse seine cost-recovery harvest of 673,209 fish, a raceway cost-recovery harvest of 166,935 fish, and broodstock carcass sales of 139,213 fish. The broodstock goal for chum salmon was 216,000 fish. Of the 181,076 chum salmon collected for broodstock 175,192 were viable. PWSAC estimated that 15,000 chum salmon were not harvested and remained within waters of the Special Harvest Area (SHA). PWSAC reported harvesting 3,084 coho salmon as part of broodstock collection; 1,272 of these were viable. The broodstock goal for coho salmon was 2,700 fish (Appendix E8; PWSAC 2015a, PWSAC 2015b)

Based on otolith thermal-mark data, it is estimated that enhanced salmon made up 71.0% of the sockeye salmon, 96.2% of the chum salmon, and 88.1% of the pink salmon harvested by the CCPF harvest in the Coghill District (Appendices E5–E7). There were approximately 54,300 MBH and 22,200 wild sockeye salmon harvested in the Coghill District commercial fishery for a total of 76,500 sockeye salmon (Appendix E5). Of the 6.26 million pink salmon harvested in this district by the CCPF, 5.26 million (84.1%) were released at WNH, 123,000 (1.9%) were released at CCH, 67,000 (1.1%) were released at SGH, and 60,000 (0.9%) were released at AFK (Appendix E6). Of the 899,300 chum salmon harvested in the Coghill district in the CCPF, approximately 865,300 (96.2%) originated from WNH, AFK, and the Port Chalmers remote release site (Appendix E7).

The Coghill District drift gillnet fishery began on May 25. A general schedule of 2 openings, 36–48-hours in duration per week was established, coinciding with openings in the Copper River and Eshamy districts. Chum salmon cost recovery at WNH began on May 31. Fishing time in the Esther Subdistrict was limited to 24-hours from May 28 to June 1, to 12-hours from June 4 to June 8, and remained closed June 9–July 6. The WNH THA remained closed May 28 to July 7 and the SHA remained closed from May 28 to July 9 to facilitate cost recovery. Beginning July 9, 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. The reduced fishing area strategy over the first 2 fishing periods resulted in a harvest of 7,500 wild sockeye salmon and the peak single fishing period wild stock harvest of the season. Considering the continued higher than anticipated harvest of wild sockeye salmon, fishing period duration was drastically reduced from 36-hour to 12-hour fishing periods. Based on harvest distribution of wild sockeye salmon during this critical run overlap time period, future management action should incorporate additional area restrictions, for example, closing the eastern and western sides of the Esther Subdistrict or only fishing in the hatchery terminal areas, and reduced fishing time in subdistricts and in the THA when sockeye salmon harvest is elevated. On July 19 cost recovery was complete. The largest daily cost-recovery harvest occurred June 16 with a harvest of 69,787 chum salmon (Appendix E8).

Peak drift gillnet fishing effort occurred during an 84-hour period beginning on July 9 when 153 permit holders harvested 8,500 sockeye and 111,900 chum salmon. Peak drift gillnet chum and sockeye salmon harvest occurred during the previous 48-hour period that began on July 6, when 149 permit holders harvested 16,000 sockeye salmon and 154,900 chum salmon (Appendix B4). Overall, 74,400 sockeye salmon and 778,100 chum salmon were harvested by 265 drift gillnet permit holders during the 2015 season. This is 47.5% and 54.6% of the 10-year average harvest of 156,800 sockeye salmon and 1.42 million chum salmon, respectively. The 2015 harvest of 6,100 coho salmon by the drift gillnet fleet was 9.9% of the previous 10-year average of 61,700 fish (Appendix B6).

PWSAC broodstock and cost recovery management recommendations resulted in the extended closure of CCPF enhanced chum salmon fishery from mid-June to early July. Once the CCPF resumed in the Esther Subdistrict and the hatchery terminal harvest areas, it became apparent that an excess of poor quality chum salmon had built up in front of the hatchery. After efforts to clean up these fish with the drift gillnet fleet failed due to lack of marketable fish, the purse seine fleet was allowed into the hatchery terminal areas for a brief period to salvage any remaining market value from these fish.

Purse seine fishing in the Coghill District began on July 11 with a 32-hour period (Appendix B5). Chum salmon harvest declined quickly through the remainder of July and pink salmon harvest increased rapidly beginning in mid-July, indicating a strong pink salmon run (Appendices B4 and B5). Coho salmon landings began in early June, but harvest remained below 1,000 fish until the final period with reported harvest that began September 10. After September 9, Coghill District was closed to purse seine gear for the remainder of the season. The Coghill District closed to commercial fishing October 3.

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. Cannery Creek Hatchery, a pink salmon hatchery, borders the southern boundary of the district. This district was established for management of runs of sockeye salmon 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 2015 fishing season on June 15 and followed a schedule of 2 evenly spaced periods per week, concurrent with other districts in PWS, until the district was closed for the season on July 24 (Appendix B8). The total 2015 Unakwik District CCPF harvest was 4,950 sockeye, 400 pink, 270 chum, and 8 Chinook salmon. The 2015 sockeye salmon harvest was near the previous 10-year average of 5,089 (Appendix B9), whereas pink harvest was below the previous 10-year average of 8,634. Peak daily sockeye salmon harvest and drift gillnet harvest effort occurred during the 36-hour fishing period that started on July 9, when 4 permit holders harvested 1,043 fish. Peak purse seine effort and sockeye salmon harvest occurred during the first period of the season, a 36-hour period beginning June 15, when 4 permit holders harvested 429 sockeye salmon (Appendix B8). Participation in this fishery is directly related to

fishing success elsewhere in PWS. Robust salmon runs to WNH, VFDA, and the Copper River probably contributed to the low fishing effort in Unakwik District.

PORT CHALMERS SUBDISTRICT

Preseason Outlook and Harvest Strategy

PWSAC forecast a run of 258,000 chum salmon to Port Chalmers Subdistrict in 2015 (PWSAC 2015a). The 5-year rolling average allocation calculation used to guide 2015 fisheries management was 55.4% purse seine, 44.6% drift gillnet, and 4.3% set gillnet. Based on the *Prince William Sound Management and Allocation Plan* (5 AAC 24.370), the drift gillnet fleet had exclusive access to the Port Chalmers Subdistrict from June 1 to July 30 in 2015.

Season Summary

The total 2015 Port Chalmers Subdistrict drift gillnet harvest was 167,000 chum, 58,000 pink, 9,700 sockeye, and 700 coho salmon with 102 drift gillnet permit holders reporting deliveries (Appendix B10). The 2015 chum salmon harvest was below the 5-year average of 268,000 fish (Appendix B12). Out of a total Montague District CPF harvest of 168,721 chum salmon, thermal mark contributions estimated 118,027 (70%) were released at Port Chalmers, 28,071 (16.6%) were released at WNH, and 4,241 (2.5%) were released at AFK. Wild chum salmon harvest composed 10.9% (18,383 fish) of the total harvest (Appendix E16). Port Chalmers Subdistrict was open 7 days per week for the duration of the drift gillnet fishery starting May 25 and continuing until July 30. Effort peaked during the June 22–24 period with 47 permit holders reporting deliveries. Drift gillnet harvest peaked during the June 25–28 period when 31,000 chum salmon were harvested by 36 permit holders.

ESHAMY DISTRICT

Preseason Outlook and Harvest Strategy

The 2015 preseason forecast of the sockeye salmon run to Eshamy Lake was 53,000 fish. Managing to the midpoint biological escapement goal (BEG) of 20,500 would leave approximately 32,500 fish for the CCPF (Moffitt and Brenner 2015). PWSAC projected the total run of enhanced sockeye salmon to MBH to be 1.56 million fish, of which 8,940 fish were required for broodstock and the remaining 1.55 million fish would be available for harvest in the common property fisheries. This is the largest MBH sockeye salmon forecast on record based on the first year of returns from a production increase implemented in 2010.

PWSAC typically installs a barrier seine in mid-June to begin broodstock collection.

According to the *Prince William Sound Management and Salmon Enhancement Allocation Plan* (5 AAC 24.370), fishing time for the set gillnet group was not limited to 36-hours per week beginning July 10.

Season Summary

The 2015 total Eshamy District CCPF harvest was 1,126,000 sockeye, 108,000 chum, 207,000 pink, and 5,500 coho salmon (Table 1 and Appendix C3). Of the almost 1.13 million sockeye salmon commercially harvested in the Eshamy District, thermal-marked otolith contributions estimated 1,077,800 (95.7%) were MBH sockeye salmon (Appendix E10), and 41.3% (44,443) of the approximately 108,000 chum salmon harvested in the district were from AFK. PWSAC

harvested 180,516 MBH sockeye salmon for cost recovery and 15,250 sockeye salmon for broodstock, of which 7,431 were viable (Appendix E12). PWSAC estimated that 16,000 MBH sockeye salmon went unharvested.

Sockeye salmon began arriving at the MBH in late May and a schedule of 2 alternating 60-hour and 48-hour fishing periods per week was initiated beginning May 28. The entire Eshamy District was initially opened to commercial fishing to allow the fleet to focus on the enhanced run to MBH and run timing overlap with Eshamy River wild sockeye salmon was minimal. The alternating gear zone (AGZ) was closed to commercial fishing June 15 to July 9. Fishing time was reduced to 24-hour and 36-hour periods from June 18 to July 9 and the Main Bay Subdistrict was closed June 18 to July 6. Beginning July 9, area was adjusted to reduce wild sockeye salmon harvest in response to low returns at the Coghill Weir. Fishing was primarily limited to the Main Bay Subdistrict and the MBH THA and SHA with 84- and 60-hour periods July 9 through August 19, and 36-hour periods August 20 through the final period of the season, ending September 8. The continued substantial harvest of wild sockeye inside of the hatchery subdistrict, 21,000 fish during the July 9 through August 19 time period, probably contributed to the missed escapement goal at Coghill Lake. In future years of low escapement, fishing farther inside the hatchery subdistrict may be warranted to further reduce the wild sockeye salmon harvest potential. Fishing in the Eshamy district outside of the Main Bay Subdistrict was authorized for short durations during a 12-hour districtwide period on July 16, and twice weekly 12-hour periods in Eshamy District north of Loomis Creek July 30 through September 7.

Peak sockeye salmon harvest and harvest effort occurred during a 36-hour period beginning June 29 when 28 set gillnet and 230 drift gillnet permit holders harvested 36,179 and 158,828 sockeye salmon, respectively (Appendices C1 and C2). Peak chum salmon harvest also peaked during the June 29 period, with a total CCPF harvest of 19,300 chum salmon. Peak pink salmon harvest occurred during the 60-hour period beginning July 20 when 66 drift gillnet and 9 set gillnet permit holders caught a total of 44,430 pink salmon (Appendices C1 and C2). Sockeye salmon wild stock harvest proportions fluctuated throughout the season and peaked at 9.0% wild harvest during the 60-hour period beginning July 13 (Appendix E6). Pink salmon harvest in the Eshamy District is normally predominantly wild stocks and most fish are assumed to be returning to streams outside of the district. The majority of wild chum salmon are also assumed to be returning to streams outside of the district.

Overall in the Eshamy District in 2015, 313 drift gillnet permit holders and 30 set gillnet permit holders participated in the fishery. Drift gillnet harvests of 860,637 sockeye salmon, 4,611 coho salmon and 178,336 pink salmon were above the most recent 10-year averages of 602,646, 2,330, and 96,102, respectively, with chum salmon harvest just 48.0% of the 10-year average. Set gillnet harvests of 265,575 sockeye and 839 coho salmon were above the most recent 10-year averages of 209,741 and 300, respectively. Set gillnet harvest of pink salmon was near the 10-year average (99.6% of the 10-year average) and a chum salmon harvest of 295,567 was slightly above the 10-year average of 272,875 fish (Appendix C3).

Escapement into Eshamy Lake in 2015 was partially assessed through a video monitoring project at the outlet of Eshamy Lake. Escapement counts for early 2015 season were incomplete, due to a log jam that allowed fish to pass through a small opening. The weir was fish-tight by July 25. The minimum count from July 25 to August 21 was 3,300 sockeye salmon. Complete counts of sockeye salmon from video files recorded after August 21 have not been completed. Historically, 50% of sockeye salmon have escaped to Eshamy Lake by August 14.

GENERAL PURSE SEINE DISTRICTS

The general purse seine districts are managed to achieve wild pink and chum salmon escapement goals by district and allow for the orderly harvest of surplus wild and enhanced stocks. Escapement of pink and chum salmon is monitored throughout the season by weekly aerial surveys of 134 index streams. This was the first year the number of streams surveyed was reduced from 215 streams after a review of the statistical design of the program. Pink and chum salmon escapement trends determine the area and duration of fishing periods within districts. Run projections are the basis for early inseason management of all 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 2015 pink salmon preseason forecast was the largest on record and liberal fishing time and area was anticipated if returns were as strong as expected. The 2015 pink salmon total run preseason forecast for PWS was 54.19 million fish. This estimate included 16.87 million wild fish, 21.60 million PWSAC fish, and 15.72 million Valdez Fisheries Development Association (VFDA) fish. Approximately 3.13 million (15%) of PWSAC's pink salmon preseason forecast was projected for cost recovery and broodstock with the remaining 18.47 million PWSAC fish expected to be available for common property fishery (CPF) harvest. Approximately 3.10 million (20%) of VFDA's pink salmon preseason forecast were projected for cost recovery and broodstock. The remaining 12.62 million VFDA fish were expected to be available for CPF harvest. A total harvest of 15.42 million wild stock pink salmon was forecasted for CPF harvest in PWS, leaving 1.45 million fish for escapement.

The 2015 chum salmon preseason forecast total run in PWS was 2.4 million fish. The majority, 1.9 million (79%), were from PWSAC hatchery production, with 280,000 fish returning to the AFK. Based on ADF&G's wild chum salmon preseason forecast of 484,000 fish, there is a potential common property harvest of 284,000 wild chum salmon. ADF&G manages for each district's escapement goal, aiming for each district's long-term average, for a combined total of 200,000 chum salmon (Table 5).

2015 SEASON SUMMARY

The 2015 PWS purse seine CCPF salmon harvest was a record 89.85 million fish: driven by 89.11 million pink, 463,000 chum, 241,000 sockeye, 45,000 coho, and 497 Chinook salmon. PWS Purse seine CCPF fishery participation was 221 permits in 2015 (Table 1). The CCPF harvest of 89.10 million pink salmon was the largest PWS pink salmon harvest on record and exceeded the preseason forecast of 54.19 million by 60%. Pink salmon total harvest was 97.35 million fish, including 7.21 million fish for hatchery cost recovery (4.59 million for PWSAC and 2.63 million for VFDA). Pink salmon thermal-marked otolith contribution estimates from commercial common property harvests were 25.54 million wild stock fish, and 31.39 million SGH fish, both of which are records; pink salmon otolith contribution estimates resulted in a commercial common property harvest contribution of 33.14 million PWSAC fish.

The 2015 PWS pink salmon escapement aerial index was the largest on record and met or exceeded all district specific escapement goals. (Appendix D5). Chum salmon escapement goals were also achieved in all districts (Appendix D5). For the 2015 season, inseason pink salmon aerial survey escapement indices were above anticipated escapement range in most districts for

most of the season. This allowed for liberal time and area for fishing effort targeting surplus wild and enhanced pink salmon.

Otolith contributions estimated hatchery pink salmon represented 69% of the record total run of 104.15 million fish (harvest, broodstock, and escapement) with VFDA and PWSAC contributing 33% and 36%, respectively. Wild stock pink salmon harvest of 25.54 million fish combined with an escapement index of 6.15 million resulted in the largest wild pink salmon return on record of 31.68 million fish. VFDA cost recovery and broodstock harvest of 3.36 million fish was approximately 10% of the record pink salmon total run of 34.71 million fish to SGH. PWSAC cost-recovery and broodstock harvest of 3.08 million fish was approximately 8% of the pink salmon total run of 37.76 million PWSAC hatchery fish. Pink salmon egg-take goals were met at all PWS hatcheries in 2015.

EASTERN DISTRICT

Eastern District pink and chum salmon escapement indices were above anticipated levels throughout the season. The Eastern District chum salmon escapement index of 112,000 fish is more than double than the district's lower bound SEG of 50,000 fish (Appendix D5). The Eastern District pink salmon escapement index of 1.6 million fish is 4 times greater than the 410,000 fish midpoint of the district's odd-year SEG index range of 310,000 to 640,000 fish.

VFDA pink salmon cost-recovery harvests began on June 30 and were conducted throughout Port Valdez in 2015. Three 12-hour periods in waters outside of Port Valdez and Valdez Arm on June 22, 25, and 29 resulted in a harvest of 38,400 pink salmon (Appendix E15). An Eastern District CCPF targeting VFDA pink salmon started on July 6 with a harvest of 1.11 million fish followed by 21 consecutive days of daily harvests over 1.00 million fish per day (except for July 19 with a harvest of 925,000 fish). Total Eastern District VFDA pink salmon CCPF harvest was a record 28.09 million fish contributing to an Eastern District total harvest of 42.43 million pink salmon. The PWS total VFDA return (CPF, cost recovery, and brood stock) was 34.00 million fish.

Pink salmon egg-take operations at SGH were successful in 2015; VFDA reached its 2015 pink salmon egg-take goal at SGH on August 22, which is comparable to the recent 10-year average end date of August 21. According to the 2015 SGH Annual Report, VFDA harvested a total of 2.08 million pink salmon for cost-recovery, and an additional 561,000 fish via the SGH fishway, for a total cost-recovery harvest of 2.69 million pink salmon. VFDA reported that 722,000 pink salmon were utilized at SGH for broodstock, and an additional 50,000 fish went unharvested.

The 2015 SGH coho salmon run was less than 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 2015 coho salmon egg-take goal at SGH on October 14. According to the 2015 SGH Annual Report, VFDA harvested 14,500 coho salmon for cost recovery from the SGH fishway and utilized an additional 2,555 fish for broodstock.

There were 71 Eastern District CCPF fishing periods in 2015 and 219 purse seine permit holders reported deliveries (Table 1). Eastern District CCPF harvest was 42.43 million pink, 143,320 chum, 67,000 sockeye, 27,331 coho, and 171 Chinook salmon (Table 1). Eastern District CCPF pink salmon harvest included 66% VFDA fish, 31% wild fish, and 3% PWSAC fish (Appendix E15). Enhanced pink salmon returns to SGH have been greater than the preseason forecast 7 out

of the past 10 years. Eastern District sockeye salmon harvest of 67,000 fish was the one of the largest on record and composed of approximately 26,000 MBH fish and 41,000 wild stock fish.

NORTHERN DISTRICT

Northern District pink and chum salmon escapement indices were above anticipated levels for much of the season. The Northern District pink salmon escapement index of 779,000 fish was six times greater than the district's odd-year SEG midpoint of 130,000 fish (range of 90,000 to 180,000 fish). The Northern District chum salmon escapement index of 43,000 fish was 2 times greater than the district's lower bound SEG of 20,000 fish (Appendix D5).

The 2015 CCH pink salmon forecast was 7.90 million fish. PWSAC anticipated utilizing 357,000 pink salmon for broodstock and 798,000 for cost recovery, leaving 6.75 million pink salmon for CCPF harvest.

The Northern District CCPF began with one 12-hour period on June 22 to provide opportunity on early season pink and chum salmon and to gauge run entry. Participation in this period was minimal, with harvests of 30,000 pink salmon (Appendix E18). Daily fishing periods from July 10–23 yielded a harvest of 3.6 million fish of which 44% were VFDA fish (Appendix E18).

Northern District pink salmon harvest increased in late July and peaked the first week of August with an average daily harvest of 700,000 fish. During that time an average of 36% of the harvest was WNH pink salmon harvested primarily in the western portion of the district. Harvest of fish from other hatcheries (WNH and VFDA) was relatively high in the Northern District.

According to the 2015 CCH Annual Report, PWSAC harvested 274,000 fish for broodstock. This broodstock total includes 19,000 pink salmon that were identified by PWSAC as holding mortality. The Northern District was open for 57 CCPF periods in 2015 with a total of 181 purse seine permits reporting harvest (Table 1). Northern District CCPF harvest was 13.55 million pink, 1,668 coho, 7,831 chum, 12,102 sockeye, and 9 Chinook salmon (Table 1). Northern District pink salmon harvest included 38% CCH fish, 23% WNH fish, 14% SGH fish, 24% wild fish, and 1% AFK fish (Appendix E18). The 2015 CCH pink salmon CCPF harvest of 13.55 million fish was greater than PWSAC's total preseason projection of 7.9 million fish.

COGHILL DISTRICT

Coghill District pink and chum salmon escapement indices were above anticipated levels for much of the season. The Coghill District pink salmon escapement index of 800,000 fish was 6 times greater than the district's odd-year SEG midpoint of 130,000 fish (range of 60,000 to 250,000 fish). The Coghill District chum salmon escapement index of 43,000 fish was 2 times greater than the district's lower bound SEG of 20,000 fish (Appendix D5).

PWSAC's 2015 preseason forecast for pink salmon returning to WNH was 6.20 million fish. PWSAC's 2015 pink salmon requirements for WNH included a broodstock goal of 283,000 fish and a cost-recovery goal of 626,000 fish. The preseason forecast for CPF harvest of WNH pink salmon was 5.29 million fish.

The Coghill District pink salmon CCPF consisted of 14-hour periods spaced 1 or 2 days apart from July 23 to August 9 after which daily periods were open through the end of the season. (Appendix E6). Peak harvest occurred during the first 2 periods on July 27 and August 1 with a combined harvest of 1.3 million fish composed of 75% WNH pink salmon. Harvest of pink salmon from other hatcheries (Appendix E18) was the lowest in this district compared to any

other area in PWS. Abundant wild stock pink salmon resulted in a harvest of 745,000 fish representing 12% of the district harvest.

According to the 2015 WNH Annual Report, PWSAC harvested 2.41 million pink salmon for cost recovery and 308,000 fish for broodstock. PWSAC estimates that 3,500 pink salmon went unharvested at WNH in 2015.

There were 42 Coghill District purse seine CCPF periods, with a total of 108 commercial purse seine permit holders reporting harvest in 2015 (Table 1; Appendix B5). Coghill District purse seine CCPF harvest was 5.60 million pink, 1,215 coho, 121,213 chum, and 2,120 sockeye salmon (Table 1). Coghill District pink salmon harvest included 84% WNH fish, 2% CCH fish, 12% wild fish, 1% AFK fish, and 1% SGH fish (Appendix E6). The 2015 WNH pink salmon run of 17.24 million fish was almost triple the PWSAC's preseason projection of 6.20 million fish. Pink salmon returns to WNH have been less than the preseason forecast 5 out of the past 10 years.

NORTHWESTERN DISTRICT

Northwestern District pink and chum salmon escapement indices were greater than anticipated levels during the 2015 season. The Northwestern District pink salmon escapement index of 454,000 fish was 5.5 times greater than 80,000 fish midpoint the district's odd-year SEG range of 50,000 to 110,000 fish. The Northwestern District chum salmon escapement index of 7,321 fish was greater than the district's lower bound SEG of 5,000 fish (Appendix D5). No harvest was reported in the Northwestern District in 2015 (Table 1).

SOUTHWESTERN DISTRICT

Similar to other districts, the Southwestern District pink salmon escapement index remained above anticipated levels during the 2015 season with an observed final index of 789,725 fish, almost four times greater than the 210,000 fish midpoint of the odd-year SEG range of 70,000 to 190,000 fish (Appendix D5). There is no chum salmon escapement goal for the Southwestern District.

PWSAC's 2015 preseason forecast for pink salmon returning to AFK was 7.50 million fish. PWSAC's 2015 pink salmon requirements for AFK included a broodstock goal of 309,000 fish and a cost-recovery goal of 758,000 fish. The preseason forecast for CPF harvest of AFK pink salmon was 6.43 million fish. PWSAC's 2015 preseason forecast for chum salmon returning to AFK was 280,000 fish, all of which were projected to be available for CPF harvest.

Fishing to target remote-release enhanced chum salmon at the AFK THA and SHA started May 27 with a weekly schedule of 60-hour and 84-hour purse seine fishing periods which continued until July 22. The AFK THA and SHA harvest during that time was 165,730 chum (including 7,262 wild stock chum salmon), and 103,384 sockeye salmon (including 5,109 wild stock sockeye salmon). Sockeye salmon harvest in this chum salmon targeted terminal area fishery was the highest on record. This level of harvest generated significant complaints from the drift gillnet gear group.

Pink salmon Southwestern District CCPF total harvest was 23.75 million fish (Appendix E20). This mixed stock harvest was composed of 35% AFK, 23% wild, 22% WNH, 15% CCH, and 4% VFDA fish. This distribution of stocks is the result of conducting the fishery in the

Southwestern District which is the primary migration corridor for pink salmon traveling to other areas of PWS.

According to the 2015 AFK Annual Report, PWSAC harvested 1.07 million AFK pink salmon for cost-recovery and 245,000 fish for broodstock. PWSAC estimates that 15,000 pink salmon went unharvested at AFK in 2015.

The 2015 Southwestern District CCPF harvest by 180 permits was 23.75 million pink, 176,739 chum, 113,937 sockeye, 9,641 coho, and 169 Chinook salmon (Table 1). The 2015 Southwestern District chum salmon harvest included 75% AFK fish, 16% WNH fish, 8% wild, and 6% Port Chalmers fish (Appendix E21). Southwestern District sockeye salmon harvest in 2015 included 89% MBH fish and 11% wild fish (Appendix E19). The total CCPF harvest estimate of 176,739 AFK enhanced chum salmon is less than the preseason forecast harvest of 280,000 fish. Hatchery chum salmon returns to AFK have been less than the preseason forecast 8 out of the past 10 years.

MONTAGUE DISTRICT

Strong wild stock escapements found in other PWS districts continued in the Montague District with a pink salmon escapement index of almost 700,000 fish; more than triple the 210,000 fish midpoint of the odd-year SEG range of 140,000 to 280,000 fish (Appendix D5). There is no chum salmon escapement goal for the Montague District.

Montague District was open for 60 CCPF periods in 2015, and 36 purse seine permits reported harvest (Table 1). The 2015 Montague District CCPF harvest was 1.53 million pink, 579 chum, 760 sockeye, 1,208 coho, and 62 Chinook salmon (Table 1). Montague District's 2015 pink salmon CCPF harvest included 38% wild, 29% AFK, 16% WNH, 10% VFDA and 8% CCH fish (Appendix E17).

SOUTHEASTERN DISTRICT

Wild stocks were also abundant in the Southeastern District with a pink salmon escapement index of 2.03 million fish, 5.5 times greater than the 360,000 fish midpoint of the odd-year SEG range of 270,000 to 620,000 fish. The Southeastern District chum salmon escapement index of 52,000 fish was 6.5 times greater than the district's lower bound SEG of 8,000 fish (Appendix D5).

The Southeastern District commercial fishing season began with 12-hour periods on June 22 and June 25. The purpose of these openers was to provide opportunity on early season pink and chum salmon and to gauge run entry. Early season opportunity was provided in the Southeastern District concurrent with Eastern District fisheries targeting the record 2015 SGH pink salmon return.

Southeastern District was open to the commercial purse seine CCPF for 44 periods, with 106 commercial purse seine permits reporting a total salmon harvest 2.30 million fish in 2015 (Table 1). The purse seine CCPF harvest was composed of 2.24 million pink, 13,532 chum, 42,284 sockeye, 3,915 coho, and 79 Chinook salmon (Table 1). The Southeastern District sockeye salmon harvest of 43,284 fish was the largest on record and composed of approximately 30,000 MBH fish and 12,000 wild stock fish.

PRINCE WILLIAM SOUND AND COPPER RIVER SUBSISTENCE 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 *Clupea pallasii*, 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 et al. (2013).

LOWER COPPER RIVER AND PRINCE WILLIAM SOUND

Subsistence fishing is allowed 7 days per week in the Copper River District from May 15 until 2 days before the opening of the commercial fishery. Boundary lines for Copper River District subsistence fishing are the same as the commercial drift gillnet fishery. Once the commercial season has commenced, subsistence fishing is generally allowed only during commercial fishing periods. Regulation stipulates that 2 days following the closure of the Copper River District 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.

In 2015, 288 subsistence permits were issued for the Copper River District, of which 19 (6.6%) were not returned. Of the 241 permits that were issued, 134 permit holders reported not fishing. A harvest of 167 Chinook, 1,400 sockeye, and 10 coho salmon was reported from the 97 permits that reported fishing (Appendix F1). In addition, 25 subsistence permits were issued for the PWS general subsistence district, of which 23 were returned. Thirteen permit holders reported not fishing, and the other 10 permit holders reported a harvest of 4 Chinook, 115 sockeye, and 3 chum salmon (Appendix F2). Overall, 286 Alaskan residences in 17 communities received permits for the PWS saltwater subsistence fisheries (see below for details of the Tatitlek and Chenega subsistence fisheries) with a total harvest of 2,080 fish (Appendix F8).

During the 2015 commercial fishing season in the Copper River District, 10,600 sockeye, 1,145 Chinook, and 1,420 coho salmon were reported as retained for their own personal use by 359 commercial permit holders (Appendices A1, A3, A16, and F7). In PWS districts, 76 commercial permit holders reported retaining 2,380 sockeye, 48 Chinook, 3 pink, 90 coho, and 73 chum salmon as homepack from their commercial harvests. Overall in Area E, 415 commercial permit holders from more than 24 Alaska communities and the other 49 states reported retaining 16,010 salmon for homepack from their commercial catches (Appendices F7 and F8).

In 2005, the federal government began issuing permits allowing 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 2015, a total of 102 federal permits were issued; 65 permits were returned, with 152 sockeye and 878 coho salmon reported as harvested (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)).

Permit holders are allowed to fish in these areas from May 15, 7 days per week, 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. Two days 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 2015, 21 permits were issued for the Chenega subsistence area, of which 4 were returned. Of those returned permits, 1 reported fishing and 3 reported not fishing, with a total harvest of 56 Chinook, 35 coho, and 12 chum salmon. In the Tatitlek area, 16 permits were issued of which 4 were returned. Of those returned permits, 4 reported fishing, with a total harvest of 12 Chinook, 110 sockeye, 143 coho, and 8 chum salmon (Appendix F3).

UPPER COPPER RIVER

Glennallen Subdistrict Subsistence Fishery

The Glennallen Subdistrict is that portion of the main stem Copper River upstream of the McCarthy Bridge to the mouth of the Slana River. 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 2015, a total of 1,128 dip net permits and 503 fish wheel permits were issued to subsistence users in the Glennallen Subdistrict. Of these, 267 (16.4%) permits were not returned. A combined total estimate of 2,210 Chinook, 81,800 sockeye, and 77 coho salmon were harvested in the Glennallen Subdistrict. Comparatively, the previous 10-year average was 3,250 Chinook and 62,800 sockeye, and 264 coho salmon for this subdistrict. Fish wheel effort has remained somewhat constant over the last 10 years, with an average number of 631 permits issued. The number of dip net permits issued has increased over the past few years. The 10-year average of 623 dip net permits is 55.2% of the number of permits issued in 2015 (Appendix F4). Historically, sockeye salmon dominate the harvest, representing approximately 94.7% of the estimated harvest in the Glennallen Subdistrict subsistence fishery, followed by Chinook and coho salmon (Appendices A1, A3, A18, and F4). Harvest from the Glennallen Subdistrict subsistence fisheries was approximately 14.6% GH sockeye salmon (Appendix E4).

In 2002, the federal government began issuing permits allowing 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 2015, a total of 325 federal permits were issued for the Glennallen Subdistrict. Of these, 286 permits were returned (Appendix F6). A total 24,100 sockeye, 369 Chinook, and 78 coho salmon were reported harvested (Appendices A1, A3, A18, and 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 were 4 permits issued in 2015 with no salmon reported harvested (Appendices A1 and F5).

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. 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 Board of Fisheries (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, are made by EO.

In 2015, there were 10 EOs issued to make adjustments to the dip net fishery. The first period started on Sunday, June 7, and the last period closed on Sunday, August 2. The fishery was then open continuously from August 3 to September 30. 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 fishery remaining open the entire season. There were 12,635 permits issued for the Chitina personal use fishery in 2015. Of these, 2,126 (16.8%) were not returned. The number of permits issued was above the 10-year average of 9,275 permits issued (Appendix F4). Expanded harvest for the Chitina Subdistrict personal use fishery in 2015 was 1,570 Chinook, 186,000 sockeye, and 841 coho salmon. The previous 10-year average reported harvests were 1,341 Chinook, 127,000 sockeye, and 1,780 coho salmon (Appendices A1, A3, A18, and F4). Harvest from the Chitina Subdistrict personal use fishery was approximately 14.6% GH sockeye salmon (Appendix E4).

In 2002, the federal government began issuing permits allowing 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 2015, a total of 111 federal permits were issued, of

which 100 were returned (Appendix F6). The reported harvest was 2,170 sockeye, 13 Chinook, and 14 coho salmon (Appendices A1, A3, A18, and F6).

2015 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. A total of 5 herring fisheries may occur annually. 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. In the fall a food/bait fishery may occur. 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 between July 1, 2014 and June 30, 2015 were closed. Age structured assessment modeling was used to forecast the 2015 spawning biomass of PWS Pacific herring at 19,700 short tons. The forecast was less than the regulatory minimum spawning biomass of 22,000 tons (Appendix G1). Recruit-age fish (age 3 and 4) were projected to represent 30% by weight or 54% by number. Because the spawning biomass forecast was less than the regulatory threshold biomass, all commercial herring fisheries were closed for the 2014–2015 herring management year.

Hydroacoustics, net sampling, and aerial surveys were conducted in 2015 to assess herring biomass, disease prevalence, age composition, and growth. Beginning on March 27, 2015, acoustic surveys of adult herring were conducted with the ADF&G vessel *R/V Solstice*. Broad scale surveys were conducted in eastern PWS including Sheep Bay, Port Gravina, and Port Fidalgo. Detailed acoustics data were collected on fish aggregations in Port Gravina between Red Head and Hell's Hole Entrance on 1 night. The 2015 ADF&G acoustics estimate of the peak acoustics biomass has not been completed yet.

Age composition samples collected during spring 2015 varied by location and sampling gear. Predominate ages by area were ages 5 and 6 (southeast PWS; 58%), ages 6–8 (northeast PWS; 61%), ages 3, 5, and 6 (Montague Island; 68%), and ages 10 and 11 (Kayak Island; 53%). Fish samples from southeast PWS and Kayak Island (collected by Prince William Sound Science Center; PWSSC) were small samples that may not be representative of the overall age composition (Appendix G4). Two of the three samples collected at Montague Island were collected with gillnets by PWSSC staff. Gillnet and cast net samples from Rocky Bay on the same day had significantly different age compositions. The cast sample was predominately age 3 (60%) and the gillnet sample was predominately ages 5 and 6 (65%).

Herring disease assessment has been included as part of the annual age, sex, and size assessment completed each spring since 1993. Only 1 sample was collected in April 2015, and no fish were positive for viral hemorrhagic septicemia virus (VHSV) or viral erythrocytic necrosis virus (VENV) in 60 fish examined. In adult herring, the prevalence of *Ichthyophonus hoferi* was 25% in Port Gravina (15 of 60 fish).

ADF&G conducted 19 aerial surveys between March 24 and May 4, 2015. ADF&G surveys documented spawn near Wingham and Kayak islands (April 24), in eastern PWS between St. Matthews Bay and Knowles Head (April 11, 17, 21–24, and 28); just west of Gravina Point in Sheep Bay (April 24); in Landlocked Bay (April 11 and 13); and in Boulder Bay (April 23). Preliminary spawn estimates within PWS are 11.4 mile-days (south of Knowles Head) and 5.3 mile-days (north of Knowles Head), and 5.0 mile-days on Montague Island for a total of 21.7 mile-days of spawn within PWS (Appendix G1). This is fewer mile-days of spawn than any year in which commercial fishing occurred since 1973. No fish or spawn were documented in Fairmont Bay, Naked Island, or Knight Island. An additional 8.2 mile-days of spawn were documented on Kayak Island on April 24, but are not included in our assessment for PWS. PWSSC flew additional aerial surveys, and those data have been examined and added to ADF&G's data.

Prince William Sound herring schools observed in early spring 2015 (prior to 10 April) were less aggregated, deeper, and smaller than observed in recent years. Even at night, schools were too deep to capture with the 17 fathom deep anchovy seine (tops of schools at 15 to 20 fathoms). On 11 April, larger schools were located near Red Head in Port Gravina, but the schools were in only 5–7 fathoms of water and too shallow to capture with the anchovy seine. The change in distribution, depth, and size of observed herring schools in 2015 compared to recent years may be related to an increase in water temperature and a decrease in abundance. For example, in early 2015 (January through March), water temperatures averaged 1.5° C warmer than the recent 10-year average (http://www.ndbc.noaa.gov/station_page.php?station=46060) at the NOAA west Orca Bay buoy 4660, and the mile-days of spawn were the fewest since 2007.

2015–2016 HERRING SEASON OUTLOOK

Given the PWS herring spawning population, current fish size, and age structure, a commercial harvest is not anticipated in 2016. Consecutive years of low recruitment will further delay the recovery of the herring population to a size capable of supporting a sustainable commercial harvest. If funding is available, ADF&G will continue to monitor the PWS herring biomass to assess growth and recruitment. An ongoing disease study will continue to examine the incidence of VHSV and *I. hoferi* in the PWS herring population.

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TABLES AND FIGURES

Table 1.–Prince William Sound Area commercial salmon harvest by gear type and district, 2015.

District	Permits	Chinook	Sockeye	Coho	Pink	Chum	Total
Eastern	219	171	67,000	27,331	42,432,142	143,320	42,669,964
Northern	181	9	12,102	1,668	13,558,665	7,831	13,580,275
Coghill	108	0	2,120	1,215	5,601,620	121,213	5,726,168
Northwestern	0	0	0	0	0	0	0
Southwestern	180	169	113,937	9,641	23,753,197	176,739	24,046,092
Montague	36	62	760	1,208	1,530,931	579	1,533,540
Southeastern	106	79	43,284	3,915	2,235,414	13,532	2,296,224
Unakwik	8	7	1,994	0	346	245	2,592
Purse seine total		497	241,197	44,978	89,112,315	463,459	89,854,855
Bering River	34	13	2,137	12,106	10	1	14,267
Copper River	515	22,506	1,750,762	136,981	84,692	15,650	2,010,591
Coghill	265	93	74,416	6,094	655,320	778,112	1,514,035
Eshamy	313	92	860,637	4,611	178,336	85,864	1,129,540
Montague	104	90	9,804	714	58,508	168,142	237,258
Unakwik	6	1	2,958	0	55	23	3,037
Drift gillnet total		22,795	2,700,714	160,506	976,921	1,047,792	4,908,728
Eshamy	30	61	265,447	839	29,070	21,696	317,113
Set gillnet total		61	265,447	839	29,070	21,696	317,113
Solomon Gulch	1	0	0	17,126	2,629,533	0	2,646,659
Cannery Creek	1	0	0	0	556,835	0	556,835
Wally Noerenberg	1	0	0	0	2,715,357	979,357	3,694,714
Main Bay	1	0	180,516	0	0	0	180,516
Armin F. Koernig	1	0	0	0	1,312,910	0	1,312,910
Hatchery total [a]		0	180,516	17,126	7,214,635	979,357	8,391,634
Test fishery	0	0	0	0	0	0	0
Home pack	415	1,193	12,973	1,523	169	147	16,312
Confiscated fish	0	0	0	0	0	0	0
Donated fish	0	0	0	0	0	0	0
Misc. total		1,193	12,973	1,523	169	147	16,312
Prince William Sound total		24,546	3,400,847	224,972	97,325,519	2,512,451	103,488,642

[a] Hatchery sales for hatchery operating costs.

Table 2.–Mean price and estimated exvessel value of the total commercial salmon harvest by gear type, Prince William Sound Area, 2015.

Purse seine [a]						
	Species	Fish ticket Number	Fish Ticket Pounds	Average weight	Price	Value
	Chinook	497	6,150	12.37	$1.14	$6,990
	Sockeye	241,197	1,276,775	5.29	$1.38	$1,766,230
	Coho	44,978	287,375	6.39	$0.29	$83,363
	Pink	89,112,315	301,531,658	3.38	$0.20	$60,306,332
	Chum	463,459	2,912,060	6.28	$0.49	$1,436,448
		89,862,446	306,014,018			$63,599,363
Drift gillnet [a]						
	Species	Number	Pounds	Average weight	Price	Value
	Chinook	22,795	392,427	17.22	$5.73	$2,250,068
	Sockeye	2,700,714	13,925,879	5.16	$2.15	$29,962,566
	Coho	160,506	1,176,345	7.33	$0.73	$862,745
	Pink	976,921	3,572,099	3.66	$0.16	$569,851
	Chum	1,047,792	6,677,339	6.37	$0.51	$3,426,951
		4,908,728	25,744,089			$37,072,182
Set gillnet [a]						
	Species	Number	Pounds	Average weight	Price	Value
	Chinook	61	918	15.05	$1.35	$1,239
	Sockeye	265,447	1,349,271	5.08	$1.40	$1,888,979
	Coho	839	5,641	6.72	$0.18	$1,015
	Pink	29,070	114,052	3.92	$0.13	$14,827
	Chum	21,696	138,054	6.36	$0.50	$69,027
		317,113	1,607,936			$1,975,088
Hatchery sales [a]						
	Species	Number	Pounds	Average weight	Price	Value
	Chinook	0	0	0.00	$0.00	$0
	Sockeye	180,516	774,135	3.93	$1.50	$1,160,000
	Coho	17,126	95,010	5.55	$0.32	$30,000
	Pink	7,214,635	21,656,411	3.00	$0.46	$9,873,200
	Chum	979,357	5,757,410	5.88	$0.60	$3,457,442
		8,391,634	28,282,966			$14,520,642

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Table 2.–Page 2 of 2.

Combined

Species	Number	Pounds	Average weight	Price	Value
Chinook	23,353	399,495	17.11	$5.65	$2,258,297
Sockeye	3,387,874	17,326,060	5.09	$2.01	$34,777,776
Coho	223,449	1,564,371	7.00	$0.62	$977,124
Pink	97,332,941	326,874,220	3.36	$0.22	$70,764,209
Chum	2,512,304	15,484,863	6.16	$0.54	$8,389,869
	103,479,921	361,649,009			$117,167,274

Gear type	Value of catch	No. of permits	Average earnings
Purse seine	$63,599,363	222	$286,484
Drift gillnet	$37,072,182	525	$70,614
Set gillnet	$1,975,088	29	$68,106
Subtotal Value of CPF catch	$102,646,632		
Hatchery	$14,520,642		
GRAND TOTAL	$117,167,274		

[a] Number and pounds from fish ticket data. Value from statewide season summary.

Table 3.–Average price paid to permit holders for salmon, Prince William Sound Area, 1989–2015.

	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
1989	$2.25	$0.00	$2.30	$0.00	$2.68	$0.60	$0.00	$1.58	NA	$0.00	$0.48	NA	$0.00	$0.43
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
10-year average	$5.43	$2.03	$2.21	$1.43	$1.31	$1.14	$0.90	$0.70	$0.25	$0.26	$0.29	$0.26	$0.57	$0.55
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

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 with previous 10-year average, Prince William Sound Area, 2005–2015.

Purse seine Species	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Previous 10-year avg.	2015
Chinook	1,787	4,940	9,330	2,487	985	634	6,120	3,279	15,444	11,317	5,632	6,990
Sockeye	207,022	219,984	338,262	540,113	584,595	705,231	560,497	1,449,007	796,220	646,931	604,786	1,766,313
Coho	103,312	1,426,736	546,805	2,056,932	22,522	48,476	633,076	117,259	1,608,923	192,659	675,670	83,371
Pink	13,104,242	6,688,126	28,839,799	39,059,344	7,890,237	78,063,374	35,834,331	37,732,043	100,334,069	36,393,753	38,393,932	60,318,284
Chum	773,620	3,007,947	3,499,189	8,002,952	1,123,335	1,019,498	691,520	2,450,017	2,157,525	1,901,811	2,462,741	1,436,478
	$14,189,982	$11,347,734	$33,233,386	$49,661,828	$9,621,674	$79,837,212	$37,725,543	$41,751,606	$104,912,182	$39,146,471	$42,142,762	$63,611,435
Drift gillnet Species												
Chinook	3,575,253	3,145,401	3,886,795	1,511,402	956,053	1,025,380	2,148,066	1,352,540	973,720	1,175,457	1,975,007	2,250,068
Sockeye	15,849,204	19,375,916	26,169,047	11,533,354	17,386,798	18,486,735	36,356,087	37,444,516	29,389,403	40,966,814	25,295,787	29,962,566
Coho	2,374,703	3,972,107	1,391,204	3,937,198	3,197,336	3,523,008	2,031,963	1,646,222	3,986,567	5,138,204	3,119,851	862,745
Pink	84,308	54,070	82,356	1,195,812	363,373	3,446,356	1,025,474	1,659,983	2,465,469	1,361,065	1,173,827	569,851
Chum	1,965,383	845,703	2,542,327	10,853,908	9,227,837	11,973,968	8,669,206	13,170,829	11,654,134	3,728,785	7,463,208	3,426,951
	$23,848,851	$27,393,197	$34,071,729	$29,031,674	$31,131,396	$38,455,447	$50,230,797	$55,274,091	$48,469,293	$52,370,325	$39,027,680	$37,072,182
Set gillnet Species												
Chinook	0	143	1,267	533	1,302	756	1,832	230	3,015	769	985	1,239
Sockeye	608,528	822,232	1,318,799	1,238,739	1,451,897	3,103,081	2,993,318	2,454,505	2,278,575	2,887,961	1,915,763	1,888,979
Coho	4,737	1,869	873	1,414	241	250	2,297	509	2,556	451	1,520	1,015
Pink	23,542	8,325	5,416	20,966	3,419	20,573	21,931	28,480	17,062	35,588	18,530	14,827
Chum	6,880	29,925	53,380	231,785	197,332	450,989	163,884	121,995	188,004	106,662	155,084	69,027
	$643,687	$862,493	$1,379,735	$1,493,437	$1,654,191	$3,575,649	$3,183,261	$2,605,720	$2,489,211	$3,031,431	$2,091,881	$1,975,088
Hatchery sales Species												
Chinook	0	0	0	0	0	0	0	59	0	0	6	0
Sockeye	2,383,400	2,173,808	1,790,819	0	1,088,363	0	0	7,749	110	0	744,425	1,160,000
Coho	0	102,792	161,995	67,879	145,267	44,808	280,215	217	214,752	19,035	103,696	30,000
Pink	7,288,894	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	8,658,974	9,873,200
Chum	1,704,693	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	2,463,388	3,457,442
	$11,376,987	$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	$11,970,489	$14,520,642

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Table 4.–Page 2 of 2.

Other gear Species	2005	2006	2007	2008	2009	2010	2011 [a]	2012[a]	2013[a]	2014	Previous 10-year avg.	2015
Chinook	81	0	0	0	0	0	0	0	0	0	8	0
Sockeye	289	0	0	0	0	0	16	159	0	0	46	0
Coho	0	0	0	0	0	0	0	0	0	0	0	0
Pink	0	0	0	0	0	0	11,123	27	0	0	1,115	0
Chum	0	0	0	0	0	0	1,169	1,090	243	0	250	0
	$370	$0	$0	$0	$0	$0	$12,308	$1,275	$243	$0	$1,420	$0
Average earnings												
Purse seine	$137,767	$299,400	$447,404	$352,212	$518,423	$216,813	$206,151	$186,391	$497,214	$176,335	$303,811	$289,143
Drift gillnet	$46,807	$68,971	$57,375	$57,262	$75,255	$96,784	$97,916	$105,889	$92,853	$99,753	$79,886	$71,293
Set gillnet	$23,840	$53,067	$57,440	$59,737	$132,431	$109,768	$109,768	$89,852	$88,900	$104,532	$82,934	$63,713
Number of permits fished												
Purse seine	103	111	111	141	154	174	183	224	211	222	163	220
Drift gillnet	508	494	506	507	511	519	513	522	522	525	513	520
Set gillnet	27	26	26	25	27	29	29	29	28	29	28	31

[a] Confiscated fish.

Table 5.–Spawning escapement goals for Prince William Sound Area salmon stocks, 2015.

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 Broodline						
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 Broodline						
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: Dual-frequency identification sonars (DIDSON)

[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 2015 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	8.5	0 - 31	1,657	966 - 2,348	201	54 - 348				
Bering River [e]	CPF harvest			14	8 - 20	46	0 - 101				
Coghill [f]	CPF harvest			80	40 - 180						
Eshamy [f]	CPF harvest										
Unakwik [g]	CPF harvest			3	1 - 5						
General districts	CPF harvest							2,680	540 - 4,820	226	111 - 341
Total wild stock		8.5	0 - 31	1,754	1,062 - 2,452	247	93 - 404	2,680	540 - 4,820	226	111 - 341
SGH	CPF harvest					105		12,620			
AFK	CPF harvest							6,433		280	
WNH [h]	CPF harvest					11,154		5,291		777	
CCH	CPF harvest							6,745			
MBH [i]	CPF harvest			1,553							
GH	CPF harvest			202	118 - 286						
Total hatchery				1,755		11,259		31,089		1,057	
Total hatchery and wild		8.5		3,509		11,506		33,769		1,283	

Note: All values are in thousands. NA (not available). Harvest estimates are made only for areas and species that constitute a significant portion of the catch.

Note: 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.

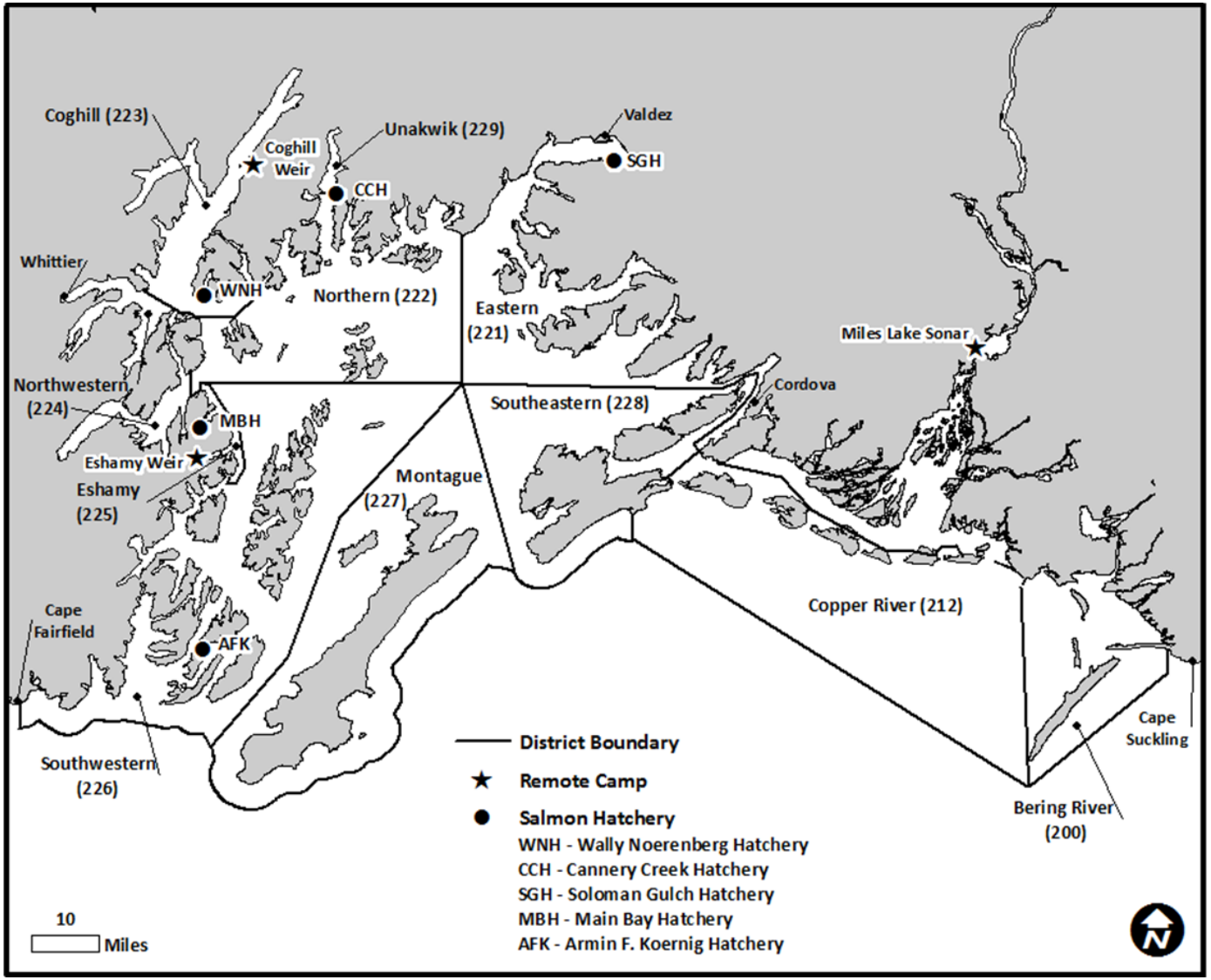

Figure 1.–Prince William Sound Area showing commercial fishing districts, salmon hatcheries, weir locations, and Miles Lake sonar camp.

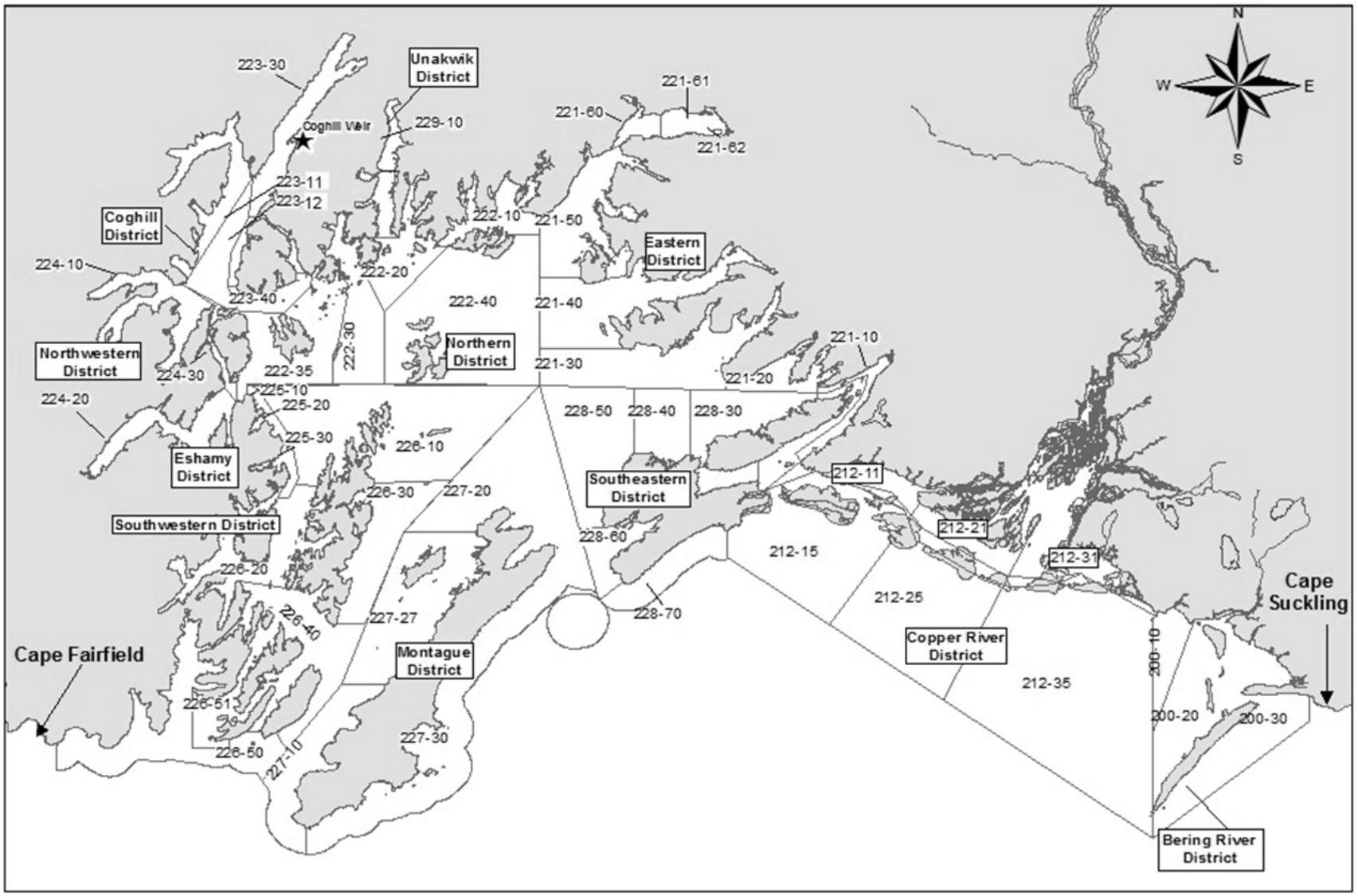

Figure 2.–Prince William Sound Area showing commercial fishing districts and statistical reporting areas.

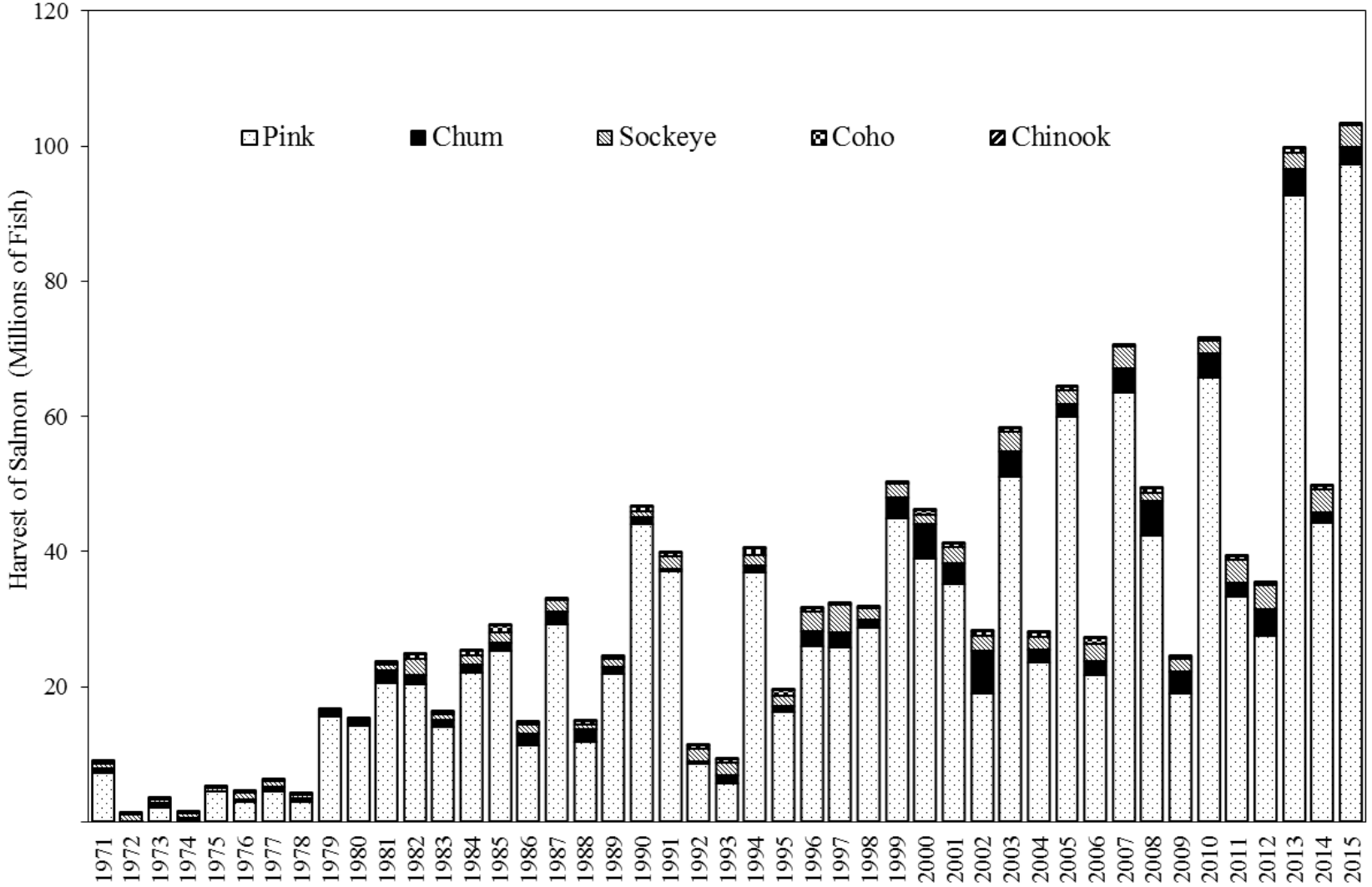

Figure 3.–Commercial salmon harvests in Prince William Sound Area, 1971–2015.

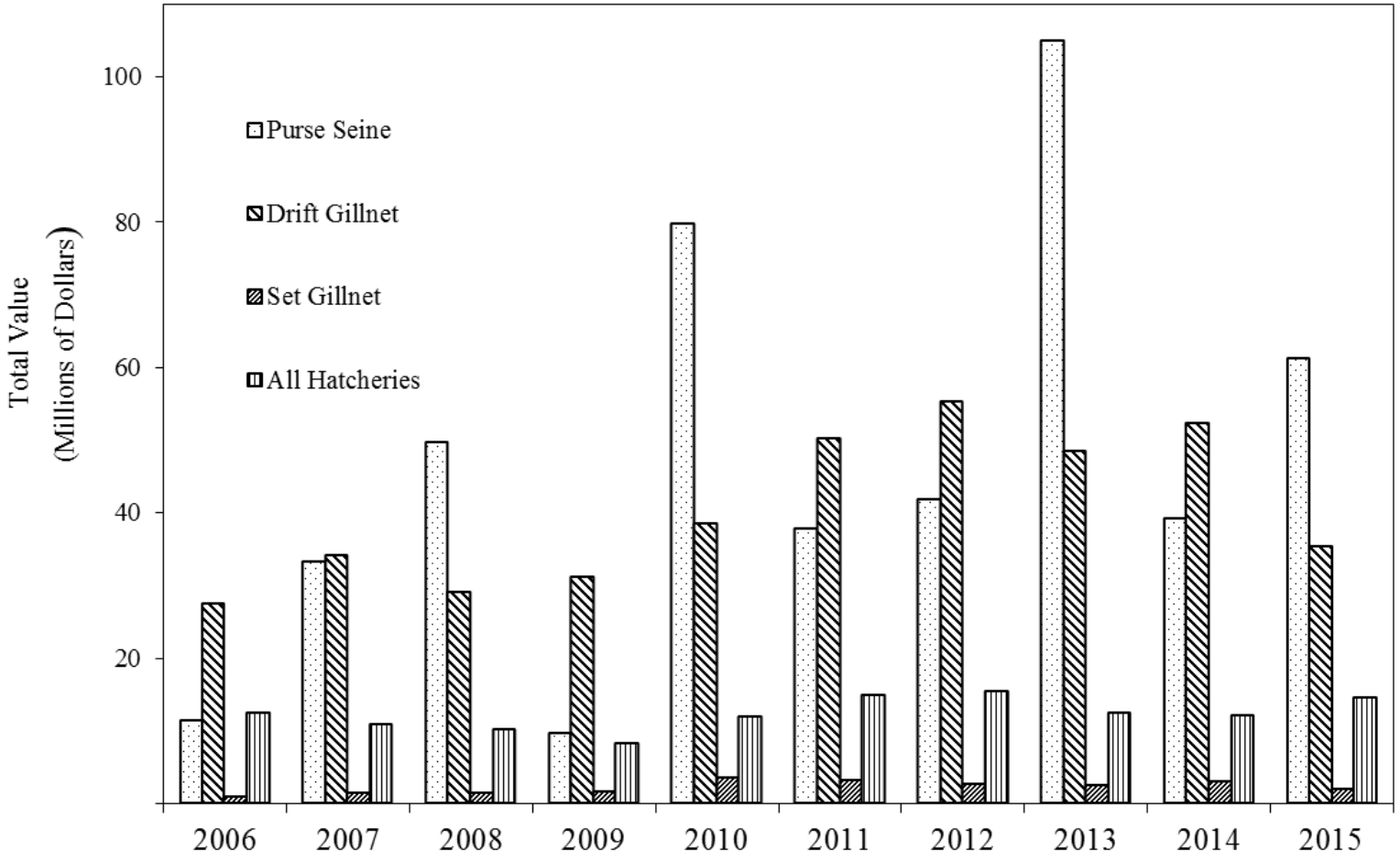

Figure 4.–Exvessel value of the commercial salmon harvest in the Prince William Sound Area by gear type, 2006–2015.

APPENDIX A: COPPER RIVER

Appendix A1.–Total estimated sockeye salmon runs to the Copper River by end user or destination with 10-year average, 2005–2015.

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	10-year Average	2015
Commercial harvest[a]	1,331,664	1,496,754	1,901,773	320,815	896,621	636,214	2,052,432	1,866,541	1,608,117	2,050,007	1,416,094	1,750,762
Commercial, homepack[a]	1,785	1,539	2,023	2,172	6,528	7,064	9,070	7,985	9,448	12,072	5,969	10,590
Commercial, donated[a]	83	114	180	80	47	0	0	0	0	0	50	0
Educational drift gillnet permit[a]	42	16	62	29	8	61	23	200	152	186	78	91
Subsistence (Cordova, drift gillnet)[b]	830	4,355	6,148	3,969	1,764	1,980	1,783	4,270	5,639	1,675	3,241	1,403
Federal Subsistence (PWS/Chugach Nat'l Forest, dip net, spear, rod and reel)[b]	109	150	36	32	46	36	35	64	102	76	69	152
Subsistence (Batzulnetas, dip net, fish wheel or spear)[b]	0	0	1	1	0	106	9	101	862	116	120	0
Subsistence (Glennallen Subdistrict, dip net, fish wheel or spear)[c]	64,213	57,710	65,714	43,157	46,849	70,719	59,622	76,305	73,728	75,501	63,352	81,800
Federal Subsistence (Glennallen subdistrict, dip net, fish wheel or spear)[d]	19,973	16,711	15,225	11,347	14,033	14,134	15,753	16,487	17,060	23,034	16,376	26,897
Personal Use Reported (Chitina Subdistrict, dip net)[c]	120,013	123,261	125,126	81,359	90,035	138,487	128,052	127,143	180,663	157,215	127,135	223,080
Federal Subsistence (Chitina subdistrict, dip net)[d]	1,265	1,379	929	789	882	2,324	1,933	915	2,252	1,664	1,433	2,310
Upriver sport harvest[e]	8,135	14,297	23,028	11,431	13,415	14,743	7,727	23,393	26,611	18,005	16,079	22,670
Delta sport harvest[e]	656	113	1,704	1,225	959	1,342	838	764	386	87	807	412
Upriver spawning escapement[f]	528,816	600,378	624,438	491,516	477,327	524,692	621,545	970,622	889,939	885,024	661,430	953,509
Delta spawning escapement[g]	116,812	197,792	176,570	135,900	138,584	167,810	153,014	133,700	151,410	128,410	150,000	132,390
Hatchery broodstock/Excess[h]	92,455	97,192	28,648	44,865	43,409	157,980	59,589	65,348	72,369	53,737	71,559	40,123
Total estimated sockeye salmon run size	2,286,851	2,611,761	2,971,605	1,148,687	1,730,507	1,737,692	3,111,425	3,293,838	3,038,738	3,406,809	2,533,791	3,246,189

[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 sportfish harvest surveys.

[f] Beginning in 1999 sockeye salmon spawning escapement is 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 on file with PWSAC.

Appendix A2.–Total estimated sockeye salmon runs to the Copper River by origin with previous 10-year average, 2005–2015.

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	10-year Average	2015
Upriver wild contribution[a]	1,753,627	1,773,532	2,264,577	852,496	1,260,759	992,075	2,004,105	2,503,339	2,224,951	2,633,102	1,826,256	2,682,257
Delta wild contribution[b]	306,563	531,312	564,546	202,811	324,744	289,313	512,515	333,445	351,004	350,493	376,675	310,595
Gulkana contributions[c]	216,583	287,906	132,625	85,916	136,402	434,608	580,917	439,688	433,778	403,178	315,160	216,742
Total estimated sockeye salmon run size	2,276,773	2,592,750	2,961,748	1,141,223	1,721,904	1,715,995	3,097,537	3,276,472	3,009,733	3,386,773	2,518,091	3,209,594

[a] Beginning in 1999, the upriver wild sockeye contribution is 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 is 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 CWT 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 times 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 with previous 10-year average, 2005–2015.

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	10-year Average	2015
Commercial harvest[a]	34,624	30,278	39,095	11,437	9,457	9,645	18,500	11,764	8,826	10,207	18,383	22,506
Commercial, homepack[a]	760	779	1,019	537	876	906	1,282	853	564	768	834	1,145
Commercial, donated[a]	11	3	0	4	0	0	0	0	0	0	2	0
Educational drift gillnet permit[a]	92	11	70	47	50	31	6	6	55	36	40	50
Subsistence (Cordova, drift gillnet)[b]	260	779	1,145	470	212	276	212	237	854	153	460	167
Subsistence (Batzulnetas, dip net, fish wheel or spear)[b]	0	0	0	0	0	0	0	0	5	0	1	0
Subsistence (Glennallen Subdistrict, dip net, fish wheel or spear)[c]	2,229	2,769	3,276	2,381	2,493	2,099	2,319	2,095	2,148	1,365	2,317	2,212
Federal Subsistence (Glennallen subdistrict, dip net, fish wheel or spear)[d]	345	430	569	705	549	326	744	415	374	420	488	402
Personal Use harvests (Chitina Subdistrict, dip net)[c]	2,043	2,663	2,694	1,999	214	700	1,067	567	744	719	1,341	1,570
Federal Subsistence (Chitina subdistrict, dip net)[d]	22	13	26	22	9	18	13	5	18	14	16	15
Sport harvest[e]	4,093	3,425	5,123	3,618	1,355	2,409	1,753	459	570	931	2,374	1,500
Upriver spawning escapement[f]	21,528	58,454	34,565	32,485	27,781	16,771	27,993	27,911	28,727	20,709	29,692	26,607
Total estimated Chinook salmon run size	66,007	99,604	87,582	53,705	42,996	33,181	53,889	44,312	42,885	35,322	55,948	56,174

[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 sportfish harvest survey.

[f] Upriver Chinook salmon spawning escapement is 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, 1971–2015.

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
10-Year Average	18,383	1,416,094	213,848	32,485	9,381	1,690,192
25-Year Average	34,244	1,401,210	277,149	18,308	13,086	1,743,998
2015	22,506	1,750,762	136,981	84,692	15,650	2,010,591

Appendix A5.–Copper River District commercial drift gillnet salmon harvest by period, 2015.

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
01[c]	05/14-05/14	05/07	12	459	517	1,517	27,519	17,864	89,975	7	47	29	171	177	1,172
02[c]	05/18-05/19	05/16	24	485	758	2,959	42,390	49,398	248,801	2	10	0	0	1,721	10,887
03[c]	05/21-05/22	05/20	24	406	671	2,460	34,316	63,852	326,412	0	0	2	7	1,120	7,223
04[c]	05/25-05/26	05/23	36	471	1,133	3,002	48,289	159,782	828,835	0	0	0	0	1,723	11,235
05[c]	05/28-05/29	05/27	24	444	817	1,932	35,259	133,376	691,858	1	6	0	0	706	4,539
06[c]	05/30-05/31	05/27	24	428	726	1,599	29,158	113,411	579,770	1	6	0	0	233	1,523
07[c]	06/01-06/02	05/30	36	420	921	1,882	35,131	143,664	734,429	47	303	5	19	674	3,948
08[c]	06/04-06/06	06/03	48	332	707	1,523	30,952	130,966	659,065	149	835	13	52	3,494	21,367
09[c]	06/08-06/09	06/06&08	36	337	567	872	15,987	82,324	407,714	20	132	1	3	341	2,285
10[c]	06/11-06/13	06/10	60	342	958	2,219	40,576	142,585	713,220	391	2,480	24	72	2,682	17,675
11	06/15-06/17	06/13	48	295	736	980	17,965	94,843	454,990	54	394	284	1,457	183	1,195
12	06/18-06/20	06/17	48	287	784	691	14,185	113,613	598,044	835	6,184	417	1,539	997	6,693
13	06/22-06/23	06/20	36	300	580	390	6,992	72,196	369,766	2,089	15,009	862	2,940	569	3,998
14	06/25-06/26	06/24	36	227	408	190	3,489	61,815	320,929	1,454	10,411	73	269	436	3,034
15	06/29-06/30	06/27	24	200	312	135	3,002	42,420	220,233	114	782	115	381	100	711
16	07/02-07/03	07/01	36	188	349	85	1,825	46,241	240,074	185	1,257	491	1,782	71	498
17	07/06-07/07	07/04	36	141	228	22	418	28,933	150,214	88	695	349	1,368	22	157
18	07/09-07/10	07/08	36	133	256	13	243	40,232	208,878	140	994	8,450	29,510	17	110
19	07/13-07/14	07/11	36	149	236	16	353	32,509	168,781	83	511	3,331	12,465	71	402
20	07/16-07/17	07/15	36	72	93	1	17	16,984	88,177	3	19	546	1,930	16	106
21	07/20-07/21	07/18	36	133	205	3	34	33,723	175,084	85	540	5,230	19,700	16	99
22	07/23-07/24	07/22	36	79	107	0	0	20,542	106,648	147	1,091	7,206	26,912	13	68
23	07/27-07/28	07/25	36	93	145	1	10	30,546	158,590	363	2,548	27,238	97,575	9	62
24	07/30-07/31	07/29	36	99	131	3	43	23,418	121,582	499	3,504	7,420	26,806	46	303
25	08/03-08/04	08/01	36	96	126	0	0	17,302	89,830	611	4,143	7,134	26,017	56	370
26	08/06-08/07	08/05	36	77	105	1	11	16,981	88,161	1,027	6,936	10,151	35,528	56	361
27	08/10-08/11	08/08	36	56	64	1	10	9,661	50,156	1,270	9,236	3,849	13,809	73	435
28	08/13-08/14	08/12	36	53	65	0	0	5,702	29,603	1,372	10,859	1,363	4,738	18	123
29	08/17-08/18	08/15	24	66	70	1	18	2,043	10,609	2,002	15,640	48	166	0	0
30	08/24-08/25	08/22	24	177	221	2	16	2,509	13,026	14,042	101,925	36	123	7	36

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Appendix A5.–Page 2 of 2.

Period [a]	Date	News Release Dates[b]	Permits Hours	Permits Fished	Landings	Chinook Number	Chinook Pounds	Sockeye Number	Sockeye Pounds	Coho Number	Coho Pounds	Pink Number	Pink Pounds	Chum Number	Chum Pounds
31	08/31-09/01	08/29	24	179	246	4	32	544	2,826	27,014	202,260	25	91	3	20
32	09/03-09/04	09/02	24	153	192	1	19	352	1,830	20,715	153,585	0	0	0	0
33	09/07-09/08	09/03	24	156	208	1	12	357	1,851	20,565	156,878	0	0	0	0
34	09/10-09/11	09/04	36	57	92	0	0	40	209	12,757	96,810	0	0	0	0
35	09/14-09/16	09/05	48	84	96	0	0	32	168	19,255	135,114	0	0	0	0
36	09/17-09/19	09/06	60	21	21	0	0	0	0	3,708	25,986	0	0	0	0
37	09/21-09/23	09/07	60	20	21	0	0	0	0	2,467	17,424	0	0	0	0
38	09/24-09/26	09/08	60	5	6	0	0	0	0	1,175	8,701	0	0	0	0
39	09/28-09/30	09/09	60	6	6	0	0	0	0	1,096	7,673	0	0	0	0
40	10/01-10/03	09/10	60	2	2	Confidential		Confidential		Confidential		Confidential		Confidential	
41	10/05-10/07	09/11	60	2	2	Confidential		Confidential		Confidential		Confidential		Confidential	
42	10/08-10/10	09/12	60	1	1	Confidential		Confidential		Confidential		Confidential		Confidential	
Total			1,608	515	13,889	22,506	388,271	1,750,762	8,950,338	136,981	1,008,964	84,692	305,430	15,650	100,635
Average Weights							17.25		5.11		7.37		3.61		6.43

Source: 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

Note: Required parameters for searching 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, with the corresponding date listed under the column heading "News Release Dates".

[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 2015.

		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
05/07	39.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
05/08 [a]	39.27	0	N/A	0	0	N/A	N/A	N/A	N/A	N/A	N/A
05/09 [b]	39.52	0	N/A	0	0	N/A	N/A	N/A	N/A	N/A	N/A
05/10 [c]	39.62	0	N/A	0	0	N/A	N/A	N/A	N/A	N/A	N/A
05/11 [d]	39.87	0	N/A	0	0	N/A	N/A	N/A	N/A	N/A	N/A
05/12 [e]	39.84	0	6	6	6	N/A	N/A	N/A	N/A	N/A	N/A
05/13 [f]	39.79	139	6	145	151	N/A	N/A	N/A	N/A	N/A	N/A
05/14	39.77	165	120	285	436	36	144	N/A	N/A	N/A	N/A
05/15	39.85	383	452	835	1,271	73	292	0	0	0	0
05/16	39.98	588	1,391	1,979	3,250	366	1,464	422	422	639	639
05/17	40.07	2,376	3,787	6,163	9,413	852	3,408	665	1,086	1,006	1,645
05/18	40.14	4,698	5,898	10,596	20,009	2,172	8,688	2,024	3,110	3,064	4,708
05/19	40.22	4,794	10,404	15,198	35,207	2,712	10,848	3,600	6,710	5,449	10,158
05/20	40.37	5,430	13,458	18,888	54,095	3,492	13,968	5,290	12,000	8,009	18,166
05/21	40.55	3,768	10,260	14,028	68,123	3,876	15,504	5,893	17,893	8,921	27,087
05/22	40.72	4,068	11,010	15,078	83,201	3,378	13,512	9,172	27,065	13,884	40,971
05/23	40.92	9,090	13,596	22,686	105,887	5,448	21,792	10,511	37,576	15,912	56,884
05/24	41.28	3,888	11,838	15,726	121,613	4,416	17,664	11,652	49,228	17,640	74,523
05/25	41.54	5,418	15,198	20,616	142,229	3,648	14,592	13,308	62,536	20,146	94,670
05/26	41.65	27,786	13,854	41,640	183,869	7,998	31,992	16,511	79,047	24,995	119,665
05/27	41.68	18,168	35,274	53,442	237,311	14,184	56,736	15,800	94,848	23,919	143,584
05/28	41.68	6,755	19,008	25,763	263,074	7,896	31,584	16,807	111,655	25,443	169,027
05/29	41.75	3,540	13,776	17,316	280,390	3,732	14,928	16,800	128,455	25,433	194,460
05/30	41.97	5,274	21,852	27,126	307,516	6,102	24,408	18,465	146,920	27,953	222,413
05/31	42.27	4,062	16,596	20,658	328,174	4,662	18,648	16,191	163,111	24,510	246,922
06/01	42.56	4,242	21,774	26,016	354,190	6,690	26,760	18,410	181,520	27,869	274,792
06/02	42.69	3,276	20,334	23,610	377,800	5,130	20,520	16,671	198,191	25,237	300,028
06/03	42.68	2,868	26,544	29,412	407,212	6,324	25,296	16,693	214,884	25,271	325,299
06/04	42.67	1,212	17,520	18,732	425,944	5,478	21,912	15,507	230,391	23,475	348,774
06/05	42.64	1,020	16,356	17,376	443,320	2,808	11,232	16,795	247,186	25,424	374,198
06/06	42.26	3,378	38,442	41,820	485,140	9,654	38,616	14,526	261,712	21,991	396,189

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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
06/07	41.77	3,480	47,988	51,468	536,608	12,672	50,688	15,945	277,657	24,137	420,326
06/08	41.40	2,628	29,730	32,358	568,966	7,716	30,864	16,648	294,305	25,202	445,529
06/09	41.21	2,286	20,670	22,956	591,922	4,308	17,232	14,310	308,615	21,663	467,192
06/10	41.18	2,016	26,190	28,206	620,128	5,232	20,928	13,061	321,676	19,772	486,964
06/11	41.01	2,214	23,754	25,968	646,096	5,700	22,800	11,870	333,546	17,969	504,934
06/12	40.81	2,772	25,314	28,086	674,182	5,137	20,548	10,502	344,048	15,898	520,832
06/13	40.77	2,670	25,422	28,092	702,274	5,532	22,128	9,195	353,244	13,920	534,752
06/14	40.90	2,262	19,338	21,600	723,874	6,072	24,288	8,897	362,140	13,468	548,220
06/15	41.08	654	12,360	13,014	736,888	2,598	10,392	9,292	371,432	14,066	562,287
06/16	41.43	756	16,567	17,323	754,211	3,330	13,320	8,857	380,289	13,407	575,694
06/17	41.85	1,236	20,424	21,660	775,871	4,656	18,624	8,856	389,145	13,407	589,101
06/18	42.25	624	13,392	14,016	789,887	3,432	13,728	8,545	397,690	12,935	602,037
06/19	42.55	786	12,750	13,536	803,423	2,532	10,128	8,757	406,447	13,256	615,293
06/20	42.75	834	17,460	18,294	821,717	3,852	15,408	8,331	414,778	12,612	627,904
06/21	42.85	624	11,640	12,264	833,981	3,324	13,296	8,232	423,010	12,463	640,367
06/22	42.92	744	9,408	10,152	844,133	2,166	8,664	7,879	430,889	11,928	652,295
06/23	43.01	762	15,834	16,596	860,729	3,303	13,212	7,277	438,166	11,016	663,311
06/24	43.11	1,128	18,306	19,434	880,163	4,170	16,680	7,232	445,398	10,947	674,259
06/25	43.21	1,398	15,151	16,549	896,712	3,582	14,328	6,767	452,165	10,245	684,503
06/26	43.33	828	10,830	11,658	908,370	3,006	12,024	7,542	459,707	11,417	695,921
06/27	43.40	606	13,159	13,765	922,135	2,982	11,928	7,494	467,201	11,345	707,265
06/28	43.38	906	12,035	12,941	935,076	2,750	11,000	7,133	474,334	10,798	718,063
06/29	43.05	486	11,787	12,273	947,349	2,820	11,280	6,826	481,159	10,333	728,396
06/30	42.81	432	13,710	14,142	961,491	2,778	11,112	6,419	487,579	9,718	738,113
07/01	42.75	666	18,122	18,788	980,279	3,282	13,128	6,418	493,997	9,716	747,830
07/02	42.67	522	19,714	20,236	1,000,515	3,852	15,408	5,945	499,942	9,000	756,830
07/03	42.62	612	17,289	17,901	1,018,416	4,404	17,616	6,440	506,383	9,750	766,579
07/04	42.56	504	17,101	17,605	1,036,021	4,411	17,644	6,525	512,908	9,878	776,458
07/05	42.50	768	12,980	13,748	1,049,769	2,701	10,804	6,999	519,907	10,596	787,053
07/06	42.63	390	11,684	12,074	1,061,843	2,934	11,736	6,497	526,405	9,836	796,889
07/07	43.05	426	13,168	13,594	1,075,437	2,953	11,812	6,755	533,159	10,225	807,114
07/08	43.50	582	12,257	12,839	1,088,276	3,383	13,532	6,653	539,812	10,071	817,186
07/09	43.74	744	10,941	11,685	1,099,961	2,484	9,936	6,792	546,604	10,283	827,468

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		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
07/10	43.75	594	13,089	13,683	1,113,644	2,505	10,020	7,524	554,129	11,391	838,859
07/11	43.69	612	11,609	12,221	1,125,865	3,301	13,204	7,946	562,075	12,029	850,888
07/12	43.65	996	17,402	18,398	1,144,263	4,771	19,084	9,460	571,535	14,320	865,208
07/13	43.62	492	11,209	11,701	1,155,964	3,366	13,464	9,407	580,942	14,241	879,450
07/14	43.41	648	10,367	11,015	1,166,979	2,921	11,684	10,319	591,261	15,621	895,071
07/15	43.28	486	12,863	13,349	1,180,328	2,310	9,240	10,062	601,323	15,233	910,303
07/16	43.11	726	19,922	20,648	1,200,976	4,122	16,488	9,932	611,255	15,036	925,339
07/17	43.15	534	15,240	15,774	1,216,750	4,030	16,120	8,007	619,262	12,121	937,460
07/18	43.25	384	9,242	9,626	1,226,376	2,293	9,172	9,210	628,472	13,942	951,402
07/19	43.34	786	12,533	13,319	1,239,695	3,110	12,440	8,408	636,880	12,728	964,130
07/20	43.28	930	12,097	13,027	1,252,722	3,000	12,000	8,063	644,942	12,206	976,336
07/21	43.20	1,926	11,482	13,408	1,266,130	2,568	10,272	8,221	653,163	12,445	988,781
07/22	43.20	2,004	15,545	17,549	1,283,679	4,046	16,184	8,678	661,841	13,137	1,001,918
07/23	43.24	1,380	14,739	16,119	1,299,798	4,434	17,736	7,703	669,544	11,662	1,013,579
07/24	43.23	1,998	12,830	14,828	1,314,626	4,408	17,632	8,315	677,859	12,587	1,026,166
07/25	43.27	1,800	11,215	13,015	1,327,641	3,090	12,360	7,940	685,799	12,020	1,038,186
07/26	43.47	1,266	8,252	9,518	1,337,159	3,530	14,120	7,643	693,442	11,570	1,049,755
07/27	43.90	708	3,678	4,386	1,341,545	1,326	5,304	7,048	700,490	10,670	1,060,426
07/28	44.03	1,182	3,373	4,555	1,346,100	997	3,988	6,301	706,791	9,539	1,069,965
07/29	43.18	-	-	-	1,346,100	-	-	4,984	711,776	7,546	1,077,510

Note: Anticipated counts are not available prior to May 15 because the sonar has only been deployed prior to this date during 3 years (2003, 2004, 2005).

[a] North bank was deployed for 8 hours.

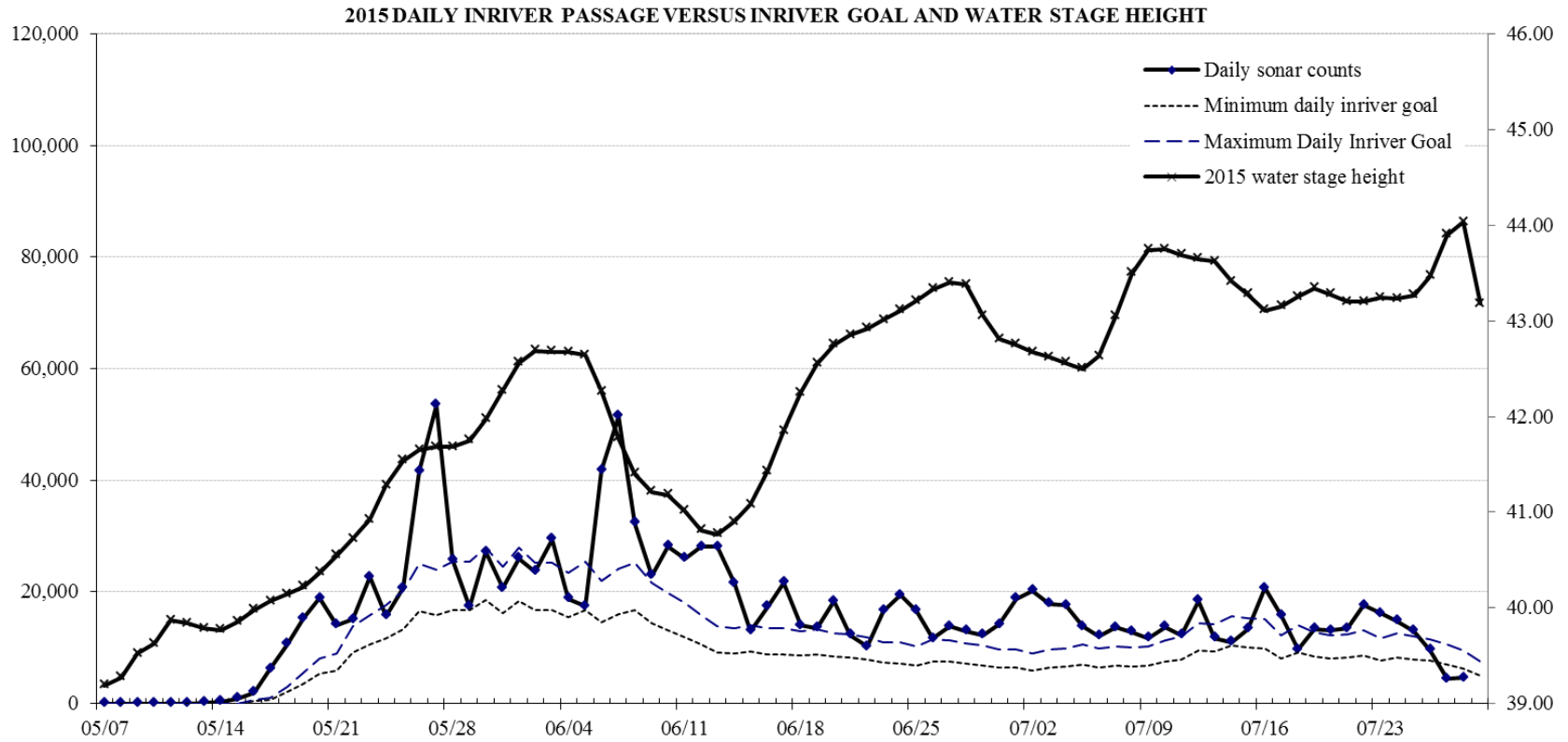
[b] North bank was deployed for 7 hours.

[c] North bank was deployed for 11 hours.

[d] North bank was deployed for 12 hours.

[e] North bank was deployed for 12 hours and south bank was deployed for 4 hours.

[f] North bank and south banks were deployed for 16 hours.



Appendix A7.–Minimum and maximum inriver sonar goal and water stage height versus actual daily salmon passage, Miles Lake sonar, 2015.

Appendix A8.–Inriver salmon passage at the Miles Lake sonar, 1978–2015.

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
Previous 10-year average	978,044	
2015	1,346,100	1

Appendix A9.–Anticipated and actual semi-weekly sockeye and Chinook salmon harvest and weekly coho salmon harvest in the Copper River District drift gillnet fishery, 2015.

Semi-Weekly Date		Fishing Time (Hours)	Anticipated Sockeye salmon Harvest [a]	Actual Sockeye salmon Harvest	Anticipated Chinook salmon Harvest[b]	Actual Chinook salmon Harvest	Anticipated Coho salmon Harvest [c]	Actual Coho salmon Harvest
05/13	Wed	0	0	0	0			
05/16	Sat	12	37,167	17,864	453	1,517	0	7
05/20	Wed	12	91,890	49,398	907	2,959		
05/23	Sat	36	132,194	63,852	674	2,460	3	2
05/27	Wed	24	177,233	159,782	662	3,002		
05/30	Sat	36	171,208	133,376	612	1,932	23	2
06/03	Wed	36	190,545	113,411	655	1,599		
06/06	Sat	48	148,921	143,664	438	1,882	37	196
06/10	Wed	48	115,103	130,966	366	1,523		
06/13	Sat	48	83,258	82,324	215	872	37	411
06/17	Wed	36	100,551	142,585	236	2,219		
06/20	Sat	36	75,053	94,843	119	980	97	889
06/24	Wed	36	106,676	113,613	95	691		
06/27	Sat	36	73,672	72,196	42	390	267	3,543
07/01	Wed	48	92,361	61,815	34	190		
07/04	Sat	48	78,654	42,420	22	135	355	299
07/08	Wed	36	107,303	46,241	20	85		
07/11	Sat	48	78,447	28,933	8	22	606	228
07/15	Wed	36	95,621	40,232	7	13		
07/18	Sat	36	59,339	32,509	4	16	1,374	86
07/22	Wed	36	64,750	16,984	3	1		
07/25	Sat	36	30,977	33,723	2	3	1,365	232
07/29	Wed	36	29,274	20,542	1	0		
08/01	Sat	36	17,255	30,546	1	1	2,920	862
08/05	Wed	36	14,908	23,418	1	3		
08/08	Sat	36	8,149	17,302	1	0	8,473	1,638

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Semi-Weekly Date		Fishing Time (Hours)	Anticipated Sockeye salmon Harvest [a]	Actual Sockeye salmon Harvest	Anticipated Chinook salmon Harvest[b]	Actual Chinook salmon Harvest	Anticipated Coho salmon Harvest [c]	Actual Coho salmon Harvest
08/12	Wed	36	8,637	16,981	1	1		
08/15	Sat	0	3,593	9,661	1	1	19,687	2,642
08/19	Wed	24	3,298	5,702	1	0		
08/22	Sat	0	1,144	0	0	0	35,226	2,002
08/26	Wed	24	1,362	2,043	0	1		
08/29	Sat	24	502	0	0	0	45,889	14,042
09/02	Wed	24	541	2,509	0	2		
09/05	Sat	24	186	544	0	4	44,349	47,729
09/09	Wed	24	150	352	0	1		
09/12	Sat	24	25	357	0	1	32,135	33,322
09/16	Wed	36	38	40	0	0		
09/19	Sat	36	10	32	0	0	15,351	22,963
09/23	Wed	60	3	0	0	0		
09/26	Sat	60	2	0	0	0	4,868	3,642
09/30	Wed	60	0	0	0	0		
10/03	Sat	60	0	0	0	0	747	1,794
10/07	Wed	60	0	0	0	0		
10/10	Sat	60	0	0	0	0	193	450
10/14	Wed	0	0	0	0	0		
Total		1,548	2,200,000	1,750,762	5,580	22,506	214,000	136,981

[a] Sockeye salmon anticipated harvest is based on the midpoint preseason forecast (2,200,000) and the 1998–2007 harvest timing.

[b] Chinook salmon anticipated harvest is based on the preseason harvest forecast (5,580) and the 1998–2007 harvest timing. This harvest forecast is the total run forecast minus the lower bound sustainable escapement goal (SEG) times 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 anticipated harvest is based on the midpoint preseason harvest forecast (214,000) 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, 2015.

System [a]	Weekly Escapement Indices (Statistical Week Ending Date Listed)[b]																
	06/13	06/20	06/27	07/04	07/11	07/25	08/01	08/15	08/29	09/05	09/26	10/24	Site[c]	System[d]	Anticipated, (by drainage)		
Eyak River																	
Eyak River	275	50	200	150	50	250	250	500	0	0	0	0	500	14,400	9,972	to	23,571
West Shore Beaches	400	100	100	1,900	1,000	4,000	3,100	3,400	200	250	0	0	3,100				
East Shore Beaches	200	25	100	1,200	3,100	1,200	5,500	2,300	2,500	1,700	50	0	5,500				
Middle Arm Beaches [e]	300	250	500	1,100	700	1,500	2,000	NS	1,000	2,000	1,000	0	2,000				
North Shore Beaches	1,600	2,000	8,000	6,450	6,000	300	3,300	700	1,100	100	0	0	3,300				
Hatchery Creek Delta	75	0	50	1,000	100	100	1,000	1,200	0	50	0	0	1,000	1,400			
Hatchery Creek	30	0	200	500	500	500	400	200	450	700	0	0	400				
Power Creek Delta	60	0	0	1,600	800	1,000	200	50	150	0	0	0	200	1,450			
Power Creek	0	0	50	500	2,500	4,000	1,250	400	100	100	0	0	1,250				
Ibeck Creek																	
Ibeck Creek	NS	NS	NS	NS	0	NS	30	800	600	200	0	0	800	800			
Alaganik Slough																	
Alaganik Slough	0	0	NS	0	0	0	0	0	0	0	0	0	0	7,300	8,359	to	19,758
McKinley Lake	0	0	200	4,500	650	4,250	1,100	1,800	1,000	400	100	5	1,800				
Salmon Creek West Fork	NS	NS	0	0	2,500	3,000	4,500	5,000	3,000	2,000	1,000	0	5,000				
Salmon Creek East Fork	NS	NS	0	0	0	0	400	500	0	200	0	0	500				
26/27 Mile Creek																	
26/27 Mile Creek	NS	0	0	0	630	920	750	680	370	NS	50	5	920	920	2,182	to	5,157
39 Mile Creek																	
39 Mile Creek	NS	0	0	75	590	2,400	2,100	NS	2,000	NS	NS	0	2,400	2,400	5,772	to	13,642
Goat Mountain																	
Goat Mountain Creek	NS	0	50	350	100	480	350	950	500	20	NS	0	950	950	549	to	1,298
Pleasant Creek																	
Pleasant Creek	3,750	4,100	8,150	8,300	4,500	595	675	135	0	0	0	0	8,300	8,300	1,075	to	2,542
Martin River																	
Martin River - Lower	20	50	90	75	50	85	0	450	0	0	0	0	0	0			
Ragged Point River	20	30	260	500	850	320	400	900	0	20	0	0	0	3,000			
Ragged Point Lake Outlet	0	0	0	0	0	0	200	25	50	200	0	0	0				
Ragged Point Lake	0	0	0	0	0	12	800	NS	800	2,000	3,000	0	3,000				
Martin River - Upper [e]	90	200	350	370	900	660	70	950	100	0	0	0	100	100			
Martin Lake Outlet	0	0	100	50	0	300	0	1,100	0	0	0	0	0	15,420	17,598	to	41,596
Martin Lake	6,620	7,000	9,200	6,900	6,700	1,150	330	1,700	150	0	300	20	6,700				

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System [a]	Weekly Escapement Indices (Statistical Week Ending Date Listed)[b]												Site[c]	System[d]	Anticipated, (by drainage)		
	06/13	06/20	06/27	07/04	07/11	07/25	08/01	08/15	08/29	09/05	09/26	10/24					
Martin Lake Feeders	0	200	1,700	6,200	7,200	6,000	2,500	7,000	600	50	0	0	7,200				
Pothole River	NS	NS	NS	1,120	220	1,200	100	60	0	100	0	0	1,120				
Pothole Lake	NS	NS	NS	400	100	100	275	NS	200	50	1,000	0	400				
Little Martin River	0	30	0	10	20	360	0	220	0	0	0	0	0	6,000			
Little Martin Lake	0	0	1,100	700	3,800	600	3,900	NS	6,000	2,400	300	0	6,000				
Tokun																	
Tokun Springs	0	0	0	50	350	170	350	450	0	0	0	0	0	2,650	5,352	to	12,649
Tokun River	100	150	300	120	450	400	275	500	400	400	0	0	400				
Tokun Lake Outlet	50	0	100	200	0	60	0	0	0	0	0	0	0				
Tokun Lake	0	40	600	500	700	25	500	300	2,250	2,100	1,650	0	2,250				
Martin River Slough																	
Martin River Slough	900	1,000	1,020	1,310	900	560	1,575	1,220	100	50	0	0	1,575	1,575	4,141	to	9,787
Total	14,490	15,225	32,420	46,130	45,960	36,497	38,180	64,090	23,620	15,090	8,450	30	66,665	66,665			
Lower SEG	7,270	14,273	17,627	28,229	30,055	32,059	32,568	26,465	19,762	17,446	6,776	0					55,000
Average SEG, (avg. antic. esc.)	11,157	21,902	27,050	43,318	46,121	49,196	49,977	40,611	30,326	26,772	10,398	0					84,400
Upper SEG	17,184	33,736	41,665	66,722	71,040	75,775	76,979	62,553	46,711	41,236	16,016	0					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, 2005–2015.

Stream/Lake [a,b]	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	10-yr Average	2015
Eyak Lake	9,130	26,290	28,640	9,290	11,980	25,000	22,775	23,350	19,205	20,400	19,606	14,400
Hatchery Creek	290	2,700	980	560	680	870	100	1,000	300	300	778	1,400
Power Creek	566	2,320	1,030	220	260	1,853	2,600	3,300	1,000	750	1,390	1,450
Ibek Creek	500	620	142	41	100	10	475	870	200	400	336	800
McKinley Lake	360	4,306	3,740	3,510	3,520	2,980	3,950	7,750	5,700	5,575	4,139	1,800
Salmon Creek	7,260	4,660	2,630	820	500	1,370	1,910	75	2,200	75	2,150	5,500
26/27 Mile Creek	3,000	3,200	700	8	0	0	870	350	950	750	983	920
39 Mile Creek	2,900	2,700	2,710	2,950	160	620	1,500	3,000	2,000	1,075	1,962	2,400
Goat Mountain	1,250	1,450	363	100	30	140	50	1,925	300	900	651	950
Pleasant Creek	50	6,600	4,860	4,920	2,610	3,460	7,600	2,300	5,900	4,700	4,300	8,300
Martin River	800	1,570	9,270	6,440	2,610	2,992	2,300	0	150	500	2,663	0
Ragged Pt. River/Lake	500	3,050	3,870	3,430	610	1,010	2,700	2,500	3,500	1,700	2,287	3,000
Martin Lake	23,300	23,300	4,200	8,970	19,071	19,660	10,200	3,850	22,000	16,085	15,064	100
Pothole Lake	1,200	5,600	2,430	5,800	2,540	4,440	0	6,900	900	250	3,006	15,420
Little Martin Lake	1,500	600	450	1,060	421	680	3,700	3,510	5,800	2,050	1,977	6,000
Tokun Lake/River	1,800	4,280	16,920	18,321	22,680	15,480	9,637	5,500	4,000	5,825	10,444	2,650
Martin River Slough	4,000	5,650	5,350	900	1,520	2,270	2,000	670	1,600	2,870	2,683	1,575
Copper River Delta Total	58,406	98,896	88,285	67,340	69,292	82,835	72,367	66,850	75,705	64,205	74,418	66,665
Upper Copper River [c]	528,816	600,378	624,438	491,516	477,327	524,692	621,545	970,622	889,939	885,024	661,430	953,509
Copper River District Total	587,222	699,274	712,723	558,856	546,619	607,527	693,912	1,037,472	965,644	949,229	735,848	1,020,174
Bering River/Lake	19,890	9,310	8,550	17,545	11,250	3,280	15,060	15,950	19,100	13,600	13,354	20,400
Shepherd Creek	1,220	60	0	180	91	46	4,800	1,400	750	750	930	625
Stillwater Creek	0	140	450	111	190	81	175	170	1,200	100	262	500
Kushtaka Lake	230	61	40	100	90	140	530	370	850	35	245	180
Katalla River	9,550	5,100	12,130	260	1,850	820	7,965	400	2,000	400	4,048	1,000
Bering River Area Total	30,890	14,671	21,170	18,196	13,471	4,367	28,530	18,290	23,900	14,485	18,797	21,705
Copper/Bering River Total	618,112	713,945	733,893	577,052	560,090	611,894	722,442	1,055,762	989,544	963,714	754,645	1,041,879

[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] The stream/lake represents the combined survey sites corresponding to the system designations presented elsewhere in this report.

[c] 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, 2000–2015.

	Yearly Survey Indices [a]																Anticipated
Location	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Indices [b]
Mentasta Lake	1,200	13,000	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	3,277
Fish Creek–Mentasta	800	3,500	900	–	–	3,330	3,700	323	1,440	680	400	91	300	900	350	800	963
Bad Crossing 1 & 2	19	2,000	157	90	30	5,120	620	1,683	520	1,691	1,390	742	261	4,100	470	4,650	2,604
Suslota Lake	3,000	2,500	1,500	2,750	1,975	1,230	1,300	30	86	320	6	350	55	500	2,500	5,500	1,416
Tanada Lake[c]	3,200	200	950	0	3,950	683	30	563	986	1,290	NS	800	1,715	2,600	1,000	1,100	3,849
Dickey Lake	0	1	0	0	10	55	185	71	37	20	3	59	26	30	251	300	115
Keg Creek	0	1	30	38	0	7	190	0	1	423	0	0	15	15	10	5	725
Swede Lake	135	500	150	325	225	7	2,570	731	343	109	320	137	400	60	175	160	531
Mahlo Creek	1,000	400	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	2,648
Mendeltna Creek	2,800	800	1,875	1,200	50	318	700	473	727	1,945	1,550	760	1,085	850	300	1,050	2,470
St. Anne Creek	1,100	300	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	4,888
Tonsina Lake	–	–	–	–	0	–	20	20	3	0	–	0	15	0	0	0	1,080
Long Lake[c]	–	–	–	–	–	–	1,400	505	382	14	10	290	375	5	10	20	1,577
Tana River	–	–	–	250	–	–	1,392	312	434	19	100	40	410	65	145	83	1,345
Salmon Creek (Bremner)	500	1,500	1,400	300	–	217	790	750	3,500	530	340	276	1,000	1,500	610	400	825
Fish Lake	5,000	5,000	125	1,300	0	281	7,250	1,066	158	0	89	1,008	35	20	4	6	6,418
Mud Creek.– Summit Lake	140	450	2,800	3,900	40	–	1,800	2,705	11,410	0	2,759	211	870	600	320	225	7,445
Paxson Inlet–Mud Creek	2,200	7,000	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	6,560
Mud Creek and Lake	30	300	30	75	5	145	310	2	10	0	20	2	10	11	100	30	172
Paxson Lake Outlet	1,000	200	140	–	5	155	270	324	596	0	560	1,700	350	2,000	350	125	2,661
Totals	22,124	37,652	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	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.

[c] Weir counts.

Appendix A13.–Estimated age and sex composition of sockeye salmon harvested in the Copper River District commercial common property drift gillnet fishery, 2015.

Strata Combined:	05/14 - 10/10	Brood Year and Age Class[a]								
Sampling dates:	05/15 - 06/30	2012	2011		2010			2009		
Sample size:	3,192	0.2	0.3	1.2	0.4	1.3	2.2	1.4	2.3	Total
Female	Percentage of sample	0.0	5.4	5.1	0.0	33.9	0.4	0.3	4.7	49.9
	Number in harvest	825	95,202	89,323	794	592,965	7,448	4,826	82,024	873,406
Male	Percentage of sample	0.0	7.5	7.6	0.0	30.3	0.4	0.3	3.8	50.1
	Number in harvest	469	131,802	132,937	794	531,224	7,831	5,264	67,034	877,356
Total	Percentage of sample	0.1	13.0	12.7	0.1	64.2	0.9	0.6	8.5	100.0
	Number in harvest	1,294	227,004	222,261	1,588	1,124,189	15,279	10,090	149,057	1,750,762
	Standard error	949	10,421	11,426	1,122	16,010	3,061	2,747	8,842	

[a] Fish with resorbed scales have been removed. Stratum 6 had 5.

Appendix A14.–Estimated age and sex composition of Chinook salmon harvested in the Copper River District commercial common property drift gillnet fishery, 2015.

Strata Combined:	05/14 - 10/10	Brood year and age class										
Sampling dates:	05/14 - 06/16	2012		2011			2010		2009		2008	
Sample size:	2,504	0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	1.5	2.4	Total
Female	Percentage of sample	0	0.2	0.1	19.0	0.0	34.1	0.4	13.5	0.4	0.6	0.0	68.4
	Number in harvest	13	49	26	4,265	8	7,673	100	3,031	90	139	4	15,398
Male	Percentage of sample	0	0.0	0.0	2.9	0.0	17.9	0.2	7.9	0.4	0.9	0.1	30.3
	Number in harvest	0	8	0	645	0	4,039	42	1,777	87	208	24	6,829
Total[a]	Percentage of sample	0	0.4	0.1	22.0	0.0	52.7	0.6	21.6	0.8	1.5	0.1	100.0
	Number in harvest	26	83	26	4,956	8	11,852	142	4,854	184	347	28	22,506
	Standard error	18	30	18	189	8	232	40	179	44	63	15	

[a] Sex could not be determined for some fish. The number of female + male sampled do not always equal the total.

Appendix A15.–Total estimated coho salmon run to the Copper River by end user or destination with previous 10-year average, 2005–2015.

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	10-year Average	2015
Commercial harvest[a]	263,465	318,285	117,182	202,621	207,776	210,621	127,511	130,261	244,985	315,776	213,848	136,981
Commercial, homepack[a]	119	137	340	423	767	1,026	543	1,037	249	1,146	579	1,423
Commercial, donated[a]	0	0	0	154	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	1	15	53	22	27	34	0	1	0	17	10
Federal Subsistence (PWS/Chugach Nat'l Forest, dip net, spear, rod and reel)[b]	141	100	68	119	185	68	581	392	310	630	259	878
Subsistence (Batzulnetas, fish wheel, dip net or spear)[b]	0	NA	NA	0	0	0	0	0	0	0	0	0
Subsistence (Glennallen Subdistrict, dip net or fish wheel)[c]	154	212	238	493	228	293	372	335	144	233	270	77
Federal Subsistence (Glennallen subdistrict, dip net or fish wheel)[d]	NA	28	34	156	55	81	223	173	21	29	89	78
Personal Use (Chitina Subdistrict, dip net)[c]	1,869	2,715	1,742	2,711	1,712	2,013	1,702	1,385	797	1,129	1,778	841
Federal Subsistence (Chitna subdistrict, dip net)[d]	0	20	40	74	11	30	10	8	8	69	27	14
Delta sport harvest[e]	9,727	5,477	6,749	7,706	14,384	15,752	14,283	15,230	17,053	16,137	12,250	16,140
Upriver sport harvest[e]	72	54	0	57	36	114	21	0	0	89	44	30
Upriver spawning escapement[f]	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown
Delta spawning escapement[g]	199,364	178,140	102,430	153,784	82,588	82,154	76,290	74,020	69,360	86,020	110,415	83,330
Total estimated coho salmon run size	474,926	505,169	228,838	368,351	307,764	312,179	221,570	222,841	332,928	421,258	339,582	239,802

[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 sportfish 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, 2015.

		Weekly Esc. Ind. (Stat. Week Ending Date)[b]							
Drainage	System[a]	08/15	08/29	09/05	09/26	10/24	Site[c]	System[d]	Anticipated (by drainage)
Eyak River	Eyak River	500	0	200	475	50	475	5,075	6,916
	East Shore Beaches	0	1,200	1,300	600	0	1,300		
	West Shore Beaches	0	300	800	750	0	800		
	Middle Arm Beaches	0	2,500	2,500	900	20	2,500		
	North Shore Beaches	0	0	0	50	0	0		
	Hatchery Creek Delta	0	50	600	400	200	600	950	
	Hatchery Creek	0	250	350	900	100	350		
	Power Creek Delta	0	0	75	100	50	75	225	
	Power Creek	0	10	150	200	2,000	150		
Ibeck Creek	Ibeck Creek	600	1,500	2,000	8,100	3,500	8,100	8,100	6,227
Scott River	Scott Lake	NS	0	0	0	100	100	100	1,429
	Scott River	NS	5	0	0	0	0		
	Elsner Lake [e]	0	0	0	0	30	30		
Alaganik Slough	Alaganik Slough	0	50	50	250	0	250		2,591
	18/20 Mile Creek	0	50	220	600	360	600	600	
	McKinley Lake	0	200	600	50	50	50	300	
	Salmon Creek West Fork	0	500	700	700	0	700	1,900	
	Salmon Creek East Fork	0	800	700	1,200	70	1,200		
26/27 Mile Creek	26/27 Mile Creek	0	0	NS	100	290	290	290	829
39 Mile Creek	39 Mile Creek	0	1,700	NS	NS	170	1,700	1,700	3,831
Goat Mountain Cr.	Goat Mountain Creek	0	350	75	NS	75	350	350	1,181
Pleasant Creek	Pleasant Creek	0	10	100	400	0	400	400	
Martin River	Martin River - Lower	200	80	800	100	50	100	4,475	6,522
	Ragged Point River	0	500	250	600	160	500	3,600	849
	Ragged Point Lake Outlet	0	100	50	100	0	100		
	Ragged Point Lake	0	3,000	2,000	1,500	200	3,000		
	Martin River - Upper	0	390	2,500	4,375	NS	4,375		

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Drainage	System[a]	Weekly Esc. Ind. (Stat. Week Ending Date)[b] 08/15	08/29	09/05	09/26	10/24	Site[c]	System[d]	Anticipated (by drainage)
Martin River	Martin Lake Outlet	0	75	50	1,700	10	1,700	3,250	1,936
	Martin Lake	0	275	150	800	75	800		
	Martin Lake Feeders	0	1,900	2,600	750	350	750		
	Pothole River	0	50	50	250	1,800	250	750	1,370
	Pothole Lake	0	500	500	400	500	500		
	Little Martin River	0	80	100	4,700	500	4,700	4,750	5,413
	Little Martin Lake	0	0	500	50	50	50		
Tokun	Tokun Springs	0	200	130	500	0	500	1,050	1,376
	Tokun River	0	200	50	500	200	500		
	Tokun Lake Outlet	0	0	0	0	25	0		
	Tokun Lake	0	0	0	50	20	50		
Martin River Slough	Martin River Slough	0	175	1,730	4,300	352	4,300	4,300	9,531
Copper River Aerial Survey Daily Total		1,300	17,000	21,880	36,450	11,357	42,165	42,165	
Lower SEG		2,025	9,298	16,147	16,908	9,841			32,000
Average SEG, (average anticipated escapement)		3,164	14,528	25,229	26,418	15,377			50,000
Upper SEG		4,240	19,468	33,807	35,401	20,605			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, 2005–2015.

Stream/Lake [a,b]	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	10-yr Average	2015
Eyak Lake	2,812	1,940	5,810	17,030	950	13,360	640	3,950	3,880	4,450	5,482	5,075
Hatchery Creek	0	160	710	370	2,320	640	2,000	100	40	1,300	764	950
Power Creek	40	360	800	1,140	990	350	2,520	150	50	760	716	225
Ibeck Creek	34,900	36,300	13,200	10,265	9,963	3,381	14,200	7,600	9,150	12,500	15,146	8,100
Scott & Elsner River [c]	1,400	200	1,520	3,281	1,170	700	380	575	50	360	964	100
18/20 Mile	610	740	550	161	150	144	310	450	120	400	364	600
McKinley Lake	140	1,400	280	300	450	630	75	100	400	450	423	300
Salmon Creek	2,250	200	150	700	1,540	730	1,620	1,300	850	1,950	1,129	1,900
26/27 Mile	820	60	480	10	100	0	1,150	475	1,800	1,600	650	290
39 Mile	9,900	4,400	3,300	5,460	1,570	1,340	2,800	2,400	2,300	2,600	3,607	1,700
Goat Mountain	4,500	3,100	1,400	920	1,220	331	210	400	900	1,200	1,418	350
Pleasant Creek	3,790	7,030	500	2,800	680	1,700	245	440	1,500	1,110	1,980	400
Martin River	1,050	9,100	8,830	9,323	1,651	5,560	2,100	1,420	350	3,820	4,320	4,475
Ragged Point River/Lake	650	360	260	302	590	690	1,100	4,000	2,500	1,050	1,150	3,600
Martin Lake	24,100	2,900	4,775	2,770	1,360	3,511	450	2,350	2,750	2,150	4,712	3,250
Pothole Lake	140	120	870	3,661	2,750	2,000	1,400	2,300	120	550	1,391	750
Little Martin Lake	2,100	7,500	2,700	8,760	2,810	460	4,500	4,700	3,800	2,900	4,023	4,750
Tokun River/Lake	2,030	700	830	3,020	850	1,370	1,350	3,200	620	1,175	1,515	1,050
Martin River Slough	9,850	12,700	5,770	7,780	10,180	4,180	1,475	1,400	3,500	4,075	6,091	4,300
Copper River Delta Total	101,082	89,270	52,735	78,053	41,294	41,077	38,525	37,310	34,680	44,400	55,843	42,165
Katalla River	6,500	12,100	8,900	5,510	3,340	1,590	1,430	950	800	1,550	4,267	1,000
Bering River/Lake	10,125	15,040	13,052	4,910	8,491	6,320	5,520	5,700	7,750	10,675	8,758	4,300
Dick Creek	2,750	362	1,660	530	1,410	1,210	2,050	2,000	2,800	1,300	1,607	1,750
Shepherd Creek	1,125	100	60	130	370	10	20	150	0	0	197	0
Nichawak River	1,475	6,900	3,200	11,900	10,120	4,690	6,800	3,750	3,800	6,500	5,914	5,100
Gandil River	2,000	4,450	640	2,650	840	1,610	820	500	1,100	1,500	1,611	700
Controller Bay	6,210	5,590	5,680	7,332	4,251	6,330	2,250	2,555	2,570	4,950	4,772	2,700
Bering River Area Total	30,185	44,542	33,192	32,962	28,822	21,760	18,890	15,605	18,820	26,475	27,125	15,550
Copper/Bering Total	131,267	133,812	85,927	111,015	70,116	62,837	57,415	52,915	53,500	70,875	82,968	57,715

[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.–Total commercial salmon harvest by species in the Bering River District, 1974–2015.

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
2014	[c]	0	50	97,637	4	0	97,691
10-Year Average		90	16,767	54,818	945	8	72,628
2015	[c]	13	2,137	12,106	10	1	14,267

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

[b] A new Kayak Island Subdistrict management plan that allowed earlier opening date (10 June) and set a closure of the subdistrict on 10 July 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 A19.–Aerial escapement indices by statistical week and location for sockeye salmon returning to the Bering River District, 2015.

		Weekly Escapement Indices (Statistical Week Ending Date Listed)[b]														
Drainage	System[a]	6/13	6/20	6/27	7/04	7/11	7/25	8/01	8/15	8/29	9/05	9/26	10/24	Site[c]	System[d]	Anticipated (by drainage)
Bering River	Bering River	60	20	350	10	0	25	0	NS	0	0	0	0	0	20,400	21,903
	Bering Lake	1,506	3,000	10,900	650	2,000	450	1,400	275	1,300	0	50	0	2,000		
	Dick Creek	0	0	0	15,500	18,400	7,650	7,750	6,500	500	350	0	0	18,400		
	Shepherd Creek Lagoon	NS	NS	NS	NS	0	0	0	200	NS	NS	NS	NS	200	625	4,375
	Shepherd Creek	NS	NS	NS	NS	20	400	450	125	NS	NS	NS	NS	125		
	Carbon Creek	NS	NS	NS	NS	0	60	100	300	NS	NS	NS	NS	300		
	Clear Creek	NS	NS	NS	NS	NS	NS	500	250	NS	NS	NS	NS	500	500	1,197
	Kushtaka Lake	NS	NS	NS	NS	NS	NS	80	120	NS	NS	NS	NS	80	180	
	Shockum Creek	NS	NS	NS	NS	NS	NS	100	200	NS	NS	NS	NS	100		1,226
Katalla River	Katalla River [e]	0	0	250	220	500	NS	300	1,000	1	10	0	0	1,000	1,000	
Bering River District Weekly Index		1,566	3,020	11,500	16,380	20,920	12,385	10,680	8,970	1,801	360	50		21,705	21,705	
Lower SEG		3,251	4,048	6,092	11,015	11,051	9,401	8,409	2,416	1,044	571	565	0			15,000
Average SEG, (average anticipated esc.)		5,202	6,477	9,747	17,623	17,682	15,042	13,454	3,866	1,670	914	903	0			24,000
Upper SEG		7,153	8,906	13,402	24,232	24,313	20,683	18,499	5,316	2,297	1,256	1,242	0			33,000

[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. NS signifies that no survey was flown.

[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 A20.–Bering River District commercial drift gillnet salmon harvest by period, 2015.

Period	Date	News Release Dates[a]	Hours	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
						Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
01	06/25-06/25	06/24	12	0	0	0	0	0	0	0	0	0	0	0	0
02	06/29-06/29	06/27	12	0	0	0	0	0	0	0	0	0	0	0	0
03	07/02-07/03	07/01	36	0	0	0	0	0	0	0	0	0	0	0	0
04	07/06-07/07	07/04	36	0	0	0	0	0	0	0	0	0	0	0	0
05	07/09-07/10	07/08	36	0	0	0	0	0	0	0	0	0	0	0	0
06	07/13-07/14	07/11	36	0	0	0	0	0	0	0	0	0	0	0	0
07	07/16-07/17	07/15	36	0	0	0	0	0	0	0	0	0	0	0	0
08	07/20-07/21	07/18	36	0	0	0	0	0	0	0	0	0	0	0	0
09	07/23-07/24	07/22	36	0	0	0	0	0	0	0	0	0	0	0	0
10	07/27-07/28	07/25	36	0	0	0	0	0	0	0	0	0	0	0	0
11	07/30-07/31	07/29	36	0	0	0	0	0	0	0	0	0	0	0	0
12	08/03-08/04	08/01	36	0	0	0	0	0	0	0	0	0	0	0	0
13	08/06-08/07	08/05	36	0	0	0	0	0	0	0	0	0	0	0	0
14	08/10-08/11	08/08	36	9	10	10	122	2,007	11,192	0	0	8	25	1	8
15	08/13-08/14	08/12	36	1	1	3	47	122	622	0	0	0	0	0	0
16	08/17-08/18	08/15	24	0	0	0	0	0	0	0	0	0	0	0	0
17	08/24-08/25	08/22	24	4	4	0	0	0	0	263	1,990	0	0	0	0
18	08/31-09/01	08/29	24	20	30	0	0	2	12	3,903	28,988	0	0	0	0
19	09/03-09/04	09/02	24	20	34	0	0	3	16	3,964	30,769	0	0	0	0
20	09/07-09/08	09/05	24	16	22	0	0	3	12	2,749	19,711	2	8	0	0
21	09/10-09/11	09/09	24	0	0	0	0	0	0	0	0	0	0	0	0
22	09/14-09/15	09/12	24	0	0	0	0	0	0	0	0	0	0	0	0
23	09/17-09/18	09/16	24	0	0	0	0	0	0	0	0	0	0	0	0
24	09/21-09/22	09/18	24	1	1	0	0	0	0	Confidential		0	0	0	0
25	09/24-09/25	09/18	24	1	1	0	0	0	0	Confidential		0	0	0	0
26	09/28-09/29	09/25	24	0	0	0	0	0	0	0	0	0	0	0	0
27	10/01-10/02	09/25	24	1	1	0	0	0	0	Confidential		0	0	0	0
28	10/05-10/07	10/02	48	1	1	0	0	0	0	Confidential		0	0	0	0
29	10/08-10/10	10/02	48	1	1	0	0	0	0	Confidential		0	0	0	0
Total			876	75	106	13	169	2,137	11,854	12,106	90,038	10	33	1	8
Average Weights							13.00		5.55		7.44		3.30		8.00

Source: 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.

[a] 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 coho salmon returning to the Bering River District, 2015.

		Weekly Escapement Indices (Statistical Week Ending Date Listed)[b]							
Drainage	System[a]	08/15	08/29	09/05	09/26	10/24	Site[c]	System[d]	Anticipated, (by drainage)
Bering River	Bering River[e]	NS	200	150	400	60	400	4,300	7,720
	Bering Lake	0	2,400	2,500	3,900	75	3,900		
	Dick Creek	0	340	1,400	1,750	35	1,750	1,750	
	Shepherd Creek - Lagoon	0	NS	NS	NS	NS	0	0	
	Shepherd Creek	0	NS	NS	NS	NS	0		
	Carbon Creek [f]	0	NS	NS	NS	NS	0		
Katalla River	Katalla River	1,000	200	350	300	200	1,000	1,000	4,993
Lower Bering River	Gandil River	NS	15	150	700	100	700	700	2,910
	Nichawak River	NS	560	1,700	5,100	500	5,100	5,100	
Controller Bay	Campbell River	NS	NS	NS	100	0	100	2,700	7,378
	Edwardes River	NS	NS	NS	1,900	2,100	2,100		
	Okalee River	NS	NS	NS	500	0	500		
	Other Clear Streams [f]	NS	NS	NS	0	0	0		
Bering River District Weekly Index		1,000	3,715	6,250	14,650	3,070	15,550	15,550	
Lower SEG		487	4,002	8,732	5,041	1,692			13,000
Average SEG, (average anticipated escapement)		861	7,080	15,448	8,919	2,993			23,001
Upper SEG		1,236	10,158	22,165	12,797	4,294			33,000

[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. NS signifies that no survey was flown.

[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.

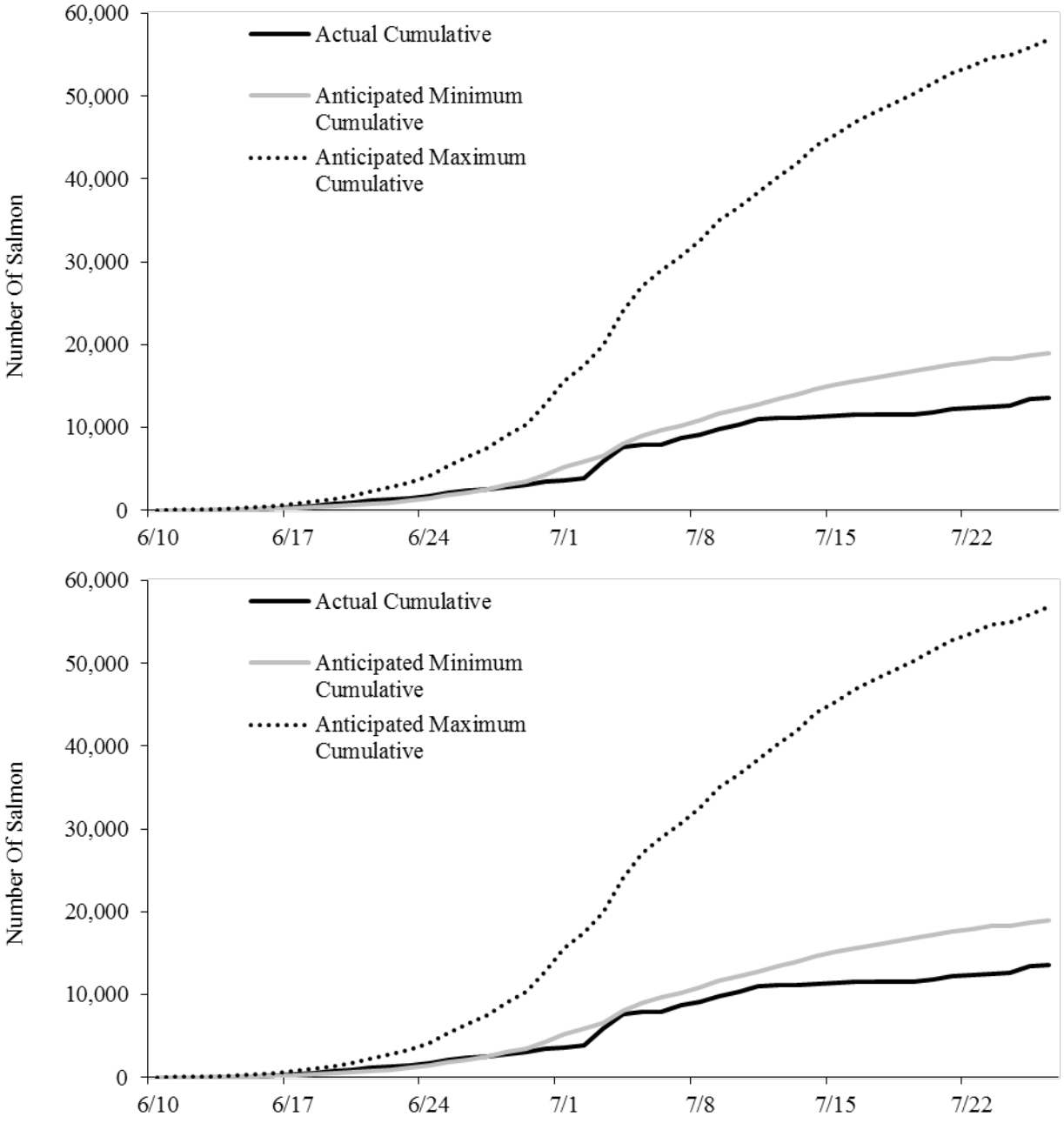
[f] This stream is not included in the indexed escapement delta wide, it is a non-index stream.

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

Appendix B1.–Daily and cumulative salmon escapement through the Coghill River weir, 2015.

	Sockeye salmon		Pink salmon			Sockeye salmon		Pink salmon	
Date	Daily	Cumulative	Daily	Cumulative	Date	Daily	Cumulative	Daily	Cumulative
06/10	0	0	0	0	07/04	1,842	7,701	4,470	5,941
06/11	0	0	0	0	07/05	182	7,883	2,149	8,090
06/12	0	0	0	0	07/06	0	7,883	794	8,884
06/13	7	7	0	0	07/07	794	8,677	10,149	19,033
06/14	16	23	0	0	07/08	507	9,184	9,873	28,906
06/15	105	128	0	0	07/09	551	9,735	10,455	39,361
06/16	117	245	0	0	07/10	645	10,380	12,457	51,818
06/17	144	389	2	2	07/11	571	10,951	13,496	65,314
06/18	159	548	2	4	07/12	136	11,087	18,561	83,875
06/19	224	772	4	8	07/13	106	11,193	15,156	99,031
06/20	142	914	5	13	07/14	54	11,247	5,180	104,211
06/21	214	1,128	5	18	07/15	194	11,441	8,337	112,548
06/22	148	1,276	0	18	07/16	138	11,579	22,199	134,747
06/23	129	1,405	0	18	07/17	NC[a]	11,579	NC[a]	134,747
06/24	289	1,694	3	21	07/18	NC[a]	11,579	NC[a]	134,747
06/25	397	2,091	9	30	07/19	NC[a]	11,579	NC[a]	134,747
06/26	227	2,318	0	30	07/20	257	11,836	37,742	172,489
06/27	232	2,550	5	35	07/21	348	12,184	20,799	193,288
06/28	245	2,795	6	41	07/22	190	12,374	46,264	239,552
06/29	213	3,008	12	53	07/23	89	12,463	18,271	257,823
06/30	512	3,520	37	90	07/24	195	12,658	31,703	289,526
07/01	96	3,616	9	99	07/25	721	13,379	33,390	322,916
07/02	198	3,814	26	125	07/26	205	13,584	53,810	376,726
07/03	2,045	5,859	1,346	1,471					

[a] NC = No Count. Pickets removed due to high water.



Appendix B2.–Anticipated cumulative and daily sockeye salmon escapement versus actual escapement through Coghill River weir, 2015.

Appendix B3.–Salmon escapement by species in the Coghill District, 1971–2015.

Year	Sockeye[a]	Pink[b]	Chum[b]	Year	Sockeye[a]	Pink[b]	Chum[b]
1971	15,000	62,160	6,600	1994	7,264	65,648	14,176
1972	51,000	30,960	28,160	1995	30,382	46,029	11,596
1973	55,000	493,780	72,610	1996	38,693	104,781	19,669
1974	22,333	56,940	29,280	1997	35,517	52,961	3,101
1975	34,855	452,430	3,640	1998	28,923	85,968	22,764
1976	9,056	53,908	31,398	1999	59,311	168,816	5,057
1977	31,562	320,680	79,957	2000	28,446	223,646	20,488
1978	42,284	67,084	15,966	2001	38,558	148,665	13,388
1979	48,281	125,544	7,823	2002	28,323	54,882	7,430
1980	142,253	148,066	20,919	2003	75,427	375,147	19,729
1981	156,112	140,436	2,389	2004	30,569	36,717	5,000
1982	180,314	309,202	21,586	2005	30,313	528,264	11,979
1983	38,783	284,164	55,127	2006	23,479	145,511	15,900
1984	63,622	365,226	13,500	2007	70,001	197,405	14,052
1985	163,311	238,728	14,514	2008	29,298	145,177	39,660
1986	71,095	109,798	16,300	2009	23,186	125,907	5,208
1987	187,263	67,761	22,472	2010	24,312	355,108	51,589
1988	72,052	42,985	42,536	2011	102,359	257,020	16,368
1989	37,751	48,802	22,434	2012	72,678	172,611	10,281
1990	8,949	45,558	20,494	2013	17,231	640,414	11,369
1991	9,752	84,790	7,055	2014	21,836	63,290	9,491
1992	29,642	23,122	7,583	10-Year Avg.	41,469	263,071	18,590
1993	9,232	41,666	7,404	2015	13,584	801,201	15,444

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

[b] Pink and chum 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, 2015.

		NR		Permits		Chinook		Sockeye		Coho		Pink		Chum	
Period	Date	Date	Hours	Fished	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1	5/25-5/27	05/20	48	22	115	1	12	5	24	0	0	0	0	31,364	219,172
2	5/28-5/30	05/27	48	37	135	10	128	21	94	0	0	0	0	18,751	125,365
3	6/01-6/03	05/30	48	46	183	23	227	217	1,212	0	0	0	0	28,015	183,698
4	6/04-6/05	06/03	36	53	181	10	148	220	1,162	0	0	0	0	52,726	339,617
5	6/08-6/09	06/06	36	117	423	9	112	825	4,813	1	6	3	9	101,112	631,352
6	6/11-6/12	06/10	36	94	243	5	64	681	3,767	0	0	0	0	41,990	277,347
7	6/15-6/16	06/13	36	58	165	7	114	3,399	19,788	4	31	10	36	27,253	179,053
8	6/18-6/19	06/17	36	50	115	4	53	6,337	35,510	4	24	36	121	15,243	100,159
9	6/22-6/23	06/20	36	70	163	1	7	9,745	51,753	5	32	23	79	16,299	107,760
10	6/25-6/26	06/24	36	55	187	3	61	6,681	36,393	81	453	80	276	42,227	264,903
11	6/29-6/30	06/27	36	32	92	3	83	4,965	27,223	68	426	890	2,919	17,389	115,087
12	7/02-7/03	07/01	36	111	348	4	67	5,775	31,593	72	522	5,035	22,839	79,696	511,298
13	7/06-7/08	07/04	48	149	523	5	88	15,995	83,700	296	2,012	19,572	70,432	154,845	937,223
14	7/09-7/12	07/08	84	153	439	2	22	8,507	45,357	549	3,814	21,018	78,931	111,888	712,876
15	7/13-7/15	07/11	60	73	204	5	62	5,745	28,899	536	3,358	28,398	103,794	20,858	125,739
16	07/16	07/15	12	28	35	1	10	342	1,701	14	81	6,015	22,140	3,753	18,175
17	7/17-7/19	07/15	60	7	14	0	0	364	1,821	34	306	6,941	20,827	2,446	14,680
18	7/20-7/22	07/18	60	12	38	0	0	273	1,424	19	151	22,774	71,192	3,653	19,656
19	07/23	07/21	14	17	42	0	0	672	3,211	118	847	25,264	92,556	1,372	8,212
20	07/27	07/25	14	18	40	0	0	477	2,469	67	556	48,949	166,076	611	3,538
21	07/30	07/29	14	24	64	0	0	424	2,224	159	1,057	40,655	156,998	1,247	5,939
22	08/01	07/31	14	23	53	0	0	526	2,679	70	556	43,551	175,383	445	2,890
23	08/03	08/02	14	25	59	0	0	255	1,271	66	492	39,813	159,620	227	1,401
24	08/05	08/04	14	31	68	0	0	627	3,252	110	644	40,705	160,490	2,801	10,142
25	08/07	08/06	14	28	59	0	0	238	1,266	36	268	54,910	202,777	125	794
26	08/09	08/08	14	19	31	0	0	113	565	38	271	30,222	105,326	101	607
27	08/10	08/08	14	22	43	0	0	123	613	41	345	40,477	138,059	161	1,071
28	08/11	08/10	14	28	56	0	0	201	973	32	214	46,626	168,091	114	720
29	08/12	08/10	14	22	49	0	0	133	683	30	216	29,108	108,949	57	353
30	08/13	08/12	14	19	29	0	0	80	420	39	260	17,948	64,374	53	361
31	08/14	08/12	14	12	27	0	0	168	987	116	725	13,374	47,740	1,032	6,253

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		NR		Permits		Chinook		Sockeye		Coho		Pink		Chum	
Period	Date	Date	Hours	Fished	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
32	08/15	08/12	14	8	9	0	0	40	192	12	74	6,371	22,614	17	128
33	08/16	08/15	14	0	0	0	0	0	0	0	0	0	0	0	0
34	08/17	08/15	14	8	15	0	0	30	153	34	230	7,923	27,990	11	66
35	08/18	08/15	14	9	13	0	0	31	158	27	183	7,641	26,776	14	84
36	08/19	08/18	12	5	10	0	0	17	83	21	132	5,730	20,056	8	48
37	08/20	08/18	12	11	22	0	0	33	162	118	736	11,724	46,849	11	77
38	08/21	08/18	12	10	18	0	0	16	81	82	504	11,332	39,660	13	75
39	08/22	08/18	12	7	10	0	0	11	55	77	412	5,544	22,157	10	68
40	08/23	08/22	12	2	3					Confidential					
41	08/24	08/22	12	9	13	0	0	15	75	119	592	6,007	21,030	0	0
42	08/25	08/22	12	5	6	0	0	5	26	45	221	1,102	3,851	3	18
43	08/26	08/22	12	3	3	0	0	8	40	48	238	1,017	3,557	4	26
44	08/27	08/26	12	1	1					Confidential					
45	08/28	08/26	12	1	1					Confidential					
46	08/29	08/26	12	1	1					Confidential					
47	08/30	08/29	15	1	2					Confidential					
48	08/31	08/29	15	6	9	0	0	5	26	384	2,184	2,361	8,260	2	12
49	09/01	08/29	15	6	9	0	0	11	56	228	1,332	1,895	7,067	4	24
50	09/02	08/29	15	6	6	0	0	15	77	322	1,870	1,224	4,282	142	498
51	09/03	09/02	15	5	5	0	0	12	62	55	318	305	1,063	0	0
52	09/04	09/02	15	1	1					Confidential					
53	09/05	09/02	15	3	3	0	0	3	15	198	1,184	358	1,254	6	36
54	09/06	09/05	12	1	1					Confidential					
55	09/07	09/05	12	2	2					Confidential					
56	09/08	09/05	12	3	3	0	0	1	5	21	129	90	364	2	12
57	09/09	09/05	12	2	4					Confidential					
58	9/10-9/12	09/09	60	8	13	0	0	10	66	1,260	8,807	84	310	1	6
Total			1,909	265	4,406	93	1,258	74,416	398,274	6,094	39,427	655,320	2,404,948	778,112	4,926,682
Average Weights							14.54		6.38		7.65		2.75		7.46

Appendix B5.–Coghill District commercial common property purse seine salmon harvest by period dates, 2015.

		NR				Chinook		Sockeye		Coho		Pink		Chum	
Period	Date	Date	Hours	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
14	7/11-7/12	07/10	32	5	12	0	0	0	0	9	56	105	420	115,120	642,008
15	7/13-7/15	07/11	60	0	0	0	0	0	0	0	0	0	0	0	0
18	7/21-7/22	07/18	44	10	24	0	0	0	0	0	0	236,223	806,669	4,239	29,569
19	07/23	07/21	14	5	6	0	0	67	429	0	0	74,296	246,947	376	2,406
20	07/27	07/25	14	26	37	0	0	105	620	6	44	614,407	2,235,801	91	638
21	07/30	07/29	14	48	65	0	0	489	2,586	70	393	610,827	2,229,671	421	2,724
22	08/01	07/31	14	27	40	0	0	356	1,971	74	422	348,103	1,204,071	270	1,696
23	08/03	08/02	14	29	35	0	0	135	720	71	420	371,585	1,236,338	132	903
24	08/05	08/04	14	34	43	0	0	368	2,374	45	333	408,419	1,397,020	159	1,120
25	08/07	08/06	14	25	30	0	0	64	355	5	31	333,869	1,091,891	60	381
26	08/09	08/08	14	17	20	0	0	22	120	10	71	162,715	573,068	24	132
27	08/10	08/08	14	13	17	0	0	76	420	94	648	196,803	654,502	7	49
28	08/11	08/10	14	30	40	0	0	200	874	74	488	406,533	1,396,808	90	618
29	08/12	08/10	14	26	34	0	0	47	217	19	104	281,802	948,589	19	121
30	08/13	08/12	14	22	24	0	0	40	194	20	102	170,930	526,063	40	237
31	08/14	08/12	14	22	23	0	0	24	110	10	70	181,385	588,785	21	132
32	08/15	08/12	14	17	20	0	0	23	118	51	361	173,056	507,440	40	278
33	08/16	08/15	14	12	14	0	0	4	40	1	8	97,924	331,021	1	8
34	08/17	08/15	14	16	16	0	0	6	38	4	22	120,429	360,730	3	19
35	08/18	08/15	14	17	17	0	0	4	20	3	20	172,247	549,839	20	109
36	08/19	08/18	12	18	18	0	0	0	0	0	0	94,759	273,796	0	0
37	08/20	08/18	12	13	13	0	0	26	123	310	1,841	100,469	317,105	34	261
38	08/21	08/18	12	12	12	0	0	2	12	4	23	58,310	208,918	0	0
39	08/22	08/18	12	10	10	0	0	13	63	29	180	115,169	359,560	6	35
40	08/23	08/22	12	10	10	0	0	5	29	47	245	85,810	255,633	1	6

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		NR				Chinook		Sockeye		Coho		Pink		Chum	
Period	Date	Date	Hours	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
41	08/24	08/22	12	8	8	0	0	11	56	36	222	84,574	237,076	12	90
42	08/25	08/22	12	5	5	0	0	7	25	63	434	38,209	99,708	21	146
43	08/26	08/22	12	6	6	0	0	26	130	103	575	47,656	138,283	1	7
44	08/27	08/26	12	2	2					Confidential					
45	08/28	08/26	12	1	1					Confidential					
46	08/29	08/26	12	0	0	0	0	0	0	0	0	0	0	0	0
47	08/30	08/29	15	0	0	0	0	0	0	0	0	0	0	0	0
48	08/31	08/29	15	0	0	0	0	0	0	0	0	0	0	0	0
49	09/01	08/29	15	0	0	0	0	0	0	0	0	0	0	0	0
50	09/02	08/29	15	0	0	0	0	0	0	0	0	0	0	0	0
51	09/03	09/02	15	0	0	0	0	0	0	0	0	0	0	0	0
52	09/04	09/02	15	0	0	0	0	0	0	0	0	0	0	0	0
53	09/05	09/02	15	0	0	0	0	0	0	0	0	0	0	0	0
54	09/06	09/05	12	0	0	0	0	0	0	0	0	0	0	0	0
55	09/07	09/05	12	0	0	0	0	0	0	0	0	0	0	0	0
56	09/08	09/05	12	0	0	0	0	0	0	0	0	0	0	0	0
57	09/09	09/05	12	0	0	0	0	0	0	0	0	0	0	0	0
Total			494	108	602	0	0	2,120	11,644	1,215	7,501	5,601,620	18,813,270	121,213	683,722
Average weight									5.49		6.17		3.36		5.64

Appendix B6.–Commercial common property harvest by species in the Coghill District, 2005–2015.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
			Drift Gillnet			
2005	115	94,748	52,416	72,110	880,967	1,100,356
2006	71	96,435	97,002	24,659	266,233	484,400
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
10-Year Average	146	156,803	61,743	1,002,134	1,424,260	2,645,086
2015	93	74,416	6,094	655,320	778,112	1,816,842
			Purse Seine			
2005	1	10,722	1,558	3,246,778	275,783	3,534,842
2006	9	5,944	16,995	1,348,377	297,576	1,668,901
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
10-Year Average	9	5,098	12,506	3,871,784	127,317	4,016,713
2015	0	2,120	1,215	5,601,620	121,213	5,726,168
			Combined Purse Seine and Drift Gillnet			
2005	116	105,470	53,974	3,318,888	1,156,750	4,635,198
2006	80	102,379	113,997	1,373,036	563,809	2,153,301
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
10-Year Average	155	165,585	73,555	4,705,629	1,542,985	6,487,909
2015	93	76,536	7,309	6,256,940	899,325	7,240,203

Appendix B7.–Estimated age and sex composition of sockeye salmon in Coghill District commercial common property drift gillnet fishery harvest and escapement through Coghill River weir, 2015.

		Brood Year and Age Class						
		2012	2011		2010		2009	
		1.1	0.3	1.2	1.3	2.2	2.3	Total
Strata dates:	5/25-9/30	Drift Gillnet Harvest						
Sampling date:	7/1-7/1							
Sample size:	381							
Female	Percentage of sample	0.0	0.0	16.3	32.8	0.0	0.0	49.1
	Number in harvest	0	0	12,110	24,415	0	0	36,524
Male	Percentage of sample	0.0	0.3	34.6	15.7	0.3	0.0	50.9
	Number in harvest	0	195	25,782	11,719	195	0	37,892
Total	Percentage of sample	0.0	0.3	50.9	48.6	0.3	0.0	100.0
	Number in harvest	0	195	37,892	36,134	195	0	74,416
	Standard error	0	195	1,908	1,908	195	0	
Strata dates:	6/8-7/26	Coghill Weir						
Sampling date:	7/1-7/26							
Sample size:	684							
Female	Percentage of sample	0.0	0.0	3.2	54.1	0.1	0.3	57.6
	Number in escapement	0	0	434	7,346	10	39	7,830
Male	Percentage of sample	0.1	0.0	7.0	34.0	0.1	0.1	41.3
	Number in escapement	10	0	957	4,614	10	20	5,610
Total	Percentage of sample	0.1	0.0	10.5	88.9	0.1	0.4	100.0
	Number in escapement	10	0	1,420	12,075	20	59	13,584
	Standard error	10	0	177	178	14	24	

Appendix B8.–Commercial common property salmon harvest by period in the Unakwik District drift gillnet and purse seine fisheries, 2015.

Period	Date	NR Dates	Hours	Permits	Landings	Chinook Number	Chinook Pounds	Sockeye Number	Sockeye Pounds	Coho Number	Coho Pounds	Pink Number	Pink Pounds	Chum Number	Chum Pounds
								Drift Gillnet							
1	6/15-6/16	06/13	36	0	0	0	0	0	0	0	0	0	0	0	0
2	6/18-6/19	06/17	36	1	1					Confidential					
3	6/22-6/23	06/20	36	1	1					Confidential					
4	6/25-6/26	06/24	36	0	0	0	0	0	0	0	0	0	0	0	0
5	6/29-6/30	06/27	36	0	0	0	0	0	0	0	0	0	0	0	0
6	7/02-7/03	07/01	36	2	2					Confidential					
7	7/06-7/07	07/04	36	1	1					Confidential					
8	7/09-7/10	07/08	36	4	4	1	5	1,043	5,511	0	0	55	164	7	42
9	7/13-7/14	07/11	36	2	2					Confidential					
10	7/16-7/17	07/15	36	0	0	0	0	0	0	0	0	0	0	0	0
11	7/20-7/21	07/18	36	1	1					Confidential					
12	7/23-7/24	07/22	36	1	1					Confidential					
Total			432	6	13	1	5	2,958	14,982	0	0	55	164	23	135
Average Weight							5.00		5.06		0.00		2.98		5.87
								Purse Seine							
1	6/15-6/16	06/13	36	4	4	2	13	429	1,780	0	0	1	1	172	1,207
2	6/18-6/19	06/17	36	3	3	2	31	295	1,518	0	0	0	0	50	290
3	6/22-6/23	06/20	36	0	0	0	0	0	0	0	0	0	0	0	0
4	6/25-6/26	06/24	36	1	1					Confidential					
5	6/29-6/30	06/27	36	0	0	0	0	0	0	0	0	0	0	0	0
6	7/02-7/03	07/01	36	2	2					Confidential					
7	7/06-7/07	07/04	36	0	0	0	0	0	0	0	0	0	0	0	0
8	7/09-7/10	07/08	36	0	0	0	0	0	0	0	0	0	0	0	0
9	7/13-7/14	07/11	36	0	0	0	0	0	0	0	0	0	0	0	0
10	7/16-7/17	07/15	36	0	0	0	0	0	0	0	0	0	0	0	0
11	7/20-7/21	07/18	36	0	0	0	0	0	0	0	0	0	0	0	0
12	7/23-7/24	07/22	36	0	0	0	0	0	0	0	0	0	0	0	0
Total			144	8	10	7	84	1,994	9,643	0	0	346	1,378	245	1,670
Average Weight							12.00		4.84		0.00		3.98		6.82

Appendix B9.–Commercial common property salmon harvest by species in the Unakwik District, 2005–2015.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
			Drift Gillnet			
2005	6	23,027	27	1,540	858	25,458
2006	1	698	1	36	171	907
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
10-Year Average	1	5,008	3	291	222	5,507
2015	1	2,958	0	55	23	3,037
			Purse Seine			
2005	0	80	0	81,858	0	81,938
2006	0	0	0	0	0	0
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
10-Year Average	0	568	0	9,011	59	8,827
2015	7	1,994	0	346	245	2,592
			Combined Purse Seine and Drift Gillnet			
2005	6	23,107	27	83,398	858	107,396
2006	1	698	1	36	171	907
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	1,390	1,390	0	1	30	2,811
2012	1,707	1,707	1,707	1,707	1,707	1,707
2013	1	3,591	1	284	187	4,064
2014	1	1,145	0	5	273	1,424
10-Year Average	311	5,089	174	8,634	392	13,917
2015	8	4,952	0	401	268	5,629

Appendix B10.–Port Chalmers commercial common property drift gillnet salmon harvest by period, 2015.

		NR				Chinook		Sockeye		Coho		Pink		Chum	
Period	Date	Date	Hours	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1	5/25-5/27	05/23	60	1	1					Confidential					
2	5/28-5/31	05/23	84	8	35	16	258	5	25	0	0	0	0	2,530	18,288
3	6/01-6/03	05/27	60	2	3					Confidential					
4	6/04-6/07	05/30	84	4	17	2	30	11	59	0	0	0	0	3,358	23,314
5	6/08-6/10	06/03	60	12	29	4	76	27	135	0	0	35	120	5,108	35,480
6	6/11-6/14	06/06	84	34	132	18	350	778	4,483	30	150	1,416	5,054	21,996	150,352
7	6/15-6/17	06/10	60	25	91	13	201	638	3,386	10	60	1,965	7,282	12,621	86,546
8	6/18-6/21	06/13	84	45	184	9	157	3,647	19,162	140	1,073	8,687	31,234	22,663	154,979
9	6/22-6/24	06/17	60	47	132	8	113	2,468	13,442	254	1,615	6,538	23,652	20,363	137,609
10	6/25-6/28	06/20	84	36	160	13	207	1,461	8,062	147	1,164	11,369	40,374	31,410	202,130
11	6/29-7/01	06/24	60	41	102	1	11	278	1,404	58	442	2,527	11,045	16,215	96,904
12	7/02-7/05	06/27	84	18	69	2	45	207	1,031	39	268	2,960	11,012	10,993	63,513
13	7/06-7/08	07/01	60	4	4	0	0	0	0	0	0	194	740	2,769	16,640
14	7/09-7/12	07/04	84	16	58	0	0	205	1,164	8	56	21,297	76,589	11,584	67,969
15	7/13-7/15	07/08	60	6	8	1	9	24	134	11	68	1,172	4,064	3,651	21,332
16	7/16-7/19	07/11	84	2	2					Confidential					
17	7/20-7/22	07/15	60	0	0	0	0	0	0	0	0	0	0	0	0
18	7/23-7/26	07/18	84	0	0	0	0	0	0	0	0	0	0	0	0
19	7/27- 7/30	07/25	72	0	0	0	0	0	0	0	0	0	0	0	0
Total				102	1,027	87	1,457	9,751	52,497	697	4,896	58,371	211,843	166,949	1,086,505
Average Weight							16.74		5.38		7.02		3.62		6.50

Appendix B11.–Port Chalmers Subdistrict commercial common property purse seine salmon by period, 2015.

		NR				Chinook		Sockeye		Coho		Pink		Chum	
Period	Date	Date	Hours	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
21	08/01	07/31	14	5	6	0	0	88	484	58	406	116,499	456,311	71	568
22	08/03	08/02	14	0	0	0	0	0	0	0	0	0	0	0	0
23	08/05	08/04	14	1	1					Confidential					
24	08/07	08/06	14	4	4	0	0	0	0	0	0	97,564	342,230	0	0
25	08/09	08/08	14	1	1					Confidential					
26	08/10	08/08	14	4	4	0	0	0	0	0	0	88,076	289,326	0	0
27	08/11	08/10	14	5	5	0	0	0	0	0	0	31,736	110,458	0	0
28	08/12	08/11	14	8	10	0	0	39	174	37	220	163,964	552,068	29	220
29	08/13	08/12	14	4	4	0	0	0	0	0	0	38,618	147,978	0	0
30	08/14	08/12	14	6	6	0	0	3	18	0	0	49,427	191,097	22	149
31	08/15	08/12	14	4	4	0	0	18	105	47	333	40,033	155,275	81	574
32	08/16	08/15	14	4	4	0	0	15	98	19	106	42,704	166,646	49	345
33	08/17	08/15	14	5	5	0	0	2	12	46	243	56,919	204,368	13	95
34	08/18	08/15	14	0	0	0	0	0	0	0	0	0	0	0	0
35	08/19	08/18	12	0	0	0	0	0	0	0	0	0	0	0	0
36	08/20	08/18	12	1	1					Confidential					
37	08/21	08/18	12	1	1					Confidential					
38	08/22	08/18	12	0	0	0	0	0	0	0	0	0	0	0	0
39	08/23	08/22	12	0	0	0	0	0	0	0	0	0	0	0	0
40	08/24	08/22	12	0	0	0	0	0	0	0	0	0	0	0	0
41	08/25	08/22	12	0	0	0	0	0	0	0	0	0	0	0	0
42	08/26	08/22	12	0	0	0	0	0	0	0	0	0	0	0	0

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		NR				Chinook		Sockeye		Coho		Pink		Chum	
Period	Date	Date	Hours	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
43	08/27	08/26	12	0	0	0	0	0	0	0	0	0	0	0	0
44	08/28	08/26	12	0	0	0	0	0	0	0	0	0	0	0	0
45	08/29	08/26	12	0	0	0	0	0	0	0	0	0	0	0	0
46	08/30	08/29	15	0	0	0	0	0	0	0	0	0	0	0	0
47	08/31	08/29	15	0	0	0	0	0	0	0	0	0	0	0	0
48	09/01	08/29	15	0	0	0	0	0	0	0	0	0	0	0	0
49	09/02	08/29	15	0	0	0	0	0	0	0	0	0	0	0	0
50	09/03	09/02	15	0	0	0	0	0	0	0	0	0	0	0	0
51	09/04	09/02	15	0	0	0	0	0	0	0	0	0	0	0	0
52	09/05	09/02	15	0	0	0	0	0	0	0	0	0	0	0	0
53	09/06	09/05	12	0	0	0	0	0	0	0	0	0	0	0	0
54	09/07	09/05	12	0	0	0	0	0	0	0	0	0	0	0	0
55	09/08	09/05	12	0	0	0	0	0	0	0	0	0	0	0	0
56	09/09	09/05	12	0	0	0	0	0	0	0	0	0	0	0	0
57	09/10	09/09	12	0	0	0	0	0	0	0	0	0	0	0	0
58	09/11	09/09	12	0	0	0	0	0	0	0	0	0	0	0	0
59	09/12	09/09	12	0	0	0	0	0	0	0	0	0	0	0	0
60	9/13-9/19	09/12	156	0	0	0	0	0	0	0	0	0	0	0	0
Total				25	56			165	891	214	1,364	783,292	2,818,954	267	1,962
Average Weight									5.40		6.37		3.59		7.34

Appendix B12.–Total commercial common property harvest by species in the Port Chalmers Subdistrict, June 1–July 30, 2010–2015.

			Numbers of fish					
Year	Permits	Gear type	Chinook	Sockeye	Coho	Pink	Chum	Total
2010	113	Drift gillnet	188	5,512	76	15,794	243,456	265,026
2011	44	Drift gillnet	79	1,613	618	4,435	103,102	109,847
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
5-Year Average	95		140	3,886	1,611	617,450	268,386	891,472
2015	102	Drift gillnet	87	9,751	697	58,371	166,949	235,855

APPENDIX C: ESHAMY DISTRICT

Appendix C1.–Total drift gillnet common property salmon harvest by period in the Eshamy District, 2015.

		NR				Chinook		Sockeye		Coho		Pink		Chum	
Period	Date	Date	Hours	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1	5/28-5/30	05/20	60	3	3	0	0	15	86	0	0	0	0	22	130
2	6/01-6/03	05/30	48	2	4					Confidential					
3	6/04-6/6	06/03	60	14	20	2	22	403	2,444	0	0	0	0	1,398	9,405
4	6/08-6/10	06/06	48	11	25	3	59	1,790	10,784	0	0	0	0	2,197	15,369
5	6/11-6/13	06/10	60	89	266	11	168	20,607	115,625	10	62	5	19	13,647	86,057
6	6/15-6/17	06/13	48	133	421	9	107	41,757	228,499	96	602	26	91	7,626	50,324
7	6/18-6/19	06/17	24	124	258	10	115	29,762	160,253	43	281	31	128	6,408	40,632
8	6/22-6/23	06/20	24	120	309	12	94	44,120	238,310	110	690	70	307	7,313	47,534
9	6/25-6/26	06/24	36	172	578	9	108	93,960	504,104	276	1,765	619	2,622	14,749	93,238
10	6/29-6/30	06/27	36	230	719	17	197	158,828	823,306	256	1,719	5,698	21,972	16,497	109,489
11	7/02-7/03	07/01	36	204	618	6	132	104,037	544,328	261	1,720	6,337	23,312	7,986	50,321
12	7/06-7/07	07/05	36	175	483	8	113	83,577	419,364	1,228	8,892	18,393	67,719	5,138	32,905
13	7/09-7/12	07/08	84	94	353	3	39	67,074	338,880	367	2,819	5,706	20,055	444	2,999
14	7/13-7/15	07/11	60	112	378	0	0	78,287	405,267	534	4,007	10,359	35,877	293	1,892
15	7/16-7/18	07/15	60	99	281	0	0	48,511	245,848	678	4,809	23,165	79,952	1,172	8,040
16	7/20-7/22	07/18	60	66	257	2	63	48,890	250,507	127	900	39,083	138,016	574	3,816
17	7/23-7/25	07/22	60	43	142	0	0	23,464	124,703	128	863	34,277	129,856	139	896
18	7/27-7/29	07/25	60	8	41	0	0	10,560	56,989	119	929	7,384	23,718	40	272
19	7/30-8/01	07/29	60	8	18	0	0	3,908	22,709	40	304	5,646	19,295	16	100
20	8/03-8/05	08/01	60	0	0	0	0	0	0	0	0	0	0	0	0
21	8/06-8/08	08/05	60	8	17	0	0	590	3,036	185	1,422	9,937	39,754	56	367
22	8/10-8/12	08/08	60	5	10	0	0	356	1,832	89	644	8,326	33,291	65	441
23	8/13-8/15	08/12	60	6	12	0	0	98	519	64	506	3,274	13,083	29	210

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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
24	8/17-8/19	08/15	60	0	0	0	0	0	0	0	0	0	0	0	0
25	8/20-8/21	08/19	36	0	0	0	0	0	0	0	0	0	0	0	0
26	8/24-8/25	08/22	36	0	0	0	0	0	0	0	0	0	0	0	0
27	8/27-8/28	08/26	36	0	0	0	0	0	0	0	0	0	0	0	0
28	8/31-9/01	08/29	36	0	0	0	0	0	0	0	0	0	0	0	0
29	9/03-9/04	09/02	36	0	0	0	0	0	0	0	0	0	0	0	0
30	9/07-9/08	09/05	36	0	0	0	0	0	0	0	0	0	0	0	0
Total			1,476	313	5213	92	1,217	860,637	4,497,643	4,611	32,934	178,336	649,067	85,864	554,767
Average Weight							13.23		5.23		7.14		3.64		6.46

Appendix C2.–Total set gillnet common property salmon harvest by period in the Eshamy District, 2015.

		NR				Chinook		Sockeye		Coho		Pink		Chum	
Period	Date	Date	Hours	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1	5/28-5/30	05/20	60	10	30	3	44	93	527	0	0	0	0	665	3,893
2	6/01-6/03	05/30	48	16	39	9	121	356	2,074	0	0	0	0	602	4,079
3	6/04-6/6	06/03	60	19	59	2	45	924	5,531	1	7	0	0	1,444	9,411
4	6/08-6/10	06/06	48	21	82	3	79	4,925	29,355	1	7	1	4	2,503	16,700
5	6/11-6/13	06/10	60	24	156	13	206	11,606	65,056	0	0	7	26	4,343	27,031
6	6/15-6/17	06/13	48	27	148	5	60	15,945	90,032	1	8	15	66	1,401	9,057
7	6/18-6/19	06/17	24	27	82	3	35	9,348	50,146	8	53	12	52	761	5,049
8	6/22-6/23	06/20	24	28	113	5	71	16,628	93,123	25	167	16	69	1,031	6,693
9	6/25-6/26	06/24	36	29	162	2	23	30,931	166,908	16	101	233	1,002	2,116	12,926
10	6/29-6/30	06/27	36	28	157	7	108	36,179	183,921	36	232	1,197	5,067	2,805	18,663
11	7/02-7/03	07/01	36	29	160	0	0	32,250	156,447	85	564	1,890	7,689	1,574	9,768
12	7/06-7/07	07/05	36	28	146	3	55	29,275	138,508	129	987	5,137	19,323	1,319	7,756
13	7/09-7/12	07/08	84	21	147	1	8	28,744	131,451	83	617	1,116	4,242	94	644
14	7/13-7/15	07/11	60	13	72	1	12	10,136	50,895	80	553	1,289	5,584	100	583
15	7/16-7/18	07/15	60	14	52	1	11	8,172	39,591	17	128	1,652	5,901	195	1,232
16	7/20-7/22	07/18	60	9	58	0	0	8,326	41,989	37	253	5,347	22,076	176	1,140
17	7/23-7/25	07/22	60	8	47	2	26	8,145	39,220	35	249	5,710	22,688	111	635
18	7/27-7/29	07/25	60	5	39	0	0	6,779	30,606	145	841	2,533	9,505	209	1,294
19	7/30-8/01	07/29	60	5	30	1	14	6,685	33,891	140	874	2,915	10,758	247	1,500
20	8/03-8/05	08/01	60	0	0	0	0	0	0	0	0	0	0	0	0
21	8/06-8/08	08/05	60	0	0	0	0	0	0	0	0	0	0	0	0
22	8/10-8/12	08/08	60	0	0	0	0	0	0	0	0	0	0	0	0
23	8/13-8/15	08/12	60	0	0	0	0	0	0	0	0	0	0	0	0

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		NR				Chinook		Sockeye		Coho		Pink		Chum	
Period	Date	Date	Hours	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
24	8/17-8/19	08/15	60	0	0	0	0	0	0	0	0	0	0	0	0
25	8/20-8/21	08/19	36	0	0	0	0	0	0	0	0	0	0	0	0
26	8/24-8/25	08/22	36	0	0	0	0	0	0	0	0	0	0	0	0
27	8/27-8/28	08/26	36	0	0	0	0	0	0	0	0	0	0	0	0
28	8/31-9/01	08/29	36	0	0	0	0	0	0	0	0	0	0	0	0
29	9/03-9/04	09/02	36	0	0	0	0	0	0	0	0	0	0	0	0
30	9/07-9/08	09/05	36	0	0	0	0	0	0	0	0	0	0	0	0
Total			1,476	30	1,779	61	918	265,447	1,349,271	839	5,641	29,070	114,052	21,696	138,054
Average Weight							15.05		5.08		6.72		3.92		6.36

Appendix C3.–Total commercial common property harvest by species in the Eshamy District, 2005–2015.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
			Drift Gillnet			
2005	15	79,227	1,636	110,499	3,493	194,870
2006	15	381,911	5,429	89,755	30,841	507,951
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
10-Year Average	55	602,646	2,330	96,102	178,745	879,877
2015	92	860,637	4,611	178,336	85,864	1,129,540
			Set Gillnet			
2005	0	109,532	882	126,135	3,452	240,001
2006	9	124,087	352	20,863	9,883	155,194
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
10-Year Average	24	209,741	300	29,200	33,610	272,875
2015	61	265,447	839	29,070	21,696	295,439
			Combined Gear			
2005	15	188,759	2,518	236,634	6,945	434,871
2006	24	505,998	5,781	110,618	40,724	663,145
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
10-Year Average	79	812,386	2,630	125,302	212,355	1,152,752
2015	153	1,126,084	5,450	207,406	107,560	1,424,979

Appendix C4.–Estimated age and sex composition of sockeye salmon harvested in the Eshamy District commercial gillnet fishery, 2015.

		Brood Year and Age Class			
		2011	2010		
		1.2	1.3	2.2	Total
Strata Combined:	5/25-9/8				
Sampling dates:	6/20-6/27				
Sample size:	525				
Female	Percentage of sample	21.6	21.0	0.0	42.6
	Number in harvest	242,954	236,338	0	479,292
Male	Percentage of sample	47.8	9.5	0.1	57.4
	Number in harvest	538,685	106,758	1,349	646,792
Total	Percentage of sample	69.4	30.5	0.1	100.0
	Number in harvest	781,639	343,096	1,349	1,126,084
	Standard error	23,355	23,335	1,349	

APPENDIX D: PURSE SEINE FISHERIES, PINK AND CHUM SALMON ESCAPEMENT

Appendix D1.–Prince William Sound commercial common property purse seine harvest by day, 2015.

			Chinook		Sockeye		Coho		Pink		Chum	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
05/25	4	4	4	38	0	0	0	0	0	0	709	4,845
05/26	1	1					Confidential					
05/29	1	2					Confidential					
06/01	2	2					Confidential					
06/02	1	1					Confidential					
06/03	4	4	0	0	1	4	0	0	6	30	1,871	19,944
06/04	1	1					Confidential					
06/05	4	4	0	0	0	0	0	0	14	39	1,027	6,730
06/06	6	6	0	0	84	508	0	0	0	0	5,016	34,389
06/07	8	8	0	0	163	695	0	0	43	138	4,421	26,926
06/08	18	27	0	0	697	3,531	15	123	222	700	13,687	86,302
06/09	3	3	2	43	108	527	0	0	102	348	1,898	11,281
06/10	4	4	0	0	317	1,777	0	0	84	314	1,912	13,299
06/11	20	28	1	12	1,134	5,730	0	0	162	538	9,550	60,311
06/12	13	13	3	47	801	3,924	1	7	325	955	6,039	39,432
06/13	5	5	0	0	673	2,723	0	0	115	408	3,077	15,402
06/14	10	10	1	6	256	1,291	0	0	195	648	3,142	20,966
06/15	10	10	37	224	422	1,847	3	17	230	719	2,191	15,252
06/16	23	23	8	134	822	4,490	27	139	494	1,698	6,219	44,250
06/17	12	13	1	6	564	2,889	1	5	95	329	3,776	24,216
06/18	19	19	0	0	768	4,307	2	14	112	403	5,071	35,467
06/19	20	21	38	236	2,500	12,239	90	463	228	833	7,920	49,892
06/20	19	20	5	68	2,825	15,989	225	1,482	337	1,152	7,145	50,818
06/21	5	5	12	72	1,329	7,663	50	302	108	363	3,310	23,395
06/22	98	103	57	892	19,117	98,326	1,690	9,875	129,022	444,510	19,532	136,195
06/23	19	19	16	96	2,546	11,375	94	476	461	1,847	3,704	23,215
06/24	13	17	18	265	2,965	14,590	310	1,914	505	1,527	4,912	31,190
06/25	124	135	41	437	31,424	166,541	1,467	8,715	166,218	592,500	12,382	84,164
06/26	14	15	1	12	3,203	18,070	42	277	349	1,211	2,735	19,141
06/27	15	16	5	87	5,374	25,990	272	1,338	873	2,967	4,877	29,694
06/28	28	34	9	123	17,406	97,669	483	2,877	1,908	6,750	8,870	65,127
06/29	116	118	40	507	18,534	89,054	869	5,488	139,244	520,271	16,147	111,776
06/30	17	17	0	0	3,865	22,994	39	290	1,418	4,811	2,670	18,640
07/01	33	33	0	0	9,279	48,342	194	1,121	5,876	21,712	7,798	51,717
07/02	20	21	3	40	2,540	13,573	6	41	1,862	6,693	1,488	10,236
07/03	43	48	3	51	4,524	23,646	130	824	7,159	25,477	5,764	36,877
07/04	24	29	0	0	2,422	13,293	165	1,128	4,916	18,845	2,562	18,543
07/05	5	5	0	0	3,239	17,537	135	852	6,355	20,823	2,635	18,438

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			Chinook		Sockeye		Coho		Pink		Chum	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
07/06	182	192	7	105	9,712	52,927	927	5,869	1,136,259	3,931,350	4,040	26,733
07/07	8	9	0	0	5,403	28,715	73	580	26,693	91,999	3,743	23,620
07/08	193	273	15	137	7,683	41,149	481	2,942	2,384,060	8,319,383	4,486	28,519
07/09	190	240	44	264	4,501	24,548	617	3,881	1,880,811	6,400,191	10,541	48,314
07/10	181	225	0	0	6,299	32,439	554	3,301	1,943,796	6,762,686	4,204	25,983
07/11	181	213	6	114	5,929	32,537	720	4,693	1,774,022	6,209,070	77,000	408,865
07/12	175	206	1	28	3,944	21,314	403	2,383	1,599,097	5,518,122	42,701	263,193
07/13	178	224	1	6	4,645	26,606	5,859	30,749	2,051,827	7,101,870	2,174	14,029
07/14	183	233	5	96	5,056	27,131	626	3,870	2,275,023	7,938,457	3,132	20,387
07/15	190	238	3	33	2,833	14,726	685	4,011	2,361,096	7,965,565	1,614	10,461
07/16	190	224	3	66	954	5,054	465	3,004	1,984,230	7,030,569	1,555	10,582
07/17	168	206	1	18	2,610	13,766	435	2,624	1,780,771	6,286,660	7,365	47,020
07/18	193	226	0	0	1,970	9,938	420	2,465	2,016,720	7,152,410	6,136	42,235
07/19	186	206	4	38	1,703	9,109	504	2,980	1,517,045	5,235,441	2,907	19,247
07/20	186	205	0	0	1,880	10,378	487	3,318	1,450,765	5,287,333	3,284	22,515
07/21	165	210	2	18	1,996	11,384	516	3,208	1,951,242	6,865,348	17,812	85,839
07/22	160	183	0	0	1,665	8,962	322	1,947	1,858,911	6,442,358	2,329	15,373
07/23	183	215	0	0	1,322	6,839	283	1,859	2,115,904	7,481,449	3,124	22,366
07/24	191	214	5	46	1,007	5,384	467	2,899	1,907,721	6,881,761	2,494	16,098
07/25	176	191	5	38	1,475	8,437	360	2,222	1,908,284	6,610,665	2,942	19,111
07/26	175	203	7	191	1,016	5,581	494	3,303	1,633,631	5,882,433	5,008	33,745
07/27	186	256	1	20	2,428	13,197	928	5,955	2,882,045	10,103,130	9,409	61,932
07/28	74	82	0	0	324	1,782	305	1,928	620,258	2,076,072	1,670	11,226
07/29	62	76	0	0	384	2,150	224	1,374	563,330	1,927,601	916	6,186
07/30	204	304	4	104	2,895	15,431	490	3,020	3,363,756	11,750,528	4,052	26,393
07/31	76	88	0	0	2,012	10,880	437	2,986	701,381	2,408,004	1,858	12,402
08/01	199	296	1	25	2,034	10,919	695	4,712	3,326,489	11,362,656	2,753	17,690
08/02	116	128	1	10	947	4,947	721	4,392	967,696	3,417,610	2,264	14,688
08/03	199	271	0	0	1,436	7,704	555	3,806	2,706,649	9,076,544	1,513	9,970
08/04	11	12	1	8	83	459	66	456	88,992	291,039	390	2,640
08/05	206	281	1	19	1,828	10,117	574	3,868	2,991,119	10,266,087	1,676	10,909
08/06	7	7	1	5	42	238	20	150	69,289	235,362	615	3,921
08/07	206	313	4	45	1,493	7,892	1,058	6,504	3,532,602	11,902,732	2,302	15,042
08/09	201	275	0	0	1,249	6,402	940	6,151	2,894,272	10,025,610	3,580	23,933
08/10	201	239	0	0	972	5,261	768	5,199	2,292,935	7,784,374	2,601	17,288
08/11	196	239	39	807	1,144	6,115	1,287	9,151	2,184,877	7,487,403	1,945	12,304
08/12	190	224	13	243	919	4,922	1,106	7,929	2,100,513	7,031,837	1,552	9,752
08/13	195	238	7	99	769	4,056	1,010	6,774	2,351,914	7,549,012	9,080	55,198

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			Chinook		Sockeye		Coho		Pink		Chum	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
08/14	177	207	7	129	566	3,212	619	4,427	1,972,235	6,147,781	480	3,119
08/15	171	192	0	0	1,068	5,659	1,065	6,891	1,883,530	5,843,645	1,786	11,674
08/16	141	162	0	0	501	2,786	971	6,782	1,546,985	4,737,307	1,907	12,826
08/17	127	149	0	0	981	5,269	1,441	9,356	1,462,809	4,508,723	2,874	17,504
08/18	127	144	0	0	445	2,292	1,226	9,171	1,430,031	4,345,860	6,436	47,747
08/19	126	147	2	20	423	2,292	885	6,059	1,483,887	4,677,871	1,619	11,949
08/20	111	124	0	0	594	3,171	1,057	6,894	1,345,610	4,118,369	2,000	13,629
08/21	107	116	0	0	613	3,364	2,445	18,677	1,157,284	3,553,122	1,325	9,508
08/22	98	116	0	0	586	3,191	699	5,203	1,242,414	3,800,115	452	3,128
08/23	92	105	0	0	289	1,469	336	2,473	1,042,780	3,179,914	395	2,862
08/24	73	86	1	22	109	608	309	2,006	971,707	2,955,479	205	1,364
08/25	63	69	0	0	185	986	271	2,048	739,001	2,270,056	114	677
08/26	57	61	0	0	247	1,221	235	1,568	637,397	1,994,839	110	596
08/27	32	34	0	0	103	587	167	1,175	248,238	770,139	5	29
08/28	17	19	0	0	23	138	12	79	208,585	628,323	0	0
08/29	6	7	0	0	0	0	47	329	67,162	262,998	15	92
Total	221	10,247	497	6,150	241,197	1,276,775	44,978	287,375	89,104,724	301,564,849	463,459	2,912,060
Average Weight				12.37		5.29		6.39		3.38		6.28

Appendix D2.–Area E commercial salmon harvest by species, excluding Copper River and Bering River districts, 1995–2015.

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	684	1,243,095	201,075	44,647,451	1,473,370	2,936,202
2015	882	1,637,486	74,452	97,240,651	2,496,726	101,450,197
10 Yr Avg	664	1,259,173	184,625	51,262,082	3,205,263	51,448,859

[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 D3.–Prince William Sound commercial common property pink salmon harvest for all gear types, by district, 1995–2015.

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	23,745,606	1,589,439	2,235,414	90,025,615
10 Yr Avg	16,689,278	7,818,860	4,999,802	52,046	122,456	13,192,948	740,378	750,330	44,366,097

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 fish harvests.

Appendix D4.–Prince William Sound commercial common property chum salmon harvest for all gear types, by district, 1995–2015.

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
10 Yr Avg	70,458	13,983	1,547,148	718	223,315	181,475	460,578	14,862	2,512,536

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 fish harvests.

Appendix D5.–Aerial escapement indices for pink and chum salmon by district, Prince William Sound, 2015.

Pink Salmon

District	Escapement midpoint	Odd-year escapement goal range	1977–2013 mean index	Observed escapement index [a]	Deviation from midpoint
Eastern	410,000	310,000 – 640,000	604,418	1,605,058	291.5%
Northern	130,000	90,000 – 180,000	180,408	779,600	499.7%
Coghill	130,000	60,000 – 250,000	204,905	801,201	516.3%
Northwestern	80,000	50,000 – 110,000	119,820	454,427	468.0%
Eshamy	9,000	4,000 – 11,000	7,624	70,068	678.5%
Southwestern	120,000	70,000 – 190,000	176,231	789,725	558.1%
Montague	210,000	140,000 – 280,000	294,632	649,144	209.1%
Southeastern	360,000	270,000 – 620,000	672,500	2,032,492	464.6%
Total	1,449,000		2,260,538	7,181,715	395.6%

Chum Salmon

District	Escapement range [b]	1976–2013 mean index	Observed escapement index [a]	Deviation from lower range
Eastern	50,000 and up	107,660	112,142	124.3%
Northern	20,000 and up	38,765	43,179	115.9%
Coghill	8,000 and up	19,288	15,444	93.1%
Northwestern	5,000 and up	14,381	7,321	46.4%
Eshamy [c]	None	79	0	NA
Southwestern [c]	None	3,170	1,923	NA
Montague [c]	None	5,154	18,769	NA
Southeastern	8,000 and up	33,044	52,031	550.4%
Total [d]	91,000 and up	213,138	230,117	152.9%

[a] 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.

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

[c] Escapement goal removed in 2003 after review.

[d] Totals exclude districts without escapement goals (Eshamy, Southwestern, and Montague districts).

Appendix D6.–Prince William Sound pink salmon escapement indices by district, 1995–2015.

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
				Even-year 10 year average					
	397,299	174,649	140,998	101,872	5,049	110,779	119,176	290,864	1,340,686
				Odd-year 10 year average					
	735,478	256,450	299,618	155,897	14,019	234,574	350,435	917,389	2,963,862

[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.

Appendix D7.–Prince William Sound chum salmon escapement indices by district, 1995–2015.

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[b]	112,142	43,179	15,444	7,321	52,031
10 year average	108,343	37,305	19,030	14,268	53,007

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.

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

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

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 1988–2012.

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
1988	1991	807,153	4,157	984	10,536	1,461	39,176	56,314	6.98%
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%

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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
1988	1991	2,397,419	71,947	36	4,708	6,469	13,990	97,150	4.05%
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%

[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, 2015.

			Origin							
			Gulkana		Main Bay		Hatchery	Wild		
Dates	Period	Hours	Number	Percent	Number	Percent	Total	Number	Percent	Total
05/14 - 05/14	1 [a]	12	0	0.0%	0	0.0%	0	17,768	100.0%	17,768
05/18 - 05/19	2 [a]	24	0	0.0%	0	0.0%	0	49,494	100.0%	49,494
05/21 - 05/22	3 [a]	24	0	0.0%	0	0.0%	0	63,852	100.0%	63,852
05/25 - 05/26	4 [a]	36	0	0.0%	0	0.0%	0	159,782	100.0%	159,782
05/28 - 05/29	5 [a]	24	0	0.0%	0	0.0%	0	133,376	100.0%	133,376
05/30 - 05/31	6 [a]	24	0	0.0%	0	0.0%	0	113,411	100.0%	113,411
06/01 - 06/02	7 [a]	36	0	0.0%	0	0.0%	0	143,664	100.0%	143,664
06/04 - 06/06	8 [a]	48	0	0.0%	0	0.0%	0	130,966	100.0%	130,966
06/08 - 06/09	9	36	0	0.0%	0	0.0%	0	82,324	100.0%	82,324
06/11 - 06/13	10	60	4,456	3.1%	5,941	4.2%	10,397	132,188	92.7%	142,585
06/15 - 06/17	11	48	1,942	2.1%	971	1.0%	2,914	90,319	96.9%	93,232
06/18 - 06/20	12	48	7,202	6.3%	12,003	10.4%	19,204	96,020	83.3%	115,224
06/22 - 06/23	13	36	11,281	15.6%	3,760	5.2%	15,041	57,155	79.2%	72,196
06/25 - 06/26	14	36	5,151	8.3%	6,439	10.4%	11,590	50,225	81.3%	61,815
06/29 - 06/30	15	24	6,628	15.6%	0	0.0%	6,628	35,792	84.4%	42,420
07/02 - 07/03	16	36	6,262	13.5%	0	0.0%	6,262	39,979	86.5%	46,241
07/06 - 07/07	17	36	7,233	25.0%	0	0.0%	7,233	21,700	75.0%	28,933
07/09 - 07/10	18	36	13,830	34.4%	419	1.0%	14,249	25,983	64.6%	40,232
07/13 - 07/14	19	36	12,191	37.5%	0	0.0%	12,191	20,318	62.5%	32,509
07/16 - 07/17	20	36	6,646	39.1%	0	0.0%	6,646	10,338	60.9%	16,984
07/20 - 07/21	21	36	11,241	33.3%	0	0.0%	11,241	22,482	66.7%	33,723
07/23 - 07/24	22	36	9,415	45.8%	214	1.0%	9,629	10,913	53.1%	20,542
07/27 - 07/28	23 [b]	36	11,065	36.2%	0	0.0%	11,065	19,481	63.8%	30,546
07/30 - 07/31	24 [b]	36	7,950	33.9%	0	0.0%	7,950	15,468	66.1%	23,418
08/03 - 08/04	25 [b]	36	5,348	30.9%	0	0.0%	5,348	11,954	69.1%	17,302
08/06 - 08/07	26 [b]	36	4,862	28.6%	0	0.0%	4,862	12,118	71.4%	16,981
08/10 - 08/11	27 [b]	36	2,473	25.6%	0	0.0%	2,473	7,188	74.4%	9,661
08/13 - 08/14	28 [b]	36	1,330	23.3%	0	0.0%	1,330	4,372	76.7%	5,702
08/17 - 08/18	29 [b]	24	422	20.7%	0	0.0%	422	1,621	79.3%	2,043
08/24 - 08/25	30 [b]	24	385	15.4%	0	0.0%	385	2,124	84.6%	2,509
08/31 - 09/01	31 [b]	24	55	10.0%	0	0.0%	55	490	90.0%	544
09/03 - 09/04	32 [b]	24	27	7.8%	0	0.0%	27	325	92.2%	352
09/07 - 09/08	33 [b]	24	17	4.7%	0	0.0%	17	340	95.3%	357
09/10 - 09/11	34 [b]	36	1	2.1%	0	0.0%	1	39	97.9%	40
09/14 - 09/16	35 [b]	48	0	0.0%	0	0.0%	0	32	0.0%	32
09/17 - 10/10	36-42 [c]	420	0	0.0%	0	0.0%	0	0	0.0%	0
Total		1,608	137,414	7.8%	29,747	1.7%	167,161	1,583,601	90.5%	1,750,762

Note: Total harvest data are from inseason reporting data as of 30 November 2015.

[a] No samples collected; proportions from period 9 used to estimate contributions.

[b] No samples collected; proportions are from regression analysis.

[c] No reported harvest.

Appendix E3.–Gulkana Hatchery sockeye salmon harvests and total contribution, 1978–2015.

	Hatchery Contributions				Total
Year	Commercial[a]	Subsistence/ Personal Use[b]	Sport[c]	Broodstock/ Escapement[d]	Hatchery Run
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	368	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	448	65,348	439,688
2013	318,212	45,800	503	72,369	436,788
2014	297,943	44,918	222	53,737	396,990
10-Year Average	207,783	34,864	342	71,559	314,507
2015	137,414	48,887	391	40,123	226,815

Note: Total commercial harvest data as of 21 April 2015. Personal use (homepack) harvests (12,072 fish) are excluded.

[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). In 2014, approximately 14,900 Gulkana Hatchery (GH) sockeye salmon were attributed to the Glennallen subsistence fishery and 31,100 GH sockeye salmon were attributed to the Chitina personal use fishery.

[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, 1974–2015.

	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
10-Year Average				5,818,199	5,261,133	8,983,051			20,062,382
2015				5,997,000	5,990,000	10,000,000			21,987,000

Appendix E5.–Sockeye salmon hatchery and wild stock contributions to the Coghill District commercial common property fishery by period, 2015.

Dates	Period	Hours	Origin					
			Main Bay		Hatchery	Wild		
			Number	Percent	Total	Number	Percent	Total
05/25 - 05/25	1	48 [a]	0	0.00%	0	5	100.00%	5
05/28 - 05/28	2	48 [a]	0	0.00%	0	21	100.00%	21
06/01 - 06/01	3	48 [b]	195	89.83%	195	22	10.17%	217
06/04 - 06/04	4	36 [b]	198	89.83%	198	22	10.17%	220
06/08 - 06/09	5	36 [b]	741	89.83%	741	84	10.17%	825
06/11 - 06/13	6	60	612	89.83%	612	69	10.17%	681
06/15 - 06/16	7	36	3,251	95.65%	3,251	148	4.35%	3,399
06/18 - 06/19	8	36	5,379	84.88%	5,379	958	15.12%	6,337
06/22 - 06/23	9	36	7,732	79.35%	7,732	2,013	20.65%	9,745
06/25 - 06/26	10	36	5,618	84.09%	5,618	1,063	15.91%	6,681
06/29 - 06/30	11	36	3,115	62.75%	3,115	1,850	37.25%	4,965
07/02 - 07/03	12	36	1,925	33.33%	1,925	3,850	66.67%	5,775
07/06 - 07/08	13	48	14,472	90.48%	14,472	1,523	9.52%	15,995
07/09 - 07/12	14	84	3,646	42.86%	3,646	4,861	57.14%	8,507
07/13 - 07/15	15	60	3,804	66.22%	3,804	1,941	33.78%	5,745
07/16 - 07/16	16	12 [c]	226	66.22%	226	116	33.78%	342
07/17 - 07/19	17	60 [a]	154	42.31%	154	210	57.69%	364
07/20 - 07/22	18	60	116	42.31%	116	158	57.69%	273
07/23 - 07/23	19	14	299	40.43%	299	440	59.57%	739
07/27 - 07/27	20	14	375	64.44%	375	207	35.56%	582
07/30 - 07/30	21	14	351	38.46%	351	562	61.54%	913
08/01 - 08/01	22	14	490	55.56%	490	392	44.44%	882
08/03 - 08/03	23	14 [d]	220	56.35%	220	170	43.65%	390
08/05 - 08/05	24	14	569	57.14%	569	426	42.86%	995
08/07 - 08/07	25	14 [c]	173	57.14%	173	129	42.86%	302
08/09 - 08/09	26	14 [c]	77	57.14%	77	58	42.86%	135
08/10 - 08/10	27	14 [c]	114	57.14%	114	85	42.86%	199
08/11 - 08/11	28	14 [c]	229	57.14%	229	172	42.86%	401
08/12 - 08/12	29	14 [c]	103	57.14%	103	77	42.86%	180
08/13 - 08/13	30	14 [c]	69	57.14%	69	51	42.86%	120
08/14 - 08/14	31	14 [c]	110	57.14%	110	82	42.86%	192

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Dates	Period	Hours	Origin					
			Main Bay		Hatchery	Wild		
			No.	Percent	Total	No.	Percent	Total
08/15 - 08/15	32	14 [a]	0	0.00%	0	63	100.00%	63
08/16 - 08/16	33	14 [e]	0	0.00%	0	4	100.00%	4
08/17 - 08/17	34	14 [a]	0	0.00%	0	36	100.00%	36
08/18 - 08/18	35	14 [a]	0	0.00%	0	35	100.00%	35
08/19 - 08/19	36	12 [a]	0	0.00%	0	17	100.00%	17
08/20 - 08/20	37	12 [a]	0	0.00%	0	59	100.00%	59
08/21 - 08/21	38	12 [a]	0	0.00%	0	18	100.00%	18
08/22 - 08/22	39	12 [a]	0	0.00%	0	24	100.00%	24
08/23 - 08/23	40	12 [a]	0	0.00%	0	13	100.00%	13
08/24 - 08/24	41	12 [a]	0	0.00%	0	26	100.00%	26
08/25 - 08/25	42	12 [a]	0	0.00%	0	12	100.00%	12
08/26 - 08/26	43	12 [a]	0	0.00%	0	34	100.00%	34
08/27 - 08/27	44	12 [a]	0	0.00%	0	1	100.00%	1
08/28 - 08/28	45	12 [e]	0	0.00%	0	0	100.00%	0
08/29 - 08/29	46	12 [a, f]	0	0.00%	0	0	100.00%	0
08/30 - 08/30	47	15 [e]	0	0.00%	0	0	100.00%	0
08/31 - 08/31	48	15 [a]	0	0.00%	0	5	100.00%	5
09/01 - 09/01	49	15 [a]	0	0.00%	0	11	100.00%	11
09/02 - 09/02	50	15 [a]	0	0.00%	0	15	100.00%	15
09/03 - 09/03	51	15 [a]	0	0.00%	0	12	100.00%	12
09/04 - 09/04	52	15 [e]	0	0.00%	0	0	100.00%	0
09/05 - 09/05	53	15 [a]	0	0.00%	0	3	100.00%	3
09/06 - 09/06	54	12 [e]	0	0.00%	0	0	0.00%	0
09/07 - 09/07	55	12 [a, f]	0	0.00%	0	4	100.00%	4
09/08 - 09/08	56	12 [a]	0	0.00%	0	1	100.00%	1
09/09 - 09/09	57	12 [a]	0	0.00%	0	6	100.00%	6
09/10 - 09/12	58	60 [a]	0	0.00%	0	10	100.00%	10
09/14 - 09/16	59	60 [e]	0	0.00%	0	0	100.00%	0
09/17 - 09/19	60	60 [e]	0	0.00%	0	0	100.00%	0
09/21 - 09/23	61	60 [e]	0	0.00%	0	0	100.00%	0

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Dates	Period	Hours	Origin					
			Main Bay		Hatchery	Wild		
			No.	Percent	Total	No.	Percent	Total
09/24 - 09/26	62	60 [e]	0	0.00%	0	0	100.00%	0
09/28 - 09/30	63	60 [e]	0	0.00%	0	0	100.00%	0
10/01 - 10/03	64	60 [e]	0	0.00%	0	0	100.00%	0
Total			54,361	71.0%	54,361	22,175	29.0%	76,536

Note: Total harvest data are from inseason reporting data as of 30 November 2015. Samples were not processed for $SrCl_2$ 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; all fish assigned to wild origin.

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

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

[d] No samples collected; proportions are the average of the adjacent sampled periods (closest prior and following periods).

[e] No harvest reported.

[f] Three permits or fewer were fished. Results are confidential.

Appendix E6.–Pink salmon hatchery and wild stock contributions to the Coghill District commercial common property fishery by period, 2015.

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
05/25	-	05/27	1	48 [a]	0	0.0%	0	0.00%	0	0.00%	0	0.00%	0	0	0.0%	0
05/28	-	05/30	2	48 [a]	0	0.0%	0	0.00%	0	0.00%	0	0.00%	0	0	0.0%	0
06/01	-	06/03	3	48 [a]	0	0.0%	0	0.00%	0	0.00%	0	0.00%	0	0	0.0%	0
06/04	-	06/05	4	36 [a]	0	0.0%	0	0.00%	0	0.00%	0	0.00%	0	0	0.0%	0
06/08	-	06/09	5	36 [b]	0	0.0%	0	0.00%	0	0.00%	0	0.00%	0	3	100.0%	3
06/11	-	06/13	6	60 [a]	0	0.0%	0	0.00%	0	0.00%	0	0.00%	0	0	0.0%	0
06/15	-	06/16	7	36 [b]	0	0.0%	0	0.00%	0	0.00%	0	0.00%	0	10	100.0%	10
06/18	-	06/19	8	36 [b]	0	0.0%	0	0.00%	0	0.00%	0	0.00%	0	36	100.0%	36
06/22	-	06/23	9	36 [b]	0	0.0%	0	0.00%	0	0.00%	0	0.00%	0	23	100.0%	23
06/25	-	06/26	10	36 [b]	0	0.0%	0	0.00%	0	0.00%	0	0.00%	0	80	100.0%	80
06/29	-	06/30	11	36 [c]	136	15.0%	0	0.00%	0	0.00%	0	0.00%	136	754	85.0%	890
07/02	-	07/03	12	36 [c]	768	15.0%	0	0.00%	0	0.00%	0	0.00%	768	4,267	85.0%	5,035
07/06	-	07/08	13	48	2,986	15.0%	0	0.00%	0	0.00%	0	0.00%	2,986	16,586	85.0%	19,572
07/09	-	07/12	14	84	3,961	19.0%	0	0.00%	0	0.00%	0	0.00%	3,961	17,162	81.0%	21,123
07/13	-	07/15	15	60	3,954	14.0%	0	0.00%	359	1.27%	0	0.00%	4,314	24,084	85.0%	28,398
07/16	-	07/16	16	12	0	0.0%	0	0.00%	752	12.50%	0	0.00%	752	5,263	88.0%	6,015
07/17	-	07/19	17	60 [d]	217	3.0%	0	0.00%	2,314	33.33%	72	1.04%	2,603	4,338	63.0%	6,941
07/20	-	07/22	18	60	16,187	6.0%	0	0.00%	140,290	54.17%	5,396	2.08%	161,873	97,124	38.0%	258,997
07/23	-	07/23	19	14	0	0.0%	0	0.00%	78,377	78.72%	0	0.00%	78,377	21,183	21.0%	99,560
07/27	-	07/27	20	14	14,266	2.0%	0	0.00%	492,167	74.19%	0	0.00%	506,433	156,923	24.0%	663,356
07/30	-	07/30	21	14	20,359	3.0%	13,573	2.08%	502,184	77.08%	6,786	1.04%	542,902	108,580	17.0%	651,482
08/01	-	08/01	22	14	0	0.0%	16,845	4.30%	336,907	86.02%	0	0.00%	353,752	37,902	10.0%	391,654
08/03	-	08/03	23	14	4,285	1.0%	4,285	1.04%	364,259	88.54%	0	0.00%	372,829	38,569	9.0%	411,398
08/05	-	08/05	24	14	0	0.0%	4,678	1.04%	392,984	87.50%	4,678	1.04%	402,340	46,784	10.0%	449,124
08/07	-	08/07	25	14	0	0.0%	5,326	1.37%	351,499	90.41%	0	0.00%	356,825	31,954	8.0%	388,779
08/09	-	08/09	26	14 [e]	0	0.0%	2,643	1.37%	174,436	90.41%	0	0.00%	177,079	15,858	8.0%	192,937
08/10	-	08/10	27	14 [e]	0	0.0%	3,250	1.37%	214,527	90.41%	0	0.00%	217,778	19,502	8.0%	237,280
08/11	-	08/11	28	14 [e]	0	0.0%	6,208	1.37%	409,705	90.41%	0	0.00%	415,913	37,246	8.0%	453,159
08/12	-	08/12	29	14 [d]	0	0.0%	5,437	1.75%	284,427	91.48%	4,961	1.60%	294,825	16,085	5.0%	310,910
08/13	-	08/13	30	14 [c]	0	0.0%	4,019	2.13%	174,813	92.55%	6,028	3.19%	184,859	4,019	2.0%	188,878
08/14	-	08/14	31	14 [c]	0	0.0%	4,144	2.13%	180,256	92.55%	6,216	3.19%	190,615	4,144	2.0%	194,759

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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
08/15	-	08/15	32	14	0	0.0%	3,818	2.13%	166,065	92.55%	5,726	3.19%	175,609	3,818	2.0%	179,427
08/16	-	08/16	33	14 [e]	0	0.0%	2,083	2.13%	90,632	92.55%	3,125	3.19%	95,841	2,083	2.0%	97,924
08/17	-	08/17	34	14 [d]	0	0.0%	5,597	4.36%	116,521	90.78%	3,459	2.69%	125,576	2,776	2.0%	128,352
08/18	-	08/18	35	14 [c]	0	0.0%	11,861	6.59%	160,120	89.01%	3,954	2.20%	175,934	3,954	2.0%	179,888
08/19	-	08/19	36	12	0	0.00	6,626	0.07	89,446	0.89	2,209	2.20%	98,280	2,209	2.0%	100,489
08/20	-	08/20	37	12 [e]	0	0.00	7,397	0.07	99,864	0.89	2,466	2.20%	109,727	2,466	2.0%	112,193
08/21	-	08/21	38	12 [c]	0	0.00	3,627	0.05	58,760	0.84	1,451	2.08%	63,839	5,804	8.0%	69,642
08/22	-	08/22	39	12	0	0.00	6,287	0.05	101,852	0.84	2,515	2.08%	110,654	10,059	8.0%	120,713
08/23	-	08/23	40	12 [d]	0	0.00	2,808	0.03	80,188	0.92	912	1.04%	83,908	3,648	4.0%	87,556
08/24	-	08/24	41	12	0	0.00	1,091	0.01	89,490	0.99	0	0.00%	90,581	0	0.0%	90,581
08/25	-	08/25	42	12 [e]	0	0.00	474	0.01	38,837	0.99	0	0.00%	39,311	0	0.0%	39,311
08/26	-	08/26	43	12 [e]	0	0.00	586	0.01	48,087	0.99	0	0.00%	48,673	0	0.0%	48,673
08/27	-	08/27	44	12 [e]	0	0.00	150	0.01	12,327	0.99	0	0.00%	12,477	0	0.0%	12,477
08/28	-	08/28	45	12 [e, g]	0	0.00	32	0.01	2,647	0.99	0	0.00%	2,679	0	0.0%	2,679
08/29	-	08/29	46	12 [f, g]	0	0.00	1	0.01	66	0.99	0	0.00%	67	0	0.0%	67
08/30	-	08/30	47	15 [f, g]	0	0.00	2	0.01	184	0.99	0	0.00%	186	0	0.0%	186
08/31	-	08/31	48	15 [f]	0	0.00	28	0.01	2,333	0.99	0	0.00%	2,361	0	0.0%	2,361
09/01	-	09/01	49	15 [f]	0	0.00	23	0.01	1,872	0.99	0	0.00%	1,895	0	0.0%	1,895
09/02	-	09/02	50	15 [f]	0	0.00	15	0.01	1,209	0.99	0	0.00%	1,224	0	0.0%	1,224
09/03	-	09/03	51	15 [f]	0	0.00	4	0.01	301	0.99	0	0.00%	305	0	0.0%	305
09/04	-	09/04	52	15 [f, g]	0	0.00	0	0.01	33	0.99	0	0.00%	33	0	0.0%	33
09/05	-	09/05	53	15 [f]	0	0.00	4	0.01	354	0.99	0	0.00%	358	0	0.0%	358
09/06	-	09/06	54	12 [a, g]	0	0.00	0	0.00	0	0.00	0	0.00%	0	0	0.0%	0
09/07	-	09/07	55	12 [f, g]	0	0.00	0	0.01	33	0.99	0	0.00%	33	0	0.0%	33
09/08	-	09/08	56	12 [f]	0	0.00	1	0.01	89	0.99	0	0.00%	90	0	0.0%	90
09/09	-	09/09	57	12 [a]	0	0.00	0	0.00	0	0.00	0	0.00%	0	0	0.0%	0
09/10	-	09/12	58	60 [f]	0	0.00	1	0.01	83	0.99	0	0.00%	84	0	0.0%	84
09/14	-	09/16	59	60 [a]	0	0.00	0	0.00	0	0.00	0	0.00%	0	0	0.0%	0
09/17	-	09/19	60	60 [a]	0	0.00	0	0.00	0	0.00	0	0.00%	0	0	0.0%	0
09/21	-	09/23	61	60 [a]	0	0.00	0	0.00	0	0.00	0	0.00%	0	0	0.0%	0
09/24	-	09/26	62	60 [a]	0	0.00	0	0.00	0	0.00	0	0.00%	0	0	0.0%	0

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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
09/28	-	09/30	63	60 [a]	0	0.00	0	0.00	0	0.00	0	0.00%	0	0	0.0%	0
10/01	-	10/03	64	60 [a]	0	0.00	0	0.00	0	0.00	0	0.00%	0	0	0.0%	0
Totals					67,118	1.1%	122,925	1.9%	5,261,647	84.1%	59,954	0.9%	5,511,644	745,296	11.9%	6,256,940

[a] No harvest reported.

[b] No samples collected; assumed wild origin.

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

[d] No samples collected; proportions are the average of the adjacent sampled periods (closest prior and following periods).

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

[f] No samples collected; assumed proportions from period 41 because all harvest in statistical areas 223-40, 223-47, and 223-48.

[g] Three permits or less were fished. Results are confidential.

Appendix E7.–Chum salmon hatchery and wild stock contributions to the Coghill District commercial common property harvest, 2015.

Dates			Period	Hours	Origin									
					Wally Noerenberg		Port Chalmers		Armin F Koernig		Hatchery	Wild		
					Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
05/25	-	05/27	1	48 [a]	30,384	96%	327	1%	0	0%	31,037	327	1%	31,364
05/28	-	05/30	2	48 [b]	18,123	97%	98	1%	0	0%	18,542	209	1%	18,751
06/01	-	06/03	3	48 [c]	27,014	97%	0	0%	0	0%	27,681	334	1%	28,015
06/04	-	06/05	4	36	51,604	98%	0	0%	0	0%	51,604	1,122	2%	52,726
06/08	-	06/09	5	36	90,580	90%	3,160	3%	2,107	2%	95,846	5,266	5%	101,112
06/11	-	06/13	6	60	39,803	95%	0	0%	2,187	5%	41,990	0	0%	41,990
06/15	-	06/16	7	36	26,388	97%	0	0%	433	2%	26,820	433	2%	27,253
06/18	-	06/19	8	36	14,423	95%	0	0%	164	1%	14,587	656	4%	15,243
06/22	-	06/23	9	36	15,945	97%	177	1%	0	0%	16,122	177	1%	16,299
06/25	-	06/26	10	36	39,473	93%	0	0%	0	0%	39,473	2,754	7%	42,227
06/29	-	06/30	11	36	16,291	94%	183	1%	549	3%	17,023	366	2%	17,389
07/02	-	07/03	12	36	78,801	98%	0	0%	895	1%	79,696	0	0%	79,696
07/06	-	07/08	13	48	143,435	92%	3,260	2%	0	0%	146,695	8,150	5%	154,845
07/09	-	07/12	14	84	224,567	98%	0	0%	0	0%	224,567	2,441	1%	227,008
07/13	-	07/15	15	60	14,632	69%	0	0%	0	0%	14,632	6,226	30%	20,858
07/16	-	07/16	16	12 [d]	2,633	69%	0	0%	0	0%	2,633	1,120	30%	3,753
07/17	-	07/19	17	60 [e]	2,240	91%	26	1%	26	1%	2,292	154	6%	2,446
07/20	-	07/22	18	60	7,227	91%	83	1%	83	1%	7,394	498	6%	7,892
07/23	-	07/23	19	14	874	50%	49	3%	0	0%	923	825	47%	1,748
07/27	-	07/27	20	14	482	69%	0	0%	0	0%	482	220	31%	702
07/30	-	07/30	21	14 [d]	1,145	69%	0	0%	0	0%	1,145	523	31%	1,668
08/01	-	08/01	22	14 [d]	491	69%	0	0%	0	0%	491	224	31%	715
08/03	-	08/03	23	14 [d]	246	69%	0	0%	0	0%	246	113	31%	359
08/05	-	08/05	24	14 [d]	2,031	69%	0	0%	0	0%	2,031	929	31%	2,960
08/07	-	08/07	25	14 [d]	127	69%	0	0%	0	0%	127	58	31%	185
08/09	-	08/09	26	14 [d]	86	69%	0	0%	0	0%	86	39	31%	125
08/10	-	08/10	27	14 [d]	115	69%	0	0%	0	0%	115	53	31%	168
08/11	-	08/11	28	14 [d]	140	69%	0	0%	0	0%	140	64	31%	204
08/12	-	08/12	29	14 [d]	52	69%	0	0%	0	0%	52	24	31%	76
08/13	-	08/13	30	14 [d]	64	69%	0	0%	0	0%	64	29	31%	93
08/14	-	08/14	31	14 [d]	723	69%	0	0%	0	0%	723	330	31%	1,053

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Dates			Period	Hours	Origin									
					Wally Noerenberg		Port Chalmers		Armin F Koernig		Hatchery	Wild		
					Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
08/15	-	08/15	32	14 [d]	39	69%	0	0%	0	0%	39	18	31%	57
08/16	-	08/16	33	14 [f]	0	0%	0	0%	0	0%	0	1	100%	1
08/17	-	08/17	34	14 [f]	0	0%	0	0%	0	0%	0	14	100%	14
08/18	-	08/18	35	14 [f]	0	0%	0	0%	0	0%	0	34	100%	34
08/19	-	08/19	36	12 [f]	0	0%	0	0%	0	0%	0	8	100%	8
08/20	-	08/20	37	12 [f]	0	0%	0	0%	0	0%	0	45	100%	45
08/21	-	08/21	38	12 [f]	0	0%	0	0%	0	0%	0	13	100%	13
08/22	-	08/22	39	12 [f]	0	0%	0	0%	0	0%	0	16	100%	16
08/23	-	08/23	40	12 [f]	0	0%	0	0%	0	0%	0	5	100%	5
08/24	-	08/24	41	12 [f]	0	0%	0	0%	0	0%	0	12	100%	12
08/25	-	08/25	42	12 [f]	0	0%	0	0%	0	0%	0	24	100%	24
08/26	-	08/26	43	12 [f]	0	0%	0	0%	0	0%	0	5	100%	5
08/27	-	08/27	44	12 [f]	0	0%	0	0%	0	0%	0	5	100%	5
08/28	-	08/28	45	12 [g,h]	0	0%	0	0%	0	0%	0	0	0%	0
08/29	-	08/29	46	12 [f, h]	0	0%	0	0%	0	0%	0	1	100%	1
08/30	-	08/30	47	15 [f, h]	0	0%	0	0%	0	0%	0	1	100%	1
08/31	-	08/31	48	15 [f]	0	0%	0	0%	0	0%	0	2	100%	2
09/01	-	09/01	49	15 [f]	0	0%	0	0%	0	0%	0	4	100%	4
09/02	-	09/02	50	15 [f]	0	0%	0	0%	0	0%	0	142	100%	142
09/03	-	09/03	51	15 [g]	0	0%	0	0%	0	0%	0	0	0%	0
09/04	-	09/04	52	15 [g,h]	0	0%	0	0%	0	0%	0	0	0%	0
09/05	-	09/05	53	15 [f]	0	0%	0	0%	0	0%	0	6	100%	6
09/06	-	09/06	54	12 [f, h]	0	0%	0	0%	0	0%	0	1	100%	1
09/07	-	09/07	55	12 [f, h]	0	0%	0	0%	0	0%	0	3	100%	3
09/08	-	09/08	56	12 [f]	0	0%	0	0%	0	0%	0	2	100%	2
09/09	-	09/09	57	12 [g,h]	0	0%	0	0%	0	0%	0	0	0%	0
09/10	-	09/12	58	60 [f]	0	0%	0	0%	0	0%	0	1	100%	1
09/14	-	09/16	59	60 [g]	0	0%	0	0%	0	0%	0	0	0%	0
09/17	-	09/19	60	60 [g]	0	0%	0	0%	0	0%	0	0	0%	0
09/21	-	09/23	61	60 [g]	0	0%	0	0%	0	0%	0	0	0%	0
09/24	-	09/26	62	60 [g]	0	0%	0	0%	0	0%	0	0	0%	0

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Dates			Period	Hours	Origin									
					Wally Noerenberg		Port Chalmers		Armin F Koernig		Hatchery	Wild		
					Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
09/28	-	09/30	63	60 [g]	0	0%	0	0%	0	0%	0	0	0%	0
10/01	-	10/03	64	60 [g]	0	0%	0	0%	0	0%	0	0	0%	0
Total					850,178	94.5%	7,362	0.8%	6,443	0.7%	865,297	34,028	3.8%	899,325

[a] WHN08 mark (1) in period 1 sample.

[b] No samples collected; proportions are the average of sample proportions from the prior and following periods.

[c] WHN08 marks (2) in period 3 sample.

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

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

[f] No samples collected; Harvest assigned to wild origin.

[g] No harvest reported.

[h] Three permits or less were fished. Results are confidential.

Appendix E8.–Daily chum and coho salmon sales and sex ratios, sales summary, and broodstock summary at the Wally Noerenberg Hatchery, 2015.

	Chum Salmon					Coho Salmon	
Date	% Female	Sales Harvest[a]	Sales Harvest cumulative	Brood Stock[b]	Brood Stock cumulative	Sales Harvest	Sales Harvest cumulative
05/31	26.0%	24,394	24,394	0	0	ND	ND
06/01	23.0%	26,218	50,612	0	0	ND	ND
06/02	20.0%	9,913	60,525	0	0	ND	ND
06/03	32.0%	7,539	68,064	0	0	ND	ND
06/04	27.0%	17,804	85,868	0	0	ND	ND
06/05	29.0%	31,368	117,236	0	0	ND	ND
06/06	32.0%	35,578	152,814	0	0	ND	ND
06/07	36.0%	41,485	194,299	0	0	ND	ND
06/08	39.0%	27,988	222,287	0	0	ND	ND
06/09	41.0%	18,169	240,456	0	0	ND	ND
06/10	42.0%	22,313	262,769	0	0	ND	ND
06/11	44.0%	43,729	306,498	0	0	ND	ND
06/12	51.0%	42,834	349,332	0	0	ND	ND
06/13	51.0%	45,832	395,164	0	0	ND	ND
06/14	52.0%	42,422	437,586	0	0	ND	ND
06/15	49.0%	31,949	469,535	0	0	ND	ND
06/16	53.0%	69,787	539,322	0	0	ND	ND
06/17	55.0%	19,527	558,849	0	0	ND	ND
06/29		0	558,849	11,455	11,455	ND	ND
06/30		26,501	585,350	17,261	28,716	ND	ND
07/01		1,136	586,486	15,690	44,406	ND	ND
07/02		948	587,434	19,806	64,212	ND	ND
07/03		1,081	588,515	20,375	84,587	ND	ND
07/04		56,060	644,575	20,590	105,177	ND	ND
07/05		34,541	679,116	24,627	129,804	ND	ND
07/06		1,079	680,195	23,237	153,041	ND	ND
07/07		1,088	681,283	17,882	170,923	ND	ND
07/08		7,886	689,169	8,931	179,854	ND	ND
07/09		26,494	715,663	38	179,892	ND	ND
07/10		0	715,663	0	179,892	ND	ND
07/11		18,877	734,540	0	179,892	ND	ND
07/12		24,084	758,624	608	180,500	ND	ND
07/13		13,540	772,164	269	180,769	ND	ND
07/14		9,838	782,002	0	180,769	ND	ND
07/15		23,244	805,246	0	180,769	ND	ND
07/16		18,523	823,769	0	180,769	ND	ND
07/17		12,400	836,169	307	181,076	ND	ND
07/19		3,975	840,144	0	181,076	ND	ND

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Hatchery escapement summary[c]	Chum Salmon	Coho Salmon
Purse seine whole fish harvest	673,209	0
Raceway harvest[d]	166,935	0
Viable broodstock (spawned, eggs in incubators)	175,192	1,272
Unviable broodstock (green/over-ripe/bad)	1,623	8
Unspawned fish (e.g.,excess males/females)	9	255
Holding mortalities (raceway, pen mortalities)	4,252	1,549
Estimated unharvested return[e]	15,000	0
Estimated total run to hatchery site	1,036,220	3,084

Sales Summary	Chum Salmon	Coho Salmon
Purse seine whole fish sales	673,209	0
Raceway sales[f]	166,935	0
Carcass sales[g]	139,213	0
Total sales	979,357	0

[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 report.

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

[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 E9.–Sockeye salmon hatchery and wild stock contributions to the Eshamy District commercial common property fishery by period, 2015.

Dates	Period	Hours	Main Bay		Hatchery	Wild		Total
			Number	Percent	Total	Number	Percent	
05/28 – 05/30	1 [a]	60	107	99.0%	107	1	1.0%	108
06/01 – 06/03	2 [a]	48	395	99.0%	395	4	1.0%	399
06/04 – 06/06	3 [a]	60	1313	99.0%	1,313	14	1.0%	1,327
06/08 – 06/10	4	48	6644	99.0%	6,644	71	1.0%	6,715
06/11 – 06/13	5	60	30290	94.0%	30,290	1923	6.0%	32,213
06/15 – 06/17	6	48	57046	99.0%	57,046	656	1.0%	57,702
06/18 – 06/19	7	24	38633	99.0%	38,633	477	1.0%	39,110
06/22 – 06/23	8	24	56318	93.0%	56,318	4430	7.0%	60,748
06/25 – 06/26	9	36	124891	100.0%	124,891	0	0.0%	124,891
06/29 – 06/30	10	36	186620	96.0%	186,620	8387	4.0%	195,007
07/02 – 07/03	11	36	128880	95.0%	128,880	7407	5.0%	136,287
07/06 – 07/07	12	36	109212	97.0%	109,212	3640	3.0%	112,852
07/09 – 07/12	13	84	90182	94.0%	90,182	5636	6.0%	95,818
07/13 – 07/15	14	60	80198	91.0%	80,198	8225	9.0%	88,423
07/16 – 07/18	15	60	55437	98.0%	55,437	1246	2.0%	56,683
07/20 – 07/22	16 [b]	60	54608	95.0%	54,608	2625	5.0%	57,233
07/23 – 07/25	17	60	29404	93.0%	29,404	2205	7.0%	31,609
07/27 – 07/29	18	60	16319	94.0%	16,319	1020	6.0%	17,339
07/30 – 08/01	19	60	10270	96.0%	10,270	434	4.0%	10,704
08/03 – 08/05	20 [c]	60	0	0.0%	0	0	0.0%	0
08/06 – 08/08	21 [d]	60	566	96.0%	566	24	4.0%	590
08/10 – 08/13	22 [d]	84	342	96.0%	342	14	4.0%	356
08/13 – 08/15	23 [d]	60	94	96.0%	94	4	4.0%	98
08/17 – 08/19	24 [c]	60	0	0.0%	0	0	0.0%	0
08/20 – 08/21	25 [c]	36	0	0.0%	0	0	0.0%	0
08/24 – 08/25	26 [c]	36	0	0.0%	0	0	0.0%	0
08/27 – 08/28	27 [c]	36	0	0.0%	0	0	0.0%	0
08/31 – 09/01	28 [c]	36	0	0.0%	0	0	0.0%	0
09/03 – 09/04	29 [c]	36	0	0.0%	0	0	0.0%	0
09/07 – 09/08	30 [c]	36	0	0.0%	0	0	0.0%	0
Total			1,077,768	95.7%	1,077,768	48,444	4.3%	1,126,212

Note: Samples were not processed for $SrCl_2$ 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 from the following sampled period.

[b] No samples collected; proportions are the average of the adjacent sampled periods (closest prior and following periods).

[c] No harvest reported.

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

Appendix E10.–Pink salmon hatchery and wild stock contributions to the Eshamy District commercial common property fishery by period, 2015.

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
05/28 - 05/30	1	60 [a]	0	0.0%	0	0	0	0.0%	0	0.0%	0	0	0.0%	0
06/01 - 06/03	2	48 [a]	0	0.0%	0	0	0	0.0%	0	0.0%	0	0	0.0%	0
06/04 - 06/06	3	60 [a]	0	0.0%	0	0	0	0.0%	0	0.0%	0	0	0.0%	0
06/08 - 06/10	4	48 [b]	0	0.0%	0	0	0	0.0%	0	0.0%	0	1	100.0%	1
06/11 - 06/13	5	60 [a]	0	0.0%	0	0	0	0.0%	0	0.0%	0	12	100.0%	12
06/15 - 06/17	6	48 [b]	0	0.0%	0	0	0	0.0%	0	0.0%	0	41	100.0%	41
06/18 - 06/19	7	24 [b]	0	0.0%	0	0	0	0.0%	0	0.0%	0	43	100.0%	43
06/22 - 06/23	8	24 [b]	0	0.0%	0	0	0	0.0%	0	0.0%	0	86	100.0%	86
06/25 - 06/26	9	36 [c]	0	0.0%	0	0	0	0.0%	0	0.0%	0	852	100.0%	852
06/29 - 06/30	10	36 [c]	0	0.0%	0	0	0	0.0%	0	0.0%	0	6,895	100.0%	6,895
07/02 - 07/03	11	36	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	8,227	100.0%	8,227
07/06 - 07/07	12	36	5,392	23.0%	0	0.0%	0	0.0%	0	0.0%	5,392	18,138	77.0%	23,530
07/09 - 07/12	13	84	1,003	15.0%	0	0.0%	0	0.0%	0	0.0%	1,003	5,819	85.0%	6,822
07/13 - 07/15	14	60	971	8.0%	0	0.0%	0	0.0%	971	8.0%	1,941	9,707	83.0%	11,648
07/16 - 07/18	15	60	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	24,817	100.0%	24,817
07/20 - 07/22	16	60 [d]	463	1.0%	0	0.0%	3,240	7.0%	231	1.0%	3,934	40,496	91.0%	44,430
07/23 - 07/25	17	60	833	2.0%	0	0.0%	5,831	15.0%	417	1.0%	7,081	32,906	82.0%	39,987
07/27 - 07/29	18	60	0	0.0%	0	0.0%	2,583	26.0%	723	7.0%	3,306	6,611	67.0%	9,917
07/30 - 08/01	19	60	504	6.0%	0	0.0%	2,518	29.0%	1,007	12.0%	4,029	4,532	53.0%	8,561
08/03 - 08/05	20	60 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/06 - 08/08	21	60 [e]	585	6.0%	0	0.0%	2,923	29.0%	1,169	12.0%	4,676	5,261	53.0%	9,937
08/10 - 08/13	22	84 [e]	490	6.0%	0	0.0%	2,449	29.0%	980	12.0%	3,918	4,408	53.0%	8,326
08/13 - 08/15	23	60 [e]	193	6.0%	0	0.0%	963	29.0%	385	12.0%	1,541	1,733	53.0%	3,274
08/17 - 08/19	24	60 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/20 - 08/21	25	36 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/24 - 08/25	26	36 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/27 - 08/28	27	36 [a]	0	0.0%	0	0	0	0.0%	0	0.0%	0	0	0.0%	0
08/31 - 09/01	28	36 [a]	0	0.0%	0	0	0	0.0%	0	0.0%	0	0	0.0%	0

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Appendix E10.–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
09/03	-	09/04	29	36 [a]	0	0.0%	0	0	0	0.0%	0	0.0%	0	0	0.0%	0
09/07	-	09/08	30	36 [a]	0	0.0%	0	0	0	0.0%	0	0.0%	0	0	0.0%	0
Total					10,433	5.0%	0		20,506	9.9%	5,883	2.8%	36,821	170,585	82.2%	207,406

[a] No harvest reported.

[b] No samples collected; assumed wild based on timing.

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

[d] No samples collected; proportions are the average of the adjacent sampled periods (closest prior and following periods).

[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, 2015.

Dates	Period	Hours	Hatchery Marks[a]						Hatchery	Wild		
			Wally Noerenberg		Port Chalmers		Armin F Koernig					
			Number	Percent	Number	Percent	Number	Percent	Total	Number	Percent	Total
05/28 – 05/30	1	60 [a]	416	61.0%	48	6.0%	176	25.0%	639	48	7.0%	687
06/01 – 06/03	2	48 [a]	397	61.0%	45	6.0%	168	25.0%	611	46	7.0%	657
06/04 – 06/06	3	60 [a]	1,719	61.0%	198	6.0%	727	25.0%	2,644	198	7.0%	2,842
06/08 – 06/10	4	48 [b]	2,643	57.0%	490	10.0%	1,077	23.0%	4,308	392	8.0%	4,700
06/11 – 06/13	5	60	10,877	61.0%	1,254	6.0%	4,602	25.0%	16,735	1,255	7.0%	17,990
06/15 – 06/17	6	48	2,257	25.0%	188	2.0%	6,018	67.0%	8,463	564	6.0%	9,027
06/18 – 06/19	7	24	4,245	59.0%	188	2.0%	2,169	30.0%	6,603	566	8.0%	7,169
06/22 – 06/23	8	24	3,129	38.0%	626	8.0%	2,504	31.0%	6,258	2,086	25.0%	8,344
06/25 – 06/26	9	36	3,994	23.0%	222	1.0%	8,655	51.0%	12,871	3,994	24.0%	16,865
06/29 – 06/30	10	36	7,636	40.0%	848	4.0%	9,121	47.0%	17,605	1,697	9.0%	19,302
07/02 – 07/03	11	36	4,217	44.0%	422	4.0%	3,937	40.0%	8,576	984	10.0%	9,560
07/06 – 07/07	12	36	1,566	24.0%	196	3.0%	3,327	51.0%	5,087	1,370	21.0%	6,457
07/09 – 07/12	13	84 [c]	130	24.0%	16	3.0%	277	51.0%	424	114	21.0%	538
07/13 – 07/15	14	60 [c]	96	24.0%	12	3.0%	203	51.0%	310	83	21.0%	393
07/16 – 07/18	15	60 [c]	332	24.0%	41	3.0%	704	51.0%	1,077	290	21.0%	1,367
07/20 – 07/22	16	60 [c]	182	24.0%	23	3.0%	387	51.0%	591	159	21.0%	750
07/23 – 07/25	17	60 [c]	60	24.0%	8	3.0%	129	51.0%	197	53	21.0%	250
07/27 – 07/29	18	60 [c]	60	24.0%	8	3.0%	129	51.0%	196	53	21.0%	249
07/30 – 08/01	19	60 [c]	64	24.0%	8	3.0%	136	51.0%	207	56	21.0%	263
08/03 – 08/05	20	60 [d]	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/06 – 08/08	21	60 [e]	0	0.0%	0	0.0%	0	0.0%	0	56	100.0%	56
08/10 – 08/13	22	84 [e]	0	0.0%	0	0.0%	0	0.0%	0	65	100.0%	65
08/13 – 08/15	23	60 [e]	0	0.0%	0	0.0%	0	0.0%	0	29	100.0%	29
08/17 – 08/19	24	60 [d]	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/20 – 08/21	25	36 [d]	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/24 – 08/25	26	36 [d]	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0

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Dates	Period	Hours	Hatchery Marks[a]							Wild		
			Wally Noerenberg		Port Chalmers		Armin F Koernig		Hatchery			
			Number	Percent	Number	Percent	Number	Percent	Total	Number	Percent	Total
08/27 – 08/28	27	36 [d]	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/31 – 09/01	28	36 [d]	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/03 – 09/04	29	36 [d]	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/07 – 09/08	30	36 [d]	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Total			44,020	40.9%	4,842	4.5%	44,443	41.3%	93,402	14,158	13.2%	107,560

[a] Proportions from period 5 samples.

[b] WNH08 mark (1) in period 4 samples.

[c] Proportions from period 12 samples.

[d] No harvest reported.

[e] No samples; assigned to wild origin.

Appendix E12.–Daily salmon sales and sex ratios, sales summary, and broodstock summary at the Main Bay Hatchery, 2015.

	Sockeye Salmon				
Date	% Female	Sales Harvest[a]	Sales Harvest cumulative	Broodtock[b]	Broodstock cumulative
06/21	67.5%	24,615	24,615	0	0
06/22		0	24,615	0	0
06/23	46.0%	10,057	34,672	0	0
06/24	50.0%	14,843	49,515	0	0
06/25	46.0%	13,590	63,105	0	0
06/26	67.0%	5,572	68,677	0	0
06/27	76.0%	1,978	70,655	0	0
06/28	76.0%	6,920	77,575	0	0
06/29	74.0%	25,719	103,294	0	0
06/30	75.0%	21,045	124,339	0	0
07/01		17,163	141,502	0	0
07/02		11,273	152,775	0	0
07/03		6,303	159,078	0	0
07/04		9,622	168,700	347	347
07/05		11,816	180,516	684	1,031
07/06		0	180,516	1,145	2,176
07/07		0	180,516	1,070	3,246
07/08		0	180,516	509	3,755
07/09		0	180,516	767	4,522
07/10		0	180,516	77	4,599
07/11		0	180,516	0	4,599
07/12		0	180,516	0	4,599
07/13		0	180,516	0	4,599
07/14		0	180,516	0	4,599
07/15		0	180,516	0	4,599
07/16		0	180,516	0	4,599
07/17		0	180,516	0	4,599
07/18		0	180,516	0	4,599
07/19		0	180,516	0	4,599
07/20		0	180,516	0	4,599
07/21		0	180,516	0	4,599
07/22		0	180,516	14	4,613
07/23		0	180,516	0	4,613
07/24		0	180,516	0	4,613
07/25		0	180,516	0	4,613
07/26		0	180,516	0	4,613
07/27		0	180,516	0	4,613
07/28		0	180,516	6	4,619
07/29		0	180,516	0	4,619
07/30		0	180,516	13	4,632
07/31		0	180,516	235	4,867
08/01		0	180,516	3	4,870
08/02		0	180,516	471	5,341

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	Sockeye Salmon				
Date	% Female	Sales Harvest[a]	Sales Harvest cumulative	Broodstock[b]	Broodstock cumulative
08/03		0	180,516	49	5,390
08/04		0	180,516	230	5,620
08/05		0	180,516	27	5,647
08/06		0	180,516	466	6,113
08/07		0	180,516	40	6,153
08/08		0	180,516	670	6,823
08/09		0	180,516	31	6,854
08/10		0	180,516	900	7,754
08/11		0	180,516	6	7,760
08/12		0	180,516	883	8,643
08/13		0	180,516	13	8,656
08/14		0	180,516	665	9,321
08/15		0	180,516	26	9,347
08/16		0	180,516	879	10,226
08/17		0	180,516	27	10,253
08/18		0	180,516	890	11,143
08/19		0	180,516	30	11,173
08/20		0	180,516	907	12,080
08/21		0	180,516	68	12,148
08/22		0	180,516	699	12,847
08/23		0	180,516	2,403	15,250

Hatchery escapement summary[c]	Sockeye salmon
Purse seine whole fish harvest	180,516
Raceway harvest[d]	0
Viable broodstock (spawned, eggs in incubators)	7,431
Unviable broodstock (green/over-ripe/bad)	283
Unspawned fish (e.g., excess males/females)	7,117
Holding mortalities (raceway, pen mortalities)	419
Estimated unharvested return[e]	16,005
Estimated total run to hatchery site	211,771

Sales Summary	
Purse seine whole fish sales	180,516
Raceway sales[f]	0
Carcass sales[g]	0
Total sales	180,516

[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 egg-take log, and annual report.

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

[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, 1990–2015.

	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
10-Year Average	903,419	997	4,478	43,054	99,257	1,050,300
2015	1,331,675	2,332	4,817	31,255	180,516	1,550,595

[a] Commercial harvest estimates are from otolith marks. Sport and subsistence/homepack 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, 1983–2015.

		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		
10-Year Average		9,701,893			9,701,893		
2015	2017, 2018	10,730,000			10,730,000		

[a] Total does 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, 2015.

					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
06/22	- 06/22	01	12		3,520	10.5%	0	0.0%	0	0.0%	0	0.00	3,520	30,120	0.90	33,640
06/25	- 06/25	02	12		7,363	19.7%	0	0.0%	0	0.0%	0	0.00	7,363	30,066	0.80	37,429
06/29	- 06/29	03	12		27,514	20.8%	0	0.0%	0	0.0%	0	0.00	27,514	104,552	0.79	132,066
07/06	- 07/06	04	14		896,189	80.2%	0	0.0%	0	0.0%	0	0.00	896,189	221,138	0.20	1,117,327
07/08	- 07/08	05	14	[a]	1,951,320	83.9%	0	0.0%	0	0.0%	0	0.00	1,951,320	375,720	0.16	2,327,040
07/09	- 07/09	06	14		1,639,854	87.5%	0	0.0%	0	0.0%	0	0.00	1,639,854	234,265	0.13	1,874,119
07/10	- 07/10	07	14	[a]	1,143,776	91.1%	0	0.0%	0	0.0%	0	0.00	1,143,776	111,487	0.09	1,255,263
07/11	- 07/11	08	14		1,345,590	94.7%	0	0.0%	0	0.0%	0	0.00	1,345,590	74,755	0.05	1,420,345
07/12	- 07/12	09	14	[b]	1,284,795	94.7%	0	0.0%	0	0.0%	0	0.00	1,284,795	71,378	0.05	1,356,173
07/13	- 07/13	10	14	[c]	1,671,678	88.5%	0	0.0%	0	0.0%	0	0.00	1,671,678	216,335	0.11	1,888,013
07/14	- 07/14	11	14		1,779,069	88.5%	0	0.0%	0	0.0%	0	0.00	1,779,069	230,232	0.11	2,009,301
07/15	- 07/15	12	14	[b]	2,060,611	88.5%	0	0.0%	0	0.0%	0	0.00	2,060,611	266,667	0.11	2,327,278
07/16	- 07/16	13	14	[c]	1,232,890	80.2%	0	0.0%	0	0.0%	0	0.00	1,232,890	304,220	0.20	1,537,110
07/17	- 07/17	14	14		1,307,032	80.2%	0	0.0%	0	0.0%	0	0.00	1,307,032	322,515	0.20	1,629,547
07/18	- 07/18	15	14	[b]	1,240,153	80.2%	0	0.0%	0	0.0%	0	0.00	1,240,153	306,012	0.20	1,546,165
07/19	- 07/19	16	14	[c]	713,356	77.1%	0	0.0%	0	0.0%	0	0.00	713,356	212,079	0.23	925,435
07/20	- 07/20	17	14		834,149	77.1%	0	0.0%	0	0.0%	0	0.00	834,149	247,990	0.23	1,082,139
07/21	- 07/21	18	14	[b]	1,286,310	77.1%	0	0.0%	0	0.0%	0	0.00	1,286,310	382,417	0.23	1,668,727
07/22	- 07/22	19	14	[c]	1,021,254	60.4%	0	0.0%	70,431	4.2%	0	0.00	1,091,685	598,666	0.35	1,690,351
07/23	- 07/23	20	14		1,080,651	60.4%	0	0.0%	74,528	4.2%	0	0.00	1,155,178	633,485	0.35	1,788,663
07/24	- 07/24	21	14	[b]	1,223,713	60.4%	0	0.0%	84,394	4.2%	0	0.00	1,308,107	717,349	0.35	2,025,456
07/25	- 07/25	22	14	[c]	830,696	51.0%	0	0.0%	16,953	1.0%	0	0.00	847,649	779,837	0.48	1,627,486
07/26	- 07/26	23	14		707,037	51.0%	0	0.0%	14,429	1.0%	0	0.00	721,466	663,749	0.48	1,385,215
07/27	- 07/27	24	14	[b]	564,092	51.0%	0	0.0%	11,512	1.0%	0	0.00	575,604	529,556	0.48	1,105,160
07/28	- 07/28	25	14	[d]	293,976	47.4%	9,692	1.6%	12,922	2.1%	0	0.00	316,590	303,668	0.49	620,258
07/29	- 07/29	26	14	[c]	246,457	43.8%	17,604	3.1%	17,604	3.1%	0	0.00	281,665	281,665	0.50	563,330
07/30	- 07/30	27	14		388,583	43.8%	27,756	3.1%	27,756	3.1%	0	0.00	444,095	444,095	0.50	888,189
07/31	- 07/31	28	14	[a]	236,386	33.7%	22,272	3.2%	29,813	4.3%	0	0.00	288,471	412,910	0.59	701,381

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				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
08/01 - 08/01		29	14	233,799	23.7%	31,882	3.2%	53,136	5.4%	0	0.00	318,816	669,515	0.68	988,331
08/02 - 08/02		30	14 [a]	237,946	28.0%	36,607	4.3%	64,062	7.5%	0	0.00	338,616	512,499	0.60	851,115
08/03 - 08/03		31	14	159,016	32.3%	26,503	5.4%	47,705	9.7%	0	0.00	233,223	259,726	0.53	492,949
08/04 - 08/04		32	14 [b]	28,707	32.3%	4,785	5.4%	8,612	9.7%	0	0.00	42,104	46,888	0.53	88,992
08/05 - 08/05		33	14 [e]	124,837	29.1%	31,587	7.4%	25,183	5.9%	6,692	0.02	188,299	239,960	0.56	428,259
08/06 - 08/06		34	14 [c]	18,044	26.0%	6,496	9.4%	1,444	2.1%	2,165	0.03	28,149	41,140	0.59	69,289
08/07 - 08/07		35	14	147,592	26.0%	53,133	9.4%	11,807	2.1%	17,711	0.03	230,244	336,511	0.59	566,755
08/09 - 08/09		36	14	84,599	18.8%	42,300	9.4%	9,400	2.1%	4,700	0.01	140,999	310,198	0.69	451,197
08/10 - 08/10		37	14	0	0.0%	0	0.0%	6,802	2.8%	0	0.00	6,802	238,065	0.97	244,867
08/11 - 08/11		38	14 [a]	4,763	3.2%	9,526	6.3%	6,064	4.0%	0	0.00	20,353	130,479	0.87	150,832
08/12 - 08/12		39	14	15,638	6.3%	31,276	12.6%	13,032	5.3%	0	0.00	59,946	187,655	0.76	247,601
08/13 - 08/13		40	14 [b]	11,829	6.3%	23,659	12.6%	9,858	5.3%	0	0.00	45,346	141,953	0.76	187,299
08/14 - 08/14		41	14 [c]	0	0.0%	0	0.0%	4,214	2.6%	4,214	0.03	8,429	155,930	0.95	164,359
08/15 - 08/15		42	14	0	0.0%	0	0.0%	5,353	2.6%	5,353	0.03	10,707	198,077	0.95	208,784
08/16 - 08/16		43	14 [a]	0	0.0%	0	0.0%	2,496	1.3%	2,496	0.01	4,992	189,685	0.97	194,677
08/17 - 08/17		44	14	0	0.0%	0	0.0%	0	0.0%	0	0.00	0	109,687	1.00	109,687
08/18 - 08/18		45	14 [a]	0	0.0%	0	0.0%	0	0.0%	0	0.00	0	84,582	1.00	84,582
08/19 - 08/19		46	12	0	0.0%	0	0.0%	0	0.0%	0	0.00	0	61,504	1.00	61,504
08/20 - 08/20		47	12 [b]	0	0.0%	0	0.0%	0	0.0%	0	0.00	0	81,956	1.00	81,956
08/21 - 08/21		48	12 [c]	3,894	6.3%	3,894	6.3%	0	0.0%	0	0.00	7,787	54,511	0.88	62,298
08/22 - 08/22		49	12	2,955	6.3%	2,955	6.3%	0	0.0%	0	0.00	5,910	41,373	0.88	47,283
08/23 - 08/23		50	12 [b]	1,976	6.3%	1,976	6.3%	0	0.0%	0	0.00	3,952	27,662	0.88	31,614
08/24 - 08/24		51	12 [b]	1,011	6.3%	1,011	6.3%	0	0.0%	0	0.00	2,022	14,157	0.88	16,179
08/25 - 09/19		52-71	[f]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Total				28,094,622	66.3%	384,912	0.9%	629,511	1.5%	43,332	0.1%	29,152,377	13,240,638	31.2%	42,345,222

[a] No samples collected; proportions are the average of sample proportions from the prior and following periods.

[b] No samples collected; proportions are from the prior period samples.

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

[d] No samples collected; proportions are the average of sample proportions from periods 24 and 27.

[e] No samples collected; proportions are the average of sample proportions from periods 31 and 35.

[f] No reported harvest.

Appendix E16.–Chum salmon hatchery and wild stock contributions to commercial common property fisheries by period and mark identification, Montague District, 2015.

Dates		Period	Hours	Origin									
				Port Chalmers		Wally Noerenberg		Armin F Koernig		Hatchery	Wild		
				Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
05/25	05/27	1	60 [a]	[a]	0.0%	[a]	0.0%	[a]	0.0%	[a]	[a]	0.0%	[a]
05/28	05/31	2	84 [b]	2,147	84.8%	77	3.0%	77	3.0%	2,300	230	9.1%	2,530
06/01	06/03	3	60 [a]	[a]	0.0%	[a]	0.0%	[a]	0.0%	[a]	[a]	0.0%	[a]
06/04	06/07	4	84 [b]	2,849	84.8%	102	3.0%	102	3.0%	3,053	305	9.1%	3,358
06/08	06/10	5	60 [b]	4,903	84.8%	175	3.0%	175	3.0%	5,254	525	9.1%	5,779
06/11	06/14	6	84	18,620	84.8%	665	3.0%	665	3.0%	19,950	1,995	9.1%	21,945
06/15	06/17	7	60	9,357	74.1%	870	6.9%	1,523	12.1%	11,751	870	6.9%	12,621
06/18	06/21	8	84	21,840	94.4%	652	2.8%	326	1.4%	22,818	326	1.4%	23,144
06/22	06/24	9	60	14,848	72.9%	3,818	18.8%	0	0.0%	18,666	1,697	8.3%	20,363
06/25	06/28	10	84	13,657	43.5%	6,828	21.7%	1,366	4.3%	21,850	9,560	30.4%	31,410
06/29	07/01	11	60	13,417	82.3%	619	3.8%	0	0.0%	14,036	2,271	13.9%	16,307
07/02	07/05	12	84	5,840	53.1%	5,153	46.9%	0	0.0%	10,993	0	0.0%	10,993
07/06	07/08	13	60 [c]	1,471	53.1%	1,298	46.9%	0	0.0%	2,769	0	0.0%	2,769
07/09	07/12	14	84 [c]	6,154	53.1%	5,430	46.9%	0	0.0%	11,584	0	0.0%	11,584
07/13	07/15	15	60 [c]	1,940	53.1%	1,711	46.9%	0	0.0%	3,651	0	0.0%	3,651
07/16	07/19	16	84 [a]	0	0.0%	0	0.0%	0	0.0%	[a]	[a]	0.0%	[a]
07/20	07/22	17	60 [d]	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/23	07/26	18	84 [d]	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/27	07/30	19	74 [d]	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/30	07/30	20	14 [d]	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/01	08/01	21	14 [e]	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/03	08/03	22	14 [e]	0	0.0%	0	0.0%	0	0.0%	0	0	100.0%	0
08/05	08/05	23	14 [e]	0	0.0%	0	0.0%	0	0.0%	0	84	100.0%	84
08/07	08/07	24	14 [d]	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0

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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
08/09	08/09	25	14 [e]	0	0.0%	0	0.0%	0	0.0%	0	105	100.0%	105
08/10	08/10	26	14 [d]	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/11	08/11	27	14 [d]	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/12	08/12	28	14 [e]	0	0.0%	0	0.0%	0	0.0%	0	131	100.0%	131
08/13	08/13	29	14 [e]	0	0.0%	0	0.0%	0	0.0%	0	13	100.0%	13
08/14	08/14	30	14 [e]	0	0.0%	0	0.0%	0	0.0%	0	22	100.0%	22
08/15	08/15	31	14 [e]	0	0.0%	0	0.0%	0	0.0%	0	81	100.0%	81
08/16	08/16	32	14 [e]	0	0.0%	0	0.0%	0	0.0%	0	49	100.0%	49
08/17	08/17	33	14 [e]	0	0.0%	0	0.0%	0	0.0%	0	13	100.0%	13
08/18	08/18	34	14 [d]	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/19	08/19	35	12 [d]	0	0.0%	0	0.0%	0	0.0%	0	8	100.0%	8
08/20	08/20	36	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	2	100.0%	2
08/21	09/19	37-60	[d]	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Total				118,027	69.9%	28,071	16.6%	4,241	2.5%	150,338	18,383	10.9%	168,721

[a] Three permits or fewer were fished. Period results are confidential, but district total includes all harvests.

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

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

[d] No harvest reported.

[e] No samples; assigned to wild origin.

Appendix E17.–Pink salmon hatchery and wild stock contributions to the Montague District commercial common property fishery by period, 2015.

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
05/25	-	05/27	1	60 [a]	[a]	0.0%	[a]	0.0%	[a]	0.0%	[a]	0.0%	[a]	[a]	0.00	[a]
05/28	-	05/31	2	84 [b]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.00	0
06/01	-	06/03	3	60 [a]	[a]	0.0%	[a]	0.0%	[a]	0.0%	[a]	0.0%	[a]	[a]	0.00	[a]
06/04	-	06/07	4	84 [b]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.00	0
06/08	-	06/10	5	60 [c]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	53	1.00	53
06/11	-	06/14	6	84	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	1,412	1.00	1,412
06/15	-	06/17	7	60	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	1,965	1.00	1,965
06/18	-	06/21	8	84	1,091	12.5%	182	2.1%	0	0.0%	0	0.0%	1,272	7,452	0.85	8,724
06/22	-	06/24	9	60 [d]	1,947	29.8%	68	1.0%	0	0.0%	0	0.0%	2,015	4,523	0.69	6,538
06/25	-	06/28	10	84	5,350	47.1%	0	0.0%	0	0.0%	0	0.0%	5,350	6,019	0.53	11,369
06/29	-	07/01	11	60	523	20.0%	0	0.0%	0	0.0%	0	0.0%	523	2,090	0.80	2,613
07/02	-	07/05	12	84	1,644	55.6%	0	0.0%	0	0.0%	0	0.0%	1,644	1,316	0.44	2,960
07/06	-	07/08	13	60 [e]	108	55.6%	0	0.0%	0	0.0%	0	0.0%	108	86	0.44	194
07/09	-	07/12	14	84 [e]	11,832	55.6%	0	0.0%	0	0.0%	0	0.0%	11,832	9,465	0.44	21,297
07/13	-	07/15	15	60 [e]	651	55.6%	0	0.0%	0	0.0%	0	0.0%	651	521	0.44	1,172
07/16	-	07/19	16	84 [a]	[a]	0.0%	[a]	0.0%	[a]	0.0%	[a]	0.0%	[a]	[a]	0.00	[a]
07/20	-	07/22	17	60 [b]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.00	0
07/23	-	07/26	18	84 [b]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.00	0
07/27	-	07/30	19	74 [b]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.00	0
07/30	-	07/30	20	14 [b]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.00	0
08/01	-	08/01	21	14	9,915	8.5%	2,479	2.1%	33,462	28.7%	9,915	8.5%	55,771	60,728	0.52	116,499
08/03	-	08/03	22	14 [d]	5,528	7.7%	2,419	3.4%	21,042	29.5%	16,318	22.9%	45,308	26,075	0.37	71,383
08/05	-	08/05	23	14	10,205	7.0%	6,804	4.7%	44,223	30.2%	54,428	37.2%	115,660	30,616	0.21	146,276
08/07	-	08/07	24	14	3,458	2.9%	3,458	2.9%	5,187	4.3%	19,020	15.9%	31,123	88,183	0.74	119,306
08/09	-	08/09	25	14	11,427	12.3%	11,427	12.3%	17,956	19.3%	11,427	12.3%	52,237	40,810	0.44	93,047
08/10	-	08/10	26	14 [e]	13,272	12.3%	13,272	12.3%	20,857	19.3%	13,272	12.3%	60,674	47,402	0.44	108,076

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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
08/10	-	08/10	26	14 [e]	13,272	12.3%	13,272	12.3%	20,857	19.3%	13,272	12.3%	60,674	47,402	0.44	108,076
08/11	-	08/11	27	14 [e]	18,592	12.3%	18,592	12.3%	29,216	19.3%	18,592	12.3%	84,991	66,399	0.44	151,390
08/12	-	08/12	28	14 [e]	27,425	12.3%	27,425	12.3%	43,096	19.3%	27,425	12.3%	125,370	97,945	0.44	223,315
08/13	-	08/13	29	14 [d]	9,718	8.7%	11,845	10.6%	13,650	12.2%	42,343	37.8%	77,555	34,504	0.31	112,059
08/14	-	08/14	30	14 [f]	3,829	5.1%	6,700	8.9%	3,829	5.1%	47,859	63.3%	62,217	13,401	0.18	75,618
08/15	-	08/15	31	14 [f]	2,998	5.1%	5,247	8.9%	2,998	5.1%	37,480	63.3%	48,724	10,495	0.18	59,219
08/16	-	08/16	32	14 [f]	4,031	5.1%	7,055	8.9%	4,031	5.1%	50,393	63.3%	65,511	14,110	0.18	79,621
08/17	-	08/17	33	14	2,882	5.1%	5,043	8.9%	2,882	5.1%	36,025	63.3%	46,832	10,087	0.18	56,919
08/18	-	08/18	34	14 [b]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.00	0
08/19	-	08/19	35	12 [e]	2,857	5.1%	4,999	8.9%	2,857	5.1%	35,706	63.3%	46,418	9,998	0.18	56,416
08/20	-	08/20	36	12 [e]	2,444	5.1%	4,277	8.9%	2,444	5.1%	30,551	63.3%	39,717	8,554	0.18	48,271
08/21	-	08/21	37	12 [e]	684	5.1%	1,198	8.9%	684	5.1%	8,554	63.3%	11,121	2,395	0.18	13,516
08/22		09/19	38-60	[b]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Total					152,527	9.6%	132,491	8.3%	248,415	15.6%	459,309	28.9%	992,742	596,697	37.5%	1,589,439

[a] Three permits or fewer were fished. Period results are confidential, but district total includes all harvests.

[b] No harvest reported.

[c] No samples collected; assumed wild origin.

[d] No samples collected; proportions are the average of the adjacent sampled periods (closest prior and following periods).

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

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

Appendix E18.–Pink salmon hatchery and wild stock contributions to the Northern District commercial common property fishery by period, 2015.

					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
06/22	-	06/22	1	12	6,929	22.8%	0	0.0%	0	0.0%	0	0.0%	6,929	23,426	0.77	30,355
07/10	-	07/10	2	14 [a]	151,400	22.8%	0	0.0%	0	0.0%	0	0.0%	151,400	511,877	0.77	663,277
07/11	-	07/11	3	14 [a]	63,925	22.8%	0	0.0%	0	0.0%	0	0.0%	63,925	216,128	0.77	280,053
07/12	-	07/12	4	14 [b]	9,667	4.2%	0	0.0%	2,417	1.1%	0	0.0%	12,083	217,498	0.95	229,581
07/13	-	07/13	5	14 [b]	6,897	4.2%	0	0.0%	1,724	1.1%	0	0.0%	8,622	155,192	0.95	163,814
07/14	-	07/14	6	14	10,934	4.2%	0	0.0%	2,733	1.1%	0	0.0%	13,667	246,005	0.95	259,672
07/15	-	07/15	7	14 [a]	1,944	4.2%	0	0.0%	486	1.1%	0	0.0%	2,431	43,749	0.95	46,180
07/16	-	07/16	8	14 [b]	322,562	74.2%	0	0.0%	0	0.0%	0	0.0%	322,562	112,196	0.26	434,758
07/17	-	07/17	9	14	109,472	74.2%	0	0.0%	0	0.0%	0	0.0%	109,472	38,077	0.26	147,549
07/18	-	07/18	10	14 [c]	366,500	78.2%	0	0.0%	0	0.0%	0	0.0%	366,500	101,915	0.22	468,415
07/19	-	07/19	11	14	473,265	82.3%	0	0.0%	0	0.0%	0	0.0%	473,265	101,842	0.18	575,107
07/20	-	07/20	12	14	237,053	92.6%	0	0.0%	3,161	1.2%	0	0.0%	240,213	15,804	0.06	256,017
07/21	-	07/21	13	14 [d]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.00	0
07/22	-	07/22	14	14 [c]	28,712	51.0%	9,603	17.1%	5,977	10.6%	0	0.0%	44,292	12,003	0.21	56,295
07/23	-	07/23	15	14 [b]	3,740	9.4%	13,558	34.1%	7,948	20.0%	0	0.0%	25,247	14,493	0.36	39,740
07/27	-	07/27	16	14	24,614	9.4%	89,228	34.1%	52,306	20.0%	0	0.0%	166,148	95,381	0.36	261,529
07/30	-	07/30	17	14	9,729	1.1%	272,416	29.5%	437,811	47.4%	19,458	2.1%	739,414	184,853	0.20	924,267
08/01	-	08/01	18	14	30,577	3.1%	377,112	38.5%	366,920	37.5%	20,384	2.1%	794,993	183,460	0.19	978,453
08/03	-	08/03	19	14	23,842	3.1%	325,835	42.7%	246,363	32.3%	15,894	2.1%	611,934	150,997	0.20	762,931
08/05	-	08/05	20	14	26,434	4.2%	323,811	51.6%	185,035	29.5%	13,217	2.1%	548,496	79,301	0.13	627,797
08/07	-	08/07	21	14	18,623	2.1%	391,081	43.8%	353,835	39.6%	9,311	1.0%	772,850	121,049	0.14	893,899
08/09	-	08/09	22	14	25,122	3.1%	418,692	52.1%	251,215	31.3%	0	0.0%	695,028	108,860	0.14	803,888
08/10	-	08/10	23	14 [a]	16,399	3.1%	273,324	52.1%	163,995	31.3%	0	0.0%	453,719	71,064	0.14	524,783
08/11	-	08/11	24	14 [b]	6,989	1.6%	220,075	49.2%	147,583	33.0%	11,771	2.6%	386,418	60,892	0.14	447,310
08/12	-	08/12	25	14	0	0.0%	237,077	46.3%	177,807	34.7%	26,941	5.3%	441,825	70,045	0.14	511,870
08/13	-	08/13	26	14 [a]	0	0.0%	180,212	46.3%	135,159	34.7%	20,479	5.3%	335,850	53,245	0.14	389,095
08/14	-	08/14	27	14 [b]	0	0.0%	277,428	64.0%	100,883	23.3%	10,088	2.3%	388,400	45,397	0.10	433,797

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Appendix E18.–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
08/15	-	08/15	28	14	0	0.0%	308,863	64.0%	112,314	23.3%	11,231	2.3%	432,408	50,541	0.10	482,949
08/16	-	08/16	29	14 [c]	0	0.0%	202,467	64.3%	73,624	23.4%	3,660	1.2%	279,751	34,982	0.11	314,733
08/17	-	08/17	30	14	0	0.0%	79,712	64.7%	28,986	23.5%	0	0.0%	108,698	14,493	0.12	123,191
08/18	-	08/18	31	14 [c]	0	0.0%	103,084	66.3%	38,867	25.0%	0	0.0%	141,950	13,622	0.09	155,572
08/19	-	08/19	32	12	0	0.0%	140,988	67.8%	54,962	26.4%	0	0.0%	195,950	11,948	0.06	207,898
08/20	-	08/20	33	12 [c]	0	0.0%	108,369	70.1%	27,536	17.8%	0	0.0%	135,905	18,654	0.12	154,559
08/21	-	08/21	34	12	0	0.0%	93,639	72.4%	11,891	9.2%	0	0.0%	105,530	23,781	0.18	129,311
08/22	-	08/22	35	12	0	0.0%	97,486	83.3%	7,311	6.3%	2,437	2.1%	107,234	9,749	0.08	116,983
08/23	-	08/23	36	12 [c]	0	0.0%	123,064	83.8%	10,003	6.8%	1,530	1.0%	134,598	12,306	0.08	146,904
08/24	-	08/24	37	12	0	0.0%	87,656	84.2%	7,670	7.4%	0	0.0%	95,326	8,766	0.08	104,092
08/25	-	08/25	38	12	0	0.0%	127,247	87.5%	10,604	7.3%	0	0.0%	137,851	7,574	0.05	145,425
08/26	-	08/26	39	12	0	0.0%	78,249	68.5%	27,493	24.1%	0	0.0%	105,742	8,459	0.07	114,201
08/27	-	08/27	40	12	0	0.0%	62,818	84.7%	8,794	11.9%	0	0.0%	71,612	2,513	0.03	74,125
08/28	-	08/28	41	12	0	0.0%	58,289	81.4%	9,992	14.0%	0	0.0%	68,281	3,331	0.05	71,612
08/29	-	09/19	42-57	[d]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Totals					1,975,329	14.6%	5,081,382	37.5%	3,073,405	22.7%	166,403	1.2%	10,296,519	3,255,468	24.0%	13,551,987

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

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

[c] No samples collected; proportions are the average of the adjacent sampled periods (closest prior and following periods).

[d] No harvest reported.

Appendix E19.–Sockeye salmon hatchery and wild stock contributions to the Southwestern District commercial common property fishery by period, 2015.

Dates			Period	Hours	Main Bay Number	Main Bay Percent	Hatchery total		Wild Number	Wild Percent	Total
05/25	-	05/27	1	60 [a]	0	0.0%	0	0.0%	0	0.0%	0
05/28	-	05/31	2	84 [b]	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]
06/01	-	06/03	3	60 [c]	0	0.0%	0	0.0%	1	100.0%	1
06/04	-	06/07	4	84 [d]	188	76.0%	188	76.0%	59	24.0%	247
06/08	-	06/10	5	60	853	76.0%	853	76.0%	269	24.0%	1,122
06/11	-	06/14	6	84	2,455	85.7%	2,455	85.7%	409	14.3%	2,864
06/15	-	06/17	7	60 [e]	1,281	92.9%	1,281	92.9%	99	7.1%	1,379
06/18	-	06/21	8	84	6,903	100.0%	6,903	100.0%	0	0.0%	6,903
06/22	-	06/24	9	60	7,227	89.6%	7,227	89.6%	840	10.4%	8,067
06/25	-	06/28	10	84	27,179	98.3%	27,179	98.3%	477	1.7%	27,656
06/29	-	07/01	11	60	22,038	94.4%	22,038	94.4%	1,296	5.6%	23,334
07/02	-	07/05	12	84	11,667	92.8%	11,667	92.8%	909	7.2%	12,576
07/06	-	07/08	13	60	10,804	96.6%	10,804	96.6%	381	3.4%	11,185
07/09	-	07/12	14	84	6,389	96.8%	6,389	96.8%	211	3.2%	6,600
07/13	-	07/15	15	60 [b]	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]
07/16	-	07/19	16	84 [b]	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]
07/20	-	07/22	17	60 [d]	1,292	89.1%	1,292	89.1%	158	10.9%	1,450
07/23	-	07/23	18	14	283	89.1%	283	89.1%	34	10.9%	317
07/27	-	07/27	19	14	499	60.0%	499	60.0%	333	40.0%	832
07/30	-	07/30	20	14	396	66.7%	396	66.7%	198	33.3%	594
08/01	-	08/01	21	14	161	55.3%	161	55.3%	131	44.7%	292
08/03	-	08/03	22	14	75	15.8%	75	15.8%	402	84.2%	477
08/05	-	08/05	23	14	216	37.9%	216	37.9%	354	62.1%	570
08/07	-	08/07	24	14	101	20.3%	101	20.3%	398	79.7%	499
08/09	-	08/09	25	14	24	4.8%	24	4.8%	473	95.2%	497
08/10	-	08/10	26	14 [f]	21	4.8%	21	4.8%	413	95.2%	434
08/11	-	08/11	27	14 [e]	18	3.7%	18	3.7%	458	96.3%	476

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Dates			Period	Hours	Main Bay Number	Main Bay Percent	Hatchery total		Wild Number	Wild Percent	Total
08/12	-	08/12	28	14 [d]	8	2.6%	8	2.6%	286	97.4%	294
08/13	-	08/13	29	14	10	2.6%	10	2.6%	352	97.4%	362
08/14	-	08/14	30	14 [e]	4	3.9%	4	3.9%	97	96.1%	101
08/15	-	08/15	31	14	27	5.2%	27	5.2%	498	94.8%	525
08/16	-	08/16	32	14 [e]	6	2.6%	6	2.6%	242	97.4%	248
08/17	-	08/17	33	14	0	0.0%	0	0.0%	780	100.0%	780
08/18	-	08/18	34	14 [e]	3	1.4%	3	1.4%	249	98.6%	252
08/19	-	08/19	35	12	7	2.7%	7	2.7%	244	97.3%	251
08/20	-	08/20	36	12 [e]	4	1.4%	4	1.4%	274	98.6%	278
08/21	-	08/21	37	12	0	0.0%	0	0.0%	266	100.0%	266
08/22	-	08/22	38	12	0	0.0%	0	0.0%	187	100.0%	187
08/23	-	08/23	39	12 [e]	2	1.1%	2	1.1%	167	98.9%	169
08/24	-	08/24	40	12	1	2.1%	1	2.1%	37	97.9%	38
08/25	-	08/25	41	12	2	2.3%	2	2.3%	95	97.7%	97
08/26	-	08/26	42	12	2	1.9%	2	1.9%	87	98.1%	89
08/27	-	08/27	43	12	0	0.0%	0	0.0%	17	100.0%	17
08/28	-	09/19	44-60	[a]	0	0.0%	0	0.0%	0	0.0%	0
Total					100,827	88.7%	100,827	88.70%	12,234	10.8%	113,718

Note: Samples were not processed for $SrCl_2$ mark identification, so the Gulkana Hatchery contribution is unknown. All fish not marked with thermal marks are assumed to be of wild origin.

[a] No harvest reported.

[b] Three permits or less were fished. Period results are confidential, but district total includes all harvests.

[c] No samples collected; all fish assigned to wild origin.

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

[e] No samples collected; proportions are the average of the adjacent sampled periods (closest prior and following periods).

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

Appendix E20.–Pink salmon hatchery and wild stock contributions to the Southwestern District commercial common property fishery by period, 2015.

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
05/25	-	05/27	1	60	[a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
05/28	-	05/31	2	84	[b]	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]	[b]	0.0%	[b]
06/01	-	06/03	3	60	[c]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	6	100.0%	6
06/04	-	06/07	4	84	[c]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	58	100.0%	58
06/08	-	06/10	5	60		9	2.2%	0	0.0%	0	0.0%	13	3.2%	22	386	94.6%	408
06/11	-	06/14	6	84		0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	797	100.0%	797
06/15	-	06/17	7	60		136	16.7%	0	0.0%	0	0.0%	273	33.3%	409	409	50.0%	818
06/18	-	06/21	8	84		69	8.8%	46	5.9%	0	0.0%	0	0.0%	116	670	85.3%	786
06/22	-	06/24	9	60		568	20.3%	0	0.0%	0	0.0%	0	0.0%	568	2,227	79.7%	2,795
06/25	-	06/28	10	84		750	22.7%	0	0.0%	0	0.0%	50	1.5%	800	2,502	75.8%	3,302
06/29	-	07/01	11	60		4,154	52.6%	0	0.0%	0	0.0%	0	0.0%	4,154	3,738	47.4%	7,892
07/02	-	07/05	12	84		12,674	62.1%	0	0.0%	0	0.0%	0	0.0%	12,674	7,734	37.9%	20,408
07/06	-	07/08	13	60		60,052	78.1%	0	0.0%	0	0.0%	801	1.0%	60,853	16,014	20.8%	76,867
07/09	-	07/12	14	84		27,858	54.8%	0	0.0%	606	1.2%	4,239	8.3%	32,703	18,169	35.7%	50,872
07/13	-	07/15	15	60	[b]	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]	[b]	0.0%	[b]
07/16	-	07/19	16	84	[b]	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]	0.0%	[b]	[b]	0.0%	[b]
07/20	-	07/22	17	60	[d]	28,107	26.5%	4,324	4.1%	8,648	8.2%	43,241	40.8%	84,320	21,620	20.4%	105,940
07/23	-	07/23	18	14		56,565	26.5%	8,702	4.1%	17,404	8.2%	87,022	40.8%	169,694	43,511	20.4%	213,205
07/27	-	07/27	19	14		66,687	9.7%	38,107	5.6%	76,214	11.1%	152,428	22.2%	333,436	352,490	51.4%	685,926
07/30	-	07/30	20	14		55,927	6.8%	37,284	4.5%	233,028	28.4%	307,596	37.5%	633,835	186,422	22.7%	820,257
08/01	-	08/01	21	14		94,136	11.6%	42,789	5.3%	188,271	23.2%	299,522	36.8%	624,718	188,271	23.2%	812,989
08/03	-	08/03	22	14		111,003	12.5%	46,251	5.2%	240,507	27.1%	212,756	24.0%	610,517	277,508	31.3%	888,025
08/05	-	08/05	23	14		13,564	1.0%	54,256	4.2%	434,044	33.3%	542,555	41.7%	1,044,419	257,714	19.8%	1,302,133
08/07	-	08/07	24	14		89,711	6.4%	119,614	8.5%	373,794	26.6%	538,264	38.3%	1,121,382	284,084	20.2%	1,405,466
08/09	-	08/09	25	14		55,122	4.2%	137,805	10.4%	289,390	21.9%	564,999	42.7%	1,047,316	275,609	20.8%	1,322,925
08/10	-	08/10	26	14	[e]	47,739	4.2%	119,347	10.4%	250,629	21.9%	489,324	42.7%	907,039	238,695	20.8%	1,145,734
08/11	-	08/11	27	14	[d]	10,328	1.0%	206,568	20.8%	227,225	22.9%	340,837	34.4%	784,959	206,568	20.8%	991,527
08/12	-	08/12	28	14		8,383	1.0%	167,658	20.8%	184,424	22.9%	276,636	34.4%	637,101	167,658	20.8%	804,759
08/13	-	08/13	29	14		59,644	4.2%	178,932	12.6%	223,665	15.8%	656,083	46.3%	1,118,323	298,220	21.1%	1,416,543
08/14	-	08/14	30	14	[f]	21,179	2.1%	142,129	14.1%	194,689	19.4%	421,588	41.9%	779,584	226,402	22.5%	1,005,986

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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
08/15	-	08/15	31	14		0	0.0%	138,742	15.6%	203,488	22.9%	332,980	37.5%	675,209	212,737	24.0%	887,946
08/16	-	08/16	32	14	f	0	0.0%	133,455	15.6%	200,182	23.4%	315,843	37.0%	649,479	204,631	24.0%	854,110
08/17	-	08/17	33	14		0	0.0%	164,466	15.6%	252,181	24.0%	383,754	36.5%	800,402	252,181	24.0%	1,052,583
08/18	-	08/18	34	14	f	16,068	1.6%	175,909	17.3%	212,955	20.9%	378,320	37.2%	783,252	234,378	23.0%	1,017,630
08/19	-	08/19	35	12		33,578	3.2%	201,469	18.9%	190,277	17.9%	402,939	37.9%	828,263	235,047	22.1%	1,063,310
08/20	-	08/20	36	12	f	25,273	2.6%	222,398	23.2%	202,180	21.1%	338,652	35.3%	788,502	171,853	17.9%	960,355
08/21	-	08/21	37	12		18,818	2.1%	244,632	27.4%	216,406	24.2%	291,677	32.6%	771,533	122,316	13.7%	893,849
08/22	-	08/22	38	12		30,093	3.1%	170,528	17.7%	170,528	17.7%	391,210	40.6%	762,358	200,621	20.8%	962,979
08/23	-	08/23	39	12	f	16,260	2.1%	183,645	23.6%	175,450	22.5%	244,162	31.4%	619,518	158,934	20.4%	778,452
08/24	-	08/24	40	12		8,057	1.1%	225,605	29.5%	209,491	27.4%	169,204	22.1%	612,358	153,089	20.0%	765,447
08/25	-	08/25	41	12		5,785	1.0%	167,767	30.2%	133,057	24.0%	127,272	22.9%	433,880	121,487	21.9%	555,367
08/26	-	08/26	42	12		19,814	4.2%	128,792	27.1%	99,071	20.8%	113,931	24.0%	361,609	113,931	24.0%	475,540
08/27	-	08/27	43	12		1,739	1.1%	48,701	30.1%	17,393	10.8%	55,658	34.4%	123,492	38,265	23.7%	161,757
08/28	-	08/28	44	12		0	0.0%	49,891	37.1%	19,189	14.3%	30,702	22.9%	99,783	34,540	25.7%	134,323
08/29	-	08/29	45	12	e	0	0.0%	24,946	37.1%	9,595	14.3%	15,351	22.9%	49,892	17,270	25.7%	67,162
08/30	-	09/19	46-60			0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Total						1,012,236	4.3%	3,585,214	15.1%	5,255,095	22.1%	8,535,872	35.9%	18,388,417	5,357,190	22.6%	23,745,607

[a] No harvest reported.

[b] Three permits or less were fished. Period results are confidential, but district total includes all harvests.

[c] No samples collected; assumed wild origin.

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

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

[f] No samples collected; proportions are the average of the adjacent sampled periods (closest prior and following periods).

Appendix E21.–Chum salmon hatchery and wild stock contributions to commercial common property fisheries by period and mark identification, Southwestern District, 2015.

Dates			Period	Hours	Origin										
					Port Chalmers		Wally Noerenberg		Armin F Koernig		Hatchery		Wild		
					Number	Percent	Number	Percent	Number	Percent	total		Number	Percent	Total
05/25	-	05/27	1	60 [a]	104	11.5%	199	21.9%	541	59.4%	845	92.7%	66	7.3%	911
05/28	-	05/31	2	84 [b]	0	0.0%	0	0.0%	0	0.0%	[b]	0.0%	[b]	0.0%	[b]
06/01	-	06/03	3	60 [a]	346	11.5%	660	21.9%	1,793	59.4%	2,799	92.7%	220	7.3%	3,019
06/04	-	06/07	4	84 [a]	1,229	11.5%	2,347	21.9%	6,370	59.4%	9,947	92.7%	782	7.3%	10,729
06/08	-	06/10	5	60	2,005	11.5%	3,827	21.9%	10,389	59.4%	16,221	92.7%	1,276	7.3%	17,497
06/11	-	06/14	6	84	1,792	8.2%	2,987	13.7%	16,729	76.7%	21,509	98.6%	299	1.4%	21,808
06/15	-	06/17	7	60	411	3.4%	1,096	9.2%	10,004	83.9%	11,512	96.6%	411	3.4%	11,923
06/18	-	06/21	8	84	514	2.2%	2,314	9.9%	19,025	81.3%	21,853	93.4%	1,543	6.6%	23,396
06/22	-	06/24	9	60	547	3.1%	1,458	8.3%	15,128	86.5%	17,133	97.9%	365	2.1%	17,498
06/25	-	06/28	10	84	1,478	7.4%	493	2.5%	17,239	86.4%	19,209	96.3%	739	3.7%	19,948
06/29	-	07/01	11	60	803	6.0%	482	3.6%	11,719	88.0%	13,003	97.6%	321	2.4%	13,324
07/02	-	07/05	12	84	594	4.5%	594	4.5%	11,477	86.6%	12,664	95.5%	594	4.5%	13,258
07/06	-	07/08	13	60	530	7.3%	1,060	14.6%	5,125	70.7%	6,716	92.7%	530	7.3%	7,246
07/09	-	07/12	14	84	272	5.6%	3,534	73.0%	924	19.1%	4,730	97.8%	109	2.2%	4,839
07/13	-	07/15	15	60 [b]	0	0.0%	0	0.0%	0	0.0%	[b]	0.0%	[b]	0.0%	[b]
07/16	-	07/19	16	84 [b]	0	0.0%	0	0.0%	0	0.0%	[b]	0.0%	[b]	0.0%	[b]
07/20	-	07/22	17	60 [c]	19	5.6%	244	73.0%	64	19.1%	326	97.8%	8	2.2%	334
07/23	-	07/23	18	14 [a]	0	0.0%	1	4.0%	0	0.0%	1	4.0%	29	96.0%	30
07/27	-	07/27	19	14 [a]	0	0.0%	8	4.0%	0	0.0%	8	4.0%	190	96.0%	198
07/30	-	07/30	20	14 [a]	0	0.0%	20	4.0%	0	0.0%	20	4.0%	469	96.0%	489
08/01	-	08/01	21	14 [a]	0	0.0%	10	4.0%	0	0.0%	10	4.0%	250	96.0%	260
08/03	-	08/03	22	14	0	0.0%	9	4.0%	0	0.0%	9	4.0%	209	96.0%	218
08/05	-	08/05	23	14 [c]	0	0.0%	16	4.0%	0	0.0%	16	4.0%	379	96.0%	395
08/07	-	08/07	24	14 [c]	0	0.0%	14	4.0%	0	0.0%	14	4.0%	342	96.0%	356
08/09	-	08/09	25	14 [c]	0	0.0%	14	4.0%	0	0.0%	14	4.0%	340	96.0%	354
08/10	-	08/10	26	14 [c]	0	0.0%	11	4.0%	0	0.0%	11	4.0%	273	96.0%	284
08/11	-	08/11	27	14 [c]	0	0.0%	16	4.0%	0	0.0%	16	4.0%	394	96.0%	410

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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
08/12	-	08/12	28	14 [d]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	289	100.0%	289
08/13	-	08/13	29	14 [d]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	268	100.0%	268
08/14	-	08/14	30	14 [d]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	73	100.0%	73
08/15	-	08/15	31	14 [d]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	296	100.0%	296
08/16	-	08/16	32	14 [d]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	230	100.0%	230
08/17	-	08/17	33	14 [d]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	513	100.0%	513
08/18	-	08/18	34	14 [d]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	340	100.0%	340
08/19	-	08/19	35	12 [d]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	249	100.0%	249
08/20	-	08/20	36	12 [d]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	162	100.0%	162
08/21	-	08/21	37	12 [d]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	139	100.0%	139
08/22	-	08/22	38	12 [d]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	141	100.0%	141
08/23	-	08/23	39	12 [d]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	181	100.0%	181
08/24	-	08/24	40	12 [d]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	52	100.0%	52
08/25	-	08/25	41	12 [d]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	48	100.0%	48
08/26	-	08/26	42	12 [d]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	78	100.0%	78
08/27	-	08/27	43	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
08/28	-	08/28	44	12 [e]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
08/29	-	08/29	45	12 [d]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	15	100.0%	15
08/30	-	09/19	46-60	[e]											
Total					10,977	6.2%	24,094	13.7%	127,925	72.5%	162,995	92.4%	13,378	7.6%	176,373

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

[b] Three permits or less were fished. Period results are confidential, but district total includes all harvests.

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

[d] No samples; assumed wild origin.

[e] No harvest reported.

APPENDIX F: SUBSISTENCE AND COMMERCIAL HOMEPACK SALMON HARVEST

Appendix F1.–Salmon harvest and effort in the Copper River District subsistence drift gillnet fishery, 1961–2015.

	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

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	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
2014	288	269	101	168	153	1,675	0	1,828
10-Year Average	372	351	189	165	464	3,096	22	3,582
2015	241	231	97	134	167	1,403	10	1,580

[a] As reported on returned permits.

Appendix F2.–Salmon harvest and effort in the Prince William Sound general area subsistence fishery, 1966–2015.

	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

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	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
10-Year Average	9	8	3	6	3	18	0	4	6	1	31
2015	25	23	10	13	4	115	0	0	3	0	122

[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 F3.–Salmon harvest and effort in the Tatitlek and Chenega subsistence fisheries, 1995–2015.

	Permits				Reported Harvest[a]						
Year	Issued	Returned	Fished	Not fished[b]	Chinook	Sockeye	Coho	Pink	Chum	Unknown	Total
				Tatitlek							
1995	15	3	0	3	0	0	0	0	0	0	0
1996	6	3	1	2	0	0	38	0	0	0	38
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
10-Year Average	14	4	3	1	2	312	174	32	22	0	542
2015	16	4	4	0	12	110	143	0	8	0	273

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	Permits				Reported Harvest[a]						
Year	Issued	Returned	Fished	Not fished[b]	Chinook	Sockeye	Coho	Pink	Chum	Unknown	Total
				Chenega							
1995	10	7	5	2	2	152	67	67	41	0	329
1996	7	6	4	2	0	135	9	125	46	0	315
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
10-Year Average	12	6	4	2	2	204	26	30	74	0	336
2015	21	4	1	3	56	0	35	0	12	0	103

[a] Reported harvest only.

[b] As reported on returned subsistence permits.

Appendix F4.–Personal use and subsistence salmon harvests by year, district and gear types for the Upper Copper River subsistence and personal use fisheries, 2000–2015.

					Reported Harvest				Expanded Harvest					
			Permits		Salmon				Salmon				other species	
Year	District	Gear	Issued	Returned	Chinook	Sockeye	Coho	Total	Chinook	Sockeye	Coho	Total	Steelhead	other
2000	Glennallen	Dip net	464	422	537	8,368	78	8,983	NA	NA	NA	NA	NA	NA
	Glennallen	Fish wheel	787	757	4,245	49,873	433	54,551	4,856	59,497	532	64,885	0	0
	Chitina	Dip net	8,151	7,680	3,007	103,269	3,540	109,816	3,168	107,856	3,657	114,681	0	203
	total		9,402	8,859	7,789	161,510	4,051	173,350	8,024	167,353	4,189	179,566	0	203
2001	Glennallen	Dip net	407	367	299	8,532	25	8,856	NA	NA	NA	NA	NA	NA
	Glennallen	Fish wheel	832	809	3,074	70,585	1,076	74,735	3,553	82,858	1,144	87,555	0	0
	Chitina	Dip net	9,462	8,356	2,803	121,304	2,385	126,492	3,113	132,108	2,720	137,941	0	484
	total		10,701	9,532	6,176	200,421	3,486	210,083	6,666	214,966	3,864	225,496	0	484
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

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			Permits		Reported Harvest				Expanded Harvest					
					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

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					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
2005–2014 10-year Average	Glennallen	Dip net	623	512	442	11,219	42	11,651	1,490	13,740	47	15,278	0	34
	Glennallen	Fish wheel	631	583	1,656	45,789	199	47,644	1,757	49,087	216	51,061	4	76
	Chitina	Dip net	9,275	7,582	1,140	110,359	1,455	112,954	1,341	127,135	1,778	130,254	0	438
	total		10,529	8,677	3,237	167,367	1,696	172,249	4,588	189,963	2,041	196,592	5	548
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

Appendix F5.–Salmon harvest and effort in the Batzulnetas subsistence harvests, 1987–2015.

	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
2014	2	1	1	1	0	116	0	116
10-Year Average	1	1	1	0	0	58	0	58
2015	4	4	0	4	0	0	0	0

[a] Harvest reported on subsistence permits.

[b] As reported on returned permits.

Appendix F6.–Salmon harvest and effort in the PWS and upper Copper River Federal subsistence fisheries, 2005–2015.

	Permits				Reported Harvest[a]			
Year	Issued	Returned	Fished	Not fished[b]	Chinook	Sockeye	Coho	Total
				Chitina Subdistrict				
2005	76	64	27	NA	22	1,265	0	1,287
2006	75	64	29	NA	13	1,379	20	1,412
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
5-Year Avg.	95	83	40	43	13	1,615	25	1,652
2015	111	100	52	48	13	2,171	14	2,198
				Glennallen Subdistrict				
2005	275	224	197	NA	345	19,973	126	20,444
2006	254	220	170	NA	430	16,711	28	17,169
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	15,432	20	15,781
2014	314	279	206	73	370	21,013	23	21,406
5-Year Avg.	283	247	177	70	413	15,496	85	15,994
2015	325	286	210	76	369	24,058	78	24,505
				PWS/Chugach Subdistrict				
2005	46	45	22	23	0	109	141	250
2006	49	48	23	25	0	150	100	250
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
5-Year Avg.	63	53	28	13	0	60	361	421
2015	102	68	50	15	0	152	878	1,030

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	Permits					Reported Harvest[a]			
Year	Issued	Returned	Fished	Not fished[b]		Chinook	Sockeye	Coho	Total
					Total federal subsistence harvests				
2005	397	333	246	NA	0	367	21,347	267	21,981
2006	378	332	222	NA	0	443	18,240	148	18,831
2007	412	358	315	42	0	595	16,190	142	16,927
2008	397	334	200	22	0	727	12,168	349	13,244
2009	384	327	231	96	0	502	12,685	230	13,417
2010	414	367	248	119	0	317	14,932	163	15,412
2011	433	363	265	98	0	711	15,502	765	16,978
2012	432	377	232	145	0	375	15,354	542	16,271
2013	438	367	228	139		346	17,480	338	18,164
2014	516	458	255	127		383	22,598	721	23,702
5-Year Avg.	447	386	246	126		426	17,173	506	18,105
2015	538	454	312	139	0	382	26,381	970	27,733

Note: NA = data not available.

[a] Reported harvest only.

[b] As reported on returned permits.

Appendix F7.–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, 1995–2015.

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
1995	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1996	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
10-Year Average	45	2	33	0	27	568	90	60	80	0	10	448	0	7	165	0
2015	76	5	34	9	401	1,017	965	23	67	0	0	3	0	4	49	20

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Copper River District (all drift gillnet)				
Year	Permits	Chinook	Sockeye	Coho
1995	318	1,688	0	0
1996	345	2,169	0	0
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
10-Year Average	309	834	5,969	579
2015	359	1,145	10,590	1,423

Bering River District (all drift gillnet)				
Year	Permits	Chinook	Sockeye	Coho
1995	5	11	0	0
1996	7	31	0	0
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
10-Year Average	3	3	5	31
2015	1	0	0	10

Appendix F8.–Area E commercial homepack and subsistence harvests by permit holder community of residence, 2015.

	Commercial Homepack[a]						
Community	Permits	Chinook	Sockeye	Coho	Pink	Chum	Total
Anchor Point	2	0	13	0	0	0	13
Anchorage	21	47	923	68	0	10	1,048
Chugiak	2	1	12	1	0	0	14
Copper Center	1	0	4	0	0	0	4
Cordova	205	694	6,447	699	19	1	7,860
Delta Junction	3	5	159	0	0	0	164
Eagle River	1	2	0	0	0	0	2
Fairbanks	1	14	118	0	0	0	132
Girdwood	4	8	141	0	0	30	179
Homer	33	41	672	123	96	28	960
Juneau	2	11	6	0	0	0	17
Kasilof	1	4	3	16	0	0	23
Kenai	1	1	0	0	0	0	1
Moose Pass	2	2	12	0	0	0	14
Nikolaevsk	1	0	1	0	0	0	1
Palmer	1	0	858	0	0	0	858
Petersburg	1	1	0	0	0	0	1
Seward	6	4	29	0	0	0	33
Soldotna	2	5	25	0	0	0	30
Sterling	4	3	45	17	0	0	65
Valdez	3	9	45	0	0	0	54
Wasilla	16	47	501	11	0	2	561
Whittier	2	0	13	1	0	0	14
Willow	2	3	137	0	0	0	140
USA Balance	83	268	2,702	536	54	76	3,636
Unknown	15	23	107	51	0	0	181
Total	415	1,193	12,973	1,523	169	147	16,005

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	Area E Subsistence[b]						
Community	Permits	Chinook	Sockeye	Coho	Pink	Chum	Total
Anchorage	40	11	224	45	0	1	281
Chenega Bay	1	0	0	0	0	0	0
Chugiak	1	0	0	0	0	0	0
Cooper Landing	1	0	0	0	0	0	0
Cordova	208	159	1,324	0	0	0	1,483
Eagle River	2	0	20	0	0	0	20
Girdwood	7	0	43	0	0	2	45
Glennallen	1	0	0	0	0	0	0
Homer	2	0	0	0	0	0	0
Juneau	1	0	0	0	0	0	0
North Pole	1	0	0	89	0	0	89
Seward	1	0	0	0	0	0	0
St Michael	1	0	0	0	0	0	0
Tatitlek	6	0	76	35	0	12	123
Valdez	6	1	17	9	0	8	35
Wasilla	6	0	0	0	0	0	0
Whittier	1	0	0	0	0	0	0
Total	286	171	1,704	178	0	23	2,076

[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 G: HERRING

Appendix G1.–Annual Pacific herring biomass indices for Prince William Sound Area harvest management years 1973–2015.

Harvest management year	Total spring: Use and harvest mortality [a] (tons)	Aerial survey estimates: Peak biomass estimate [b] (tons)	Aerial survey estimates: Maximum possible observed biomass [c]	Aerial survey estimates: Miles of spawn [d]	Aerial survey estimates: Mile days of spawn [e]	Unexploitated esc. biomass: Age structured analysis [f] (tons)	Pre-fishery run biomass: Age structured analysis [f] (tons)	Observed peak acoustic biomass estimates: Fall (tons)	Observed peak acoustic biomass estimates: Spring (tons)	Prior year forecast (tons)
1973–1974	6,375	41,080	107,290	38.5	96.0	ND	ND	ND	ND	ND
1974–1975	5,854	ND	ND	34.2	54.0	ND	ND	ND	ND	ND
1975–1976	2,584	7,330	25,247	32.8	41.2	ND	ND	ND	ND	ND
1976–1977	2,267	16,830	17,460	39.3	78.2	ND	ND	ND	ND	ND
1977–1978	1,391	13,410	36,540	28.7	50.8	ND	ND	ND	ND	ND
1978–1979	4,138	42,100	107,390	54.5	89.0	ND	ND	ND	ND	ND
1979–1980	6,323	62,110	122,050	50.5	95.5	61,270	66,592	ND	ND	ND
1980–1981	14,124	77,810	161,690	85.4	144.0	60,881	74,335	ND	ND	ND
1981–1982	7,861	68,790	97,620	49.0	85.5	54,889	62,441	ND	ND	ND
1982–1983	3,181	41,850	107,710	67.4	93.5 [g]	65,558	68,332	ND	ND	ND
1983–1984	6,604	58,870	158,760	60.1	104.8	76,518	82,469	ND	ND	ND
1984–1985	7,679	20,830	60,954	101.2	156.7	94,344	101,580	ND	ND	ND
1985–1986	11,180	15,180	54,820	72.4	146.8	82,131	92,753	ND	ND	ND
1986–1987	6,281	26,530	52,192	65.3	186.8	94,482	99,709	ND	ND	ND
1987–1988	9,871	34,270	67,175	166.3	269.8	121,750	131,014	ND	ND	43,992
1988–1989	[h]	56,915	186,708	98.4	228.1	119,803	119,803	ND	ND	54,899
1989–1990	10,103	57,900	145,013	94.1	164.4	92,209	102,295	ND	ND	51,692
1990–1991	15,196	42,765	141,375	58.0	71.5	74,377	88,216	ND	ND	96,666
1991–1992	20,752	53,835	130,569	74.7	119.8	73,558	92,220	ND	ND	121,342
1992–1993	2,360	20,725	109,865	20.4	50.3	37,522	39,102	ND	ND	134,133
1993–1994	151	19,640	154,008	14.6	23.1	20,342	20,342	20,998	ND	29,787
1994–1995	0	7,113	20,868	20.4	28.2	15,516	15,516	13,840	14,639	19,009
1995–1996	0	10,691	37,771	27.2	37.3	15,885	15,885	26,776	25,346	24,332
1996–1997	5,170	10,858	57,114	42.7	64.3	25,210	29,132	3,086	44,083	37,599
1997–1998	3,849	13,817	50,124	38.7	62.0	20,109	23,317	ND	19,456	38,640
1998–1999	49	6,366	10,872	25.4	40.7	14,910	14,952	ND	22,397	39,557
1999–2000	0	1,610	2,889	19.5	31.7	12,282	12,282	ND	8,024	23,987

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Appendix G1.–Page 2 of 2.

Harvest management year	Total spring Use and harvest mortality [a] (tons)	Aerial survey estimates Peak biomass estimate [b] (tons)	Maximum possible observed biomass [c]	Miles of spawn [d]	Mile days of spawn [e]	Unexploitated esc. biomass Age structured analysis [f] (tons)	Pre-fishery run biomass Age structured analysis [f] (tons)	Observed peak acoustic biomass estimates Fall (tons)	Spring (tons)	Prior year forecast (tons)
2000–2001	0	587	1,075	16.0	14.8	8,785	8,785	ND	7,035	NA
2001–2002	0	646	1,433	21.5	23.6	11,799	11,799	ND	11,791	NA
2002–2003	0	5,600	8,951	25.2	26.1	15,447	15,447	ND	29,864	NA
2003–2004	0	12,305	17,650	29.7	30.4	18,565	18,565	ND	21,046	NA
2004–2005	0	4,773	5,230	29.9	31.7	14,754	14,754	ND	16,800 [i]	21,064
2005–2006	0	540	609	19.9	21.7	12,738	12,738	ND	7,600 [i]	17,554
2006–2007	0	770	1,615	NA[j]	18.3	15,036	15,036	ND	10,700 [i]	15,830
2007–2008	0	10,700	13,740	NA[j]	33.2	20,243	20,243	ND	23,300 [i]	10,252
2008–2009	0	1,933	2,913	NA[j]	29.8	21,462	21,462	ND	16,900 [i]	17,903
2009–2010	0	4,180	15,160	NA[j]	32.7	22,605	22,605	ND	28,500 [i]	NA[k]
2010–2011	0	7,570	14,380	NA[j]	26.2	19,444	19,444	ND	24,000 [i]	22,704
2011–2012	0	1,960	7,360	NA[j]	39.3	19,830	19,830	ND	30,000 [i]	22,397
2012–2013	0	1,720	5,837	NA[j]	29.3	19,899	19,899	ND	24,200 [i]	26,095
2013–2014	0	2,722	9,441	NA[j]	36.6	19,845	19,845	ND	22,000 [i]	24,815
2014–2015	0	3,540	11,032	NA[j]	21.6	NA	NA	ND	NA [k]	19,700

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] Total linear miles of milt observed.

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

[f] Unexploited escapement and run biomass estimates from age structured analysis completed in 2014 to project 2015.

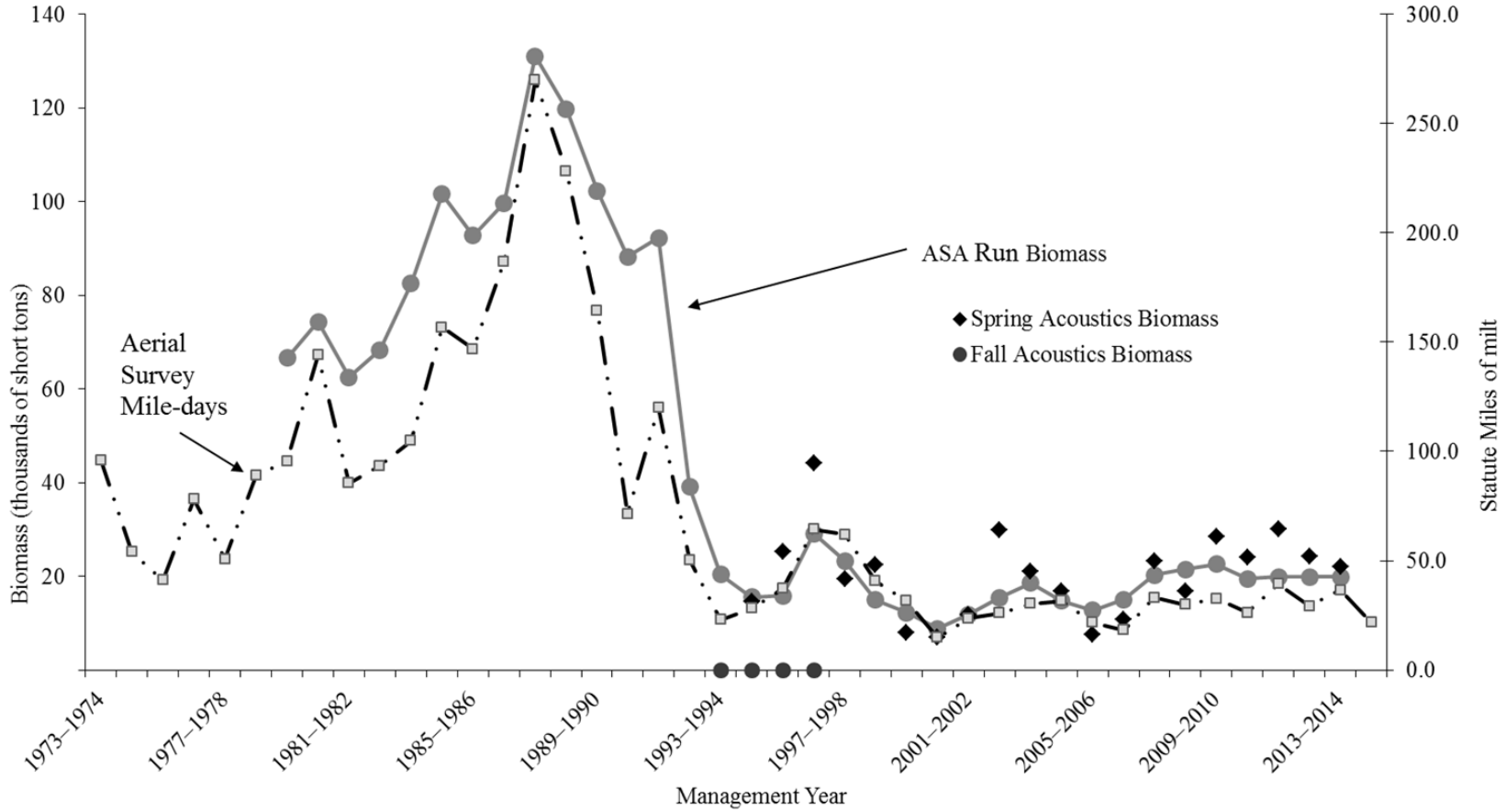
[g] Partial estimate of spawning biomass from feasibility study.

[h] 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.

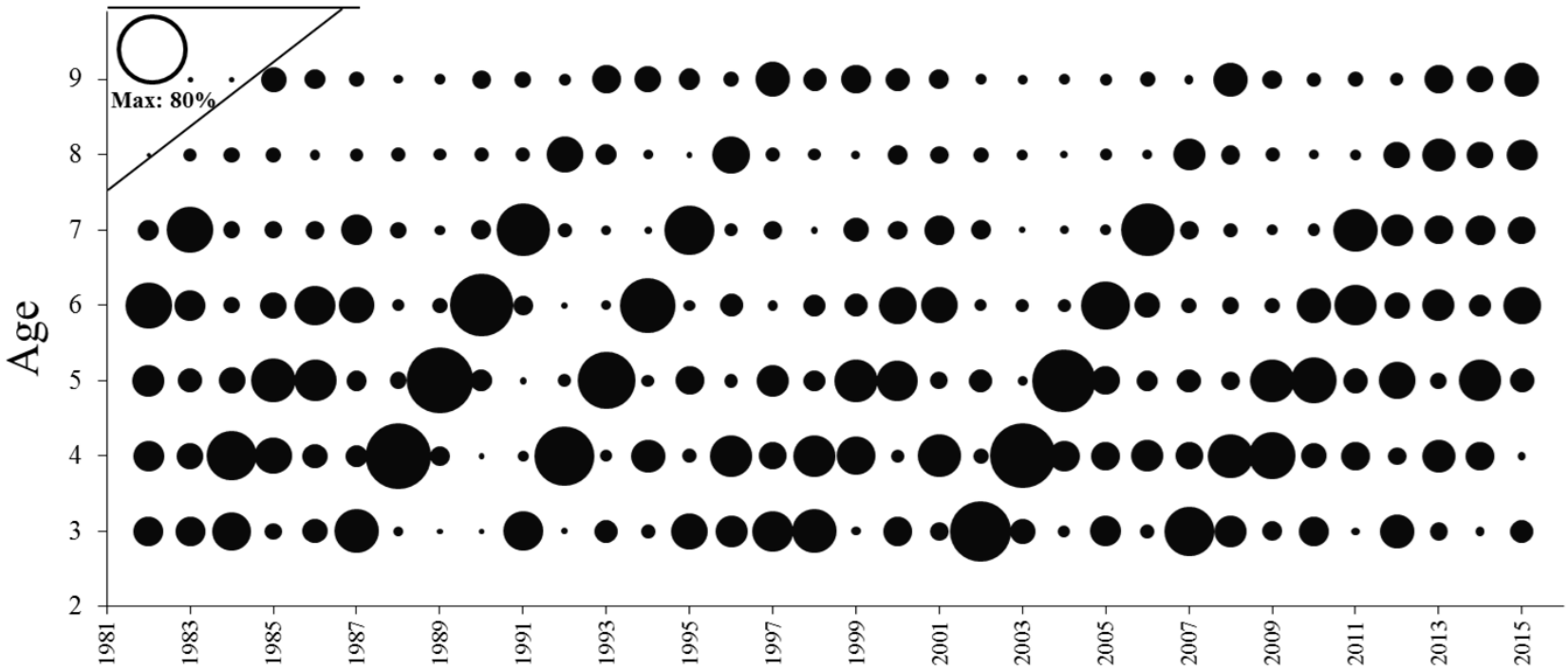
[i] Acoustics estimates for 2005–2014 are from ADF&G surveys only and are not adjusted for maturity or subsequent harvest. Therefore, they represent the total biomass and not the spawning biomass.

[j] Miles of spawn estimate for 2007–2015 are not available.

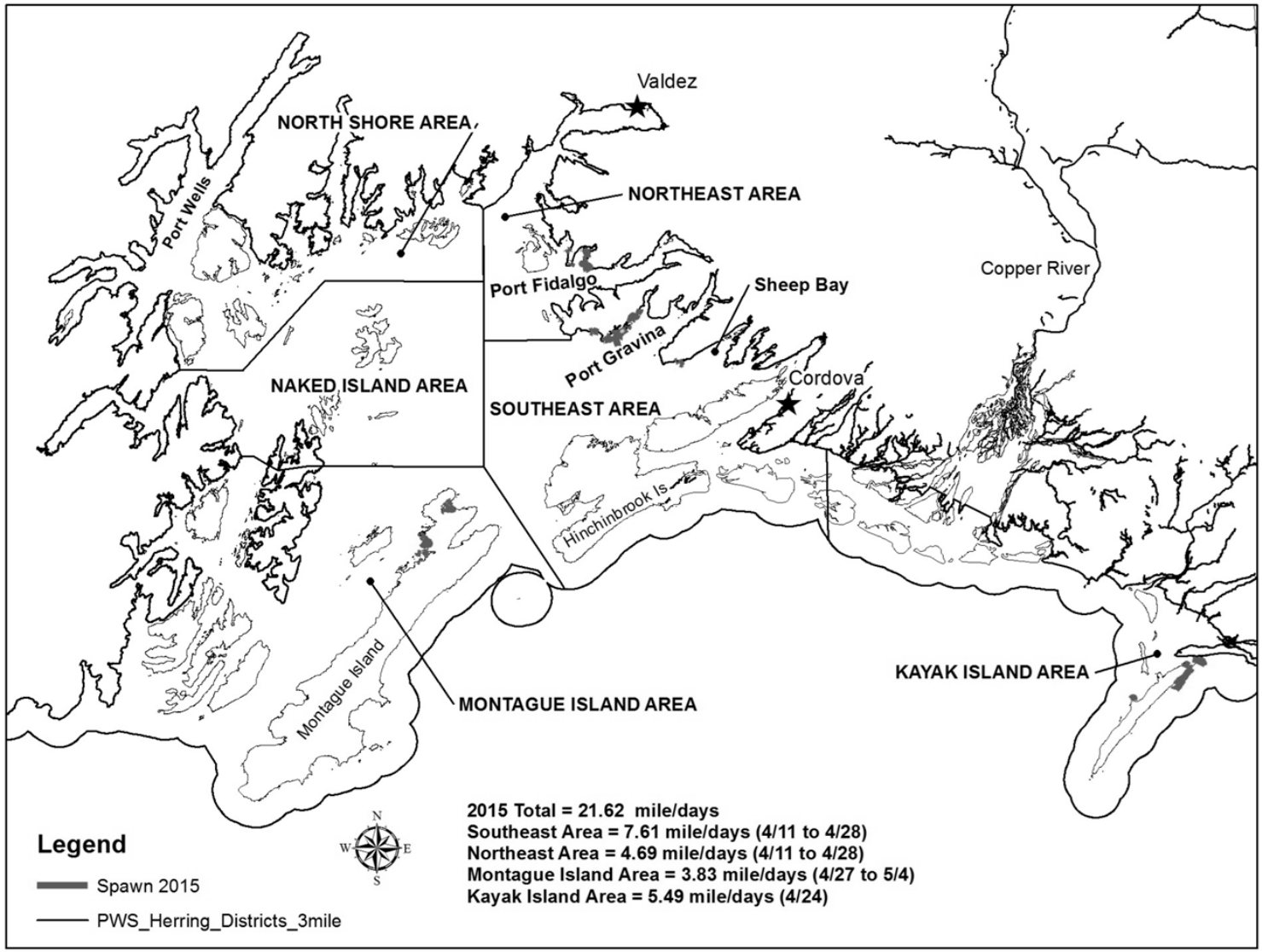
[k] Estimates are not available.



Appendix G2.–Prince William Sound Area annual Pacific herring biomass indices by management year, 1973–2015.



Appendix G3.–Pacific herring percentage contribution by number of each age group to the spring run biomass, 1982–2015.



Appendix G4.–Location of spawning herring and miles of spawn observed during aerial surveys in the Prince William Sound Area, 2015.