### 2014 Prince William Sound Area Finfish Management Report

by

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August 2015

**Alaska Department of Fish and Game** 

**Divisions of Sport Fish and Commercial Fisheries** 



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Weights and measures (metric)		General		Mathematics, statistics	
centimeter	cm	Alaska Administrative		all standard mathematical	
deciliter	dL	Code	AAC	signs, symbols and	
gram	g	all commonly accepted		abbreviations	
hectare	ha	abbreviations	e.g., Mr., Mrs.,	alternate hypothesis	$H_A$
kilogram	kg		AM, PM, etc.	base of natural logarithm	e
kilometer	km	all commonly accepted		catch per unit effort	CPUE
liter	L	professional titles	e.g., Dr., Ph.D.,	coefficient of variation	CV
meter	m		R.N., etc.	common test statistics	$(F, t, \chi^2, etc.)$
milliliter	mL	at	@	confidence interval	CI
millimeter	mm	compass directions:		correlation coefficient	
		east	E	(multiple)	R
Weights and measures (English)		north	N	correlation coefficient	
cubic feet per second	ft <sup>3</sup> /s	south	S	(simple)	r
foot	ft	west	W	covariance	cov
gallon	gal	copyright	©	degree (angular )	0
inch	in	corporate suffixes:		degrees of freedom	df
mile	mi	Company	Co.	expected value	E
nautical mile	nmi	Corporation	Corp.	greater than	>
ounce	OZ	Incorporated	Inc.	greater than or equal to	≥
pound	lb	Limited	Ltd.	harvest per unit effort	HPUE
quart	qt	District of Columbia	D.C.	less than	<
yard	yd	et alii (and others)	et al.	less than or equal to	≤
, u	<i>J</i>	et cetera (and so forth)	etc.	logarithm (natural)	ln
Time and temperature		exempli gratia		logarithm (base 10)	log
day	d	(for example)	e.g.	logarithm (specify base)	log <sub>2</sub> , etc.
degrees Celsius	°C	Federal Information	-	minute (angular)	, 52,
degrees Fahrenheit	°F	Code	FIC	not significant	NS
degrees kelvin	K	id est (that is)	i.e.	null hypothesis	$H_{O}$
hour	h	latitude or longitude	lat or long	percent	%
minute	min	monetary symbols		probability	P
second	S	(U.S.)	\$, ¢	probability of a type I error	
		months (tables and		(rejection of the null	
Physics and chemistry		figures): first three		hypothesis when true)	α
all atomic symbols		letters	Jan,,Dec	probability of a type II error	
alternating current	AC	registered trademark	®	(acceptance of the null	
ampere	A	trademark	TM	hypothesis when false)	β
calorie	cal	United States		second (angular)	"
direct current	DC	(adjective)	U.S.	standard deviation	SD
hertz	Hz	United States of		standard error	SE
horsepower	hp	America (noun)	USA	variance	~-
hydrogen ion activity	рH	U.S.C.	United States	population	Var
(negative log of)	P		Code	sample	var
parts per million	ppm	U.S. state	use two-letter	~p	· <del></del>
parts per thousand	ppt,		abbreviations		
r r	% %		(e.g., AK, WA)		
volts	V				
watts	W				

#### FISHERY MANAGEMENT REPORT NO. 15-34

## 2014 PRINCE WILLIAM SOUND AREA FINFISH MANAGEMENT REPORT

by

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> > August 2015

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This document should be cited as

Wiese, A., T. Sheridan, J. Botz, S. Moffitt, and R. Brenner. 2015. 2014 Prince William Sound area finfish management report. Alaska Department of Fish and Game, Fishery Management Report No. 15-34, Anchorage.

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#### **ABSTRACT**

The 2014 Prince William Sound (PWS) management area commercial salmon harvest was 49.78 million fish. The harvest included 44.31 million pink *Oncorhynchus gorbuscha*, 3.31 million sockeye *O. nerka*, 1.54 million chum *O. keta*, 616,000 coho *O. kisutch*, and 11,700 Chinook salmon *O. tshawytscha*. Approximately 44.29 million fish were commercial common property harvest, and 5.49 million fish were sold for hatchery cost recovery. The estimated value of the combined commercial salmon harvest, including hatchery sales, was approximately \$106.62 million. During the 2014 season, 525 drift gillnet, 29 set gillnet, and 222 purse seine permit holders fished. Drift gillnet exvessel harvest value was an estimated \$52.37 million (average permit earnings of \$99,800); set gillnet exvessel harvest value was an estimated \$3.03 million (average permit earnings at \$105,000); and purse seine exvessel harvest value was an estimated \$39.15 million (average permit earnings at \$176,000). Revenue generated for hatchery operations was approximately \$12.08 million. The PWS management area personal use and subsistence fisheries harvested a total of 145,000 fish in 2014. For these fisheries, approximately 13,000 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 2014 for the 15th consecutive year because age structure and available surplus in the spawning biomass did not support a fishery.

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

# 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 salmon 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. 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 (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 (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 Sheridan et al. (2013) and Stopha (2013a, 2013b, 2013c, 2013d, and 2013e).

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 2014, purse seine 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 then 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 while maintaining a threshold spawning biomass.

# OVERVIEW OF AREAWIDE SALMON AND HERRING FISHERIES

The 2014 PWS management area commercial salmon harvest was 49.78 million fish. The harvest included 44.31 million pink, 3.31 million sockeye, 1.54 million chum, 616,000 coho, and 11,700 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 89.0% of the commercial harvest (44.29 million fish) was attributed to the commercial common property fishery (CCPF) and 11.0% (5.49 million fish) was attributed to the hatchery cost-recovery fishery (Table 1). The 2014 preliminary exvessel value estimates by gear group from the CCPF, including both wild and enhanced salmon, are \$39.15 million (41.4%) for purse seine, \$52.37 million (55.4%) for drift gillnet, and \$3.03 million (3.2%) for set gillnet (Table 2; Figure 4). The average price per pound paid to fishermen was above the recent 10-year (2004–2013) average for all species except pink and chum salmon harvested in the Copper River District (Table 3). The purse seine gear group harvest value was the fifth highest in the last 10 years, and 100.9% of the recent 10-year average. The drift gillnet gear group had the second highest harvest value on record. The set gillnet gear group harvest value was the third

highest in the last 10 years and more than a million dollars above the recent 10-year average (Table 4).

No commercial fisheries for herring occurred in 2014; the projected spawning biomass of 24,800 tons for spring 2014 was above the regulatory minimum spawning biomass of 22,000 tons. Because a majority of the population was projected to be recruit-age fish, and due to uncertainty in the forecast point estimate, all commercial herring fisheries were closed. Given the PWS herring spawning population, current 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 2004–2013 was 24,800 Chinook, 1.25 million sockeye, and 252,000 coho salmon. The 25-year average for 1989–2013 was 35,800 Chinook, 1.31 million sockeye, and 278,000 coho salmon (Appendix A4). The 2014 harvest was 10,200 Chinook, 2.05 million sockeye, and 316,000 coho salmon (Table 1).

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 spawning escapement goal was changed to 24,000 or greater Chinook salmon (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 the sonar at Miles Lake to manage the commercial fishery and provide for upriver escapement and fishery allocations. Additionally, upper river aerial escapement observations, thermal and strontium 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*.

From 2004 to 2013 the combined upriver subsistence and personal use harvest (federal and state) has ranged from 140,000 sockeye salmon (in 2008) to the record harvest of 275,000 (in 2013), with a 10-year average of 201,000 sockeye salmon (Appendix A1). A general increasing trend in subsistence harvest is reflected annually through additions to the inriver goal.

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, with 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 2014 inriver goal were as follows:

• Spawning escapement: 360,000 to 750,000 sockeye salmon

• Other salmon: 17,500 salmon

Subsistence harvest: 82,500 salmonPersonal use harvest: 132,500 salmon

• Sport fishery: 15,000 salmon

Gulkana Hatchery broodstock: 20,000 sockeye salmon
Gulkana Hatchery surplus: 120,400 sockeye salmon

• Total: 728,000 to 1,140,000 salmon

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 2014 commercial harvest forecast for the Copper River District was 22,000 Chinook, 1.60 million sockeye, and 229,000 coho salmon (Appendix A10). The GH enhanced sockeye salmon run was forecast by ADF&G to be 468,000 fish (Appendix E1). 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 2014 inriver goal for salmon passing the Miles Lake sonar was 728,000 to 1.14 million fish. This number equated to a sonar goal of 697,000 to 1.06 million salmon by July 28, which was the season ending date for sonar counting at Miles Lake in 2014 (Appendix A7).

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 total 2014 Copper River sockeye salmon run was 3.41 million fish, with 2.05 million (60.2%) commercially harvested and sold, 258,000 (7.6%) harvested by upriver subsistence and personal use fishermen, and an estimated 20,000 (0.6%) 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 1.01 million (29.7%) fish, and 53,700 (1.6%) fish returned to the GH sites (Appendix A1). Overall, 2.63 million (77.7%) of the sockeye salmon originated from upriver wild stock systems, 351,000 (10.4%) from Copper River Delta wild stock systems, and 403,000 (11.9%) came from the GH (Appendix A2).

The 2014 total Chinook salmon run was 35,300 fish with 10,200 (28.9%) commercially harvested and sold, 189 (0.5%) harvested through educational and subsistence permits in the Copper River District, and 768 (2.2%) retained by commercial permit holders as "homepack." A total of 2,520 (7.1%) were harvested by upriver personal use and subsistence users, an estimated 800 (2.3%) were harvested by sport fishermen, and the remaining 20,800 (59.0%) represent spawning escapement (Appendix A3). The commercial harvest ranks as the eighth lowest annual harvest since 1960. The spawning escapement was below the lower bound SEG of 24,000 for Copper River Chinook salmon. The Copper River commercial sockeye salmon harvest of 2.05 million was 28.1% above the projected 1.60 million and 55.3% above the previous 10-year average of 1.32 million sockeye salmon. The commercial harvest of 11,000 Chinook salmon was 49.9% of the previous 10-year average of 22,000 fish. The overall commercial harvest of Chinook salmon was the third lowest since 1960 (Appendix A4). The overall commercial sockeye salmon harvest from the Copper River District was the fourth largest harvest in the history of the fishery.

A total of 518 drift gillnet permits were active in the Copper River District in 2014 out of 532 total permits. Fishing effort peaked during the third period that began May 26 when 501 permits were fished, though harvest did not peak until the seventh period with 247,000 sockeye salmon. (Appendix A5).

The 2014 cumulative Miles Lake sonar count on July 28 (last day of operation) was 1.22 million salmon, which was above the upper bound of the inriver goal (Appendices A7 through A9). River height was above the historical maximum during the first few days of May, dipped beneath the average from early June through early July, climbed above average during July, and fell sharply again just before the sonar was pulled for the season (Appendix A11).

Final escapement index count for the Copper River Delta systems was 64,200 sockeye salmon, within the SEG range of 55,000–130,000 fish (Appendix A12; Table 5) and 10,700 fish below the recent 10-year average. Since 2004, the escapement index has ranged from a low of 58,400 in 2005 to a high of 98,900 in 2006 (Appendix A13). 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 (Sr) otolith mark analysis, an estimated 298,000 GH sockeye salmon were harvested in the Copper River District commercial fishery in 2014, accounting for 14.5% of the total sockeye salmon commercial harvest (Appendix E3). This is almost twice the previous 10-year average commercial harvest of 184,000 GH sockeye salmon (Appendix E4). The majority were 5-year-old fish from the 2010 GH release of 22.0 million fry. (Appendix E5). Additionally, there were an estimated 72,800 MBH sockeye salmon in the Copper River District commercial harvest (Appendix E3).

In 2014, the overall run of sockeye salmon produced by the Gulkana hatcheries totaled 397,000 fish (Appendix E4). This was almost identical to the PWSAC total return forecast of 403,000 fish and less than ADF&G's forecast return of 468,000 fish (PWSAC 2014; Appendix E1). A total of 53,700 sockeye salmon were reported collected for broodstock or escaped into the watershed. Of these fish, 16,200 were harvested for broodstock and an estimated 37,500 sockeye salmon returned to release locations and were not harvested.

The Miles Lake sonar became fully operational on May 12, though each bank had been operated independently for short periods for a few days prior. The first observed salmon were enumerated on May 12, with the north bank passing 279 fish and the south bank passing 161 fish (Appendices A7 and A8).

Due to a poor Chinook salmon forecast, inside waters as described in 5 AAC 24.350(1)(B) were closed for 11 periods, through the period beginning June 19. This was 9 fishing periods beyond the regulatory requirement in 5 AAC 24.361(b). Actual Chinook salmon harvest was well below inseason harvest projections for the first several fishing periods. Combined with a low preseason projection, this prompted ADF&G to maintain the inside waters closure into the second week of June based on the likelihood of a poor Chinook salmon run.

The first Copper River District commercial fishing period on Thursday, May 15 was for 12 hours, and 487 commercial drift gillnet permits fished. Harvest from this period was 32,000 sockeye and 1,260 Chinook salmon. The anticipated harvest was 33,000 sockeye and 2,670 Chinook salmon (Appendices A5 and A10). Processors reported paying a grounds base price of approximately \$6.25 per pound for Chinook and \$4.25 per pound for sockeye salmon. Harvest increased during the second 12-hour period when 497 permit holders landed and sold 82,900 sockeye salmon (Appendices A5 and A10). Strong sockeye salmon run entry through the west and central portion of the district, outside the barrier islands, accounted for a majority of the harvest

Spring tides with a range of 16 feet or greater began on May 14, the day preceding the first 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 started a trend of above-maximum inriver passage that would continue throughout the entire season (Appendices A7 and A8).

The third period was announced Wednesday, May 21, and Miles Lake sonar had been counting for 9 full days. With a cumulative count of 49,500 salmon versus a maximum escapement objective of 18,000 salmon, it was clear that a large run was likely. In response, fishing time for the third period was increased to 36 hours. Sockeye salmon harvest of 223,000 fish from this period was 114,000 above expected. Chinook salmon harvest of 1,470 fish was more than 1,400 fish below expected (Appendices A5, A7 and A10).

The fourth period occurred Monday, May 26 for 24 hours. Sockeye salmon harvest was above expected and Chinook salmon harvest was below expected. This harvest trend – high sockeye and low 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 early portion of the run. Participation in the fishery remained above 300 permits or greater until the tenth period on June 16 (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.

The aerial survey program on the Copper River Delta began the first week of June. Aerial surveys became an increasingly important sockeye salmon management tool during late June and throughout much of July. Fishing time was reduced from 48 to 36 hours per period beginning June 16 to allow for adequate sockeye salmon escapement into delta systems (Appendices A5 and A12). GH contribution estimates were a critical management tool during June and July, allowing for the tracking of hatchery run strength relative to wild stock run strength.

The June 30 and July 3 fishing periods were increased to 48 hours based on increasing numbers of GH sockeye salmon and higher than anticipated Copper River Delta sockeye salmon escapement indices, (Appendix A5 and A12). This decision was also supported by historical run timing of the wild and enhanced stocks and by increasing numbers of Sr-marked GH fish harvested in the commercial fishery. GH sockeye salmon were near peak abundance in the fishery during these fishing periods, representing 44.0% (June 30) and 37.5% (July 3) of the harvest (Appendix E3). The peak harvest during the June 5 fishing period was earlier than normal and was over 2.5 times the anticipated harvest (Appendices A5 and A10). Higher than anticipated sonar passage and strong sockeye salmon wild stock contributions in the fishery allowed for periods of 36 or 48 hours in duration in early July. Fishing time and area were primarily based on inseason indices of available wild stock surplus and secondarily by abundance of GH sockeye salmon. Copper River Delta aerial escapement survey indices were below average for the first 2 surveys in June but climbed above average in late June and early July (Appendix A12).

Copper River Delta survey conditions remained good, and the sockeye salmon escapement index was ahead of lower SEG through early 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 early August, from 227 permits on the July 14 fishing period to 16 permits on the August 7 fishing period. 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 (76.4%) were 5-year-old fish from brood year 2009, followed by 20.9% 4-year-old fish and 6-year-old fish (2.6%). Over half of the sockeye salmon harvested (55.0%) were males (Appendix A15). The majority of the commercially harvested Chinook salmon (45.5%) were 5-year-old fish from brood year 2009, followed by 30.8% 4-year-old and 6-year-old fish (23.4%). Approximately 0.3% of the run was 3-year-old fish from brood year 2011. Less than half of the Chinook salmon harvested (38.2%) were males (Appendix A16).

#### **Coho Salmon Fishery Season Summary**

The 2014 coho salmon run was estimated to be 420,000 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 316,000 coho salmon were harvested and sold commercially; 1,150 were reported retained as "homepack;" 0 were harvested from the Copper River District in the subsistence gillnet fishery; 888 were harvested by personal use and subsistence dip net fishermen in the Chitina Subdistrict; 509 were harvested in the Glennallen Subdistrict dip net and fish wheel subsistence fisheries; an estimated 15,500 were harvested by sport fisherman on the Copper River Delta near Cordova; and an estimated 7 fish were harvested by upriver sport fisherman. Finally, 428 coho salmon were harvested in the federally-managed Copper River Delta subsistence fishery (Appendices A18 and F6). The Copper River Delta spawning escapement index was 86,000 coho salmon (Appendix A18). The aerial survey index for this season was 42,500 fish and was within the SEG index range of 32,000–67,000 (Table 5; Appendix A19). This index value was below the midpoint of the SEG index range but is somewhat higher than the low index values from 2009 to 2012 (Appendix A20).

The coho salmon commercial harvest of 316,000 was 28.6% above the projected harvest of 229,000 fish (Appendix A10). Peak fishing effort and harvest for the coho salmon season was during the 24-hour period that occurred on August 25 when 261 permit holders delivered 61,400 coho salmon (Appendix A5). As is typical in this fishery, estimation of coho salmon escapement was hampered by frequent storms and poor visibility in major index streams. Rough seas and inclement weather probably had a negative impact on harvest levels of coho salmon.

The first period that coho salmon were the majority of harvest was the 36-hour period that began Monday, August 11. The district remained closed to fishing on Thursday, August 14 to allow for early season coho salmon escapement. The coho salmon season began on Monday, August 18 during statistical week 34 with a 36-hour period (Appendices A5 and A6). An aerial survey flown during the week ending August 23 under marginal conditions produced a count of 5,300 coho salmon in index streams, which was below the target range for statistical week 32 (Appendix A19). Harvest from the August 18 fishing period was 41,000 coho salmon and 199 permit holders reported deliveries. This extended period yielded much higher than the anticipated harvest of 16,600 coho salmon and thus prompted a fishery closure for the rest of the week (Appendices A5 and A10). The 24-hour fishing period beginning on August 25 resulted in 61,400 coho salmon delivered by 261 permit holders (Appendix A5). The anticipated harvest for this fishing period was 25,200 coho salmon (Appendix A10). An aerial survey flown under poor observational conditions on August 27 documented 11,900 coho salmon in index streams, which was below average but within the SEG range for the date (Appendix A19). Effort and harvest dropped substantially the following period that began August 28, in which 160 permit holders sold 27,600 coho salmon. During the next period, effort and harvest increased again to 249 participating boats and 47,200 coho salmon harvested versus the expected 28,200. An aerial survey flown on September 2 documented 27,100 coho salmon in index streams, which was above the average SEG midpoint for the date. This above-average level of escapement persisted for the remaining 2 surveys and allowed the fishery to remain on a schedule of 2 periods per week until the season closed October 11 (Appendices A5 and A19).

Harvest and effort declined steadily during periods 31 (September 4), 32 (September 8), and 33 (September 11). During the period beginning September 15, 135 permit holders harvested 26,000 coho salmon. This was the last substantial harvest of the season; a total of 6,450 coho salmon

were harvested after this period, with fewer than 20 boats fishing during each opening. There was no effort or harvest from September 29 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 survey was flown during statistical weeks 32, 33, 38, 40, 41 or 42. However, above-average escapement trends observed during the surveys that were completed combined with above-anticipated harvest provided enough information to continue a regular fishing schedule throughout most of the season (Appendices A10, A12 and A19).

The majority of the coho salmon harvested commercially (51.5%) were 4-year-old fish from brood year 2010, with 3-year-old (48.3%) and 5-year-old (0.2%) fish contributing most of the remaining fish. An estimated 58.7% of the coho salmon harvested were males (Appendix A17).

#### 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 not likely 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 7. The total index count from this survey was 200 sockeye salmon, below the anticipated range of 893–1,970 sockeye salmon for this date (Appendix A22). Because the escapement count was below anticipated levels, the fishery remained closed the following week. No survey was flown during the week ending June 14. To provide some information with minimal potential for a large harvest, the district was opened for the season June 16 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.

Harvest from the first period was confidential because less than 3 permits fished (Appendix A23). It is worth noting that 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 second aerial survey was conducted the week ending June 21. The index of 1,100 sockeye salmon was below the SEG range of 4,050–8,910 for the week. Considering the poor escapement and that there would probably be limited fishing effort, the second period in the district was limited to 12 hours and occurred June 19. No harvest was reported from this period (Appendix A22 and A23).

Sockeye salmon escapement had increased greatly by the third survey. The index of 12,800 was near the upper end of the weekly SEG, 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 (Appendices A22 and A23).

After the third survey, escapement indices remained nearer to the lower end of the SEG range, even falling below the range on the fifth survey during the week ending July 19. The final season index was 14,985 sockeye salmon, falling only 15 salmon short of the lower end of the SEG range.

#### **Coho Salmon Season Summary**

Late-season weather conditions prohibited several aerial surveys in the Bering River District. For the seventh 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 A25). Commercial harvest 97,700 was the largest since 2002 and was nearly 50% greater than the 10-year average (Appendix A21).

Indices from an aerial survey flown the week ending August 23 were below the lower end of the SEG range for the week (Appendix A25). Harvest from the period that began August 18 was 1,500 coho salmon with 4 permit holders participating (Appendix A23). 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 30 yielded an index of 4,720 coho salmon, which was within the range of 4,000–10,200 for the date (Appendix A25). Harvest during this statistical week was 23,700 coho salmon with 34 permits fished, which indicated that run entry was increasing (Appendix A24). This pattern continued during the next aerial survey in which the index of 12,300 was closer to the average SEG for the date. Aerial survey indices continued to rise for the rest of the season, though poor weather prevented several surveys from taking place. The highest aerial survey index was observed the week ending September 27. At 21,600 coho salmon, the index from this survey was 8,800 salmon above the upper end of the SEG range for the date. The total drainage index for the season was 26,500 coho salmon, versus an SEG range of 13,000–33,000 (Appendix A25).

The coho fishing period schedule in the Bering River District followed that which was 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 strong and early fishing pressure during the 2014 season. Thirty permits fished the 24-hour period that began August 28, harvesting 12,200 coho salmon. Peak harvest occurred during the next fishing period that occurred September 1, when 25,900 coho salmon were sold by 55 permit holders. Interestingly, during the following period there was a marked increase in participation with 74 permits fishing and a decline in harvest with 20,600 coho salmon sold. Harvest and effort tapered rapidly during the next 2 periods, and no harvest was reported after the period that closed September 12 (Appendix A23).

#### COGHILL DISTRICT

#### **Preseason Outlook and Harvest Strategy**

The 2014 forecast of the sockeye salmon run to Coghill Lake was 168,000 fish. Meeting the midpoint of the SEG range of 20,000–60,000 sockeye salmon (Table 5; Fair et al. 2011) would leave 116,000 fish for the common property fishery (Table 6). The enhanced chum salmon run to WNH was forecast to be 1.64 million fish. PWSAC's projection for cost-recovery and broodstock requirements was approximately 512,000 fish, leaving 1.13 million chum salmon for the CCPF. An estimated run of 217,000 coho salmon was projected to return to WNH. A total of

2,700 were anticipated to be harvested for broodstock, and the remaining 214,000 fish would be available to the CCPF.

The 5 year rolling average allocation calculation used to guide 2014 fisheries management was 53.7% purse seine, 46.3% drift gillnet, and 4.3% set gillnet. As a result, the purse seine fleet had exclusive access to the Port Chalmers Subdistrict from June 1 to July 30 in 2014, and the set gillnet fleet was not limited to 36 hours per week after July 10, 2014.

#### **Season Summary**

Early season management of the Coghill District is largely based on Coghill Lake wild sockeye salmon escapement. Coghill River escapement was assessed from June 8 to July 26, with a total sockeye salmon escapement of 20,800 fish, just above the lower SEG bound of 20,000 fish (Table 5 and Appendices B1, B2 and B3). Total pink salmon passage at the weir was 4,800, down markedly from the 360,000 pink salmon passed at the weir in 2013. The district pink and chum salmon escapement goals were met.

The total CCPF purse seine and drift gillnet combined sockeye salmon harvest for the Coghill District was 159,000 (99.8% drift gillnet) fish; the total CCPF harvests was 643,000 chum salmon (99.9% drift gillnet), 2.00 million pink salmon (54.9% drift gillnet), and 160,000 coho salmon (94.7% drift gillnet) (Table 1). This is only the fourth time that total Coghill District drift gillnet pink salmon harvest has surpassed purse seine harvest (Appendix B6). The total Coghill District commercial drift gillnet harvest was 159,000 sockeye, 643,000 chum, 1.10 million pink, and 152,000 coho salmon, with 284 permit holders reported deliveries (Table 1 and Appendices B4 and B6).

In 2014, PWSAC reported a WNH chum salmon purse seine cost-recovery harvest of 173,000 fish, a raceway cost-recovery harvest of 27,000 fish, and broodstock carcass sales of 173,000 fish. As part of chum salmon brood collection, 173,000 chum salmon were used as broodstock, 2,630 fish were not viable or unspawned, and 4,209 fish were holding mortalities. PWSAC estimated that 10,000 fish were not harvested and remained within waters of the Special Harvest Area (SHA). PWSAC also reported harvesting 10,900 coho salmon for raceway cost recovery and 6,580 fish as part of broodstock collection. The broodstock goal for coho salmon was 2,700 fish (Appendix E9, PWSAC 2014a).

Based on otolith thermal-mark data, it is estimated that enhanced salmon made up 73.9% of the sockeye salmon, 90.8% of the chum salmon, and 93.6% of the pink salmon harvested by the CCPF harvest in the Coghill District (Appendices E6–E8). There were approximately 123,000 MBH sockeye salmon harvested in the Coghill District commercial fishery, accounting for 73.9% of the 166,000 sockeye salmon harvested (Appendix E6). Of the 671,000 chum salmon harvested in the Coghill district in the CCPF, approximately 554,000 (90.8%) originated from WNH, AFK, and the Port Chalmers remote release site (Appendix E8). Of the 2.00 million pink salmon harvested in this district by the CCPF, 1.40 million (70.0%) were released at WNH, 368,000 (18.4%) were released at CCH, 51,000 (2.6%) were released at SGH, and 52,600 (2.6%) were released at AFK (Appendix E7).

The Coghill District drift gillnet fishery began on May 29. A general schedule of 2 openings, 48–60 hours in duration per week was established, coinciding with openings in the Copper River and Eshamy districts. Beginning July 10, the Bettles Bay Subdistrict was closed, to allow for wild

chum salmon escapement to the western side of Port Wells. The closure of this subdistrict typically begins around the second week of July to protect chum salmon stocks.

The WNH chum salmon run was weaker than anticipated throughout the season. Chum salmon cost recovery at WNH began on June 12. The WNH hatchery escapement exclusion zone (HEEZ) remained closed at the start of the season. Beginning June 12, fishing time within the Esther and Granite Bay subdistricts was reduced to facilitate cost recovery. On June 18 cost recovery was 100% complete, on par with the previous year's cost-recovery timing (Appendix E9). Drift gillnet harvest within the Coghill District peaked during the 60-hour period that began June 19 (Appendix B4). The largest daily cost-recovery harvest occurred June 12 with a harvest of 31,900 chum salmon (Appendix E9). From June 9 through July 2, the WNH, SHA, and THA were closed to commercial fishing. In subsequent periods the WNH, SHA, and THA were open and the WNH HEEZ was excluded, until July 17 when the SHA and THA were again excluded. After this period, the Coghill District was closed until the seine fishery began July 28 (Appendix B4). PWSAC collected 214,000 chum salmon for broodstock vs an anticipated 216,000 (Appendix E9, PWSAC 2014a).

Sockeye salmon passage at the Coghill River weir did not follow the typical pattern. Usually, daily run entry follows a normal distribution and peaks near July 4. In 2014, the highest daily passage at Coghill River weir occurred on June 20 when 1,740 sockeye salmon passed the weir. However, passage did not continue to rise rapidly, and there was only 1 other day (June 30) in which over 1,000 sockeye salmon were counted. The final escapement estimate into Coghill Lake was 21,800 sockeye salmon and included 350 fish observed below the weir during the day that the weir was taken down (Appendices B1 and B2).

By regulation, on July 21 purse seine permit holders were allowed to fish Coghill District during all open fishing periods. Chum salmon harvest declined quickly through the remainder of July, largely due to processors not buying chum salmon from the hatchery terminal areas after July 21 because of quality concerns. Pink salmon harvest in the southern portion of the district increased rapidly beginning in mid-July, indicating a strong pink salmon run (Appendices B4 and B5).

Coho salmon landings began in early August, but harvest remained below 1,000 fish until the period that began August 21. Coho salmon harvest continued late in the season and the final period with reported harvest began September 20. On August 28, the harvest of pink salmon (5,220) fell below the harvest of coho salmon (8,020) (Appendix B4 and B5). On September 1, Coghill District was closed to purse seine gear for the remainder of the season, and the peak drift gillnet harvest of coho salmon (16,800) occurred during this period. The Coghill District closed to commercial fishing on October 10 (Appendix B4). Of the 6,580 coho salmon collected for broodstock, 1,950 were viable (Appendix E9). WNH coho salmon survival has been highly variable, ranging from nearly 12% to less than 1% and the coho salmon egg take goal has been achieved in only 4 of 7 years (Appendix E2).

Peak drift gillnet fishing effort occurred during the 60-hour period beginning June 19 when 150 permit holders harvested 23,100 sockeye and 112,000 chum salmon. Peak drift gillnet chum salmon harvest also occurred during this period. Peak drift gillnet sockeye salmon harvest of 30,900 fish occurred during the previous period (Appendix B4). Overall, 159,000 sockeye salmon were harvested by 284 drift gillnet permit holders during the 2014 season. This is 93.1% of the 10-year harvest average of 171,000 sockeye salmon. The 2014 harvest of 643,000 chum salmon by drift gillnet permit holders was much lower than the previous 10-year average of 1.57

million and very poor in comparison to the harvests of over 2 million in 2012 and 2013. The 2014 harvest of 160,000 coho salmon by the drift gillnet fleet was 63.5% greater than the previous 10-year average of 58,600 fish (Appendix B6).

#### UNAKWIK DISTRICT

#### **Preseason Outlook and Harvest Strategy**

The Unakwik District, located in the northern portion of Unakwik Inlet, is the smallest district in the PWS management area. Both drift gillnet and purse seine gears are allowed during all fishing periods. CCH, a pink salmon hatchery, borders the southern boundary of the district. This district was established for management of 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**

The total 2014 Unakwik District harvest was 1,150 sockeye, 5 pink, and 273 chum salmon. The 2014 sockeye salmon harvest was below the previous 10-year average of 5,720 (Appendix B10). Peak sockeye salmon harvest (852) occurred during the fishing period that started on June 19 (36 hours). 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. The Unakwik District opened for the 2014 fishing season on June 16 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 22 (Appendix B9).

#### **ESHAMY DISTRICT**

#### **Preseason Outlook and Harvest Strategy**

The 2014 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 (Table 6). PWSAC projected the total run of enhanced sockeye salmon to MBH to be 1.04 million fish, of which 8,940 fish were required for broodstock and the remaining 1.03 million fish would be available for harvest in the common property fisheries. 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 2014 total Eshamy District CCPF harvest was 1.02 million sockeye, 98,600 chum, 226,000 pink, and 672 coho salmon (Table 1 and Appendix C6). Of the 1.02 million sockeye salmon commercially harvested in the Eshamy District, 961,000 (94.0%) were MBH sockeye salmon (Appendix E10). PWSAC did not conduct cost recovery on MBH sockeye salmon and had a broodstock harvest of 12,700 fish (Appendix E13).

Sockeye salmon began arriving at the MBH in late May and a schedule of 2 extended fishing periods per week was initiated beginning May 29. The entirety of the Eshamy District was initially opened to commercial fishing to allow the fleet to focus on the enhanced run to MBH while run timing overlap with Eshamy River wild sockeye salmon was minimal. On June 19, the alternating gear zone (AGZ) was closed to commercial fishing per PWSAC's recommendation. In 2014, the set gillnet gear group fished the first period in the AGZ when it was opened on June 23. Although set gillnet participation remained steady for much of the season, drift gillnet participation fluctuated as permit holders moved between the Coghill and Copper River districts. The highest level of drift gillnet participation occurred during periods 6 and 7, with 198 permit holders reporting deliveries in each period (Appendices C4 and C5).

The Eshamy River weir did not operate in 2014. Escapement was assessed through a video monitoring project at the outlet of Eshamy Lake. This project was redesigned in 2013 to include 2 below-water cameras, night time monitoring, and lower power consumption. Also, solar panels were moved to a site with more solar exposure. Escapement counts for the 2014 season were incomplete, largely due to fish passing around the partial weir at high water levels in August. The minimum count was ~7,500 sockeye salmon. Improvements for 2015 could include a more complete weir.

The peak Eshamy District sockeye salmon harvest of 168,000 fish occurred during period 7 (beginning June 19); peak chum salmon harvest of 18,200 occurred during period 6 (beginning June 16); and peak pink salmon harvest of 91,100 occurred during period 19 (beginning July 31) (Appendices C2 and C3). Through June 23, the sockeye and chum salmon wild stock harvest proportions remained low, averaging 1.7% and 11.6% wild, respectively. Although wild sockeye salmon harvest proportions remained stable for the remainder of June and early July, wild chum salmon harvest proportions increased in late June and early July and remained between 20.8% and 92.1% throughout the rest of July (Appendices E10 and E12). Pink salmon harvest topped 10,000 fish during period 12 (started July 7, 48 hours) and stayed between 10,000 and 14,000 until jumping up to over 20,000 during period 17 (started July 24, 36 hours). The 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.

Beginning July 24, only that portion of the Eshamy District north of Loomis Creek was open to commercial fishing until August 4. This action was taken to protect wild Eshamy Lake and Gumboot Lake sockeye salmon. From August 4 through August 19, only the Main Bay Subdistrict within the Eshamy District was opened to commercial fishing to protect not only wild sockeye but also wild chum and pink salmon transiting the district. Beginning August 21 and through the end of the season, the entire district was again opened during commercial fishing periods. There was no effort after the period that closed August 12 (Appendices C2 and C3). Low sockeye salmon harvest and limited information from the Eshamy River video weir did not support expanded fishing opportunity on the Eshamy Lake sockeye salmon stock.

Overall for the Eshamy District, 306 drift gillnet permit holders harvested 761,000 sockeye, 77,700 chum, and 190,000 pink salmon during the 2014 season (Appendices C2, C8 and Table 1). This year's drift gillnet harvest totals of 761,000 sockeye and 190,000 pink salmon were higher than the 10-year harvest averages of 548,000 sockeye and 82,700 pink salmon, but the harvest of 77,700 chum salmon was less than half of the 10-year average of 175,000 chum salmon (Appendix C6). A total of 29 set gillnet permit holders harvested 260,000 sockeye,

20,900 chum, and 35,700 pink salmon (Appendix C3). This sockeye and chum salmon harvest total is higher than the previous 10-year averages of 193,000 sockeye salmon but lower than the 10-year average of 32,600 chum salmon. Set gillnet caught pink salmon harvest totals are higher than the previous 10-year average of 30,800 pink salmon (Appendix C6).

#### 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 215 index streams. Pink and chum salmon escapement trends determine the area and duration of fishing periods within districts. Run projections for species and districts without formal forecasts were based on average historical production. 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 needs are met. ADF&G uses time and area to assist with prosecuting an orderly fishery while protecting wild salmon from overharvest.

The 2014 forecast for the wild and hatchery chum salmon run to PWS was 3.08 million fish. Based on ADF&G's forecast of 445,000 wild chum salmon and escapement goal of 200,000, there was a potential CPF harvest of 245,000 wild chum salmon (Tables 5 and 6). The majority of the chum salmon run was anticipated to be from PWSAC hatchery production.

The 2014 wild and hatchery pink salmon run forecast for PWS was 38.44 million fish. This estimate includes 4.30 million wild stock pink salmon, 12.94 million VFDA pink salmon, and 21.20 million PWSAC pink salmon (Tables 5 and 6). The hatchery forecast was based on the release of approximately 599.58 million pink salmon fry in 2013 (Appendix E1).

Preseason escapement goal assumptions for PWS hatchery operators are expressed as midpoints of escapement goal ranges. The escapement goal ranges used are intended to provide for hatchery operator broodstock and cost-recovery requirements based on several variables, including fecundity, pre-spawning mortality percentage, immature and over-mature spawner percentage, average fish size, and price per pound. PWSAC's aggregate 2014 pink salmon escapement goal for AFK, CCH, and WNH was based on broodstock needs of approximately 949,000 fish and a revenue goal of \$6.13 million. PWSAC estimated that approximately 3.07 million pink salmon (14.5%) of the projected 21.2 million pink salmon returning to PWSAC hatcheries would be required for cost recovery and broodstock, and the remaining 18.13 million PWSAC fish would be available for CCPF harvest. The 2014 VFDA pink salmon escapement goal was based on broodstock needs of approximately 346,000 fish and a revenue goal of \$3.93 million. VFDA estimated that approximately 2.76 million pink salmon (21.4%) of the projected 12.94 million pink salmon returning to SGH would be required for cost recovery and broodstock. and the remaining 10.18 million VFDA fish would be available for CCPF harvest (Table 6). After an escapement of 1.16 million wild pink salmon, 3.14 million wild pink salmon were projected for CCPF harvest (Tables 5 and 6).

The 2014 run of coho salmon to SGH was forecast to be 106,000 fish, with 1,000 salmon needed for broodstock. Port Valdez was anticipated to be closed to CCPF purse seine fishing inside of a line from Entrance Point to Potato Point beginning on August 15. Purse seine fishing in Port Valdez was expected to resume the day after Labor Day, September 2, to target surplus SGH coho salmon.

The 2014 PWS Area forecast CCPF harvest by species, including both hatchery and wild fish, was 31.47 million pink, 2.81 million sockeye, 2.36 million chum, 548,000 coho, and 22,000 Chinook salmon (Table 6).

#### **2014 Season Summary**

The PWS SHTF process led to the creation of enlarged closure areas at the heads of several specific bays as a management tool to provide a greater assurance of meeting minimum wild stock pink and chum salmon escapement objectives while permitting as much fishing time and area as possible during a given season. Due to their proximity to Port Valdez and SGH, enlarged closures defined by GPS coordinates and SHTF markers in Sawmill, Jack, and Galena bays have been implemented for the entirety of the SGH enhanced pink salmon return in most years since their creation in the early 1990s. These closures were implemented for the entirety of the 2014 purse seine fishery targeting SGH enhanced pink salmon. The record setting 2014 SGH pink salmon run of 25.46 million fish was nearly double the preseason forecast of 12.94 million fish (Appendix E1). Local processing capacity was exceeded during several early July fishing periods in PWS. Over 5.92 million pink salmon were harvested in PWS on July 2 and 3, which is a record 2-day harvest total in the history of the SGH pink salmon fishery. More than 9.19 million pink salmon were harvested in PWS through July 2, which was a record cumulative total for that date. In order to maintain quality, much of eastern PWS was opened to daily 14-hour fishing periods from July 2 through July 7. Effort aerial surveys were conducted extensively during the 2014 season, and very few boats were observed fishing outside of Port Valdez and Valdez Arm during the SGH enhanced pink salmon run. As the season progressed and Eastern District pink salmon escapements lagged behind historical averages, ADF&G maintained SHTF area closures elsewhere in the district to close wild stock terminal areas. As the fishery targeting SGH enhanced pink salmon neared its conclusion in late July, fishing was further restricted to waters of Port Valdez to ensure that wild stock escapement goals were met.

Aerial surveys conducted throughout PWS during the statistical week ending August 2 indicated that wild stock pink and chum salmon escapements throughout PWS were near or greater than historical averages. PWSAC completed its cost-recovery fishing operations on August 2, and the majority of PWSAC hatchery subdistricts were opened at PWSAC's recommendation to daily 14-hour fishing periods on August 3 and 4. Preliminary harvest reporting from area processors indicated that over 3.52 million pink salmon were harvested in PWS on August 3. This was the seventh largest single day pink salmon harvest total on record for PWS and the second largest harvest on record for that date. Following a record setting pink salmon run to SGH, broad area was provided for daily fisheries targeting what appeared to be a large hatchery pink salmon return to PWSAC facilities beginning August 5. Poor weather limited fishing opportunity throughout the week of August 3 and further limited ADF&G's and PWSAC's ability to assess escapements to both streams and hatcheries. Based on ADF&G harvest sampling results from the August 5 and 6 fisheries, there were indications that PWSAC's enhanced pink salmon run was less than forecast and nearing its completion. As a result, the PWS purse seine fishery was closed from August 9 until August 18 to ensure that escapement goals were met. Fishing opportunity during the week of August 18 was limited with regards to time and area, and purse seine fishing effort declined rapidly throughout the following week.

Aerial surveys to assess wild chum salmon escapements in the Eastern and Northern districts began in mid-June. Surveys were conducted in other PWS districts starting in early July. Poor weather conditions negatively impacted the PWS pink and chum salmon aerial survey program

for much of August and September. Fewer streams were flown during August 2014 than any month of August since 1981. Bue et al. (1998) documented that the accuracy and precision of area-under-the-curve estimates decreased as the interval between surveys increased. Further, observational conditions reported for completed surveys were among the worst on record for the program.

The 2014 PWS chum salmon escapement index in districts with SEGs is greater than the PWS lower bound SEG, and most district-specific chum salmon escapement goals were met (Appendix D5). The Eastern, Coghill, Northwestern, and Southeastern districts chum salmon escapement indices were greater than their lower bound SEGs. The Northern/Unakwik district chum salmon escapement index was below its lower bound SEG. District-specific escapement goals are in place for PWS pink salmon, and most goals were met in 2014 (Appendix D5). The Eshamy District pink salmon escapement index was greater than the district's even-year SEG range. The Eastern, Coghill, Southwestern, and Southeastern district pink salmon escapement indices were all within their even-year SEG ranges. The Northern/Unakwik, Northwestern, and Montague district pink salmon escapement indices were less than their even-year SEG range. However, only 17 of 33 index streams in the Montague District were surveyed often enough (≥ 3 surveys) in 2014 to use with area-under-the-curve methodology, and the 2014 pink salmon escapement index for Montague District is probably an underestimate. Further, all 2014 escapement estimates for PWS pink and chum salmon are probably an underestimate of escapement. Due to compromised aerial surveys the 2014 indices represent a minimum count.

The 2014 PWS commercial purse seine salmon harvest was 38.35 million fish: 37.9 million pink, 376,000 chum, 60,800 sockeye, 35,000 coho, and 496 Chinook salmon. PWS commercial purse seine fishery participation increased from 211 commercial purse seine permit holders reporting harvest in 2013 to 222 in 2014 (Table 1; Sheridan et al. 2014).

The 2014 commercial harvest of 44.30 million pink salmon in PWS was the second largest even-year pink salmon harvest on record (Appendix D2). According to otolith contribution estimates, VFDA and PWSAC contributed 57.6% and 39.1%, respectively, to the overall PWS pink salmon CCPF harvest in 2014 (Appendices D2 and E1). Pink salmon harvest by gear type was 37.87 million by purse seine, 1.30 million by drift gillnet, 35,700 by set gillnet, and 5.10 million for hatchery harvests (Table 1). VFDA cost-recovery and broodstock harvest of 1.87 million fish was approximately 7.7% of the record pink salmon run of 25.46 million fish to SGH in 2014 (Appendix E1) and 67.9% VFDA's preseason assumption of 2.76 million fish. PWSAC cost-recovery and broodstock harvest of 3.45 million fish was approximately 20.0% of the total pink salmon run of 17.23 million fish to PWSAC hatcheries in 2014 (Appendix E1), and 112.2% of PWSAC's preseason assumption of 3.07 million fish. Pink salmon egg-take goals were made at all PWS hatcheries in 2014.

Additional information regarding 2014 purse seine fishing periods, including area opened to fishing, may be accessed through the ADF&G Commercial Fishing Regulation Announcements, News Release, and Updates web page (ADF&G 2011).

#### **EASTERN DISTRICT**

ADF&G first observed chum salmon returning to streams in the Eastern District during the season's second aerial survey on June 24; pink salmon were observed returning to streams in the Eastern District on July 2. Eastern District chum salmon escapement indices were at or near anticipated levels for much of the season. Eastern District pink salmon escapement indices were

less than average for much of the 2014 season but within the expected range. The Eastern District chum salmon escapement index of 105,000 fish is greater than the district's lower bound SEG of 50,000 fish (Appendix D5). The Eastern District pink salmon escapement index of 270,000 fish is within the district's even-year SEG index range of 250,000 to 580,000 fish.

VFDA pink salmon cost-recovery harvests began on June 23 and were conducted throughout Port Valdez in 2014. All Eastern District wild stock terminal areas identified by SHTF markers and coordinates were closed for all 2014 commercial salmon fisheries through August 2 to ensure that wild stock escapement goals were met. The Eastern District CCPF first opened for 12-hour periods in waters outside of Port Valdez and Valdez Arm on Monday, June 23 and Thursday, June 26, resulting in the harvest of 64,100 pink salmon (Appendix E16). A third 12hour opener in the same areas followed on June 30 when 54.6% of VFDA's cost-recovery goal was complete, resulting in the harvest of 985,000 pink salmon (Appendix E16). Cost-recovery fishing continued on July 1. VFDA recommended Port Valdez fisheries targeting SGH enhanced pink salmon during 14-hour periods on July 2 and July 3, with 80.7% of VFDA's cost-recovery goal harvested through July 1. Harvest totals for the July 2 and July 3 fishing periods include 5.93 million pink salmon (Appendix E16). Greater than anticipated cumulative pink salmon harvest through July 3 combined with lower than anticipated female ratios indicated that the 2014 SGH pink salmon run was probably greater than forecast. Local processing capacity was exceeded during the July 2 and July 3 fishing periods, with fish being hauled out of the area to processing plants elsewhere in the state. In the face of a large return, much of eastern PWS was opened to daily 14-hour fishing periods from July 4 to July 7, resulting in a commercial purse seine harvest of 3.41 million pink salmon in the Eastern District (Appendix E16). The PWS purse seine fishery in eastern PWS was closed on July 8 to allow for VFDA cost-recovery fishing. From July 9 to July 12, CCPF periods alternated with VFDA cost-recovery fishing, resulting in a commercial purse seine harvest of 3.51 million pink salmon in the Eastern District (Appendix E16). VFDA reached its preseason pink salmon sales revenue goal on July 13. The Eastern District commercial purse seine fishery remained closed to the CCPF until July 17 to aid SGH broodstock collection. Waters of the Eastern District were open to 14-hour fishing periods on July 17 and July 20, resulting in a commercial purse seine harvest of 2.89 million pink salmon in the Eastern District (Appendix E16). Area restrictions were implemented in Port Valdez and Valdez Arm during the July 17 and July 20 fishing periods to aid both SGH broodstock collection and wild stock escapements. Time and area restrictions were implemented in Port Valdez and elsewhere in the Eastern District for the remainder of the SGH run to ensure that SGH's broodstock goal and wild stock escapement goals were met. A total of 2.52 million pink salmon were harvested in the Eastern District from July 22 to August 2 (Appendix E16). VFDA recommended the closure of Port Valdez beyond the August 2 CCPF, and fewer than 250 VFDA pink salmon were harvested in the Eastern District during the remainder of the 2014 season (Appendix E16). Purse seine effort targeting wild stock chum salmon in Port Fidalgo was reported for CCPF periods on August 9 and August 18, resulting in the harvest of 25,600 chum salmon (Appendix D1). No harvests were reported beyond August 18 for the Eastern District. The district closed to commercial fishing on September 17.

Pink salmon egg-take operations at SGH were successful in 2014; VFDA reached its 2014 pink salmon egg-take goal at SGH on August 20, which is comparable to the recent 10-year average end date of August 21. According to the 2014 SGH Annual Report, VFDA harvested 1.53 million pink salmon during traditional purse seine cost-recovery fishing, and an additional 64,500 fish via the SGH fishway, for a total cost-recovery harvest of 1.59 million pink salmon.

VFDA reported that 237,000 pink salmon were utilized at SGH for broodstock, with an additional 43,600 fish that went unharvested at SGH in 2014.

The 2014 SGH coho salmon run was less than forecast, and no surplus fish were available for CCPF harvest. Enhanced coho salmon returns to SGH have been less than the preseason forecast 6 out of the past 10 years. VFDA reached its 2014 coho salmon egg-take goal at SGH on October 22. According to the 2014 SGH Annual Report, VFDA harvested 1,140 coho salmon for cost recovery via the SGH fishway and utilized an additional 1,400 fish for broodstock.

As hatchery returns to SGH have increased and stabilized over time, the majority of eastern PWS commercial purse seine fishing activity has been focused in Port Valdez and Valdez Arm, regardless of opportunity provided outside of this area. From 2004 to 2013, 91.8% of all Eastern District commercial salmon harvests have occurred in Port Valdez and Valdez Arm. In 2013, when faced with a record wild stock return to PWS and significant opportunity existed outside of Port Valdez and Valdez Arm, a strong return to SGH resulted in 84.2% of all Eastern District salmon harvests taking place in Port Valdez and Valdez Arm. By contrast, in 2014 when faced with a less robust wild stock return and record SGH pink salmon return, time and area restrictions outside of Port Valdez and Valdez Arm resulted in 97.5% of all salmon harvests being restricted to this area. Extensive effort aerial surveys were flown throughout the 2014 SGH pink salmon run to monitor effort outside of Port Valdez and Valdez Arm, with observations mirroring harvest data.

There were a total of 58 Eastern District CCPF fishing periods in 2014, and 217 purse seine permit holders reported deliveries (Table 1). The Eastern District CCPF harvest was 19.85 million pink, 101,000 chum, 13,800 sockeye, 2,230 coho, and 28 Chinook salmon (Table 1). The Eastern District CCPF pink salmon harvest included 97.7% VFDA fish, 2.0% wild fish, and 0.4% PWSAC fish (Appendix E16). The 2014 PWS total run estimate of 25.46 million VFDA-produced pink salmon was greater than VFDA's preseason forecast of 12.94 million fish and is a record return for SGH (Appendix E1). Enhanced pink salmon returns to SGH have been greater than the preseason forecast 6 out of the past 10 years. Otolith contribution estimates indicate that VFDA pink salmon were harvested in the CCPF outside of the Eastern District, including 2.63 million in the Montague District, 1.09 million in the Northern District, 160,000 in the Southwestern District, 54,600 in the Coghill District, and 8,300 in the Eshamy District (Appendices E7, E11, E18, E19 and E21).

#### NORTHERN DISTRICT

The first full survey of the Northern District was completed on July 16. Surveys of Northern District streams on July 24 and August 1 indicated that pink salmon escapement indices were greater than anticipated levels. Northern District chum salmon escapement indices were less than average through August 1 but within the expected range. Poor weather resulted in poor observation conditions for subsequent surveys of the Northern District conducted on August 18 and August 22. Poor weather limited surveys beyond August 22, and the final survey of the 2014 season was conducted on September 1. The Northern District pink salmon escapement index of 105,000 fish was less than the district's even-year SEG range of 140,000 to 210,000 fish. The Northern District chum salmon escapement index of 14,700 fish was less than the district's lower bound SEG of 20,000 fish (Appendix D5).

The 2014 CCH pink salmon forecast was 4.90 million fish. PWSAC anticipated utilizing 357,000 pink salmon for broodstock and 491,000 for cost recovery, leaving 4.05 million pink salmon for CCPF harvest.

The Northern District commercial fishing season began with 1- hour periods on June 26 and June 30 in waters east of Granite Point, excluding waters north of the Long Bay SHTF markers. The purpose of these openers was to provide opportunity on early season pink and chum salmon, and to gauge run entry. Participation in these openers was minimal, with harvests of 72,400 and 114,000 pink salmon on June 26 and June 30, respectively (Appendix E19). Identical area to the June fishing periods were opened to commercial fishing for daily 14-hour periods from July 2 to July 7. The July 2 to July 7 fishing periods ran concurrently with Port Valdez fisheries targeting SGH pink salmon. Total pink salmon harvest for these fishing periods was 831,000 fish, 93.9% of which were SGH fish (Appendix E19). Poor parent year (2012) pink and chum salmon escapements in Northern District, an increasing trend in effort, and observed run entry to district streams led to an extended closure of the Northern District following the July 7 CCPF to ensure that wild stock escapement goals were met.

The majority of the Cannery Creek Subdistrict in the Northern District was opened to the CCPF at PWSAC's recommendation on July 28 and July 31, at which time 30% and 60% of PWSAC's aggregate cost-recovery goal had been completed. All waters inside of the Siwash Bay and Jonah Bay SHTF markers were closed to commercial fishing during these periods to ensure that wild stock escapement goals were met. Total CCPF pink salmon harvest for these fishing periods was 1.14 million fish (Appendix E19). PWSAC completed its cost-recovery fishing operations on August 2, and much of the Northern District was opened to daily 14-hour fishing periods beginning on August 3. Waters inside of all Northern District SHTF markers were closed to commercial fishing during these periods to preserve wild stock salmon escapements that had been observed during an August 1 aerial survey of the district. Poor weather negatively impacted fishing conditions throughout PWS during this time frame and grounded attempts to survey the fishery. A total of 2.39 million pink salmon were harvested in the Northern District from August 3 to August 6 (Appendix E19). ADF&G sampling of CCPF pink salmon harvested in the Northern District on August 5 and August 6 resulted in 53.7% and 56.0% female, respectively. These ratios were greater than anticipated, suggesting that the PWSAC run was advanced. Time and area restrictions were implemented in the PWS purse seine fishery beginning August 7 to ensure that hatchery escapement goals were met. An additional 222,000 pink salmon were harvested in the Northern District on August 7 (Appendix E19). The PWS purse seine fishery was closed on August 8. The Cannery Creek Subdistrict was closed during a 14-hour CCPF on August 9, which took place in poor weather conditions. Approximately 136,000 pink salmon were harvested in the Northern District on August 9 (Appendix E19). Fishery performance indicators combined with inadequate escapement progress at PWSAC hatcheries led to an extended closure of the PWS purse seine fishery starting August 10. Weather grounded the PWS stream aerial survey program from August 1 until August 10. A limited survey on August 10 indicated that escapements did not warrant a directed wild stock fishery in PWS. On August 16, PWSAC reported inadequate escapement progress at CCH in particular, leading to the closure of the Cannery Creek Subdistrict during a 12-hour Northern District CCPF scheduled for August 18. Ten permit holders reported deliveries in the Northern District on this date, resulting in the harvest of 29,000 pink salmon (Appendix E19). An ADF&G aerial survey of PWSAC hatcheries on August 19 indicated that escapements had improved and were nearing the goals at AFK, CCH, and WNH. Waters of the Northern District, excluding the Cannery Creek Subdistrict, were opened to a 12-hour period on August 21. Eight permit holders reported deliveries in the Northern District on this date, resulting in the harvest of 25,500 pink salmon (Appendix E19). An ADF&G aerial survey of CCH on August 22 resulted in the observation of elevated prespawn mortality in the CCH SHA. To ensure that an adequate number of viable broodstock were available for egg take operations at CCH, ADF&G maintained area closures in the Cannery Creek Subdistrict for 12-hour fishing periods scheduled on August 24 and August 25. Harvest from the August 24 period is confidential due to low participation, and no harvest was reported in the Northern District on August 25. PWSAC recommended some opportunity in a portion of the Cannery Creek Subdistrict from August 26 to August 28, resulting in the harvest of 36,500 pink salmon (Appendix E19). No harvests were reported beyond August 28 for the Northern District, and the district closed to commercial fishing on September 17.

On August 24, PWSAC reported freshwater and saltwater temperatures at CCH that were greater than average and expressed concerns to ADF&G regarding environmental conditions that were creating challenges for hatchery staff at AFK and WNH. PWSAC's 2014 egg-take operations began on August 20 at WNH, August 21 at AFK, and August 26 at CCH. On September 2, PWSAC staff submitted CCH pink salmon broodstock to the ADF&G Fish Pathological Section for diagnostic evaluation following elevated pre-spawning mortality of CCH brood. Clinical findings were consistent with PWSAC staff observations at CCH, including high water temperatures and low dissolved oxygen. ADF&G area staff visited CCH on September 3 and observed elevated pre-spawning mortality in the CCH SHA and throughout the hatchery's freshwater recruitment system. CCH reached its 2014 pink salmon egg-take goal on September 13. This date of completion matches the recent 10-year average end date of September 13.

Due to later pink salmon run entry to CCH, along with higher and more consistent cost-recovery harvest at WNH and AFK, PWSAC cost-recovery fishing effort shifted to WNH and AFK, and no purse seine cost-recovery harvest occurred at CCH in 2014. According to the 2014 CCH Annual Report, PWSAC harvested 66,900 pink salmon for cost recovery via the CCH fishway in 2014 and utilized an additional 337,000 fish for broodstock. This broodstock total includes 104,000 pink salmon that were identified by PWSAC as holding mortality. PWSAC estimates that 5,000 pink salmon went unharvested at CCH in 2014.

The Northern District was open for 43 CCPF periods in 2014 with a total of 166 purse seine permits reporting harvest (Table 1). The Northern District CCPF harvest was 5.02 million pink, 3,280 coho, 2,240 chum, 1,820 sockeye, and 4 Chinook salmon (Table 1). The Northern District pink salmon harvest included 53.8% CCH fish, 22.1% WNH fish, 19.4% SGH fish, 3.2% wild fish, and 1.6% AFK fish (Appendix E19). The 2014 CCH enhanced pink salmon run of 5.08 million fish was greater than PWSAC's preseason projection of 4.90 million fish (Appendix E1). Enhanced pink salmon returns to CCH have been greater than the preseason forecast 6 out of the past 10 years. Otolith contribution estimates indicate that CCH pink salmon were harvested in the CCPF outside of the Northern District, including 1.68 million in the Southwestern District, 393,000 in the Coghill District, 46,900 in the Eshamy District, 6,340 in the Eastern District, and 1,810 in the Montague District (Appendices E7, E11, E16, E18 and E21).

#### **COGHILL DISTRICT**

The first complete aerial survey of the Coghill District was flown on July 28 in good conditions and indicated pink salmon escapements were greater than would be expected for the date. Coghill District chum salmon escapement was less than anticipated following the July 28 survey. For the Coghill District, 5 surveys were attempted in 2014, with weather cutting all but 3 short. The Coghill District pink salmon escapement index of 63,300 fish is greater than the district's

even-year SEG range of 60,000 to 150,000 fish. The Coghill District escapement index of 10,300 chum salmon is greater than the district's lower bound SEG index of 8,000 fish (Appendix D5).

PWSAC's 2014 forecast for pink salmon returning to WNH was 9.30 million fish. PWSAC's 2014 pink salmon escapement requirements for WNH included a broodstock goal of 283,000 fish and a cost-recovery goal of 931,000 fish. The preseason forecast for CCPF harvest of WNH pink salmon was 8.09 million fish.

By regulation, management for pink salmon returning to the Coghill District began on July 21. Waters of the Coghill District, excluding the Bettles Bay Subdistrict, and excluding all waters of the Esther and Perry Island subdistricts, were opened to commercial fishing for 14-hour periods on July 28 and July 31, at which time 30.0% and 60.0% of PWSAC's aggregate cost-recovery goal had been completed. PWSAC recommended against CCPF openings in the Esther and Perry Island subdistricts during these fishing periods to allow for unimpeded pink salmon costrecovery fishing. No purse seine harvest was reported for Coghill District on July 28; purse seine harvest for the July 31 fishing period includes 2,390 pink, 7 sockeye, and 4 chum salmon, with 1 delivery reported (Appendix B5). PWSAC completed its cost-recovery fishing operations on August 2, and much of the Coghill District was opened to daily 14-hour fishing periods beginning on August 3. Poor weather negatively impacted fishing conditions during this time frame and grounded attempts to survey the fishery. A total of 693,000 pink salmon were harvested by the purse seine fleet in the Coghill District from August 3 to August 6 (Appendix B5). ADF&G sampling of CCPF pink salmon harvested in the Coghill District on August 4 and August 5 ranged from 56.1% to 62.0% female, respectively. These ratios were greater than anticipated, suggesting that the PWSAC run was advanced for the date. Time and area restrictions were implemented in the PWS purse seine fishery beginning August 7 to ensure that hatchery broodstock goals were met. An additional 15,700 pink salmon were harvested by 9 purse seine permit holders in the Coghill District on August 7 (Appendix B5). The PWS purse seine fishery was closed on August 8. The WNH SHA and THA were closed during a 14-hour CCPF on August 9, which took place in poor weather conditions. Approximately 57,800 pink salmon were harvested by 15 purse seine permit holders in the Coghill District on August 9 (Appendix B5). Fishing performance indicators combined with inadequate escapement progress at PWSAC hatcheries led to an extended closure of the PWS purse seine fishery from August 10 to August 18. Weather grounded the PWS stream aerial survey program from August 1 until August 10. A limited survey on August 10 indicated that escapements did not warrant a directed wild stock fishery in PWS. On August 16, PWSAC reported inadequate escapement progress at WNH, leading to the closure of the Esther and Perry Island subdistricts during a 12-hour fishing period on August 18. Coghill District purse seine harvest for this fishing period includes 16,130 pink salmon, with 3 deliveries reported (Appendix B5). An ADF&G aerial survey of PWSAC hatcheries on August 19 indicated that escapements had improved and were nearing broodstock goals at AFK, CCH, and WNH. PWSAC recommended commercial fishing opportunity in the majority of the Esther and Perry Island subdistricts for a 12-hour period on August 21. Seventeen purse seine permit holders reported deliveries in the Coghill District on this date, resulting in the harvest of 33,800 pink, 2,780 coho, 16 chum, and 7 sockeye salmon (Appendix B5). PWSAC recommended opportunity in the Esther and Perry Island subdistricts, excluding the WNH SHA, for daily commercial fishing periods beginning August 22. Limited purse seine fishing effort through August 25 resulted in the harvest of 83,500 pink, 5,510 coho, 111 chum, and 39 sockeye salmon (Appendix B5). There was no commercial purse seine fishing effort reported in the

Coghill District beyond August 25, and the district closed to commercial purse seine fishing following the August 29 fishing period.

Pink salmon egg-take operations at WNH were successful in 2014; PWSAC reached its 2014 pink salmon egg-take goal at WNH on August 30, which is earlier than the recent 10-year average end date of September 7. According to fish ticket data, an additional 271,000 pink salmon carcasses and accompanying roe were processed and sold at WNH from August 31 until September 13.

Higher and more consistent purse seine cost-recovery harvest took place at WNH relative to AFK and CCH in 2014, and PWSAC focused most of its cost-recovery fishing effort at WNH. According to the 2014 WNH Annual Report, PWSAC harvested 1.84 million pink salmon for cost recovery at WNH in 2014 and utilized an additional 253,000 fish for broodstock. PWSAC estimates that 1,000 pink salmon went unharvested at WNH in 2014.

There were 18 Coghill District purse seine CCPF periods, with a total of 65 commercial purse seine permit holders reporting harvest in 2014 (Table 1; Appendix B5). The Coghill District purse seine CCPF harvest was 902,000 pink, 8,540 coho, 325 chum, and 299 sockeye salmon (Table 1). The Coghill District pink salmon harvest included 70.0% WNH fish, 18.5% CCH fish, 6.4% wild fish, 2.6% AFK fish, and 2.6% SGH fish (Appendix E7). The 2014 WNH enhanced pink salmon run of 7.86 million fish was less than PWSAC's preseason projection of 9.30 million fish (Appendix E1). Enhanced pink salmon returns to WNH have been less than the preseason forecast 6 out of the past 10 years. Otolith contribution estimates indicate that WNH pink salmon were harvested in the CCPF outside of the Coghill District, including 2.98 million in the Southwestern District, 1.10 million in the Northern District, 53,500 in the Eastern District, 25,600 in the Montague District, and 22,900 in the Eshamy District (Appendices E11, E16, E18, E19 and E21).

#### NORTHWESTERN DISTRICT

Northwestern District pink salmon escapement indices were greater than anticipated levels during the season's first complete survey on July 28. Northwestern District chum salmon escapement indices were less than anticipated levels for much of the season. For the Northwestern District, 5 surveys were attempted in 2014, with weather cutting all but 3 short. The Northwestern District pink salmon escapement index of 67,000 fish was less than the district's even-year SEG range of 70,000 to 140,000 fish. The Northwestern District chum salmon escapement index of 7,070 fish was greater than the district's lower bound SEG of 5,000 fish (Appendix D5).

The Northwestern District was open to the CCPF for 35 periods with 10 commercial purse seine permits reporting harvest in 2014 (Table 1). The 2014 Northwestern District purse seine CCPF harvest was 70,700 pink, 5,880 chum, 418 sockeye, and 139 coho salmon (Table 1). There was no sampling of Northwestern District commercial harvests in 2014, and all harvests are allocated to wild stocks. There was no commercial purse seine fishing effort in the Northwestern District beyond August 21, and the district closed to commercial fishing on September 17.

#### SOUTHWESTERN DISTRICT

The first aerial survey of the Southwestern District took place on July 22. Southwestern District pink salmon escapement indices were less than average for much of the 2014 season but within

the expected range. The Southwestern District pink salmon escapement index of 83,600 fish was within the district's even-year SEG range of 70,000 to 160,000 fish. There is no chum salmon escapement goal for this district (Appendix D5).

PWSAC's 2014 forecast for pink salmon returning to AFK was 7.00 million fish. PWSAC's 2014 pink salmon escapement requirements for AFK included a broodstock goal of 309,000 fish and a cost-recovery goal of 701,000 fish. The preseason forecast for CCPF harvest of AFK pink salmon was 5.99 million fish. PWSAC's 2014 forecast for chum salmon returning to AFK was 492,000 fish, all of which were projected to be available for CCPF harvest.

Fishing to target remote-release enhanced chum salmon at the AFK THA and SHA started on June 2 for 60 hours, followed by an 84-hour period on June 5. A weekly schedule of 60-hour and 84-hour purse seine fishing periods continued until July 20. From June 2 to July 20, the Southwestern District CCPF harvest was 70,300 pink, 61,600 chum, 28,200 sockeye, 146 Chinook, and 3 coho salmon.

Southwestern District pink salmon harvest management in 2014 was based on aerial survey escapement indices, otolith contribution estimates, test fishing, harvest rates, and terminal area run entry. Test fishing conducted by the *R/V Solstice* in late July provided pink salmon harvest rate, stock composition, and sex ratio data. Fishing time and area was initially limited in the hatchery subdistricts and general district waters to ensure that migration corridors through Montague, Latouche, Elrington, Prince of Wales, Bainbridge, and Knight Island passages remained open for wild and enhanced stock salmon bound for northern PWS.

Upon transition to pink salmon management in the Southwestern District on July 19, PWSAC recommended a closure of AFK hatchery subdistricts to allow for unimpeded cost-recovery fishing. The Elrington Subdistrict was opened to the CCPF at PWSAC's recommendation on July 28 and July 31, at which time 30.0% and 60.0% of PWSAC's aggregate cost-recovery goal had been completed. Additional general district waters identified as migration corridors for hatchery fish were opened during these fishing periods. Total pink salmon harvest for these fishing periods was 2.17 million fish (Appendix E21). PWSAC completed its cost-recovery fishing operations on August 2, and much of the Southwestern District was opened to daily 14hour fishing periods beginning on August 3. A total of 4.87 million pink salmon were harvested in the Southwestern District from August 3 to August 6 (Appendix E21). ADF&G sampling of CCPF pink salmon harvested throughout PWS from August 3 to August 6 indicated that the PWSAC run was advanced for the date. Time and area restrictions were implemented in the PWS purse seine fishery beginning August 7 to ensure that hatchery escapement goals were met. An additional 839,000 pink salmon were harvested in the Southwestern District on August 7 (Appendix E21). The PWS purse seine fishery was closed on August 8. The AFK SHA and Terminal Harvest Area (THA) were closed during a 14-hour CCPF on August 9, which took place in poor weather conditions. A total of 466,000 pink salmon were harvested in the Southwestern District on August 9 (Appendix E21). Fishing performance indicators combined with inadequate escapement progress at PWSAC hatcheries led to an extended closure of the PWS purse seine fishery starting August 10. Weather grounded the PWS stream aerial survey program from August 1 until August 10. A limited survey on August 10 indicated that escapements did not warrant a directed wild stock fishery in PWS. On August 16, PWSAC reported inadequate escapement progress at AFK, leading to the closure of all Southwestern District hatchery subdistricts during a 12-hour CCPF scheduled for August 18. Purse seine harvest of pink salmon for this fishing period was 302,000 fish, with 77 permit holders reporting deliveries in the district (Appendix E21). An ADF&G aerial survey of PWSAC hatcheries on August 19 indicated that escapements had improved and were nearing broodstock goals at AFK, CCH, and WNH. PWSAC recommended commercial fishing opportunity in the majority of AFK hatchery subdistricts for a 12-hour period on August 21. Thirty-seven purse seine permit holders reported deliveries in the Southwestern District on this date, resulting in the harvest of 172,000 pink salmon (Appendix E21). On August 21, 62 purse seine permit holders reported deliveries throughout PWS, and expectations were for rapidly declining participation (Appendix D1). Commercial fishing opportunity was provided in the Port San Juan Subdistrict for 12-hour periods on August 22 and August 23, with 11,650 pink salmon harvested (Appendix E21). PWSAC recommended opportunity in Southwestern District hatchery subdistricts, excluding the AFK SHA, for daily commercial fishing periods beginning August 24. Limited purse seine fishing effort through August 28 resulted in the harvest of 61,100 pink salmon in the Southwestern District (Appendix E21). There was no commercial purse seine fishing effort in the Southwestern District beyond August 28, and the district closed to commercial purse seine fishing on September 17.

In the event that a broodstock shortage occurred at AFK in 2014, pink salmon eggs were permitted to be collected at WNH and transferred to AFK. ADF&G area staff visited AFK on September 3 and observed elevated pre-spawn mortality in the vicinity of the hatchery, consistent with observations elsewhere in PWS and probably due to those prevailing environmental conditions described previously for CCH. Pink salmon egg-take operations at AFK were successful in 2014 and no egg transfer from WNH was required. PWSAC reached its 2014 pink salmon egg-take goal at AFK on September 5, which is earlier than the recent 10-year average end date of September 10. According to fish ticket data, an additional 74,700 pink salmon carcasses and accompanying roe were processed and sold at AFK from September 6 until September 13.

Higher and more consistent purse seine cost-recovery harvest took place at WNH relative to AFK and CCH in 2014, and PWSAC focused most of its cost-recovery fishing effort at WNH. According to the 2014 AFK Annual Report, PWSAC harvested 741,000 pink salmon for cost-recovery at AFK in 2014 and utilized an additional 188,000 fish for broodstock. PWSAC estimates that 12,000 pink salmon went unharvested at AFK in 2014.

In 2014, when fishery performance indicators suggested that PWSAC's enhanced pink salmon returns were below forecast, and poor weather grounded the PWS stream aerial survey program, a conservative fishery management approach was taken to ensure that escapement goals were met. For the years 2004–2013, an average of 757 hours were opened to commercial fishing in the Southwestern District during the late season PWS pink salmon fishery. By comparison, commercial fishing opportunity in the Southwestern District during a similar time frame was limited to 504 hours in 2014.

The Southwestern District was open for 14 CCPF periods targeting AFK enhanced chum salmon, and 37 CCPF periods targeting late run pink salmon, with a total of 189 purse seine permits reporting harvest in 2014 (Table 1). The 2014 Southwestern District CCPF harvest was 8.96 million pink, 66,300 chum, 34,000 sockeye, 19,700 coho, and 216 Chinook salmon (Table 1). The Southwestern District's 2014 pink salmon harvest included 36.4% AFK fish, 34.0% WNH fish, 19.2% CCH fish, 8.8% wild fish, and 1.9% SGH fish (Appendix E21). The 2014 Southwestern District chum salmon harvest included 70.9% AFK fish, 13.2% Port Chalmers

fish, 10.3% WNH fish, and 5.7% wild fish (Appendix E22). The 2014 Southwestern District sockeye salmon harvest included 92.8% MBH fish and 7.2% wild fish (Appendix E20).

The 2014 AFK enhanced pink salmon run of 4.44 million fish was less than PWSAC's preseason projection of 7.0 million fish (Appendix E1). Enhanced pink salmon returns to AFK have been less than the preseason forecast 5 out of the past 10 years. Otolith contribution estimates indicate that AFK pink salmon were harvested in the CCPF outside of the Southwestern District, including 78,600 in the Northern District, 65,100 in the Eshamy District, 55,400 in the Coghill District, 17,700 in the Eastern District, and 5,090 in the Montague District (Appendices E7, E11, E16, E18 and E19). Otolith contribution estimates indicate that AFK chum salmon were harvested in the CCPF outside of the Southwestern District, including 27,400 in the Coghill District, 19,900 in the Eshamy District and 2,165 in the Montague District (Appendices E8, E12 and E17). The total CCPF harvest estimate of 82,200 AFK enhanced chum salmon is less than the preseason forecast harvest of 492,000 fish (Appendix E1). Enhanced chum salmon returns to AFK have been less than the preseason forecast 7 out of the past 10 years.

#### MONTAGUE DISTRICT

The first aerial survey of the Montague District took place on July 22 in good conditions, resulting in pink salmon escapements greater than anticipated levels for the date. Poor weather resulted in poor observation conditions for subsequent surveys of the Montague District conducted on August 21, August 23, and August 26. No aerial surveys were flown in the Montague District beyond August 26, and only 2 complete surveys of the district were flown in 2014. The Montague District pink salmon escapement index of 24,900 fish was less than the district's even-year SEG range of 50,000 to 140,000 fish (Appendix D5). Only 17 of 33 index streams in the Montague District were surveyed often enough (≥ 3 surveys) in 2014 to use with area-under-the-curve methodology. The 2014 escapement estimate for Montague District pink salmon is an underestimate. There is no chum salmon escapement goal for this district.

Based on the *Prince William Sound Management and Allocation Plan* (5 AAC 24.370), the purse seine gear group had exclusive access to the Port Chalmers Subdistrict in Montague District in 2014. PWSAC's 2014 forecast for chum salmon returning to Port Chalmers was 495,000 fish, all of which were projected to be available for CCPF harvest.

A weekly schedule of 60-hour and 84-hour purse seine fishing periods began on June 2 in the Port Chalmers Subdistrict, with brief closures occurring on Wednesday and Sunday evenings to allow for harvest reporting. ADF&G received informal reports of higher than expected pink salmon harvests occurring in the Port Chalmers Subdistrict during the 84-hour fishing period beginning on June 12. ADF&G staff flew a survey of the fishery on Sunday, June 15 and observed a quantity and distribution of effort similar to that which was seen during the 2006–2008 seasons. Harvests reported for the 84-hour fishing period that ended on Sunday, June 15 included 126,000 pink and 18,100 chum salmon (Appendices E17 and E18). Weather limited fishing effort on June 16 and June 17, and harvests for the 60-hour fishing period ending June 18 included 9 pink and 23,100 chum salmon (Appendices E17 and E18). ADF&G staff took part in a skiff survey of the fishery on Thursday, June 19, and observed a quantity and distribution of effort similar to the June 15 aerial survey. Harvest for the 84-hour fishing period that ended on Sunday, June 22 included 56,600 pink and 49,400 chum salmon (Appendices E17 and E18). Much of the Eastern and Southeastern districts were opened to purse seine fishing for a 12-hour period on Monday, June 23. ADF&G flew a survey of eastern PWS during the fishery and

observed that a majority of purse seine fishing effort had left Port Chalmers for the day. For the Wednesday, June 25 fishery announcement, it was decided to continue with extended duration fishing periods, and the Port Chalmers Subdistrict was opened to commercial fishing for an 84hour period starting on Thursday, June 26. Harvest was subsequently reported for the 60-hour fishing period that ended on Wednesday, June 25, which included 445,000 pink and 17,200 chum salmon (Appendices E17 and E18). ADF&G staff flew a survey of Port Chalmers on Friday, June 27 and observed an increase in effort and distribution of effort that was indicative of fishers targeting pink salmon near the subdistrict's southern boundary. In order to focus effort on enhanced chum salmon and reduce the interception of pink salmon, time and area restrictions were announced for the Port Chalmers fishery on Saturday, June 28. Harvest for Port Chalmers fishing periods ending on June 29 and June 30 totaled 2.34 million pink and 29,600 chum salmon (Appendices E17 and E18). Area was further restricted in the Port Chalmers Subdistrict starting on Wednesday, July 2, and purse seine effort in PWS shifted towards Port Valdez to target the record 2014 SGH enhanced pink salmon run. No harvests were reported for a 14-hour fishing period in the Port Chalmers Subdistrict on July 2. Extended duration fishing periods returned for the Port Chalmers fishery starting on July 3, with a weekly schedule of 60- and 84-hour purse seine fishing periods continuing through July 20. A total of 11,400 pink and 9,300 chum salmon harvests were reported in the Port Chalmers Subdistrict from July 3 to July 20 (Appendices E17 and E18). Port Chalmers Subdistrict fishing periods ran concurrent to purse seine fishing opportunity elsewhere in PWS for 14-hour fishing periods on July 21 and July 24, with no harvest reported. The Montague District then transitioned to pink salmon management and was opened to commercial fishing concurrent to fishing periods taking place elsewhere in PWS. No salmon harvests were reported for the Montague District beyond July 16.

The Montague District was open for 53 CCPF periods in 2014, with a total of 112 purse seine permits reporting harvest (Table 1). The 2014 Montague District CCPF harvest was 3.04 million pink, 187,000 chum, 9,770 sockeye, 1,070 coho, and 247 Chinook salmon (Table 1). The Montague District's 2014 pink salmon harvest included 91.1% SGH fish, 7.7% wild fish, and 1.2% PWSAC fish (Appendix E18). The Montague District's 2014 chum salmon harvest included 82.8% Port Chalmers fish, 11.4% wild fish, 4.7% WNH fish, and 1.2% AFK fish (Appendix E17). Otolith contribution estimates indicate that Port Chalmers chum salmon were harvested in the CCPF outside of the Montague District, including 27,400 in the Coghill District, 19,900 in the Eshamy District, and 8,430 in the Southwestern District (Appendices E8, E12, and E22). PWSAC's PWS total CCPF harvest estimate of 193,000 Port Chalmers enhanced chum salmon is less than the preseason forecast harvest of 495,000 fish. According to PWSAC annual reports, enhanced chum salmon returns to Port Chalmers have been less than the preseason forecast 8 out of the past 10 years.

#### SOUTHEASTERN DISTRICT

The first aerial survey of the Southeastern District took place on July 22 in fair conditions, resulting in pink and chum salmon escapements greater than anticipated levels for the date. Poor weather resulted in poor observation conditions for subsequent surveys of the Southeastern District conducted on August 10 and August 21. No aerial surveys were flown in the Southeastern District beyond August 21. The Southeastern District pink salmon escapement index of 185,000 fish was within the district's even-year SEG range of 150,000 to 310,000 fish. The Southeastern District chum salmon escapement index of 20,500 fish is 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 26 and June 30. 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 to Eastern District fisheries targeting the record 2014 SGH pink salmon return. Period-specific harvest data is confidential due to limited participation, and there was no commercial purse seine fishing effort in the Southeastern District beyond August 4. The district closed to commercial fishing on September 17.

The Southeastern District was open to the commercial purse seine CCPF for 50 periods, with 4 commercial purse seine permits reporting harvest in 2014 (Table 1). The 2013 Southeastern District purse seine CCPF harvest was 19,900 pink, 12,700 chum, 10 sockeye, and 3 coho salmon (Table 1).

# 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 2014, 288 subsistence permits were issued for the Copper River District, of which 19 (6.6%) were not returned. Of the 288 permits that were issued, 168 permit holders reported not fishing. A harvest of 153 Chinook, 1,680 sockeye, and 0 coho salmon was reported from the 101 permits that reported fishing (Appendix F1). In addition, 23 subsistence permits were issued for the PWS general subsistence district, of which 21 were returned. Nineteen permit holder reported not fishing, and the other 2 permit holders reported a harvest of 3 sockeye salmon (Appendix F2). Overall, 328 Alaskan residences in 19 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 2,000 fish (Appendix F8).

During the 2014 commercial fishing season in the Copper River District, 12,100 sockeye, 768 Chinook, and 1,150 coho salmon were reported as retained for their own personal use by 386 commercial permit holders (Appendices A1, A3, A18, and F7). In PWS districts, 81 commercial permit holders reported retaining 1,620 sockeye, 55 Chinook, 20 pink, 1,520 coho, and 73 chum salmon as "homepack" from their commercial harvests. Overall in Area E, 435 commercial permit holders from more than 24 Alaska communities and the other 49 states reported retaining 16,300 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 2014, a total of 89 federal permits were issued; 76 permits were returned, with 76 sockeye and 630 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 2014, 10 permits were issued for the Chenega subsistence area, of which 5 were returned. Of those returned permits, 2 reported fishing and 3 reported not fishing, with a total harvest of 10 pink salmon. In the Tatitlek area, 7 permits were issued of which 5 were returned. Of those returned permits, 2 reported fishing, with a total harvest of 46 sockeye and 103 coho 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 2014, a total of 1,148 dip net permits and 508 fish wheel permits were issued to subsistence users in the Glennallen Subdistrict. Of these, 277 (16.7%) were not returned. A combined total estimate of 1,370 Chinook and 75,500 sockeye salmon were harvested in the Glennallen Subdistrict. Comparatively, the previous 10-year average was 3,450 Chinook and 60,800 sockeye salmon for this subdistrict. Fish wheel effort has remained somewhat constant over the last 10 years, with an average number of 643 permits issued. The number of dip net permits issued has increased over the past few years. The 10-year average of 542 dip net permits is 47.2% of the number of permits issued in 2014 (Appendix F4). Historically, sockeye salmon dominate the harvest, representing approximately 94.2% of the estimated harvest, followed by Chinook and coho salmon (Appendices A1, A3, A18 and F4). Harvest from the Glennallen Subdistrict subsistence fisheries was approximately 14,900 or 19.8% 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 2014, a total of 314 federal permits were issued for the Glennallen Subdistrict. Of these, 279 permits were returned (Appendix F6). A total 21,000 sockeye, 370 Chinook, and 23 coho salmon were reported harvested (Appendices A1, A3 and A18).

#### **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 2 permits issued in 2014, with 116 sockeye, 0 Chinook, and 0 coho 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. Annual bag limits would continue to be 15 salmon for a household of 1 and 30 salmon for a household of 2 or more individuals. Inseason adjustments to the fishery, as necessitated by fluctuations in salmon escapement, are made by EO.

In 2014, there were 11 EOs issued to make adjustments to the dip net fishery. The first period started on Saturday, June 7, and the last period closed on Sunday, August 31. The fishery is then open by regulation from September 1 to September 30. Low Chinook salmon commercial harvest rates and poor escapement indices from Native Village of Eyak's fishwheel mark-recapture program led to the closure of the Chinook salmon fishery beginning Monday, June 16. There were 11,600 permits issued for the Chitina personal use fishery in 2014. Of these, 2,286 (19.7%) were not returned. The number of permits issued was above the 10-year average of

8,950 permits issued (Appendix F4). Reported harvest for the Chitina Subdistrict personal use fishery in 2014 was 719 Chinook, 157,000 sockeye, and 1,130 coho salmon. The previous 10-year average reported harvests were 1,520 Chinook, 122,000 sockeye, and 1,950 coho salmon (Appendices A1, A3 and A18). Harvest from the Chitna Subdistrict personal use fishery was approximately 31,100 or 19.8% GH sockeye salmon (Appendix F7).

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 2014, a total of 113 federal permits were issued, of which 103 were returned (Appendix F6). The reported harvest was 1,510 sockeye, 13 Chinook, and 68 coho salmon (Appendices A1, A3, and A18).

#### 2014 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 and harvest strategy, see Botz et al. (2013).

#### SEASON SUMMARY

Based on herring stock assessment information, all Pacific herring fisheries between July 1, 2013 and June 30, 2014 were closed. Age structured assessment modeling was used to estimate the 2014 spawning biomass of PWS Pacific herring. The spawning biomass forecast for 2014 was 24,800 tons and above the regulatory minimum spawning biomass of 22,000 tons (Appendix G12). Recruit-age fish (age 3 and 4) were projected to represent 30% by weight or 54% by number. Because a majority of the spawning population was projected to be recruit-age fish, and due to uncertainty in the forecast point estimate, all commercial herring fisheries were closed.

Hydroacoustic, net sampling, and aerial surveys were conducted in 2014 to assess herring biomass, disease prevalence, age composition, and growth. In March and April 2014, acoustic surveys of adult herring were conducted with the ADF&G vessel *R/V Solstice*. Broad scale surveys were conducted in eastern PWS up to Boulder Bay. Detailed acoustics data were collected on fish aggregations in Sheep Bay near Gravina Point, in Port Gravina between St. Matthews Bay and Knowles Head, and in Port Fidalgo near Snug Corner Cove. The 2014 ADF&G acoustics estimate of the peak acoustics biomass is 22,000 short tons (Appendix G12).

Age composition samples collected during spring 2014 varied by location and sampling gear. Fish samples from southeast PWS, northeast PWS, and Montague Island (collected by Prince William Sound Science Center) were predominately (60–66%) 5-, 7-, and 8-year-old fish (Appendix G.14). A gillnet sample from 1 of the Kayak Island spawn events was predominately 8- (23%), 9- (40%), and 10-year-old (22%) fish.

Herring disease assessment has been included as part of the annual age, sex, and size assessment completed each spring since 1993. Disease sampling in April 2014 found no fish positive for viral hemorrhagic septicemia virus (VHSV) in 175 fish examined.

In adult herring, the prevalence of *Ichthyophonus hoferi* was 23.3% in Sheep Bay (14 of 60 fish), 33.3% in Port Gravina (20 of 60 fish), and 21.7% in Snug Corner Cove (13 of 60 fish), representing a decrease in prevalence from samples collected in 2011, 2012, and 2013.

ADF&G conducted 16 aerial surveys between March 23 and May 1, 2014. Surveys documented spawn on Wingham and Kayak islands (3 and 7 April), in eastern PWS between St. Matthews Bay and Knowles Head (14 and 16–18 April); around Gravina Point (17–19 April); in Landlock Bay (17–19, 21 and 24 April); and in Boulder Bay (24 April). Spawn estimates within PWS are 34.9 mile-days (south of Knowles Head) and 1.7 mile-days (north of Knowles Head), for a total of 36.6 mile-days of spawn within Prince William Sound This is fewer mile-days of spawn in PWS than in any year in which commercial fishing occurred since 1973. No fish or spawn were documented in Fairmont Bay, Naked Island, or Knight Island. Some schools were documented on northern Montague Island, but no spawn was observed. An additional 6.8 mile-days of spawn were documented on Kayak Island on April 3 and April 7 but are not included in our assessment for Prince William Sound. Prince William Sound Science Center funded additional surveys and those data were examined and added to ADF&G's data. (Appendix G15).

#### 2014–2015 HERRING SEASON OUTLOOK

Given the PWS herring spawning population, current fish size, and age structure, a commercial harvest is not anticipated in 2015. Consecutive years of low recruitment will further delay the recovery of the herring population to a size capable of supporting a sustainable commercial harvest. 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.

#### **ACKNOWLEDGEMENTS**

The authors gratefully acknowledge the entire staff of the Cordova office of the Alaska Department of Fish and Game for their many contributions that are essential to the management of the various fisheries and the completion of this report.

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# **TABLES AND FIGURES**

Table 1.-Prince William Sound Management Area commercial salmon harvest by gear type and district, 2014.

District	Permits	Chinook	Sockeye	Coho	Pink	Chum	Total
Eastern	217	28	13,784	2,226	19,853,828	101,432	19,971,298
Northern	166	4	1,823	3,282	5,024,235	2,238	5,031,582
Coghill	65	0	299	8,536	901,916	325	911,076
Northwestern	10	0	418	139	70,684	5,884	77,125
Southwestern	189	216	33,970	19,717	8,958,165	66,261	9,078,329
Montague	112	247	9,773	1,065	3,044,491	187,016	3,242,592
Southeastern	4	0	10	3	19,949	12,749	32,711
Unakwik	2	1	686	0	2	243	932
Purse seine total	222	496	60,763	34,968	37,873,270	376,148	38,345,645
Bering River	81	0	50	97,637	4	0	97,691
Copper River	533	10,207	2,050,007	315,776	11,703	45,534	2,433,227
Coghill	285	76	159,167	151,723	1,096,425	642,964	2,050,355
Eshamy	306	35	761,315	607	189,940	77,719	1,029,616
Unakwik	4	0	459	0	3	30	496
Drift gillnet total	525	10,318	2,970,998	565,743	1,298,075	766,247	5,611,385
Eshamy	29	22	259,568	65	35,681	20,921	316,257
Set gillnet total	29	22	259,568	65	35,681	20,921	316,257
Solomon Gulch	1	0	0	2,543	1,831,769	0	1,834,312
Cannery Creek	1	0	0	0	274,182	0	274,182
Wally Noerenberg	1	0	0	10,877	2,076,101	373,108	2,460,086
Main Bay	0	0	0	0	0	0	0
Armin F. Koernig	1	0	0	0	918,800	0	918,800
Hatchery total <sup>a</sup>	4	0	0	13,420	5,100,852	373,108	5,487,380
Test fishery	2	0	208	0	1,607	385	2,200
Home pack	424	823	13,687	1,480	191	131	16,312
Confiscated fish	0	0	0	0	0	0	0
Donated fish	0	0	0	0	0	0	0
Misc. total		823	13,895	1,480	1,798	516	18,512
Prince William Sound total		11,659	3,305,224	615,676	44,309,676	1,536,940	49,779,179

Table 2.—Mean price and estimated exvessel value of the total commercial salmon harvest by gear type, Prince William Sound, 2014.

Purse seine <sup>a</sup>				Average		
	Species	Number	Pounds	weight	Price	Value
	Chinook	496	6,494	13.09	\$1.74	\$11,317
	Sockeye	60,763	341,236	5.62	\$1.90	\$646,931
	Coho	34,968	237,899	6.80	\$0.81	\$192,659
	Pink	37,873,270	127,295,081	3.36	\$0.29	\$36,393,753
	Chum	376,148	2,915,417	7.75	\$0.65	\$1,901,811
		38,345,645	130,796,127			\$39,146,471
Drift gillnet <sup>a</sup>				Average		
	Species	Number	Pounds	weight	Price	Value
	Chinook	10,318	183,370	17.77	\$6.41	\$1,175,457
	Sockeye	2,970,998	17,721,161	5.96	\$2.31	\$40,966,814
	Coho	565,743	4,549,588	8.04	\$1.13	\$5,138,204
	Pink	1,298,075	4,526,178	3.49	\$0.30	\$1,361,065
	Chum	764,247	5,757,129	7.53	\$0.65	\$3,728,785
		5,609,381	32,737,426			\$52,370,325
Set gillnet <sup>a</sup>				Average		
	Species	Number	Pounds	weight	Price	Value
	Chinook	22	328	14.91	\$2.35	\$769
	Sockeye	259,568	1,461,005	5.63	\$1.98	\$2,887,961
	Coho	65	511	7.86	\$0.88	\$451
	Pink	35,681	119,268	3.34	\$0.30	\$35,588
	Chum	20,921	159,242	7.61	\$0.67	\$106,662
		316,257	1,740,354			\$3,031,431
Hatchery sales <sup>a</sup>				Average		
	Species	Number	Pounds	weight	Price	Value
	Chinook	0	0	0.00	\$0.00	\$0
	Sockeye	0	0	0.00	\$0.00	\$0
	Coho	13,420	93,303	6.95	\$0.20	\$19,035
	Pink	5,451,273	17,314,059	3.18	\$0.61	\$10,482,055
	Chum	355,122	2,755,077	7.76	\$0.57	\$1,573,976
		5,819,815	20,162,439			\$12,075,066

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Table 2.–Page 2 of 2.

Confiscated <sup>a</sup>				Average		
	Species	Number	Pounds	weight	Price	Value
	Chinook	0	0	0.00	\$0.00	\$0
	Sockeye	0	0	0.00	\$0.00	\$0
	Coho	0	0	0.00	\$0.00	\$0
	Pink	0	0	0.00	\$0.00	\$0
	Chum	0	0	0.00	\$0.00	\$0
		0	0			\$0
					No. of	Average
	Gear type		Value of catch		permits	earnings
	Purse seine		\$39,146,471		222	\$176,335
	Drift gillnet		\$52,370,325		525	\$99,753
	Set gillnet		\$3,031,431		29	\$104,532
	Subtotal					
	Value of CPF catch		\$94,548,226			
	Hatchery		\$12,075,066			
	Confiscated		\$0			
	Grand total	·	\$106,623,292	·	·	

Table 3.-Average price paid to permit holders for salmon, Prince William Sound, 1988–2014.

	Chinook sa	almon	Sock	eye salmon		Col	no salmon		Pin	k salmon		Chum salmon		
	Gillne	ŧ	Gillne	:t		Gillne	t		Gillne	:t		Gillne	et	
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
1988	\$2.23	\$2.43	\$3.20	\$2.74	\$2.68	\$2.35	\$1.19	\$1.85	NA	\$0.60	\$0.79	NA	\$0.92	\$0.72
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 <sup>a</sup>	\$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
10-year														
average	\$5.25	\$1.87	\$2.15	\$1.32	\$1.18	\$1.09	\$0.83	\$0.66	\$0.28	\$0.24	\$0.27	\$0.27	\$0.52	\$0.51
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

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 2011). These prices are estimates and do not reflect postseason adjustments and bonuses. Caution should be used when estimating values from these prices.

<sup>&</sup>lt;sup>a</sup> Values are from COAR 2011.

Table 4.–Estimated exvessel value of the total commercial salmon harvest by gear type with the 10-year average, Prince William Sound, 2004–2014.

Purse sein	ne										Previous	
Species	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	10-year avg.	2014
Chinook	1,270	1,787	4,940	9,330	2,487	985	634	6,120	3,279	15,444	4,628	11,317
Sockeye	46,573	207,022	219,984	338,262	540,113	584,595	705,231	560,497	1,449,007	796,220	544,750	646,931
Coho	121,688	103,312	1,426,736	546,805	2,056,932	22,522	48,476	633,076	117,259	1,608,923	668,573	192,659
Pink	4,293,551	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	35,183,912	36,393,753
Chum	1,228,965	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	2,395,457	1,901,811
	\$5,692,047	\$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	\$38,797,319	
Drift gillr	net											
Species												
Chinook	4,050,947	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	2,262,556	1,175,457
Sockeye	13,436,808	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	22,542,787	40,966,814
Coho	3,561,659	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	2,962,197	5,138,204
Pink	12,134	84,308	54,070	82,356	1,195,812	363,373	3,446,356	1,025,474	1,659,983	2,465,469	1,038,933	1,361,065
Chum	976,553	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	7,187,985	3,728,785
	\$22,038,101	\$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	\$35,994,458	\$52,370,325
Set gillne	t											
Species												
Chinook	189	0	143	1,267	533	1,302	756	1,832	230	3,015	927	769
Sockeye	454,709	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	1,672,438	2,887,961
Coho	1,635	4,737	1,869	873	1,414	241	250	2,297	509	2,556	1,638	451
Pink	7,439	23,542	8,325	5,416	20,966	3,419	20,573	21,931	28,480	17,062	15,715	35,588
Chum	17,261	6,880	29,925	53,380	231,785	197,332	450,989	163,884	121,995	188,004	146,143	106,662
	\$481,233	\$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	\$1,836,862	\$3,031,431
Hatchery	sales											
Species												
Chinook	0	0	0	0	0	0	0	0	59	0	6	0
Sockeye	997,020	2,383,400	2,173,808	1,790,819	0	1,088,363	0	0	7,749	110	844,127	0
Coho	35,733	0	102,792	161,995	67,879	145,267	44,808	280,215	217	214,752	105,366	19,035
Pink	5,718,678	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	8,182,636	10,482,055
Chum	779,268	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	2,383,917	1,573,976
	\$7,530,699	\$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	\$11,516,052	\$12,075,066

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Table 4.–Page 2 of 2.

Other gear											Previous	
Species	2004	2005	2006	2007	2008	2009	2010	2011 a	2012 <sup>a</sup>	2013 <sup>a</sup>	10-year avg.	2014
Chinook	493	81	0	0	0	0	0	0	0	0	57	0
Sockeye	614	289	0	0	0	0	0	16	159	0	108	0
Coho	0	0	0	0	0	0	0	0	0	0	0	0
Pink	0	0	0	0	0	0	0	11,123	27	0	1,115	0
Chum	0	0	0	0	0	0	0	1,169	1,090	243	250	0
	\$1,107	\$370	\$0	\$0	\$0	\$0	\$0	\$12,308	\$1,275	\$243	\$1,530	\$0
Average earnings												
Purse seine	\$54,210	\$137,767	\$299,400	\$447,404	\$352,212	\$518,423	\$216,813	\$206,151	\$186,391	\$497,214	\$291,598	\$176,335
Drift gillnet	\$42,219	\$46,807	\$68,971	\$57,375	\$57,262	\$75,255	\$96,784	\$97,916	\$105,889	\$92,853	\$74,133	\$99,753
Set gillnet	\$17,823	\$23,840	\$53,067	\$57,440	\$59,737	\$132,431	\$109,768	\$109,768	\$89,852	\$88,900	\$74,263	\$104,532
Number of permits fished												
Purse seine	105	103	111	111	141	154	174	183	224	211	152	222
Drift gillnet	522	508	494	506	507	511	519	513	522	522	512	525
Set gillnet	27	27	26	26	25	27	29	29	29	28	27	29

<sup>&</sup>lt;sup>a</sup> Confiscated fish.

Table 5.—Spawning escapement goals for Area E salmon stocks, 2014.

		Goal	Long-term		Year	Evaluation
Species/stock	Lower	Upper	target <sup>a</sup>	Type <sup>b</sup>	implemented c	method
Cl: 1 1						
Chinook salmon	24.000	1	27.000	SEG d	2002	M. 1
Copper River	24,000	and up	27,000	SEG "	2003	Mark-recapture
Coho salmon	12.000	22.000		CEC	2002	A : 1
Bering River	13,000	- 33,000		SEG	2003	Aerial surveys
Copper River Delta	32,000	- 67,000		SEG	2003	Aerial surveys
Sockeye salmon				~-~		
Bering River	15,000	- 33,000		SEG	2012	Aerial surveys
Upper Copper River <sup>e</sup>	360,000	- 750,000	361,000	SEG	2012	Didson sonar
Copper River Delta <sup>f</sup>	55,000	- 130,000	84,500	SEG	2003	Aerial surveys
Coghill Lake	20,000	- 60,000		SEG	2012	Weir
Eshamy Lake	13,000	- 28,000		BEG	2009	Video
Pink Salmon <sup>g</sup>						
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

<sup>&</sup>lt;sup>a</sup> Managed for escapements that on average match the historical average escapement listed. For pink salmon, these long-term targets are the median escapement values.

<sup>&</sup>lt;sup>b</sup> 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.

<sup>&</sup>lt;sup>c</sup> Goals are generally adopted the year before they are implemented.

<sup>&</sup>lt;sup>d</sup> Goals are lower bound SEG goals (5 AAC 39.222).

<sup>&</sup>lt;sup>e</sup> 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 The Copper River Delta sockeye salmon goal is managed for escapements that, on average, match the long-term escapement index of 84,500.

<sup>&</sup>lt;sup>g</sup> 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 2014 common property salmon fishery by district and species, Prince William Sound Area.

		Chino	ook	Soc	keye	Coh	o <sup>c</sup>	Pi	nk	Chun	1
		Point		Point		Point		Point		Point	
District/facility <sup>a</sup>	Forecast type b	estimate	Range	estimate	Range	estimate	Range	estimate	Range	estimate	Range
Copper River d	CPF harvest	33	15-63	1,340	730–1,940	229	23-434				
Bering River <sup>e</sup>	CPF harvest			15	0-52	46	0-96				
Coghill <sup>f</sup>	CPF harvest			138	62-333						
Eshamy <sup>f</sup>	CPF harvest			32	9–57						
Unakwik <sup>g</sup>	CPF harvest			6	1-11						
General districts	CPF harvest							3,140	0-17,840	245	0-522
Total wild stock		33	15-63	1,531	916-2,163	275	64-486	3,140	0-17,840	245	0-522
SGH	CPF harvest					87		10,182			
AFK	CPF harvest							5,990		492	
WNH h	CPF harvest					214		8,086		1,626	
ССН	CPF harvest							4,052			
MBH <sup>i</sup>	CPF harvest			1,029							
GH	CPF harvest			330	180-380						
Total hatchery				1,359	152–378	301		28,310		2,118	
Total hatchery and wild		33		2,890		576		31,450		2,363	

Note: All values are in thousands.

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).

- <sup>a</sup> 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. Harvest estimates are made only for species that constitute a significant portion of the catch.
- b The 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 returns and Gulkana Hatchery sockeye salmon. Harvest projections do not include salmon harvested by hatcheries for cost recovery.
- <sup>c</sup> ADF&G provides commercial common property (CCPF) harvest forecasts for Copper River and Bering River coho salmon.
- 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).
- <sup>e</sup> Bering River coho and sockeye salmon harvest estimates are based on 10-year mean annual harvest.
- Formalized sibling model forecast procedures are used for Coghill and Eshamy District sockeye salmon runs. The Coghill District's wild pink and chum salmon harvest is included in the General (PWS) districts projection.
- <sup>g</sup> The 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 of chum and coho salmon.
- Main Bay Hatchery sockeye salmon harvest estimate includes all on-site and remote release runs of sockeye salmon.

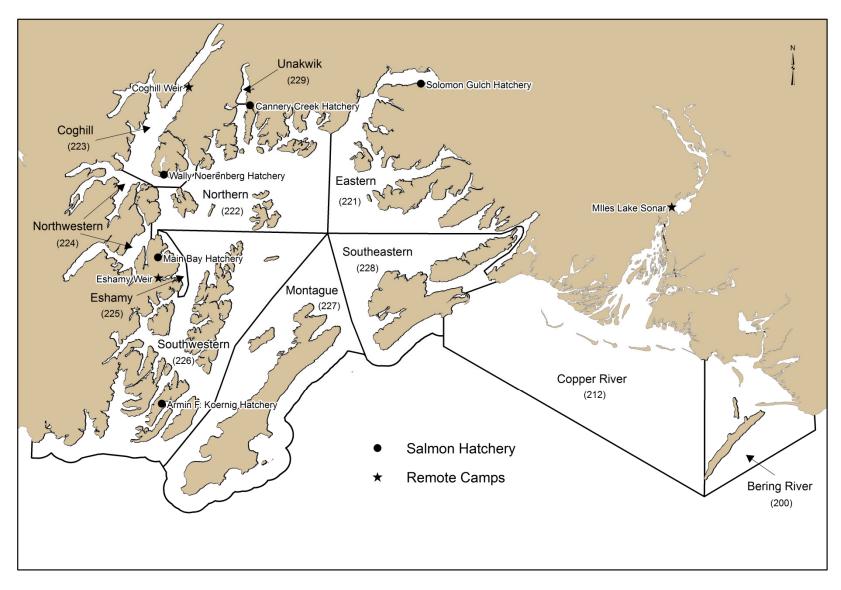


Figure 1.-Prince William Sound Management Area showing commercial fishing districts, salmon hatcheries, weir locations, and Miles Lake sonar camp.

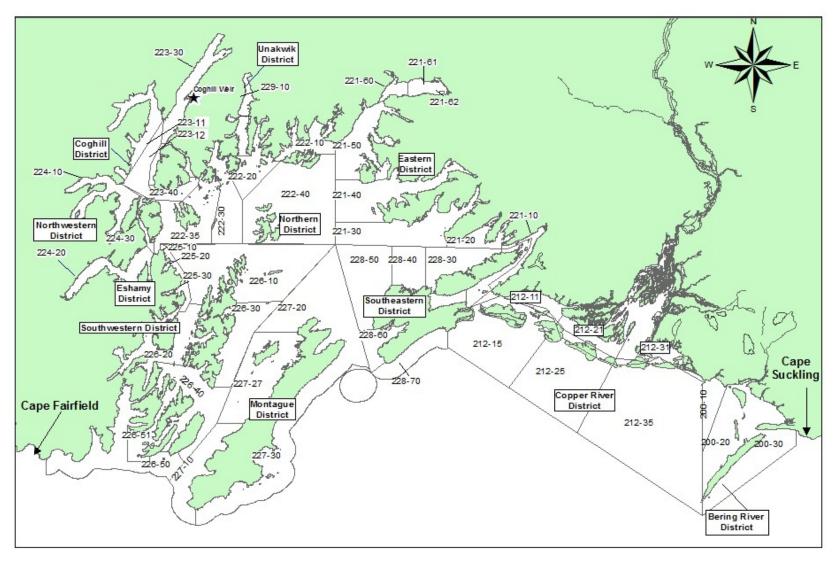


Figure 2.—Prince William Sound Management Area showing commercial fishing districts and statistical reporting areas.

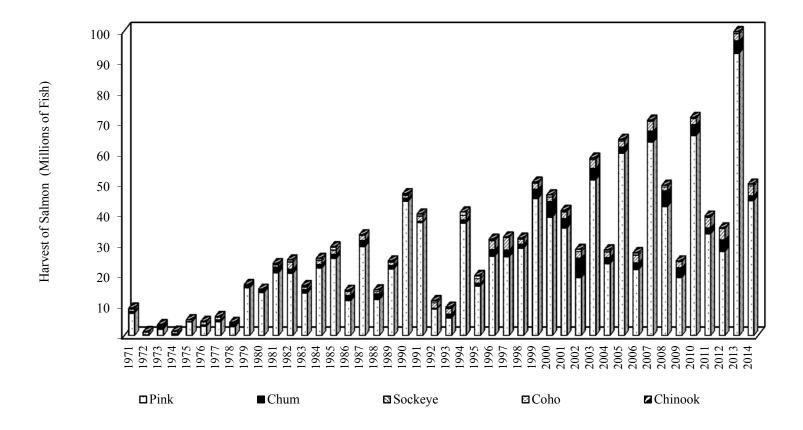


Figure 3.—Commercial salmon harvests in Prince William Sound, 1971–2014.

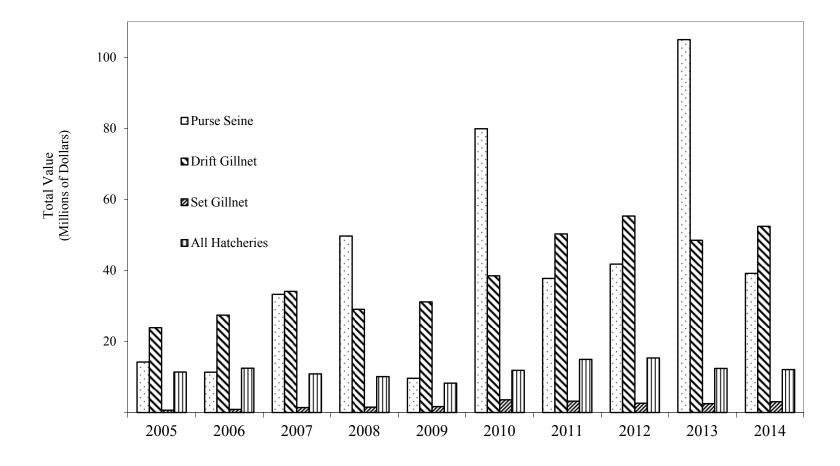


Figure 4.–Exvessel value of the commercial salmon harvest by gear type, 2005–2014.

# **APPENDIX A: COPPER RIVER**

Appendix A1.—Total estimated sockeye salmon runs to the Copper River by end user or destination with the 10-year average, 2004–2014.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	10-year Average	2014
Commercial harvest <sup>a</sup>	1,048,004	1,331,664	1,496,754	1,901,773	320,815	896,621	636,214	2,052,432	1,866,541	1,608,117	1,315,894	2,050,007
Commercial, homepack <sup>a</sup>	525	1,785	1,539	2,023	2,172	6,528	7,064	9,070	7,985	9,448	4,814	12,072
Commercial, donated <sup>a</sup>	74	83	114	180	80	47	0	0	0	0	58	0
Educational drift gillnet permit <sup>a</sup>	0	42	16	62	29	8	61	23	200	152	59	186
Subsistence (Cordova, drift gillnet) <sup>b</sup> Federal Subsistence	1,822	830	4,355	6,148	3,969	1,764	1,980	1,783	4,270	5,639	3,256	1,675
(PWS/Chugach Nat'l Forest, dip net, spear, rod and reel) <sup>b</sup>	0	109	150	36	32	46	36	35	64	102	61	76
Subsistence (Batzulnetas, dip net, fish wheel or spear) <sup>b</sup>	182	0	0	1	1	0	106	9	101	862	126	116
Subsistence (Glennallen Subdistrict, dip net, fish wheel or spear) <sup>c</sup>	55,510	64,213	57,710	65,714	43,157	46,849	70,719	59,622	76,305	73,728	61,353	75,501
Federal Subsistence (Glennallen subdistrict, dip net, fish wheel or spear) <sup>d</sup>	17,704	19,973	16,711	15,225	14,475	14,033	14,134	15,753	16,487	17,060	16,156	23,034
Personal Use Reported (Chitina Subdistrict, dip net) <sup>c</sup>	107,312	120,013	123,261	125,126	81,359	90,035	138,487	128,052	127,143	180,663	122,145	157,215
Federal Subsistence (Chitina subdistrict, dip net) <sup>d</sup>	1,215	1,265	1,379	929	959	882	2,324	1,933	915	2,252	1,405	1,664
Upriver sport harvest <sup>e</sup>	6,464	8,135	14,297	23,028	11,431	13,415	14,743	7,727	23,393	26,611	14,924	20,000
Delta sport harvest <sup>e</sup>	952	656	113	1,704	1,225	959	1,342	838	764	472	903	691
Upriver spawning escapement <sup>f</sup>	462,664	528,816	600,378	624,438	491,516	477,327	524,692	621,545	970,622	889,939	619,194	883,029
Delta spawning escapement <sup>g</sup>	138,770	116,812	197,792	176,570	135,900	138,584	167,810	153,014	133,700	151,410	151,036	128,410
Hatchery broodstock/excess <sup>h</sup>	6,618	92,455	97,192	28,648	44,865	43,409	157,980	59,589	65,348	72,369	66,847	53,737
Total estimated sockeye salmon run size	1,847,816	2,286,851	2,611,761	2,971,605	1,151,985	1,730,507	1,737,692	3,111,425	3,293,838	3,038,824	2,378,230	3,407,413

## Appendix A1.—Page 2 of 2.

- <sup>a</sup> 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.
- <sup>c</sup> Data are expanded harvest from returned state and federal subsistence permits.
- d Data are reported harvest, 2002–2004, and expanded harvest, 2005–2014, from returned state and federal subsistence permits.
- e Upriver and Copper River Delta sport harvest data are from statewide sport fish harvest surveys.
- 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.
- <sup>g</sup> Delta spawning escapement estimated by doubling the peak aerial survey index.
- h Hatchery broodstock and onsite excess are from the PWSAC 2014.

Appendix A2.—Total estimated sockeye salmon runs to the Copper River by origin with the 10-year average, 2004–2014.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	10-year Average	2014
Upriver wild contribution <sup>a</sup>	1,374,017	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	1,700,348	2,633,102
Delta wild contribution <sup>b</sup>	366,231	306,563	531,312	564,546	202,811	324,744	289,313	512,515	333,445	351,090	378,257	351,098
Gulkana contributions <sup>c</sup>	93,438	216,583	287,906	132,625	85,916	136,402	434,608	580,917	439,688	433,778	284,186	403,178
Total estimated sockeye salmon run size	1,833,686	2,276,773	2,592,750	2,961,748	1,141,223	1,721,904	1,715,995	3,097,537	3,276,472	3,009,819	2,362,791	3,387,377

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.

<sup>&</sup>lt;sup>c</sup> 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.

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Appendix A3.—Total estimated Chinook salmon run to the Copper River by end user or destination with 10-year average, 2004–2014.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	10-year Average	2014
Commercial harvest <sup>a</sup>	38,191	34,624	30,278	39,095	11,437	9,457	9,645	18,500	11,764	8,826	21,182	10,207
Commercial, homepack <sup>a</sup>	539	760	779	1,019	537	876	906	1,282	853	564	812	768
Commercial, donated <sup>a</sup>	5	11	3	0	4	0	0	0	0	0	2	0
Educational drift gillnet permit <sup>a</sup>	0	92	11	70	47	50	31	6	6	55	37	36
Subsistence (Cordova, drift gillnet) <sup>b</sup>	1,106	260	779	1,145	470	212	276	212	237	854	555	153
Subsistence (Batzulnetas, dip net, fish wheel or spear) <sup>b</sup>	0	0	0	0	0	0		0	0	5	1	0
Subsistence (Glennallen Subdistrict, dip net, fish wheel or spear) <sup>c</sup>	3,346	2,229	2,769	3,276	2,381	2,493	2,099	2,319	2,095	2,148	2,516	1,365
Federal Subsistence (Glennallen subdistrict, dip net, fish wheel or spear ) <sup>d</sup>	636	345	430	569	837	549 <sup>0</sup>	326	744	415	374	522	420
Personal Use harvests (Chitina Subdistrict, dip net) <sup>c</sup>	2,495	2,043	2,663	2,694	1,999	214	700	1,067	567	744	1,519	719
Federal Subsistence (Chitina subdistrict, dip net) <sup>d</sup>		22	13	26	23	9	18	13	5	18	15	14
Sport harvest <sup>e</sup>	3,435	4,093	3,425	5,123	3,618	1,355	2,409	1,753	459	570	2,624	800
Upriver spawning escapement <sup>f</sup>	30,645	21,528	58,454	34,565	32,485	27,781	16,771	27,993	27,911	28,727	30,686	20,840
Total estimated Chinook salmon run size 7	80,405	66,007	99,604	87,582	53,838	42,996	33,181	53,889	44,312	42,885	60,470	35,322

<sup>&</sup>lt;sup>a</sup> Numbers are from fish ticket data.

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

<sup>&</sup>lt;sup>c</sup> Data are expanded harvest from returned state and federal subsistence permits.

<sup>&</sup>lt;sup>d</sup> Data are reported harvest, 2002–2004, and expanded harvest, 2005–2011, from returned state and federal subsistence permits.

<sup>&</sup>lt;sup>e</sup> Upriver Chinook salmon sport harvest only; there is no Copper River Delta Chinook salmon sport harvest. The sport harvest numbers are generated from the statewide sport fish harvest survey.

f Upriver Chinook salmon spawning escapement 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, 1960-2014.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1960	14,052	593,824	118,395	375	314	726,960
1961	7,621	528,223	133,987	1,639	106	671,576
1962	14,792	677,626	174,628	1,880	513	869,439
1963	10,871	375,925	202,621	1,487	85	590,989
1964	12,751	699,548	242,666	548	62	955,575
1965	15,390	818,277	70,786	803	331	905,587
1966	11,422	1,005,615	116,147	717	115	1,134,016
1967	9,853	679,503	160,532	573	218	850,679
1968	9,743	573,270	230,867	4,343	473	818,696
1969	14,040	696,836	77,405	847	244	789,372
1970	19,375	1,115,695	161,892	645	687	1,298,294
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 47,721	1,248,503	504,223 363,489	3,677	31,627	1,826,764
2003	47,721	1,188,052		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

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Year	Chinook	Sockeye	Coho	Pink	Chum	Total
2008	11,437	320,815	202,621	1,437	1,279	1,705,827
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
25-Year Average	34,904	1,330,120	273,961	17,031	12,782	1,713,730
10-Year Average	21,182	1,315,894	229,057	28,649	8,550	1,720,154
2014	10,207	2,050,007	315,776	43,534	11,703	2,431,227

Appendix A5.-Copper River District commercial drift gillnet salmon harvest by period, 2014.

		News release		Permits		Chin	ook	Soci	keye	Со	ho	Pin	k	Chi	um
Period <sup>a</sup>	Date	dates <sup>a</sup>	Hours	fished	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
01 <sup>b</sup>	05/15-05/15	05/08	12	487	562	1,264	23,270	32,011	195,688	0	0	0	0	3,146	23,461
$02^{b}$	05/19-05/19	05/17	12	497	695	851	16,035	82,896	519,413	2	25	79	514	2,896	20,955
03 <sup>b</sup>	05/22-05/23	05/21	36	498	1,454	1,470	24,661	222,704	1,383,571	3	24	0	0	14,162	103,013
$04^{b}$	05/26-05/27	05/24	24	501	966	1,210	20,250	152,910	934,494	2	13	0	0	1,969	14,136
05 <sup>b</sup>	05/29-05/30	05/27	36	386	879	1,182	20,913	183,181	1,128,452	100	706	0	0	1,555	11,029
$06^{b}$	06/02-06/03	05/31	36	463	1,212	1,283	21,444	204,160	1,263,492	7	45	12	43	8,152	59,779
$07^{b}$	06/05-06/07	06/04	48	448	1,251	1,281	20,360	246,591	1,533,296	85	601	17	126	3,403	24,250
$08^{b}$	06/09-06/11	06/07	48	413	1,150	822	16,992	161,060	987,738	39	283	0	0	2,114	15,152
$09^{b}$	06/12-06/14	06/11	48	308	584	242	4,764	93,447	583,942	31	215	2	7	930	7,129
$10^{b}$	06/16-06/17	06/14	36	141	206	84	1,962	36,823	230,022	30	210	209	730	197	1,478
11 <sup>b</sup>	06/19-06/20	06/18	36	206	518	154	3,620	100,154	615,028	31	262	0	0	1,080	8,040
12	06/23-06/24	06/21	36	225	478	99	2,373	102,832	629,726	39	276	53	187	949	6,892
13	06/26-06/27	06/25	36	256	480	77	1,875	67,535	415,415	61	450	94	445	1,262	9,592
14	06/30-07/02	06/28	48	262	642	59	1,155	80,609	497,101	167	1,287	154	680	478	3,450
15	07/03-07/05	07/02	48	238	478	45	1,001	59,956	368,321	102	789	460	1,703	386	2,697
16	07/07-07/08	07/05	36	216	457	17	358	56,421	346,650	21	157	88	281	139	1,034
17	07/10-07/12	07/09	48	64	83	0	0	7,620	45,732	0	0	35	106	22	159
18	07/14-07/15	07/12	36	227	384	25	355	44,524	266,453	112	746	149	523	170	1,301
19	07/17-07/18	07/16	36	197	335	6	62	43,062	252,006	146	1,112	544	1,885	211	1,367
20	07/21-07/22	07/19	36	144	204	12	235	23,078	137,678	173	1,332	2,074	7,521	96	736
21	07/24-07/25	07/23	36	97	148	5	67	18,915	111,406	214	1,465	2,660	9,382	105	720
22	07/28-07/29	07/26	36	90	126	3	61	12,426	73,252	587	4,632	2,393	9,131	35	273
23	07/31-08/01	07/30	36	75	81	9	82	8,666	51,691	633	4,879	2,465	8,557	50	348
24	08/04-08/05	08/02	36	29	33	1	11	3,657	19,035	432	3,522	63	267	3	18
25	08/07-08/08	08/06	36	16	20	0	0	1,643	9,866	529	4,283	69	271	7	58
26	08/11-08/12	08/08	36	38	62	1	13	1,674	10,409	5,447	44,049	51	158	8	60
27	08/18-08/19	08/16	36	199	339	4	70	856	5,197	41,019	345,618	19	60	5	37
28	08/25-08/26	08/23	24	261	427	1	15	226	1,314	61,399	549,137	6	19	4	32
29	08/28-08/29	08/27	24	160	221	0	0	242	2,025	27,646	233,829	1	3	0	0
30	09/01-09/02	08/29	24	249	360	0	0	66	387	47,186	424,169	3	9	0	0
31	09/04-09/05	09/03	24	170	255	0	0	42	240	37,918	347,979	3	12	0	0
32	09/08-09/09	09/06	24	168	261	0	0	10	58	34,056	310,800	0	0	0	0
33	09/11-09/12	09/10	24	100	155	0	0	1	7	25,065	222,076	0	0	0	0

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		News Release		Permits			Chinook		Sockeye		Coho		Pink		Chum
Period <sup>a</sup>	Date	Dates <sup>a</sup>	Hours	Fished 1	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
34	09/15-09/16	09/12	36	135	223	0	0	9	56	26,041	237,726	0	0	0	0
35	09/18-09/19	09/12	36	17	27	0	0	0	0	2,665	26,404	0	0	0	0
36	09/22-09/24	09/19	60	13	18	0	0	0	0	3,438	34,372	0	0	0	0
37	09/25-09/27	09/19	60	1	1	0	0	0	0	350	3,567	0	0	0	0
38	9/29-10/01	09/26	60	0	0	0	0	0	0	0	0	0	0	0	0
39	10/02-10/04	09/26	60	0	0	0	0	0	0	0	0	0	0	0	0
40	10/06-10/08	10/03	60	0	0	0	0	0	0	0	0	0	0	0	0
41	10/09-10/11	10/03	60	0	0	0	0	0	0	0	0	0	0	0	0
Total			1,560	518	15,775	10,207	182,004	2,050,007 1	2,619,161	315,776	2,807,040	11,703	42,620	43,534	317,196
Average	weight						17.83		6.16		8.89		3.64		7.29

Source: Additional information relevant to each fishing period, including area opened to fishing, may be found on the applicable news release (NR) available through the ADF&G Commercial Fishing News Release System at <a href="http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main.">http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main.</a> Required parameters for searching the ADF&G Commercial Fishing News Release System include: Effective Year = 2013; Species Group = Salmon; Management Area = Prince William Sound.

<sup>&</sup>lt;sup>a</sup> 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 News Release Dates.

<sup>&</sup>lt;sup>c</sup> Waters of the inside closure area described in 5 AAC 24.350(1)(B) were closed.

Appendix A6.-Copper River District commercial drift gillnet salmon harvest by statistical week, 2014.

			Permits		Chin	ook	Soc	keye	C	oho	Pin	k	Ch	um
Week	Start Date	Hours	fished	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
20	05/11	12	489	566	1,270	23,409	32,146	196,353					3,146	23,461
21	05/18	48	508	2,145	2,315	40,557	305,465	1,902,319	5	49	79	514	17,058	123,968
22	05/25	60	506	1,845	2,392	41,163	336,091	2,062,946	102	719			3,524	25,165
23	06/01	84	472	2,463	2,564	41,804	450,751	2,796,788	92	646	29	169	11,555	84,029
24	06/08	96	426	1,734	1,064	21,756	254,507	1,571,680	70	498	2	7	3,044	22,281
25	06/15	72	218	724	238	5,582	136,935	844,767	31	262			1,275	9,506
26	06/22	72	275	958	176	4,248	170,367	1,045,141	100	726	147	632	2,211	16,484
27	06/29	96	285	1,119	104	2,156	140,540	865,270	269	2,076	614	2,383	864	6,147
28	07/06	84	221	540	17	358	64,041	392,382	21	157	123	387	161	1,193
29	07/13	72	248	719	31	417	87,586	518,459	258	1,858	693	2,408	381	2,668
30	07/20	72	152	352	17	302	41,993	249,084	387	2,797	4,734	16,903	201	1,456
31	07/27	72	103	208	12	143	21,159	125,378	1,250	9,721	5,067	18,418	87	633
32	08/03	72	33	54	1	11	5,306	28,935	974	7,909	132	538	10	76
33	08/10	36	38	62	1	13	1,674	10,409	5,447	44,049	51	158	8	60
34	08/17	36	199	340	4	70	856	5,197	41,097	346,244	19	60	5	37
35	08/24	48	273	647	1	15	468	3,339	88,967	782,340	7	22	4	32
36	08/31	48	261	614	0	0	102	593	85,091	772,044	6	21	0	0
37	09/07	48	185	416	0	0	11	65	59,121	532,876	0	0	0	0
38	09/14	72	138	250	0	0	9	56	28,706	264,130	0	0	0	0
39	09/21	120	13	19	0	0	0	0	3,788	37,939	0	0	0	0
40	09/28	120	0	0	0	0	0	0	0	0	0	0	0	0
41	10/05	120	0	0	0	0	0	0	0	0	0	0	0	0
Total		1,560	518	15,775	10,207	182,004	2,050,007	12,619,161	315,776	2,807,040	11,703	42,620	43,534	317,196
Average	e weights					17.83		6.16		8.89		3.64		7.29

Appendix A7.–Daily salmon counts at Miles Lake sonar, 2014.

				Daily s	onar counts			Minim	um inriver	Maximum inriver		
	Water	North	South			0600	Projected	passag	e objective	passag	e objective	
Date	level	bank	bank	Daily	Cumulative	Count	Daily	Daily	Cumulative	Daily	Cumulative	
05/07 a	40.61	N/A	0	0	0	0	0	NA	NA	NA	NA	
05/08 b	40.61	N/A	0	0	0	0	0	NA	NA	NA	NA	
05/09 <sup>c</sup>	40.76	N/A	N/A	0	0	0	0	NA	NA	NA	NA	
05/10 d	40.98	0	N/A	0	0	0	0	NA	NA	NA	NA	
05/11 e	41.06	0	0	0	0	0	0	NA	NA	NA	NA	
05/12 f	40.85	279	161	440	440	100	400	NA	NA	NA	NA	
05/13	40.64	360	372	732	1,172	112	448	NA	NA	NA	NA	
05/14	40.53	611	699	1,310	2,482	325	1,300	NA	NA	NA	NA	
05/15	40.53	969	1,278	2,247	4,729	361	1,444	0	0	0	0	
05/16	40.46	2,411	2,600	5,011	9,740	755	3,020	415	415	633	633	
05/17	40.46	3,660	4,530	8,190	17,930	1,316	5,264	654	1,069	997	1,629	
05/18	40.47	2,429	4,902	7,331	25,261	1,660	6,640	1,991	3,060	3,035	4,664	
05/19	40.53	5,825	4,037	9,862	35,123	1,925	7,700	3,542	6,602	5,398	10,062	
05/20	40.57	8,056	6,354	14,410	49,533	2,403	9,612	5,205	11,807	7,933	17,995	
05/21	40.68	9,491	15,968	25,459	74,992	5,135	20,540	5,798	17,606	8,837	26,832	
05/22	40.93	2,836	20,690	23,526	98,518	4,821	19,284	9,025	26,630	13,754	40,586	
05/23	41.19	4,325	18,293	22,618	121,136	4,011	16,044	10,343	36,973	15,763	56,350	
05/24	41.00	2,400	20,925	23,325	144,461	5,289	21,156	11,466	48,440	17,476	73,825	
05/25	41.01	3,769	14,817	18,586	163,047	4,639	18,556	13,096	61,536	19,959	93,784	
05/26	40.87	1,887	11,754	13,641	176,688	3,395	13,580	16,248	77,783	24,762	118,547	
05/27	40.84	5,689	9,871	15,560	192,248	2,072	8,288	15,550	93,333	23,699	142,246	
05/28	40.91	5,578	16,129	21,707	213,955	4,212	16,848	16,541	109,874	25,209	167,455	
05/29	41.02	4,653	15,370	20,023	233,978	4,724	18,896	16,535	126,408	25,200	192,654	
05/30	41.14	6,507	23,697	30,204	264,182	5,727	22,908	18,173	144,582	27,697	220,352	
05/31	41.19	14,002	30,125	44,127	308,309	7,914	31,656	15,936	160,518	24,288	244,639	
06/01	41.32	8,989	23,265	32,254	340,563	7,770	31,080	18,118	178,636	27,614	272,253	
06/02	41.44	6,769	20,608	27,377	367,940	5,155	20,620	16,407	195,043	25,006	297,258	
06/03	41.44	8,035	31,354	39,389	407,329	5,245	20,980	16,431	211,474	25,041	322,300	
06/04	41.45	8,045	40,288	48,333	455,662	9,279	37,116	15,265	226,739	23,265	345,564	
06/05	41.44	4,816	21,139	25,955	481,617	6,990	27,960	16,531	243,270	25,194	370,758	
06/06	41.41	4,085	14,857	18,942	500,559	4,277	17,108	14,301	257,571	21,796	392,554	

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				Daily s	onar counts				um inriver	Maximum inriver		
	Water	North	South			0600	Projected	passag	e objective	passag	ge objective	
Date	level	bank	bank	Daily	Cumulative	Count	daily	Daily	Cumulative	Daily	Cumulative	
06/07	41.45	17,674	5,136	22,810	523,369	6,065	24,260	15,697	273,267	23,923	416,477	
06/08	41.61	3,824	11,979	15,803	539,172	4,201	16,804	16,388	289,656	24,977	441,454	
06/09	41.79	4,658	10,501	15,159	554,331	3,749	14,996	14,087	303,743	21,470	462,924	
06/10	41.75	3,649	14,910	18,559	572,890	4,409	17,636	12,859	316,602	19,598	482,522	
06/11	41.57	3,720	17,763	21,483	594,373	4,436	17,744	11,687	328,289	17,811	500,333	
06/12	41.60	4,140	11,816	15,956	610,329	4,293	17,172	10,340	338,629	15,759	516,092	
06/13	41.80	3,913	7,004	10,917	621,246	2,586	10,344	9,054	347,683	13,799	529,891	
06/14	41.44	6,247	10,330	16,577	637,823	3,244	12,976	8,760	356,443	13,350	543,242	
06/15	41.41	5,285	10,720	16,005	653,828	4,301	17,204	9,148	365,590	13,942	557,183	
06/16	41.45	3,387	8,773	12,160	665,988	3,128	12,512	8,718	374,308	13,287	570,470	
06/17	41.61	1,675	11,397	13,072	679,060	2,350	9,400	8,719	383,027	13,288	583,758	
06/18	41.79	1,849	14,263	16,112	695,172	2,896	11,584	8,412	391,439	12,820	596,578	
06/19	41.75	2,498	12,151	14,649	709,821	3,522	14,088	8,620	400,059	13,138	609,716	
06/20	41.57	3,014	11,378	14,392	724,213	2,715	10,860	8,201	408,260	12,499	622,215	
06/21	41.60	3,411	14,574	17,985	742,198	3,968	15,872	8,105	416,365	12,353	634,568	
06/22	41.80	2,172	15,124	17,296	759,494	4,395	17,580	7,758	424,123	11,824	646,391	
06/23	41.76	3,366	11,164	14,530	774,024	3,339	13,356	7,165	431,288	10,920	657,311	
06/24	41.70	2,118	14,437	16,555	790,579	3,629	14,516	7,121	438,409	10,853	668,164	
06/25	41.83	1,218	16,192	17,410	807,989	3,612	14,448	6,665	445,074	10,158	678,322	
06/26	42.11	1,548	14,208	15,756	823,745	3,363	13,452	7,427	452,501	11,319	689,641	
06/27	42.12	1,038	11,393	12,431	836,176	3,186	12,744	7,380	459,881	11,247	700,888	
06/28	42.13	1,668	11,913	13,581	849,757	2,616	10,464	7,025	466,906	10,707	711,595	
06/29	42.12	3,306	11,193	14,499	864,256	3,381	13,524	6,724	473,630	10,248	721,842	
06/30	42.14	1,308	10,327	11,635	875,891	2,345	9,380	6,324	479,954	9,638	731,481	
07/01	42.37	1,320	13,204	14,524	890,415	3,007	12,028	6,331	486,285	9,649	741,130	
07/02	42.66	1,032	13,386	14,418	904,833	3,084	12,336	5,867	492,152	8,942	750,071	
07/03	42.81	1,122	11,011	12,133	916,966	2,136	8,544	6,357	498,509	9,688	759,759	
07/04	43.05	822	7,835	8,657	925,623	1,887	7,548	6,442	504,951	9,819	769,578	
07/05	43.24	852	7,112	7,964	933,587	2,347	9,388	6,916	511,868	10,541	780,119	
07/06	43.46	1,122	9,285	10,407	943,994	2,702	10,808	6,419	518,286	9,782	789,901	
07/07	43.60	1,662	8,583	10,245	954,239	3,549	14,196	6,677	524,964	10,177	800,078	
07/08	43.59	984	8,855	9,839	964,078	2,197	8,788	6,580	531,543	10,028	810,106	
07/09	43.51	2,004	9,195	11,199	975,277	2,764	11,056	6,719	538,262	10,239	820,345	

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				Daily	sonar counts			Minim	num inriver	Maxin	num inriver
	Water	North	South			0600	Projected	passag	e objective	passag	e objective
Date	level	bank	bank	Daily	Cumulative	Count	daily	Daily	Cumulative	Daily	Cumulative
07/10	43.48	1,896	13,028	14,924	990,201	3,740	14,960	7,444	545,706	11,345	831,691
07/11	43.50	792	10,084	10,876	1,001,077	3,091	12,364	7,863	553,569	11,984	843,674
07/12	43.62	690	8,374	9,064	1,010,141	2,238	8,952	9,359	562,928	14,264	857,939
07/13	43.82	1,074	8,448	9,522	1,019,663	1,293	5,172	9,308	572,236	14,186	872,125
07/14	43.92	1,296	8,329	9,625	1,029,288	1,602	6,408	10,210	582,446	15,560	887,685
07/15	43.60	1,218	14,196	15,414	1,044,702	2,448	9,792	9,956	592,402	15,173	902,858
07/16	43.56	2,052	23,725	25,777	1,070,479	6,396	25,584	9,828	602,230	14,979	917,837
07/17	43.33	1,734	22,976	24,710	1,095,189	7,023	28,092	7,923	610,153	12,074	929,912
07/18	43.24	1,504	15,147	16,651	1,111,840	4,059	16,236	9,116	619,268	13,893	943,805
07/19	43.28	1,272	2,916	15,042	1,126,882	3,660	14,640	8,325	627,593	12,688	956,493
07/20	43.32	846	11,478	12,324	1,139,206	3,066	12,264	7,983	635,577	12,167	968,659
07/21	43.40	672	9,096	9,768	1,148,974	3,792	15,168	8,138	643,714	12,403	981,062
07/22	43.30	552	9,198	9,750	1,158,724	1,800	7,200	8,592	652,307	13,095	994,157
07/23	43.14	846	14,790	15,636	1,174,360	3,732	14,928	7,627	659,934	11,624	1,005,781
07/24	43.04	1,152	13,050	14,202	1,188,562	3,414	13,656	8,228	668,161	12,540	1,018,321
07/25	42.37	810	8,202	9,012	1,197,574	3,007	12,028	7,856	676,017	11,973	1,030,294
07/26	42.70	708	6,774	7,482	1,205,056	1,506	6,024	7,566	683,583	11,531	1,041,825
07/27	42.62	498	6,186	6,684	1,211,740	876	3,504	6,977	690,560	10,633	1,052,458
07/28	42.57	426	6,252	6,678	1,218,418	1,104	4,416	6,237	696,797	9,505	1,061,963

Note: Anticipated counts are not available prior to 15 May because the sonar has only been deployed prior to this date in 2003, 2004, and 2005.

The south bank was deployed for 4 hours.

The south bank was deployed for 13.5 hours.

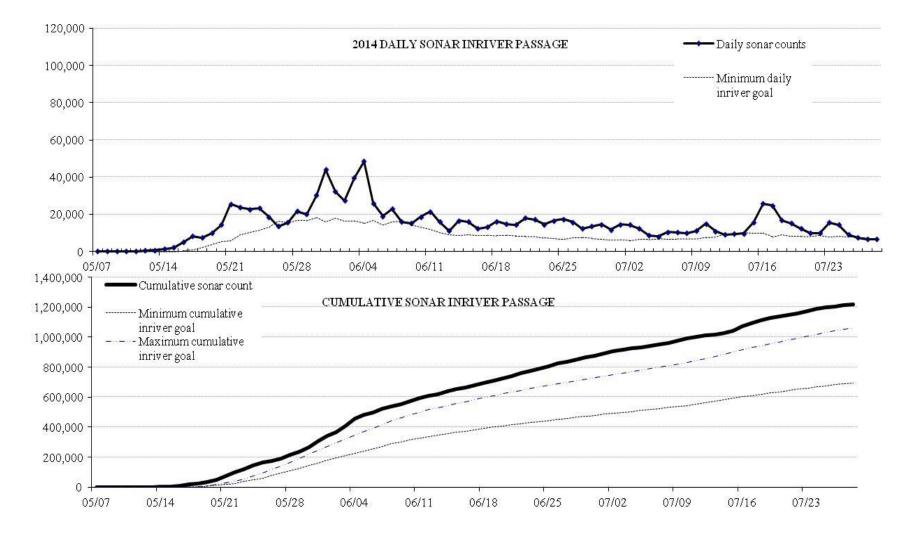
The south bank was deployed for 13.5 hours.

Sonar was pulled due to ice moving downriver from Miles Lake.

The north bank only was deployed for 4 hours.

The north bank was deployed for 7 hours.

Both banks operational as of 0000.



Appendix A8.-Minimum and maximum inriver sonar goal versus actual daily and cumulative salmon passage, Miles Lake sonar, 2014.

Appendix A9.–Inriver salmon passage at the Miles Lake sonar, 1978–2014.

Year	Total	Rank
1978	107,011	37
1979	328,090	36
1980	374,091	35
1981	576,681	29
1982	517,885	32
1983	592,563	28
1984	618,732	25
1985	466,190	34
1986	481,628	33
1987	523,022	31
1988	528,940	30
1989	643,367	21
1990	624,922	24
1991	593,185	27
1992	604,898	26
1993	819,700	15
1994	738,011	17
1995	637,293	22
1996	907,267	9
1997	1,164,791	4
1998	865,896	11
1999	850,597	13
2000	636,837	23
2001	878,205	10
2002	830,263	14
2003	747,091	16
2004	684,103	20
2005	855,125	12
2006	959,706	5
2007	919,601	7
2008	718,344	18
2009	709,748	19
2010	923,811	6
2011	914,231	8
2012	1,294,400	1
2013	1,267,060	2
10 year avg	924,613	
2014	1,218,418	3

Appendix A10.—Anticipated and actual semi-weekly harvest of sockeye, Chinook, and coho salmon in the Copper River District drift gillnet fishery, 2014.

		Fishing	Anticipated	Actual	Anticipated	Actual	Anticipated	Actual
Semi-wee	ekly	time	sockeye salmon	sockeye salmon	Chinook salmon	Chinook salmon	coho salmon	coho salmon
Date		(hours)	harvest <sup>a</sup>	harvest	harvest <sup>b</sup>	harvest	harvest <sup>c</sup>	harvest
5/14	Wed	0	0	0	0	0	0	0
5/17	Sat	12	33,047	32,011	2,673	1,264	0	0
5/21	Wed	12	93,330	82,896	3,746	851	1	2
5/24	Sat	36	108,582	222,704	2,917	1,470	2	3
5/28	Wed	24	137,507	152,910	2,639	1,210	8	2
5/31	Sat	36	89,358	183,181	1,771	1,182	11	100
6/04	Wed	36	161,741	204,160	2,752	1,283	15	7
6/07	Sat	48	90,811	246,591	1,506	1,281	13	85
6/11	Wed	48	78,632	161,060	1,248	822	31	39
6/14	Sat	48	52,829	93,447	757	242	16	31
6/18	Wed	36	79,043	36,823	828	84	37	30
6/21	Sat	36	53,487	100,154	370	154	43	31
6/25	Wed	36	78,386	102,832	324	99	160	39
6/28	Sat	36	52,352	67,535	139	77	75	61
7/02	Wed	48	67,773	80,609	125	59	221	167
7/05	Sat	48	56,238	59,956	56	45	157	102
7/09	Wed	36	78,968	56,421	63	17	305	21
7/12	Sat	48	55,303	7,620	24	0	292	0
7/16	Wed	36	72,918	44,524	24	25	730	112
7/19	Sat	36	39,337	43,062	11	6	695	146
7/23	Wed	36	41,789	23,078	9	12	825	173
7/26	Sat	36	18,206	18,915	5	5	617	214
7/30	Wed	36	21,307	12,426	3	3	1,412	587
8/02	Sat	36	11,332	8,666	2	9	1,465	633
8/06	Wed	36	9,830	3,657	2	1	3,293	432
8/09	Sat	36	5,811	1,643	1	0	4,369	529

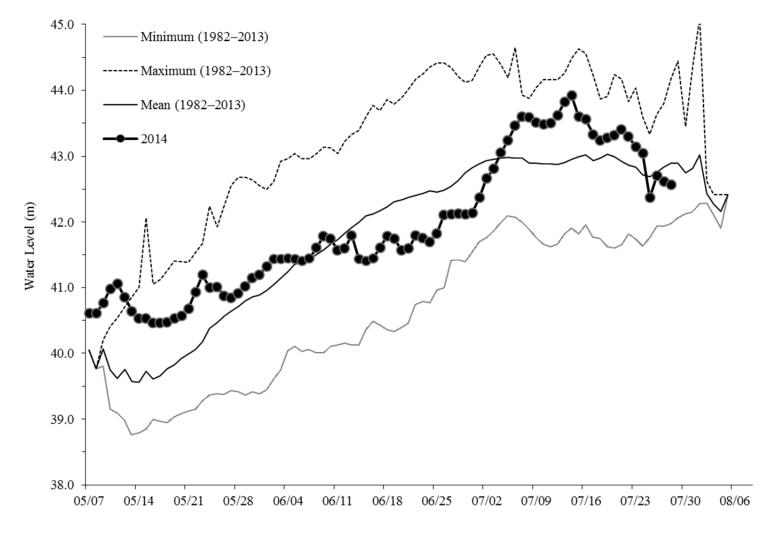
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g :	1.1	Fishing	Anticipated	Actual	Anticipated	Actual	Anticipated	Actual
Semi-w	eekly	time	sockeye salmon	sockeye salmon	Chinook salmon	Chinook salmon	coho salmon	coho salmon
Date		(hours)	harvest <sup>a</sup>	harvest	harvest <sup>b</sup>	harvest	harvest c	harvest
8/13	Wed	36	5,462	1,674	2	1	7,905	5,447
8/16	Sat	0	2,278	0	1	0	10,905	0
8/20	Wed	24	1,637	856	1	4	16,584	41,019
8/23	Sat	0	1,086	0	1	0	18,787	0
8/27	Wed	24	665	226	0	1	25,186	61,399
8/30	Sat	24	422	242	1	0	22,999	27,646
9/03	Wed	24	273	66	0	0	28,225	47,186
9/06	Sat	24	147	42	0	0	19,816	37,918
9/10	Wed	24	66	10	0	0	21,353	34,056
9/13	Sat	24	24	1	0	0	13,630	25,065
9/17	Wed	36	0	9	0	0	14,989	26,041
9/20	Sat	36	0	0	0	0	5,460	2,665
9/24	Wed	60	0	0	0	0	4,786	3,438
9/27	Sat	60	0	0	0	0	1,838	350
10/01	Wed	60	0	0	0	0	740	0
10/04	Sat	60	0	0	0	0	216	0
10/08	Wed	60	0	0	0	0	278	0
10/11	Sat	60	0	0	0	0	28	0
10/15	Tue	0	0	0	0	0	3	0
Total		1,548	1,599,975	2,050,007	22,000	10,207	228,520	315,776

<sup>&</sup>lt;sup>a</sup> Sockeye salmon anticipated harvest is based on the midpoint preseason forecast (1,300,876) and the 1998–2007 harvest timing.

Chinook salmon anticipated harvest is based on the preseason harvest forecast (14,162) and the 1998–2007 harvest timing. This harvest forecast is the total run forecast minus the lower escapement goal threshold times the mean commercial exploitation rate. Therefore, the Chinook salmon harvest should be considered a maximum harvest because the escapement goal is a lower threshold.

<sup>&</sup>lt;sup>c</sup> Coho salmon anticipated harvest is based on the midpoint preseason harvest forecast (240,371) and the 1973–2009 harvest timing.



Appendix A11.-Water stage height at the Million Dollar Bridge, 2014.

Appendix A12.—Aerial escapement indices by statistical week and location for sockeye salmon returning to the Copper River Delta, 2014.

										1.							
_							tistical we									•	d, (by
System <sup>a</sup>	06/07	06/21	06/28	07/05	07/19	07/26	08/02	08/23	08/30	09/06	09/13	09/27	Site <sup>c</sup>	System <sup>d</sup>	d	rainag	ge)
Eyak River																	
Eyak River	30	250	800	420	0	0	100	0	0	0	0	0	100	20,400	9,972	to	23,571
West Shore Beaches	0	50	200	50	500	2,000	1,100	950	0	0	0	0	1,100				
East Shore Beaches	0	120	1,900	850	900	1,800	2,300	200	1,500	1,200	2,200	250	2,300				
Middle Arm Beaches <sup>e</sup>	200	500	500	2,200	575	1,300	2,400	8,500	NS	5,500	3,800	1,100	2,400				
North Shore Beaches	0	600	6,200	7,600	0	25	14,500	25	NS	250	250	0	14,500				
Hatchery Creek Delta	0	0	100	0	0	0	100	0	NS	100	0	0	100	300			
Hatchery Creek	0	100	100	200	25	75	100	75	NS	800	450	0	200				
Power Creek Delta	0	0	400	500	0	0	50	50	NS	0	0	0	500	750			
Power Creek	0	0	0	50	0	5	250	0	NS	350	100	0	250				
Ibeck Creek																	
Ibeck Creek	NS	0	NS	0	0	0	200	400	360	20	30	0	400	400			
Alaganik Slough																	
Alaganik Slough	0	20	50	0	0	0	0	0	0	0	0	0	0	5,650	8,359	to	19,758
McKinley Lake	0	0	1,700	1,200	5,575	3,800	900	1,000	1,600	950	900	350	5,575				
Salmon Creek West Fork	NS	NS	NS	0	0	75	1,300	100	400	500	200	100	0				
Salmon Creek East Fork	NS	NS	NS	0	75	0	400	0	100	0	0	0	75				
26/27 Mile Creek																	
26/27 Mile Creek	0	0	0	0	550	750	400	100	250	100	50	60	750	750	2,182	to	5,157
39 Mile Creek															,		,
39 Mile Creek	NS	NS	200	350	475	1,075	900	1,000	1,000	400	0	0	1,075	1,075	5,772	to	13,642
Goat Mountain						-		-					•		•		
Goat Mountain Creek	NS	NS	300	300	570	900	360	500	0	10	0	20	900	900	549	to	1,298
Pleasant Creek																	,
Pleasant Creek	420	3,400	4,700	4,500	625	545	400	25	0	0	0	0	4,700	4,700	1,075	to	2,542
Martin River		,	,	,									,	,	,		,
Martin River - Lower	0	0	0	600	0	0	40	0	0	0	0	0	0	0			
Ragged Point River	NS	NS	0	800	225	400	400	0	0	0	0	0	0	1,700			
Ragged Point Lake Outlet	NS	NS	0	0	0	0	10	0	0	0	200	0	200	,			
Ragged Point Lake	NS	NS	0	0	0	700	300	1,500	400	1,000	1,000	700	1,500				
Martin River - Upper <sup>e</sup>	20	150	800	650	0	500	275	0	0	0	0	0	500	500			
Martin Lake Outlet	0	400	50	200	0	0	0	0	0	0	0	0	0	16,335	17,598	to	41,596
Martin Lake	2,200	4,000	8,800	8,650	5,085	6,400	260	0	0	700	30	100	5,085	10,000	- 1,000	••	, . , .
Martin Lake Feeders	0	100	750	3,200	11,000	8,500	3,100	0	200	50	0	0	11,000				
Pothole River	NS	NS	0	790	200	600	100	0	0	0	0	0	200				
Pothole Lake	NS	NS	20	20	50	300	400	0	700	1,600	700	200	50				
Little Martin River	NS	200	0	250	0	50	200	0	0	0	0	0	250	2,050			
Little Martin Lake	NS	400	1,250	1,800	0	1,300	1,950	1,800	600	800	900	50	1,800	2,030			
Little Martin Lake	1113	+00	1,230	1,000	U	1,500	1,930	1,000	000	300	700	50	1,000				

## Appendix A12.—Page 2 of 2.

	Weekly escapement indices (statistical week ending date listed) <sup>b</sup>																				
System <sup>a</sup>	06/07	06/21	06/28	07/05	07/19	07/26	08/02	08/23	08/30	09/06	09/13	09/27	Site <sup>c</sup>	System <sup>d</sup>		Anticipated, (by drainage)					
Tokun																					
Tokun Springs	0	75	150	200	200	200	100	0	0	0	0	0	200	5,825	5,352	to	12,649				
Tokun River	15	600	550	1,925	100	700	530	100	200	300	75	0	1,925								
Tokun Lake Outlet	0	50	900	200	0	0	0	0	0	50	0	0	200								
Tokun Lake	0	400	700	3,500	2,100	450	500	700	1,100	1,800	1,800	500	3,500								
Martin River Slough																					
Martin River Slough	NS	300	2,500	2,870	715	600	900	0	0	0	0	0	2,870	2,870	4,141	to	9,787				
Total	2,885	11,715	33,620	43,875	29,545	33,050	34,825	17,025	8,410	16,480	12,685	3,430	64,205	64,205							
Lower SEG	2,697	14,273	17,627	28,229	31,424	32,059	32,568	24,382	19,762	17,446	12,467	6,776					55,000				
Average SEG, (avg. antic. esc.)	4,139	21,902	27,050	43,318	48,222	49,196	49,977	37,415	30,326	26,772	19,131	10,398					84,400				
Upper SEG	6,376	33,736	41,665	66,722	74,276	75,775	76,979	57,630	46,711	41,236	29,467	16,016					130,000				

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

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.

<sup>&</sup>lt;sup>c</sup> 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.

<sup>&</sup>lt;sup>e</sup> 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 A13.-Copper River and Bering River area sockeye salmon escapement indices, 2004–2014.

Stream/Lake <sup>a</sup>	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	10 yr Average	2014
Eyak Lake	14,300	9,130	26,290	28,640	9,290	11,980	25,000	22,775	23,350	19,205	18,996	20,400
Hatchery Creek	500	290	2,700	980	560	680	870	100	1,000	300	798	300
Power Creek	1,500	566	2,320	1,030	220	260	1,853	2,600	3,300	1,000	1,465	750
Ibek Creek	2,300	500	620	142	41	100	10	475	870	200	526	400
McKinley Lake	4,500	360	4,306	3,740	3,510	3,520	2,980	3,950	7,750	5,700	4,032	5,575
Salmon Creek	7,400	7,260	4,660	2,630	820	500	1,370	1,910	75	2,200	2,883	75
26/27 Mile Creek	1,125	3,000	3,200	700	8	0	0	870	350	950	1,020	750
39 Mile Creek	2,600	2,900	2,700	2,710	2,950	160	620	1,500	3,000	2,000	2,114	1,075
Goat Mountain	700	1,250	1,450	363	100	30	140	50	1,925	300	631	900
Pleasant Creek	3,525	50	6,600	4,860	4,920	2,610	3,460	7,600	2,300	5,900	4,183	4,700
Martin River	2,275	800	1,570	9,270	6,440	2,610	2,992	2,300	0	150	2,841	500
Ragged Pt. River/Lake	1,975	500	3,050	3,870	3,430	610	1,010	2,700	2,500	3,500	2,315	1,700
Martin Lake	17,300	23,300	23,300	4,200	8,970	19,071	19,660	10,200	3,850	22,000	15,185	16,085
Pothole Lake	1,350	1,200	5,600	2,430	5,800	2,540	4,440	0	6,900	900	3,116	250
Little Martin Lake	1,610	1,500	600	450	1,060	421	680	3,700	3,510	5,800	1,933	2,050
Tokun Lake/River	3,775	1,800	4,280	16,920	18,321	22,680	15,480	9,637	5,500	4,000	10,239	5,825
Martin River Slough	2,650	4,000	5,650	5,350	900	1,520	2,270	2,000	670	1,600	2,661	2,870
Copper River Delta total	69,385	58,406	98,896	88,285	67,340	69,292	82,835	72,367	66,850	75,705	74,936	64,205
Upper Copper River b	462,664	528,816	600,378	624,438	491,516	477,327	524,692	621,545	970,622	889,939	619,194	883,029
Copper River District total	532,049	587,222	699,274	712,723	558,856	546,619	607,527	693,912	1,037,472	965,644	694,130	947,234
Bering River/Lake	22,550	19,890	9,310	8,550	17,545	11,250	3,280	15,060	15,950	19,100	14,249	13,600
Shepherd Creek	195	1,220	60	0	180	91	46	4,800	1,400	750	874	750
Stillwater Creek	500	0	140	450	111	190	81	175	170	1,200	302	100
Kushtaka Lake	15	230	61	40	100	90	140	530	370	850	243	35
Katalla River	1,875	9,550	5,100	12,130	260	1,850	820	7,965	400	2,000	4,195	400
Bering River Area total	25,135	30,890	14,671	21,170	18,196	13,471	4,367	28,530	18,290	23,900	19,862	14,485
Copper/Bering River total	557,184	618,112	713,945	733,893	577,052	560,090	611,894	722,442	1,055,762	989,544	713,992	961,719

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

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

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Appendix A14.—Aerial survey indices of sockeye salmon escapement to the upper Copper River drainage, 1999–2014.

								Yearly s	urvey inc	lices <sup>a</sup>							Anticipated
Location	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	indices b
Mentasta Lake	715	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	3,277
Fish Creek-Mentasta	450	800	3,500	900	_	_	3,330	3,700	323	1,440	680	400	91	300	900	350	963
Bad Crossing 1 & 2	195	19	2,000	157	90	30	5,120	620	1,683	520	1,691	1,390	742	261	4,100	470	2,604
Suslota Lake	0	3,000	2,500	1,500	2,750	1,975	1,230	1,300	30	86	320	6	350	55	500	2,500	1,416
Tanada Lake	350	3,200	200	950	0	3,950	683	30	563	986	1,290	NS	800	1,715	2,600	1,000	3,849
Dickey Lake	11	0	1	0	0	10	55	185	71	37	20	3	59	26	30	251	115
Keg Creek	125	0	1	30	38	0	7	190	0	1	423	0	0	15	15	10	725
Swede Lake	270	135	500	150	325	225	7	2,570	731	343	109	320	137	400	60	175	531
Mahlo Creek	325	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	2,648
Mendeltna Creek	120	2,800	800	1,875	1,200	50	318	700	473	727	1,945	1,550	760	1,085	850	300	2,470
St. Anne Creek	1,300	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	4,888
Tonsina Lake	_	_	_	_	_	0	_	20	20	3	0	_	0	15	0	0	1,080
Long Lake	_	_	_	_	_	_	_	1,400	505	382	14	10	290	375	5	10	1,577
Tana River	_	_	_	_	250	_	_	1,392	312	434	19	100	40	410	65	145	1,345
Salmon Creek (Bremner)	0	500	1,500	1,400	300	_	217	790	750	3,500	530	340	276	1,000	1,500	610	825
Fish Lake	1,880	5,000	5,000	125	1,300	0	281	7,250	1,066	158	0	89	1,008	35	20	4	6,418
Mud Creek Summit Lake	820	140	450	2,800	3,900	40	_	1,800	2,705	11,410	0	2,759	211	870	600	320	7,445
Paxson Inlet-Mud Creek	5,700	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	6,560
Mud Creek and Lake	20	30	300	30	75	5	145	310	2	10	0	20	2	10	11	100	172
Paxson Lake Outlet	1,800	1,000	200	140	_	5	155	270	324	596	0	560	1,700	350	2,000	350	2,661
Total	14,081	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	51,569

<sup>&</sup>lt;sup>a</sup> 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.

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Appendix A15.–Estimated age and sex composition of sockeye salmon harvested in the Copper River District commercial common property drift gillnet fishery, 2014.

Strata combined:	05/15 - 09/26				Bro	od year and	l age class				
Sampling dates:	05/15 - 07/12	201	1	201	.0		2009		20	08	
Sample size:	3,280	0.2	1.1	0.3	1.2	0.4	1.3	2.2	1.4	2.3	Total
Female	Percentage of sample	0.0	0.0	0.2	8.3	0.0	31.8	0.4	0.0	1.1	41.8
	Number in harvest	0	0	4,430	170,444	120	650,912	7,237	996	23,236	857,374
Male	Percentage of sample	0.1	0.0	0.4	11.7	0.0	41.0	0.5	0.0	1.2	55.0
	Number in harvest	1,930	712	8,449	238,826	324	840,349	10,489	717	25,460	1,127,256
Total	Percentage of sample	0.1	0.0	0.6	20.3	0.0	75.4	1.0	0.1	2.5	100.0
	Number in harvest	1,930	712	13,278	415,688	444	1,545,040	20,113	1,713	51,089	2,050,007
	Standard error	1,156	712	2,613	15,718	345	16,682	3,638	1,168	4,827	

Appendix A16.–Estimated age and sex composition of Chinook salmon harvested in the Copper River District commercial common property drift gillnet fishery, 2014.

Strata combined:	05/15 - 09/26			Bı	ood year and a	ge class					
Sampling dates:	05/15 - 06/11	2011	2010		2009		2008		200	07	
Sample size:	1,876	1.1	1.2	2.1	1.3	2.2	1.4	2.3	1.5	2.4	Total
Female	Percentage of sample	0.1	19.5	0.1	28.5	1.5	11.4	0.6	0.0	0.0	61.7
	Number in harvest	8	1,988	14	2,911	150	1,166	57	0	0	6,294
Male	Percentage of sample	0.2	11.0	0.0	15.1	0.4	10.9	0.5	0.0	0.0	38.2
	Number in harvest	18	1,128	0	1,542	38	1,111	56	4	4	3,900
Total <sup>a</sup>	Percentage of sample	0.3	30.6	0.2	43.6	1.8	22.3	1.1	0.0	0.0	100.0
	Number in harvest	26	3,120	23	4,453	188	2,278	113	4	4	10,207
	Standard error	14	116	11	125	31	107	26	4	4	

<sup>&</sup>lt;sup>a</sup> Sex could not be determined for some fish. Thus, the number of female plus male sampled do not always equal the total.

Appendix A17.—Estimated age and sex composition of coho salmon harvested in the Copper River District commercial common property drift gillnet fishery, 2014.

Strata combined:	05/15 - 09/26	Brood ye	ar and age class		
Sampling dates:	08/20 - 08/29	2011	2010	2009	
Sample size:	822	1.1	2.1	3.1	Total
Female	Percentage of sample	19.5	21.9	0.0	41.3
	Number in harvest	61,473	69,099	0	130,572
Male	Percentage of sample	28.9	29.6	0.2	58.7
	Number in harvest	91,158	93,544	502	185,204
Total	Percentage of sample	48.3	51.5	0.2	100.0
	Number in harvest	152,631	162,643	502	315,776
	Standard error	5,728	5,730	502	

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Appendix A18.—Total estimated coho salmon run to the Copper River by end user or destination with previous 10-year average, 2004–2014.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	10-year Average	2014
Commercial harvest <sup>a</sup>	467,859	263,465	318,285	117,182	202,621	207,776	210,621	127,511	130,261	244,985	229,057	315,776
Commercial, homepack <sup>a</sup>	2	119	137	340	423	767	1,026	543	1,037	249	464	1,146
Commercial, donated <sup>a</sup>	0	0	0	0	154	0	0	0	0	0	15	0
Educational drift gillnet permit <sup>a</sup>	0	0	0	0	0	0	0	0	0	0	0	0
Subsistence (Cordova, drift gillnet) <sup>b</sup>	46	15	1	15	53	22	27	34	0	1	21	0
Federal Subsistence (PWS/Chugach												
Nat'l Forest, dip net, spear, rod and reel) <sup>b</sup>	0	141	100	68	119	185	68	581	392	310	196	630
Subsistence (Batzulnetas, fish wheel, dip net or spear) <sup>b</sup>	0	NA	NA	0	0	0	0	0	0	0	0	0
Subsistence (Glennallen Subdistrict, dip net or fish wheel) <sup>c</sup>	577	154	212	238	493	228	293	372	335	144	305	233
Federal Subsistence (Glennallen subdistrict, dip net or fish wheel) <sup>d</sup>	NA	126	28	34	229	55	81	223	173	21	108	29
Personal Use (Chitina Subdistrict, dip net) <sup>c</sup>	2,860	1,869	2,715	1,742	2,711	1,712	2,013	1,702	1,385	797	1,951	1,129
Federal Subsistence (Chitna subdistrict, dip net) <sup>d</sup>	18	0	20	40	100	11	30	10	8	8	25	69
Delta sport harvest <sup>e</sup>	14,512	9,727	5,477	6,749	7,706	14,384	15,752	14,283	15,230	17,053	12,087	15,522
Upriver sport harvest <sup>e</sup>	131	72	54	0	57	36	114	21	0	0	49	7
Upriver spawning escapement <sup>f</sup>	_	_	_	_	_	_	_	_	_	_	_	_
Delta spawning escapement <sup>g</sup>	199,010	199,364	178,140	102,430	153,784	82,588	82,154	76,290	74,020	69,360	121,714	86,020
Total estimated coho salmon run size	685,015	475,052	505,169	228,838	368,450	307,764	312,179	221,570	222,841	332,928	365,981	420,561

<sup>&</sup>lt;sup>a</sup> Numbers are from fish ticket data.

<sup>&</sup>lt;sup>b</sup> Data are reported harvest from returned state and federal subsistence permits.

<sup>&</sup>lt;sup>c</sup> Data are expanded harvest from returned state and federal subsistence permits.

<sup>&</sup>lt;sup>d</sup> Data are reported harvest, 2002–2004, and expanded harvest, 2005–2011, from returned state and federal subsistence permits.

<sup>&</sup>lt;sup>e</sup> 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.

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Appendix A19.—Aerial escapement indices by statistical week and location for the coho salmon run to the Copper River Delta, 2014.

			Weekly	escapem	ent indices	(statistica	al week en	ding date	listed)b				
Drainage	System <sup>a</sup>	8/23	8/30	9/6	9/13	9/20	9/27	10/4	10/11	10/18	Site <sup>c</sup>	System <sup>d</sup>	Anticipated (by drainage)
Eyak River	Eyak River	0	700	400	1,200		350				350	6,510	6,916
	East Shore Beaches	0	300	400	800		600				600		
	West Shore Beaches	0	500	1,900	1,850		2,700				2,700		
	Middle Arm Beaches	0	NS	100	200		800				800		
	North Shore Beaches	0	NS	0	0		0				0		
	Hatchery Creek Delta	0	NS	10	20		100				100		
	Hatchery Creek	0	NS	50	30		1,200				1,200		
	Power Creek Delta	0	NS	0	0		0				0		
	Power Creek	0	NS	0	0		760				760		
Ibeck Creek	Ibeck Creek	650	4,200	8,100	11,100		12,500				12,500	12,500	6,227
Scott River	Scott Lake	300	0	50	10		50				300	360	1,429
	Scott River	0	0	0	0		10				10		
	Elsner Lake <sup>e</sup>	0	0	50	20		0				50		
Alaganik Slough	Alaganik Slough	0	200	150	200		100				100	2,400	2,591
	18/20 Mile Creek	0	150	140	510		300				300		
	McKinley Lake	0	0	500	50		50				50		
	Salmon Creek West Fork	0	0	150	500		400				400		
	Salmon Creek East Fork	0	0	0	400		1,550				1,550		
26/27 Mile Creek	26/27 Mile Creek	225	200	200	300		1,600				1,600	1,600	829
39 Mile Creek	39 Mile Creek	2,300	2,600	2,400	1,900		1,600				2,600	2,600	3,831
Goat Mountain Cr.	Goat Mountain Creek	300	100	200	700		1,200				1,200	1,200	1,181
Pleasant Creek	Pleasant Creek	0	50	1,110	920		150				1,110	1,110	

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			_										
Drainage	System <sup>a</sup>	8/23	8/30	9/6	9/13	9/20	9/27	10/4	10/11	10/18	Site <sup>c</sup>	System <sup>d</sup>	Anticipated (by drainage)
Martin River	Martin River - Lower	0	20	250	220		60				220	3,820	6,522
	Ragged Point River	25	50	250	275		400				250	1,050	849
	Ragged Point Lake Outlet	0	0	400	50		30				400		
	Ragged Point Lake	0	700	400	200		100				400		
	Martin River - Upper	50	300	2,900	3,600		450				3,600		
	Martin Lake Outlet	0	0	400	1,300		100				1,300	2,150	1,936
	Martin Lake	0	50	120	350		250				350		
	Martin Lake Feeders	100	350	450	500		400				500		
	Pothole River	0	20	300	250		500				250	550	1,370
	Pothole Lake	0	50	200	300		200				300		
	Little Martin River	1,350	1,100	2,300	2,750		4,500				2,750	2,900	5,413
	Little Martin Lake	0	200	100	100		150				150		
Tokun	Tokun Springs	0	0	100	150		700				700	1,175	1,376
	Tokun River	0	20	50	400		375				375		
	Tokun Lake Outlet	0	0	0	0		0				0		
	Tokun Lake	0	0	50	100		100				100		
Martin River Slough	Martin River Slough	0	0	2,915	3,220		4,075				4,075	4,075	9,531
Copper River Aerial S	5,300	11,860	27,095	34,475		38,410				42,530	42,530		
Lower SEG	5,846	9,298	16,147	21,447	9,298	16,908	21,447	18,286	16,908			32,000	
Average SEG, (average	9,134	14,528	25,229	33,510	14,528	26,418	33,510	28,571	26,418			50,000	
Upper SEG				33,807	44,904	19,468	35,401	44,904	38,285	35,401			67,000

<sup>&</sup>lt;sup>a</sup> 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.

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.

<sup>&</sup>lt;sup>d</sup> The sum of the index counts by site within the index systems.

<sup>&</sup>lt;sup>e</sup> This stream is not included in the estimated delta wide escapement; it is a non-index stream.

Appendix A20.-Copper River Delta and Bering River coho salmon escapement indices, 2004–2014.

Stream/Lake a,	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	10-yr Average	2014
Eyak Lake	12,700	2,812	1,940	5,810	17,030	950	13,360	640	3,950	3,880	6,307	4,450
Hatchery Creek	1,450	0	160	710	370	2,320	640	2,000	100	40	779	1,300
Power Creek	500	40	360	800	1,140	990	350	2,520	150	50	690	760
Ibeck Creek	32,000	34,900	36,300	13,200	10,265	9,963	3,381	14,200	7,600	9,150	17,096	12,500
Scott & Elsner River b	475	1,400	200	1,520	3,281	1,170	700	380	575	50	975	360
18/20 Mile	1,560	610	740	550	161	150	144	310	450	120	480	400
McKinley Lake	275	140	1,400	280	300	450	630	75	100	400	405	450
Salmon Creek	6,100	2,250	200	150	700	1,540	730	1,620	1,300	850	1,544	1,950
26/27 Mile	850	820	60	480	10	100	0	1,150	475	1,800	575	1,600
39 Mile	3,120	9,900	4,400	3,300	5,460	1,570	1,340	2,800	2,400	2,300	3,659	2,600
Goat Mountain	450	4,500	3,100	1,400	920	1,220	331	210	400	900	1,343	1,200
Pleasant Creek	3,950	3,790	7,030	500	2,800	680	1,700	245	440	1,500	2,264	1,110
Martin River	11,600	1,050	9,100	8,830	9,323	1,651	5,560	2,100	1,420	350	5,098	3,820
Ragged Point River/Lake	575	650	360	260	302	590	690	1,100	4,000	2,500	1,103	1,050
Martin Lake	4,475	24,100	2,900	4,775	2,770	1,360	3,511	450	2,350	2,750	4,944	2,150
Pothole Lake	500	140	120	870	3,661	2,750	2,000	1,400	2,300	120	1,386	550
Little Martin Lake	7,900	2,100	7,500	2,700	8,760	2,810	460	4,500	4,700	3,800	4,523	2,900
Tokun River/Lake	1,750	2,030	700	830	3,020	850	1,370	1,350	3,200	620	1,572	1,175
Martin River Slough	9,750	9,850	12,700	5,770	7,780	10,180	4,180	1,475	1,400	3,500	6,659	4,075
Copper River Delta total	99,980	101,082	89,270	52,735	78,053	41,294	41,077	38,525	37,310	34,680	61,401	44,400
Katalla River	10,000	6,500	12,100	8,900	5,510	3,340	1,590	1,430	950	800	5,112	1,550
Bering River/Lake	13,750	10,125	15,040	13,052	4,910	8,491	6,320	5,520	5,700	7,750	9,066	10,675
Dick Creek	2,050	2,750	362	1,660	530	1,410	1,210	2,050	2,000	2,800	1,682	1,300
Shepherd Creek	700	1,125	100	60	130	370	10	20	150	0	267	0
Nichawak River	900	1,475	6,900	3,200	11,900	10,120	4,690	6,800	3,750	3,800	5,354	6,500
Gandil River	900	2,000	4,450	640	2,650	840	1,610	820	500	1,100	1,551	1,500
Controller Bay	4,175	6,210	5,590	5,680	7,332	4,251	6,330	2,250	2,555	2,570	4,694	4,950
Bering River Area total	32,475	30,185	44,542	33,192	32,962	28,822	21,760	18,890	15,605	18,820	27,725	26,475
Copper/Bering total	132,455	131,267	133,812	85,927	111,015	70,116	62,837	57,415	52,915	53,500	89,126	70,875

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 Not an index stream.

Appendix A21.-Total commercial salmon harvest by species in the Bering River District, 1974-2014.

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 <sup>a</sup>	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 <sup>b</sup>	330	91,784	214,632	309	20,408	327,463
1985 <sup>b</sup>	215	26,561	419,276	214	9,642	455,908
1986 <sup>c</sup>	128	19,038	115,809	15	243	135,233
1987 <sup>c</sup>	34	16,926	15,864	54	7	32,885
1988 <sup>c</sup>	19	7,152	86,539	23	181	93,914
1989 <sup>c</sup>	30	9,225	26,952	7	2	36,216
1990 <sup>c</sup>	14	8,332	42,952	2	1	51,301
1991 <sup>c</sup>	28	19,181	110,951	4	195	130,359
1992 <sup>c</sup>	21	19,721	125,616	4	1	145,363
1993 <sup>c</sup>	130	33,951	115,833	82	22	150,018
1994 <sup>c</sup>	121	27,926	259,003	34	63	287,147
1995 <sup>c</sup>	44	21,585	282,045	26	229	303,929
1996 <sup>c</sup>	111	37,712	93,763	0	30	131,616
1997 <sup>c</sup>	23	9,651	97	2	0	9,773
1998 <sup>c</sup>	70	8,439	12,284	5	2	20,800
1999 <sup>c</sup>	42	13,697	9,852	204	96	23,891
2000 °	5	1,279	56,329	0	0	57,613
2001 <sup>c</sup>	76	5,450	2,715	0	0	8,241
2002 °	14	235	108,522	0	0	108,771
2003 °	151	18,266	59,481	33	0	77,931
2004 <sup>c</sup>	87	13,165	95,595	2	21	108,870
2005 °	277	77,464	43,030	9,327	14	130,112
2006 °	238	36,867	56,713	54	39	93,911
2007 °	88	16,470	9,305	6	1	25,870
2008 °	42	1,175	40,380	8	1	65,601
2009 °	15	4,157	45,522	1	5	49,700
2010 °	0	51	80,560	2	0	80,613
2011	1	6	19,956	8	0	19,971
2013 <sup>c</sup>	16	3,286	46,959	2	16	50,279
10-Year Average	92	17,091	49,750	944	10	67,886
2014 <sup>c</sup>	0	50	97,637	4	0	97,691

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.

<sup>&</sup>lt;sup>c</sup> The Alaska Board of Fisheries closed the Kayak Island Subdistrict due to interceptions of non-local stocks.

Appendix A22.—Aerial escapement indices by statistical week and location for sockeye salmon returning to the Bering River District, 2014.

	Weekly escapement indices (Statistical week ending date listed) <sup>b</sup>												_			
Drainage	System <sup>a</sup>	6/7	6/21	6/28	7/5	7/19	7/26	8/2	8/23	8/30	9/6	9/13	9/27	Site <sup>c</sup>	System <sup>d</sup>	Anticipated (by drainage)
Bering River	Bering River	200	1,000	200	0	0	0	100	0	0	0	0	0	100	14,100	21,903
	Bering Lake	0	100	5,000	700	75	10,300	675	25	0	0	0	0	700		
	Dick Creek	0	0	7,200	12,800	9,600	2,450	4,500	1,320	1,200	500	0	0	13,300		
	Shepherd Creek Lago	on					0	0	0					0	750	4,375
	Shepherd Creek						0	600	0					600		
	Carbon Creek						0	150	400					150		
	Clear Creek						5	100						100	100	1,197
	Kushtaka Lake						0	25						25	35	
	Shockum Creek						0	10						10		1,226
Katalla River	Katalla River <sup>e</sup>		0	400	200	0	100	150	75		0	0	0	400	400	
Bering River Di	strict weekly index	200	1,100	12,800	13,700	9,675	12,855	6,310	1,820	1,200	500	0	0	14,985	14,985	
Lower SEG		893	4,048	6,092	11,015	11,004	9,401	8,409	1,481	1,044	571	737	565			15,000
Average SEG, (a	average anticipated esc.)	1,430	6,477	9,747	17,623	17,606	15,042	13,454	2,370	1,670	914	1,179	903			24,000
Upper SEG		1,966	8,906	13,402	24,232	24,208	20,683	18,499	3,259	2,297	1,256	1,621	1,242			33,000

<sup>&</sup>lt;sup>a</sup> The survey systems represent the majority of known sockeye salmon spawning locations in the Bering River drainage.

The 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. Blank cells signify that no survey was flown.

<sup>&</sup>lt;sup>c</sup> 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.

<sup>&</sup>lt;sup>e</sup> This stream is not included in the indexed escapement for the Bering River drainage, it is a non-index stream.

Appendix A23.-Bering River District commercial drift gillnet salmon harvest by period, 2014.

		News release				Chir	iook	Soci	keye	Co	ho	Piı	nk	Ch	um
Period	Date	dates	Hours	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
01	06/16-06/17	06/14	12	1	1	_	_	_	_	_	_	_	_	_	_
02	06/19-06/20	06/18	12	0	0	0	0	0	0	0	0	0	0	0	0
03	06/30-07/02	06/28	48	0	0	0	0	0	0	0	0	0	0	0	0
04	07/03-07/05	07/02	48	0	0	0	0	0	0	0	0	0	0	0	0
05	07/07-07/08	07/05	36	0	0	0	0	0	0	0	0	0	0	0	0
06	07/10-07/12	07/09	48	0	0	0	0	0	0	0	0	0	0	0	0
07	07/14-07/15	07/12	36	0	0	0	0	0	0	0	0	0	0	0	0
08	07/17-07/18	07/16	36	0	0	0	0	0	0	0	0	0	0	0	0
09	07/21-07/22	07/19	36	0	0	0	0	0	0	0	0	0	0	0	0
10	07/24-07/25	07/23	36	0	0	0	0	0	0	0	0	0	0	0	0
11	07/28-07/29	07/26	36	0	0	0	0	0	0	0	0	0	0	0	0
12	07/31-08/01	07/30	36	0	0	0	0	0	0	0	0	0	0	0	0
13	08/04-08/05	08/02	36	0	0	0	0	0	0	0	0	0	0	0	0
14	08/07-08/08	08/06	36	0	0	0	0	0	0	0	0	0	0	0	0
15	08/11-08/12	08/08	36	0	0	0	0	0	0	0	0	0	0	0	0
16	08/18-08/19	08/16	36	4	7	0	0	19	115	1,493	11,942	0	0	0	0
17	08/25-08/26	08/23	24	23	45	0	0	7	42	11,557	96,414	1	4	0	0
18	08/28-08/29	08/27	24	30	57	0	0	0	0	12,167	101,908	0	0	0	0
19	09/01-09/02	08/29	24	55	99	0	0	0	0	25,869	229,088	0	0	0	0
20	09/04-09/05	09/03	24	74	147	0	0	1	6	20,606	174,380	3	9	0	0
21	09/08-09/09	09/06	24	47	88	0	0	0	0	18,261	158,366	0	0	0	0
22	09/11-09/12	09/10	24	34	49	0	0	0	0	7,684	67,740	0	0	0	0
23	09/15-09/16	09/12	36	0	0	0	0	0	0	0	0	0	0	0	0
24	09/18-09/19	09/12	36	0	0	0	0	0	0	0	0	0	0	0	0
25	09/22-09/24	09/19	60	0	0	0	0	0	0	0	0	0	0	0	0
26	09/25-09/27	09/19	60	0	0	0	0	0	0	0	0	0	0	0	0
27	9/29-10/01	09/26	60	0	0	0	0	0	0	0	0	0	0	0	0
28	10/02-10/04	09/26	60	0	0	0	0	0	0	0	0	0	0	0	0
29	10/06-10/08	10/03	60	0	0	0	0	0	0	0	0	0	0	0	0
30	10/09-10/11	10/03	60	0	0	0	0	0	0	0	0	0	0	0	0
Total			1,140	83	493	0	0	50	303	97,637	839,838	4	13	0	0
Average	e weight						0.00		6.06		8.60		3.25		0.00

Source: Additional information relevant to each fishing period, including area opened to fishing, may be found on the applicable news release (NR) available through the ADF&G Commercial Fishing News Release System at <a href="http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main">http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main</a>. Required parameters for searching the ADF&G Commercial Fishing News Release System include: Effective Year = 2013; Species Group = Salmon; Management Area = Prince William Sound.

Note: En dashes indicate confidential data; less than 3 permit holders delivering.

Appendix A24.-Bering River District commercial drift gillnet salmon harvest by statistical week, 2014.

			Permits		Chir	iook	Sock	keye	Co	oho	Pir	nk	Chi	ım
Week	Dates <sup>a</sup>	Hours	fished	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
25	06/15	72	1	1	b	b	b	b	b	b	b	b	b	b
26	06/22	0	0	0	0	0	0	0	0	0	0	0	0	0
27	06/29	96	0	0	0	0	0	0	0	0	0	0	0	0
28	07/06	84	0	0	0	0	0	0	0	0	0	0	0	0
29	07/13	72	0	0	0	0	0	0	0	0	0	0	0	0
30	07/20	72	0	0	0	0	0	0	0	0	0	0	0	0
31	07/27	72	0	0	0	0	0	0	0	0	0	0	0	0
32	08/03	72	0	0	0	0	0	0	0	0	0	0	0	0
33	08/10	36	0	0	0	0	0	0	0	0	0	0	0	0
34	08/17	36	4	7	0	0	19	115	1,493	11,942	0	0	0	0
35	08/24	48	34	102	0	0	7	42	23,724	198,322	1	4	0	0
36	08/31	48	55	99	0	0	0	0	25,869	229,088	0	0	0	0
37	09/07	48	74	235	0	0	1	6	38,867	332,746	3	9	0	0
38	09/14	72	34	49	0	0	0	0	7,684	67,740	0	0	0	0
39	09/21	120	0	0	0	0	0	0	0	0	0	0	0	0
40	09/28	120	0	0	0	0	0	0	0	0	0	0	0	0
41	09/05	120	0	0	0	0	0	0	0	0	0	0	0	0
Total		1,188	521	322	0	0	50	303	97,637	839,838	4	13	0	0
Average v	weight					0.00		6.06		8.60		3.25		0.00

Statistical week beginning date.
 Confidential data, less than 3 permit holders delivering.

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Appendix A25.—Aerial escapement indices by statistical week and location for coho salmon returning to the Bering River District, 2014.

			Weekl	y escapem	ent indice	s (Statistic	al week en	ding date l	isted) <sup>b</sup>				
Drainage	System <sup>a</sup>	8/23	8/30	9/6	9/13	9/20	9/27	10/4	10/11	10/18	Site <sup>c</sup>	System <sup>d</sup>	Anticipated, (by drainage)
Bering River	Bering River <sup>e</sup>	10	100	1,550	3,000		1,475				3,000	10,675	7,720
	Bering Lake	0	2,600	3,650	7,675		6,320				7,675		
	Dick Creek	0	20	700	1,300		1,900				1,300	1,300	
	Shepherd Creek - Lagoon	0									0	0	
	Shepherd Creek	0									0		
	Carbon Creek f	0									0		
Katalla River	Katalla River	125		1,390	1,550		500				1,550	1,550	4,993
Lower Bering River	Gandil River	405	350	600	1,100		1,500				1,500	1,500	2,910
	Nichawak River	950	1,100	2,000	2,400		6,500				6,500	6,500	
Controller Bay	Campbell River		0	0	0		2,300				2,300	4,950	7,378
-	Edwardes River		450	1,750	1,400		850				1,750		
	Okalee River		100	625	900		250				900		
	Other Clear Streams f		0	0	0		0				0		
Bering River District	weekly index	1,490	4,720	12,265	19,325		21,595				26,475	26,475	
Lower SEG		2,533	4,002	8,732	8,803	6,969	5,041	4,199	5,156	1,042			13,000
Average SEG, (avera	4,482	7,080	15,448	15,574	12,330	8,919	7,429	9,122	1,844			23,001	
Upper SEG				22,165	22,345	17,691	12,797	10,659	13,089	2,645			33,000

<sup>&</sup>lt;sup>a</sup> The survey system represent the majority of known coho salmon spawning locations in the Bering River drainage.

b The 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. Blank cells indicate no survey was flown.

<sup>&</sup>lt;sup>c</sup> 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

<sup>&</sup>lt;sup>e</sup> 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 AND PORT CHALMERS SUBDISTRICT

Appendix B1.-Anticipated daily and cumulative salmon escapement versus actual escapement through the Coghill River weir, 2014.

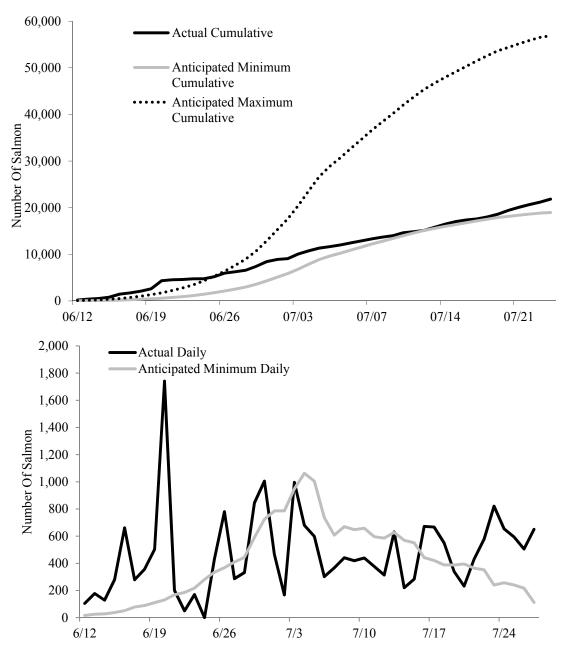
			Sock	eye salmon			Pin	k salmon	
		Actual	Projec	cted Lower a	Projec	cted Upper a		Actual	·
Date	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Comments
06/04	_	_	0	0	0	0	_	-	Crew arrived at camp.
06/05	_	_	0	0	0	0	_	_	
06/06	_	_	0	0	1	1	_	_	
06/07	_	_	0	0	1	1	_	_	
06/08	0	0	0	1	1	2			Weir fish tight as of 12:30 PM.
06/09	0	0	1	1	2	4	0	0	1 seal at weir. 1 sockeye observed downstream. Water level: 0.22 m (very low).
06/10	23	23	3	4	9	13	0	0	
06/11	85	108	7	12	22	35	0	0	
06/12	105	213	16	28	49	85	0	0	
06/13	178	391	26	54	77	161	0	0	
06/14	129	520	28	81	83	244	0	0	
06/15	280	800	38	119	113	357	0	0	
06/16	661	1,461	52	171	156	513	0	0	Seals harassing fish near weir.
06/17	279	1,740	78	249	234	747	0	0	Water level has risen with the recent rain.
06/18	357	2,097	89	339	268	1,016	0	0	
06/19	502	2,599	111	449	332	1,347	0	0	
06/20	1,741	4,340	131	580	392	1,739	0	0	
06/21	200	4,540	169	749	507	2,246	0	0	Began ASL sample #1
06/00	50	4.500	105	02.4	556	2 002	0	0	Continued ASL sample. The fish are wary, especially in full sun, and difficult to
06/22	50	4,590	185	934	556	2,802	0		capture for sampling.
06/23	170	4,760	218	1,152	654	3,456	0	0	N C 1
06/24	0	4,760	281	1,433	844	4,300	0		No fish were passed due to sampling. Completed ASL sample #1.
06/25	432	5,192	334	1,767	1,003	5,302	0		1 chum, 1 jack
06/26	780	5,972	368	2,135	1,104	6,406	0		1 jack
06/27	287	6,259	409	2,545	1,228	7,634	0		Lots of small fish (not jacks)
06/28	332	6,591	444 500	2,989	1,333	8,967	0	0	2 inalia
06/29	845	7,436	590 724	3,579	1,770	10,737	0		3 jacks
	1,005	8,441	724	4,303	2,173	12,910	0	0	Danas ACI ammala #2 1 inch manad
07/01	466	8,907	785	5,089	2,356	15,266	1	1	Began ASL sample #2. 1 jack passed.
07/02	167	9,074	786	5,875	2,359	17,625	4		Continued ASL sample. 6 jacks.
07/03	996	10,070	948	6,823	2,844	20,469	5		Finished ASL sample #2. 9 jacks, 1 chum
07/04	680	10,750	1,063	7,886	3,188	23,657	3	13	

Appendix B1.–Page 2 of 2.

			Sock	eye salmon			Pin	ık salmon	_
		Actual	Projec	cted Lower a	Proje	cted Upper a		Actual	_
Date	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Comments
07/05	598	11,348	1,004	8,890	3,013	26,671	1	14	4 jacks
07/06	302	11,650	737	9,627	2,211	28,882	4	18	8 jacks
07/07	367	12,017	608	10,235	1,823	30,705	5	23	6 jacks
07/08	441	12,458	670	10,905	2,010	32,715	5	28	9 jacks
07/09	419	12,877	648	11,553	1,943	34,658	2	30	3 jacks
07/10	439	13,316	658	12,211	1,974	36,633	55	85	2 jacks, 1 chum. Water level rising rapidly due to heavy rain.
07/11	377	13,693	596	12,807	1,788	38,421	24	109	2 jacks and 7 chum
									High water due to heavy rains, water level still rising. 3 jacks, 1
07/12	314	14,007	585	13,392	1,756	40,177	0	109	chum.
07/13	631	14,638	628	14,020	1,883	42,060	7	116	Begin ASL sample #3. 2 jacks
0=11.1	•••	44050		4.4.500	4 = 00	12.760	0.4	••=	
07/14	220	14,858	570	14,589	1,709	43,768	91	207	8 jacks
07/15	284	15,142	551	15,140	1,653	45,421	87	294	5 jacks.
07/16	672	15,814	442	15,583	1,327	46,748	326	620	5 jacks. Finished ASL sample #3.
07/17	667	16,481	421	16,004	1,262	48,011	541	1,161	4 jacks.
07/18	550	17,031	388	16,391	1,164	49,174	473	1,634	3 jacks, 1 king, 3 chum
07/19	340	17,371	387	16,779	1,162	50,336	359	1,993	5 jacks, 1 chum
07/20	232	17,603	395	17,174	1,186	51,522	111	2,104	1 jack
07/21	431	18,034	364	17,539	1,093	52,616	154	2,258	2 jacks
07/22	578	18,612	352	17,891	1,056	53,672	170	2,428	2 jacks, 2 chum
07/23	821	19,433	240	18,131	721	54,393	371	2,799	10 jacks, 2 chum
07/24	654	20,087	257	18,388	771	55,163	430	3,229	5 jacks, 9 chum
07/25	594	20,681	241	18,629	722	55,886	903	4,132	6 jacks, 12 chum
07/26	505	21,186	217	18,845	651	56,536	666	4,798	Last day of counts
07/27	650	21,836	b 112	18,958	337	56,873	_	_	9 jacks, 7 chum counted below weir.

The projected lower and upper daily escapements are calculated using the lower bound (20,000) and upper bound (60,000) of the sustainable escapement goal apportioned to day with the historical run timing proportions.

<sup>&</sup>lt;sup>b</sup> An estimated 350 sockeye salmon were observed directly below the weir and 350 sockeye salmon were observed in the river downstream of the weir before the weir was dismantled.



Appendix B2.—Anticipated cumulative and daily sockeye salmon escapement versus actual escapement through Coghill River weir, 2014.

Appendix B3.-Salmon escapement by species in the Coghill District, 1971–2014.

Year	Sockeye <sup>a</sup>	Pink <sup>b</sup>	Chum <sup>b</sup>
1971	15,000	62,160	6,600
1972	51,000	30,960	28,160
1973	55,000	493,780	72,610
1974	22,333	56,940	29,280
1975	34,855	452,430	3,640
1976	9,056	53,908	31,398
1977	31,562	320,680	79,957
1978	42,284	67,084	15,966
1979	48,281	125,544	7,823
1980	142,253	148,066	20,919
1981	156,112	140,436	2,389
1982	180,314	309,202	21,586
1983	38,783	284,164	55,127
1984	63,622	365,226	13,500
1985	163,311	238,728	14,514
1986	71,095	109,798	16,300
1987	187,263	67,761	22,472
1988	72,052	42,985	42,536
1989	37,751	48,802	22,434
1990	8,949	45,558	20,494
1991	9,752	84,790	7,055
1992	29,642	23,122	7,583
1993	9,232	41,666	7,404
1994	7,264	65,648	14,176
1995	30,382	46,029	11,596
1996	38,693	104,781	19,669
1997	35,517	52,961	3,101
1998	28,923	85,968	22,764
1999	59,311	168,816	5,057
2000	28,446	223,646	20,488
2001	38,558	148,665	13,388
2002	28,323	54,882	7,430
2002	75,427	375,147	19,729
2004	30,569	36,717	5,000
2005	30,313	528,264	11,979
2006	23,479	145,511	15,900
2007	70,001	197,405	14,052
2007	29,298	145,177	39,660
2009	23,186		
	· ·	125,907 355,108	5,208 51,580
2010 2011	24,312	355,108	51,589
	102,359	257,020	16,368
2012	72,678	172,611	10,281
2013	17,231	640,414	11,369
10-Year Average	45,227 21,836	260,413 63,290	18,141

a Escapement count of sockeye salmon past the Coghill River weir.
b Pink and chum salmon escapements indexed for streams by aerial survey. Historical data revised in 1990.

Appendix B4.-Coghill District commercial common property drift gillnet salmon harvest by period, 2014.

		NR		Permits		Chir	iook	Sock	teye	Col	10	Pir	ık	Chi	ım
Period	Dates	datesa	Hours	fished	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1	5/29-5/31	5/24	48	48	83	2	16	187	1,079	0	0	0	0	5,926	45,424
2	6/2-6/4	5/31	48	35	126	2	48	819	4,825	0	0	0	0	16,010	129,620
3	6/5-6/7	6/4	48	41	145	2	20	2,530	15,460	0	0	1	4	16,753	132,818
4	6/9-6/10	6/7	36	33	92	2	20	3,162	20,159	1	7	0	0	13,403	107,789
5	6/12-6/14	6/11	60	103	328	5	60	15,312	90,817	0	0	2	6	56,405	446,207
6	6/16-6/18	6/14	48	135	457	3	60	30,910	190,025	5	43	3	12	81,416	608,102
7	6/19-6/21	6/18	60	150	619	2	26	23,118	138,817	0	0	2	6	112,126	856,115
8	6/23-6/25	6/22	48	127	447	7	99	11,409	69,141	3	24	135	481	66,391	496,480
9	6/26-6/28	6/25	60	131	452	4	52	12,730	75,616	4	20	8,236	28,853	60,518	449,609
10	6/30-7/2	6/28	48	122	395	4	44	9,607	58,712	27	212	9,247	34,282	50,500	368,093
11	7/3-7/5	7/2	60	130	599	9	126	19,150	114,922	57	527	26,269	91,355	106,602	801,543
12	7/7-7/9	7/5	48	119	369	9	107	12,598	78,041	250	1,935	28,636	97,362	30,311	227,538
13	7/10-7/12	7/9	60	76	173	5	61	7,007	42,058	50	304	14,537	52,040	17,523	132,909
14	7/14-7/15	7/12	36	65	175	4	55	4,591	26,954	37	346	29,732	110,497	4,517	33,407
15	7/17-7/19	7/16	48	37	92	3	42	4,280	24,310	7	52	14,953	53,341	2,253	16,737
16	7/28	7/26	14	4	6	0	0	85	520	0	0	7,102	24,011	80	620
17	7/31	7/30	14	15	20	0	0	231	1,494	31	235	18,428	66,576	149	1,130
18	8/3	8/2	14	72	169	0	0	238	1,307	122	810	161,413	577,465	91	588
19	8/4	8/2	14	105	197	0	0	292	1,696	630	3,218	163,732	582,047	225	1,653
20	8/5	8/4	14	114	229	3	43	284	1,649	362	2,523	161,795	598,107	870	2,260
21	8/6	8/4	14	132	233	6	68	204	1,158	572	4,140	155,078	529,858	175	1,244
22	8/7	8/6	14	138	196	0	0	189	1,073	658	4,501	97,498	339,274	521	2,613
23	8/9	8/8	14	86	118	1	10	129	691	598	4,108	54,943	199,854	104	739
24	8/18	8/16	12	27	38	2	30	45	227	470	2,967	11,868	36,018	80	627
25	8/21	8/20	12	48	85	0	0	12	60	5,318	31,532	32,581	109,124	4	30
26	8/22	8/20	12	45	66	0	0	6	30	3,277	17,388	16,371	55,246	0	0
27	8/23	8/20	12	35	51	1	10	1	7	3,565	19,054	10,861	35,887	1	7
28	8/24	8/23	12	18	36	0	0	2	14	2,866	14,938	8,020	26,239	0	0
29	8/25	8/23	12	43	64	0	0	8	47	5,524	27,448	13,943	51,296	3	24
30	8/26	8/25	12	42	75	0	0	5	25	9,114	49,825	13,513	48,682	0	0
31	8/27	8/25	12	40	58	0	0	5	25	6,414	35,400	7,866	26,577	5	40
32	8/28	8/27	12	21	48	0	0	6	30	8,020	46,891	5,223	18,870	0	0

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		NR		Permits		Chin	iook	Soci	keye	Со	ho	Pi	nk	Cl	num
Period	Dates	Dates	Hours	fished	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
33	8/29	8/27	12	26	56	0	0	1	7	10,144	60,257	4,377	16,004	1	7
34	9/1-9/2	8/29	24	46	129	0	0	1	5	16,814	97,296	6,595	20,638	1	8
35	9/3	9/2	12	0	0	0	0	0	0	0	0	0	0	0	0
36	9/4	9/3	12	38	73	0	0	1	5	7,633	48,234	4,759	14,331	0	0
37	9/5	9/3	12	38	64	0	0	2	10	7,759	48,532	2,873	9,467	0	0
38	9/6	9/3	12	36	49	0	0	1	5	7,414	43,834	4,080	12,237	0	0
39	9/7	9/3	12	24	43	0	0	2	10	7,065	46,024	631	1,891	0	0
40	9/8	9/6	12	29	46	0	0	0	0	6,473	38,821	786	2,360	0	0
41	9/9	9/6	12	26	32	0	0	3	15	3,844	24,333	336	1,039	0	0
42	9/10	9/6	12	20	25	0	0	0	0	4,356	28,548	0	0	0	0
43	9/11	9/10	12	12	15	0	0	0	0	3,658	21,945	0	0	0	0
44	9/12	9/10	12	15	22	0	0	0	0	3,121	18,717	0	0	0	0
45	9/13	9/10	12	13	25	0	0	0	0	4,701	28,206	0	0	0	0
46	9/14	9/12	12	9	9	0	0	0	0	5,272	31,642	0	0	0	0
47	9/15	9/12	12	12	13	0	0	0	0	2,512	15,062	0	0	0	0
48	9/16	9/12	12	14	25	0	0	3	15	4,077	24,446	0	0	0	0
49	9/17	9/12	12	13	13	0	0	0	0	4,838	29,020	0	0	0	0
50	9/18	9/12	12	11	13	0	0	0	0	1,749	10,488	0	0	0	0
51	9/19	9/12	12	10	12	0	0	1	5	1,734	10,397	0	0	0	0
52	9/20-9/26	9/19	156	3	3	0	0	0	0	577	4,037	0	0	0	0
53	9/27-10/3	9/26	156	0	0	0	0	0	0	0	0	0	0	0	0
54	10/4-10/10	10/3	156	0	0	0	0	0	0	0	0	0	0	0	0
Total			1,684	284	6,908	76	997	159,167	961,065	151,723	898,287	1,096,425	3,871,337	642,964	4,863,981
Average	e weight						13.12		6.04		5.92		3.53		7.56

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 <a href="http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main">http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main</a>

*Note*: Required parameters for searching the ADF&G Commercial Fishing News Release System include: Effective Year = 2014; Species Group = Salmon; Management Area = Prince William Sound.

<sup>&</sup>lt;sup>a</sup> Queries made through the ADF&G Commercial Fishing News Release System will provide results sorted by Publication Date.

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Appendix B5.-Coghill District commercial common property purse seine salmon harvest by period dates, 2014.

		NR	NR			Chin	iook	Sock	teye	Co	ho	P	ink	Chi	um
Period	Date	dates a	Hours	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
17	7/31	07/30	14	1	1	0	0	7	59	0	0	2,390	8,368	4	24
18	8/3	08/02	14	22	32	0	0	36	205	35	271	242,260	868,667	32	228
19	8/4	08/02	14	23	23	0	0	51	295	21	160	170,381	606,774	57	402
20	8/5	08/04	14	25	29	0	0	79	444	58	443	192,331	707,882	43	323
21	8/6	08/04	14	13	17	0	0	24	143	45	318	87,634	308,599	4	23
22	8/7	08/06	14	9	9	0	0	5	30	15	105	15,728	53,596	3	18
23	8/9	08/08	14	15	15	0	0	51	295	72	521	57,761	218,011	55	394
24	8/18	08/16	12	3	3	0	0	0	0	0	0	16,130	54,844	0	0
25	8/21	08/20	12	17	17	0	0	7	42	2,781	16,941	33,803	123,003	16	109
26	8/22	08/20	12	10	12	0	0	22	133	2,903	18,972	43,662	151,164	109	637
27	8/23	08/20	12	6	8	0	0	0	0	1,623	8,978	21,109	72,815	0	0
28	8/24	08/23	12	4	4	0	0	17	107	820	5,027	18,172	58,975	2	16
29	8/25	08/23	12	1	1	0	0	0	0	163	898	555	1,942	0	0
30	8/26	08/25	12	0	0	0	0	0	0	0	0	0	0	0	0
31	8/27	08/25	12	0	0	0	0	0	0	0	0	0	0	0	0
32	8/28	08/27	12	0	0	0	0	0	0	0	0	0	0	0	0
33	8/29	08/27	12	0	0	0	0	0	0	0	0	0	0	0	0
Total			218	65	171	0	0	299	1,753	8,536	52,634	901,916	3,234,640	325	2,174
Average	e weight						0.00		5.86		6.17		3.59		6.69

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 <a href="http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main">http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main</a>

Note: Required parameters for searching the ADF&G Commercial Fishing News Release System include: Effective Year = 2014; Species Group = Salmon; Management Area = Prince William Sound.

<sup>&</sup>lt;sup>a</sup> Queries made through the ADF&G Commercial Fishing News Release System will provide results sorted by Publication Date.

Appendix B6.-Commercial common property harvest by species in the Coghill District, 1984-2014.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
			Drift Gi	llnet		
1984	396	94,956	563	897,496	264,878	1,258,289
1985	380	339,296	1,131	454,531	246,824	1,042,162
1986	617	381,565	789	68,887	218,971	670,829
1987	352	377,454	13,396	712,897	318,842	1,422,941
1988	501	82,294	41,307	1,314,061	346,388	1,784,551
1989	364	106,114	80,737	628,522	194,584	1,010,321
1990	126	11,988	128,605	1,907,510	301,209	2,349,438
1991	92	3,888	78,363	231,501	34,223	348,067
1992	242	57,919	86,782	167,384	182,433	494,760
1993	576	66,532	37,898	141,279	635,208	881,493
1994	390	12,928	50,879	58,334	554,181	676,712
1995	468	57,797	29,343	161,493	379,659	628,760
1996	575	177,530	20,926	59,447	612,969	871,447
1997	862	227,231	5,618	154,969	689,977	1,078,657
1998	605	59,463	2,925	383,604	347,317	793,914
1999	401	106,028	1,114	32,408	689,210	829,161
2000	269	176,452	82,869	88,228	1,643,801	1,991,619
2001	216	87,539	3,185	308,707	1,142,449	1,542,096
2002	203	59,758	784	6,457	1,660,443	1,727,645
2003	114	161,872	9,900	44,419	726,431	942,736
2004	126	216,156	10,200	20,081	534,959	781,522
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
10-year Average	151	162,502	47,590	894,500	1,413,460	2,518,203
2014	76	159,167	151,723	1,096,425	642,964	2,050,355

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Year	Chinook	Sockeye	Coho	Pink	Chum	Total
_			Purse S	Seine		
1984	0	21	0	10,911	1,126	12,058
1985	85	10,757	112	69,242	19,330	99,526
1986	186	18,514	98	145,706	27,078	191,582
1987	58	38,899	1,956	865,671	59,252	965,836
1988	63	1,623	15,787	1,600,481	11,755	1,629,709
1989	61	2,030	39,484	3,296,965	124,639	3,463,179
1990	2	286	11,819	785,278	10,951	808,336
1991	11	1,562	621	1,980,074	11,519	1,993,787
1992	6	765	27,382	196,503	1,603	226,259
1993	46	6,250	1,760	352,468	3,645	364,169
1994	50	21,060	30,517	3,538,760	3,575	3,593,962
1995	33	20,670	5,337	917,200	2,597	945,837
1996	1	2,640	5,319	1,484,422	463	1,492,845
1997	7	5,694	1,269	1,875,617	33,139	1,915,726
1998	20	1,702	1,531	2,845,157	21,600	2,870,010
1999	34	3,229	338	3,509,722	621,349	4,134,672
2000	1	2,984	31,991	3,271,314	1,338	3,307,628
2001	8	2,398	356	648,335	3,802	654,899
2002	5	2,068	2,431	1,271,180	794,794	2,070,478
2003	15	125,641	724	11,439,915	750,834	12,317,129
2004	2	195	133	23,609	386,042	409,981
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
10-Year Average	9	5,088	11,665	3,783,953	165,889	3,966,604
2014	0	299	8,536	901,916	325	911,076

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Year	Chinook	Sockeye	Coho	Pink	Chum	Total
_		Comb	ined Purse Sei	ine and Drift Gil	lnet	
1984	396	94,977	563	908,407	266,004	1,270,347
1985	465	350,053	1,243	523,773	266,154	1,141,688
1986	803	400,079	887	214,593	246,049	862,411
1987	410	416,353	15,352	1,578,568	378,094	2,388,777
1988	564	83,917	57,094	2,914,542	358,143	3,414,260
1989	425	108,144	120,221	3,925,487	319,223	4,473,500
1990	128	12,274	140,424	2,692,788	312,160	3,157,774
1991	103	5,450	78,984	2,211,575	45,742	2,341,854
1992	248	58,684	114,164	363,887	184,036	721,019
1993	622	72,782	39,658	493,747	638,853	1,245,662
1994	440	33,988	81,396	3,597,094	557,756	4,270,674
1995	501	78,467	34,680	1,078,693	382,256	1,574,597
1996	576	180,170	26,245	1,543,869	613,432	2,364,292
1997	869	232,925	6,887	2,030,586	723,116	2,994,383
1998	625	61,165	4,456	3,228,761	368,917	3,663,924
1999	435	109,257	1,452	3,542,130	1,310,559	4,963,833
2000	270	179,436	114,860	3,359,542	1,645,139	5,299,247
2001	224	89,937	3,541	957,042	1,146,251	2,196,995
2002	208	61,826	3,215	1,277,637	2,455,237	3,798,123
2003	129	287,513	10,624	11,484,334	1,477,265	13,259,865
2004	128	216,351	10,333	43,690	921,001	1,191,503
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
10-Year Average	160	171,274	58,562	4,510,164	1,570,756	6,310,916
2014	76	159,466	160,259	1,998,341	643,289	2,961,431

Appendix B7.–Estimated age and sex composition of sockeye salmon harvested in the Coghill District commercial common property drift gillnet and purse seine fisheries, 2014.

Strata combined:	05/29 - 09/23			Brood year	and age class a,b					
Sampling dates:	06/18 - 07/19	2011	2	2010		2009			2007	
Sample size:	1342	1.1	0.3	1.2	1.3	2.2	1.4	2.3	2.4	Total <sup>b</sup>
	a				===		•	_		=0.4
	Sample size	2	15		753	2	2	7		781
Female	Percentage of sample	0.0	0.0	28.5	19.2	0.2	0.0	0.0	0.0	48.0
	Number in escapement	0	0	45,430	30,587	393	35	71	0	76,516
	Sample size									
Male	Percentage of sample	0.4	0.1	31.3	19.4	0.8	0.0	0.1	0.1	52.0
	Number in escapement	576	108	49,933	30,884	1,203	0	138	108	82,950
	Sample size									
Total	Percentage of sample	0.4	0.1	59.8	38.5	1.0	0.0	0.1	0.1	100.0
	Number in escapement	576	108	95,363	61,470	1,596	35	209	108	159,466
	Standard error	576	108	2,952	2,970	653	35	120	108	

a Scale pattern analysis in Strata #1 indicates 26 of 489 or 5.3% Coghill Lake wildstock, of which 4 were age 1.2 and 22 age 1.3. Strata #2 indicates 53 of 460 or 11.5% of which 5 were age 1.2 and 48 age 1.3. Strata #3 indicates 18 of 115 or 15.7% of which 5 were age 1.2 and 13 age 1.3. Strata #4 indicates 109 of 433 or 25.2% of which 15 were age 1.2, 87 age 1.3, 1 age 1.4, and 6 resorbed. Strata combined indicate 206 of 1,497 or 13.8% Coghill Lake wildstock, of which 29 were age 1.2, 170 age 1.3, 1 age 1.4, and 6 resorbed.

b Fish with resorbed scales have been removed; Strata #2 had 1, #3 - 31, #4 - 124

Appendix B8.–Estimated age and sex composition of the sockeye salmon escapement through the weir on the outlet stream of Coghill Lake, 2014.

Strata combined:	06/08 - 07/26		Brood year and age class <sup>a</sup>											
Sampling dates:	06/21 - 07/16	2011	2010		2009	200								
Sample size:	1,416	1.1	1.2	2.1	1.3	2.2	1.4	2.3	Total					
Female	Percentage of sample	0.0	14.5	0.0	38.1	1.3	0.0	0.1	54.0					
	Number in harvest	0	3,164	0	8,327	277	0	31	11,800					
	Sample size													
Male	Percentage of sample	0.9	26.1	0.4	17.3	1.1	0.1	0.1	46.0					
	Number in harvest	199	5,707	77	3,774	232	31	15	10,036					
	Sample size													
Total	Percentage of sample	0.9	40.6	0.4	55.4	2.3	0.1	0.2	100.0					
	Number in harvest	199	8,872	77	12,102	509	31	46	21,836					
	Standard error	55	282	34	286	87	22	27						

<sup>&</sup>lt;sup>a</sup> Fish with resorbed scales have been removed; Strata #1 had 3, #2 - 5, #3 - 54.

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Appendix B9.—Commercial common property salmon harvest by period in the Unakwik District drift gillnet and purse seine fisheries, 2014.

		NR				Chir	nook	So	ckeye	Со	ho	Pi	nk	Ch	um
Period	Date	datesa	Hours	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
									Drift gillnet						
01	6/16–6/17	6/14	24	0	0	0	0	0	0	0	0	0	0	0	0
02	6/19-6/20	6/18	36	2	2	0	0	328	1,962	0	0	0	0	0	0
03	6/23-6/24	6/21	36	1	1	0	0	6	36	0	0	0	0	7	50
04	6/26-6/27	6/25	36	0	0	0	0	0	0	0	0	0	0	0	0
05	6/30-7/1	6/28	36	0	0	0	0	0	0	0	0	0	0	0	0
06	7/3-7/4	7/2	36	1	1	0	0	125	931	0	0	3	9	23	189
07	7/7–7/8	7/5	36	0	0	0	0	0	0	0	0	0	0	0	0
08	7/10-7/11	7/9	36	0	0	0	0	0	0	0	0	0	0	0	0
09	7/14-7/15	7/12	36	0	0	0	0	0	0	0	0	0	0	0	0
10	7/17-7/18	7/16	36	0	0	0	0	0	0	0	0	0	0	0	0
11	7/21-7/22	7/19	24	0	0	0	0	0	0	0	0	0	0	0	0
Total			288	4	2	0	0	459	2,929	0	0	3	9	30	239
Average	e weight						0.00		6.38		0.00		3.00		7.97
0.1	6/16–6/17	6/14	24	0	0	0	0	0	Purse seine 0	0	0	0	0	0	0
01 02	6/10-6/17	6/18	36	2	2	1	10	524	2,751	0	0	2	6	132	720
02	6/23-6/24	6/21	36	3	3	0	0	162	968	0	0	0	0	111	824
04	6/26–6/27	6/25	36	0	0	0	0	0	0	0	0	0	0	0	0
05	6/30–7/1	6/28	36	0	0	0	0	0	0	0	0	0	0	0	0
06	7/3–7/4	7/2	36	0	0	0	0	0	0	0	0	0	0	0	0
07	7/7–7/8	7/5	36	0	0	0	0	0	0	0	0	0	0	0	0
08	7/10–7/11	7/9	36	0	0	0	0	0	0	0	0	0	0	0	0
09	7/14–7/15	7/12	36	0	0	0	0	0	0	0	0	0	0	0	0
10	7/17–7/18	7/12	36	0	0	0	0	0	0	0	0	0	0	0	0
11	7/21–7/22	7/19	24	0	0	0	0	0	0	0	0	0	0	0	0
Total		1117	288	3	3	1	10	686	3,719	0	0	2	6	243	1,544
	e weight		200	3	3	1	10.00	000	5.42	0	0.00	2	3.00	2.3	6.35

Note: All waters designated for commercial salmon fishing in the Unakwik District were open for all periods.

<sup>&</sup>lt;sup>a</sup> Queries made through the ADF&G Commercial Fishing News Release System will provide results sorted by Publication Date.

Appendix B10.-Commercial common property salmon harvest by species in the Unakwik District, 1983-2014.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
		Dri	ft Gillnet			
1983	3	13,215	0	1,515	1,426	16,159
1984	2	18,522	0	27,742	7,125	53,391
1985	26	27,532	22	9,191	3,942	40,713
1986	5	25,759	1	1,973	2,463	30,201
1987	2	5,894	1	4,871	1,356	12,124
1988	15	8,589	0	281	1,504	10,389
1989	31	21,412	27	41,820	404	63,694
1990	3	247	127	9,986	23	10,386
1991	13	4,482	11	12,299	118	16,923
1992	3	2,224	13	3,972	94	6,306
1993	5	14,691	4	3,338	978	19,016
1994	0	548	0	300	0	848
1995	8	2,116	0	1	36	2,161
1996	3	6,063	0	17	694	6,777
1997	3	3,411	0	0	177	3,591
1998	10	13,651	55	1,932	586	16,234
1999	4	8,544	5	0	296	8,849
2000	0	1,119	0	0	20	1,139
2001	3	2,298	2	4	44	2,351
2002	5	9,825	14	0	761	10,605
2003	0	2,163	0	0	0	2,163
2004	5	7,438	1	0	168	7,612
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	1,337	0	16	2	1,355
2013	1	776	0	203	28	1,008
10-Year Average	2	5,219	3	290	217	6,219
2014	0	459	0	3	30	492

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Year	Chinook	Sockeye	Coho	Pink	Chum	Total
		Pur	rse Seine			
1983	0	6	0	3,344	716	4,066
1984	0	0	0	0	0	0
1985	0	138	0	28,210	4,123	32,471
1986	0	76	0	4,718	4,675	9,469
1987	0	146	0	187,752	6,549	194,447
1988	0	667	7	57,844	23,860	82,378
1989	0	0	0	0	0	0
1990	0	0	0	0	0	0
1991	0	819	3	121,068	79	121,969
1992	0	42	2	13,264	119	13,427
1993	0	79	0	3,233	67	3,379
1994	0	226	102	388,901	73	389,302
1995	0	0	0	0	0	0
1996	0	0	0	0	0	0
1997	0	0	0	0	0	0
1998	0	0	0	0	0	0
1999	1	386	0	0	2	389
2000	0	0	0	20,485	0	20,485
2001	0	0	0	0	0	0
2002	3	1,141	16	133	123	1,416
2003	0	1,017	0	2,261	20	3,298
2004	0	0	0	0	0	0
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	81	159	3,056
10-Year Average	0	500	0	8,199	35	8,734
2014	1	686	0	2	243	932

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Year	Chinook	Sockeye	Coho	Pink	Chum	Total
		Com	bined Gear			
1983	3	13,221	1	4,859	2,142	20,226
1984	2	18,522	1	27,742	7,125	53,392
1985	26	27,670	23	37,401	8,065	73,185
1986	5	25,835	2	6,691	7,138	39,671
1987	2	6,040	2	192,623	7,905	206,572
1988	15	9,256	1	58,125	25,364	92,761
1989	31	21,412	28	41,820	404	63,695
1990	3	247	128	9,986	23	10,387
1991	13	5,301	12	133,367	197	138,890
1992	3	2,266	14	17,236	213	19,732
1993	5	14,770	5	6,571	1,045	22,396
1994	0	774	1	389,201	73	390,049
1995	8	2,116	1	1	36	2,162
1996	3	6,063	1	17	694	6,778
1997	3	3,411	1	0	177	3,592
1998	10	13,651	56	1,932	586	16,235
1999	5	8,930	6	0	298	9,239
2000	0	1,119	1	20,485	20	21,625
2001	3	2,298	3	4	44	2,352
2002	8	10,966	15	133	884	12,006
2003	0	3,180	1	2,261	20	5,462
2004	5	7,438	2	0	168	7,613
2005	6	23,107	28	83,398	858	107,397
2006	1	698	2	36	171	908
2007	1	15,693	1	0	226	15,921
2008	0	389	1	878	58	1,326
2009	1	3,128	1	0	384	3,514
2010	1	46	1	34	26	108
2011	0	1,390	0	1	30	1,421
2012	0	1,707	0	34	150	1,891
2013	1	3,591	1	284	187	4,064
10-Year Average	2	5,719	4	8,467	226	14,416
2014	1	1,145	0	5	273	1,424

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Appendix B11.-Port Chalmers Subdistrict commercial common property purse seine harvest of salmon by period, 2014.

		NR				Chin	ook	Sock	eye	Col	ho	Piı	ık	Ch	ıum
Period	Date	datesa	Hours	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1	6/2-6/4	5/31	60	9	12	1	7							6,010	49,165
2	6/5-6/8	5/31	84	15	31	11	213	97	583			298	1,179	14,648	120,079
3	6/9-6/11	6/4	60	18	25	18	192	853	5,086	34	220	8,141	31,736	13,815	113,770
4	6/12-6/15	6/7	84	34	63	13	217	443	2,466	5	31	126,360	372,451	18,132	143,196
5	6/16-6/18	6/11	60	27	34	16	379	61	352			9	19	23,118	179,244
6	6/19-6/22	6/14	84	44	83	140	2,096	260	1,070	4	34	56,585	165,406	49,369	381,075
7	6/23-6/25	6/18	60	55	105	34	490	2,676	15,208	151	1,058	445,458	1,378,027	17,228	132,850
8	6/26-6/29	6/21	84	99	296	14	165	4,741	27,179	801	5,353	2,237,861	7,051,367	29,016	222,681
9	6/30	6/28	12	22	23			293	1,671	21	161	99,755	335,397	569	4,151
10	7/1	6/28	12	23	25			222	1,066	49	350	58,642	191,874	5,810	40,862
11	7/2	7/1	14	0	0	0	0	0	0	0	0	0	0	0	0
12	7/3-7/6	7/2	84	0	0	0	0	0	0	0	0	0	0	0	0
13	7/7–7/9	7/2	60	4	5			126	619			10,844	32,527	6,255	53,116
14	7/10-7/13	7/9	84	4	4			1	7			139	502	2,342	16,310
15	7/14–7/16	7/9	60	2	2							399	1,396	704	5,632
16	7/17-7/20	7/12	84	0	0	0	0	0	0	0	0	0	0	0	0
17	7/21	7/19	14	0	0	0	0	0	0	0	0	0	0	0	0
18	7/24	7/23	14	0	0	0	0	0	0	0	0	0	0	0	0
Total			1,014	356	708	247	3,759	9,773	55,307	1,065	7,207	3,044,491	9,561,881	187,016	1,462,130
Average	e weight						15.22		5.66		6.77		3.14		7.82

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 <a href="http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main">http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main</a>

Note: Required parameters for searching the ADF&G Commercial Fishing News Release System include: Effective Year = 2014; Species Group = Salmon; Management Area = Prince William Sound.

<sup>&</sup>lt;sup>a</sup> Queries made through the ADF&G Commercial Fishing News Release System will provide results sorted by Publication Date.

Appendix B12.-Total commercial common property harvest by species in the Port Chalmers Subdistrict, 2009–2014.

		<u>-</u>			Num	bers of fish		
Year	Number of permits fished	Gear type	Chinook	Sockeye	Coho	Pink	Chum	Total
2009	207	drift gillnet	87	10,208	2,318	67,978	672,918	753,509
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
5-Year Average	114		108	3,979	659	25,966	365,649	396,361
2014	113	purse seine	247	9,743	7,077	3,025,399	186,600	3,229,066

## **APPENDIX C: ESHAMY DISTRICT**

Appendix C1.-Salmon escapement by species past the Eshamy River weir, 1967-2014.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1967	0	10,821	192	10,433	1	21,447
1968	1	68,048	450	919	1	69,419
1969	0	61,196	96	3,095	2	64,389
1970	0	11,460	25	387	0	11,872
1971 <sup>a</sup>	0	954	97	3,179	0	4,230
1972 <sup>b</sup>	0	28,683	0	0	0	28,683
1973	0	10,202	205	1,698	0	12,105
1974 <sup>b</sup>	0	633	0	0	0	633
1975 <sup>b</sup>	0	1,724	0	0	0	1,724
1976 <sup>b</sup>	0	19,367	0	0	0	19,367
1977	0	11,746	230	32,080	0	44,056
1978	0	12,580	20	552	0	13,152
1979	0	12,169	5	3,654	1	15,829
1980	5	44,263	128	963	2	45,361
1981	1	23,048	249	5,956	13	29,267
1982	0	6,782	79	1,056	79	7,996
1983	0	10,348	40	7,047	4	17,439
1984	2	36,121	881	3,970	0	40,974
1985	0	26,178	96	6,271	0	32,545
1986	2	6,949	55	1,004	31	8,041
1987 <sup>c</sup>	0	0	0	0	0	0
1988	2	31,747	48	1,205	1	33,003
1989	1	57,232	0	7,782	210	65,225
1990	0	14,477	43	2,209	5	16,734
1991	2	46,229	907	31,241	17	78,396
1992	1	36,237	52	3,004	5	39,299

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Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1993	1	42,893	92	3,435	9	46,430
1994	1	64,660	1,184	12,061	87	77,993
1995	7	21,701	1,076	18,601	407	41,792
1996	2	5,271	108	7,959	9	13,349
1997	2	39,015	111	15,142	18	54,288
1998 <sup>c</sup>	0	0	0	0	0	0
1999	1	27,057	194	32,756	3	60,011
2000	2	22,653	151	20,515	381	43,702
2001	0	55,187	335	21,027	176	76,725
2002	0	40,478	14	4,843	1,072	46,407
2003	2	39,845	NA	2,440	335	42,622
2004	0	13,443	0	1,518	0	14,961
2005	1	23,523	46	11,024	529	35,123
2006	0	41,823	201	3,585	608	46,217
2007	0	16,646	831	29,409	243	46,673
2008	0	18,494	27	2,060	20	20,601
2009	1	24,025	147	3,849	416	28,438
2010	0	16,291	114	2,268	84	18,757
2011	0	24,129	0	2,879	35	27,043
2012 <sup>c</sup>	0	0	0	0	0	C
2013 °	0	0	0	0	0	0
Avg (2002-2011)	0	25,870	153	6,388	334	32,684
2014 °	0	0	0	0	0	0

<sup>&</sup>lt;sup>a</sup> Estimate may be low because of holes in weir; actual escapement is estimated to be greater than 3,000 sockeye salmon.

b Passage of salmon other than sockeye salmon was not recorded.

<sup>&</sup>lt;sup>c</sup> The Eshamy River weir was not in operation.

Appendix C2.—Total drift gillnet common property salmon harvest by period in the Eshamy District, 2014.

		NR				Ch	inook	Soc	ckeye	C	oho	F	Pink	Cl	hum
Period	Date	dates <sup>a</sup>	Hours	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1	5/29-5/31	5/27	60	2	4	0	0	152	882	0	0	0	0	54	392
2	6/2-6/4	5/31	48	3	14	1	7	466	2,663	0	0	0	0	391	3,015
3	6/5-6/7	6/4	60	10	32	3	34	4,177	24,752	0	0	0	0	1,756	14,496
4	6/9-6/11	6/7	48	75	293	4	43	62,391	343,379	0	0	0	0	3,900	30,013
5	6/12-6/14	6/11	60	141	485	4	36	68,757	394,689	0	0	3	12	13,709	104,855
6	6/16-6/18	6/14	48	198	673	7	92	127,496	708,496	8	58	13	40	17,026	126,312
7	6/19-6/21	6/18	60	198	777	6	59	128,263	750,640	11	82	98	472	12,273	90,959
8	6/23-6/25	6/21	48	177	587	2	16	103,021	541,597	2	14	255	885	7,868	53,011
9	6/26-6/28	6/25	60	139	496	0	0	82,803	434,828	2	12	3,597	12,559	8,002	58,411
10	6/30-7/2	6/28	48	99	307	0	0	37,878	184,025	40	221	5,542	18,221	2,644	19,251
11	7/3-7/5	7/2	60	59	234	1	15	26,097	148,394	40	306	6,716	23,483	1,777	13,178
12	7/7–7/9	7/5	48	56	209	1	9	26,751	135,123	26	208	10,026	32,267	1,765	13,169
13	7/10-7/12	7/9	60	49	165	2	24	29,034	142,599	27	195	9,199	30,729	2,613	19,800
14	7/14–7/15	7/12	36	54	158	0	0	22,567	110,248	44	338	10,197	32,497	1,957	14,237
15	7/17–7/19	7/16	48	47	135	0	0	23,038	116,911	12	101	7,568	25,701	746	5,642
16	7/21-7/22	7/19	24	32	76	0	0	6,952	34,119	20	138	8,284	27,827	188	1,371
17	7/24-7/25	7/23	36	22	70	3	26	5,384	31,342	49	373	17,532	57,943	448	3,272
18	7/28-7/29	7/26	36	20	60	0	0	3,314	19,067	35	274	25,587	79,705	203	1,387
19	7/31-8/1	7/30	36	48	178	1	8	2,763	13,872	291	2,103	84,636	267,107	399	2,942
20	8/4-8/5	8/2	36	0	0	0	0	0	0	0	0	0	0	0	0
21	8/7-8/8	8/6	36	0	0	0	0	0	0	0	0	0	0	0	0
22	8/11-8/12	8/8	36	1	2	0	0	11	77	0	0	687	2,751	0	0
23	8/14-8/15	8/13	36	0	0	0	0	0	0	0	0	0	0	0	0

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		NR				Chi	inook	Se	ockeye	C	oho	I	Pink	C	hum
Period	Date	dates	Hours	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
24	8/18-8/19	8/16	36	0	0	0	0	0	0	0	0	0	0	0	0
25	8/21-8/22	8/20	36	0	0	0	0	0	0	0	0	0	0	0	0
26	8/25-8/26	8/23	36	0	0	0	0	0	0	0	0	0	0	0	0
27	8/28-8/29	8/27	36	0	0	0	0	0	0	0	0	0	0	0	0
28	9/1-9/2	8/29	36	0	0	0	0	0	0	0	0	0	0	0	0
29	9/4–9/5	9/3	36	0	0	0	0	0	0	0	0	0	0	0	0
30	9/8-9/9	9/6	36	0	0	0	0	0	0	0	0	0	0	0	0
Total			1,320	311	4,955	35	369	761,315	4,137,703	607	4,423	189,940	612,199	77,719	575,713
Average	e weight						10.54		5.43		7.29		3.22		7.41

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 Fisheries News Release System at <a href="http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main">http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main</a>

*Note*: Required parameters for searching the ADF&G Commercial Fisheries News Release System include: Effective Year = 2014; Species Group = Salmon; Management Area = Prince William Sound.

<sup>&</sup>lt;sup>a</sup> Queries made through the ADF&G Commercial Fisheries News Release System will provide results sorted by Publication Date.

Appendix C3.—Total set gillnet common property salmon harvest by period in the Eshamy District, 2014.

		NR				Ch	inook	Soc	ckeye	C	oho	P	ink	Cł	num
Period	Date	dates <sup>a</sup>	Hours	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1	5/29-5/31	5/27	60	8	14	0	0	133	866	0	0	0	0	222	2,015
2	6/2-6/4	5/31	48	14	58	3	40	2,375	14,345	0	0	0	0	853	6,958
3	6/5-6/7	6/4	60	20	145	3	64	16,660	103,360	0	0	0	0	1,316	10,899
4	6/9-6/11	6/7	48	23	152	5	91	23,545	136,845	2	13	0	0	1,232	9,926
5	6/12-6/14	6/11	60	26	179	1	11	25,367	152,941	1	11	0	0	1,806	13,995
6	6/16-6/18	6/14	48	26	132	0	0	21,554	127,062	0	0	0	0	1,209	9,280
7	6/19-6/21	6/18	60	28	227	1	10	39,284	231,195	1	7	50	249	2,492	18,841
8	6/23-6/25	6/21	48	29	188	1	6	28,770	163,111	1	9	158	673	1,527	11,111
9	6/26-6/28	6/25	60	29	193	0	0	23,571	128,243	0	0	1,186	4,195	3,202	23,939
10	6/30-7/2	6/28	48	28	155	2	26	18,885	96,009	0	0	2,065	6,677	1,983	14,390
11	7/3-7/5	7/2	60	27	154	1	16	12,879	70,183	3	21	3,224	11,735	1,359	9,800
12	7/7–7/9	7/5	48	26	138	2	31	13,721	67,073	4	27	3,672	12,858	1,202	9,255
13	7/10-7/12	7/9	60	19	71	1	11	5,527	27,896	10	97	2,206	8,385	924	7,260
14	7/14-7/15	7/12	36	23	100	0	0	12,172	62,488	24	162	2,878	10,307	945	6,988
15	7/17-7/19	7/16	48	18	82	0	0	8,736	46,551	5	36	3,305	11,691	371	2,600
16	7/21-7/22	7/19	24	12	41	1	12	4,136	19,611	2	19	2,264	7,303	82	585
17	7/24-7/25	7/23	36	7	27	1	10	1,829	10,689	11	98	4,190	12,765	149	1,066
18	7/28-7/29	7/26	36	2	13	0	0	253	1,509	0	0	3,971	12,319	30	210
19	7/31-8/1	7/30	36	2	14	0	0	171	1,028	1	11	6,512	20,111	17	124
20	8/4-8/5	8/2	36	0	0	0	0	0	0	0	0	0	0	0	0
21	8/7-8/8	8/6	36	0	0	0	0	0	0	0	0	0	0	0	0
22	8/11-8/12	8/8	36	0	0	0	0	0	0	0	0	0	0	0	0
23	8/14-8/15	8/13	36	0	0	0	0	0	0	0	0	0	0	0	0

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						Chi	inook	So	ockeye	С	oho	F	Pink	C	hum
Period	Date		Hours	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
24	8/18-8/19	8/16	36	0	0	0	0	0	0	0	0	0	0	0	0
25	8/21-8/22	8/20	36	0	0	0	0	0	0	0	0	0	0	0	0
26	8/25-8/26	8/23	36	0	0	0	0	0	0	0	0	0	0	0	0
27	8/28-8/29	8/27	36	0	0	0	0	0	0	0	0	0	0	0	0
28	9/1-9/2	8/29	36	0	0	0	0	0	0	0	0	0	0	0	0
29	9/4–9/5	9/3	36	0	0	0	0	0	0	0	0	0	0	0	0
30	9/8-9/9	9/6	36	0	0	0	0	0	0	0	0	0	0	0	0
Total			1,320	29	2,083	22	328	259,568	1,461,005	65	511	35,681	119,268	20,921	159,242
Average	e weight						14.91		5.63		7.86		3.34		7.61

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 Fisheries News Release System at <a href="http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main">http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main</a>

*Note*: Required parameters for searching the ADF&G Commercial Fisheries News Release System include: Effective Year = 2014; Species Group = Salmon; Management Area = Prince William Sound.

<sup>&</sup>lt;sup>a</sup> Queries made through the ADF&G Commercial Fisheries News Release System will provide results sorted by Publication Date.

Appendix C4.-Total commercial harvest in the Eshamy District, 1980-2014.

Chum T	Chum	Pink	Coho	Sockeye	Chinook	Year
			Drift Gillnet	I		
130 4	130	3,225	25	684	0	1980
0	0	0	0	0	0	1981
0	0	0	0	0	0	1982
3,427 166	3,427	162,541	8	924	1	1983
15,451 286	15,451	247,326	282	23,490	7	1984
1,021 26	1,021	24,899	0	667	1	1985
65 1.	65	938	1	4	0	1986
7,060 10	7,060	3,225	3	642	2	1987
206,060 606	206,060	348,873	794	50,868	94	1988
0	0	0	0	0	0	1989 <sup>a</sup>
264,772 443	264,772	165,362	574	12,967	110	1990
202,183 543	202,183	44,516	468	296,234	107	1991
50,974 578	50,974	153,018	1,017	373,596	158	1992
27,045 154	27,045	45,974	673	80,807	8	1993
9,497 326	9,497	254,535	623	61,848	2	1994
13,284 105	13,284	60,712	1,468	29,851	21	1995
23,552 222	23,552	19,043	1,056	179,064	19	1996
34,768 657	34,768	146,324	426	475,498	17	1997
343 199	343	101,068	252	98,002	2	1998
13,120 228	13,120	127,082	2,036	86,032	30	1999
27,511 643	27,511	375,250	5,396	235,085	634	2000
21,316 899	21,316	367,588	10,423	499,972	47	2001
104,284 819	104,284	122,365	3,532	589,199	428	2002
16,057 655	16,057	61,565	1,764	575,608	19	2003
43,228 316	43,228	55,832	1,467	215,460	21	2004
3,493 194	3,493	110,499	1,636	79,227	15	2005
30,841 507	30,841	89,755	5,429	381,911	15	2006
81,410 664	81,410	42,822	2,556	538,183	27	2007
251,493 917	251,493	103,325	1,930	560,869	48	2008
286,361 904	286,361	77,539	1,695	539,293	67	2009
521,032 1,580	521,032	117,249	1,367	940,640	91	2010
95,991 1,082	95,991	78,762	6,159	901,279	129	2011
254,774 1,331	254,774	88,951	192	987,678	52	2012
184,334 584	184,334	62,176	1,724	336,061	74	2013
	175,296	82,691	2,416	548,060	e 54	10-Year Average
77,719 1,029		189,940	607	761,315	35	2014

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Year	Chinook	Sockeye	Coho	Pink	Chum	Total
		Set	Gillnet			
1980	0	2,000	38	2,371	134	4,543
1981	0	0	0	0	0	0
1982	0	0	0	0	0	0
1983	1	1,328	10	167,942	4,463	173,744
1984	5	23,226	98	278,176	3,000	304,505
1985	1	3,439	74	33,284	1,295	38,093
1986	9	1,043	86	42,123	5,764	49,025
1987	31	5,387	336	86,677	45,099	137,530
1988	100	18,321	283	180,456	93,577	292,737
1989 <sup>a</sup>	0	0	0	0	0	0
1990	56	10,204	532	369,589	94,494	474,875
1991	76	184,028	504	20,075	49,394	254,077
1992	101	144,568	1,242	390,097	4,695	540,703
1993	55	101,717	832	84,568	20,369	207,541
1994	9	97,664	628	311,134	6,908	416,343
1995	19	30,814	695	28,118	6,621	66,267
1996	13	132,268	309	16,648	9,276	158,514
1997	12	196,005	163	76,610	8,475	281,265
1998	1	25,533	91	33,916	214	59,755
1999	131	74,378	1,092	43,443	11,101	130,145
2000	41	101,105	662	139,008	12,319	253,135
2001	25	176,060	1,006	127,737	7,057	311,885
2002	30	241,660	525	64,421	22,987	329,623
2003	0	215,733	663	28,537	6,265	251,198
2004	11	91,412	825	51,655	10,381	154,284
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
10-Year Average	23	192,925	376	30,797	32,556	256,678
2014	22	259,568	65	35,681	20,921	316,257

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Year	Chinook	Sockeye	Coho	Pink	Chum	Total
		Comb	ined Gear			
1980	0	2,684	63	5,596	264	8,607
1981	0	0	0	0	0	0
1982	0	0	0	0	0	0
1983	2	2,252	18	330,483	7,890	340,645
1984	12	46,716	380	525,502	18,451	591,061
1985	2	4,106	74	58,183	2,316	64,681
1986	9	1,047	87	43,061	5,829	50,033
1987	33	6,029	339	89,902	52,159	148,462
1988	194	69,189	1,077	529,329	299,637	899,426
1989 <sup>a</sup>	0	0	0	0	0	0
1990	166	23,171	1,106	534,951	359,266	918,660
1991	183	480,262	972	64,591	251,577	797,585
1992	259	518,164	2,259	543,115	55,669	1,119,466
1993	63	182,524	1,505	130,542	47,414	362,048
1994	11	159,512	1,251	565,669	16,405	742,848
1995	40	60,665	2,163	88,830	19,905	171,603
1996	32	311,332	1,365	35,691	32,828	381,248
1997	29	671,503	589	222,934	43,243	938,298
1998	3	123,535	343	134,984	557	259,422
1999	161	160,410	3,128	170,525	24,221	358,445
2000	675	336,190	6,058	514,258	39,830	897,011
2001	72	676,032	11,429	495,325	28,373	1,211,231
2002	458	830,859	4,057	186,786	127,271	1,149,431
2003	19	791,341	2,427	90,102	22,322	906,211
2004	32	306,872	2,292	107,487	53,609	470,292
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
10-Year Average	77	740,985	2,792	113,488	207,852	1,065,194
2014	57	1,020,883	672	225,621	98,640	1,345,873

<sup>&</sup>lt;sup>a</sup> Fishing was closed because of oil contamination on the beaches.

Appendix C5.—Estimated age and sex composition of sockeye salmon harvested in the Eshamy District commercial gillnet fishery, 2014.

Strata combined:	05/29 - 08/11	Bro	od year and age	class <sup>a</sup>		
Sampling dates:	06/25 - 07/13	2011	2010	2009	2008	
Sample size:	666	1.1	1.2	1.3	1.4	Total
Female	Percentage of sample	1.8	46.0	7.0	0.1	55
	Number in harvest	18,597	469,214	71,794	1,396	561,001
Male	Percentage of sample	2.5	39.5	3.1	0.0	45.0
	Number in harvest	25,575	402,954	31,354	0	459,882
Total	Percentage of sample	4.3	85.4	10.1	0.1	100.0
	Number in harvest	44,172	872,168	103,148	1,396	1,020,883
	Standard error	7,606	13,149	11,570	1,396	

<sup>&</sup>lt;sup>a</sup> 162 fish with resorbed scales have been removed.

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

Appendix D1.-Prince William Sound commercial common property purse seine harvest by day, 2014.

			Chin	ook	Sock	eye	Co	ho	P	ink	Chu	ım
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
06/02	_	_	_	_	_	_	_	-	_	_	_	_
06/03	8	9	1	7	5	18	0	0	0	0	5,743	46,778
06/04	9	10	9	119	421	1,880	0	0	0	0	3,473	28,023
06/05	11	11	10	137	69	359	0	0	0	0	5,828	49,627
06/06	10	10	2	30	409	1,915	0	0	93	293	4,089	32,945
06/07	_	_	_	_	_	_	_	_	_	_	_	_
06/08	18	18	8	164	999	5,746	0	0	287	1,149	5,744	45,252
06/09	6	6	0	0	910	5,398	2	14	11	38	1,866	15,170
06/10	20	20	21	231	1,644	9,146	20	136	3,421	10,421	14,666	121,687
06/11	17	17	101	1,048	785	5,380	15	91	4,762	21,424	4,160	35,461
06/12	25	25	5	31	817	4,620	5	31	59,765	165,963	7,676	48,398
06/13	14	16	1	20	783	3,774	0	0	20,222	61,591	5,678	47,915
06/14	16	17	11	146	2,038	11,147	0	0	8,138	28,262	6,165	47,272
06/15	30	30	10	229	961	4,858	0	0	38,770	118,134	10,261	85,699
06/16	16	18	1	19	3,238	17,104	0	0	751	2,975	10,541	79,125
06/17	31	34	18	393	4,182	23,898	0	0	73	200	18,405	147,739
06/18	21	21	0	0	3,317	18,181	0	0	1,915	4,850	9,293	70,770
06/19	27	29	71	1,089	1,890	9,916	0	0	185	498	24,634	191,200
06/20	45	50	1	10	2,755	12,811	1	10	5,051	13,341	18,416	143,441
06/21	29	37	70	1,019	547	2,638	3	24	43,851	130,562	14,515	111,409
06/22	25	25	0	0	1,624	9,273	0	0	11,276	31,747	9,470	69,327
06/23	42	43	15	236	324	1,772	29	185	20,093	63,112	8,581	69,029
06/24	50	51	8	125	2,412	12,891	28	195	162,028	516,812	8,926	73,621
06/25	52	59	12	162	1,574	9,170	123	863	287,997	881,192	5,420	40,553
06/26	95	96	8	87	1,786	10,429	259	1,775	604,432	1,922,841	9,725	75,680
06/27	70	84	6	51	1,452	8,360	270	1,762	876,953	2,795,495	2,842	21,659
06/28	64	66	5	69	778	4,661	111	753	362,606	1,171,083	12,160	92,415
06/29	84	86	1	24	1,147	6,208	177	1,158	519,985	1,563,536	7,473	58,820
06/30	147	159	1	4	5,468	35,747	283	1,520	1,289,544	4,162,623	2,803	20,788
07/01	25	25	0	0	222	1,066	49	350	58,642	191,874	5,810	40,862
07/02	192	287	2	21	588	3,382	8	55	3,418,564	11,237,147	1,546	12,001
07/03	184	239	5	40	454	2,475	24	132	2,519,416	8,077,458	5,458	43,127
07/04	181	196	3	20	963	5,750	4	26	1,466,660	4,667,570	5,732	40,691
07/05	172	181	1	4	630	3,592	17		1,058,307	3,432,991	855	6,794
07/06	169	177	0	0	1,129	6,553	41	341	796,626	2,635,221	8,039	73,637
07/07	160	167	4	15	1,026	4,951	87	664	1,017,882	3,379,495	13,226	100,024
07/08	_	_	_	_	_	_	_	_	_	_	_	_
07/09	197	214	1	6	579	3,136	36	255	1,620,584	5,330,261	7,137	66,014
07/10	0	0	0	0	0	0	0	0	0	0	0	0
07/11	187	230	1	7	1,427	7,986	71	461	1,616,868	5,369,451	7,944	59,466
07/12	165	165	1	15	214	1,228	27	197	504,027	1,655,734	5,802	37,856
07/13	7	7	0	0	362	2,168	0	0	3,854	13,104	2,516	17,701
07/14	4	4	1	8	266	1,472	0	0	6,684	22,316	421	3,182
07/15	5	5	0	0	56	303	0	0	4,250	14,685	794	6,342
07/16	0	0	0	0	0	0	0	0	0	0	0	0
07/17	177	186	0	0	851	4,775	18	137	1,047,695	3,524,505	4,513	37,603
07/18	5	5	0	0	244	1,247	0	0	9,406	31,864	266	2,079
07/19	_	_	_	_	_	_	_	_	_	_	_	

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			Chin	ook	Sock	keye	Co	ho	Pi	nk	Ch	um
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
07/20	167	215	0	0	216	1,268	5	45	1,850,610	6,208,460	736	5,831
07/21	22	22	0	0	41	227	23	165	51,473	173,752	11,758	88,919
07/22	179	188	2	11	234	1,341	41	301	874,505	2,948,500	717	5,422
07/23	159	164	0	0	98	544	49	298	472,194	1,566,615	351	2,643
07/24	146	150	0	0	251	1,431	367	2,433	487,161	1,634,378	8,979	65,208
07/25	105	106	1	10	78	398	59	441	286,388	967,219	286	2,157
07/26	0	0	0	0	0	0	0	0	0	0	0	0
07/27	0	0	0	0	0	0	0	0	0	0	0	0
07/28	200	235	27	354	1,386	7,428	809	5,781	1,733,137	5,904,916	1,947	14,548
07/29	34	34	1	17	67	377	99	782	81,538	289,676	305	2,271
07/30	7	7	0	0	33	200	14	100	49,440	172,551	26	225
07/31	206	246	10	105	900	5,264	1,443	9,820	1,926,693	6,767,180	6,435	48,423
08/01	12	12	0	0	117	668	124	1,024	36,632	128,539	176	1,323
08/02	4	4	0	0	11	73	43	316	7,026	23,791	63	422
08/03	208	318	7	71	1,187	6,800	819	5,676	3,314,432	11,726,977	880	6,482
08/04	185	207	1	12	695	4,057	483	3,537	1,585,742	5,617,535	377	2,776
08/05	194	227	7	62	715	3,845	987	6,990	1,628,242	5,796,821	511	3,622
08/06	182	206	1	13	716	4,183	2,170	12,221	1,459,211	5,089,838	510	3,845
08/07	186	198	3	18	835	4,500	990	6,843	1,077,456	3,832,786	1,942	15,266
08/08	0	0	0	0	0	0	0	0	0	0	0	0
08/09	161	164	1	11	390	2,203	2,907	20,362	662,632	2,386,854	6,887	46,823
08/10	0	0	0	0	0	0	0	0	0	0	0	0
08/11	0	0	0	0	0	0	0	0	0	0	0	0
08/12	0	0	0	0	0	0	0	0	0	0	0	0
08/13	0	0	0	0	0	0	0	0	0	0	0	0
08/14	0	0	0	0	0	0	0	0	0	0	0	0
08/15	0	0	0	0	0	0	0	0	0	0	0	0
08/16	0	0	0	0	0	0	0	0	0	0	0	0
08/17	0	0	0	0	0	0	0	0	0	0	0	0
08/18	102	104	16	173	555	3,705	9,949	74,431	348,627	1,198,987	20,259	143,025
08/19	0	0	0	0	0	0	0	0	0	0	0	0
08/20	-	-	_	_	170	-	- 5.505	-	-	- 0.45.752	-	- 214
08/21	62	64	0	0	178	944	5,785	37,337	253,024	845,753	39	314
08/22	21	23	0	0	56	306	3,015	19,832	57,354	195,139	109	637
08/23	7	9	0	0	3	16	1,625	8,990	21,505	74,121	0	0
08/24	14	14	0	0	32	205	854	5,301	39,974	136,604	2	16
08/25	8	8	0	0	10	53	572	3,399	23,146	82,594	0	0
08/26	5	5	0	0	2	14	12	96	27,733	110,936	0	0
08/27	_	-	_	_	-	_	-	-	- ( 770	- 27.117	_	_
08/28	4	4	0	0		0	8	64	6,778	27,117	0	0
08/29	0	0	0	0	0	0	0	0	0	0	0	0
08/30	0	0	0	0	0	0	0	0	0	0	0	0
08/31	0	0	0	0	0	0	0	0	0	0	0	0
09/01	0	0	0	0	0	0	0	0	0	0	0	0
09/02	0	0	0	0	0	0	0	0	0	0	0	0
09/03	0	0	0	0	0	0	0	0	0	0	0	0

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			Chin	ook	Soci	keye	Сс	ho	P	ink	C	hum
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
09/04	0	0	0	0	0	0	0	0	0	0	0	0
09/05	0	0	0	0	0	0	0	0	0	0	0	0
09/06	0	0	0	0	0	0	0	0	0	0	0	0
09/07	0	0	0	0	0	0	0	0	0	0	0	0
09/08	0	0	0	0	0	0	0	0	0	0	0	0
09/09	0	0	0	0	0	0	0	0	0	0	0	0
09/10	0	0	0	0	0	0	0	0	0	0	0	0
09/11	0	0	0	0	0	0	0	0	0	0	0	0
09/12	0	0	0	0	0	0	0	0	0	0	0	0
09/13	0	0	0	0	0	0	0	0	0	0	0	0
09/14	0	0	0	0	0	0	0	0	0	0	0	0
09/15	0	0	0	0	0	0	0	0	0	0	0	0
09/16	0	0	0	0	0	0	0	0	0	0	0	0
09/17	0	0	0	0	0	0	0	0	0	0	0	0
Total	222	6,085	496	6,494	60,763	341,236	34,968	237,899	37,873,270	127,295,081	376,148	2,915,417
Averag	ge weight			13.09		5.62		6.80		3.36		7.75

Note: En dashes indicate confidential data.

Appendix D2.—Area E commercial salmon harvest by species, excluding Copper River and Bering River districts, 1995–2014.

Year <sup>a</sup>	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	44,296,191	1,491,348	47,232,393
10 Yr Avg	611	1,153,192	199,695	47,492,923	3,166,984	52,013,405

<sup>&</sup>lt;sup>a</sup> 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.

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Appendix D3.-Prince William Sound commercial common property pink salmon harvest for all gear types, by district, 1995–2014.

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
10 Yr Avg	14,497,699	7,488,912	4,705,997	52,046	125,378	11,956,529	665,900	603,845	40,096,306

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

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Appendix D4.-Prince William Sound commercial common property chum salmon harvest for all gear types, by district, 1995–2014.

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
10 Yr Avg	59,369	14,689	1,572,891	718	213,248	164,176	467,557	13,942	2,506,589

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

Appendix D5.-Aerial escapement indices for pink and chum salmon by district, Prince William Sound, 2014.

			Pink salmon	
	Ev	ven cycle	1966–2010	Observed
	esc	capement	even years	escapement
District	go	oal range	median index <sup>a</sup>	index b
Eastern	250,000	- 580,000	390,000	270,244
Northern/Unakwik	140,000	- 210,000	160,000	105,333
Coghill	60,000	- 150,000	100,000	63,290
Northwestern	70,000	- 140,000	100,000	67,030
Eshamy	3,000	- 11,000	6,000	12,400
Southwestern	70,000	- 160,000	130,000	83,581
Montague	50,000	- 140,000	70,000	24,917
Southeastern	150,000	- 310,000	200,000	185,072
Total	793,000	- 1,701,000	1,156,000	811,867

			Chum salmon	
			1976–2012	Observed
			mean	escapement
District	Escapement rang	ge <sup>c</sup>	index <sup>d</sup>	index b
Eastern	50,000	and up	104,862	61,969
Northern/Unakwik	20,000	and up	38,510	14,680
Coghill	8,000	and up	19,589	10,281
Northwestern	5,000	and up	14,730	7,072
Southeastern	8,000	and up	31,348	20,467
Total <sup>e</sup>	91,000	and up	209,039	114,468

<sup>&</sup>lt;sup>a</sup> Beginning in 2012, pink salmon will be managed to achieve the median value of the estimated escapement by district. The 1965–2009 (odd years) and 1966–2010 (even years) median values will be used.

Based on weekly aerial survey counts of 215 index spawning streams in Prince William Sound. This does not represent the total spawning escapement but rather a comparable annual index.

<sup>&</sup>lt;sup>c</sup> Escapement goal changed to a lower bound sustainable escapement goal (SEG) with no upper end after the 2005 escapement goal review.

d SEG thresholds are specified with the desire to maintain an escapement near the average.

<sup>&</sup>lt;sup>e</sup> Totals exclude districts without escapement goals (Eshamy, Southwestern, and Montague districts).

Appendix D6.-Prince William Sound pink salmon escapement indices by district, 1995-2014.

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 <sup>b</sup>	270,244	105,843	63,290	67,030	12,400	83,581	24,917	185,072	812,376
				Even 10 ye	ar average				
	397,299	174,649	140,998	101,872	5,049	110,779	119,176	290,864	1,340,686
				Odd 10 yea	ar average				
	688,189	212,580	254,063	131,103	9,433	187,308	338,909	839,510	2,661,095
								-	

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

<sup>&</sup>lt;sup>a</sup> 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.

Appendix D7.-Prince William Sound chum salmon escapement indices by district, 1995-2014.

Year	Eastern	Northern <sup>a</sup>	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
10 Yr Avg	108,442	36,053	18,684	14,806	50,359

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

<sup>&</sup>lt;sup>a</sup> Northern District totals include both Northern and Unakwik district counts combined.

## **APPENDIX E: SALMON ENHANCEMENT**

Appendix E1.-Summary of salmon runs to Prince William Sound and Copper River hatcheries, 2014.

Sockeye salmon <sup>a</sup>			BY 2009	BY 2010	2014	Estimated	Estimated	Broodstock	Estimated	
-			release	release	forecast	CPF	sales harvest	& unharvested	total	Eggs
Hatchery					run	b contribution	contribution c	contribution d	run '	
Gulkana Hatchery I			20,680,000	20,640,000	467,914	349,441	0	53,737	403,178	27,900,000
Gulkana Hatchery II			1,330,000	1,340,000	407,914	349,441	0	33,737	403,176	1,750,000
Main Bay Hatchery			8,680,000	11,040,000	1,038,000	1,187,930	0 f	84,324	1,272,254	11,600,000
Total sockeye salmon			30,690,000	33,020,000	1,505,914	1,537,371	0	138,061	1,675,432	41,250,000
Coho salmon a, g				BY 2011	2014	Estimated	Estimated	Broodstock	Estimated	
				release	forecast	CPF	sales harvest	& unharvested	total	Eggs
Hatchery or release site					run	b contribution	g contribution c	contribution d	run '	e collected
Solomon Gulch				1,657,016	106,480	20,309	1,139	1,804	23,252	2,155,236
Wally Noerenberg				3,210,000	234,800	184,330	10,877	6,584	201,791	4,000,000
Total coho salmon				4,867,016	341,280	204,639	12,016	8,388	225,043	6,155,236
Pink salmon <sup>a</sup>				BY 2012	2014	Estimated	Estimated	Broodstock	Estimated	
				release	forecast	CPF	sales harvest	& unharvested	total	Eggs
Hatchery					run	b contribution	contribution c	contribution d	run '	e collected
Solomon Gulch				218,276,748	12,943,811	23,585,058	1,592,943	281,008	25,459,009	230,000,096
Armin F. Koernig				152,000,000	7,000,000	3,500,389	741,318	199,665	4,441,372	166,000,000
Wally Noerenberg				135,000,000	9,300,000	5,604,883	1,840,907	254,381	7,700,171	149,000,000
Cannery Creek				94,300,000	4,900,000	4,674,621	66,935	342,152	5,083,708	190,000,000
Total pink salmon				599,576,748	34,143,811	37,364,952	4,242,103	1,077,206	42,684,261	735,000,096
Chum salmon a	BY 2008	BY 2009	BY 2010	BY 2011	2014	Estimated	Estimated	Broodstock	Estimated	
	release	release	release	release	forecast	CPF	sales harvest	& unharvested	total	Eggs
Hatchery or release site					run	b contribution	contribution c	contribution d	run '	e collected
Sawmill Bay	15,100,000	12,900,000	30,500,000	29,400,000	492,000	82,154	0	0	82,154	0
Wally Noerenberg	71,900,000	76,500,000	69,000,000	74,100,000	1,643,000	635,199	197,580	189,818	1,022,597	144,000,000
Port Chalmers	38,100,000	40,800,000	40,000,000	36,800,000	495,000	195,988	0	0	195,988	0
Mixed h	0	0	0	0	0	0	0	0	0	0
Total chum salmon	125,100,000	130,200,000	139,500,000	140,300,000	2,630,000	0 913,341	197,580	189,818 0	1,300,739	0 144,000,000
Total salmon				<u> </u>		40,020,303	4,451,699	1,413,473	45,885,475	926,405,332

<sup>&</sup>lt;sup>a</sup> Contribution estimates from Prince William Sound Aquaculture Corporation (PWSAC) and Valdez Fisheries Development Association (VFDA) hatcheries are based on analysis of otolith recoveries, historical data, and location of harvest as reported on fish tickets.

<sup>&</sup>lt;sup>b</sup> Gulkana Hatchery run forecasts were completed by ADF&G; all other hatchery run forecasts were completed by PWSAC and VFDA.

<sup>&</sup>lt;sup>c</sup> Includes whole fish purse seine and raceway harvest, but does not include carcass sales from viable broodstock.

d Includes viable broodstock, unviable broodstock, holding mortalities, watershed spawners, donated and discarded fish, and fish remaining in the bay after all harvests were complete.

e Does not include confiscated salmon.

f Includes Solf Lake marked sockeye salmon.

g Includes remote releases at Chenega, Cordova, and Whittier.

Appendix E2.-Historical harvest contributions, thermally marked otolith releases, and total return of coho salmon to Prince William Sound hatcheries, brood years 1988–2011.

Solomo	on Gulch Hat	chery	Hatchery	Hatchery	Hatchery	Hatchery	Hatchery	Total	Estimated
Brood	Return	Fry	contribution	contribution	contribution	contribution to	contribution to	hatchery	marine
year	year	release	to the CCPF <sup>a</sup>	to sub & pu harvest b	to sport harvest <sup>c</sup>	broodstock esc. d	cost recovery. e	return	survival
1988	1991	807,153	4,157	984	10,536	1,461	39,176	56,314	6.98%
1989	1991	993,633	5,000	369	17,789	2,651	26,776	52,585	5.29%
1990	1992	1,226,044	102	305	12,979	1,658	2,343	17,387	1.42%
1990	1993	461,388	0	143	19,012	11,376	22,091	52,622	11.41%
1991	1994	915,087	78,006	0	37,474	16,045	21,592	153,117	16.73%
1992	1995	1,325,316	87,360	38	-				12.55%
1993	1990	1,875,823	47,500	38 45	43,467	21,772 13,605	13,713 9,818	166,350 107,488	5.73%
1994	1997	1,315,183	,	321	36,520 37,126	3,880	19,068	84,112	5.73% 6.40%
1993	1998	1,748,486	23,717	541	•		•	119,303	6.82%
1990	2000		67,232 342,490	468	36,310	2,541 1,625	12,679	-	
		1,863,528	· · · · · · · · · · · · · · · · · · ·		68,014	· ·	24,887	437,484	23.48%
1998 1999	2001	1,625,599	147,000	230	60,975	1,778	25,595	235,578	14.49%
	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	20,000	1,804	1,139	24,373	1.47%

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Wally	Noerenbe	erg Hatchery							
		•	Hatchery	Hatchery	Hatchery	Hatchery	Hatchery	Total	Estimated
Brood	Return	Fry	contribution	contribution	contribution	contribution to	contribution to	hatchery	marine
year	year	release	to the CCPF <sup>a</sup>	to sub & pu harvest b	to sport harvest c	broodstock esc. d	cost recovery. e	return	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		9	20,569	1,399	0	21,977	9.72%
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	18,438	6,584	10,877	201,791	6.29%

<sup>&</sup>lt;sup>a</sup> Commercial common property fishery (CCPF).

b Subsistence and personal use fisheries.

<sup>&</sup>lt;sup>c</sup> 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.

<sup>&</sup>lt;sup>d</sup> 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.

<sup>&</sup>lt;sup>e</sup> Hatchery cost recovery is the whole fish purse seine and raceway effort and does not include carcass sales from viable broodstock.

Appendix E3.—Sockeye salmon hatchery and wild stock contributions to the Copper River drift gillnet commercial common property fishery by period, 2014.

						Orig	in			
			Gulk		Main		Hatchery	Wild		<u>-</u>
Dates	Period		Number		Number	Percent	Total	Number		Total
05/15 - 05/15	1 a	12	0	0.0%	0	0.0%	0		100.0%	32,011
05/19 - 05/19	2 a	12	0	0.0%	0	0.0%	0	82,896	100.0%	82,896
05/22 - 05/23	3 <sup>a,b</sup>	36	0	0.0%	0	0.0%	0	222,704		222,704
05/26 - 05/27	4 <sup>a</sup>	24	0	0.0%	0	0.0%	0	152,910		152,910
05/29 - 05/30	5 a	36	0	0.0%	0	0.0%	0	183,181	100.0%	183,181
06/02 - 06/03	6 b	36	8,507	4.2%	8,507	4.2%	17,013	187,147	91.7%	204,160
06/05 - 06/07	7	48	20,549	8.3%	5,137	2.1%	25,687	220,904	89.6%	246,591
06/09 - 06/11	8	48	13,422	8.3%	21,810	13.5%	35,232	125,828	78.1%	161,060
06/12 - 06/14	9	48	17,521	18.8%	8,761	9.4%	26,282	67,165	71.9%	93,447
06/16 - 06/17	10	36	6,904	18.8%	4,219	11.5%	11,124	25,699	69.8%	36,823
06/19 - 06/20	11	36	28,168	28.1%	4,173	4.2%	32,341	67,813	67.7%	100,154
06/23 - 06/24	12	36	28,922	28.1%	6,427	6.3%	35,349	67,484	65.6%	102,832
06/26 - 06/27	13	36	28,140	41.7%	5,628	8.3%	33,768	33,768	50.0%	67,535
06/30 - 07/02	14	48	35,468	44.0%	2,418	3.0%	37,886	42,723	53.0%	80,609
07/03 - 07/05	15	48	22,484	37.5%	3,747	6.3%	26,231	33,725	56.3%	59,956
07/07 - 07/08	16	36	25,860	45.8%	0	0.0%	25,860	30,561	54.2%	56,421
07/10 - 07/12	17	48	3,493	45.8%	79	1.0%	3,572	4,048	53.1%	7,620
07/14 - 07/15	18	36	16,697	37.5%	1,391	3.1%	18,088	26,436	59.4%	44,524
07/17 - 07/18	19	36	16,597	38.5%	0	0.0%	16,597	26,465	61.5%	43,062
07/21 - 07/22	20	36	8,173	35.4%	481	2.1%	8,654	14,424	62.5%	23,078
07/24 - 07/25	21	36	7,523	39.8%	0	0.0%	7,523	11,392	60.2%	18,915
07/28 - 07/29	22	36	4,290	34.5%	0	0.0%	4,290	8,136	65.5%	12,426
07/31 - 08/01	23 °	36	2,846	32.8%	0	0.0%	2,846	5,820	67.2%	8,666
08/04 - 08/05	24 <sup>c</sup>	36	1,128	30.8%	0	0.0%	1,128	2,529	69.2%	3,657
08/07 - 08/08	25 °	36	482	29.3%	0	0.0%	482	1,161	70.7%	1,643
08/11 - 08/12	26 °	36	458	27.3%	0	0.0%	458	1,216	72.7%	1,674
08/18 - 08/19	27 °	36	204	23.8%	0	0.0%	204	652	76.2%	856
08/25 - 08/26	28 °	24	46	20.3%	0	0.0%	46	180	79.7%	226
08/28 - 08/29	29 <sup>c</sup>	24	46	18.8%	0	0.0%	46	196	81.2%	242
09/01 - 09/02	30 °	24	11	16.8%	0	0.0%	11	55	83.2%	66
09/04 - 09/05	31 °	24	6	15.3%	0	0.0%	6	36	84.7%	42
09/08 - 09/09	32 <sup>d</sup>	24	0	0.0%	0	0.0%	0	10	100.0%	10
09/11 - 09/12	33 <sup>d</sup>	24	0	0.0%	0	0.0%	0	1	100.0%	1
09/15 - 09/16	34 <sup>d</sup>	36	0	0.0%	0	0.0%	0	9	100.0%	9
09/18 - 09/19	35 <sup>e</sup>	36	0	0.0%	0	0.0%	0	0	0.0%	0
09/22 - 09/24	36 <sup>e</sup>	60	0	0.0%	0	0.0%	0	0	0.0%	0
09/25 - 09/27	37 <sup>f</sup>	60	0	0.0%	0	0.0%	0	0	0.0%	0
09/29 10/01	38 <sup>e</sup>	60	0	0.0%	0	0.0%	0	0	0.0%	0
10/02 10/04	39 <sup>e</sup>	60	0	0.0%	0	0.0%	0	0	0.0%	0
10/06 10/08	40 e	60	0	0.0%	0	0.0%	0	0	0.0%	0
10/09 10/11	41 <sup>e</sup>	60	0	0.0%	0	0.0%	0	0	0.0%	0
Total		1,560	297,943	14.5%	72,779	3.6%	370,722	1,679,285	81.9%	2,050,007

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

<sup>&</sup>lt;sup>a</sup> No samples were collected; entire harvest assumed to originate from wild stocks.

One fish from NEETSUMBAY09SUM was harvested and identified. This fish was not included in the overall contribution estimate for this period.

No samples collected; Gulkana Hatchery proportions are based on a linear regression of proportions from Period 16 through Period 22.

<sup>&</sup>lt;sup>d</sup> Harvests assumed to be wild stocks.

e No harvest reported.

When 3 permits or less are fished the results are confidential.

Appendix E4.—Gulkana Hatchery sockeye salmon harvests and total contribution, 1977–2014.

	Hatchery	contributions			Total
	•	Subsistence/		Broodstock/	hatchery
Year	Commercial <sup>a</sup>	personal use b	Sport <sup>c</sup>	escapement d	run
1977	183	12	0	122	318
1978	720	74	1	1,300	2,095
1979	900	393	6	3,425	4,724
1980	350	589	22	4,250	5,211
1981	3,600	478	9	4,650	8,736
1982	3,600	322	4	5,740	9,666
1983	6,600	1,167	14	8,396	16,177
1984	5,318	450	9	4,846	10,623
1985	31,955	2,121	73	24,021	58,170
1986	30,404	2,667	113	25,408	58,592
1987	47,347	3,071	182	25,505	76,105
1988	92,552	9,351	260	94,563	196,726
1989	175,643	13,734	532	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	548	62,361	426,665
2003	138,056	19,513	253	45,024	202,845
2004	59,540	27,117	163	6,618	93,438
2005	95,897	28,031	200	92,455	216,583
2006	163,691	26,860	163	97,192	287,906
2007	94,232	9,656	89	28,648	132,625
2008	21,669	19,175	207	44,865	85,916
2009	59,948	29,355	335	43,409	133,047
2010	207,915	68,180	533	157,980	434,608
2011	487,916	33,113	299	59,589	580,917
2012	330,402	43,549	389	65,348	439,688
2013	318,212	45,800	407	72,369	436,788
10 Yr Average	183,942	33,084	278	66,847	284,152
2014	297,943	44,918	392	53,737	396,990

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

<sup>&</sup>lt;sup>a</sup> 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 GH sockeye salmon were attributed to the Glennallen subsistence fishery and 31,100 GH sockeye salmon were attributed to the Chitina personal use fishery.

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 E5.-Gulkana Hatchery salmon fry releases, 1974–2014.

	Ch	inook salm	on	_		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 1987				8,586,509	14,999,085				23,585,594
1988		1 200	1 200	9,905,907	12,491,826	2.497.207	502 275		22,397,733
1989	15 077	1,388	1,388	6,389,963	12,026,642	2,487,396	503,375		21,407,376
1990	15,977		15,977	10,870,655	12,004,491	3,130,373 4,906,005	515,046		26,520,565
1991	26,209		26,209	14,127,313 11,288,721	6,445,011 6,109,833	5,469,759	505,305		25,983,634 22,868,313
1992	30,488	34,842	65,330	11,288,721	7,049,000	8,420,000			27,109,000
1993	30,400	34,042	05,550	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
10 Yr Av	rerage			6,459,050	5,318,629	8,818,962			20,596,641
2014				6,000,000	6,000,000	10,000,000			22,000,000

Appendix E6.–Sockeye salmon hatchery and wild stock contributions to the Coghill District commercial common property fishery by period, 2014.

									Origin					
					Gulk		Main		Solf I		Hatchery	Wi	ld	
I	Date		Period	Hours	Number	Percent	Number	Percent	Number	Percent	Total	Number	Percent	Total
05/29	-	05/29	1	48 <sup>b</sup>	0	0.0%	156	83.3%	0	0.0%	156	31	16.7%	187
06/02	-	06/02	2	48 <sup>c</sup>	0	0.0%	683	83.3%	0	0.0%	683	137	16.7%	819
06/05	-	06/05	3	48	0	0.0%	2,530	100.0%	0	0.0%	2,530	0	0.0%	2,530
06/09	-	06/09	4	36	0	0.0%	2,726	86.2%	0	0.0%	2,726	436	13.8%	3,162
06/12	-	06/14	5	60	0	0.0%	13,159	85.9%	0	0.0%	13,159	2,153	14.1%	15,312
06/16	-	06/18	6	48	0	0.0%	28,876	93.4%	0	0.0%	28,876	2,034	6.6%	30,910
06/19	-	06/21	7	60	0	0.0%	19,265	83.3%	0	0.0%	19,265	3,853	16.7%	23,118
06/23	-	06/25	8	48	0	0.0%	7,069	62.0%	0	0.0%	7,069	4,340	38.0%	11,409
06/26	-	06/28	9	60	0	0.0%	9,735	76.5%	0	0.0%	9,735	2,995	23.5%	12,730
06/30	-	07/02	10	48	0	0.0%	5,764	60.0%	0	0.0%	5,764	3,843	40.0%	9,607
07/03	-	07/05	11	60	0	0.0%	11,210	58.5%	0	0.0%	11,210	7,940	41.5%	19,150
07/07	-	07/09	12	48	0	0.0%	6,031	47.9%	0	0.0%	6,031	6,567	52.1%	12,598
07/10	-	07/12	13	60	0	0.0%	3,766	53.8%	0	0.0%	3,766	3,241	46.3%	7,007
07/14	-	07/15	14	36 d	0	0.0%	3,478	75.8%	0	0.0%	3,478	1,113	24.2%	4,591
07/17	-	07/18	15	36	0	0.0%	2,533	59.2%	0	0.0%	2,533	1,747	40.8%	4,280
07/28	-	07/28	16	14 <sup>e</sup>	0	0.0%	27	31.8%	0	0.0%	27	58	68.2%	85
07/31	-	07/31	17	14 e	0	0.0%	43	18.1%	0	0.0%	43	195	81.9%	238
08/03	-	08/03	18	14 <sup>e</sup>	0	0.0%	31	11.2%	0	0.0%	31	243	88.8%	274
08/04	-	08/04	19	14 <sup>e</sup>	0	0.0%	27	7.8%	0	0.0%	27	316	92.2%	343
08/05	-	08/05	20	14 e	0	0.0%	22	6.1%	0	0.0%	22	341	93.9%	363
08/06	-	08/06	21	14 e	0	0.0%	12	5.2%	0	0.0%	12	216	94.8%	228
08/07	-	08/07	22	14 e	0	0.0%	5	2.6%	0	0.0%	5	189	97.4%	194
08/09	-	08/09	23	14	0	0.0%	8	4.3%	0	0.0%	8	172	95.7%	180
08/18	-	08/18	24	12 f	0	0.0%	2	4.3%	0	0.0%	2	43	95.7%	45
08/21	-	08/21	25	12 f	0	0.0%	1	4.3%	0	0.0%	1	18	95.7%	19
08/22	-	08/22	26	12 f	0	0.0%	1	4.3%	0	0.0%	1	27	95.7%	28
08/23	-	08/23	27	12 f	0	0.0%	0	4.3%	0	0.0%	0	1	95.7%	1
08/24	_	08/24	28	12 f	0	0.0%	1	4.3%	0	0.0%	1	18	95.7%	19
08/25	_	08/25	29	12 <sup>g</sup>	0	0.0%	0	0.0%	0	0.0%	0	8	100.0%	8
08/26	_	08/26	30	12 <sup>g</sup>	0	0.0%	0	0.0%	0	0.0%	0	5	100.0%	5
08/27	_	08/27	31	12 <sup>g</sup>	0	0.0%	0	0.0%	0	0.0%	0	5	100.0%	5

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							Orig	gin				
			Gı	ılkana <sup>+</sup>	Main I	Bay	So	lf Lake	Hatchery	Wi	ld	
Dates	Period	Hours	No.	Percent	No.	Percent	No.	Percent	Total	No.	Percent	Total
08/28 - 08/28	32	12 <sup>g</sup>	0	0.0%	0	0.0%	0	0.0%	0	6	100.0%	6
08/29 - 08/29	33	12 <sup>g</sup>	0	0.0%	0	0.0%	0	0.0%	0	1	100.0%	1
09/01 - 09/02	34	24 <sup>g</sup>	0	0.0%	0	0.0%	0	0.0%	0	1	100.0%	1
09/03 - 09/03	35	12 h	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/04 - 09/04	36	12 <sup>g</sup>	0	0.0%	0	0.0%	0	0.0%	0	1	100.0%	1
09/05 - 09/05	37	12 <sup>g</sup>	0	0.0%	0	0.0%	0	0.0%	0	2	100.0%	2
09/06 - 09/06	38	12 <sup>g</sup>	0	0.0%	0	0.0%	0	0.0%	0	1	100.0%	1
09/07 - 09/07	39	12 h	0	0.0%	0	0.0%	0	0.0%	0	2	100.0%	2
09/08 - 09/08	40	12 <sup>g</sup>	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/09 - 09/09	41	12 h	0	0.0%	0	0.0%	0	0.0%	0	3	100.0%	3
09/10 - 09/10	42	12 h	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/11 - 09/11	43	12 h	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/12 - 09/12	44	12 h	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/13 - 09/13	45	12 h	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/14 - 09/14	46	12 h	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/15 - 09/15	47	12 h	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/16 - 09/16	48	12 <sup>g</sup>	0	0.0%	0	0.0%	0	0.0%	0	3	100.0%	3
09/17 - 09/17	49	12 h	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/18 - 09/18	50	12 h	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/19 - 09/19	51	12 <sup>g</sup>	0	0.0%	0	0.0%	0	0.0%	0	1	100.0%	1
09/20 - 09/26	52	156 <sup>i</sup>	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/27 - 10/03	53	156 h	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
10/04 - 10/10	54	156 h	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Total			0	0.0%	117,159	73.5%	0	0.0%	117,159	42,307	26.5%	159,466

Note: Total harvest data as of 22 April 2015. Personal use harvests (747fish) are excluded.

<sup>&</sup>lt;sup>a</sup> Samples were not processed for SrCl mark identification, so the Gulkana Hatchery contribution is unknown. All fish not marked with thermal marks are assumed to be of wild origin.

<sup>&</sup>lt;sup>b</sup> No samples collected. Proportions based on Period 2 results.

<sup>&</sup>lt;sup>c</sup> One non-PWS fish was found with the thermal mark of SWEETHEART10, and it was not included in the contribution estimate for this period.

d One non-PWS fish was found with the thermal mark of SPEELARM10A, and it was not included in the contribution estimate for this period.

<sup>&</sup>lt;sup>e</sup> No samples collected. Proportions based on a linear interpolation to estimate hatchery contribution.

<sup>&</sup>lt;sup>f</sup> No samples collected. Proportions based on Period 23 results.

<sup>&</sup>lt;sup>g</sup> No samples collected. Entire harvest assumed to originate from wild stocks.

h No harvest reported.

When 3 permits or less are fished the results are confidential.

Appendix E7.-Pink salmon hatchery and wild stock contributions to the Coghill District commercial common property fishery by period, 2014.

			0.1	G 1.1		G 1	TT 11 37	Origin	4 5 77		TT . 1	****		
Datas	Period	Hours	Solomor Number		Cannery	Percent	Wally No		A.F. Ko		Hatchery	Wil	Percent	Takal
Dates 05/29 - 05/31		Hours 48	Number 0	Percent 0.0%	Number 0	0.0%	Number 0	Percent 0.0%	Number 0	Percent 0.0%	total 0	Number 0	0.0%	Total 0
06/02 - 06/04		48 48	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
06/02 - 06/04		48 48	0	38.2%	0	0.0%	0	0.0%	0	0.0%	0	1	61.8%	1
06/09 - 06/10	_	36	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
06/12 - 06/14		60	1	38.2%	0	0.0%	0	0.0%	0	0.0%	1	1	61.8%	2
06/12 - 06/14		48	1	38.2%	0	0.0%	0	0.0%	0	0.0%	1	2	61.8%	3
06/19 - 06/21	7	60	1	38.2%	0	0.0%	0	0.0%	0	0.0%	1	1	61.8%	2
06/23 - 06/25		48	52	38.2%	0	0.0%	0	0.0%	0	0.0%	52	83	61.8%	135
06/26 - 06/28		60	3,149	38.2%	0	0.0%	0	0.0%	0	0.0%	3,149	5,087	61.8%	8,236
06/30 - 07/02		48	3,536	38.2%	0	0.0%	0	0.0%	0	0.0%	3,536	5,711	61.8%	9,247
07/03 - 07/05		60	10,581	40.3%	0	0.0%	0	0.0%	0	0.0%	10,581	15,688	59.7%	26,269
07/07 - 07/09		48	10,070	35.2%	0	0.0%	315	1.1%	0	0.0%	10,384	18,252	63.7%	28,636
07/10 - 07/12		60	1,896	13.0%	0	0.0%	1,896	13.0%	0	0.0%	3,792	10,745	73.9%	14,537
07/14 - 07/15		36	13,317	44.8%	0	0.0%	3,717	12.5%	0	0.0%	17,034	12,698	42.7%	29,732
07/17 - 07/18		36	522	3.5%	174	1.2%	7,650	51.2%	0	0.0%	8,346	6,607	44.2%	14,953
07/28 - 07/28		14	142	2.0%	426	6.0%	4,261	60.0%	284	4.0%	5,113	1,989	28.0%	7,102
07/31 - 07/31		14	0	0.0%	0	0.0%	13,879	66.7%	0	0.0%	13,879	6,939	33.3%	20,818
08/03 - 08/03	18	14	4,205	1.0%	25,230	6.3%	323,779	80.2%	33,639	8.3%	386,853	16,820	4.2%	403,673
08/04 - 08/04	19	14	0	0.0%	116,738	34.9%	201,273	60.2%	4,025	1.2%	322,037	12,076	3.6%	334,113
08/05 - 08/05	20	14	0	0.0%	97,278	27.5%	244,587	69.1%	3,997	1.1%	345,862	8,264	2.3%	354,126
08/06 - 08/06		14	0	0.0%	48,542	20.0%	189,060	77.9%	2,555	1.1%	240,157	2,555	1.1%	242,712
08/07 - 08/07	22	14	1,179	1.0%	29,014	25.6%	80,661	71.2%	1,775	1.6%	112,630	596	0.5%	113,226
08/09 - 08/09	23	14	2,348	2.1%	35,220	31.3%	72,788	64.6%	2,348	2.1%	112,704	0	0.0%	112,704
08/18 - 08/18	24	12	0	0.0%	0	0.0%	27,998	100.0%	0	0.0%	27,998	0	0.0%	27,998
08/21 - 08/21	25	12	0	0.0%	5,163	7.8%	59,746	90.0%	738	1.1%	65,646	738	1.1%	66,384
08/22 - 08/22	26	12	0	0.0%	4,240	7.1%	52,267	87.1%	1,763	2.9%	58,270	1,763	2.9%	60,033
08/23 - 08/23	27	12	0	0.0%	2,030	6.3%	26,895	84.1%	1,522	4.8%	30,448	1,522	4.8%	31,970
08/24 - 08/24	28	12	0	0.0%	1,048	4.0%	25,144	96.0%	0	0.0%	26,192	0	0.0%	26,192
08/25 - 08/25	29	12	0	0.0%	580	4.0%	13,918	96.0%	0	0.0%	14,498	0	0.0%	14,498
08/26 - 08/26	30	12	0	0.0%	541	4.0%	12,972	96.0%	0	0.0%	13,513	0	0.0%	13,513
08/27 - 08/27	31	12	0	0.0%	315	4.0%	7,551	96.0%	0	0.0%	7,866	0	0.0%	7,866
08/28 - 08/28	32	12	0	0.0%	209	4.0%	5,014	96.0%	0	0.0%	5,223	0	0.0%	5,223
08/29 - 08/29	33	12	0	0.0%	175	4.0%	4,202	96.0%	0	0.0%	4,377	0	0.0%	4,377
09/01 - 09/02	34	24	0	0.0%	264	4.0%	6,331	96.0%	0	0.0%	6,595	0	0.0%	6,595
09/03 - 09/03	35	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0

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								Origin						
			Solomo	n Gulch	Cannery	Creek	Wally Noe	renberg	A.F. Ko	ernig	Hatchery	Wi	ld	
Dates	Period	Hours	Number	Percent	Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
09/04 - 09/04	36	12	0	0.0%	190	4.0%	4,569	96.0%	0	0.0%	4,739	0	0.0%	4,759
09/05 - 09/05	37	12	0	0.0%	115	4.0%	2,758	96.0%	0	0.0%	2,873	0	0.0%	2,873
09/06 - 09/06	38	12	0	0.0%	163	4.0%	3,917	96.0%	0	0.0%	4,025	0	0.0%	4,080
09/07 - 09/07	39	12	0	0.0%	25	4.0%	606	96.0%	0	0.0%	631	0	0.0%	631
09/08 - 09/08	40	12	0	0.0%	31	4.0%	755	96.0%	0	0.0%	714	0	0.0%	786
09/09 - 09/09	41	12	0	0.0%	13	4.0%	323	96.0%	0	0.0%	315	0	0.0%	336
09/10 - 09/10	42	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/11 - 09/11	43	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/12 - 09/12	44	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/13 - 09/13	45	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/14 - 09/14	46	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/15 - 09/15	47	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/16 - 09/16	48	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/17 - 09/17	49	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/18 - 09/18	50	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/19 - 09/19	51	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/20 - 09/26	52	156	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/27 - 10/03	53	156	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
10/04 - 10/10	54	156	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Total	•	•	50,999	2.6%	367,725	18.4%	1,398,832	70.0%	52,647	2.6%	1,870,035	128,138	6.4%	1,998,341

Appendix E8.-Chum salmon hatchery and wild stock contributions to the Coghill District commercial common property harvest, 2014.

			Wally No	erenberg	Port Ch	nalmers	Armin F K	oernig	Hatchery	Wi	ild	
Dates	Period	Hours	Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
05/29 - 05/31	1	48 <sup>a</sup>	5,702	96%	0	0%	112	2%	5,814	112	2%	5,926
06/02 - 06/04	2	48	15,406	96%	0	0%	302	2%	15,708	302	2%	16,010
06/05 - 06/07	3	48	15,727	94%	342	2%	342	2%	16,411	342	2%	16,753
06/09 - 06/10	4	36	11,662	87%	696	5%	522	4%	12,881	522	4%	13,403
06/12 - 06/14	5	60	50,649	90%	1,151	2%	4,604	8%	56,405	0	0%	56,405
06/16 - 06/18	6	48	61,733	76%	6,263	8%	10,736	13%	78,732	2,684	3%	81,416
06/19 - 06/21	7	60	105,029	94%	2,839	3%	2,839	3%	110,707	1,419	1%	112,126
06/23 - 06/25	8	48	59,896	90%	5,051	8%	0	0%	64,948	1,443	2%	66,391
06/26 - 06/28	9	60	53,956	89%	1,458	2%	729	1%	56,143	4,375	7%	60,518
06/30 - 07/02	10	48	41,692	83%	1,762	3%	1,174	2%	44,628	5,872	12%	50,500
07/03 - 07/05	11	60	75,168	71%	4,100	4%	4,100	4%	83,368	23,234	22%	106,602
07/07 - 07/09	12	48	20,942	69%	0	0%	1,653	5%	22,595	7,716	25%	30,311
07/10 - 07/12	13	60	13,040	74%	204	1%	204	1%	13,448	4,075	23%	17,523
07/14 - 07/15	14	36	2,212	49%	92	2%	92	2%	2,397	2,120	47%	4,517
07/17 - 07/18	15	36	393	17%	36	2%	0	0%	429	1,824	81%	2,253
07/28 - 07/28	16	14 <sup>b</sup>	7	9%	1	1%	0	0%	8	72	90%	80
07/31 - 07/31	17	14 <sup>b</sup>	7	4%	1	0%	0	0%	7	146	95%	153
08/03 - 08/03	18	14 <sup>b</sup>	3	2%	0	0%	0	0%	3	120	98%	123
08/04 - 08/04	19	14 <sup>b</sup>	3	1%	0	0%	0	0%	3	279	99%	282
08/05 - 08/05	20	14 <sup>b</sup>	5	1%	0	0%	0	0%	5	908	99%	913
08/06 - 08/06	21	14 <sup>b</sup>	0	0%	0	0%	0	0%	0	179	100%	179
08/07 - 08/07	22	14 °	0	0%	0	0%	0	0%	0	524	100%	524
08/09 - 08/09	23	14 °	0	0%	0	0%	0	0%	0	159	100%	159
08/18 - 08/18	24	12 °	0	0%	0	0%	0	0%	0	80	100%	80
08/21 - 08/21	25	12 °	0	0%	0	0%	0	0%	0	20	100%	20
08/22 - 08/22	26	12 °	0	0%	0	0%	0	0%	0	109	100%	109
08/23 - 08/23	27	12 °	0	0%	0	0%	0	0%	0	1	100%	1
08/24 - 08/24	28	12 °	0	0%	0	0%	0	0%	0	2	100%	2
08/25 - 08/25	29	12 °	0	0%	0	0%	0	0%	0	3	100%	3
08/26 - 08/26	30	12 <sup>d</sup>	0	0%	0	0%	0	0%	0	0	0%	0
08/27 - 08/27	31	12 °	0	0%	0	0%	0	0%	0	5	100%	5
08/28 - 08/28	32	12 <sup>d</sup>	0	0%	0	0%	0	0%	0	0	0%	0
08/29 - 08/29	33	12 °	0	0%	0	0%	0	0%	0	1	100%	1
09/01 - 09/02	34	24 °	0	0%	0	0%	0	0%	0	1	100%	1
09/03 - 09/03	35	12 <sup>d</sup>	0	0%	0	0%	0	0%	0	0	0%	0

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			Wally No	erenberg	Port Ch	almers	Armin F K	Coernig	Hatchery	W	ild	
Dates	Period	Hours	Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
09/04 - 09/04	36	12 <sup>d</sup>	0	0%	0	0%	0	0%	0	0	0%	0
09/05 - 09/05	37	12 <sup>d</sup>	0	0%	0	0%	0	0%	0	0	0%	0
09/06 - 09/06	38	12 <sup>d</sup>	0	0%	0	0%	0	0%	0	0	0%	0
09/07 - 09/07	39	12 <sup>d</sup>	0	0%	0	0%	0	0%	0	0	0%	0
09/08 - 09/08	40	12 <sup>d</sup>	0	0%	0	0%	0	0%	0	0	0%	0
09/09 - 09/09	41	12 <sup>d</sup>	0	0%	0	0%	0	0%	0	0	0%	0
09/10 - 09/10	42	12 <sup>d</sup>	0	0%	0	0%	0	0%	0	0	0%	0
09/11 - 09/11	43	12 <sup>d</sup>	0	0%	0	0%	0	0%	0	0	0%	0
09/12 - 09/12	44	12 <sup>d</sup>	0	0%	0	0%	0	0%	0	0	0%	0
09/13 - 09/13	45	12 <sup>d</sup>	0	0%	0	0%	0	0%	0	0	0%	0
09/14 - 09/14	46	12 <sup>d</sup>	0	0%	0	0%	0	0%	0	0	0%	0
09/15 - 09/15	47	12 <sup>d</sup>	0	0%	0	0%	0	0%	0	0	0%	0
09/16 - 09/16	48	12 <sup>d</sup>	0	0%	0	0%	0	0%	0	0	0%	0
09/17 - 09/17	49	12 <sup>d</sup>	0	0%	0	0%	0	0%	0	0	0%	0
09/18 - 09/18	50	12 <sup>d</sup>	0	0%	0	0%	0	0%	0	0	0%	0
09/19 - 09/19	51	12 <sup>d</sup>	0	0%	0	0%	0	0%	0	0	0%	0
09/20 - 09/26	52	156 <sup>d,e</sup>	0	0%	0	0%	0	0%	0	0	0%	0
09/27 - 10/03	53	156 <sup>d</sup>	0	0%	0	0%	0	0%	0	0	0%	0
10/04 - 10/10	54	156 <sup>d</sup>	0	0%	0	0%	0	0%	0	0	0%	0
Total			533,234	82.9%	23,996	3.7%	27,410	4.3%	584,641	58,648	9.1%	643,289

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

a No samples collected. Proportions are based on Period 2 results.

b No samples collected. A linear interpolation was used to determine hatchery contribution.

c No samples were collected. Entire harvest assumed to originate from wild stocks.

d No harvest reported.

e When 3 permits or less are fished the results are confidential.

Appendix E9.-Daily chum and coho salmon sales and sex ratios, sales summary, and broodstock summary at the Wally Noerenberg Hatchery, 2014.

Date         Female Harvest Pemale Harvest visock vis				Chum salmo	on		Cohe	o salmon
16/12   25.0%   31.940   31.940   0   0   0   ND   ND     16/13   35.0%   22.527   54.467   0   0   0   ND   ND     16/15   35.0%   31.286   112.233   0   0   ND   ND     16/15   35.0%   31.286   112.233   0   0   ND   ND     16/17   - 0   143.819   0   0   ND   ND     16/17   - 0   143.819   0   0   ND   ND     16/17   - 0   0   143.819   0   0   ND   ND     16/17   - 0   0   143.819   0   0   ND   ND     16/17   - 0   0   143.819   0   0   ND   ND     16/17   - 0   0   143.819   0   0   ND   ND     16/18   40.0%   29.387   173.206   0   0   ND   ND     17/105   - 799   174.005   8,716   8,716   ND   ND     17/106   - 1,729   175,734   9,916   18,632   ND   ND     17/107   - 3.996   179,730   11,294   29.926   ND   ND     17/109   - 1,875   185.690   13,056   72.538   ND   ND     17/10   - 1,875   185.690   13,056   72.538   ND   ND     17/11   - 4,560   190.250   14,945   87.483   ND   ND     17/12   - 2,077   192,327   15,643   103.126   ND   ND     17/13   - 1,410   193,737   13,225   116,361   ND   ND     17/14   - 393   194,676   8,782   125,143   ND   ND     17/15   - 576   195.252   10,027   135,170   ND   ND     17/17   - 242   196,482   2,455   149,223   ND   ND     17/17   - 340   197,580   1,379   196,632   ND   ND     17/17   - 7,714   7,714		%		Sales harvest		Brood stock	Sales	Sales harvest
06/13   35.0%   22.527   54.467   0   0   0   ND   ND     06/14   35.0%   26.480   80.947   0   0   0   ND   ND     06/16   -3   1.586   112.233   0   0   0   ND   ND     06/16   -3   1.586   143.819   0   0   0   ND   ND     06/17   -0   0   143.819   0   0   0   ND   ND     06/18   40.0%   29.387   173.206   0   0   0   ND   ND     07/08   -7   799   174,005   8.716   8.716   ND   ND     07/06   -1   1.729   175,734   9.916   18.632   ND   ND     07/07   -3   3.996   179,730   11.294   29.926   ND   ND     07/08   -2   2.395   182,125   14.435   44.361   ND   ND     07/09   -1   1.690   183.815   15.121   59.482   ND   ND     07/10   -3   1.875   185.690   13.056   72.538   ND   ND     07/11   -4   4.560   190.250   14.945   87.483   ND   ND     07/12   -2   2.077   192.327   15.643   103.126   ND   ND     07/13   -3   1.410   193.737   13.235   116.361   ND   ND     07/14   -9   39.9   194.676   8.782   125.143   ND   ND     07/15   -9   576   595.252   10.027   135.170   ND   ND     07/16   -9   988   196.240   11.598   146.768   ND   ND     07/18   -9   271   197.240   2.015   156.921   ND   ND     07/19   -2   271   197.240   2.015   156.921   ND   ND     07/12   -3   0   197.580   1.359   169.632   ND   ND     07/12   -3   0   197.580   0.359   169.622   ND   ND     07/12   -3   0   197.580   0.359   169.632   ND   ND     07/12   -3   0   197.580   0.359   169.632   ND   ND     07/22   -3   0   197.580   0.359   169.632   ND   ND     07/24   -3   0   197.580   0.359   169.632   ND   ND     07/25   -3   0   197.580   0.359   177.805   ND   ND     07/26   -3   0   197.580   0.359   169.632   ND   ND     07/27   -3   0   197.580   0.359   177.805   ND   ND     07/28   -3   0   197.580   0.317   178.05   ND   ND     07/29   -3   0   197.580   0.317   178.05   ND   ND     07/22   -3   0   197.580   0.317   178.05   ND   ND     07/25   -3   0   197.580   0.317   178.05   ND   ND     07/26   -3   0   197.580   0.317   178.05   ND   ND     07/27   -3   0   197.580   0.317   178.05   ND   ND     07/28   -3   0	Date	Female	Harvest a	cumulative	stock b	cumulative	harvest	cumulative
66/14   35.0%   26.480   80.947   0   0   0   ND   ND   06/15   35.0%   31,286   112,233   0   0   0   ND   ND   06/16   - 31,586   143,819   0   0   0   ND   ND   06/17   - 0   0   143,819   0   0   0   ND   ND   06/18   40.0%   29,387   173,206   0   0   ND   ND   07/05   - 799   174,005   8,716   8,716   ND   ND   07/06   - 1,729   175,734   9,916   18,632   ND   ND   07/07   - 3,996   179,730   11,294   29,926   ND   ND   07/08   - 2,395   182,125   14,435   44,361   ND   ND   07/09   - 1,690   183,815   15,121   59,482   ND   ND   07/10   - 1,875   185,690   130,56   72,538   ND   ND   07/11   - 4,560   190,250   14,945   87,483   ND   ND   07/12   - 2,077   192,327   15,643   103,126   ND   ND   07/13   - 1,410   193,737   13,235   116,361   ND   ND   07/14   - 939   194,676   8,782   125,143   ND   ND   07/15   - 576   195,252   10,027   135,170   ND   ND   07/16   - 988   196,240   11,598   146,768   ND   ND   07/17   - 242   196,482   2,455   149,223   ND   ND   07/18   - 487   196,969   5,683   154,906   ND   ND   07/19   - 271   197,240   2,015   156,921   ND   ND   07/20   - 340   197,580   1,359   169,632   ND   ND   07/21   - 0   197,580   1,359   169,632   ND   ND   07/22   - 0   197,580   1,359   169,632   ND   ND   07/23   - 0   197,580   0,317   175,609   ND   ND   07/24   - 0   197,580   0,3137   175,609   ND   ND   07/25   - 0   197,580   0,3137   175,609   ND   ND   07/26   - 0   197,580   0,3137   175,609   ND   ND   07/27   - 0   197,580   0,3137   175,609   ND   ND   07/28   - 0   197,580   0,3137   175,609   ND   ND   07/29   - 0   197,580   2,33   178,038   ND   ND   07/27   - 0   197,580   2,33   178,038   ND   ND   07/28   - 0   197,580   0,3137   175,609   ND   ND   07/29   - 0   197,580   2,33   178,038   ND   ND   07/29   - 0   197,580   2,33   178,038   ND   ND   07/29   - 0   197,580   2,33   178,038   ND   ND   07/29   - 0   197,580   2,34   177,805   ND   ND   07/29   - 0   197,580   2,34   179,818   ND   ND   07/29   - 0   197,580   2,34   179,818   ND   ND   07/29   - 0	06/12	25.0%		31,940	0	0	ND	ND
06/15   35.0%   31.286   112.233   0   0   ND   ND     06/16	06/13	35.0%	22,527	54,467	0	0	ND	ND
06/16	06/14	35.0%	26,480	80,947	0	0	ND	ND
06/17	06/15	35.0%	31,286	112,233	0	0	ND	ND
66/18	06/16	-	31,586	143,819	0	0	ND	ND
07/05         −         799         174,005         8,716         8,716         ND         ND           07/06         −         1,729         175,734         9,916         18,632         ND         ND           07/07         −         3,996         179,730         11,294         29,926         ND         ND           07/08         −         2,395         182,125         14,435         44,361         ND         ND           07/10         −         1,690         183,815         15,121         59,482         ND         ND           07/11         −         4,560         190,250         14,945         87,483         ND         ND           07/12         −         2,077         192,327         15,643         103,126         ND         ND           07/13         −         1,410         193,737         13,235         116,361         ND         ND           07/13         −         1,410         193,737         13,235         116,361         ND         ND           07/13         −         1,410         193,737         13,235         116,361         ND         ND           07/13         −         1,410	06/17	_	0	143,819	0	0	ND	ND
1,729	06/18	40.0%	29,387	173,206	0	0	ND	ND
07/07	07/05	_	799	174,005	8,716	8,716	ND	ND
07/108	07/06	_	1,729	175,734	9,916	18,632	ND	ND
07/09         -         1,690         183,815         15,121         59,482         ND         ND           07/10         -         1,875         185,690         13,056         72,538         ND         ND           07/11         -         4,560         190,250         14,945         87,483         ND         ND           07/12         -         2,077         192,327         15,643         103,126         ND         ND           07/13         -         1,410         193,737         13,235         116,361         ND         ND           07/14         -         939         194,676         8,782         125,143         ND         ND           07/15         -         576         195,252         10,027         135,170         ND         ND           07/16         -         988         196,240         11,598         146,768         ND         ND           07/17         -         242         196,482         2,455         149,223         ND         ND           07/18         -         487         196,699         5,683         154,906         ND         ND           07/19         -         271	07/07	_	3,996	179,730	11,294	29,926	ND	ND
07/10	07/08	_	2,395	182,125	14,435	44,361	ND	ND
07/11         — 4,560         190,250         14,945         87,483         ND         ND           07/12         — 2,077         192,327         15,643         103,126         ND         ND           07/13         — 1,410         193,737         13,235         116,361         ND         ND           07/14         — 939         194,676         8,782         125,143         ND         ND           07/15         — 576         195,252         10,027         135,170         ND         ND           07/16         — 988         196,240         11,598         146,768         ND         ND           07/17         — 242         196,482         2,455         149,223         ND         ND           07/18         — 487         196,699         5,683         154,906         ND         ND           07/19         — 271         197,240         2,015         156,921         ND         ND           07/21         — 0         197,580         2,352         159,273         ND         ND           07/21         — 0         197,580         10,359         169,632         ND         ND           07/22         — 0         197,580	07/09	_	1,690	183,815	15,121	59,482	ND	ND
07/12         —         2,077         192,327         15,643         103,126         ND         ND           07/13         —         1,410         193,737         13,235         116,361         ND         ND           07/14         —         939         194,676         8,782         125,143         ND         ND           07/15         —         576         195,252         10,027         135,170         ND         ND           07/16         —         988         196,240         11,598         146,768         ND         ND           07/17         —         242         196,482         2,455         149,223         ND         ND           07/18         —         487         196,969         5,683         154,906         ND         ND           07/19         —         271         197,240         2,015         156,921         ND         ND           07/20         —         340         197,580         2,352         159,273         ND         ND           07/21         —         0         197,580         2,352         159,273         ND         ND           07/23         —         0         197,58	07/10	-	1,875	185,690	13,056	72,538	ND	ND
07/13         —         1,410         193,737         13,235         116,361         ND         ND           07/14         —         939         194,676         8,782         125,143         ND         ND           07/15         —         576         195,252         10,027         135,170         ND         ND           07/16         —         988         196,240         11,598         146,768         ND         ND           07/17         —         242         196,482         2,455         149,223         ND         ND           07/18         —         487         196,969         5,683         154,906         ND         ND           07/19         —         271         197,240         2,015         156,921         ND         ND           07/20         —         340         197,580         2,352         159,273         ND         ND           07/21         —         0         197,580         2,352         159,273         ND         ND           07/22         —         0         197,580         1,359         169,632         ND         ND           07/23         —         0         197,580 <td>07/11</td> <td>_</td> <td>4,560</td> <td>190,250</td> <td>14,945</td> <td>87,483</td> <td>ND</td> <td>ND</td>	07/11	_	4,560	190,250	14,945	87,483	ND	ND
07/14         —         939         194,676         8,782         125,143         ND         ND           07/15         —         576         195,252         10,027         135,170         ND         ND         ND           07/16         —         988         196,240         11,598         146,768         ND         ND         ND           07/17         —         242         196,482         2,455         149,223         ND         ND           07/18         —         487         196,969         5,683         154,906         ND         ND           07/19         —         271         197,240         2,015         156,921         ND         ND           07/20         —         340         197,580         2,352         159,273         ND         ND           07/21         —         0         197,580         1,359         169,632         ND         ND           07/22         —         0         197,580         1,874         171,506         ND         ND           07/23         —         0         197,580         0         172,472         ND         ND           07/24         — <td< td=""><td>07/12</td><td>_</td><td>2,077</td><td>192,327</td><td>15,643</td><td>103,126</td><td>ND</td><td>ND</td></td<>	07/12	_	2,077	192,327	15,643	103,126	ND	ND
07/15         -         576         195,252         10,027         135,170         ND         ND           07/16         -         988         196,240         11,598         146,768         ND         ND           07/17         -         242         196,482         2,455         149,223         ND         ND           07/18         -         487         196,969         5,683         154,906         ND         ND           07/19         -         271         197,240         2,015         156,921         ND         ND           07/20         -         340         197,580         2,352         159,273         ND         ND           07/21         -         0         197,580         10,359         169,632         ND         ND           07/23         -         0         197,580         1,874         171,506         ND         ND           07/24         -         0         197,580         3,137         175,609         ND         ND           07/25         -         0         197,580         3,137         175,609         ND         ND           07/26         -         0         197,580	07/13	_	1,410	193,737	13,235	116,361	ND	ND
07/16         -         988         196,240         11,598         146,768         ND         ND           07/17         -         242         196,482         2,455         149,223         ND         ND         ND           07/18         -         487         196,969         5,683         154,906         ND         ND         ND           07/19         -         271         197,240         2,015         156,921         ND         ND           07/20         -         340         197,580         2,352         159,273         ND         ND           07/21         -         0         197,580         10,359         169,632         ND         ND           07/22         -         0         197,580         10,359         169,632         ND         ND           07/23         -         0         197,580         1,874         171,506         ND         ND           07/25         -         0         197,580         0         172,472         ND         ND           07/26         -         0         197,580         2,196         177,809         ND         ND           07/29         -         0<	07/14	_	939	194,676	8,782	125,143	ND	ND
07/17         -         242         196,482         2,455         149,223         ND         ND           07/18         -         487         196,969         5,683         154,906         ND         ND         ND           07/19         -         271         197,240         2,015         156,921         ND         ND           07/20         -         340         197,580         2,352         159,273         ND         ND           07/21         -         0         197,580         10,359         169,632         ND         ND           07/22         -         0         197,580         1,874         171,506         ND         ND           07/23         -         0         197,580         966         172,472         ND         ND           07/24         -         0         197,580         3,137         175,609         ND         ND           07/25         -         0         197,580         3,137         175,609         ND         ND           07/27         -         0         197,580         2,196         177,805         ND         ND           07/28         -         0         197,5	07/15	_	576	195,252	10,027	135,170	ND	ND
07/18         -         487         196,969         5,683         154,906         ND         ND           07/19         -         271         197,240         2,015         156,921         ND         ND           07/20         -         340         197,580         2,352         159,273         ND         ND           07/21         -         0         197,580         10,359         169,632         ND         ND           07/22         -         0         197,580         1,874         171,506         ND         ND           07/23         -         0         197,580         966         172,472         ND         ND           07/24         -         0         197,580         0         172,472         ND         ND           07/25         -         0         197,580         3,137         175,609         ND         ND           07/27         -         0         197,580         2,196         177,805         ND         ND           07/28         -         0         197,580         233         178,038         ND         ND           07/30         -         0         197,580         233	07/16	_	988	196,240	11,598	146,768	ND	ND
07/19         -         271         197,240         2,015         156,921         ND         ND           07/20         -         340         197,580         2,352         159,273         ND         ND           07/21         -         0         197,580         10,359         169,632         ND         ND           07/22         -         0         197,580         1,874         171,506         ND         ND           07/23         -         0         197,580         966         172,472         ND         ND           07/24         -         0         197,580         0         172,472         ND         ND           07/25         -         0         197,580         3,137         175,609         ND         ND           07/26         -         0         197,580         0         177,609         ND         ND           07/27         -         0         197,580         2,196         177,805         ND         ND           07/29         -         0         197,580         233         178,038         ND         ND           Hackbery escapement summary c         Chursalmon         Chursalmon         <	07/17	_	242	196,482	2,455	149,223	ND	ND
07/19         -         271         197,240         2,015         156,921         ND         ND           07/20         -         340         197,580         2,352         159,273         ND         ND           07/21         -         0         197,580         10,359         169,632         ND         ND           07/22         -         0         197,580         1,874         171,506         ND         ND           07/23         -         0         197,580         966         172,472         ND         ND           07/24         -         0         197,580         0         172,472         ND         ND           07/25         -         0         197,580         3,137         175,609         ND         ND           07/26         -         0         197,580         2,0         177,805         ND         ND           07/27         -         0         197,580         2,196         177,805         ND         ND           07/29         -         0         197,580         233         178,038         ND         ND           Hatchery escapement summary c         Churs almon         Chursalmon	07/18	_	487	196,969			ND	ND
07/20         -         340         197,580         2,352         159,273         ND         ND           07/21         -         0         197,580         10,359         169,632         ND         ND           07/22         -         0         197,580         1,874         171,506         ND         ND           07/23         -         0         197,580         966         172,472         ND         ND           07/24         -         0         197,580         0         172,472         ND         ND           07/25         -         0         197,580         0         175,609         ND         ND           07/26         -         0         197,580         0         175,609         ND         ND           07/27         -         0         197,580         2,196         177,805         ND         ND         ND           07/28         -         0         197,580         233         178,038         ND         ND         ND           07/29         -         0         197,580         233         178,038         ND         ND         ND         ND         ND         ND         ND	07/19	_	271	197,240			ND	ND
07/21         -         0         197,580         10,359         169,632         ND         ND           07/22         -         0         197,580         1,874         171,506         ND         ND           07/23         -         0         197,580         966         172,472         ND         ND           07/24         -         0         197,580         0         172,472         ND         ND           07/25         -         0         197,580         3,137         175,609         ND         ND           07/26         -         0         197,580         0         175,609         ND         ND           07/27         -         0         197,580         2,196         177,805         ND         ND           07/28         -         0         197,580         233         178,038         ND         ND           07/29         -         0         197,580         233         179,818         ND         ND           Hatchery escapement summary comportal series whole fish harvest         173,206         10,877         10,877         10,877         10,877         10,877         10,877         10,877         10,948         1	07/20	_	340	197,580		159,273	ND	ND
07/22         -         0         197,580         1,874         171,506         ND         ND           07/23         -         0         197,580         966         172,472         ND         ND           07/24         -         0         197,580         0         172,472         ND         ND           07/25         -         0         197,580         3,137         175,609         ND         ND           07/26         -         0         197,580         0         175,609         ND         ND           07/27         -         0         197,580         2,196         177,805         ND         ND           07/28         -         0         197,580         2,196         177,805         ND         ND           07/29         -         0         197,580         233         178,038         ND         ND           07/30         0         197,580         1,780         179,818         ND         ND           Hachery escapement summary combusts         173,206         10,877         17,818         ND         ND           Viable broodstock (spawned, eggs in incubators)         172,896         172,494         0 <t< td=""><td>07/21</td><td>_</td><td>0</td><td></td><td></td><td>169,632</td><td>ND</td><td>ND</td></t<>	07/21	_	0			169,632	ND	ND
07/23         -         0         197,580         966         172,472         ND         ND           07/24         -         0         197,580         0         172,472         ND         ND           07/25         -         0         197,580         3,137         175,609         ND         ND           07/26         -         0         197,580         0         175,609         ND         ND           07/27         -         0         197,580         2,196         177,805         ND         ND           07/28         -         0         197,580         0         177,805         ND         ND           07/29         -         0         197,580         233         178,038         ND         ND           07/30         0         197,580         1,780         179,818         ND         ND           Hatchery escapement summary c         Chum salmon         Coho salmon           Purse seine whole fish harvest         173,206         10,877           Raceway harvest d         24,374         0           Viable broodstock (spawned, eggs in incubators)         172,896         1,948           Unviable broodstock (green/over-ripe/bad) <td>07/22</td> <td>_</td> <td>0</td> <td>197,580</td> <td></td> <td>171,506</td> <td>ND</td> <td>ND</td>	07/22	_	0	197,580		171,506	ND	ND
07/24         -         0         197,580         0         172,472         ND         ND           07/25         -         0         197,580         3,137         175,609         ND         ND           07/26         -         0         197,580         0         175,609         ND         ND           07/27         -         0         197,580         2,196         177,805         ND         ND           07/28         -         0         197,580         233         178,038         ND         ND           07/29         -         0         197,580         233         178,038         ND         ND           07/30         0         197,580         1,780         179,818         ND         ND           Hatchery escapement summary c         Chum salmon         Chum salmon         Coho salmon           Purse seine whole fish harvest         173,206         10,877           Raceway harvest d         24,374         0           Viable broodstock (green/over-ripe/bad)         2,455         18           Unspawned fish (e.g.,excess males/females)         177         2,714           Holding mortalities (raceway, pen mortalities)         4,290         1,904 <td>07/23</td> <td>_</td> <td>0</td> <td></td> <td></td> <td></td> <td>ND</td> <td>ND</td>	07/23	_	0				ND	ND
07/25         -         0         197,580         3,137         175,609         ND         ND           07/26         -         0         197,580         0         175,609         ND         ND           07/27         -         0         197,580         2,196         177,805         ND         ND         ND           07/28         -         0         197,580         0         177,805         ND         ND         ND           07/29         -         0         197,580         233         178,038         ND         ND         ND           07/30         0         197,580         1,780         179,818         ND         ND         ND           Hatchery escapement summary °         Chum salmon         Coho salmon         Chum salmon         Coho salmon           Purse seine whole fish harvest         173,206         10,877         18           Unviable broodstock (spawned, eggs in incubators)         172,896         1,948           Unviable broodstock (green/over-ripe/bad)         2,455         18           Unspawned fish (e.g., excess males/females)         177         2,714           Holding mortalities (raceway, pen mortalities)         4,290         1,904		_						
07/26         -         0         197,580         0         175,609         ND         ND           07/27         -         0         197,580         2,196         177,805         ND         ND           07/28         -         0         197,580         0         177,805         ND         ND           07/29         -         0         197,580         233         178,038         ND         ND           07/30         0         197,580         1,780         179,818         ND         ND           Hatchery escapement summary company company         Chum salmon         Coho salmon           Purse seine whole fish harvest         173,206         10,877           Raceway harvest domain         24,374         0           Viable broodstock (spawned, eggs in incubators)         172,896         1,948           Unviable broodstock (green/over-ripe/bad)         2,455         18           Unspawned fish (e.g., excess males/females)         177         2,714           Holding mortalities (raceway, pen mortalities)         4,290         1,904           Estimated unharvested return end total run to hatchery site         387,398         17,461           Sales Summary         Chum salmon         Coho salmon		_						
07/27         -         0         197,580         2,196         177,805         ND         ND           07/28         -         0         197,580         0         177,805         ND         ND           07/29         -         0         197,580         233         178,038         ND         ND           07/30         0         197,580         1,780         179,818         ND         ND           Hatchery escapement summary c         Chum salmon         Coho salmon           Purse seine whole fish harvest         173,206         10,877           Raceway harvest down except sein incubators         172,896         1,948           Unviable broodstock (spawned, eggs in incubators)         172,896         1,948           Unviable broodstock (green/over-ripe/bad)         2,455         18           Unspawned fish (e.g., excess males/females)         177         2,714           Holding mortalities (raceway, pen mortalities)         4,290         1,904           Estimated unharvested return company         10,000         0           Estimated total run to hatchery site         387,398         17,461           Sales Summary         Chum salmon         Coho salmon           Purse seine whole fish sales         173,206<		_	0					
07/28         -         0         197,580         0         177,805         ND         ND           07/29         -         0         197,580         233         178,038         ND         ND           07/30         0         197,580         1,780         179,818         ND         ND           Hatchery escapement summary c         Chum salmon         Coho salmon           Purse seine whole fish harvest         173,206         10,877           Raceway harvest d         24,374         0           Viable broodstock (spawned, eggs in incubators)         172,896         1,948           Unviable broodstock (green/over-ripe/bad)         2,455         18           Unspawned fish (e.g., excess males/females)         177         2,714           Holding mortalities (raceway, pen mortalities)         4,290         1,904           Estimated unharvested return e         10,000         0           Estimated total run to hatchery site         387,398         17,461           Sales Summary         Chum salmon         Coho salmon           Purse seine whole fish sales         173,206         10,877           Raceway sales f         27,006         0           Carcass sales g         172,896		_	0					
07/29         -         0         197,580         233         178,038         ND         ND           07/30         0         197,580         1,780         179,818         ND         ND           Hatchery escapement summary c         Chum salmon         Coho salmon           Purse seine whole fish harvest         173,206         10,877           Raceway harvest d         24,374         0           Viable broodstock (spawned, eggs in incubators)         172,896         1,948           Unviable broodstock (green/over-ripe/bad)         2,455         18           Unspawned fish (e.g., excess males/females)         177         2,714           Holding mortalities (raceway, pen mortalities)         4,290         1,904           Estimated unharvested return e         10,000         0           Estimated total run to hatchery site         387,398         17,461           Sales Summary         Chum salmon         Coho salmon           Purse seine whole fish sales         173,206         10,877           Raceway sales f         27,006         0           Carcass sales g         172,896         0		_	0					
07/30         0         197,580         1,780         179,818         ND         ND           Hatchery escapement summary c         Chum salmon         Coho salmon           Purse seine whole fish harvest         173,206         10,877           Raceway harvest d         24,374         0           Viable broodstock (spawned, eggs in incubators)         172,896         1,948           Unviable broodstock (green/over-ripe/bad)         2,455         18           Unspawned fish (e.g., excess males/females)         177         2,714           Holding mortalities (raceway, pen mortalities)         4,290         1,904           Estimated unharvested return e         10,000         0           Estimated total run to hatchery site         387,398         17,461           Sales Summary         Chum salmon         Coho salmon           Purse seine whole fish sales         173,206         10,877           Raceway sales f         27,006         0           Carcass sales g         172,896         0		_						
Hatchery escapement summary cChum salmonCoho salmonPurse seine whole fish harvest173,20610,877Raceway harvest d24,3740Viable broodstock (spawned, eggs in incubators)172,8961,948Unviable broodstock (green/over-ripe/bad)2,45518Unspawned fish (e.g., excess males/females)1772,714Holding mortalities (raceway, pen mortalities)4,2901,904Estimated unharvested return e10,0000Estimated total run to hatchery site387,39817,461Sales SummaryChum salmonCoho salmonPurse seine whole fish sales173,20610,877Raceway sales f27,0060Carcass sales g172,8960			0					
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Raceway harvest <sup>d</sup> 24,374         0           Viable broodstock (spawned, eggs in incubators)         172,896         1,948           Unviable broodstock (green/over-ripe/bad)         2,455         18           Unspawned fish (e.g., excess males/females)         177         2,714           Holding mortalities (raceway, pen mortalities)         4,290         1,904           Estimated unharvested return <sup>e</sup> 10,000         0           Estimated total run to hatchery site         387,398         17,461           Sales Summary         Chum salmon         Coho salmon           Purse seine whole fish sales         173,206         10,877           Raceway sales <sup>f</sup> 27,006         0           Carcass sales <sup>g</sup> 172,896         0								
Viable broodstock (spawned, eggs in incubators) $172,896$ $1,948$ Unviable broodstock (green/over-ripe/bad) $2,455$ $18$ Unspawned fish (e.g., excess males/females) $177$ $2,714$ Holding mortalities (raceway, pen mortalities) $4,290$ $1,904$ Estimated unharvested return $^e$ $10,000$ $0$ Estimated total run to hatchery site $387,398$ $17,461$ Sales SummaryChum salmonCoho salmonPurse seine whole fish sales $173,206$ $10,877$ Raceway sales $^f$ $27,006$ $0$ Carcass sales $^g$ $172,896$ $0$								
Unviable broodstock (green/over-ripe/bad)         2,455         18           Unspawned fish (e.g., excess males/females)         177         2,714           Holding mortalities (raceway, pen mortalities)         4,290         1,904           Estimated unharvested return e         10,000         0           Estimated total run to hatchery site         387,398         17,461           Sales Summary         Chum salmon         Coho salmon           Purse seine whole fish sales         173,206         10,877           Raceway sales f         27,006         0           Carcass sales g         172,896         0			eggs in incub	ators)				1,948
Unspawned fish (e.g., excess males/females) $177$ $2,714$ Holding mortalities (raceway, pen mortalities) $4,290$ $1,904$ Estimated unharvested return e $10,000$ $0$ Estimated total run to hatchery site $387,398$ $17,461$ Sales SummaryChum salmonCoho salmonPurse seine whole fish sales $173,206$ $10,877$ Raceway sales f $27,006$ $0$ Carcass sales g $172,896$ $0$				,				
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Estimated total run to hatchery site387,39817,461Sales SummaryChum salmonCoho salmonPurse seine whole fish sales173,20610,877Raceway sales f27,0060Carcass sales g172,8960				,				
Sales SummaryChum salmonCoho salmonPurse seine whole fish sales173,20610,877Raceway sales f27,0060Carcass sales g172,8960								17,461
Purse seine whole fish sales       173,206       10,877         Raceway sales f       27,006       0         Carcass sales g       172,896       0			w					
Raceway sales f       27,006       0         Carcass sales g       172,896       0								
Carcass sales <sup>g</sup> 172,896 0						· ·		0
								0

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

Broodstock daily totals from PWSAC egg-take log.

Determined by fish tickets, PWSAC egg-take log, and annual report.

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

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

Sum of raceway harvest, unviable broodstock and unspawned fish.

g Represents the sale of "viable broodstock" carcasses.

Appendix E10.-Sockeye salmon hatchery and wild stock contributions to the Eshamy District commercial common property fishery by period, 2014.

			Gulka	na <sup>a</sup>	Main	Bay	Solf I	ake	Hatchery	Wi	ld	
Dates	Period	Hours	Number	Percent	Number	Percent	Number	Percent	Total	Number	Percent	Total
05/29 - 05/31	1 <sup>b</sup>	60	0	0.0%	285	100.0%	0	0.0%	285	0	0.0%	285
06/02 - 06/04	2	48	0	0.0%	2841	100.0%	0	0.0%	2,841	0	0.0%	2,841
06/05 - 06/07	3 °	60	0	0.0%	20719	99.4%	0	0.0%	20,719	118	0.6%	20,837
06/09 - 06/11	4	48	0	0.0%	84959	98.9%	0	0.0%	84,959	977	1.1%	85,936
06/12 - 06/14	5	60	0	0.0%	92121	97.9%	0	0.0%	92,121	2003	2.1%	94,124
06/16 - 06/18	6	48	0	0.0%	144343	96.8%	0	0.0%	144,343	4707	3.2%	149,050
06/19 - 06/21	7	60	0	0.0%	163982	97.9%	0	0.0%	163,982	3565	2.1%	167,547
06/23 - 06/25	8	48	0	0.0%	130389	98.9%	0	0.0%	130,389	1402	1.1%	131,791
06/26 - 06/28	9	60	0	0.0%	101847	95.7%	0	0.0%	101,847	4527	4.3%	106,374
06/30 - 07/02	10	48	0	0.0%	50743	89.4%	0	0.0%	50,743	6020	10.6%	56,763
07/03 - 07/05	11	60	0	0.0%	30269	77.7%	0	0.0%	30,269	8707	22.3%	38,976
07/07 - 07/09	12	48	0	0.0%	32291	79.8%	0	0.0%	32,291	8181	20.2%	40,472
07/10 - 07/12	13	60	0	0.0%	30191	87.4%	0	0.0%	30,191	4370	12.6%	34,561
07/14 - 07/15	14	36	0	0.0%	29673	85.4%	0	0.0%	29,673	5066	14.6%	34,739
07/17 - 07/18	15	36	0	0.0%	28163	88.6%	0	0.0%	28,163	3611	11.4%	31,774
07/21 - 07/22	16	36	0	0.0%	7900	71.3%	0	0.0%	7,900	3188	28.8%	11,088
07/24 - 07/25	17	36	0	0.0%	6288	87.2%	0	0.0%	6,288	925	12.8%	7,213
07/28 - 07/29	18	36	0	0.0%	2323	65.1%	0	0.0%	2,323	1244	34.9%	3,567
07/31 - 08/01	19	36	0	0.0%	978	33.3%	0	0.0%	978	1956	66.7%	2,934
08/04 - 08/05	20 <sup>d</sup>	36	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/07 - 08/08	21 <sup>d</sup>	36	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/11 - 08/12	22 <sup>e</sup>	36	0	0.0%	4	33.3%	0	0.0%	4	7	66.7%	11
08/14 - 08/15	23 <sup>d</sup>	36	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/18 - 08/19	24 <sup>d</sup>	36	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/21 - 08/22	25 <sup>d</sup>	36	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/25 - 08/26	26 <sup>d</sup>	36	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/28 - 08/29	27 <sup>d</sup>	36	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/01 - 09/02	28 <sup>d</sup>	36	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/04 - 09/05	29 <sup>d</sup>	36	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/08 - 09/09	$30^{-d}$	36	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Total			0	0.0%	960,310	94.1%	0	0.0%	960,310	60,573	5.9%	1,020,883

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

No samples collected. Proportions based on Period 2 results.
 No samples collected. Proportions based on an average of Period 2 and Period 4 results.

d No harvest reported.

e When 3 permits or less are fished the results are confidential.

Appendix E11.–Pink salmon hatchery and wild stock contributions to the Eshamy District commercial common property fishery by period, 2014.

		_						Origin						
		_	Solomon	Gulch	Cannery	Creek	Wally No	erenberg	A.F. Ko	pernig	Hatchery	Wi	ld	
Dates	Period Ho		Number	Percent	Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
05/29 - 05/31	1	84	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
06/02 - 06/04	2	48	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
06/05 - 06/07	3	72	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
06/09 - 06/11	4	48	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
06/12 - 06/14	5	72	1	16.7%	0	0.0%	0	0.0%	0	0.0%	1	3	83.3%	3
06/16 - 06/18	6	48	2	16.7%	0	0.0%	0	0.0%	0	0.0%	2	11	83.3%	13
06/19 - 06/21	7	48	25	16.7%	0	0.0%	0	0.0%	0	0.0%	25	123	83.3%	148
06/23 - 06/25	8	48	69	16.7%	0	0.0%	0	0.0%	0	0.0%	69	344	83.3%	413
06/26 - 06/28	9	60	797	16.7%	0	0.0%	0	0.0%	0	0.0%	797	3,986	83.3%	4,783
06/30 - 07/02	10	48	1,268	16.7%	0	0.0%	0	0.0%	0	0.0%	1,268	6,339	83.3%	7,607
07/03 - 07/05	11	60	1,657	16.7%	0	0.0%	0	0.0%	0	0.0%	1,657	8,283	83.3%	9,940
07/07 - 07/09	12	48	2,163	15.8%	0	0.0%	0	0.0%	0	0.0%	2,163	11,535	84.2%	13,698
07/10 - 07/12	13	36	0	0.0%	0	0.0%	0	0.0%	1,426	12.5%	1,426	9,979	87.5%	11,405
07/14 - 07/15	14	36	688	5.3%	0	0.0%	0	0.0%	2,064	15.8%	2,753	10,322	78.9%	13,075
07/17 - 07/18	15	24	988	9.1%	329	3.0%	1,977	18.2%	0	0.0%	3,295	7,578	69.7%	10,873
07/21 - 07/22	16	24	270	2.6%	0	0.0%	3,651	34.6%	1,488	14.1%	5,409	5,139	48.7%	10,548
07/24 - 07/25	17	48	278	1.3%	366	1.7%	7,054	32.5%	4,827	22.2%	12,526	9,196	42.3%	21,722
07/28 - 07/29	18	48	0	0.0%	996	3.4%	8,967	30.3%	8,967	30.3%	18,930	10,628	36.0%	29,558
07/31 - 08/01	19	48	0	0.0%	45,574	50.0%	0	0.0%	45,574	50.0%	91,148	0	0.0%	91,148
08/04 - 08/05	20	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/07 - 08/08	21	36	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/11 - 08/12	22	36	0	0.0%	344	50.0%	0	0.0%	344	50.0%	687	0	0.0%	687
08/14 - 08/15	23	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/18 - 08/19	24	36	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/21 - 08/22	25	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/25 - 08/26	26	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/28 - 08/29	27	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/01 - 09/02	28	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/04 - 09/05	29	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/08 - 09/09	30	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Total			8,206	3.6%	47,609	21.1%	21,650	9.6%	64,689	28.7%	142,154	83,467	37.0%	225,621

Appendix E12.—Chum salmon hatchery and wild stock contributions to the Eshamy District commercial common property fishery by period, 2014.

					Hatchery ma	rks						
			Wally No	erenberg	Port C	nalmers	Armin F	Koernig	Hatchery	Wi	ld	
Dates	Period	Hours	Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
05/29 - 05/31	1 a	60	158	57.1%	20	7.1%	79	28.6%	256	20	7.1%	276
06/02 - 06/04	2	48	711	57.1%	89	7.1%	355	28.6%	1,155	89	7.1%	1,244
06/05 - 06/07	3 b	60	1,902	61.9%	280	9.1%	780	25.4%	2,962	110	3.6%	3,072
06/09 - 06/11	4	48	3,421	66.7%	570	11.1%	1,140	22.2%	5,132	0	0.0%	5,132
06/12 - 06/14	5	60	9,309	60.0%	1,034	6.7%	3,793	24.4%	14,136	1,379	8.9%	15,515
06/16 - 06/18	6	48	9,992	54.8%	1,249	6.8%	4,496	24.7%	15,737	2,498	13.7%	18,235
06/19 - 06/21	7	60	8,121	55.0%	984	6.7%	3,445	23.3%	12,550	2,215	15.0%	14,765
06/23 - 06/25	8	48	5,197	55.3%	600	6.4%	1,199	12.8%	6,996	2,399	25.5%	9,395
06/26 - 06/28	9	60	5,602	50.0%	700	6.3%	2,568	22.9%	8,870	2,334	20.8%	11,204
06/30 - 07/02	10	48	2,169	46.9%	0	0.0%	723	15.6%	2,892	1,735	37.5%	4,627
07/03 - 07/05	11	60	878	28.0%	251	8.0%	627	20.0%	1,756	1,380	44.0%	3,136
07/07 - 07/09	12	48	685	23.1%	0	0.0%	228	7.7%	913	2,054	69.2%	2,967
07/10 - 07/12	13	60	93	2.6%	0	0.0%	186	5.3%	279	3,258	92.1%	3,537
07/14 - 07/15	14	36	223	7.7%	0	0.0%	112	3.8%	335	2,567	88.5%	2,902
07/17 - 07/18	15 °	36	86	7.7%	0	0.0%	43	3.8%	129	988	88.5%	1,117
07/21 - 07/22	16	36	0	0.0%	0	0.0%	34	12.5%	34	236	87.5%	270
07/24 - 07/25	17 <sup>d</sup>	36	0	0.0%	23	3.8%	60	10.1%	83	514	86.1%	597
07/28 - 07/29	18	36	0	0.0%	18	7.7%	18	7.7%	36	197	84.6%	233
07/31 - 08/01	19 <sup>e</sup>	36	0	0.0%	32	7.7%	32	7.7%	64	352	84.6%	416
08/04 - 08/05	20 f	36	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/07 - 08/08	21 <sup>f</sup>	36	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/11 - 08/12	22 <sup>g</sup>	36	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/14 - 08/15	23 f	36	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/18 - 08/19	24 f	36	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/21 - 08/22	25 f	36	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/25 - 08/26	26 f	36	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/28 - 08/29	27 <sup>f</sup>	36	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/01 - 09/02	28 <sup>f</sup>	36	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/04 - 09/05	29 f	36	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/08 - 09/09	30 f	36	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Total			48,546	49.2%	5,851	5.9%	19,919	20.2%	74,316	24,324	24.7%	98,640

Note: WNH = Wally Noerenberg Hatchery, AFK = Armin F. Koernig Hatchery. Total harvest data as of 4 February 2015. Personal use harvests are excluded (24 fish).

No samples collected. Proportions are based on Period 2 results.

No samples were collected. Proportions are based on an average of Period 2 and Period 4 results.

No samples were collected. Proportions are based on an average of Period 14 and Period 16 results.

No samples were collected. Proportions are based on an average of Period 16 and Period 18 results.

No samples collected. Proportions are based on Period 18 results.

f No harvest reported.

When 3 permits or less are fished the results are confidential.

Appendix E13.–Daily salmon sales and sex ratios, sales summary, and broodstock summary at the Main Bay Hatchery, 2014.

-			Sockeye Salm	on	
			Sales		Brood
Date	%	Sales	Harvest	Brood	Stock
	Female	Harvesta	cumulative	Stock <sup>b</sup>	cumulative
06/20	_	0	0	165	165
06/21	_	0	0	190	355
06/22	_	0	0	243	598
06/23	_	0	0	324	922
06/24	_	0	0	207	1,129
06/25	_	0	0	0	1,129
06/26	_	0	0	0	1,129
06/27	_	0	0	7	1,136
06/28	_	0	0	12	1,148
06/29	_	0	0	8	1,156
06/30	_	0	0	14	1,170
07/01	_	0	0	11	1,181
07/02	_	0	0	9	1,190
07/03	_	0	0	21	1,211
07/04	_	0	0	14	1,225
07/05	_	0	0	9	1,234
07/06	_	0	0	14	1,248
07/07	_	0	0	7	1,255
07/08	_	0	0	17	1,272
07/09	_	0	0	11	1,283
07/10	_	0	0	36	1,319
07/11 07/12	_	0	0	78 15	1,397
07/12	_	0	0	15 13	1,412
07/13	_	0	0	15	1,425
07/14	_	0	0	13	1,440 1,453
07/16	_	0	0	0	1,453
07/17	_	0	0	0	1,453
07/18	_	0	0	0	1,453
07/19		0	0	0	1,453
07/20	_	0	0	7	1,460
07/21	_	0	0	0	1,460
07/22	_	0	0	0	1,460
07/23	_	0	0	0	1,460
07/24	_	0	0	0	1,460
07/25	_	0	0	5	1,465
07/26	_	0	0	40	1,505
07/27	_	0	0	463	1,968
07/28	_	0	0	65	2,033
07/29	_	0	0	634	2,667
07/30	_	0	0	63	2,730
07/31	_	0	0	694	3,424
08/01	_	0	0	123	3,547

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			Sockeye Sa	lmon	
			Sales		Brood
Date	%	Sales	Harvest	Brood	Stock
	Female	Harvest <sup>a</sup>	cumulative	Stock <sup>b</sup>	cumulative
08/02	_	0	0	653	4,200
08/03	_	0	0	133	4,333
08/04	_	0	0	903	5,236
08/05	_	0	0	107	5,343
08/06	_	0	0	791	6,134
08/07	_	0	0	109	6,243
08/08	_	0	0	689	6,932
08/09	_	0	0	188	7,120
08/10	_	0	0	1,092	8,212
08/11	_	0	0	290	8,502
08/12	_	0	0	666	9,168
08/13	_	0	0	192	9,360
08/14	_	0	0	688	10,048
08/15	_	0	0	208	10,256
08/16	_	0	0	677	10,933
08/17	_	0	0	0	10,933
08/18	_	0	0	0	10,933
08/19	_	0	0	0	10,933
08/20	_	0	0	1,719	12,652
Hatchery escapement sum	mary <sup>c</sup>				Sockeye salmon
Purse seine whole fish har	vest				0
Raceway harvest <sup>d</sup>					0
Viable broodstock (spawn	ed, eggs in in	cubators)			6,520
Unviable broodstock (gree					516
Unspawned fish (e.g., exc	-				3,062
Holding mortalities (racev					2,554
Estimated unharvested ret	urn <sup>e</sup>				0
Estimated total run to hatc					12,652
					,
Sales summary					
Purse seine whole fish sale	es				0
Raceway sales <sup>f</sup>					0
Carcass sales <sup>g</sup>					0
Total sales					0

<sup>&</sup>lt;sup>a</sup> Whole fish from purse seine and raceway sales.

<sup>&</sup>lt;sup>b</sup> Broodstock daily harvest numbers include viable broodstock, unviable broodstock, unspawned fish, and holding mortalities.

<sup>&</sup>lt;sup>c</sup> 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 egg take.

<sup>&</sup>lt;sup>e</sup> Fish remaining in saltwater and fresh water after all hatchery harvest is complete.

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

Represents the sale of "viable broodstock" carcasses.

Appendix E14.-Main Bay sockeye salmon harvests and total contribution, 1990-2014.

		Hatchery	contributi	ions <sup>a</sup>		Total
		Subsistence/		Broodstock/	Cost	hatchery
Year	Commercial	personal use	Sport	escapement	recovery	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
10-Year	020.052		2.050	26.200	105.151	
Average	820,052	699	3,958	36,380	127,171	# 987,885
2014	1,189,499	3,485	4,039	84,324	0	1,281,347

<sup>&</sup>lt;sup>a</sup> Commercial harvest estimates are from otolith marks. Sport estimates and subsistence and personal use estimates are derived from commercial harvest proportions. Broodstock/escapement and hatchery cost recovery are assumed to be 100% MBH origin.

Appendix E15.-Main Bay Hatchery salmon fry releases, 1983-2014.

		S	lockeye salmon			Pink salmon	Chum salmon
Release	Primary	Coghill	Eshamy	Eyak Lake	Total	Total	Total
year	return years	Lake stock	Lake stock	stock	released a	released	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		
10 Yr Ave		9,701,893			9,701,893		
2014	2016, 2017	11,460,000			11,460,000		

<sup>&</sup>lt;sup>a</sup> Total do not include releases at other locations, such as Coghill, Davis, Eshamy, Esther Pass, Eyak, Marsha, Pass, Solf lakes, and Esther Pass.

Appendix E16.-Pink salmon hatchery and wild stock contributions to the Eastern District commercial common property fishery by period, 2014.

								Origin						
		•	Solomon	Gulch	Cannery	Creek	Wally No	erenberg	A.F. K	oernig	Hatchery	Wi	ld	
Dates	Period		Number	Percent	Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
06/23 - 06/23	01	12	12,363	97.9%	0	0.0%	0	0.0%	0	0.0%	12,363	266	2.1%	12,629
06/26 - 06/26	02	12	52,048	98.1%	0	0.0%	0	0.0%	0	0.0%	52,048	1,001	1.9%	53,049
06/30 - 06/30	03	12	1,037,384	97.9%	0	0.0%	0	0.0%	0	0.0%	1,037,384	22,072	2.1%	1,059,456
07/02 - 07/02	04	14	3,418,564	100.0%	0	0.0%	0	0.0%	0	0.0%	3,418,564	0	0.0%	3,418,564
07/03 - 07/03	05	14	2,481,886	99.0%	0	0.0%	0	0.0%	0	0.0%	2,481,886	26,125	1.0%	2,508,011
07/04 - 07/04	06	14	1,235,885	99.0%	0	0.0%	0	0.0%	0	0.0%	1,235,885	13,009	1.0%	1,248,894
07/05 - 07/05	07	14	822,339	97.9%	0	0.0%	0	0.0%	0	0.0%	822,339	17,497	2.1%	839,836
07/06 - 07/06	08	14	588,995	97.9%	0	0.0%	0	0.0%	0	0.0%	588,995	12,532	2.1%	601,527
07/07 - 07/07	09	14	827,767	98.4%	0	0.0%	0	0.0%	0	0.0%	827,767	13,186	1.6%	840,953
07/09 - 07/09	10	14	1,603,525	98.9%	0	0.0%	0	0.0%	0	0.0%	1,603,525	17,059	1.1%	1,620,584
07/11 - 07/11	11	14	1,591,516	98.4%	0	0.0%	0	0.0%	0	0.0%	1,591,516	25,352	1.6%	1,616,868
07/12 - 07/12	12	14	493,413	97.9%	0	0.0%	0	0.0%	0	0.0%	493,413	10,498	2.1%	503,911
07/17 - 07/17	13	14	1,016,298	97.9%	0	0.0%	0	0.0%	0	0.0%	1,016,298	21,623	2.1%	1,037,921
07/20 - 07/20	14	14	1,831,333	99.0%	0	0.0%	19,277	1.0%	0	0.0%	1,850,610	0	0.0%	1,850,610
07/21 - 07/21	15	14	1,602	3.7%	0	0.0%	0	0.0%	0	0.0%	1,602	41,658	96.3%	43,260
07/22 - 07/22	16	14	840,373	95.8%	0	0.0%	0	0.0%	0	0.0%	840,373	36,538	4.2%	876,911
07/23 - 07/23	17	14	445,561	94.8%	0	0.0%	7,344	1.6%	4,896	1.0%	457,801	12,241	2.6%	470,042
07/24 - 07/24	18	14	454,903	93.8%	0	0.0%	15,163	3.1%	10,109	2.1%	480,176	5,054	1.0%	485,230
07/25 - 07/25	19	14	286,388	100.0%	0	0.0%	0	0.0%	0	0.0%	286,388	0	0.0%	286,388
07/28 - 07/28	20	14	214,083	85.4%	2,611	1.0%	2,611	1.0%	2,611	1.0%	221,916	28,718	11.5%	250,634
07/29 - 07/29	21	14	51,811	63.5%	425	0.5%	3,822	4.7%	425	0.5%	56,482	25,056	30.7%	81,538
07/30 - 07/30	22	14	31,415	63.5%	258	0.5%	2,318	4.7%	258	0.5%	34,248	15,193	30.7%	49,440
07/31 - 07/31	23	14	21,573	41.7%	0	0.0%	4,315	8.3%	0	0.0%	25,888	25,888	50.0%	51,775
08/01 - 08/01	24	14	33,302	90.9%	3,330	9.1%	0	0.0%	0	0.0%	36,632	0	0.0%	36,632
08/02 - 08/02	25	14	6,387	90.9%	639	9.1%	0	0.0%	0	0.0%	7,026	0	0.0%	7,026
08/03 - 08/03	26	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/04 - 08/04	27	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/05 - 08/05	28	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/06 - 08/06	29	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/07 - 08/07	30	14	23	10.5%	0	0.0%	11	5.3%	0	0.0%	34	181	84.2%	215
08/09 - 08/09	31	14	202	10.5%	0	0.0%	101	5.3%	0	0.0%	303	1,614	84.2%	1,917
08/18 - 08/18	32	12	1	10.5%	0	0.0%	0	5.3%	0	0.0%	1	6	84.2%	7
08/21 - 08/21	33	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/24 - 08/24	34	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/25 - 08/25	35	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0

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								Origin						
		_	Solomon	Gulch	Canner	y Creek	Wally No	erenberg	A.F. K	oernig	Hatchery	W	ild	
Dates	Period	Hours	Number	Percent	Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
08/26 - 08/26	36	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/27 - 08/27	37	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/28 - 08/28	38	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/29 - 08/29	39	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/30 - 08/30	40	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/31 - 08/31	41	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/01 - 09/01	42	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/02 - 09/02	43	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/03 - 09/03	44	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/04 - 09/04	45	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/05 - 09/05	46	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/06 - 09/06	47	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/07 - 09/07	48	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/08 - 09/08	49	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/09 - 09/09	50	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/10 - 09/10	51	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/11 - 09/11	52	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/12 - 09/12	53	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/13 - 09/13	54	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/14 - 09/14	55	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/15 - 09/15	56	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/16 - 09/16	57	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/17 - 09/17	58	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Total			19,400,939	97.7%	7,262	0.0%	54,963	0.3%	18,298	0.1%	19,481,461	372,367	1.9%	19,853,828

Appendix E17.–Chum salmon hatchery and wild stock contributions to the Montague District commercial common property fishery by period, 2014.

				-					Origin					
				-	Port Cha		•	oerenberg	Armin F		Hatchery	Wi		
	Date		Period	Hours	Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
06/02	_	06/04	1	60	5,596	93.1%	207	3.4%	0	0.0%	5,803	207	3.4%	6,010
06/05	_	06/08	2	84	13,638	93.1%	505	3.4%	0	0.0%	14,143	505	3.4%	14,648
06/09	_	06/11	3	60	12,862	93.1%	476	3.4%	0	0.0%	13,339	476	3.4%	13,815
06/12	_	06/15	4	84	16,882	93.1%	625	3.4%	0	0.0%	17,507	625	3.4%	18,132
06/16	_	06/18	5	60	22,814	98.7%	0	0.0%	0	0.0%	22,814	304	1.3%	23,118
06/19	_	06/22	6	84	47,368	95.9%	0	0.0%	0	0.0%	47,368	2,001	4.1%	49,369
06/23	_	06/25	7	60	10,837	62.9%	3,057	17.7%	556	3.2%	14,449	2,779	16.1%	17,228
06/26	_	06/29	8	84	22,024	75.9%	1,049	3.6%	1,049	3.6%	24,122	4,894	16.9%	29,016
06/30	_	06/30	9	12	102	17.9%	102	17.9%	20	3.6%	224	345	60.7%	569
07/01	_	07/01	10	12	1,038	17.9%	1,038	17.9%	208	3.6%	2,283	3,528	60.7%	5,810
07/02	_	07/02	11	14	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/03	_	07/06	12	84	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/07	_	07/09	13	60	1,117	17.9%	1,117	17.9%	223	3.6%	2,457	3,798	60.7%	6,255
07/10	_	07/13	14	84	418	17.9%	418	17.9%	84	3.6%	920	1,422	60.7%	2,342
07/14	_	07/16	15	60	126	17.9%	126	17.9%	25	3.6%	277	427	60.7%	704
07/17	_	07/20	16	84	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/21	_	07/21	17	14	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/24	_	07/24	18	14	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/28	_	07/28	19	14	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/31	_	07/31	20	14	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/03	_	08/03	21	14	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/04	_	08/04	22	14	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/05	_	08/05	23	14	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/06	_	08/06	24	14	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/07	_	08/07	25	14	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/09	_	08/09	26	14	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/18	_	08/18	27	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/21	_	08/21	28	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/24	_	08/24	29	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/25	_	08/25	30	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/26	_	08/26	31	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/27	_	08/27	32	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/28	_	08/28	33	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/29	_	08/29	34	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/30	_	08/30	35	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0

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				_					Origin					
					Port Cha	almers	Wally No	oerenberg	Armin F	Koernig	Hatchery	Wi	ld	
]	Date	s	Period	Hours	Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
08/31	_	08/31	36	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/01	_	09/01	37	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/02	_	09/02	38	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/03	_	09/03	39	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/04	_	09/04	40	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/05	_	09/05	41	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/06	_	09/06	42	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/07	_	09/07	43	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/08	_	09/08	44	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/09	-	09/09	45	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/10	_	09/10	46	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/11	-	09/11	47	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/12	_	09/12	48	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/13	_	09/13	49	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/14	_	09/14	50	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/15	_	09/15	51	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/16	_	09/16	52	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/17	-	09/17	53	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Total					154,820	82.8%	8,719	4.7%	2,165	1.2%	165,703	21,313	11.4%	187,016

Appendix E18.—Pink salmon hatchery and wild stock contributions to the Montague District commercial common property fishery by period, 2014.

-								Origin						
		_	Solomon	Gulch	Canner	y Creek	Wally No	erenberg	A.F. K	oernig	Hatchery	Wi	ld	
Dates	Period	Hours	Number	Percent	Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
06/02 - 06/04	1	60	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
06/05 - 06/08	2	84	248	83.3%	0	0.0%	6	2.1%	9	3.1%	264	34	11.5%	298
06/09 - 06/11	3	60	6,784	83.3%	0	0.0%	170	2.1%	254	3.1%	7,208	933	11.5%	8,141
06/12 - 06/15	4	84	105,300	83.3%	0	0.0%	2,633	2.1%	3,949	3.1%	111,881	14,479	11.5%	126,360
06/16 - 06/18	5	60	8	89.1%	0	0.0%	0	1.0%	0	1.6%	8	1	8.3%	9
06/19 - 06/22	6	84	50,396	89.1%	0	0.0%	589	1.0%	884	1.6%	51,870	4,715	8.3%	56,585
06/23 - 06/25	7	60	422,257	94.8%	0	0.0%	0	0.0%	0	0.0%	422,257	23,201	5.2%	445,458
06/26 - 06/29	8	84	2,028,062	90.6%	0	0.0%	23,311	1.0%	0	0.0%	2,051,373	186,488	8.3%	2,237,861
06/30 - 06/30	9	12	98,035	98.3%	0	0.0%	0	0.0%	0	0.0%	98,035	1,720	1.7%	99,755
07/01 - 07/01	10	12	53,468	91.2%	1,725	2.9%	0	0.0%	0	0.0%	55,192	3,450	5.9%	58,642
07/02 - 07/02	11	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/03 - 07/06	12	84	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/07 - 07/09	13	60	9,887	91.2%	319	2.9%	0	0.0%	0	0.0%	10,206	638	5.9%	10,844
07/10 - 07/13	14	84	127	91.2%	4	2.9%	0	0.0%	0	0.0%	131	8	5.9%	139
07/14 - 07/16	15	60	364	91.2%	12	2.9%	0	0.0%	0	0.0%	376	23	5.9%	399
07/17 - 07/20	16	84	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/21 - 07/21	17	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/24 - 07/24	18	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/28 - 07/28	19	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/31 - 07/31	20	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/03 - 08/03	21	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/04 - 08/04	22	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/05 - 08/05	23	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/06 - 08/06	24	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/07 - 08/07	25	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/09 - 08/09	26	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/18 - 08/18	27	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/21 - 08/21	28	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/24 - 08/24	29	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0

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		_						Origin						
		_	Solomon	Gulch	Cannery	Creek	Wally No	erenberg	A.F. Ko	oernig	Hatchery	Wi	ld	
Dates	Period		Number	Percent	Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
08/25 - 08/25	30	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/26 - 08/26	31	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/27 - 08/27	32	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/28 - 08/28	33	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/29 - 08/29	34	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/30 - 08/30	35	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/31 - 08/31	36	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/01 - 09/01	37	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/02 - 09/02	38	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/03 - 09/03	39	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/04 - 09/04	40	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/05 - 09/05	41	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/06 - 09/06	42	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/07 - 09/07	43	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/08 - 09/08	44	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/09 - 09/09	45	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/10 - 09/10	46	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/11 - 09/11	47	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/12 - 09/12	48	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/13 - 09/13	49	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/14 - 09/14	50	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/15 - 09/15	51	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/16 - 09/16	52	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/17 - 09/17	53	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Total			2,774,936	91.1%	2,060	0.1%	26,709	0.9%	5,097	0.2%	2,808,801	235,690	7.7%	3,044,491

Appendix E19.—Pink salmon hatchery and wild stock contributions to the Northern District commercial common property fishery by period, 2014.

-								Origin						
			Solomor	Gulch	Cannery	Creek	Wally No	erenberg	A.F. K	oernig	Hatchery	Wi	ld	
Dates	Period	Hours	Number	Percent	Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
06/26 - 06/26	1	12	71,248	98.4%	0	0.0%	1,131	1.6%	0	0.0%	72,379	0	0.0%	72,379
06/30 - 06/30	2	12	110,861	96.8%	1,205	1.1%	1,205	1.1%	0	0.0%	113,271	1,205	1.1%	114,476
07/02 - 07/02	3	14	14,781	93.2%	83	0.5%	83	0.5%	0	0.0%	14,948	909	5.7%	15,857
07/03 - 07/03	4	14	10,631	93.2%	60	0.5%	60	0.5%	0	0.0%	10,751	654	5.7%	11,405
07/04 - 07/04	5	14	202,986	93.2%	1,146	0.5%	1,146	0.5%	0	0.0%	205,278	12,488	5.7%	217,766
07/05 - 07/05	6	14	195,714	89.6%	0	0.0%	0	0.0%	0	0.0%	195,714	22,757	10.4%	218,471
07/06 - 07/06	7	14	189,002	96.9%	0	0.0%	0	0.0%	0	0.0%	189,002	6,097	3.1%	195,099
07/07 - 07/07	8	14	166,767	97.0%	0	0.0%	0	0.0%	0	0.0%	166,767	5,158	3.0%	171,925
07/28 - 07/28	9	14	5,959	1.3%	417,099	87.5%	35,751	7.5%	11,917	2.5%	470,726	5,959	1.3%	476,685
07/31 - 07/31	10	14	8,324	1.3%	582,676	87.5%	49,944	7.5%	16,648	2.5%	657,591	8,324	1.3%	665,915
08/03 - 08/03	11	14	0	0.0%	779,473	60.0%	437,599	33.7%	13,675	1.1%	1,230,746	68,375	5.3%	1,299,121
08/04 - 08/04	12	14	15,534	5.2%	132,038	44.2%	139,805	46.8%	7,767	2.6%	295,145	3,883	1.3%	299,028
08/05 - 08/05	13	14	0	0.0%	343,283	66.7%	165,040	32.1%	0	0.0%	508,323	6,602	1.3%	514,925
08/06 - 08/06	14	14	0	0.0%	184,268	65.6%	76,047	27.1%	17,549	6.3%	277,865	2,925	1.0%	280,790
08/07 - 08/07	15	14	0	0.0%	114,909	51.7%	89,365	40.2%	9,415	4.2%	213,689	8,566	3.9%	222,255
08/09 - 08/09	16	14	0	0.0%	51,533	37.8%	72,753	53.3%	3,031	2.2%	127,318	9,094	6.7%	136,412
08/18 - 08/18	17	12	0	0.0%	24,680	85.0%	3,387	11.7%	0	0.0%	28,067	968	3.3%	29,035
08/21 - 08/21	18	12	0	0.0%	18,734	73.3%	5,535	21.7%	0	0.0%	24,269	1,277	5.0%	25,546
08/24 - 08/24	19	12	0	0.0%	5,863	73.3%	1,732	21.7%	0	0.0%	7,595	400	5.0%	7,995
08/25 - 08/25	20	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/26 - 08/26	21	12	0	0.0%	9,743	73.3%	2,879	21.7%	0	0.0%	12,622	664	5.0%	13,286
08/27 - 08/27	22	12	0	0.0%	9,714	73.3%	2,870	21.7%	0	0.0%	12,584	662	5.0%	13,246
08/28 - 08/28	23	12	0	0.0%	4,579	73.3%	1,353	21.7%	0	0.0%	5,932	312	5.0%	6,244
08/29 - 08/29	24	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/30 - 08/30	25	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/31 - 08/31	26	12	0	0.0%	12,008	73.3%	3,548	21.7%	0	0.0%	15,555	819	5.0%	16,374
09/01 - 09/01	27	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/02 - 09/02	28	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/03 - 09/03	29	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/04 - 09/04	30	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/05 - 09/05	31	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/06 - 09/06	32	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/07 - 09/07	33	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0

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								Origin						
			Solomor	Gulch	Cannery	Creek	Wally Noe	renberg	A.F. K	oernig	Hatchery	Wi	ld	
Dates	Period	Hours	Number	Percent	Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
09/08 - 09/08	34	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/09 - 09/09	35	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/10 - 09/10	36	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/11 - 09/11	37	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/12 - 09/12	38	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/13 - 09/13	39	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/14 - 09/14	40	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/15 - 09/15	41	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/16 - 09/16	42	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/17 - 09/17	43	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Totals			991,806	19.7%	2,693,095	53.6%	1,091,234	21.7%	80,003	1.6%	4,856,137	168,098	3.3%	5,024,235

Appendix E20.–Sockeye salmon hatchery and wild stock contributions to the Southwestern District commercial common property fishery by period, 2014.

	d	Wile	Hatchery	Bay	Main E					
Total	Percent	Number	total	Percent	Number	Hours	Period		ates	D
37	11.3%	4	33	88.7%	33	60	1	06/04	-	06/02
1,531	11.3%	173	1,358	88.7%	1,358	84	2	06/08	-	06/05
3,116	11.3%	353	2,763	88.7%	2,763	60	3	06/11	-	06/09
4,156	11.3%	470	3,686	88.7%	3,686	84	4	06/15	-	06/12
9,081	3.3%	303	8,778	96.7%	8,778	60	5	06/18	-	06/16
7,126	4.0%	285	6,841	96.0%	6,841	84	6	06/22	-	06/19
1,803	11.6%	209	1,594	88.4%	1,594	60	7	06/25	-	06/23
59	11.6%	7	52	88.4%	52	84	8	06/29	-	06/26
0	0.0%	0	0	0.0%	0	60	9	07/02	-	06/30
0	0.0%	0	0	0.0%	0	84	10	07/06	-	07/03
0	0.0%	0	0	0.0%	0	60	11	07/09	-	07/07
362	19.2%	70	292	80.8%	292	84	12	07/13	-	07/10
322	25.0%	81	242	75.0%	242	60	13	07/16	-	07/14
585	12.3%	72	513	87.7%	513	84	14	07/20	-	07/17
1,055	100.0%	1,055	0	0.0%	0	14	15	07/28	-	07/28
595	95.2%	567	28	4.8%	28	14	16	07/31	-	07/31
758	84.2%	638	120	15.8%	120	14	17	08/03	-	08/03
543	95.7%	519	24	4.3%	24	14	18	08/04	-	08/04
415	97.8%	406	9	2.2%	9	14	19	08/05	-	08/05
549	100.0%	549	0	0.0%	0	14	20	08/06	-	08/06
791	100.0%	791	0	0.0%	0	14	21	08/07	-	08/07
307	100.0%	307	0	0.0%	0	14	22	08/09	-	08/09
546	100.0%	546	0	0.0%	0	12	23	08/18	-	08/18
167	100.0%	167	0	0.0%	0	12	24	08/21	-	08/21
34	100.0%	34	0	0.0%	0	12	25	08/22	-	08/22
3	100.0%	3	0	0.0%	0	12	26	08/23	-	08/23
15	100.0%	15	0	0.0%	0	12	27	08/24	-	08/24
10	100.0%	10	0	0.0%	0	12	28	08/25	-	08/25
2	100.0%	2	0	0.0%	0	12	29	08/26	-	08/26
2	100.0%	2	0	0.0%	0	12	30	08/27	-	08/27
0	0.0%	0	0	0.0%	0	12	31	08/28	-	08/28
0	0.0%	0	0	0.0%	0	12	32	08/29	-	08/29
0	0.0%	0	0	0.0%	0	12	33	08/30	-	08/30

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					Main E	Bay	Hatchery	Wil	d	
D	ates		Period	Hours	Number	Percent	total	Number	Percent	Total
08/31	-	08/31	34	12	0	0.0%	0	0	0.0%	0
09/01	-	09/01	35	12	0	0.0%	0	0	0.0%	0
09/02	-	09/02	36	12	0	0.0%	0	0	0.0%	0
09/03	-	09/03	37	12	0	0.0%	0	0	0.0%	0
09/04	-	09/04	38	12	0	0.0%	0	0	0.0%	0
09/05	-	09/05	39	12	0	0.0%	0	0	0.0%	0
09/06	-	09/06	40	12	0	0.0%	0	0	0.0%	0
09/07	-	09/07	41	12	0	0.0%	0	0	0.0%	0
09/08	-	09/08	42	12	0	0.0%	0	0	0.0%	0
09/09	-	09/09	43	12	0	0.0%	0	0	0.0%	0
09/10	-	09/10	44	12	0	0.0%	0	0	0.0%	0
09/11	-	09/11	45	12	0	0.0%	0	0	0.0%	0
09/12	-	09/12	46	12	0	0.0%	0	0	0.0%	0
09/13	-	09/13	47	12	0	0.0%	0	0	0.0%	0
09/14	-	09/14	48	12	0	0.0%	0	0	0.0%	0
09/15	-	09/15	49	12	0	0.0%	0	0	0.0%	0
09/16	-	09/16	50	12	0	0.0%	0	0	0.0%	0
09/17	-	09/17	51	12	0	0.0%	0	0	0.0%	0
Total					26,332	77.5%	26,332	7,638	22.5%	33,970

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

Appendix E21.-Pink salmon hatchery and wild stock contributions to the Southwestern District commercial common property fishery by period, 2014.

								Origin						
		_	Solomor	Gulch	Cannery		Wally No		A.F. Ko		Hatchery	Wi	ld	
Dates	Period I		Number	Percent	Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
06/02 - 06/04	1	60	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
06/05 - 06/08	2	84	39	50.0%	0	0.0%	0	0.0%	7	9.1%	46	32	40.9%	77
06/09 - 06/11	3	60	29	50.0%	0	0.0%	0	0.0%	5	9.1%	34	24	40.9%	58
06/12 - 06/15	4	84	268	50.0%	0	0.0%	0	0.0%	49	9.1%	316	219	40.9%	535
06/16 - 06/18	5	60	1,334	50.0%	0	0.0%	0	0.0%	243	9.1%	1,577	1,091	40.9%	2,668
06/19 - 06/22	6	84	2,966	50.0%	0	0.0%	0	0.0%	539	9.1%	3,505	2,427	40.9%	5,932
06/23 - 06/25	7	60	2,894	45.8%	0	0.0%	263	4.2%	1,142	18.1%	4,299	2,015	31.9%	6,314
06/26 - 06/29	8	84	3,019	45.8%	0	0.0%	274	4.2%	1,191	18.1%	4,485	2,102	31.9%	6,587
06/30 - 07/02	9	60	1,118	45.8%	0	0.0%	102	4.2%	441	18.1%	1,661	778	31.9%	2,439
07/03 - 07/06	10	84	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/07 - 07/09	11	60	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/10 - 07/13	12	84	1,596	41.7%	0	0.0%	319	8.3%	1,038	27.1%	2,953	878	22.9%	3,831
07/14 - 07/16	13	60	3,059	29.0%	0	0.0%	340	3.2%	3,228	30.6%	6,627	3,908	37.1%	10,535
07/17 - 07/20	14	84	5,229	16.7%	0	0.0%	1,307	4.2%	22,223	70.8%	28,759	2,614	8.3%	31,373
07/28 - 07/28	15	14	65,176	6.5%	173,802	17.4%	315,017	31.5%	249,841	25.0%	803,835	195,528	19.6%	999,363
07/31 - 07/31	16	14	36,578	3.1%	268,242	22.9%	463,326	39.6%	292,627	25.0%	1,060,774	109,735	9.4%	1,170,509
08/03 - 08/03	17	14	0	0.0%	264,071	14.9%	603,592	34.0%	716,765	40.4%	1,584,429	188,622	10.6%	1,773,051
08/04 - 08/04	18	14	49,372	4.5%	123,431	11.2%	370,292	33.7%	493,723	44.9%	1,036,818	61,715	5.6%	1,098,533
08/05 - 08/05	19	14	0	0.0%	355,824	39.4%	328,453	36.4%	136,855	15.2%	821,132	82,113	9.1%	903,245
08/06 - 08/06	20	14	0	0.0%	159,073	14.6%	374,958	34.4%	488,582	44.8%	1,022,613	68,174	6.3%	1,090,787
08/07 - 08/07	21	14	0	0.0%	158,373	18.9%	281,179	33.5%	364,645	43.4%	804,197	35,061	4.2%	839,258
08/09 - 08/09	22	14	0	0.0%	107,982	23.2%	152,157	32.6%	196,332	42.1%	456,471	9,817	2.1%	466,288
08/18 - 08/18	23	12	3,145	1.0%	47,169	15.6%	88,049	29.2%	147,796	49.0%	286,159	15,723	5.2%	301,882
08/21 - 08/21	24	12	0	0.0%	15,653	9.1%	24,598	14.3%	129,700	75.3%	169,952	2,236	1.3%	172,188
08/22 - 08/22	25	12	0	0.0%	1,862	16.5%	2,154	19.1%	6,939	61.7%	10,955	298	2.6%	11,253
08/23 - 08/23	26	12	0	0.0%	66	16.5%	76	19.1%	244	61.7%	386	10	2.6%	396
08/24 - 08/24	27	12	0	0.0%	5,232	24.0%	5,232	24.0%	10,465	48.0%	20,930	872	4.0%	21,802
08/25 - 08/25	28	12	0	0.0%	5,422	24.0%	5,422	24.0%	10,844	48.0%	21,687	904	4.0%	22,591
08/26 - 08/26	29	12	0	0.0%	2,580	24.0%	2,580	24.0%	5,160	48.0%	10,319	430	4.0%	10,749
08/27 - 08/27	30	12	0	0.0%	1,293	24.0%	1,293	24.0%	2,586	48.0%	5,172	215	4.0%	5,387
08/28 - 08/28	31	12	0	0.0%	128	24.0%	128	24.0%	256	48.0%	513	21	4.0%	534
08/29 - 08/29	32	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/30 - 08/30	33	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0

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									Origin						
				Solomo	n Gulch	Cannery	Creek	Wally Noe	renberg	A.F. Ko	ernig	Hatchery	Wi	ld	
Dates		Period	Hours	Number	Percent	Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
08/31	- 08/31	34	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/01	- 09/01	35	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/02	- 09/02	36	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/03	- 09/03	37	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/04	- 09/04	38	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/05	- 09/05	39	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/06	- 09/06	40	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/07	- 09/07	41	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/08	- 09/08	42	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/09	- 09/09	43	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/10	- 09/10	44	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/11	- 09/11	45	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/12	- 09/12	46	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/13	- 09/13	47	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/14	- 09/14	48	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/15	- 09/15	49	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/16	- 09/16	50	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/17	- 09/17	51	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Total		•		175,821	2.0%	1,690,204	18.9%	3,021,112	33.7%	3,283,465	36.7%	8,170,601	787,564	8.8%	8,958,165

Appendix E22.-Chum salmon hatchery and wild stock contributions to the Southwestern District commercial common property fishery by period, 2014.

				_					Origin					
				_	Port Cha		Wally N	oerenberg	Armin F		Hatchery	Wi		
	Date		Period	Hours	Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
06/02	-	06/04	1	60	161	14.5%	161	14.5%	733	66.1%	1,054	54	4.8%	1,108
06/05	-	06/08	2	84	495	14.5%	495	14.5%	2,256	66.1%	3,247	165	4.8%	3,412
06/09	-	06/11	3	60	1,113	14.5%	1,113	14.5%	5,070	66.1%	7,296	371	4.8%	7,667
06/12		06/15	4	84	1,691	14.5%	1,691	14.5%	7,703	66.1%	11,084	564	4.8%	11,648
06/16	-	06/18	5	60	1,689	14.5%	1,689	14.5%	7,695	66.1%	11,074	563	4.8%	11,637
06/19	-	06/22	6	84	1,907	12.8%	1,080	7.3%	11,124	74.7%	14,111	774	5.2%	14,885
06/23	-	06/25	7	60	735	11.1%	0	0.0%	5,513	83.3%	6,248	368	5.6%	6,615
06/26	· -	06/29	8	84	25	5.6%	8	1.8%	361	81.0%	394	52	11.7%	446
06/30	) -	07/02	9	60	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/03	-	07/06	10	84	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/07	· -	07/09	11	55	67	5.6%	22	1.8%	983	81.0%	1,072	142	11.7%	1,214
07/10	-	07/13	12	84	0	0.0%	71	3.6%	1,560	78.6%	1,631	355	17.9%	1,986
07/14		07/16	13	60	83	16.3%	9	1.8%	354	69.3%	446	65	12.7%	511
07/17		07/20	14	84	149	32.5%	0	0.0%	274	60.0%	423	34	7.5%	457
07/28	-	07/28	15	14	133	16.3%	0	0.0%	245	30.0%	377	439	53.8%	816
07/31	-	07/31	16	14	72	16.3%	0	0.0%	133	30.0%	205	239	53.8%	444
08/03	-	08/03	17	14	0	0.0%	0	0.0%	0	0.0%	0	694	100.0%	694
08/04		08/04	18	14	0	0.0%	0	0.0%	0	0.0%	0	246	100.0%	246
08/05		08/05	19	14	0	0.0%	0	0.0%	0	0.0%	0	248	100.0%	248
08/06	· • -	08/06	20	14	0	0.0%	0	0.0%	0	0.0%	0	417	100.0%	417
08/07	· -	08/07	21	14	21	3.8%	21	3.8%	0	0.0%	42	498	92.3%	540
08/09		08/09	22	14	13	3.8%	13	3.8%	0	0.0%	27	323	92.3%	350
08/18		08/18	23	12	69	7.7%	69	7.7%	0	0.0%	138	759	84.6%	897
08/21		08/21	24	12	2	7.7%	2	7.7%	0	0.0%	3	19	84.6%	22
08/22		08/22	25	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/23		08/23	26	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/24		08/24	27	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/25	_	08/25	28	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/26		08/26	29	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/27		08/27	30	12	0	0.0%	0	0.0%	0	0.0%	0	1	100.0%	1
08/28		08/28	31	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/29		08/29	32	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/30		08/30	33	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/31		08/31	34	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/01		09/01	35	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0

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				_					Origin					
				_	Port Cha	almers	Wally No	erenberg	Armin F I	Koernig	Hatchery	Wil	d	
Da	ates	S	Period	Hours	Number	Percent	Number	Percent	Number	Percent	total	Number	Percent	Total
09/02	-	09/02	36	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/03	-	09/03	37	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/04	-	09/04	38	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/05	-	09/05	39	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/06	-	09/06	40	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/07	-	09/07	41	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/08	-	09/08	42	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/09	-	09/09	43	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/10	-	09/10	44	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/11	-	09/11	45	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/12	-	09/12	46	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/13	-	09/13	47	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/14	-	09/14	48	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/15	-	09/15	49	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/16	-	09/16	50	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/17	-	09/17	51	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Total		•			8,425	12.7%	6,444	9.7%	44,004	66.4%	58,873	7,388	11.2%	66,261

## APPENDIX F: SUBSISTENCE AND COMMERCIAL HOMEPACK SALMON HARVEST

Appendix F1.–Salmon harvest and effort in the Copper River District subsistence drift gillnet fishery, 1961–2014.

'		Pe	rmits		]	Reported harv	est	-
Year	Issued	Returned	Fished	Not fished <sup>a</sup>	Chinook	Sockeye	Coho	Total
1961	14	0	0	0	60	137	99	296
1962	14	0	0	0	44	135	3	182
1963	8 5	0	0	0	3	13	157	173
1964		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
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
2013	531	492	321	171	854	5,639	1	6,494
10 Yr Avg	398	375	221	156	602	2,990	25	3,617
2014	288	269	101	168	153	1,675	0	1,828

<sup>&</sup>lt;sup>a</sup> As reported on returned permits.

Appendix F2.—Salmon harvest and effort in the Prince William Sound general area subsistence fishery, 1966–2014.

Test			Pe	rmits				Report	ed har	vest <sup>a</sup>		
1967	Year	Issued			Not fished <sup>b</sup>	Chinook	Sockeye	Coho	Pink	Chum	Unknown	Total
1968	1966	3	3	0	0	0	3	19	20	50	0	92
1969	1967	4	3	0	0	0	0	4	4	0	0	8
1970	1968	4	3	0	0	0	0	20	156	0	22	198
1971	1969	7	3	0	0	0	0	16	0	0	0	16
1972	1970	1	1	0	0	0	0	0	0	0	0	0
1973	1971	3	2	0	0	0	0	0	46	0	0	46
1974	1972	0	0	0	0	0	0	0	0	0	0	0
1974	1973	19	16	0	0	0	0	289	0	0	0	289
1976	1974		1	0	0	0	0	0	0	0	0	0
1977	1975		0	0	0	0	0	0	0	0	0	0
1977	1976	0	0	0	0	0	0	0	0	0	0	0
1978		4	4	0	0	0	0	0	0	0	0	0
1979											0	0
1980         26         15         0         0         0         7         6         0         0         0           1981         12         8         0         0         0         3         29         0         2         0           1983         26         21         0         0         0         84         4         31         24         0           1984         8         8         0         0         0         10         0         11         27         16         14         26         0           1985         22         16         0         0         1         12         7         16         14         26         0           1986         25         14         0         0         0         5         15         0         0         0           1987         18         17         0         0         2         51         7         10         9         0           1988         7         7         0         0         2         51         7         0         0           1999         8         7         0         0												0
1981         12         8         0         0         0         3         29         0         2         0           1982         35         27         0         0         0         84         4         31         24         0           1984         8         8         0         0         0         10         0         11         2         0           1985         22         16         0         0         1         27         16         14         26         0           1986         25         14         0         0         0         5         15         0         0         0           1988         7         7         0         0         2         51         7         10         9         0           1989         11         7         0         0         0         0         0         3         0         199         0         1999         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0											0	13
1982         35         27         0         0         0         84         4         31         24         0           1983         26         21         0         0         0         22         36         9         79         0           1984         8         8         8         0         0         0         11         2         0           1985         22         16         0         0         1         27         16         14         26         0           1986         25         14         0         0         0         5         31         6         0         16         0           1987         18         17         0         0         5         31         6         0         16         0           1988         7         7         0         0         0         0         0         0         3         0           1989         11         7         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         <					0						0	34
1983         26         21         0         0         0         22         36         9         79         0           1984         8         8         0         0         0         10         0         11         2         0           1985         22         16         0         0         1         27         16         14         26         0           1986         25         14         0         0         0         5         15         0         0         0           1987         18         17         0         0         5         31         6         0         16         0           1988         7         7         0         0         2         51         7         10         9         0           1989         11         7         0         0         0         0         0         0         0         0         0         0         199         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0												143
1984         8         8         0         0         0         10         0         11         2         0           1985         22         16         0         0         1         27         16         14         26         0           1986         25         14         0         0         0         5         15         0         0         0           1987         18         17         0         0         5         31         6         0         16         0           1988         7         7         0         0         2         51         7         10         9         0           1989         11         7         0												146
1985         22         16         0         0         1         27         16         14         26         0           1986         25         14         0         0         0         5         15         0         0         0           1987         18         17         0         0         5         31         6         0         16         0           1988         7         7         0         0         2         51         7         10         9         0           1989         11         7         0         0         0         0         0         0         3         0           1990         8         7         0         0         0         0         7         4         0         0           1991         9         5         2         3         0         2         0         0         0           1991         9         5         2         3         0         2         0         0         0         0           1992         10         6         1         5         0         20         0         0         0<												23
1986         25         14         0         0         0         5         15         0         0         0           1987         18         17         0         0         5         31         6         0         16         0           1988         7         7         0         0         2         51         7         10         9         0           1989         11         7         0         0         0         0         0         3         0           1990         8         7         0 </td <td></td> <td>84</td>												84
1987         18         17         0         0         5         31         6         0         16         0           1988         7         7         0 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>20</td></td<>												20
1988         7         7         0         0         2         51         7         10         9         0           1989         11         7         0         0         0         0         0         0         3         0           1990         8         7         0         0         0         0         7         4         0         0           1991         9         5         2         3         0         2         0         0         0           1992         10         6         1         5         0         20         0         0         0           1993         6         6         6         4         2         1         104         10         0         0           1994         5         4         2         2         0         0         0         0         0         0           1995         4         2         0         2         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0												58
1989         11         7         0         0         0         0         0         0         3         0           1990         8         7         0         0         0         0         7         4         0         0           1991         9         5         2         3         0         2         0         0         0           1992         10         6         1         5         0         20         0         0         0           1993         6         6         6         4         2         1         104         10         0         0         0           1994         5         4         2         2         0 <td></td> <td>79</td>												79
1990         8         7         0         0         0         0         7         4         0         0           1991         9         5         2         3         0         2         0         0         0           1992         10         6         1         5         0         20         0         0         0           1993         6         6         4         2         1         104         10         0         0           1994         5         4         2         2         0         0         0         0         0           1995         4         2         0         2         0         0         0         0         0           1996         10         7         0         7         0												3
1991         9         5         2         3         0         2         0         0         0           1992         10         6         1         5         0         20         0         0         0           1993         6         6         4         2         1         104         10         0         0         0           1994         5         4         2         2         0												11
1992         10         6         1         5         0         20         0         0         0           1993         6         6         4         2         1         104         10         0         0           1994         5         4         2         2         0         0         0         0         0           1995         4         2         0         2         0         0         0         0         0           1996         10         7         0         7         0         0         0         0         0         0           1997         4         3         1         2         0         3         0 <td></td> <td>2</td>												2
1993         6         6         4         2         1         104         10         0         0           1994         5         4         2         2         0         0         0         0         0         0           1995         4         2         0         2         0         0         0         0         0         0           1996         10         7         0         7         0												20
1994         5         4         2         2         0         0         0         0         0         0         0         1995         4         2         0         2         0 </td <td></td> <td>115</td>												115
1995         4         2         0         2         0         0         0         0         0           1996         10         7         0         7         0         0         0         0         0           1997         4         3         1         2         0         3         0         0         0         0           1998         4         3         0         3         0         0         0         0         0         0           1999         3         3         0         3         0												0
1996         10         7         0         7         0         0         0         0         0           1997         4         3         1         2         0         3         0         0         0         0           1998         4         3         0         3         0 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>0</td></td<>												0
1997         4         3         1         2         0         3         0         0         0         0         0         1998         4         3         0         3         0 </td <td></td> <td>0</td>												0
1998         4         3         0         3         0												3
1999         3         3         0         3         0												0
2000         3         3         0         3         0         0         0         0         0         0           2001         5         5         0         0         0         0         0         0           2002         11         9         2         7         0         31         0         9         7         0           2003         3         3         0         38         0         0         3         0           2004         12         11         5         6         0         8         0         0         3         0           2005         14         13         1         12         0         4         0         0         0         0           2006         11         9         2         7         0         20         0         30         0         0         0           2007         3         3         1         2         0         30         0         0         0         0           2008         11         10         4         6         1         32         0         0         0         0         0 <td></td> <td>0</td>												0
2001         5         5         0         5         0												0
2002         11         9         2         7         0         31         0         9         7         0           2003         3         3         0         3         0         48         0         0         3         0           2004         12         11         5         6         0         8         0         0         3         0           2005         14         13         1         12         0         4         0         0         0         0           2006         11         9         2         7         0         20         0         30         0         0         0           2007         3         3         1         2         0         30         0         0         0         0           2008         11         10         4         6         1         32         0         0         0         0         0         0           2010         2         2         1         1         0         0         0         0         0         0         0         0         0         0         0         0         0												0
2003       3       3       0       3       0       48       0       0       3       0         2004       12       11       5       6       0       8       0       0       3       0         2005       14       13       1       12       0       4       0       0       0       0         2006       11       9       2       7       0       20       0       30       0       0       0         2007       3       3       1       2       0       30       0       0       0       0         2008       11       10       4       6       1       32       0       0       0       0       0         2009       1       1       0       1       0       <												47
2004         12         11         5         6         0         8         0         0         3         0           2005         14         13         1         12         0         4         0         0         0         0           2006         11         9         2         7         0         20         0         30         0         0         0           2007         3         3         1         2         0         30         0         0         0         0           2008         11         10         4         6         1         32         0         0         0         0         0           2009         1         1         0         1         0 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>51</td></t<>												51
2005       14       13       1       12       0       4       0       0       0       0         2006       11       9       2       7       0       20       0       30       0       0       0         2007       3       3       1       2       0       30       0       0       0       0         2008       11       10       4       6       1       32       0       0       0       0         2009       1       1       0       1       0       0       0       0       0       0         2010       2       2       1       1       0       0       0       0       0       0         2011       4       4       3       1       29       40       1       5       10       0         2012       14       12       6       6       0       40       0       0       22       0         2013       8       8       7       1       0       12       0       0       24       5												11
2006         11         9         2         7         0         20         0         30         0         0         0           2007         3         3         1         2         0         30         0         0         0         0           2008         11         10         4         6         1         32         0         0         0         0           2009         1         1         0         1         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           2012         14         12         6         6         0         40         0         0         22         0           2013         8         8         7         1         0         12         0         0         24         5												4
2007       3       3       1       2       0       30       0       0       0       0         2008       11       10       4       6       1       32       0       0       0       0         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         2012       14       12       6       6       0       40       0       0       22       0         2013       8       8       7       1       0       12       0       0       24       5												50
2008       11       10       4       6       1       32       0       0       0       0         2009       1       1       0       1       0       0       0       0       0       0         2010       2       2       1       1       0       0       0       0       0       0         2011       4       4       3       1       29       40       1       5       10       0         2012       14       12       6       6       0       40       0       0       22       0         2013       8       8       7       1       0       12       0       0       24       5												30
2009       1       1       0       1       0												33
2010     2     2     1     1     0     0     0     0     0     0       2011     4     4     3     1     29     40     1     5     10     0       2012     14     12     6     6     0     40     0     0     22     0       2013     8     8     7     1     0     12     0     0     24     5												0
2011     4     4     3     1     29     40     1     5     10     0       2012     14     12     6     6     0     40     0     0     22     0       2013     8     8     7     1     0     12     0     0     24     5												0
2012     14     12     6     6     0     40     0     0     22     0       2013     8     8     7     1     0     12     0     0     24     5											-	
<u>2013</u> 8 8 7 1 0 12 0 0 24 5								-				85
												62
												41
10 ff Avg         8         7         3         4         3         19         0         4         6         1           2014         23         21         2         19         0         3         0         0         0         0	10 Yr Avg	8		3	4	3	19	0	4	6	1	32

<sup>&</sup>lt;sup>a</sup> 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, 1989-2014.

		Pe	rmits				Repoi	rted ha	rvest <sup>a</sup>		
Year	Issued	Returned	Fished	Not fished <sup>b</sup>	Chinook	Sockeye	Coho	Pink	Chum	Unknown	Total
				Tatitl	ek						
1989	14	10	7	3	1	107	653	33	43	0	837
1990	13	6	3	3	0	5	241	10	4	0	260
1991	17	10	7	3	0	107	984	320	28	0	1,439
1992	16	7	5	2	2	441	369	30	49	0	891
1993	18	11	7	4	2	512	305	144	74	180	1,217
1994	14	5	4	1	0	50	143	50	70	0	313
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
10 Yr Avg	15	5	4	1	2	342	198	37	26	0	604
2014	7	5	2	3	0	46	103	0	0	0	149

Appendix F3.–Page 2 of 2.

		Per	rmits				Repor	ted hai	rvest <sup>a</sup>		
Year	Issued	Returned	Fished	Not fished <sup>b</sup>	Chinook	Sockeye	Coho	Pink	Chum	Unknown	Total
				Chene	ga						
1989	8	7	7	0	0	322	0	554	180	0	1,056
1990	7	4	2	2	1	36	5	20	2	0	64
1991	12	7	4	3	3	345	42	195	53	0	638
1992	14	6	6	0	1	526	23	313	99	0	962
1993	22	19	17	2	2	875	60	232	124	0	1,293
1994	16	10	8	2	5	192	77	402	161	0	837
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
10 Yr Avg	12	6	4	2	2	258	30	34	83	0	407
2014	10	5	2	3	0	0	0	10	0	0	10

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, 1999–2014.

						Reported h	arvest				Expande	d harvest		
			Per	rmits		Salmo	n			Salmo	n		Other spe	cies
Year	District	Gear	Issued	Returned	Chinook	Sockeye	Coho	Total	Chinook	Sockeye	Coho	Total	Steelhead	Other
1999	Glennallen	Dip net	336	295	306	8,928	131	9,365	NA	NA	NA	NA	NA	NA
	Glennallen	Fish wheel	765	712	2,616	61,971	922	65,509	3,278	77,369	1,121	81,768	0	0
	Chitina	Dip net	9,944	8,966	5,758	137,942	2,070	145,770	5,913	141,658	2,128	149,699	0	34
	total		11,045	9,973	8,680	208,841	3,123	220,644	9,191	219,027	3,249	231,467	0	34
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	Fishwheel	832	809	3,074	70,585	1,076	74,735	3,553	82,858	1,144	87,555	0	0
	Chitina	Dipnet	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

						Reported ha	arvest			]	Expanded	l harvest		
			Peri	nits		Salmo	n			Salmoi	n		Other spec	eies
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
	Glennallen	Dip net	542	447	414	9,230	33	9,626	1,454	11,280	41	12,775	1	33
10 yr Avg	Glennallen	Fish wheel	643	596	1,880	46,314	240	48,434	1,991	49,548	257	51,797	10	73
10 y1 71vg	Chitina	Dip net	8,952	7,335	1,286	105,959	1,600	108,845	1,519	122,145	1,951	125,614	0	456
	Total		10,136	8,377	3,579	161,504	1,872	166,904	4,964	182,973	2,249	190,186	11	563
2014	Glennallen	Dip net	1,148	918	551	24,736	169	25,456	675	29,914	169	30,758	0	3
	Glennallen	Fish wheel	508	461	652	42,027	57	42,736	690	45,587	57	46,334	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	1,355	236,155	0	361

Appendix F5.-Salmon harvest and effort in the Batzulnetas subsistence harvests, 1987-2014.

		Pe	rmits		F	Reported harve	est <sup>a</sup>	
Year	Issued	Returned	Fished	Not fished <sup>b</sup>	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
2013	3	3	3	0	0	862	0	862
10 Yr Avg	1	1	1	0	0	133	0	133
2014	2	1	1	1	0	116	0	116

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, 2003–2014.

Pear   Issue   Returne   Fishe   Not Isbed*   Chinoo   Sockeye   Cohe   Total Substitute   Total Substit			Pe	rmits		Reported harve	est <sup>a</sup>	
D003	Year	Issued	Returned	Fished		Sockeye	Coho	Total
2004   109								
2005         76         64         27         NA         22         1,265         0         1,287           2006         75         64         29         NA         13         1,379         0         1,412           2007         98         87         74         112         26         929         40         995           2008         82         70         38         0         22         789         74         885           2010         92         79         38         41         17         2,061         31         2,109           2011         84         68         42         26         13         1,693         8         1,711           2012         89         80         33         47         5         865         8         878           2013         99         85         39         46         17         1,946         8         1,590           2014         113         103         49         54         13         1,50         6         8         1,590           2014         113         1,362         23         1,399         1         1         1,462								
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         86         8         88           2013         99         85         39         46         17         1,946         8         1,971           2014         113         103         49         54         13         1,509         68         1,590           2004         262         206         NA         NA         36         17,704         152         14,322								
2007								
2008         82         70         38         0         22         789         74         885           2010         92         79         38         41         17         2,061         31         2,109           2011         84         68         42         26         13         1,693         8         1,71           2012         89         80         33         47         5         86         8         8,78           2013         99         85         39         46         17         1,946         8         1,399           2014         113         103         49         54         13         1,509         68         1,590           2014         113         103         49         54         13         1,509         68         1,590           2014         113         103         49         54         13         1,509         68         1,590           2004         262         206         NA         NA         636         17,704         152         18,492           2003         275         224         197         NA         343         19,731         162								
2009								
Description   Page								
2011								
2012								
S-Year Avg.   86								
S-Year Avg.   86								
The color of the								
Coloradian   C								
2003   221	2014	113	103	49		1,509	68	1,590
2004         262         206         NA         NA         636         17,704         152         18,492           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           2010         270         236         175         61         300         12,835         64         13,199           2011         280         240         1173         67         698         13,774         176         14,692           2011         280         240         1173         67         698         13,774         176         14,693           2012         277         244         169         75         370         11,425         142         14,937           2013         274         236         160         76	2002	221	104	27.4		12 (1)	1.50	1 4 222
2006         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         12,359           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         14,938           2012         277         244         169         75         370         14,425         142         14,938           2013         314         279         206         73         <								
2006         254         220         170         NA         430         16,711         28         17,169           2007         281         238         224         14         569         15,225         34         15,828           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           2013         274         236         160         76         329         15,432         20         15,781           2014         314         279         206         73         370         21,013         23         21,593           2014         314         279         206         73 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>								
2007         281         238         224         14         569         15,225         34         15,828           2008         270         219         139         0         705         11,347         156         12,208           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           5-Year Avg.         275         234         164         56         483         13,273         99         13,854           2014         314         279         206         73         370         21,013         23         21,406								
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           5-Year Avg.         275         234         164         56         483         13,273         99         13,854           2014         314         279         206         73         370         21,013         23         21,406								
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         14,425         142         14,937           2013         274         236         160         76         329         15,432         20         15,781           5-Year Avg.         275         234         164         56         483         13,273         99         13,854           2014         314         279         206         73         370         21,013         23         21,406           PWS/Chugach Subdistrict           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								
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           5-Year Avg.         275         234         164         56         483         13,273         99         13,854           2014         314         279         206         73         370         21,013         23         21,406           PWS/Chugach Subdistrict           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           2007         32         38								
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           5-Year Avg.         275         234         164         56         483         13,273         99         13,854           2014         314         279         206         73         370         21,013         23         21,406           PWS/Chugach Subdistrict           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         23								
2012         277         244         169         75         370         14,425         142         14,937           2013         274         236         160         76         329         15,432         20         15,781           5-Year Avg.         275         234         164         56         483         13,273         99         13,854           2014         314         279         206         73         370         21,013         23         21,406           PWS/Chugach Subdistrict           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								
2013         274         236         160         76         329         15,432         20         15,781           5-Year Avg.         275         234         164         56         483         13,273         99         13,854           2014         314         279         206         73         370         21,013         23         21,406           PWS/Chugach Subdistrict           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								
5-Year Avg.         275         234         164         56         483         13,273         99         13,854           2014         314         279         206         73         370         21,013         23         21,406           PWS/Chugach Subdistrict           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         55         55         5         0         35         581         616           2011         69         55         50         5         0         35         581         616           2012         66         53         30         23         0         64         392         456           2013         65         48         32         17         0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
PWS/Chugach Subdistrict								
PWS/Chugach Subdistrict								
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           5-Year Avg.         56         48         32         17         0         53         276         328           2014         89         76         NA         NA         0         76         630         706           <	2014	314	219	206		21,013	23	21,406
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         5-Year Avg.         56         48         32         17         0         53         276         328           2014         89         76         NA         NA         NA         0         76         630         706           2004         371         289         NA         NA         A643         18,919         170         19,732 <t< td=""><td>2006</td><td>10</td><td>18</td><td>23</td><td></td><td>150</td><td>100</td><td>250</td></t<>	2006	10	18	23		150	100	250
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           5-Year Avg.         56         48         32         17         0         53         276         328           2014         89         76         NA         NA         NA         0         76         630         706           Total federal subsistence harvest           2003         321         266         NA         NA         NA         643         18,919         170         19,732           2004         371         289         NA								
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           5-Year Avg.         56         48         32         17         0         53         276         328           2014         89         76         NA         NA         NA         0         76         630         706           Total federal subsistence harvest           2003         321         266         NA         NA         572         14,333         222         15,127           2004         371         289         NA         NA         A643         18,919         170         19,732           2005         351         288         NA								
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           5-Year Avg.         56         48         32         17         0         53         276         328           2014         89         76         NA         NA         NA         0         76         630         706           Total federal subsistence harvest           2003         321         266         NA         NA         572         14,333         222         15,127           2004         371         289         NA         NA         643         18,919         170         19,732           2005         351         288         NA         NA         367         21,238         126         21,731           2006         378         332								
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           5-Year Avg.         56         48         32         17         0         53         276         328           2014         89         76         NA         NA         0         76         630         706           Total federal subsistence harvest           2003         321         266         NA         NA         572         14,333         222         15,127           2004         371         289         NA         NA         643         18,919         170         19,732           2005         351         288         NA         NA         367         21,238         126         21,731           2006         378         332         222         25         443         18,240         148         18,831           2007         412         358         315 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
2012         66         53         30         23         0         64         392         456           2013         65         46         29         17         0         102         310         412           5-Year Avg.         56         48         32         17         0         53         276         328           2014         89         76         NA         NA         0         76         630         706           Total federal subsistence harvest           2003         321         266         NA         NA         572         14,333         222         15,127           2004         371         289         NA         NA         643         18,919         170         19,732           2005         351         288         NA         NA         367         21,238         126         21,731           2006         378         332         222         25         443         18,240         148         18,831           2007         412         358         315         16         595         16,190         142         16,927           2008         397         334								
2013         65         46         29         17         0         102         310         412           5-Year Avg.         56         48         32         17         0         53         276         328           2014         89         76         NA         NA         NA         0         76         630         706           Total federal subsistence harvest           2003         321         266         NA         NA         572         14,333         222         15,127           2004         371         289         NA         NA         643         18,919         170         19,732           2005         351         288         NA         NA         367         21,238         126         21,731           2006         378         332         222         25         443         18,240         148         18,831           2007         412         358         315         16         595         16,190         142         16,927           2008         397         334         200         22         727         12,168         349         13,244           2019         384<								
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2014         89         76         NA         NA         NA         0         76         630         706           Total federal subsistence harvest           2003         321         266         NA         NA         572         14,333         222         15,127           2004         371         289         NA         NA         643         18,919         170         19,732           2005         351         288         NA         NA         367         21,238         126         21,731           2006         378         332         222         25         443         18,240         148         18,831           2007         412         358         315         16         595         16,190         142         16,927           2008         397         334         200         22         727         12,168         349         13,244           2009         384         327         231         96         502         12,685         230         13,417           2010         414         367         248         119         317         14,932         163         15,412           2011								
Total federal subsistence harvest           2003         321         266         NA         NA         572         14,333         222         15,127           2004         371         289         NA         NA         643         18,919         170         19,732           2005         351         288         NA         NA         367         21,238         126         21,731           2006         378         332         2222         25         443         18,240         148         18,831           2007         412         358         315         16         595         16,190         142         16,927           2008         397         334         200         22         727         12,168         349         13,244           2009         384         327         231         96         502         12,685         230         13,417           2010         414         367         248         119         317         14,932         163         15,412           2011         433         363         265         98         711         15,502         765         16,978           2012								
2003         321         266         NA         NA         572         14,333         222         15,127           2004         371         289         NA         NA         643         18,919         170         19,732           2005         351         288         NA         NA         367         21,238         126         21,731           2006         378         332         222         25         443         18,240         148         18,831           2007         412         358         315         16         595         16,190         142         16,927           2008         397         334         200         22         727         12,168         349         13,244           2009         384         327         231         96         502         12,685         230         13,417           2010         414         367         248         119         317         14,932         163         15,412           2011         433         363         265         98         711         15,502         765         16,978           2012         432         377         232         145		- 0,	,,,	1111		,,	020	,,,,
2004         371         289         NA         NA         643         18,919         170         19,732           2005         351         288         NA         NA         367         21,238         126         21,731           2006         378         332         222         25         443         18,240         148         18,831           2007         412         358         315         16         595         16,190         142         16,927           2008         397         334         200         22         727         12,168         349         13,244           2009         384         327         231         96         502         12,685         230         13,417           2010         414         367         248         119         317         14,932         163         15,412           2011         433         363         265         98         711         15,502         765         16,978           2012         432         377         232         145         375         15,354         542         16,271           2013         438         367         228         139	2003	321	266	NA		14,333	222	15,127
2005         351         288         NA         NA         367         21,238         126         21,731           2006         378         332         222         25         443         18,240         148         18,831           2007         412         358         315         16         595         16,190         142         16,927           2008         397         334         200         22         727         12,168         349         13,244           2009         384         327         231         96         502         12,685         230         13,417           2010         414         367         248         119         317         14,932         163         15,412           2011         433         363         265         98         711         15,502         765         16,978           2012         432         377         232         145         375         15,354         542         16,271           2013         438         367         228         139         346         17,480         338         18,164           5-Year Avg.         408         350         252         70<								
2006       378       332       222       25       443       18,240       148       18,831         2007       412       358       315       16       595       16,190       142       16,927         2008       397       334       200       22       727       12,168       349       13,244         2009       384       327       231       96       502       12,685       230       13,417         2010       414       367       248       119       317       14,932       163       15,412         2011       433       363       265       98       711       15,502       765       16,978         2012       432       377       232       145       375       15,354       542       16,271         2013       438       367       228       139       346       17,480       338       18,164         5-Year Avg.       408       350       252       70       570       14,295       330       15,196								
2007       412       358       315       16       595       16,190       142       16,927         2008       397       334       200       22       727       12,168       349       13,244         2009       384       327       231       96       502       12,685       230       13,417         2010       414       367       248       119       317       14,932       163       15,412         2011       433       363       265       98       711       15,502       765       16,978         2012       432       377       232       145       375       15,354       542       16,271         2013       438       367       228       139       346       17,480       338       18,164         5-Year Avg.       408       350       252       70       570       14,295       330       15,196								
2008     397     334     200     22     727     12,168     349     13,244       2009     384     327     231     96     502     12,685     230     13,417       2010     414     367     248     119     317     14,932     163     15,412       2011     433     363     265     98     711     15,502     765     16,978       2012     432     377     232     145     375     15,354     542     16,271       2013     438     367     228     139     346     17,480     338     18,164       5-Year Avg.     408     350     252     70     570     14,295     330     15,196								
2009     384     327     231     96     502     12,685     230     13,417       2010     414     367     248     119     317     14,932     163     15,412       2011     433     363     265     98     711     15,502     765     16,978       2012     432     377     232     145     375     15,354     542     16,271       2013     438     367     228     139     346     17,480     338     18,164       5-Year Avg.     408     350     252     70     570     14,295     330     15,196								
2010     414     367     248     119     317     14,932     163     15,412       2011     433     363     265     98     711     15,502     765     16,978       2012     432     377     232     145     375     15,354     542     16,271       2013     438     367     228     139     346     17,480     338     18,164       5-Year Avg.     408     350     252     70     570     14,295     330     15,196								
2011     433     363     265     98     711     15,502     765     16,978       2012     432     377     232     145     375     15,354     542     16,271       2013     438     367     228     139     346     17,480     338     18,164       5-Year Avg.     408     350     252     70     570     14,295     330     15,196								
2012     432     377     232     145     375     15,354     542     16,271       2013     438     367     228     139     346     17,480     338     18,164       5-Year Avg.     408     350     252     70     570     14,295     330     15,196								
2013     438     367     228     139     346     17,480     338     18,164       5-Year Avg.     408     350     252     70     570     14,295     330     15,196								
5-Year Avg. 408 350 252 70 570 14,295 330 15,196								

Reported harvest only.
 As reported on returned permits.

Appendix F7.—Salmon retained from the commercial harvest for personal use (home pack) by district, species, and gear type, in Prince William Sound and the Copper River and Bering River districts, 1995–2014.

				Princ	e Williar	n Sound (d	rift 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
10 Yr Avg	48	2	33	3	27	573	95	50	68	0	8	370	0	6	135	0
2014	81	7	38	10	168	1,146	301	17	1,500	0	0	20	0	11	62	0

Appendix F7.–Page 2 of 2.

	Copper River District	(all drift gillnet)				Bering River	District (all drift g	gillnet)	
Year	Permits	Chinook	Sockeye	Coho	Year	Permits	Chinook	Sockeye	Coho
1995	318	1,688	0	0	1995	5	11	0	0
1996	345	2,169	0	0	1996	7	31	0	0
1997	284	1,243	0	0	1997	1	3	0	0
1998	309	1,411	1,435	14	1998	5	7	0	0
1999	297	1,115	1,333	36	1999	2	2	20	102
2000	245	740	651	0	2000	1	3	0	0
2001	289	935	2,113	24	2001	2	2	0	0
2002	247	773	1,138	187	2002	1	1	0	0
2003	287	1,073	4,077	0	2003	6	6	52	0
2004	174	539	525	2	2004	2	0	1	10
2005	228	760	1,785	119	2005	2	2	0	0
2006	264	779	1,539	137	2006	4	9	6	0
2007	280	1,019	2,023	340	2007	2	2	0	0
2008	223	537	2,172	423	2008	4	9	6	0
2009	328	876	6,528	767	2009	1	0	0	20
2010	333	906	7,064	1,026	2010	5	0	0	82
2011	336	1,282	9,070	543	2011	1	0	0	10
2012	378	853	7,985	1,037	2012	4	1	0	155
2013	331	564	9,448	249	2013	2	4	35	0
10 Yr Avg	288	812	4,814	464	10 Yr Avg	3	3	5	28
2014	386	768	12,072	1,146	2014	3	0	0	42

Appendix F8.–Area E commercial homepack and subsistence harvests by permit holder community of residence, 2014.

			Commercia	al homep	ack <sup>a</sup>		
Community	Permits	Chinook	Sockeye	Coho	Pink	Chum	Total
Anchor point	1	2	0	0	0	0	2
Anchorage	22	45	655	88	0	3	791
Chugiak	1	0	40	0	0	0	40
Copper center	1	0	2	0	0	0	2
Cordova	213	490	7,140	728	1	24	8,383
Delta junction	3	3	24	0	0	0	27
Eagle river	3	3	21	10	0	0	34
Fairbanks	1	3	33	0	0	0	36
Girdwood	9	10	183	5	0	0	198
Homer	38	55	1,150	225	170	28	1,628
Juneau	1	0	19	0	0	0	19
Kasilof	2	17	51	1	0	0	69
Kenai	1	0	2	0	0	0	2
Moose pass	2	0	5	18	0	0	23
Palmer	1	0	29	0	0	0	29
Petersburg	1	0	4	0	0	0	4
Seldovia	1	0	21	0	0	0	21
Seward	7	4	47	0	0	0	51
Soldotna	3	17	0	11	0	0	28
Sterling	2	0	45	8	0	0	53
Valdez	4	10	41	0	0	6	57
Wasilla	19	32	560	50	0	0	642
Whittier	1	1	31	0	0	0	32
Willow	2	0	72	130	0	0	202
Usa balance	84	112	3,224	176	20	60	3,592
Unknown	12	19	288	30	0	10	347
Total	435	823	13,687	1,480	191	131	16,312

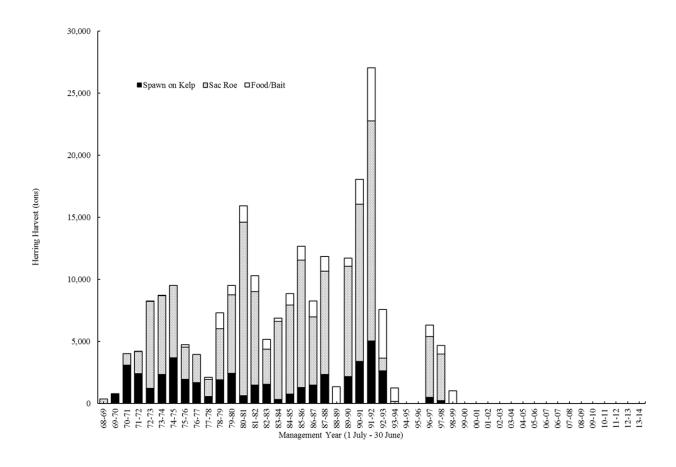
Appendix F8.-Page 2 of 2.

	Area E Subsistence <sup>b</sup>									
Community	Permits	Chinook	Sockeye	Coho	Pink	Chum	Total			
Anchorage	46	8	137	0	0	0	145			
Chenega	2	0	0	0	0	0	0			
Chenega Bay	3	0	0	0	0	0	0			
Chugiak	2	0	0	0	0	0	0			
Cooper Landing	1	0	0	0	0	0	0			
Cordova	246	133	1,471	0	2	5	1,611			
Douglas	1	0	0	0	0	0	0			
Eagle River	3	0	3	0	0	0	3			
Fairbanks	1	0	0	0	0	0	0			
Girdwood	3	0	0	0	0	0	0			
Homer	1	0	0	0	0	0	0			
Indian	1	1	12	0	0	0	13			
Juneau	1	0	0	0	0	0	0			
North Pole	1	0	0	0	0	0	0			
Palmer	1	4	20	0	0	0	24			
Seward	2	0	15	0	0	0	15			
Tatitlek	5	7	69	103	0	0	179			
Valdez	2	0	0	0	0	0	0			
Wasilla	6	0	0	0	10	0	10			
Total	328	153	1,727	103	12	5	2,000			

<sup>&</sup>lt;sup>a</sup> Homepack fish are defined in 5 AAC 39.010 as finfish retained from lawfully taken commercial catch for that fisherman's own use.

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.–Prince William Sound commercial Pacific herring harvest by management year and fishery, 1968–2014.

Appendix G2.—Pacific herring sac roe purse seine fishery effort, anticipated harvest, and actual harvest, 1969–2014.

				Purse seine fisher	у		
Calendar	Opening		Effort	Guideline	Harvest	CPUE	Estimated
year	dates	Hours	(boats)	harvest a	(short ton)	(tons/boat hr)	roe %
1969	03/01-06/30		5		325.4		
1970	03/01-06/30						
1971	03/01-06/30		12		919.2		
1972	03/01-06/30		18		1,777.2		
1973	04/23-05/09		31		6,991.9		
1974	04/10-04/17		72		6,371.0		
1975	04/15-04/22	14.0	76		5,853.8	5.50	
1976	05/08 & 06/01	13.0	66		2,584.2	3.01	
1977	04/09-04/10	38.0	58		2,265.6	1.03	
1978	04/17-04/21 <sup>b</sup>	106.0	75	5,000	1,329.5	0.17	
1979	04/07-04/19	215.5	89	5,000	4,138.0	0.22	
1980	04/01-04/09	162.0	76	5,000	6,042.2	0.49	
1981	04/01-04/09	60.0	106	5,000	13,768.2	2.16	
1982	04/23	2.0	95	5,000	7,148.3	37.62	10-14%
1983	04/13	1.0	103	c 5,000	2,728.5	26.49	11.0%
1984	04/14	3.0	105	<sup>d</sup> 5,000	5,946.1	18.88	10-11%
1985	04/28-04/29	4.0	103	e 5,000	6,764.1	16.42	10-12%
1986	04/17	3.0	106	5,000-7,000	9,828.1	30.91	11.0%
1987	04/08-04/09	1.5	96	3,000-5,000	4,982.2	34.60	10.0%
1988	04/21-04/22	2.0	105	4,000-5,000	7,977.3	37.99	10.5%
1989	Season closed f			6,400			
1990	04/12	0.3	96	6,038	8,362.1	290.35	10.0%
1991	04/09, 04/10, & 04/19	1.3	104	11,233	11,923.0	g 85.32	10.5%
1992	04/13, 04/17, & 04/21	2.0	104	14,100	16,784.2	h 80.69	10.0%
1993	No harvest			15,586			
1994	Season closed i			0	151.0	k	
1995	Season closed i			0			
1996	Season closed i			0			
1997	04/13,04/15	1.8	71	2,965	4,703.5	36.80	9.75%
1998	04/06	0.5	46	3,367	3,329.7	144.77	9.6%
1999	Season closed j			3,447			
2000-2014	Season closed <sup>1</sup>			0			

*Note*: CPUE = catch per unit effort.

<sup>&</sup>lt;sup>a</sup> Guideline harvest based on preseason harvest projection beginning in 1986.

<sup>&</sup>lt;sup>b</sup> An additional opening on June 14 for 6 hours resulted in no harvest.

<sup>&</sup>lt;sup>c</sup> Of 103 permit holders participating, 72 made deliveries.

<sup>&</sup>lt;sup>d</sup> Of 105 permit holders participating, 101 made deliveries.

<sup>&</sup>lt;sup>e</sup> Of 103 permit holders participating, 62 made deliveries at Montague Island and 90 made deliveries in the north shore area.

All herring commercial fisheries in PWS were closed during spring 1989 because of the potential for contamination from the Exxon Valdez oil spill.

<sup>&</sup>lt;sup>g</sup> Total for 1991 includes a 92.2 short ton test fishery set made by ADF&G for aerial survey calibration.

<sup>&</sup>lt;sup>h</sup> Total for 1992 includes a 192.5 short ton test fishery harvest made by ADF&G for aerial survey calibration.

<sup>&</sup>lt;sup>i</sup> Season closed because the herring biomass was forecast to be less than the 22,000 short ton spawning biomass threshold.

Because no significant biomass was located, the season was cancelled on April 20.

<sup>&</sup>lt;sup>k</sup> Harvest for 1994 consisted of a single test fishery harvest made by ADF&G for aerial survey calibration.

<sup>&</sup>lt;sup>1</sup> The 2000–2014 seasons were closed because the herring biomass was forecast to be less than the 22,000 short ton spawning biomass threshold.

Appendix G3.-Pacific herring sac roe drift gillnet fishery effort, anticipated harvest, and actual harvest, 1974-2014.

			Ι	Drift gillnet fish	ery		
Calendar	Opening		Effort	Guideline	Harvest	CPUE	Estimated
year	dates	Hours	(boats)	harvest a	(short tons)	(tons/boat hr)	roe %
1974	04/10-04/17		3		3.8		
1975	04/15-04/22	14.0					
1976		13.0					
1977	04/09-04/10	38.0	1		1.6	0.04	
1978 <sup>b</sup>	04/17-04/21	106.0	38		61.7	0.02	
1979	Season closed c						
1980	04/17-05/05		16		264.4		
1981	04/16-04/18	53.0	18		234.5	0.25	
1982	04/24-04/26	54.0	18		393.9	0.41	12-15%
1983	04/21-04/22	24.0	22		105.4	0.20	11.0%
1984	04/18-04/22	59.0	23	250	342.7	0.25	8-14%
1985	04/29-05/01	34.0	21	250	413.3	0.58	10-12%
1986	04/24-04/28	90.0	24	300-400	448.6	0.21	11.4%
1987	04/10-04/11	24.0	24	200-300	533.3	0.93	9.5%
1988	04-23	5.5	24	275	353.0	2.67	10.0%
1989	Season closed d			375			
1990	04/13	4.0	24	353	505.4	5.26	10.6%
1991	04/18	10.5	24	657	742.0	2.94	11.06%
1992	04/23-04/24	11.0	24	825	940.6	3.56	10.8%
1993	04/15, 04/17-04/19	36.0	24	912	1,029.9	1.19	11.01%
1994	Season closed e			0			
1995	Season closed e			0			
1996	Season closed e			0			
1997	04/09	2.5	22	175	175.7	3.19	8.00%
1998	04/11, 04/12	6.5	20	197	415.1	3.19	11.0%
1999	Season closed f			202			
2000-2014	Season closed g			0			

*Note*: CPUE = catch per unit effort.

<sup>&</sup>lt;sup>a</sup> Guideline harvest based on preseason harvest projection beginning in 1986.

<sup>&</sup>lt;sup>b</sup> An additional opening on June 14 for 6 hours resulted in no harvest.

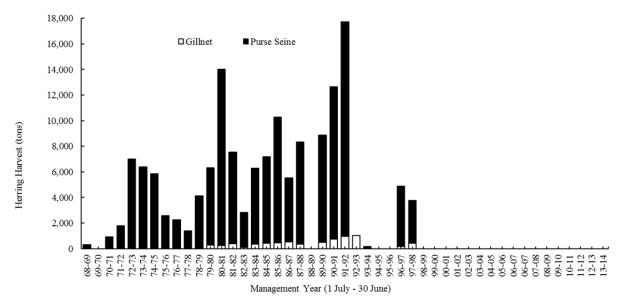
<sup>&</sup>lt;sup>c</sup> Drift gillnet fishery closed by Alaska Board of Fisheries action.

d All commercial herring fisheries in PWS were closed during spring 1989 because of the potential for contamination from the Exxon Valdez oil spill.

<sup>&</sup>lt;sup>e</sup> Season closed because the herring biomass was forecast to be less than the 22,000 short ton spawning biomass threshold.

Because no significant biomass was located, the season was cancelled on April 20.

<sup>&</sup>lt;sup>g</sup> The 2000–2014 seasons were closed because the herring biomass was forecast to be less than the 22,000 short ton spawning biomass threshold.



Appendix G4.—Prince William Sound commercial Pacific herring sac roe purse seine and gillnet harvest by management year, 1968–2014.

Appendix G5.-Pacific herring pound spawn-on-kelp fishery harvest, 1979–2014.

			Effort			Guideline	Blade	s per	Sı	pawn-on-kelp har	vest	Herring
Calendar	Fishery	CFEC	Permits	Producing p	permits a	harvest	permit	holder		(short ton)		utilized b
year	dates <sup>c</sup>	permits d	committed e	Closed f	Open <sup>g</sup>	(short ton)	Closed <sup>f</sup>	Open <sup>g</sup>	Ribbon	Macrocystis	Total	(short ton)
1979		2	0									
1980	04/14	14	4	2		8			0.9	0.4	1.3	16.6
1981	04/14	18	18	7		16			8.6	1.1	9.7	120.7
1982	04/29-05/10	25	20	18		26			25.1	0.5	25.5	319.2
1983	04/30-05/04	47	38	26		26			17.7	10.1	27.7	346.7
1984	04/24-05/08	65	45	37		26			6.4	18.8	25.2	315.1
1985	04/25-05/07	81	59	50		40			12.1	28.1	40.2	502.1
1986	04/21-04/28	104	82	81		60			0	72.2	72.2	903.0
1987	04/10-04/21	111	111	108		85			0	61.2	61.2	765.1
1988	04/12-04/23	122	122	119		85			0	123.2	123.2	1,540.5
1989	Season closed h											
1990	04/11-04/26	128	128	122		118			0	98.8	98.8	1,235.3
1991	04/07-04/20	126	126	119		220	1,200		0	202.4	202.4	2,530.5
1992	04/07-04/24	127	127	127		276	1,770		0	242.2	242.2	3,027.7
1993	04/10-04/22	128	124	52		305	1,950		0	106.4	106.4	1,330.5
1994	Season closed i											
1995	Season closed i											
1996	Season closed i											
1997	04/10-05/06	128	116	7	84	725	410	640	0	34.3	34.3	290.5
1998	04/04, 04/05, 04/09, 04/13 <sup>j</sup>	128	36	13	20	823	425	660	0	10.7	10.7	104.3
1999	04/01, 04/20 k	128	27	7	2	843	435	680	0	6.2	6.2	48.8
2000-2014	Season closed 1											

## Appendix G5.–Page 2 of 2.

*Note*: CFEC = commercial fishery entry commission.

- <sup>a</sup> Number of permits successful in producing product. Because of group cooperation, production is often reported for some individuals whose pounds did not produce product.
- b The equivalent harvest of herring due to stress mortality and the removal of reproductive capacity from the population based on the assumption that 12.5 short tons of herring are used to produce each ton of spawn-on-kelp product.
- <sup>c</sup> Dates that the fishery was opened to purse seines for the capture and placement of herring into pounds.
- Prior to 1994, commissioner permits issued to applicants registering before the March 1 deadline. After 1994, the number of permits represents limited entry permits. Beginning in 1997 permit holders could operate pounds in open or closed configuration, but were required to state intended configuration prior to season.
- <sup>e</sup> The number of individuals receiving an equal allocation of the guideline harvest. Prior to 1994 this represents the number of individual pounds constructed by the April 1 deadline. Beginning in 1997, this number represents permit holders stating intended configuration prior to season.
- f A pound fished in a closed configuration consists of a rectangular floating frame with webbing suspended below, that encloses herring and kelp for period of time during spawning.
- <sup>g</sup> A pound fished in an open configuration consists of a rectangular floating frame with either no webbing suspended below, or with webbing that permits volitional entry and exit of herring on at least one side.
- h All herring commercial fisheries in Prince William Sound were closed spring 1989 because of the potential for contamination from the Exxon Valdez oil spill.
- Season closed because the herring biomass was forecast to be less than the 22,000 short ton spawning biomass threshold.
- <sup>j</sup> Opening dates for each area were: Montague Island April 4, Eastern April 5, Northern April 9, and Southeastern April 13. All areas closed by regulation on December 31, 1998.
- k Opening dates for each area were: Montague Island April 1, St. Matthews Bay April 20. All areas closed by EO on April 25, 1999.
- The 2000–2014 seasons were closed because the herring biomass was forecast to be less than the 22,000 short ton spawning biomass threshold.

Appendix G6.-Natural spawning Pacific herring spawn-on-kelp harvests in pounds and short tons, 1969-2014.

				Guideline	Spawn-on-kelp		Herring
Calendar	Fishery		Effort	harvest	harvest		utilized a
year	dates	Hours	(No. of divers)	(short ton)	Pounds	Short ton	(short ton)
1969	05/18-05/31		3		5,424	2.7	21.7
1970	04/19-06/06		34		190,374	95.2	761.5
1971	04/18-05/15		159		769,481	384.7	3,077.9
1972	04/30-05/20		397		600,453	300.2	2,401.8
1973	04/23-05/26		176		306,358	153.2	1,225.4
1974	04/22-05/04		143		580,588	290.3	2,322.4
1975	04/25-05/10		328		916,919	458.5	3,667.7
1976	04/21- ?		279		485,043	242.5	1,940.2
1977	04/27-12/31		104		417,000	208.5	1,668.0
1978	04/20-04/30		66	165	141,268	70.6	565.1
1979	04/25-05/03		97	200	474,242	237.1	1,897.0
1980	04/23-04/30	10	458	200	603,880	301.9	2,415.5
1981	04-25	12	196	200	122,532	61.3	490.1
1982	05/05-05/08	73	152	187	291,430	145.7	1,165.7
1983	04/27	12	185	187	298,362	149.2	1,193.4
1984	Season Closed b		225 <sup>c</sup>	187			
1985	05/06 & 05/08	20	106	169	60,832	30.4	243.3
1986	04/30-05/03	86	29	142	95,205	47.6	380.8
1987	04/15-04/17	44	59	103	176,485	88.2	705.9
1988	04/29 & 04/30	12	159	103	194,762	97.4	779.0
1989	Season Closed d			110			
1990	04/21-04/22	16	134	104	237,575	118.8	950.3
1991	05/11-05/17	95	48	195	215,147	107.6	860.8
1992	04/24-04/30	101	217	243	504,663	252.3	2,018.7
1993	04/19-04/24	114	83	268	325,181	162.6	1,300.7
1994	Season Closed <sup>e</sup>			110			
1995	Season Closed <sup>e</sup>						
1996	Season Closed <sup>e</sup>						
1997	04/25 & 04/26	26.4	45	56.4	52,800	26.4	211.2
1998	04/22 - 04/27	62	35	464	34,695	17.3	138.8
1999	Season Closed <sup>e</sup>			475			
2000-2014	Season Closed e						

<sup>&</sup>lt;sup>a</sup> Indicates the annual removal of reproductive capacity from the population based on the assumption that average fish roe recovery is 10%, and 80% of spawn-on-kelp harvest weight consists of eggs.

b Season remained closed due to lack of suitable spawn.

<sup>&</sup>lt;sup>c</sup> Permits issued.

d All herring commercial fisheries in Prince William Sound were closed spring 1989 because of the potential for contamination of catches from the Exxon Valdez oil spill.

e Season closed because the herring biomass was forecast to be less than the 22,000 short ton spawning biomass threshold.

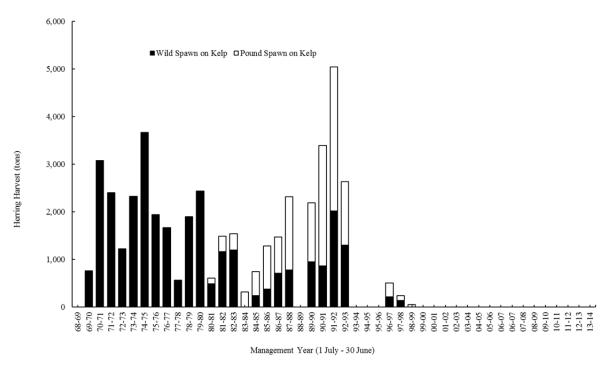
Appendix G7.-Natural spawning Pacific herring spawn-on-kelp harvests by kelp species, 1969-2014.

				Guideline				by kelp specie					
Calendar	Fishery		Effort	harvest		ibbon		Sieve		ucus		Oth	
year	dates	Hours	(no. of divers)	(short ton)	Percent	Price	Percent	Price	Percent	Price	Percent		Price
1969	05/18-05/31		3										
1970	04/19-06/06		34										
1971	04/18-05/15		159										
1972	04/30-05/20		397										
1973	04/23-05/26		176										
1974	04/22-05/04		143										
1975	04/25-05/10		328										
1976	04/21- ?		279										
1977	04/27-12/31		104										
1978	04/20-04/30		66	165	23%		50%				27%	a	
1979	04/25-05/03		97	200									
1980	04/23-04/30	10	458	200	60%	\$1.25	40%	\$0.85					
1981	04-25	12	196	200	38%	\$1.25	60%	\$0.85			2%	a	\$0.60
1982	05/05-05/08	73	152	187	83%	\$1.42	11%	\$0.95			6%	a	\$0.74
1983	04/27	12	185	187	51%	\$2.00-2.45	35%	\$1.50-1.70			14%	b	
1984	Season closed c		225	d 187									
1985	05/06 & 05/08	20	106	169	51%	\$1.25	49%	\$0.50					
1986	04/30-05/03	86	29	142	97%	\$1.75		\$0.80				a	\$0.80
1987	04/15-04/17	44	59	103	90%	\$1.70		\$0.85				a	\$0.80
1988	04/29 & 04/30	12	159	103	64%	\$1.50	24%	\$0.75-1.00			12%	a	\$0.75-1.00
1989	Season closed e			110									
1990	04/21-04/22	16	134	104	37%	\$0.99	6%	\$0.52			57%	a	\$0.88
1991	05/11-05/17	95	48	195					100%	\$0.75-0.85			
1992	04/24-04/30	101	217	243	21%	\$0.70			76%	\$0.40	3%		
1993	04/19-04/24	114	83	268					100%	\$0.55			
1994	Season closed f			110									
1995	Season closed f												
1996	Season closed f												
1997	04/25 & 04/26	26.4	45	56.4					100%				
1998	04/22-04/27	62	35	464	16%	\$0.80			84%	\$0.50			
1999	Season closed f	~ <b>~</b>	33	475	10/0	Ψ0.00			0.70	Ψ0.50			
2000–2014				175									

a Hair kelp.
b Mostly Macrocystis. Some hair kelp.
c Season remained closed due to lack of suitable spawn.

Permits issued.

All herring commercial fisheries in Prince William Sound were closed spring 1989 because of the potential for contamination of catches from the Exxon Valdez oil spill. Season closed because the herring biomass was forecast to be less than the 22,000 short ton spawning biomass threshold.



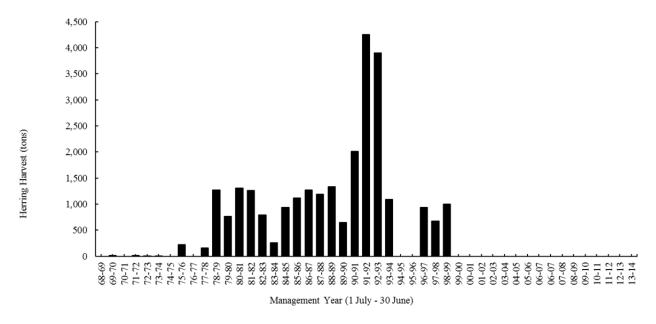
Appendix G8.—Prince William Sound commercial spawn-on-kelp Pacific herring usage by management year, 1968–2014.

Appendix G9.-Prince William Sound commercial Pacific herring food/bait fishery effort and harvests, management years 1969–2014.

Harvest			Guideline	Purse	e seine	Pair	trawl	Mid-w	ater trawl	Otter	trawl	Total
management	Fishin	g Dates	harvest	Effort	Harvest	Effort	Harvest	Effort	Harvest	Effort	Harvest	harvest
year	Opened	Closed	short ton (st)	(boats)	(st)	(boats)	(st)	(boats)	(st)	(boats)	(st)	(st)
1969–1970	10/01/1969	06/30/1970 <sup>a</sup>		_	14.0							14.0
1970-1971	10/01/1970	06/30/1971 a										0
1971-1972	10/01/1971	06/30/1972 a		_	20.0							20.0
1972-1973	10/01/1972	05/09/1973 <sup>a</sup>		_	9.0							9.0
1973-1974	08/27/1973	04/17/1974 <sup>a</sup>	ь	_	8.5							8.5
1974-1975	07/15/1974	03/10/1975	b									0
1975-1976	06/01/1975	06/25/1975 <sup>c</sup>	b	4	226.7							226.7
1976-1977	02/01/1977	03/09/1977	b									0
1977-1978	10/01/1977	02/28/1978	b	_	17.0	_	145.3					162.3
1978-1979	10/16/1978	d	b	_	195.4	7	988.7	_	9.4	_	81.0	1,274.4
1979-1980	09/16/1979	02/28/1980 <sup>e</sup>	1,400	_	510.8	4	145.1	_	103.2	_	2.6	761.7
1980-1981	09/15/1980	11/07/1980	1,400	_	1,030.4	6	275.7					1,306.1
1980-1982	09/15/1981	09/30/1981	1,400	7	1,189.4	_	73.1					1,262.5
1982-1983	09/15/1982	01/31/1983	1,400	6	797.3							797.3
1983-1984	09/15/1983	01/31/1984	1,400	_	257.6							257.6
1984-1985	09/15/1984	01/31/1985	1,400	_	936.2							936.2
1985-1986	09/01/1985	02/15/1986	1,400	6	1,118.1							1,118.1
1986-1987	09/01/1986	10/24/1986	1,400	6	1,276.2							1,276.2
1987-1988	09/02/1987	11/12/1987 <sup>f</sup>	1,400	7	1,189.4							1,189.4
1988-1989	11/01/1988	11/05/1988	1,400	8	1,335.3							1,335.3
1989-1990	11/01/1989	01/31/1990	1,694	-	646.1							646.1
1990-1991	09/21/1990	$11/24/1990^{g}$	3,151	5	1,955.0			_	60.8			2,015.9
1991-1992	10/01/1991	10/14/1991	3,956	14	4,258.5							4,258.5
1992-1993	10/01/1992	10/22/1992	3,416	<sup>n</sup> 17	3,900.3							3,900.3
1993-1994	10/07/1993	10/10/1993	978	8	1,087.0							1,087.0
1994-1995	Season closed j											0
1995-1996	Season closed j											0
1996-1997	11/01/1996	11/03/1996	825	6	933.9							933.9
1997-1998	k 11/1/1997, 02/19/1998	02/28/1998	945	12	679.7							679.7
1998–1999	11/02/1998	11/04/1998, 11/06/1998	967	11	1,003.3	_	_					1,003.3
1999–2014	<sup>m</sup> Season closed <sup>j</sup>											

## Appendix G9.–Page 2 of 2.

- <sup>a</sup> Openings set by regulation. Ending date coincides with regulatory ending of sac roe season.
- b No official quota, but unofficial goal was 1,500 short tons.
- Harvest from special June food-and-bait fishery opening. Although this harvest actually occurred at the end of the 1975 management year, it is included in the 1976 harvest management year to be consistent with other food-and-bait harvests that occur after spring sac roe fisheries.
- <sup>d</sup> Fishery closed from 1 January to 6 January 1979.
- <sup>e</sup> Fishery closed from 1 January to 15 February 1980.
- Fishing season opened by regulation on September 1, 1987 in the District. The north-shore and east-shore herring districts opened on September 23. The season was closed by EO on October 6 for a period of five weeks, reopened on November 9, and closed for the duration of the 1987/1988 season on November 12, 1987.
- g Fishery open from September 21 until November 24. The Montague Island area was open from September 24 until November 24.
- h Preseason guideline harvest level based on spawn deposition biomass estimate. Final guideline harvest based on age-structured analysis was issued in January 1993 and was 4,373 short tons.
- Preseason guideline harvest level based on preliminary aerial survey biomass estimate of 40,000 short tons.
- Season closed because the herring biomass was forecast to be less than the 22,000 short ton spawning biomass threshold.
- k Season reopened in spring 1998 based on final age structured assessment modeling. Of the total harvest, 578.1 short tons were taken in November 1997 and 101.6 short tons were taken in February 1998.
- <sup>1</sup> Includes sale from ADF&G test fishery near Knowles Head, October 31 1998.
- <sup>m</sup> Season closed for all management years between 1999 and 2014.



Appendix G10.-Prince William Sound commercial food/bait Pacific herring harvest, management years 1968-2014.

Appendix G11.—Mean price and estimated exvessel value of the commercial Pacific herring harvest by gear type based on verbal postseason estimates from processors and permit holders, 1978–2014.

	Sac	c roe fisheries		Spa	wn on kelp fi	sheries		Food-and-bait	fishery		
<u> </u>	Purse seine	:	Drif	t gillnet	Wild spawn o	n kelp	P	ounds	Mixed ge	ar	
Calendar	Price	Total	Price	Total	Price	Total	Price	Total	Price	Total	Total
year	per ton	value	per ton	value	per lb	value	per lb a	value	per ton	value	Value
1978	\$720	\$956,800			\$1.25	\$175,000			\$380	\$489,820	\$1,621,700
1979	\$1,260	\$5,213,880			\$1.74	\$821,280			\$300	\$196,800	\$6,231,960
1980	\$320	\$1,933,760			\$1.09	\$667,080			\$300	\$424,800	\$3,025,640
1981	\$400	\$5,508,000	\$580	\$135,720	\$1.00	\$122,000			\$260	\$328,120	\$6,093,840
1982	\$380	\$2,716,240	\$640	\$251,520	\$1.29	\$397,320			\$220	\$194,260	\$3,559,340
1983	\$600	\$1,634,400	\$1,040	\$109,200	\$2.10	\$634,200			\$260	\$70,980	\$2,448,780
1984	\$760	\$4,435,360	\$640	\$218,880	NO HARV	EST	\$3.50	\$176,439	\$260	\$265,460	\$5,096,139
1985	\$760	\$5,380,800	\$900	\$371,700	\$0.48 \$	19,200	\$7.09	\$569,058	\$250	\$279,500	\$6,620,258
1986	\$820	\$8,058,960	\$920	\$412,160	\$1.70 \$	159,800	\$8.00	\$1,155,200	\$180	\$229,680	\$10,015,800
1987	\$1,100	\$5,480,200	\$960	\$511,680	\$1.70 \$	299,200	\$15.00	\$1,836,000	\$300	\$356,700	\$8,483,780
1988	\$840	\$6,600,000	\$1,400	\$537,000	\$1.20 \$	232,000	\$18.00	\$4,500,000	\$300	\$400,590	\$12,236,500
1989				SEASON CI	LOSED				\$300	\$193,830	\$193,830
1990	\$640	\$5,351,744	\$640	\$323,456	\$0.90	\$213,840	\$11.40	\$2,305,080	\$300	\$605,130	\$8,799,250
1991	\$600	\$7,153,800	\$600	\$445,200	\$0.80	\$172,160	\$9.00	\$2,880,000	\$250	\$1,064,625	\$11,715,785
1992	\$400	\$6,713,680	\$800	\$752,480	\$0.46	\$232,116	\$8.00	\$3,875,200	\$200	\$780,060	\$12,353,536
1993	NO HARVE	EST	\$400	\$411,960	\$0.55	\$178,860	\$10.00	\$2,000,000	\$200	\$217,400	\$2,808,220
1994					SEAS	ON CLOSEI	)				
1995					SEAS	ON CLOSEI	)				
1996				SEASON CI	LOSED				\$200	\$187,000	\$187,000
1997	\$200	\$940,600	\$80	\$14,080	\$0.61	\$32,000	\$8.00	\$426,816	\$250	\$170,000	\$1,583,496
1998	\$300	\$999,000	\$375	\$156,000	\$0.65	\$23,000	\$5.00	\$107,000	\$295	\$296,000	\$1,581,000
1999		S	EASON (	CLOSED			\$8.00	\$99,000	SEASON CLOSED		
2000-2014						SEASO	ON CLOS	ED			

<sup>&</sup>lt;sup>a</sup> The price per pound for spawn on kelp in pounds is based on the final product weight, not harvest weight.

Appendix G12.-Annual Pacific herring biomass indices for harvest management years 1973-2014.

	Total					Unexploitated	Pre-fishery	Observe	ed	
	spring	Aerial survey estimates				esc. biomass	run biomass	peak acoustic biomass		
	Use and	Peak	Maximum		Mile	Age	Age	estimat	es	
Harvest	harvest	biomass	possible	Miles	days	structured	structured			Prior year
management	mortality <sup>a</sup>	estimate b	observed	of	of	analysis <sup>f</sup>	analysis <sup>f</sup>	Fall	Spring	forecast
year	(st)	(st)	biomass c	spawn <sup>d</sup>	spawn <sup>e</sup>	(st)	(st)	(st)	(st)	(st)
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	59,243	64,058	ND	ND	ND
1980-1981	14,124	77,810	161,690	85.4	144.0	62,368	75,633	ND	ND	ND
1981-1982	7,861	68,790	97,620	49.0	85.5	57,888	65,382	ND	ND	ND
1982-1983	3,181	41,850	107,710	67.4	93.5 <sup>g</sup>	70,655	73,423	ND	ND	ND
1983-1984	6,604	58,870	158,760	60.1	104.8	78,729	84,548	ND	ND	ND
1984–1985	7,679	20,830	60,954	101.2	156.7	94,996	102,109	ND	ND	ND
1985-1986	11,180	15,180	54,820	72.4	146.8	83,325	93,935	ND	ND	ND
1986–1987	6,281	26,530	52,192	65.3	186.8	100,887	106,112	ND	ND	ND
1987–1988	9,871	34,270	67,175	166.3	269.8	122,992	131,588	ND	ND	43,992
1988–1989	h	56,915	186,708	98.4	228.1	139,298	139,298	ND	ND	54,899
1989–1990	10,103	57,900	145,013	94.1	164.4	118,483	128,539	ND	ND	51,692
1990-1991	15,196	42,765	141,375	58.0	71.5	90,682	105,620	ND	ND	96,666
1991–1992	20,752	53,835	130,569	74.7	119.8	62,863	81,279	ND	ND	121,342
1992–1993	2,360	20,725	109,865	20.4	50.3	31,861	33,228	ND	ND	134,133
1993–1994	151	19,640	154,008	14.6	23.1	17,531	17,531	20,998	ND	29,787
1994–1995	0	7,113	20,868	20.4	28.2	16,375	16,375	13,840	14,639	19,009
1995–1996	0	10,691	37,771	27.2	37.3	21,798	21,798	26,776	25,346	24,332
1996–1997	5,170	10,858	57,114	42.7	64.3	29,321	33,403	3,086	44,083	37,599
1997–1998	3,849	13,817	50,124	38.7	62.0	23,471	26,757	ND	19,456	38,640
1998–1999	49	6,366	10,872	25.4	40.7	17,393	17,441	ND	22,397	39,557
1999-2000	0	1,610	2,889	19.5	31.7	14,849	14,849	ND	8,024	23,987

## Appendix G12.—Page 2 of 2.

	Total					Unexploitated	Pre-fishery	Observed		
	spring	Aerial survey estimates				esc. biomass	run biomass	peak acoustic biomass		
	Use and	Peak	Maximum		Mile	Age	Age	esti	mates	
Harvest	harvest	biomass	possible	Miles	days	structured	structured			Prior year
management	mortality <sup>a</sup>	estimate b	observed	of	of	analysis <sup>f</sup>	analysis <sup>f</sup>	Fall	Spring	forecast
year	(st)	(st)	biomass c	spawn <sup>d</sup>	spawn <sup>e</sup>	(st)	(st)	(st)	(st)	(st)
2000-2001	0	587	1,075	16.0	14.8	10,375	10,375	ND	7,035	NA
2001-2002	0	646	1,433	21.5	23.6	12,965	12,965	ND	11,791	NA
2002-2003	0	5,600	8,951	25.2	26.1	16,738	16,738	ND	29,864	NA
2003-2004	0	12,305	17,650	29.7	30.4	21,707	21,707	ND	21,046	NA
2004-2005	0	4,773	5,230	29.9	31.7	16,387	16,387	ND	16,800 <sup>i</sup>	21,064
2005-2006	0	540	609	19.9	21.7	13,497	13,497	ND	7,600 <sup>i</sup>	17,554
2006-2007	0	770	1,615	$NA^{j}$	18.3	14,993	14,993	ND	10,700 <sup>i</sup>	15,830
2007-2008	0	10,700	13,740	$NA^{j}$	33.2	20,154	20,154	ND	23,300 <sup>i</sup>	10,252
2008-2009	0	1,933	2,913	$NA^{j}$	29.8	22,757	22,757	ND	16,900 <sup>i</sup>	17,903
2009-2010	0	4,180	15,160	$NA^{j}$	32.7	24,119	24,119	ND	28,500 i	$NA^k$
2010-2011	0	7,570	14,380	$NA^{j}$	26.2	20,090	20,090	ND	24,000 i	22,704
2011-2012	0	1,960	7,360	$NA^{j}$	39.3	22,730	22,040	ND	30,000 <sup>i</sup>	22,397
2012-2013	0	1,720	5,837	$NA^{j}$	29.3	24,741	24,884	ND	24,200 <sup>i</sup>	26,095
2013-2014	0	2,722	9,441	$NA^{j}$	36.6	NA	NA	ND	22,000 i	24,815

*Note*: st = short tons

<sup>&</sup>lt;sup>a</sup> Represents the common property seine and gillnet sac roe harvest, and equivalent use of herring in closed pound SOK fisheries.

b Largest single day aerial estimate of herring biomass in short tons (2,000 lb). Does not include Kayak Island estimates.

<sup>&</sup>lt;sup>c</sup> The sum of all daily aerial biomass estimates for a given year. Does not include Kayak Island estimates.

d Total linear miles of spawn (statute miles).

<sup>&</sup>lt;sup>e</sup> The sum of the daily observed linear miles of herring spawn was calculated in ArcMap from digitized hand-annotated paper maps and data collected electronically (statute miles). Estimate does not include Kayak Island data.

f Unexploited escapement and run biomass estimates from age structured analysis, September 2012. Model to project 2014 was not finalized.

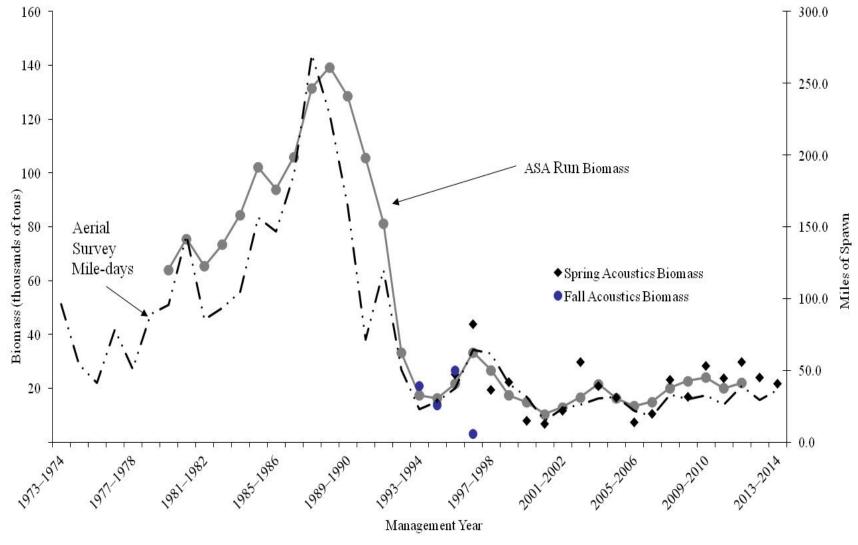
<sup>&</sup>lt;sup>g</sup> Partial estimate of spawning biomass from feasibility study.

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.

<sup>&</sup>lt;sup>i</sup> 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.

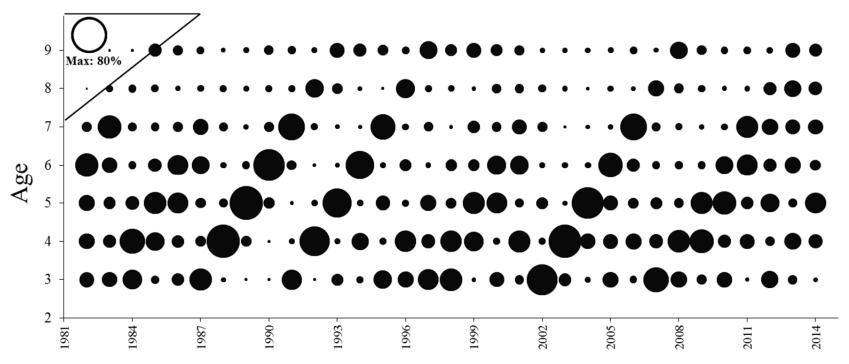
<sup>&</sup>lt;sup>j</sup> Miles of spawn estimate for 2007–2014 are not available.

k Estimates are not available.

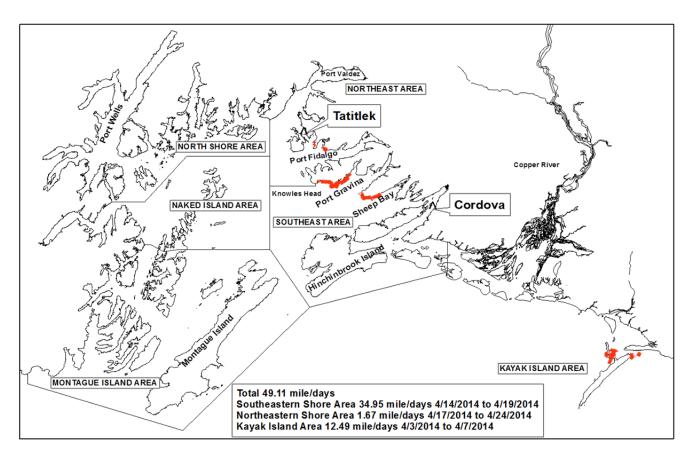


Appendix G13.-Prince William Sound annual Pacific herring biomass indices by management year, 1973-2014.

Note: Aerial survey results are mile-days of spawn and other indices are thousands of short tons.



Appendix G14.—Pacific herring percentage contribution by number of each age group to the spring run biomass, 1982–2014.



Appendix G15.-Location of spawning herring and miles of spawn observed during aerial surveys in Prince William Sound, 2014.