Fishery Management Report No. 12-06

2010 Prince William Sound Area Finfish Management Report

by

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

Symbols and Abbreviations

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

Weights and measures (metric)

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

Weights and measures (English)

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

Time and temperature

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

Physics and chemistry

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

General

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

Measures (fisheries)

fork length	FL
mideye to fork	MEF
mideye to tail fork	METF
standard length	SL
total length	TL

Mathematics, statistics

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

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2010 PRINCE WILLIAM SOUND AREA FINFISH MANAGEMENT REPORT

by

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

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ABSTRACT

The 2010 Prince William Sound (PWS) management area (all coastal waters and inland drainages entering the north central Gulf of Alaska between Cape Suckling and Cape Fairfield) commercial salmon harvest was 78.0 million salmon. The harvest was comprised of 71.3 million pink *Oncorhynchus gorbuscha*, 2.0 million sockeye *O. nerka*, 4.3 million chum *O. keta*, 351,000 coho *O. kisutch*, and 11,000 Chinook salmon *O. tshawytscha*. Approximately 91.9% of the harvest, 71.7 million fish, was common property harvest and 6.3 million fish were sold for hatchery cost recovery. Homepack, educational permits, and donated fish accounted for less than one percent. Based on an informal survey of salmon processors in the PWS and Copper River area, the preliminary estimated value of the combined commercial salmon harvest, including hatchery sales was $133.7 million. During the 2010 season, 519 drift gillnet, 29 set gillnet, and 174 purse seine permit holders fished. Drift gillnet exvessel harvest value was an estimated $38.5 million, setting average permit earnings at $74,095; set gillnet exvessel harvest value was an estimated $3.6 million, setting average permit earnings at $123,298; purse seine fishery exvessel harvest value was an estimated $79.8 million, setting average permit earnings at $458,835. Revenue generated for hatchery operations was approximately $11.9 million. The PWS management area personal use and subsistence fisheries harvested a total of 206,000 fish. For these fisheries, approximately 11,400 subsistence and personal use permits were issued to Alaska residents. Sport fish permit holders landed an estimated 150,000 salmon in the PWS management area. The commercial Pacific herring *Clupea pallasi* fishery in the PWS management area was closed in 2010 for the eleventh consecutive year because the spawning biomass remained below or near the 22,000 tons regulatory threshold.

Key words: Prince William Sound, Copper River, salmon, harvest, drift gillnet, set gillnet, purse seine, commercial salmon harvest, salmon enhancement, PWSAC, VFDA, hatchery, cost recovery, sport fishery, subsistence fishery, personal use fishery, escapement, sockeye salmon, *Oncorhynchus nerka*, pink salmon, *Oncorhynchus gorbuscha*, chum salmon, *Oncorhynchus keta*, Chinook salmon, *Oncorhynchus tshawytscha*, coho salmon, *Oncorhynchus kisutch*, Pacific herring, *Clupea pallasii,* 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 Prince William Sound, the management area includes Bering River and Copper River 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 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 stocks 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. As an avenue for the commercial fishing industry to formally provide management recommendations to the 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).

Six hatcheries contribute to the area's salmon fisheries. Prince William Sound Aquaculture Corporation (PWSAC) operates 5 of the hatcheries. Gulkana Hatchery (GH) in Paxson augments production of sockeye salmon *Oncorhynchus nerka* in the Copper River. Cannery Creek

Hatchery (CCH) located in Unakwik Inlet (northern PWS) and Armin F. Koernig (AFK) Hatchery on Evans Island (southwestern PWS) produce pink salmon *O. gorbuscha*. Wally Noerenberg Hatchery (WNH) on Esther Island (northwestern PWS) produces pink, chum *O. keta*, and coho salmon *O. kisutch*. Main Bay Hatchery (MBH) in the Eshamy District (western PWS) produces sockeye salmon. Valdez Fisheries Development Association (VFDA) operates Solomon Gulch Hatchery (SGH) in Port Valdez (northern PWS) and produces pink and coho salmon.

Gear utilized in the salmon fisheries includes purse seine and drift and set gillnet. Purse seine gear is permitted to fish in the Eastern, Northern, Unakwik, Coghill, Northwestern, Southwestern, Montague and Southeastern Districts. Drift gillnet permits are the most numerous and are permitted to fish in the Bering River, Copper River, Coghill, Unakwik, and Eshamy Districts. In 2009 and 2010 drift gillnet gear was permitted to harvest hatchery chum salmon in the Port Chalmers Subdistrict of the Montague District as stipulated in the *Prince William Sound Management and Allocation Plan* (5 AAC 24.370). Set gillnet gear is permitted to fish in the Eshamy District.

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, governs all herring fisheries. The management objective for herring is to target fisheries on a high quality segment of the biomass while maintaining a threshold spawning biomass.

OVERVIEW OF AREAWIDE SALMON AND HERRING FISHERIES

The 2010 Prince William Sound management area commercial salmon harvest was 78.0 million fish. The harvest was composed of 71.3 million pink, 2.0 million sockeye, 4.3 million chum, 351,000 coho, and 11,000 Chinook salmon *O. tshawytscha* (Table 1; Figure 3). Hatchery runs of sockeye, coho, pink, and chum salmon were at or above forecast. Harvest of pink and chum salmon were above the 10-year (2000–2009) commercial harvest average (Table 2). Approximately 92% of the harvest, 71.7 million fish, was attributed to the common property fishery and 6.3 million fish were attributed to the hatchery cost recovery fishery. Homepack harvest accounted for less than one percent of Area E harvest (Table 1). The 2010 preliminary exvessel value estimates by gear group from the common property fishery, both wild and enhanced salmon, are $79.8 million (65.5%) for purse seine, $38.5 million (31.6%) for drift gillnet, and $3.6 million (2.9%) for set gillnet (Table 3; Figure 4). The average price per pound paid to fishermen was significantly above the 10-year (2000–2009) average (Table 4). The overall harvest values for all gear groups were the highest on record (Table 5).

No commercial fisheries for herring occurred in 2010 even though the spawning biomass was above the regulatory threshold of 22,000 tons of herring. The spawning biomass estimate of 22,400 did not provide a large enough harvestable surplus of herring to allocate fish among herring fisheries. The interannual trend in available surplus will also need to be assessed for population stability prior to reopening the fisheries.

As the result of amendments made to the *Prince William Sound Management and Salmon Enhancement Allocation Plan* (5 AAC 24.370) at the December 2005 Alaska Board of Fisheries (BOF) meeting, and the 5-year average enhanced exvessel value for the purse seine gear group exceeding their limit of 55%, drift gillnet permit holders were permitted to harvest hatchery chum salmon in the Port Chalmers Subdistrict of the Montague District.

SALMON SEASON SUMMARY BY DISTRICT

COPPER RIVER DISTRICT (APPENDICES A1–A20, APPENDIX E)

ADF&G with direction from the BOF, has managed salmon runs to the Copper River District to assure sustained yield and to meet all user group allocations, as outlined in 5 AAC 24.360 *Copper River District Salmon Management Plan*. At the December 1999 BOF meeting in Valdez, 5 AAC 24.361 *Copper River King Salmon Management Plan* was amended to provide ADF&G both the tools and the discretion to manage early season fisheries as necessary to maintain the spawning escapement within the range of 28,000 to 55,000 Chinook salmon. In 2003 the BOF modified the spawning escapement goal to 24,000 or greater Chinook salmon. At the December 2005 BOF meeting, the *Copper River Chinook Salmon Fishery Management Plan* was further amended to limit the number of commercial openings inside of the barrier islands in statistical weeks 20 and 21 to no more than 1 per week to increase escapement.

Management tools, such as inriver sonar, aerial survey observations, and harvest data provide ADF&G fishery managers with indices of abundance that are used to regulate Copper River fisheries. ADF&G relies on the escapement index provided by the sonar at Miles Lake to manage the commercial fishery and provide for upriver escapement and allocations. Additionally, aerial escapement indices, thermal and strontium marked otolith data, and weir data have provided supporting information on the relative success of ADF&G in meeting provisions of the *Copper River District Salmon Management Plan*. From 2000 to 2009 the combined reported upriver subsistence and personal use harvest (federal and state) has ranged from 123,000 sockeye salmon (in 2008) to 200,000 (in 1999), with a 10-year average of 160,000 salmon. A general increasing trend in subsistence harvest is reflected annually through additions to the inriver goal. Achieving escapement goals and satisfying management plan provisions remain the primary management objectives of ADF&G.

The Copper River District commercial fishing season has historically opened in mid-May. Commercial fishery periods, as described in regulation, that ran from Monday morning to Friday evening had been standard management practice. Starting in 1968, periods were 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 Alaska Board of Fisheries. Two commercial fishing periods per week has been the recent schedule with the duration of a given fishing period dependent upon trends in escapement, harvest, and environmental conditions.

In 2003, the BOF adopted a range of 300,000–500,000 wild sockeye salmon as the sustainable escapement goal (SEG) (5 AAC 24.360(a)) for Copper River. Prior to this, the sockeye salmon spawning escapement goal was 300,000 fish (adopted in 1972 and placed into regulation in 1980 (Fried 1994).

The components of the 2010 inriver goal were as follows:

Spawning escapement	300,000 to 500,000 sockeye salmon
Other salmon	17,500 salmon
Subsistence harvest	70,747 salmon
Personal Use harvest	108,295 salmon
Sport fishery	15,000 salmon
Gulkana broodstock	20,000 sockeye
Gulkana Hatchery surplus	136,047 sockeye
Total	667,590 to 867,590 salmon

Of the 7 categories contained within the inriver goal, the most significant increases over time have been in hatchery surplus, subsistence, and personal use categories. In the early 1980s, the Miles Lake sonar minimum inriver goal stood at 350,000 salmon. Since that time, the minimum inriver goal has been set as high as 768,000, primarily in response to large forecasts of enhanced sockeye salmon and increasing subsistence and personal use harvests. The number of subsistence and personal use salmon within the inriver goal are calculated annually using the average subsistence and personal use harvest from the previous 5 years. The daily inriver goal is the anticipated number of salmon counted daily at the Miles Lake sonar to meet the overall inriver goal. For 6 of the 7 components listed above, the daily inriver goal is calculated using both wild and enhanced 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... The number of hatchery surplus sockeye salmon within the inriver goal is determined annually using the Gulkana Hatchery run forecast to determine the surplus escapement of hatchery fish required to not exceed the average wild stock exploitation rate of 67% during the late June and July mixed stock fishery in Copper River District. It is important to note surplus hatchery sockeye salmon do not fulfill any wild stock escapement needs, nor are they linked to any upriver subsistence or sport allocations; however, a significant percentage of the hatchery surplus is harvested during July and August in these upriver fisheries.

Preseason Outlook and Harvest Strategy

The 2010 commercial harvest forecast for the Copper River District was 16,600 Chinook, 1,270,000 sockeye, and 302,900 coho salmon, (Table 6). The enhanced sockeye salmon run to Gulkana Hatchery was forecast by ADF&G to be 471,000 fish. PWSAC required approximately 20,000 fish for broodstock leaving the remaining hatchery sockeye salmon available for commercial, subsistence, personal use, and sport harvests. The 2010 inriver goal for salmon passing Miles Lake was 667,590 to 867,590 fish. This number equated to a sonar goal of 648,638 to 842,841 salmon by July 31, the season ending date for sonar counting at Miles Lake in 2010 (Appendix A7).

The traditional fishing schedule for the Copper River District is 2 evenly spaced fishing periods per week, with periods generally occurring on Mondays and Thursdays with duration of periods announced by emergency order. It was agreed upon at the Salmon Harvest Task Force meeting in 2007 that the second gillnet fishing period in each week would begin Thursday morning rather than Thursday evening as had been the standard for over 15 years prior to that year. This change

was requested by the majority of the permit holders who indicated a preference for starting the openings in the mornings. Most processors also supported this as it provided additional time to process and ship fresh product to the weekend markets.

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. In addition 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 estimates 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 for Copper River delta sockeye salmon stocks is 55,000 to 130,000 fish.

Typically, coho salmon management begins in the second week of August. The historical precedent is to provide an initial single 24-hour opening per week; as harvest or aerial survey numbers warrant, the duration of this fishing period may be increased to 48 hours, or a second fishing period may be added during the week. Aerial escapement estimates for the early portion of the coho salmon run are frequently not immediately available as other species of salmon remain in tributaries and accurate aerial identification is problematic. Additionally, stormy fall weather makes weekly survey flights difficult. The SEG for the Copper River Delta is 32,000 to 67,000 coho salmon.

Sockeye and Chinook Salmon Fishery Season Summary

The total 2010 Copper River sockeye salmon run was 1,715,967 fish with 636,214 (37.1%) commercially harvested, 198,162 (11.5%) harvested by upriver subsistence and personal use users, and an estimated 16,000 (0.9%) by upriver sport fishermen. Commercial permit holders retained 7,064 for "homepack" (0.4%). Sport fishermen on the Copper River Delta harvested an estimated 1,300 (<0.1%) sockeye salmon. Reported educational permit and subsistence harvest in the Copper River District totaled 2,041 (0.1%). The remaining 679,055 (39.6%) comprised the upriver and delta wild sockeye salmon escapement with an additional 176,123 (10.3%) returning to the Gulkana Hatchery area (Appendix A1). Overall, 973,932 (56.8%) of the sockeye salmon entering the Copper River District originated from upriver wild stock systems, 289,285 (16.9%) from delta wild stock systems and 452,751 (26.4%) came from the Gulkana Hatchery (Appendix A2).

The 2010 total Chinook salmon run was 33,181 fish with 9,645 (29.1%) commercially harvested, 307 (0.9%) harvested through educational and subsistence permits in the Copper River District and 906 (2.7%) retained by commercial permit holders as "homepack". A total of 2,875 (8.7%) were harvested by upriver personal use and subsistence users, an estimated 2,500 (7.5%) were harvested by sport fishermen, and the remaining 51.1%, (16,948) represent spawning escapement (Appendix A3). This is below the SEG minimum threshold of 24,000 for Copper River Chinook salmon as defined by the BOF in 5 AAC 24.361(a). The entire Chinook salmon run originated from wild upriver stocks.

The Copper River commercial sockeye salmon harvest was 636,214. This was below the projected 1,270,000 and 54.7% of the previous 10-year average of 1,163,610 sockeye salmon. The harvest of 9,645 Chinook salmon was less than one-third of the previous 10-year average of 32,032 fish (Appendix A4). The final Miles Lake sonar count on August 1 was 923,811 salmon

and was above the escapement goal range of 648,638 to 842,841 salmon for that date (Appendices A7 through A9). A total of 495 drift gillnet permits were active in the Copper River District in 2010 out of a total 541, with peak participation occurring in the third fishing period of the season on May 20 with 456 permit holders reporting deliveries. River height was above the 27-year average in late May (Appendix A11). The final escapement index count for the Copper River Delta systems was 83,905 sockeye salmon; within the SEG range of 55,000–130,000 fish and comparable to historical escapement (Appendices A12 and A13). Three aerial surveys of upper Copper River index streams were conducted by the gillnet manager, and peak counts for these surveys are in Appendix A13.

Based on strontium chloride (Sr) otolith mark analysis, 207,915 Gulkana Hatchery sockeye salmon were harvested in the Copper River commercial fishery in 2010 accounting for 32.7% of the total sockeye salmon commercial harvest (Appendix E6). This is more than the previous 10-year contribution average of 153,118 hatchery sockeye salmon (Appendix E7). The majority were 5-year-old fish from the 2006 Gulkana Hatchery release of 20.2 million fry. (Appendix E8).

Additionally in 2010, there were an estimated 12,888 Main Bay Hatchery sockeye salmon harvested commercially in the Copper River District (Appendix E6).

Typically the Copper River District has opened for commercial fishing in mid-May, with the management strategy to provide for 2 evenly spaced fishing periods per week as escapement allows.

The first Copper River District commercial fishing period on Thursday, May 13 was for 12 hours and had 239 commercial drift gillnet permits fishing. The harvest from this period was 6,641 sockeye and 969 Chinook salmon (Appendices A5 and A6). The anticipated harvest was 8,986 sockeye and 785 Chinook salmon (Appendix A10). The weather was overcast and the seas were reported as 10 feet with 25 knot winds during this period. Processors were paying $5.00 per pound for Chinook and $3.40 per pound for sockeye salmon. The second 12-hour period occurred under sunny skies and variable wind on Monday, May 17 with 447 commercial permits reporting deliveries. Harvest from this period was 34,962 sockeye and 1,475 Chinook salmon. This was below the anticipated 45,217 sockeye and below the anticipated 2,572 Chinook salmon harvest for the second period.

The Miles Lake south and north bank sonar became operational on May 20 and counted 24 salmon on the first day of operation. This was below the minimum inriver goal of 5,264 for that date (Appendices A7 and A8).

In accordance with 5 AAC 24.361(b) the inside waters, as described in 5 AAC 24.350(1)(B), were closed for the duration of the 12-hour period occurring on Thursday, May 20. Harvest from this period was 46,966 sockeye and 1,783 Chinook salmon with 456 permit holders reporting deliveries. Weather during this period continued to be sunny with southwest winds to 15 knots. This allowed some smaller vessels to fish in the deeper exposed waters outside of the barrier islands. The actual sockeye salmon harvest from this period was lower than the 71,302 anticipated and Chinook salmon harvested was also below the anticipated level of 3,406 fish (Appendix A10). Given that the actual Chinook salmon harvest was below the anticipated harvest in 2 of the 3 periods fished, waters inside of the barrier islands described in 5 AAC 24.350(1)(B) remained closed after week 21 (May 16–22) in order to maximize the number of Chinook salmon traveling upriver. Daily sonar passage at Miles Lake matched passage expected 3–4 days earlier indicating a salmon return that was possibly 3–4 days late in timing. Harvest

during the two 12-hour periods in week 22 (May 23–29) was below anticipated with 2,596 Chinook and 77,761 sockeye salmon harvested versus anticipated harvests of 5,051 and 195,079 for this week respectively (Appendix A6). On May 28, in response to an increased lag in passage at the Miles lake sonar, ADF&G did not announce a fishing period on Monday, May 31.

A fishing period was also not announced for Thursday, June 3. This allowed additional fish in the river so that on June 7 cumulative escapement reached 262,477. While below the cumulative inriver goal of 270,228 for that date, this deficit (2.9%) was considered acceptable given the later timing of the return observed up to that date. Actual daily inriver passage from this date until June 28 generally matched anticipated levels. A 12-hour fishing period occurred on Monday, June 7 with 242 permit holders harvesting 44,545 sockeye and 829 Chinook salmon (Appendix A10). An additional 12-hour period occurred on Thursday, June 10 with 200 permit holders harvesting 20,101 sockeye and 547 Chinook salmon. Waters inside of the barrier islands remained closed during both of these periods in order to reduce the harvests of Chinook salmon. Waters in this area were opened along with outer waters for a 12-hour period on Monday, June 14. Typically by this date more than 90% of the commercial Chinook salmon harvest has occurred. Harvest during this period was 19,512 sockeye and 508 Chinook salmon with 129 permit holders reporting deliveries. Over the next 2 weeks, harvests of sockeye salmon remained steady with two 12-hour periods per week and an average of 19,061 fish caught per period while Chinook salmon harvest declined as expected with 829 harvested during week 25 (June 13–19) and 303 harvested the following week (June 20–26).

On Sunday June 27, in anticipation of increasing numbers of Gulkana hatchery sockeye salmon the duration of the Monday, June 28 fishing period was extended to 24 hours. This decision was supported by not only historic run timing of this stock, but also by increasing numbers of strontium marked fish harvested in the commercial fishery. Harvest from this fishing period and participation were similar to previous periods with 97 permit holders reporting 22,859 sockeye and 97 Chinook salmon. A second 24-hour period was announced for Thursday, July 1. During this fishing period 84 permits reported harvesting 19,425 sockeye and 56 Chinook salmon. With sonar passage showing an increasing trend, a 36-hour fishing period was announced for July 5. In spite of participation that was half of the previous fishing period, 43 permit holders harvested 15,687 sockeye and 19 Chinook salmon. This reduction in fishing effort was likely the result of permit holders choosing to focus on robust returns of hatchery chum and sockeye salmon to the Wally Noerenberg and Main Bay hatcheries in Prince William Sound. Fishing time was increased to 60 hours for the Thursday, July 8 period. This was based on improved catch per vessel from the July 5 period, increasing escapement as measured by the Miles Lake Sonar, and further strontium data showing increasing levels of hatchery salmon in the commercial harvest. Participation in the 60-hour period increased to 85 permit holders who reported 60,660 sockeye and 46 Chinook salmon harvested. In addition, on Friday, July 9 sonar passage peaked for the season with an estimated 31,188 salmon passing by the Miles Lake facility. Estimated passage was nearly as high the following day with 31,061 salmon counted.

There were two 60-hour fishing periods the following week on Monday, July 12 and Thursday, July 15. Participation was 171 and 177 permits respectively, with 52,635 sockeye salmon caught in the Monday period and 71,651 in the Thursday fishing period. Supported by sonar passage remaining above anticipated, two 48-hour periods were held in week 30 (July 18–24) with a total of 59,236 sockeye harvested by 206 permit holders. Daily sonar passage during the second half of July remained above the minimum inriver goals and was frequently above maximum daily

goals. The last day of sonar counting at Miles Lake sonar was Saturday, July 31. There were two 48-hour periods during the first week of August with 31 permits reporting 4,725 sockeye harvested for both periods combined. Harvest continued declining during the following week (August 8–14) with a total of 934 sockeye salmon reported by 31 permit holders during the two 36-hour periods that occurred.

The final cumulative sonar estimate on July 31 was 923,811 salmon. This was above the upper end of the inriver goal range of 648,638 to 842,841 salmon for the final date.

The final escapement index value for Copper River Delta sockeye salmon stocks based on aerial surveys was 83,905, and was within the SEG range of 55,000 to 130,000 fish. Since 1999 this value has ranged from a low of 58,406 in 2005, to a high of 98,896 in 2006 with a previous 10-year average index value of 76,960 (Appendices A12 and A13).

Fishing effort in 2010 peaked during the third period on May 20 where 456 permit holders harvested 46,966 sockeye and 1,783 Chinook salmon during the 12-hour opening. Peak Chinook salmon harvest also occurred during this fishing period. Peak sockeye salmon harvest occurred during the Thursday, July 15 fishing period where 71,651 fish were harvested by 177 permit holders.

The total 2010 Copper River District commercial harvest of sockeye salmon (636,214), was below the anticipated harvest of 1.3 million sockeye, as was the Chinook salmon harvest (9,645), which was below the anticipated harvest of 16,600 fish. These harvests were below the previous 10-year average for both sockeye (1,163,610) and Chinook salmon (32,032). In addition to closures of the waters inside of the barrier islands as described in 5 AAC 24.350(1)(B) to commercial fishing from May 20 until June 14 other harvests of Chinook salmon were restricted. Personal Use harvest of Chinook salmon at Chitina was suspended on June 15. On June 15, the upper Copper River Sport harvest annual bag limit for Chinook salmon was reduced from 4 to 2 fish and no more than 1 fish could be retained from any individual tributary or the mainstem Copper River. Final spawning escapement of Chinook salmon in the Copper River is estimated at 17,000 fish. This is below the SEG threshold of 24,000 fish as specified in 5 AAC 24.361(a).

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, 73.5%, were 5-year-old fish from brood year 2005, with 4-year-old fish and 6-year-old fish making up 22.1% and 4.2%, respectively. Over half of the sockeye salmon harvested, 54.5%, were males. (Appendix A15). The majority of the Chinook salmon harvested commercially, 49.4%, were also 5-year-old fish from brood year 2005, with 6-year-old and 4-year-old fish making up 21.3% and 26.0%, respectively. Approximately 1.3% of the run was 7-year-old fish from brood year 2003. Less than half of the Chinook salmon harvested, 42.8%, were males (Appendix A16).

Coho Salmon Fishery Season Summary

The 2010 total run was estimated to be 337,114 coho salmon. A total of 210,621, (62.5%) coho salmon were harvested commercially, and of these 1,026 were reported retained as “homepack”, 27 were harvested from the Copper River District in the subsistence gillnet fishery; 2,195 were harvested by personal use dipnetters in the Chitina Subdistrict; 293 were harvested in the Glennallen Subdistrict dip net and fish wheel subsistence fisheries; an estimated 9,822 (2.91%) were harvested by sport fisherman on the Copper River delta near Cordova; and an estimated 31

fish were harvested by upriver sport fisherman (Appendix A18). Finally, 165 coho salmon were harvested in federally managed subsistence fisheries (Appendices F5 and F6). The Copper River Delta spawning escapement was 112,934 coho salmon (Appendix A18). The aerial survey index for this season was 41,077 fish and was within the SEG index range of 32,000 to 67,000 (Appendix A19). The 2010 index value is at least 20,000 fish below the 2002 to 2006 index values, and is comparable to index values from 2000, 2001, and 2009 when delta coho salmon runs were depressed (Appendix A20). The 2010 total run size for coho salmon in the Copper River is unknown because the number of coho salmon migrating upriver was not assessed.

The coho salmon commercial harvest of 210,621 was 30.5% below the projected harvest of 302,900 fish. As is typical in this fishery, escapement estimates of coho salmon were hampered by frequent storms and high silt levels in major index streams. Rough seas and inclement weather likely had a negative impact on harvest levels of coho salmon.

The transition to coho salmon management typically takes place in early August. During years where aerial survey indices are below weekly SEG targets, commercial fishing opportunity is reduced to one period per week or less. In 2010 aerial survey indices were within anticipated ranges. An aerial survey flown on Sunday, August 15 documented 11,650 coho salmon in index streams. Based on these observations and combined with reports of good sport fish harvests, there were two 24-hour periods in week 34 (August 15–21). Harvest during these periods was below the previous 10-year average (43,013) with 8,364 coho salmon harvested by 65 permit holders. Weather during these fishing periods was challenging with rain and rough seas.

Harvest the following week (August 22–28) increased substantially with 60,600 harvested by 266 permit holders during the two 24-hour fishing periods that occurred. The anticipated harvest (10-year average) for this statistical week was 62,526 fish. An aerial survey was flown on August 30 with 22,781 coho salmon observed in index streams as compared to a minimum SEG of 21,447 fish for statistical week 36 (August 29–September 4). There were two 24-hour periods during this statistical week with 61,234 coho salmon harvested by 271 permit holders. Anticipated harvest for this statistical week was 64,224 fish.

The next week (September 12–18) continued the pattern of two 24-hour periods per week with 221 permit holders delivering 44,185 coho salmon, less than the 52,138 fish anticipated for statistical week 37. An aerial survey flown the following week on Friday, September 10 documented 29,714 coho salmon in index streams. This was well within the SEG range of 18,286–38,285 for statistical week 37. As a result of this aerial survey, the 24-hour fishing period announced earlier that day and scheduled for Monday, September 13 was extended from 24 to 48 hours. Harvest from the two 48-hour periods in week 38 (September 12-18) was 24,073 coho salmon with 120 permit holders reporting deliveries. The following week saw a continuation of stormy conditions that prevented aerial surveys and made commercial fishing problematic. There were two 48-hour fishing periods in statistical week 39 (September 19–25). During the first fishing period 32 permit holders reported harvesting 3,474 coho salmon and during the second, 3 permit holders reported harvesting 186 fish. There were no further deliveries reported in any of the 4 commercial periods that occurred prior to the Copper River District closing for the 2010 season on October 11.

Peak fishing effort was during the 24-hour period that occurred on Thursday, August 26 when 251 permit holders delivered 21,946 coho salmon. Peak harvest occurred during the previous 24-hour period on Monday, August 23 when 157 permit holders harvested 38,654 coho salmon. The

total harvest of 210,621 coho salmon for the 2010 season was below the harvest projection of 302,896 fish (Appendices A5 and A10). The final 2010 aerial escapement index value for Copper River Delta coho salmon stocks was 41,077 fish and within the SEG range of 32,000–67,000 coho salmon for the Copper River District. This was below the previous 10-year average index value of 70,864 coho salmon (Appendices A19 and A20). The majority of the coho salmon harvested commercially, 52.3%, were 4-year-olds from brood year 2006, with 3-year-old and 5-year-old fish making up 47.7% and 0.1%, respectively. Over half, 55.1%, of the coho salmon harvested were males (Appendix A17).

BERING RIVER DISTRICT, (APPENDICES A20–A25)

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 23,000 (as measured by aerial survey) had not been met since 2005 ADF&G announced at the Salmon Harvest Task Force that it would not open this district until escapement levels were within the anticipated weekly SEG.

Sockeye Salmon Season Summary

The first aerial survey of the Bering River District was flown on Sunday, July 4 with a second one flown later in statistical week 28 (July 4–10) on Friday, July 9. Peak counts from these surveys produced a total of 3,382 sockeye salmon counted in index streams. This was below the SEG range for that statistical week of 9,341–14,214 sockeye salmon (Appendix A22). Historically statistical weeks 28 and 29 have resulted in the largest counts in index streams in this district. As the result of these surveys, combined with sockeye salmon escapement that has fallen below SEG goals since 2005, ADF&G elected to keep the Bering River District closed to commercial harvest prior to the start of coho salmon season in early August. Poor observational conditions prevented regular weekly surveys of this district. An additional survey flown on July 20 counted 2,770 sockeye salmon. This was below the SEG range of 16,946–25,789 for statistical week 30 (July 18–24) in these index systems. An aerial survey flown on August 3 documented 2,290 sockeye and 2,460 coho salmon in index streams. While the count for sockeye salmon was below the SEG range of 14,415–21,936 for this date, the coho salmon count was close to the SEG of 2,533–6,431 for this statistical week (Appendix A22). Given that the midpoint of the overall SEG range of 13,000–35,000 coho salmon has been exceeded in 4 of the last 5 years in this district (Appendix A20) and that historically more than 90% of the sockeye salmon commercially harvested have been caught by this date, the Bering River District was opened to commercial harvest for 48 hours along with the Copper River on Thursday, August 5 (Appendices A23 and A24).

Coho Salmon Season Summary

Weather conditions allowed for sporadic aerial surveys of coho salmon index streams. For the fourth year in a row, the Bering River District coho salmon run was late and above average in abundance with final escapement within the SEG.

In 2010 the first opening of the Bering River District coho salmon fishery was on August 5 and was for 48 hours with no fish reported as harvested. Prior to this an aerial survey flown on August 3 documented numbers of returning coho salmon that were consistent with returns in

recent years during which final escapement has been in the upper end of the SEG range. There were 3 additional openings on August 9, 12 and 16 during which there were no deliveries reported from this district. An aerial survey flown on August 15 documented 3,881 coho salmon in Bering River and Controller Bay index streams. This compares to an SEG range of 8,732–22,165 coho salmon (Appendix A25). The 24-hour fishing period on Thursday, August 19 saw minimal participation with less than 3 permits harvesting a confidential number of coho salmon. Harvest increased during statistical week 35 (August 22–28) with 32 permits delivering a total of 10,519 during the two 24-hour periods. An aerial survey flown on Monday, August 30 counted 12,870 coho salmon which is within the SEG range (6,969–17,691) for statistical week 36 (August 29–September 4). Harvest from the two 24-hour periods in this statistical week was 14,183 coho salmon with 40 permits reporting deliveries. Harvest the following week remained robust with 25,324 coho salmon harvested by 46 permit holders. An aerial survey flown on September 10 counted 14,791 coho salmon. This is above the upper end of the SEG range (5,041–12,797) for statistical week 37 (September 5–11). Harvest overall the following week (September 12–18) was slightly larger with 52 permit holders reporting 26,096 coho salmon sold during the two 48-hour periods. An aerial survey flown on September 20 documented 17,650 in index streams, this is above the SEG range of 5,156–13,089 for statistical week 39 (September 19–25). There were 4,349 coho salmon harvested by 16 permit holders during the 48-hour fishing period that occurred on Monday, September 20. There was no harvest from the 48-hour period that started on Thursday, September 23. There were 4 additional commercial fishing periods held over the next 2 weeks with no deliveries reported. The Bering River District closed for the 2010 season on October 11 (Appendices A24 and A25).

Peak fishing effort and harvest was during the first period in statistical week 38 on September 13–15 when 44 boats harvested 16,613 coho salmon (Appendix A23). The total harvest of 80,560 coho salmon for the 2010 season was above the anticipated previous 10-year harvest average of 51,759 fish. The coho salmon escapement goal was achieved with a peak escapement index of 21,311 fish. This was below the previous 10-year average of 31,453 and within the SEG range of 13,000 to 33,000 fish for the Bering River District (Appendices A20–21 andA24).

COGHILL DISTRICT (APPENDICES B1–B10)

Preseason Outlook and Harvest Strategy

The 2010 forecast of sockeye salmon returning to Coghill Lake was 70,900 fish. Meeting the lower end of the SEG range of 20,000–40,000 sockeye salmon would leave 50,900 fish for the common property fishery (Table 6). Enhanced chum salmon runs to the Wally Noerenberg Hatchery were forecast to be 1.8 million fish. PWSAC's projection for cost recovery and broodstock requirements was approximately 693,000 fish, leaving 1.1 million chum salmon for the CPF. The projected run of pink salmon to the WNH facility was 5.9 million fish. Of those, PWSAC's projection for cost recovery and broodstock requirements was approximately 1.1 million fish, leaving 4.8 million pink salmon available to the CPF (PWSAC 2010, WNH Annual Management Plan, page 8). An estimated run of 8,100 coho salmon were projected for WNH (Table 6). A total of 2,700 were anticipated to be harvested for broodstock with the remaining 5,400 fish available to the CPF.

Season Summary

The Coghill River weir was fully deployed and fish tight on June 10. The aluminum panel weir installed at that time replaced the bolt-together iron weir that had been used at this site for more than 20 years. This weir was destroyed in 2009 during a high water event. Final 2010 sockeye salmon escapement on July 26 was 24,312. This is within the SEG range for Coghill Lake of 20,000–40,000 sockeye salmon (Appendices B1, B2, and B3).

The total CPF purse seine and drift gillnet combined sockeye salmon harvest for the Coghill District was 88,244 (99.1% drift gillnet) fish; the total CPF harvests for chum, pink, and coho salmon were 2,515,212 (99.9% drift gillnet), 14,252,561 (23.4% drift gillnet), and 5,932 (92.7% drift gillnet), respectively (Appendix B4 and B5). In 2010 PWSAC reported a WNH chum salmon purse seine cost recovery harvest of 538,130 fish, a raceway cost recovery harvest of 55,914 fish and broodstock carcass sales of 155,912 fish. PWSAC also reported a pink salmon purse seine cost recovery harvest of 1.4 million fish, a raceway cost recovery harvest of 146,992 fish, and broodstock carcass sales of 190,418 fish. As part of chum salmon brood collection, 155,912 chum salmon were used to seed the hatchery, 12,651 fish were not viable or unspawned, 20,996 fish were holding mortalities, and PWSAC estimated that 7,000 fish were not harvested and remained within the watershed. As part of pink salmon brood collection, 190,418 pink salmon were used to seed the hatchery, 14,089 fish were unviable or unspawned, 8,784 fish were holding mortalities, and PWSAC estimated that 5,000 fish were not harvested and remained within the watershed. PWSAC also reported harvesting 371 coho salmon for broodstock (Appendix E12).

There were 72,998 MBH sockeye harvested in the Coghill District commercial fishery, accounting for 82.7% of the 88,244 total sockeye salmon harvested (Appendix E9). There were 2,536,740 chum salmon harvested in this district by the CPF, with 2,493,608 (98.3%) having been released at WNH and the Port Chalmers remote release site in the Montague District, as well as 43,132 (1.7%) originated from wild stocks (Appendix E11). While these fish had thermal marks that were supposedly specific to each release site, fish were released from both sites with either mark. A total of 87,465 sockeye, 5,498 coho, 3,333,106 pink and 2,512,005 chum salmon were harvested by the drift gillnet fleet and the remainder by the purse seine fleet (Appendices B4 and B5).

The common property gillnet fishery began in the Coghill District on Monday, May 24. This began a regular schedule of Monday and Thursday openings until late July when purse seine gear was allowed in this district with the start of pink salmon management.

During the first openings of the season in statistical week 22 (May 23–29) 172 permit holders reported harvesting 294,802 chum and 63 sockeye salmon during the 60-hour and 84-hour openings (Appendix B4 and B6). Portions of the Coghill District in northern Port Wells and the northern portion of the WNH special harvest area (SHA) (north of 60° 47.83’ N latitude) were closed during these periods.

During the 2 periods occurring in statistical week 23 (May 30–June 5) waters north of Pt. Pakenham were closed to conserve wild sockeye salmon stocks and waters west of a line from Point Pigot to Point Pakenham were closed to conserve wild chum salmon in western bays. In addition, waters within ½ nautical miles of Culross Island were closed to minimize harvest of both of these stocks. Also waters in the Esther Subdistrict north of Egg Rocks were closed to allow a buildup of returning hatchery chum salmon in anticipation of cost recovery beginning in

the next few weeks. During week 23, 295 permit holders harvested a total of 662 sockeye and 398,152 chum salmon during the 60 and 36-hour periods that occurred. In statistical week 24 (June 6–12) two 36-hour commercial fishing periods were announced using the same areas as had been open the previous week. Total harvest from these periods was 360,960 chum and 9,239 sockeye salmon with 292 permit holders reporting deliveries. In week 25 (June 13–19), 24-hour and 12-hour periods were announced for Monday and Thursday with the same closed areas as previously described, with the exception that the entirety of the Esther Subdistrict remained closed. Total harvest from these periods with 302 permits reporting, was less chum salmon than in previous weeks (194,430) but increasing numbers of sockeye salmon (3,004) as the Coghill Lake wild return and Main Bay Hatchery return developed. Passage at the Coghill weir was lagging with an expected cumulative escapement for Saturday, June 19 of 600 sockeye salmon versus an actual passage of 387 fish.

There were two 24-hour periods in statistical week 26 (June 20–26) with 264 permit holders delivering a total of 292,884 chum and 6,359 sockeye salmon. Passage at the Coghill River weir increased during this week with a count on Saturday, June 26 of 3,159 sockeye salmon past the weir versus an expected minimum of 2,848 for this date. With the attainment of the PWSAC WNH cost recovery goal and increasing numbers of sockeye salmon past the Coghill weir, time was increased during week 27 (June 27–July 3) to a 24-hour period on Monday and a 36-hour period on Thursday. An additional 12-hour period was inserted on Wednesday, June 30 in response to PWSAC's unexpected announcement on Monday, June 28 that chum salmon cost recovery was completed. During this period waters of the Esther Subdistrict excluding the SHA and terminal harvest area (THA) were opened to commercial harvest. These waters were also opened on the following day. Harvest for this statistical week was 453,327 chum, 1,048 pink and 26,108 sockeye salmon. Passage at the Coghill weir was restricted by technicians during much of this week for sampling purposes, as a consequence cumulative passage on Saturday, July 3 was 4,840 versus an SEG of 8,439 for that date. The weir was opened to fish passage early in the following week (statistical week 28, July 4–10) allowing more than 5,000 to pass in a 2-day period, before being closed again for continued sampling.

During week 28 there were two 60-hour periods. Waters west of a line from Point Pakingham to Point Pigot and waters within 0.5 nautical miles of Culross Island were closed to reduce the harvest of wild chum salmon. In addition, the WNH THA and SHA were both closed during the Monday period, but only the SHA was closed during the period that occurred on Thursday. Harvest from these periods combined was 392,672 chum, 26,205 pink and 20,803 sockeye salmon with 236 permits reporting deliveries. Harvest during statistical week 29 (July 11–17) was significantly less with 160 permits delivering only 94,491 chum and 12,623 sockeye salmon during the 60 and 84-hour periods on Monday and Thursday.

Closed waters were similar to previous periods with the WNH SHA closed during the Monday period and opened for the Thursday period. As had been the case during the previous 2 weeks, the Coghill weir was closed to fish passage during a portion of the week to allow for sampling. As of Saturday, July 17 a total of 15,059 sockeye salmon had been counted at the weir versus an expected minimum escapement for that date of 17,067 fish. Estimates of sockeye salmon in the river below the weir indicated that there were enough to meet the SEG. Drift gillnet harvest and participation during statistical week 30 (July 18–24) declined to 79 permits as pink salmon management began on July 21 with purse seine gear allowed in the district on that date. There was one 60-hour period that began on Monday, July 19 as well as three 14-hour periods on July

22, 23 and 24. Harvest from the drift gillnet only 60-hour period was 46,507 pink, 13,581, chum and 2,876 sockeye salmon with 66 drift gillnet permit holders reporting deliveries from this period. Drift gillnet harvest from the three 14-hour periods was 75,416 pink, 9,859 chum and 2,504 sockeye salmon. There were two 14-hour openings in statistical week 31 (July 25–31) on Sunday and Tuesday. Gillnet harvest from these periods was 22,316 pink, 1,276 chum and 429 sockeye salmon with 20 permit holders reporting deliveries.

The district was closed for the latter half of the week to allow a buildup of returning pink salmon in anticipation of PWSAC cost recovery. There were five 14-hour fishing periods in week 32 (August 1–7) with a total of 1.0 million pink, 1,174 chum and 820 sockeye salmon harvested by the drift gillnet fleet. During this statistical week 5.1 million pink salmon were harvested by purse seine permit holders. Robust gillnet harvests of pink salmon continued for the remainder of August with 2.0 million pink salmon landed by 229 permit holders during statistical weeks 33 (August 8–14) through 35 (August 22–28). During this period 5.6 million pink salmon were harvested by 73 purse seine permit holders. As the result of only 106,000 brood year 2007 coho salmon being released from the WNH in 2009, there was no directed fishery on PWSAC returning coho salmon. The last commercial delivery was made from the September 1 commercial period. The Coghill District closed for the 2010 season on September 11.

Peak drift gillnet fishing effort occurred during the 24-hour period on June 14 when 290 permit holders harvested 2,044 sockeye and 109,936 chum salmon. Peak sockeye salmon harvest occurred during the 60-hour period on July 5–7 when 12,475 fish were landed by 208 permit holders. Peak chum salmon harvest occurred during the May 27 fishing period (84 hours) when 201 permit holders harvested 279,695 fish. Overall, 87,465 sockeye salmon were harvested by 428 drift gillnet permit holders during the 2010 season. This is below the previous drift gillnet 10-year harvest average of 134,778 sockeye salmon (Appendix B8). The majority of the 88,244 sockeye salmon harvested by the drift gillnet and purse seine fleets combined were returning Main Bay Hatchery fish (72,998) in addition to 214 sockeye salmon from the Solf Lake remote release site. The remaining 15,031 sockeye salmon were wild stock (Appendix E9). The 2010 harvest of 2,512,005 chum salmon by drift gillnet permit holders was above the previous 10-year average of 1,134,542 chum salmon. The 2010 harvest of 5,498 coho salmon by the drift gillnet fleet was below the previous 10-year average harvest of 41,703 fish (Appendix B8).

The estimated age and sex compositions of sockeye salmon commercially harvested as well as those sampled at the Coghill weir can be found in Appendix B9 and B10.

UNAKWIK DISTRICT (APPENDICES B11 AND B12)

Preseason Outlook and Harvest Strategy

Unakwik District, in the northern portion of Unakwik Inlet, is the smallest district in the Prince William Sound management area. Both drift gillnet and purse seine gears are allowed during all fishing periods. This district was established for management of relatively small runs of sockeye salmon to Cowpen and Miners lakes. Escapement enumeration is by aerial survey. A major pink salmon hatchery, Cannery Creek Hatchery, borders the southern boundary of the district. Harvest opportunity in this district was significantly reduced from that in recent years due to a lack of reliable sockeye salmon escapement information in this district.

Season Summary

The total 2010 Unakwik District harvest was 46 sockeye and 26 chum salmon (Appendix B11). Of those fish, 31 sockeye and 26 chum salmon were caught by purse seine permit holders. The 2010 total sockeye salmon harvest of 46 fish was below the 10-year average of 6,802 fish for both gear types (Appendix B12). The Unakwik District opened on Monday, June 14 for a 24-hour period followed by an 24-hour period on Thursday. This schedule was maintained until July 5 when a schedule of two 36-hour periods per week was established that continued until July 22. A 14-hour period was announced for this date with an additional 14-hour period held on July 26. The Unakwik District was closed to commercial harvest at the conclusion of this period for the 2010 season.

PORT CHALMERS SUBDISTRICT, (APPENDICES B13–B16, E22)

Preseason Outlook and Harvest Strategy

The Port Chalmers Subdistrict is located in the northern end of the Montague District. Since 1994 PWSAC has been releasing chum salmon at this remote location for purse seine harvest. PWSAC forecast a run of 863,000 chum salmon returning to this subdistrict in 2010.

At the 2005 BOF meeting, the *Prince William Sound Management and Allocation Plan* (5 AAC 24.370) was amended to address imbalances in the allocation and states when: "the drift gillnet gear group harvest value (of PWSAC enhanced sales) is 45% or less, then in the year following the current calculations, the drift gillnet gear group shall have exclusive access to the Port Chalmers Subdistrict to harvest enhanced salmon returns from June 1 through July 30, during fishing periods established by emergency order;".

The drift gillnet harvest value allocation percentage for the 2010 fishing season, based on the 2004–2008 5-year average annual exvessel value of enhanced salmon, was 37.9%. On October 16, 2009 ADF&G announced that the drift gillnet fleet would have exclusive access to enhanced chum salmon returning to the Port Chalmers Subdistrict in 2010. Deep gillnets greater than 60 meshes in depth are permitted in this subdistrict to assure an aggressive harvest of hatchery produced chum salmon and thereby minimize the possibility of these fish straying. Harvest from this subdistrict was significantly below expected levels. This may have been related to difficulty PWSAC had in establishing net pens and transporting fish to Port Chalmers during the harsh winter of 2006.

Season Summary

The total Port Chalmers Subdistrict harvest was 242,526 chum salmon (Appendices B13 and B14) with 113 drift gillnet permit holders reporting deliveries. The 2010 chum salmon harvest was below the 6-year average of 612,436 fish (Appendix B15). A total of 154,508 chum salmon (63.7%) were marked as having been released at Pt. Chalmers, and 83,972 (34.6%) were marked as WNH releases. The remaining 4,064 (1.7%) were wild stock chum salmon (Appendix E21). The Port Chalmers Subdistrict was opened on Monday, May 24 for a 60-hour period followed by an 84-hour period on Thursday. This schedule was maintained for the next 10 weeks until the last week of July with a 40-hour period that ended at 11:59 pm on July 30. The following morning this district reopened to purse seine only harvest. Harvest peaked during the June 24–27 period with 31,830 chum salmon harvested by 45 permit holders. In addition, 2,050 sockeye salmon were harvested during this period. Effort peaked during the week prior with 29,313 chum

salmon harvested by 59 permit holders during the June 17–20 period. During the July 5–7 fishing period 3,782 pink salmon and 17,929 chum salmon were harvested (Appendix B13). In order to minimize the harvest of salmon other than enhanced chum salmon returning to Port Chalmers, the western boundary of the subdistrict was moved eastwards to a line from Graveyard Point to a point of land 3 miles south of Gilmour Point.

ESHAMY DISTRICT, (APPENDICES C1–C10)

Preseason Outlook and Harvest Strategy

The 2010 forecast for sockeye salmon returning to Eshamy Lake was 46,900. Meeting the minimum of the BEG range of 13,000–28,000 fish would leave 33,900 fish for the common property set and drift gillnet fisheries. The total return to the Main Bay Hatchery was projected by PWSAC to be 884,000 sockeye salmon. The entire projected run was stock of Coghill Lake origin, of which 6,617 fish were required for broodstock and the remaining 876,000 fish would be available for harvest in the common property fisheries. At the SHTF meeting in late spring it was announced that the first gillnet opening in the Crafton Island Subdistrict would occur during the last week of May. Additionally, it was agreed that the fishing periods starting on Thursday would continue to begin in the mornings, rather than the evenings as had been the standard prior to 2007. Similar to previous years, fishing periods would be reduced to less than 12 hours, as an alternative to omitting fishing periods. Additionally, 2010 was the first year since the *Prince William Sound Management and Salmon Enhancement Allocation Plan* (5 AAC 24.370) was modified in 2005 that the set gillnet gear group was not restricted to less than 36 hours of fishing time per week after July 10. This was the result of the 5-year average value of PWSAC enhanced stocks harvested by set gillnet permit holders was less than 5%.

Season Summary

The Eshamy River weir was fully deployed and fish tight on July 9. The weir was maintained and fish were counted through August 29. Total escapement through the weir consisted of 16,291 sockeye, 2,268 pink, 84 chum, and 114 coho salmon. The 2010 sockeye salmon escapement was below the 10-year average of 29,612 fish (Appendices C1–C3). No cost recovery was done at the Main Bay Hatchery in 2010, the only corporate harvest conducted at the site was for broodstock (18,196). The run timing of Coghill Lake sockeye salmon stock returning to the MBH was expected to be from mid-June to late-July with the peak anticipated on July 4. PWSAC typically installs the barrier seine in mid-June to begin broodstock collection.

The initial commercial opening of the 2010 season was a 60-hour period occurring in statistical week 22 (May 23–29) on Monday, May 24 (Appendices C4–C7). There were no drift gillnet permits and only 5 set gillnet permits that reported 40 sockeye and 381 chum salmon from this period. This was followed by an 84-hour period on Thursday, May 27 during which 7 set gillnet permit holders harvested 1,365 chum and 172 sockeye salmon. Harvest and effort during week 23 (May 30–June 5) increased significantly with 15 set gillnet permit holders delivering 7,046 chum and 1,522 sockeye salmon. Drift gillnet participation also increased with 16 permits delivering 1,169 sockeye and 11,426 chum salmon during the 60 and 84-hour periods that the district was open to commercial harvest. During the following week (June 6–12) harvests of hatchery chum and sockeye salmon increased significantly with 28,813 sockeye and 53,614 chum salmon harvested by 25 set and 169 drift gillnet permit holders. This trend continued from week 25 (June 13–19) through week 27 (June 27–July 3) with 890,476 sockeye and 440,119

chum salmon harvested during this period by 28 set and 357 drift gillnet permits. During these 3 weeks over 90% of the sockeye and chum salmon were of hatchery origin (Appendix E13 and E15). During week 28 (July 4–10) both sockeye and chum salmon catches diminished significantly with 255 drift and 28 set permit holders reporting 182,539 sockeye salmon and 81,335 chum salmon. However, harvests of pink salmon during this week increased from 6,121 fish in the previous week to 38,111. Of those fish 47.2% were of wild stock origin. Given that in recent years, pink salmon wild stock escapement has dwindled in the Eshamy and the neighboring Northwestern district, ADF&G announced early in June that beginning July 8 gillnet gear in the Eshamy District would be limited to mesh no smaller than 5 inches. Pink salmon harvest declined slightly to 33,172 during week 29 (July 11–17). Given the continued robust pink salmon harvest and below SEG aerial survey indices for this species, waters of the Eshamy District south of Loomis Creek were closed beginning on Monday, July 12. Waters of the general district north of this were open for 24 hours with the Main Bay Subdistrict open for 60 hours. Harvest from week 29 was 78,971 sockeye, 9,860 chum, and 33,172 pink salmon with 20 set and 116 drift gillnet permit holders reporting deliveries. During the following week waters north of Loomis Creek in the general district were open on Monday for 24 hours with the Main Bay Subdistrict open for 60 hours. Beginning on Thursday, July 22, only waters of the Main Bay Hatchery Subdistrict were opened in order to reduce interception of wild stock pink salmon. Harvest from week 30 (July 18–24) was 41,527 sockeye, 5,165 chum and 30,190 pink salmon with 15 set and 62 drift permit holders reporting deliveries. Of these salmon, 86.8% of the sockeye, 48.1% of the chum and 13.0% of the pink salmon were of hatchery origin (Appendices E13–15).

The Eshamy weir began passing fish on July 13. At the end of week 30 (July 24) a total of 1,284 sockeye salmon had been counted at the weir versus a cumulative expected escapement of 1,763 for this date. Early in week 31 (July 25–31) the tender Cape Cross struck a rock while anchored and sank in shallow water in the Main Bay Subdistrict, just east of the THA boundary along the southern shore. While only minimal quantities of oil leaked from the grounded vessel, the Main Bay Subdistrict was closed to commercial harvest at 10:30 am on Tuesday, July 27. Conditions were overcast with fog at the time. Tender captains reported that some vessels continued fishing after the announced closure and transported their catch to tenders in the Coghill District for sale and reporting from that district. Harvest from this period from the Eshamy District was 7,138 sockeye, 2,276 pink and 85 chum and 70 coho salmon with 40 permits reporting deliveries. Of these salmon, 94.4% of the sockeye, 48.1% of the chum and 14.3% of the pink salmon were estimated to be of hatchery origin. All waters of the Eshamy district were closed during this period to minimize interception of wild stock pink and chum salmon returning to this district and the neighboring Northwestern District.

There was no Thursday period in the Eshamy District due to concerns of possible contamination from the grounded tender. Weir passage during this week increased with a cumulative total of 4,067 sockeye salmon as of July 31. This is within the cumulative SEG range of 2,997–6,456 for that date. Pink salmon escapement in index streams remained below expected levels for this date. A 12-hour fishing period was announced for Monday, August 2 in Eshamy Bay, excluding waters of the lagoon as described in 5 AAC 24.350(8). In addition waters of the MBH THA and SHA were opened for a 36-hour period. As had been the case in previous years, when only Eshamy Bay was opened, the preponderance of the catch was pink salmon. Overall, 32 permit holders reported harvesting 7,083 sockeye, 230 coho and 16,363 pink salmon from the Eshamy District. In the portion of the general subdistrict open to commercial harvest 20 permit holders

delivered 2,111 sockeye and 14,893 pink salmon. A second opening of similar duration and area occurred on Thursday, August 5 with 4 permit holders harvesting 446 sockeye and 3,300 pink salmon from Eshamy Bay. There was no reported harvest from Main Bay for this fishing period. Passage at the Eshamy River weir during week 32 (August 1–7) remained strong resulting in a cumulative passage on August 7 of 9,440 versus an SEG range of 4,156 to 8,951.

Given that pink salmon escapement index streams in the Eshamy and Northwestern districts continued to be below the SEG, and that harvest of pink salmon continued to exceed sockeye salmon in commercial harvests in Eshamy Bay, ADF&G elected to reduce fishing area to waters just off the mouth of the Eshamy River for a 12-hour period on Monday, August 9. Harvest from this period was 2,942 sockeye and 1,424 pink salmon with 15 permits reporting deliveries. In addition, the Main Bay SHA and THA were open for 36 hours beginning on Monday morning with no deliveries reported. Area and duration were repeated for a period on Thursday, August 12 with 9 permit holders delivering 1,605 sockeye and 1,435 pink salmon from the area off of the Eshamy River. There was no reported harvest from the Main Bay Subdistrict. Cumulative passage at the Eshamy River weir on August 14 was 13,200 sockeye salmon and was within the SEG range for this date of 6,539–14,085. Area and duration for commercial harvest were repeated on Monday, August 16 with 3 permit holders delivering 545 sockeye, 148 coho, and 1,030 pink salmon from area in the Eshamy Lagoon. There was no delivery from the Main Bay Subdistrict.

There were 5 additional fishing periods announced over the next 4 weeks during which there were no deliveries. The Eshamy District was closed to commercial harvest on September 25. The weir on the Eshamy river was operational through August 29 with a final count of 16,291. This was within the SEG of 11,481–24,728 sockeye salmon for that date. In addition 2,268 pink, 84 chum, and 114 coho salmon passed through the Eshamy weir in 2010. This compares to a previous 10-year average of 29,612 sockeye, 195 coho, 10,027 pink and 378 chum salmon (Appendix C3).

Overall 962,478 sockeye and 529,860 chum salmon were harvested by 413 drift gillnet permit holders during the 2010 season. This is higher than the previous 10-year average of 421,481 sockeye and 86,599 chum salmon for this gear group. A total of 29 set gillnet permit holders harvested 282,467 sockeye and 80,516 chum salmon. This is also higher than the previous 10-year averages of 157,117 sockeye and 20,137 chum salmon harvested by this gear group (Appendix C6–C8). Of the 1,244,945 sockeye salmon commercially harvested in the Eshamy District, 1,200,436 (96.2%) were Main Bay Hatchery sockeye salmon (Appendix E13).

The majority of the chum salmon harvested in the Eshamy District were of hatchery origin released at either WNH, AFK Hatchery or the Port Chalmers remote release site. While fish released at each of these sites are required to have a unique thermal mark on their otolith, PWSAC failed to do this in 2006 when multiple marks were released from each release site.

The estimated age and sex compositions of sockeye salmon, harvested in the commercial fishery and at the Eshamy River weir can be found in Appendices C9 and C10.

GENERAL PURSE SEINE DISTRICTS, (APPENDICES D1–D13)

Preseason Outlook and Harvest Strategy

The general purse seine districts include Eastern, Northern, Unakwik, Coghill, Northwestern, Southwestern, Montague, and Southeastern. The *Prince William Sound Management and Salmon*

Enhancement Allocation Plan (5 AAC 24.370(d)) closes Southwestern District to purse seine gear prior to July 18. The plan also closes Coghill District to purse seine gear prior to July 21, unless superseded by the following: the *Wally Noerenberg Hatchery Management Plan* (5 AAC 24.368(f)) allows early harvest of the harvestable surplus of chum salmon to prevent deterioration of fish quality; or the *Prince William Sound Management and Salmon Enhancement Allocation Plan* (5 AAC 24.370(e)) allows the purse seine fleet to fish prior to July 21 if the purse seine fleet caught 45% or less of the average annual commercial CPF exvessel value in the PWS area in the previous 5 years. Beginning July 21, both purse seine and drift gillnet gear are allowed in Coghill District. Purse seine gear is allowed in Coghill District while the harvestable surplus by number is predominantly pink salmon. Fishing periods in all districts are established by EO.

ADF&G forecasts wild fish runs, while hatchery run projections are provided by PWSAC and VFDA. Run projections for species and districts without formal forecasts were based on average historical production. The forecast CPF harvests by species are summarized in Table 6. Run projections are the basis for early inseason management of all districts. Cost recovery harvest projections of enhanced runs may change depending upon the price per pound that VFDA and PWSAC contract for their cost recovery harvest. On March 15, 2010, the PWSAC Board of Directors approved the annual corporate budget for Fiscal Year 2010. The overall pink salmon and Wally Noerenberg Hatchery chum salmon revenue goals were $4,720,485 and $2,697,238, respectively.

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 through the season by weekly aerial surveys of 215 index streams. The escapement index is based on a geometric method used since the inception of the systematic survey program in the early 1960s. In this method, aerial observers are assumed to count without error or bias. Linear interpolations between observations are used to estimate numbers of fish in the stream on days when no surveys are flown. All daily observations and interpolations are summed across the season. Because fish seen on day i+1 may include fish seen on day i, the sum of all daily observations and interpolations must be divided by some residence time for fish in the streams to account for duplicate observations. Currently, a residence time of 17.5 days is used which is based on tagging studies completed by National Marine Fisheries Service on Olsen Creek in the early 1960s (Bue et al. 1998). Aerial survey pink and chum salmon escapement trends, compared to average historical performance, determine the area and duration of fishing periods within districts. Escapement indices may underestimate wild escapement due to frequent weather delays and varied observational conditions throughout the season.

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. When wild salmon escapements are weak hatchery subdistrict and terminal area openings are utilized to target the fishing fleet on enhanced stocks. Further, ADF&G may use Salmon Harvest Task Force markers to close wild stock terminal areas when escapements are lower than expected or as an intermediate step before initiating area wide closures.

Hatchery Annual Management Plans (AMP) from VFDA and PWSAC provide guidelines to ADF&G for managing enhanced stock fisheries to achieve cost recovery and broodstock

objectives. The AMPs underwent ADF&G and Regional Planning Team (RPT) review on April 21, and were later signed by the Commissioner. The RPT also reviewed 5 Permit Alteration Requests (PARs), for PWSAC's PWS hatchery facilities, at a meeting this spring. These PARs were based on a review of potential hatchery rearing capacity. PWSAC determined that their existing facilities could support an additional 103 million pink salmon, 17 million chum salmon, and 2 million sockeye salmon green eggs. As part of the April 21 RPT meeting, ADF&G (Jeff Regnart and James Hasbrouck, Commercial and Sport Fisheries Regional Supervisors, Alaska Department of Fish and Game, Anchorage; personal communication) and PWSAC position documents were assessed and it was determined that more time was warranted to allow PWSAC adequate response time in addressing department concerns. Two RPT meetings were scheduled, prior to the initiation of broodstock collection, to allow for a review of additional position documents. At these meetings the RPT cast votes, 3 in support and 3 in opposition, on each PAR. The PARs and the RPT's tie vote position statement were forwarded to the Commissioner for a final approval/denial. The Commissioner's office approved the chum and sockeye salmon production increases and the pink salmon production increases were denied (David Bedford, Deputy Commissioner, Alaska Department of Fish and Game, Juneau; personal communication).

Chum Salmon

The 2010 forecast for the chum salmon run to PWS was 3.38 million fish. The majority (90%) of the run was anticipated to be from PWSAC hatchery production. PWSAC forecasted a run of 1.82 million chum salmon to WNH of which 639,000 would be needed for cost recovery and broodstock. The remaining 1.18 million chum salmon were anticipated to be available for the CPF. PWSAC also forecasted a 863,000 chum salmon run for the Port Chalmers remote release site and a 344,000 chum salmon run for the AFK Hatchery remote release site. All AFK chum salmon were intended for harvest by the purse seine CPF. Based on the wild chum salmon forecast of 355,000 fish, there was a potential CPF harvest of 155,000 wild chum salmon.

Pink Salmon

The 2010 pink salmon run forecast for PWS was 30.64 million fish. This estimate includes 2.80 million wild stock pink salmon, 10.63 million VFDA pink salmon, and 17.20 million PWSAC pink salmon (Table 6). The hatchery forecast was based on the release of approximately 640.20 million pink salmon fry in 2009. Approximately 6.10 million pink salmon (57%) of the projected VFDA pink salmon run were designated for cost recovery and broodstock. The remaining 4.53 million VFDA fish were intended for the CPF. Approximately 3.34 million pink salmon (19%) of the projected PWSAC pink salmon run were needed for cost recovery and broodstock. The remaining 13.86 million PWSAC fish were intended for the CPF. After an escapement of 2.00 million wild pink salmon, 803,000 wild pink salmon were projected for commercial harvest.

At the May 2010 SHTF meeting, ADF&G described the potential for a weak 2010 wild pink salmon run- ninth smallest among 25 even brood year returns, 1960–2008, based on average total runs for even years 2006 and 2008. Environmental factors such as minimal cold and dry periods during the winter, promoting above average survival of eggs and fry in streams, and an upswing in ocean temperatures, as indicated by a positive Pacific Decadal Oscillation (PDO) Index, may have increased marine survival. The SHTF discussed the pink salmon harvest strategy in anticipation of a moderate enhanced pink salmon run and weak wild pink salmon run. The strategy related consistent and focused fishing effort in hatchery terminal areas with concurrent

expansions in fishing area as wild stock aerial survey estimates indicate adequate numbers of returning fish to meet escapement goals.

Coho Salmon

PWSAC forecasted a small run of coho salmon and VFDA forecasted a moderate run of coho salmon in 2010. PWSAC's expected run of coho salmon was 17,000 fish (8,000 fish to WNH and 9,000 fish to remote release sites). The small PWSAC run is the result of broodstock rebuilding efforts following a change in donor stock. Approximately 2,700 fish were required for broodstock, leaving 5,000 fish for the CPF. Considering the disparity between the pink and coho salmon run sizes and substantial run overlap, the harvestable surplus of coho salmon was not likely to surpass pink salmon during the normal extent of commercial fishing effort. If the harvestable surplus were to shift to coho salmon during the first week of September, the drift gillnet fleet would have exclusive access to the Coghill District.

The 2010 run of coho salmon to the VFDA hatchery was forecast to be 178,000 fish with 1,000 salmon needed for VFDA broodstock. Port Valdez was anticipated to be closed to CPF 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 start the day after Labor Day, September 7, to target surplus VFDA produced coho salmon.

Chum Salmon Season Summary

The 2010 PWS purse seine CPF harvest of 186,000 chum salmon was composed of approximately 4% wild fish and 96% hatchery fish. PWSAC harvested approximately 776,000 enhanced and 2,000 wild chum salmon for cost recovery and broodstock.

Aerial surveys to assess wild chum salmon escapements in the Eastern and Northern districts began in mid-June. Surveys expanded to other PWS districts starting in early July. Inseason, the wild chum salmon escapement estimates from aerial surveys lagged behind anticipated aerial survey indices early in the season with escapement exceeding anticipated levels in all but the Eastern District by the end of the season. Pink salmon densities during aerial surveys made accurate chum salmon counting difficult, so chum salmon may have been under estimated. After postseason adjustment of escapement estimates for comparison with individual district sustainable escapement goals (SEG), Eastern, Northern, Coghill, Northwestern, and Southeastern districts exceeded their SEG lower thresholds. Of these districts, only Eastern and Northern District escapement indices were below historical average escapement, but both districts were within 11% of the desired average. The 2010 PWS wild stock chum salmon escapement index of 297,000 in districts with SEGs (320,000 in all districts) was more than triple the PWS SEG lower threshold of 91,000; this difference was largely driven by Coghill, Northwestern, and Southeastern district adjusted aerial escapement indexes that were 2–3 times the historical average.

Pink and chum salmon utilize common migration corridors and spawning areas, with regular run timing overlaps between species, resulting in mixed stock fisheries. In mixed stock fisheries, if one stock requires protection from fishing effort because of low abundance, fishing opportunity on stocks with a harvestable surplus may be limited. This was the case for wild chum salmon in 2010; CPF harvest of wild chum was limited by low pink salmon escapement estimates through late June and all of July that resulted in few openings outside hatchery subdistricts. During August and early September, purse seine fishing effort was focused on large hatchery pink

salmon runs, minimizing the effort on wild pink and chum salmon during openings outside hatchery subdistricts.

Pink Salmon Season Summary

The 2010 record harvest of 71.31 million pink salmon, composed of approximately 3% wild and 97% hatchery fish, eclipsed the previous record harvest (63.44 million in 2007) by more than 7 million fish. VFDA and PWSAC contributed 26% and 71%, respectively, to the overall PWS pink salmon harvest. Pink salmon harvest by gear type was 62.26 million by purse seine, 17,000 by set gillnet, 3.49 million by drift gillnet, and 5.54 million for hatchery cost recovery and broodstock (2.37 million VFDA and 3.17 million PWSAC). VFDA cost recovery and broodstock harvest was approximately 13% of the total pink salmon run to SGH. PWSAC cost recovery and broodstock harvest was approximately 7% of the total pink salmon run to PWSAC hatcheries.

Aerial surveys to assess early chum and pink salmon escapements in the Eastern and Northern districts began in mid-June. Surveys expanded to other PWS districts in July. Inseason pink salmon aerial survey escapement estimates moved above minimum anticipated escapement thresholds by mid-September in all districts but Montague District. Adjusted pink salmon aerial survey escapement indices were only below the lower SEG bound in the Southwestern District. The 2010 PWS wild stock pink salmon escapement index of 1.92 million was slightly below the odd-year SEG midpoint of 2.0 million and was the fourth highest even-year escapement since 1960. The PWS wild stock pink salmon harvest of 2.40 million fish was 300% of the 2010 commercial harvest forecast midpoint estimate and 86% of the total run estimate, and was the tenth lowest wild stock harvest in the last 26 even years. The wild pink salmon harvest represented the second lowest percent of total harvest (enhanced and wild) in the last 34 years. The ratio of enhanced pink salmon to wild pink salmon in the 2010 commercial common property harvest was 27:1.

Eastern District Summary

The 2010 VFDA SGH pink salmon forecast was 10.63 million fish, based on a 4.70% marine survival applied to the 2009 fry release of 226.20 million. A total of 346,000 pink salmon were needed to meet egg take objectives. The 2010 pink salmon cost recovery goal was estimated at $3.37 million or approximately 5.76 million fish (18.19 million pounds). Approximately 4.53 million pink salmon were forecast for CPF harvest.

Aerial surveys of the Eastern District started in late June and were flown into late September to ensure that the broad range in pink and chum salmon run timing was represented in the escapement index. Aerial survey counts were below anticipated cumulative wild pink and chum salmon escapement indices through June and July, but moved above cumulative escapement indices by the end of August. The 2010 pink salmon escapement index for the Eastern District was 491,000 fish, one quarter of the way between the even-year SEG lower bound (425,000 fish) and midpoint (677,500 fish). The 2010 chum salmon observed escapement of 92,000 fish was almost double the SEG lower threshold of 50,000 chum salmon (Appendix D4).

ADF&G received few reports of pink and chum salmon run entry (school or jumper reports) in the Eastern District until late June. An aerial survey of the Eastern and Northern districts on June 21 showed below anticipated escapement in all index streams. For example, in the case of the largest stream count on this date, Beartrap River, where a normal chum salmon count would be

2,500 fish, the aerial surveyor only counted 200 fish. A chum salmon CPF was not scheduled during June due to low chum salmon abundance throughout the Eastern District.

VFDA pink salmon cost recovery started on June 25 and continued on a daily schedule through July 6. ADF&G expanded the SHA to the mouth of Port Valdez at the beginning of cost recovery operations. Cost recovery purse seine fishing, conducted by eight contract seine vessels occurred throughout Port Valdez to a line between Potato Point and Entrance Point. The bulk of the initial fishing effort was concentrated in the vicinity of Valdez Narrows. During the first week of cost recovery, the daily harvest averaged 50,000 fish per day, or 6,250 fish per boat, and was characterized by frequent sets harvesting low numbers of fish. Beginning July 1, considering limited run timing overlap with Port Valdez wild stocks and the potential for increasing harvest efficiency, the SGH SHA was expanded to include regulatory closed waters within Port Valdez. VFDA's cost recovery fleet regularly prospected for large concentrations of fish in the expanded area east of the hatchery with limited results. The majority of cost recovery harvest continued to come from boats making hook hauls for traveling fish near Valdez Narrows. This expanded cost recovery area was maintained until the cost recovery goal was met on July 12.

Wild salmon harvest in VFDA cost recovery remained a management concern because of high numbers of wild fish intercepted, ranging between 23,000 and 50,000 over the previous 3 years. To track wild salmon harvest, VFDA was required to complete daily stock composition sampling. In 2010, 76,000 wild pink salmon were harvested in the cost recovery fishery, representing 4% of the total harvest, similar to the proportion in 2009, but up from 1% wild stock harvest seen in 2007 and 2008. The four fold increase in the proportion of wild pink salmon harvested over the last 2 years may be due to a shift to lower numbers of enhanced pink salmon relative to wild pink salmon early in the VFDA run as well as weak run entry promoting aggressive and dispersed fishing effort from the fleet to target small concentrations of fish. During strong run entry, fleet distribution is generally concentrated in areas with consistent run entry or large concentrations of enhanced fish, i.e., Valdez Narrows or waters adjacent to the hatchery. ADF&G and VFDA will continue to work together to limit wild stock harvest.

The Eastern District commercial harvest was 16.40 million pink, 14,383 chum, 840 sockeye, 5,865 coho, and 2 Chinook salmon (Table 1). The total VFDA enhanced pink salmon harvest of 18.37 million was 1.73 times the preseason forecast and was composed of 16.06 million CPF harvest and 2.31 million hatchery harvest (cost recovery and broodstock). Contribution estimates indicated 178,000 VFDA pink salmon were harvested in the CPF outside the Eastern District, including 94,000 fish harvested in the Coghill District, 33,000 fish harvested in the Southwestern District, and 24,000 fish harvested in the Eshamy District. VFDA pink salmon cost recovery harvest was composed of 2.31 million VFDA fish and 76,000 wild fish. In 2010, 61 CPF fishing periods occurred with 163 permit holders recording 2,609 landings. The Eastern District CPF harvest of 16.42 million pink salmon was composed of 15.92 million VFDA fish, 800 AFK fish, 0 WNH fish, 3,000 CCH fish, and 505,000 wild fish. The 14,000 chum salmon harvested in the Eastern District were 34% hatchery origin and 66% wild origin. The peak CPF harvest of 3,400 chum salmon occurred on July 9 during a 14-hour period in the Port Valdez area. The 830 sockeye salmon harvested in the Eastern District were assumed to be 100% wild origin, with an average daily harvest of 36 fish. These sockeye salmon were harvested in the Port Valdez area and were likely bound for Robe Lake.

From August 8 through Labor Day, Port Valdez remained closed to the CPF north of a line from Entrance Point to Potato Point. After the August 7 fishing period in Port Valdez, weighing the

extremely limited availability of surplus VFDA pink salmon and the increased probability of overexploiting area wild stocks, the enhanced pink salmon CPF was closed. In addition, the combination of pink and coho salmon hatchery requirements, wild stock escapement, and sport fishery management transition factored into the closure. On August 15, management priority shifted to the coho salmon sport fishery in Port Valdez, closing the Port to commercial fishing before Labor Day. In discussion prior to the commercial CPF, VFDA expressed concern about jeopardizing hatchery equipment, namely the barrier weir on the hatchery water source, by allowing the commercial fleet to fish on-site at the hatchery. Accordingly, ADF&G provided a small closed area buffer around the hatchery to protect hatchery property. Port Valdez opened to the commercial CPF on September 7 and remained open until September 22; 4,000 coho salmon were harvested over the first 3 days of the fishery followed by a period of no reported harvest for the remainder of the season. According to VFDA's 2010 Annual Report, 847 coho salmon were utilized for broodstock and 43,722 coho salmon were sold as raceway cost recovery.

Northern District Summary

Northern District wild pink and chum salmon escapement indices were above inseason anticipated escapement levels by early August. After postseason analysis, correcting for stream life and observer efficiency, the Northern District met the pink salmon sustainable escapement goal in 2010. Wild pink salmon escapement of 287,000 fish was 1.6 times the 175,000 fish escapement lower bound and 4,000 fish above the escapement midpoint. The Northern District chum salmon escapement index of 38,000 fish was 1.9 times the SEG lower threshold of 20,000 fish.

The 2010 PWS total harvest of 19.73 million CCH enhanced pink salmon was well above the PWSAC forecast of 5.10 million fish. Strong early run entry of CCH and WNH enhanced pink salmon concentrated fishing effort in hatchery subdistricts and terminal areas. This enhanced stock run entry and above anticipated wild pink and chum salmon escapement indices allowed for a more liberal management approach than the previous 2 years (less than anticipated wild stock escapement and broad area closures), resulting in consistent use of large area general district openings. To maintain escapement in wild stock terminal areas, SHTF closed water areas were employed through the third week of August. In consideration of Perry Passage as a wild stock migratory corridor and lagging Northwestern and Coghill escapement indices, waters of the passage were closed through August 7. The management strategy in the Northern District provided opportunity for mixed stock and directed wild stock fishing, but considering sustained hatchery run entry above daily processing capacity and ensuing harvest limits, the bulk of fishing effort was directed on concentrations of hatchery fish. This strategy allowed for an efficient and timely harvest of hatchery fish, protection of wild chum and pink salmon in wild stock terminal areas, and provided consistent harvest opportunity on wild stock salmon migrating to district streams.

PWSAC utilized 548,000 pink salmon for cost recovery and broodstock in the Northern District. The CCH SHA was expanded for cost recovery harvest, upon PWSAC's request, from July 24 to July 31 to expedite cost recovery in an effort to maintain fish quality and allow for a timely CPF during early run entry. To limit wild stock pink and chum salmon harvest, the SHA expansion was restricted to waters approximately 1 nautical mile offshore on the east side of Unakwik Inlet north of a line at 60^{o} 58.00 N lat. PWSAC contracted with Silver Bay Seafoods for 82% of their pink salmon cost recovery goal with fishing effort to be focused at CCH and WNH. Cost recovery seining was only conducted in the CCH SHA during 4 days, July 29–31 and August 2,

largely as a result of higher and more consistent cost recovery harvest at WNH. The average daily cost recovery harvest at CCH was 66,000 pink salmon, while the daily average at WNH was 194,000 pink salmon. Cost recovery traditional harvest was approximately 266,000 pink salmon, falling 64% below the CCH cost recovery goal of 729,000 fish. The CCH cost recovery harvest was not sampled and the contribution estimate was assumed to be 100% enhanced stock. The broodstock and roe recovery harvest of approximately 266,000 fish was 8% below the broodstock goal of 290,000 fish. An additional 100,000–150,000 pink salmon carcasses were observed in Cannery Creek and the hatchery SHA during an aerial survey conducted by ADF&G biologists on September 17, 2010.

The 2010 Northern District CPF harvest was composed of 17.92 million pink, 2,400 chum, 800 sockeye, and 900 coho salmon. The Northern District was open for 41 CPF periods with a total of 141 permits recording 1,962 landings. This fishery had a maximum single-period harvest of 2.11 million pink salmon and an average of 560,000 pink salmon harvested per period between July 22 and September 7 (there was no reported fishing effort after September 7). The Northern District season started with a 36-hour CPF period in mid-July scheduled concurrently with Eastern, Coghill, and Southwestern district openings in an effort to provide clean-up harvest opportunity on remaining enhanced chum salmon stocks. Approximately 1,700 chum salmon, assumed to be of WNH origin, and 23,000 pink salmon were harvested on the east side of Culross Island in Hidden Bay. After the fishing period, the buildup of enhanced chum salmon in Hidden Bay was deemed to be cleaned up and the Northern District remained closed to the CPF until PWSAC achieved 62% of their aggregate cost recovery at CCH, WNH, and AFK hatchery. From August 1 to 4, CPF periods alternated with PWSAC cost recovery on an every other day basis. The average daily pink salmon harvest during these 2 periods was 2.08 million fish for a total of 4.16 million fish or 23% of the Northern District pink salmon harvest. Moving to an everyday schedule starting August 5, as the strength of the run became apparent, the fishery continued with 14-hour periods and soon shifted to 17-hour periods to increase harvest efficiency on enhanced stocks. During the first 12 daily periods (August 5–16), the pink salmon harvest ranged between 615,000 (August 16) and 1.54 million (August 5) fish with a daily average of 1.05 million fish. Between August 16 and 17 participation declined by 45%, from 53 to 29 permits fished, and harvest declined by 53%, from 615,000 to 287,000 fish harvested, signifying a substantial slowdown in run entry. From August 17 to September 7, the daily pink salmon harvest average was 72,000 fish with an average daily catch per unit effort (CPUE) of 6,200 fish per permit. For comparison, between August 1 and 17, the average daily CPUE was 17,800 fish per permit. After August 27, fishing effort declined further and fluctuated between 2 and 4 active permits and the area of reported harvest progressively contracting towards CCH until the final SHA clean-up on September 7. The pink salmon CPF harvest was composed of 3% wild stock pink salmon and 88% CCH, 9% WNH, and <1% AFK fish.

Coghill District Summary

Coghill District wild pink and chum salmon aerial escapement indices moved above cumulative anticipated levels starting in late July and early August, respectively. The wild pink salmon spawning escapement of 335,000 fish was above the escapement goal range, 85,000 fish above the escapement goal upper bound of 250,000. Coghill River pink salmon escapement was well above the historical average escapement, representing more than half of the total district escapement, and was a strong driver behind Coghill District exceeding the escapement goal. The

Coghill District spawning escapement estimates of 52,000 wild chum salmon was 6.45 times the SEG lower threshold of 8,000 fish and almost triple the desired average escapement.

PWSAC's 2010 forecast for pink salmon returning to WNH was 5.90 million fish. PWSAC set a broodstock goal of 283,000 pink salmon and a cost recovery goal of 843,000 pink salmon. The preseason forecast for common property harvest of pink salmon returning to WNH was 4.77 million fish.

The WNH enhanced pink salmon run of 17.26 million fish was nearly three times PWSAC's preseason projections. Run timing was early and harvest remained ahead of anticipated for the duration of the pink salmon run. PWSAC harvested 1.77 million pink salmon for cost recovery and broodstock at WNH. There were 46 CPF periods with a total of 95 permit holders recording 1,223 landings. The top 2 days of purse seine harvest and permit participation occurred on August 3 and 8, with 1.83 million pink salmon harvested by 50 permit holders and 1.19 million pink salmon harvested by 65 permit holders, respectively. The 2010 Coghill District CPF purse seine harvest was composed of 3,200 chum, 10.92 million pink, 800 sockeye, and 400 coho salmon (Table 1). The pink salmon CPF harvest was composed of 5% wild stock pink salmon and 79% WNH, 12% CCH, 3% AFK, and <1% VFDA enhanced pink salmon. Additional information, including the preseason outlook, harvest strategy, and results, is detailed in the Coghill District section of this report.

By regulation, management for pink salmon returning to WNH began on July 21. The management strategy in Coghill District initially focused effort on hatchery fish with the possibility of expanding area as wild stock escapement in Port Wells and Northwestern District streams allowed. This was accomplished by initially limiting fishing effort to a portion of the Esther Subdistrict north of Egg Rocks and west of Esther Passage. Daily fishing in the northern portion of the Esther Subdistrict and within the THA and SHA provided an effective means for harvesting enhanced chum and pink salmon in close proximity to WNH while minimizing harvest of wild stocks. The intent of this strategy was to allow wild stocks to pass through the southern and eastern portions of the Esther Subdistrict into the Northwestern District and the Port Wells area of the Coghill District. This early enhanced salmon fishery was closed when PWSAC initiated cost recovery on July 26. Early indications of above average pink salmon run strength in Coghill River (26,000 pink salmon observed in the river on July 23) prompted the establishment of an early fishery to capitalize on potential surplus run entry. On July 25 and 27, the waters of College Fjord north of Point Pakenham were opened for short duration fishing periods to focus fishing effort on Coghill River wild pink salmon. This wild stock fishery resulted in little fishing effort and minimal pink salmon harvest. PWSAC cost recovery boats first participated in the College Fjord wild stock fishery prior to engaging in cost recovery efforts; PWSAC likely lost more than a half day of cost recovery fishing effort during July 27 wild stock fishery. Between July 28 and 31, the Coghill District CPF remained closed while PWSAC conducted cost recovery and districtwide wild stock escapement was allowed to strengthen.

Pink salmon purse seine cost recovery harvest was conducted from July 26 to 31 and on August 2 and 4, averaging 194,000 fish per day. PWSAC conducted cost recovery concurrently with the CPF from August 22 to finish the remainder of their processor cost recovery bid obligations, which resulted in the harvest of 65,000 pink salmon. The traditional cost recovery harvest of 1.43 million was 69% above the goal of 843,000 pink salmon. In the absence of catch sampling, the WNH purse seine cost recovery harvest contribution estimate was assumed to be 100% enhanced pink salmon. The broodstock and roe recovery harvest of 346,000 pink salmon was 22% above

the broodstock goal of 283,000 fish. An additional 5,000 pink salmon remained unharvested as surplus to cost recovery and broodstock.

The Coghill District reopened to CPF purse seine and drift gillnet gear on August 1 and 3, alternating with the WNH cost recovery fishery. The average daily pink salmon harvest during these 2 periods was 1.58 million fish for a total of 3.15 million fish or 22% of the Coghill District pink salmon harvest. Moving to an everyday schedule starting August 5, as the strength of the run became apparent, the fishery continued with 14-hours periods and soon shifted to 17-hour periods to increase harvest efficiency on enhanced stocks. During the first 9 daily periods (August 5–13), the pink salmon harvest ranged between 683,000 (August 13) and 1.35 million (August 8) fish with a daily average of 970,000 fish. A daily average of 209 permits participated in the fishery during this 9 day period. Between August 14 and 18 participation declined by 35% to an average of 136 permits fished per day, and harvest declined by 70% to an average of 289,000 fish harvested per day, signifying a significant slowdown in run entry. From August 19 to August 26, the daily pink salmon harvest average was 56,000 fish with an average daily CPUE of 1,360 fish per permit (drift gillnet and purse seine combined). For comparison, between August 1 and 18, the average daily CPUE was 4,724 fish per permit. After August 26, participation in the fishery stopped for a period of 5 days and resumed briefly for a clean-up of pink salmon in the WNH THA on September 1; no fishing effort was reported for the remainder of the season.

Northwestern District Summary

Northwestern District wild pink and chum salmon aerial survey escapement indices remained below the cumulative anticipated escapement through July, but moved ahead of anticipated levels starting in early August. Wild pink salmon spawning escapement of 212,000 fish was midway between the even-year escapement midpoint of 175,000 fish and the upper bound of 240,000 fish. Northwestern District escapement of 30,000 wild chum salmon was 6 times the SEG threshold of 5,000 fish.

The Northwestern District was open to the commercial CPF for 35 periods with no reported harvest. Competing enhanced stock fisheries with higher potential yield were prosecuted concurrently in the Northern, Coghill, and Southwestern districts and likely explain the lack of fishing effort.

Southwestern District Summary

The Southwestern District aerial escapement indices exceeded daily anticipated escapement levels starting in the first week of August and exceeded cumulative anticipated escapement starting in the fourth week of August. The wild pink salmon escapement index of 126,000 fish was below the lower bound of the even-year sustainable escapement goal (130,000 fish) by 3%. The Southwestern District had an aerial survey escapement index of 11,000 chum salmon. Pink salmon harvest management was based on aerial survey escapement data, test fishing in the Southwestern District, harvest rates, and terminal area run entry. Test fishing conducted by the *R/V Solstice* in late July and early August provided pink salmon harvest rate, stock composition, and sex ratio data. A regular fishing schedule was maintained in the AFK hatchery SHA and THA during the CPF to focus fishing effort on AFK pink salmon, remote release chum salmon, and other migrating hatchery stocks while maintaining an acceptable level of wild stock harvest. Fishing area within the Port San Juan Subdistrict and AFK SHA and THA was adjusted to meet hatchery escapement (cost recovery and broodstock) goals. Fishing time and area was provided

in the hatchery subdistricts and general district waters on a limited basis to ensure that migration corridors through Montague, Latouche, Elrington, Prince of Whales, Bainbridge, and Knight Island Passages remained open for wild stock salmon bound for southwestern and northern systems (e.g., Eshamy Lake sockeye and southern/northern/western PWS chum and pink salmon).

The 2010 Southwestern District CPF harvest was composed of 16.98 million pink, 166,000 chum, 60,300 sockeye, 1,100 coho, and 20 Chinook salmon. There were 61 CPF periods in the Southwestern District. Fishing to target remote release chum salmon at the AFK THA and SHA started with a weekly schedule of alternating 60-hour and 84-hour fishing periods on May 27. The 2 periods per week schedule was implemented to increase the frequency of harvest reporting and subsequent timeliness of management actions. With no return forecasted, the recent historical precedent for the initiation of a terminal clean-up fishery of enhanced sockeye salmon in Marsha Bay, normally starting in the second week of June, was not realized. The regular schedule of alternating 60-hour and 84-hour fishing periods continued in either the AFK THA, SHA, or both until July 21, but was punctuated by 2 shorter duration periods from June 24 to June 27. The short duration fishing periods were used to increase reporting frequency as the harvest of non-targeted stock increased and were used to implement a line adjustment to the southern THA boundary, creating a closure line perpendicular to shore. The standard regulatory THA line travels along the south shore at an acute angle and is difficult to legally fish and enforce. Beginning June 27, the area open to the enhanced chum salmon fishery was reduced to waters within the AFK Hatchery SHA to minimize the harvest of non-targeted salmon stocks. The largest non-targeted harvest component in the AFK THA and SHA fishery, sockeye salmon, may be the result of fishing on the edge of a migratory corridor and run timing overlap with the AFK enhanced chum salmon run. While difficult to reconcile with run timing and alternate management strategies, the reduced area strategy coincided with the peak sockeye salmon harvest, and did not appear to reduce harvest as desired. Next season, to evaluate area adjustment strategies, alternating expansion and reduction of area, likely on a weekly interval will be employed as a systematic approach for discerning fluctuations in harvest rate from stage of run entry.

Of the 166,000 chum salmon harvested in the AFK THA and SHA by the CPF, 79% were WNH thermal marked fish, 18% were Port Chalmers thermal marked fish, and 3% were of wild stock origin. PWSAC did not harvest any portion of the AFK enhanced chum salmon run for cost recovery, instead conducting chum salmon cost recovery at WNH.

Sockeye salmon made up a large component of the harvest during early-season fishing in the Southwestern District. There were 59,000 sockeye salmon harvested in the AFK THA and SHA with more than 99% harvested in the AFK hatchery chum salmon fishery in June and July. Otolith sampling revealed that 5% of the sockeye salmon harvested were of wild stock origin and the remainder were of Main Bay Hatchery enhanced stock origin. ADF&G, working with Icicle Seafoods and Trident Seafoods (predominant chum salmon buyers by volume in the Southwestern District), arranged for preliminary reporting of sockeye salmon harvest in this fishery. These processors also provided an opportunity to sample the harvest to determine stock composition. This is an important arrangement because harvest reporting by regulation is only required on the day following the close of a fishing period. Voluntary reporting by processors and the fishing fleet allows ADF&G to effectively manage sockeye salmon in the migratory corridors.

The 2010 AFK enhanced pink salmon run of 13.80 million fish was 2.22 times PWSAC's preseason projection of 6.20 million fish. PWSAC harvested 82% of their 1.05 million pink salmon harvest goal (cost recovery and broodstock combined) at AFK with a harvest of 865,000 fish. The purse seine cost recovery harvest of 548,000 pink salmon was 62% of the cost recovery goal of 886,000 fish, while the broodstock and raceway cost recovery harvest of 318,000 fish was above the broodstock goal of 309,000 fish by 3%. An additional 7,700 pink salmon remained unharvested as surplus to cost recovery and broodstock. The AFK cost recovery harvest contribution estimate was 100% enhanced stock pink salmon. Run entry at AFK was early, with a daily average of 111,000 pink salmon harvested for cost recovery between July 27 and 31. This was above the average daily cost recovery harvest of 31,000 fish in 2008 and 58,000 fish in 2006, but well below the average daily cost recovery harvest of 358,000 fish in 2007 and 194,000 fish in 2009.

Run entry remained above cumulative anticipated run entry from the start of the pink salmon CPF on August 1 with an average daily harvest of 573,000 pink salmon through the end of August. The pink salmon CPF started earlier than anticipated, largely because of strong run entry promoting rapid cost recovery progress and aggressive harvest management. During the initial CPF pink salmon fishing period, open area was limited to waters of the AFK hatchery THA to ensure timely run entry into the AFK Hatchery terminal areas for an every-other-day cost recovery fishery. Due to improving trends in wild stock escapement in Northern, Coghill, Northwestern, and Southwestern districts, open area for the second CPF period (August 3) was expanded to include waters east of Point Helen and waters within 1 nautical mile of Latouche Island east of Pt. Grace and east of the southern tip of the Latouche Island. The average daily pink salmon harvest during the first 2 CPF periods was 707,000 fish for a total of 1.41 million fish or 8% of the Southwestern District pink salmon harvest. The number of fish harvested during these 2 periods was less than half of the harvest in the Coghill and Northern districts for the same dates, but average number of fish per delivery was more than 2,000 fish higher in the Southwestern District. Moving to an everyday schedule starting August 5, as the strength of the run became apparent, the fishery continued with 14-hour periods and soon shifted to 17-hour periods to increase harvest efficiency on enhanced stocks.

During the first thirteen daily periods (August 5–17), the pink salmon harvest ranged between 598,000 (August 5) and 1.28 million (August 10) fish with a daily average of 967,000 fish. A daily average of 56 permits participating in the fishery during this thirteen day period. Between August 18 and 22 participation increased slightly to an average of 43 permits fished per day, but harvest declined by 59% to an average of 392,000 fish harvested per day, signifying a significant slowdown in run entry. From August 23 to August 31, the daily pink salmon harvest average was 74,000 fish with an average daily catch CPUE of 5,600 fish per permit. For comparison, between August 1 and 22, the average daily CPUE was 15,000 fish per permit.

The positive trend in wild stock escapement remained a driving force in the fishery through August and September, allowing for dynamic time and area strategies. Aerial surveys and on-the-ground reports, prior to and during the first 3 weeks of the fishery, indicated that large numbers of pink salmon were present throughout the Southwestern District. To provide the fleet with an opportunity to harvest available surplus, while minimizing the risk of overharvesting wild stocks, a strategy of fishing expanded areas for 1 to 2 periods per week was implemented starting August 6. The strategy built on the consistent (daily) open area in the AFK Hatchery THA and SHA and on the east side of Knight and Latouche islands with pulses of fishing

opportunity in passages (Port San Juan Subdistrict and Prince of Whales, Bainbridge, and Knight Island passages) to focus fishing effort on large concentrations of enhanced stocks. These expanded openings occurred on 4 occasions (August 6, 9, 13, and 22) and resulted in 3.6 million pink salmon harvested, of which 191,000 were of wild stock origin.

The AFK Hatchery THA and SHA were closed between August 22 and September 1 to build up and maintain broodstock for egg-take. To accommodate broodstock run entry, either the northern or the southern half of the San Juan Subdistrict was closed concurrent with the hatchery THA and SHA closures. After broodstock was secured in the SHA, both the THA and the San Juan Subdistrict were open on a daily basis for the remainder of the season. With the exception of Port San Juan Subdistrict waters, southern passages were closed after August 22 to continue building wild stock escapement in the southern portion of the district. With strong escapement indices in the northern and western portion of the district, area around Knight Island and Dangerous passages was opened, starting with an every-other-day and shifting to a daily schedule, to continue directing effort on enhanced stocks while providing harvest opportunity on surplus of wild pink and chum salmon. After August 31, participation in the fishery stopped of 4 days. Starting September 5, the AFK Hatchery SHA was opened for a clean-up of pink salmon surplus to broodstock needs with 5 days of reported harvest; a total of 245,000 pink salmon were harvested in this SHA clean-up fishery. After September 10, no fishing effort was reported for the remainder of the season.

Hatchery-wild contribution estimates during the Southwestern District pink salmon CPF averaged 16,800 wild stock origin fish per fishing period. The total Southwestern District pink salmon CPF harvest of 16.98 million fish was composed of 3% wild stock, 73% AFK, 15% WNH, 9% CCH, and <1% VFDA fish. Of the estimated 543,000 wild stock pink salmon harvested in the Southwestern District CPF, 98% were harvested during fishing periods with open area expanded beyond the AFK hatchery THA and SHA. It is unknown how many of those fish were destined for the Southwestern District or other areas in the sound.

Montague District Summary

Aerial surveys were conducted into late September to ensure the majority of the pink salmon escapement was represented in the escapement indices. Wild pink salmon spawning escapement of 145,000 fish was 18% above the even-year escapement midpoint of 122,500 salmon. Montague District had an estimated 13,000 wild chum salmon spawning escapement, but has no chum salmon escapement goal (Appendix D4). It is likely the chum salmon are largely stray hatchery salmon from the Port Chalmers remote chum salmon release.

The 2010 Montague District purse seine fishery was open for a single fishing period. Port Chalmers Subdistrict opened directly after the July 30 regulatory end date of the drift gillnet enhanced chum salmon fishery. The short duration fishery was intended to target any remaining enhanced chum salmon. One landing was reported and the harvest was confidential. The purse seine harvest in the Montague District included a pink salmon harvest composition of 80% wild and 20% enhanced fish and a chum salmon harvest composition of 2% wild and 98% enhanced fish.

Southeastern District Summary

In 2010, the Southeastern District wild pink salmon aerial survey escapement index remained above the daily and cumulative anticipated escapement for most of the season. The aerial survey

pink salmon escapement index was 310,676 salmon, 9% below the midpoint even-year escapement of 342,500 fish. The 2010 aerial survey chum salmon escapement index exceeded the daily and cumulative anticipated escapement starting in late July. The aerial survey chum salmon escapement index was 85,138 well above the lower threshold escapement range of 8,000 salmon (Appendix D4).

The Southeastern District purse seine harvest was composed of 19,000 pink salmon (Table 1). The Southeastern District was open daily from August 8 through September 22. Fishing was restricted to area south and west of a line from Johnstone Point to Hook Point for the entire season due to lower than anticipated escapement on Hawkins Island and northern Hinchinbrook Island. The only period with reported harvest occurred on August 23 with 6 permit holders participating in the fishery. This harvest was likely the result of a group of boats retuning to Cordova to end the fishing season.

PRINCE WILLIAM SOUND AND COPPER RIVER SUBSISTENCE FISHERIES (APPENDICES F1–F8)

The Prince William Sound 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. 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. Lingcod *Ophiodon elongatus* may be taken for subsistence purposes only from July 1 through December 31. Additionally, herring *Clupea pallasii*, smelt, rockfish *Sebastes* spp., and other groundfish may also be harvested for subsistence purposes in the PWS Area.

Prior to achieving statehood in 1959, Alaska's subsistence fisheries were not monitored by the territorial government. In addition, the Copper River District commercial fishery was opened in early May and participants were allowed to operate 150 fathoms of 8.5 inch mesh king salmon gear in addition to the legal limit of 150 fathoms of red salmon gear (Pirtle and Fridgen 1967; pg 22). These regulations, in conjunction with no monitoring, likely lead to the depletion of upriver stocks utilized by interior residents. Under state jurisdiction, the opening date for the Copper River District commercial and subsistence seasons was moved to mid-May and commercial gear was restricted to 150 fathoms per permit holder to increase early run escapement to interior residents. Beginning in 1960, subsistence users were required to have a license and a permit, and were required to report harvests at the end of the season (Pirtle and Noerenberg 1960; pg 30). In addition, until 1987 commercial permit holders were not permitted to hold subsistence fishing permits during the commercial salmon net fishing season in Area E. Also, seasonal subsistence bag limits were tied to both household size and income. From 1960 to 1977 fish wheel permit holders from households with incomes above $4,000 were entitled to the same number of fish as dipnet subsistence users: 20 salmon for a one person household and 40 salmon for households with 2 or more people. Fish wheel permit holders from households with incomes less than $4,000 were entitled to the standard dip net amount plus an additional 200 salmon for a household of 1 person and up to 500 salmon for a household of 2 or more people. The 1966 Area Management Biologist Ralph Pirtle noted that while the number of fish wheel subsistence permits remained constant from 1960 to 1966, the number of dip net permits had increased from 32 in 1960 to 1,132 in 1965. He further stated that,

> "Subsistence fishing in Alaska is allowed, usually by authority of a permit, as a means for low income families to supplement their diet. Unfortunately, a complete control of the fishery has not been maintained which has allowed abuse of the subsistence fishery by persons actually seeking recreation and sport rather than actual need of the resource for livelihood" (Pirtle and Fridgen 1967).

After 1977, in response to increased participation related to the trans-Alaska oil pipeline boom, basic allocation for both gear types was reduced to 15 or 30 salmon for households with incomes greater than $5,000. In addition, after 1977 the maximum household income necessary to receive the 200 or 500 fish additional allocation was increased to $6,000. Beginning in 1981, fish wheel limits were increased to 30 salmon for one person, 60 salmon for a household of 2, and 10 salmon for each additional household member. The income limit for the 200 or 500 additional allocation of salmon was also increased to $12,000.

In February 1984, the BOF determined salmon stocks of the Chitina Subdistrict do not support customary and traditional uses and those in the Glennallen Subdistrict do support customary and traditional uses. Accordingly, the BOF amended its *Copper River Subsistence Salmon Fisheries Management Plan* (5 AAC 01.647) to include provisions for subsistence salmon fishing only in the Glennallen Subdistrict. While the Chitina Subdistrict was closed to subsistence fishing, a personal use fishery was authorized. Participation in the Glennallen Subdistrict subsistence salmon fishery was limited to residents of the Copper River basin and certain upper Tanana communities. In addition, the $12,000 income restriction granting eligibility for the additional 200 or 500 salmon allocation was removed, with permits for these additional salmon available by request to Alaska residents regardless of income.

In 1985, following an Alaska Supreme Court decision, regulations governing subsistence fishing in the Copper River reverted back to those prior to 1984. This change eliminated the distinction between the personal use and subsistence fisheries with both fisheries operating under subsistence regulations. In addition, the restriction limiting participation in subsistence fisheries to only rural residents was removed. However, the income restriction prohibiting persons of higher incomes from receiving the additional 200 or 500 salmon was not reinstated.

In 1986, following the passage of a new state subsistence statute that included a rural preference, the regulations in effect in 1984 were reinstated, closing the Chitina Subdistrict subsistence fishery and reopening a personal use fishery instead. In 1988, the Batzulnetas fishery was established in response to a lawsuit. This lawsuit allowed the residents of Batzulnetas to fish at the traditional village site. In addition, this lawsuit coupled with the McDowell decision challenging rural preference, forced the federal government to assume management of subsistence fishing in navigable waters. In 1990, following the Alaska Supreme Court decision in the McDowell case in late 1989, the subsistence fishery in the Glennallen Subdistrict was again open to all Alaska residents. In December 1996, the BOF rejected (by a vote of 0–6) Proposal 50 to make a positive customary and traditional use finding for the Chitina Subdistrict fishery that would reopen the Chitina Subdistrict to subsistence fishing. In December 1999, the BOF adopted (by a vote of 4–2) Proposal 44 to make a positive customary and traditional finding for the Chitina Subdistrict salmon fishery. The BOF then adopted regulations changing the status of the Chitina Subdistrict dip net fishery from personal use to subsistence.

In 2003, the BOF reversed its 1999 positive finding for customary and traditional use of salmon stocks in the Chitina Subdistrict. This finding resulted in the Chitina Subdistrict subsistence

fishery reverting back to a personal use fishery. As a result, there are currently 2 subsistence fisheries north of Miles Lake: the Glennallen Subdistrict fishery and the Batzulnetas subsistence fishery, both primarily use fish wheel and dip net fisheries. In response to increased harvest, the BOF, during the December 2005 meeting, voted to increase the Glennallen Subdistrict subsistence fishery component of the Miles Lake sonar inriver goal from a range of 60,000–75,000 to range of 61,000–82,500 salmon.

Lower Copper River and Prince William Sound

Prior to 1987, commercial permit holders were not permitted to hold subsistence fishing permits during the commercial salmon net fishing season in Area E. During this period 5 AAC 01.020 *Subsistence Fishing By Commercial Fishermen* stated that, "Commercial fishermen may retain fish for their personal use from their lawfully taken commercial catch." In 1993 this was repealed with the following regulation adopted, 5 AAC 01.021 *Retention Of Fish Taken In Commercial Fisheries*. This stated that, "People who commercial fish may retain fish for their own use from their lawfully taken commercial catch." This was repealed in 2004 with 5 AAC 39.010. *Retention of fish taken in a commercial fishery* adopted. This stated that, "A person engaged in a commercial fishery may retain finfish from lawfully taken commercial catch for that person's own use, including for the use as bait in a commercial fishery. Finfish retained under this section may not be sold or bartered." Moving this regulation from the Subsistence chapter to Chapter 39 allowed retained fish to be used as bait. In addition it eliminated conflict with 5 AAC 01.010(b) that specified that only Alaska residents may take finfish for subsistence purposes. Currently, commercial permit holders may retain fish from their commercial harvest for their own personal use and in addition (since 1987) may also participate in subsistence fisheries in the Prince William Sound area.

Subsistence fishing is allowed in the Copper River District from May 15 until 2 days before the opening of the commercial fishery, 7 days per week. 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 allowed only during commercial fishing periods or by emergency order. 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 2010, 325 subsistence permits were issued, of which 11 (3.4%) were not returned. Of the 314 permits that were returned, 175 permit holders reported not fishing. A harvest of 276 Chinook, 1,980 sockeye, and 27 coho salmon were reported from the 139 permits that reported fishing (Appendix F1). In addition 2 subsistence permits were issued for the PWS general subsistence district. One permit holder reported not fishing and the other reported zero success. (Appendix F2). Overall 338 Alaskans from 22 communities received permits for this fishery that harvested 2,827 salmon in the Area E subsistence fisheries (Appendix F8).

During the 2010 commercial fishing season in the Copper River District, 8,183 sockeye, 957 Chinook and 1,166 coho salmon were reported as retained for their own personal use by 364 commercial permit holders (Appendices A1, A3, A18, F7, and F8). In PWS, 85 commercial permit holders reported retaining 1,119 sockeye, 51 Chinook, and 60 coho salmon as "homepack" from their commercial harvests. Overall in Area E, 364 permit holders from 19

Alaska communities and the lower 49 states reported retaining 10,481 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 dipnet, rod and reel, and spear. In 2010, a total of 33 federal permits were issued; 33 permits were returned, with 36 sockeye and 68 coho salmon reported as harvested. Current and historical federal harvest numbers are listed in 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 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)). Initially, only residents of Chenega and Tatitlek were eligible for subsistence permits in their respective areas. In 1989, a court ruling qualified all residents of Alaska for a subsistence permit in both of these subsistence areas, invalidating 5 AAC 01.648(a)(7) and (b)(7) which stipulates that permits may only be issued in these villages. 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. Chenega Subsistence Area consists of waters in Southwestern and Montague districts and Tatitlek Subsistence Area consists of waters in Eastern and Northern districts. Once the commercial fishing season is established, area and time within these 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 2010, 9 permits were issued for the Chenega subsistence area, of which 5 permits were returned. Of those returned permits, all reported fishing, with a total harvest of 55 sockeye, 6 pink, and 87 chum salmon. In the Tatitlek area, 8 permits were issued of which 5 were returned. Of those returned permits, all reported fishing, with a total harvest of 165 sockeye and 142 coho and 10 chum salmon (Appendix F3).

UPPER COPPER RIVER

Glennallen Subdistrict Subsistence Fishery

The Glennallen Subdistrict is that portion of the main stem Copper River upstream of the McCarthy Bridge to the mouth of the Slana River; this subdistrict is open June 1 through September 30 for continuous fishing. Fish wheels and dip nets are legal gear. Participants must be Alaska residents and are allowed one 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 2010, a total of 620 dip net permits and 702 fish wheel permits were issued to subsistence users in the Glennallen Subdistrict. Of these 166 (12.5%) were not returned. A combined total of 1,970 Chinook and 66,667 sockeye salmon were reported harvested in the Glennallen Subdistrict. Comparatively, the previous 10-year average was 54,074 sockeye and 2,924 Chinook salmon for this subdistrict. Total effort has remained somewhat constant over the last 10-years, with an average number of 674 fish wheel permits and 423 dip net permits issued per season (Appendix F4). Historically, sockeye salmon dominate the harvest, representing approximately 95% of the reported harvest, followed by Chinook and coho salmon (Appendices A1, A3, A18 and F4).

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 2010, a total of 269 federal permits were issued for the Glennallen Subdistrict. Of these 236 permits were returned. A total 12,779 sockeye, 299 Chinook, and 64 coho salmon were reported harvested (Appendices A1, A3, A18). Current and historical federal harvest numbers are listed in Appendix F6.

Batzulnetas Subsistence Fishery

In 1988, an interim subsistence fishery was provided by emergency regulation at Batzulnetas to settle the United States District Court case of John vs. Alaska. 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 emergency order, starting June 1 when fishing periods are limited to one 48-hour period per week; beginning in July, fishing periods are increased to 84-hours per week until September 1, when the fishery closes.

In 1987, the fishery was conducted near the mouth of Tanada Creek near the historical village site of Batzulnetas. Eight permits were issued in that year to individuals, or family groups, from Mentasta and Dot Lake, and the fishery was conducted during July and August. A total harvest of 22 sockeye salmon was reported in 1987. The BOF reviewed the fishery before the 1988 season and set seasons, eliminated the quota, and provided for additional gear types. Permits can be issued throughout the season and must be completed and returned to ADF&G by October 31. No permits were issued for this fishery between 1988 and 1992 and in 1996. Between 1993 and 2002 the average harvest was 251 sockeye salmon. From 1999 to 2002 only one permit was issued each year with a harvest of 55 sockeye salmon in 1999, 0 sockeye salmon in 2000, 62 sockeye salmon in 2001, and 208 sockeye salmon in 2002. In 2004 one permit was issue with a reported harvest of 182 salmon. Beginning in 2005, the National Park Service (NPS) in the Wrangell-St. Elias National Park and Preserve began enforcing NPS regulations that only allow subsistence salmon harvest by rural community residents. The enforcement of these regulations prohibited the subsistence fishing by non-rural residents in that portion of the Copper River upstream of Indian River. This includes 15 river miles of the Glennallen Subdistrict and the entire Batzulnetas fishery. As a result of the rural preference, no state subsistence fishing permits were issued after 2004. A single federal permit was issued in 2005 and 2007 with only one sockeye salmon reported harvested in 2007. Three permits were issued in 2010 with 106 sockeye 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 one Chinook salmon per household. The BOF determined that retaining the bag limit of one Chinook salmon provided for a reasonable opportunity to harvest Chinook salmon, and would also maintain Chinook salmon harvests at historical levels. Annual bag limits would continue to be 15 salmon for a household of one, and 30 salmon for a household of 2 or more individuals. Based upon recent harvests, the BOF determined that a range of 100,000–150,000 sockeye salmon was necessary for personal use needs to be met in the Chitina Subdistrict fishery. This range includes a hatchery contribution of 15,000–20,000 fish, resulting in an 85,000–130,000 wild sockeye salmon stock harvest allocation.

The *Copper River Personal Use Dip Net Salmon Fishery Management Plan* (5 AAC 77.591) requires the Chitina Subdistrict personal use fishery to be opened on June 1; an emergency order may be issued to close the fishery, effective June 1, and an emergency order to reopen the season shall be issued on or before June 11 depending on the strength and timing of the sockeye salmon run. Additionally, inseason adjustments to the fishery, as necessitated by fluctuations in salmon escapement, shall be made by emergency order. In 2010, there were 12 EOs issued to make adjustments to the dip net fishery. The first period started on Saturday, June 5 and the last period closed on August 31. The fishery is then open by regulation from September 1 to 30. As the result of below anticipated abundance of Chinook salmon in the commercial fishery and at Baird Canyon fish wheels, this fishery was closed to the retention of Chinook salmon beginning on Monday, June 21. Reported harvest for the Chitina Subdistrict personal use fishery in 2010 was 589 Chinook, 116,549 sockeye, and 2,195 coho salmon. The previous 10-year average reported harvests are 1,943 Chinook, 93,858 sockeye, and 2,085 coho salmon. There were 9,316 permits issued for the Chitina Personal Use fishery in 2010, of these 1,552 (16.7%) were not returned. This is slightly above the 10-year average of 8,072 permits issued (Appendices A1, A3, A18 and F4).

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 2010, a total of 92 federal permits were issued. Of the 79 permits returned, 2,061 sockeye, 17 Chinook and 33 coho salmon were reported harvested (Appendices A1, A3, A18). Current and historical federal harvest numbers are listed in Appendix F6.

PRINCE WILLIAM SOUND AND COPPER RIVER SALMON ENHANCEMENT (APPENDIX E)

Fisheries enhancement and rehabilitation in Alaska began in earnest in the early 1970s by the Fisheries Research and Enhancement Division (FRED) to help build and stabilize fisheries production. In 1974, the Alaska legislature passed the Private Non-Profit Hatchery Act, allowing private-sector non-profit businesses to assist with salmon enhancement and rehabilitation. In December 1974, the Prince William Sound Aquaculture Corporation (PWSAC) was created and began hatchery operations at Armin F. Koernig Hatchery on Evans Island in 1975, producing

pink and chum salmon. In 1978, Valdez Fisheries Development Association (VFDA) began producing pink, chum, and coho salmon at the Crooked Creek Scientific/Educational facility in Port Valdez. Hatcheries in the Prince William Sound Management Area are currently run by 2 non-profit corporations;: PWSAC operates Armin F. Koernig (AFK), Main Bay (MBH), Wally Noerenberg (WNH), Cannery Creek (CCH), and Gulkana hatcheries (GH), and VFDA operates the Solomon Gulch Hatchery (SGH). These 2 non-profit corporations are among 15 other non-profit corporations in the state of Alaska that maintain and operate private hatcheries that produce salmon for harvest in common property fisheries.

PWSAC is the largest producer of salmon in Alaska, with a permitted capacity of 684.15 million eggs. PWSAC is also the largest producer of pink and sockeye salmon in Alaska, with a permitted capacity of 462.0 million and 49.2 million eggs, respectively. The pink salmon production is more than double the permitted capacity of the next largest producer, VFDA, which has a permitted capacity of 230.0 million pink salmon eggs. PWSAC is the third largest producer of chum salmon in Alaska with a permitted capacity of 165.0 million eggs. In addition to the aforementioned species, PWSAC and VFDA have a permitted coho salmon capacity of 4.0 million and 2.0 million eggs, respectively. Further, PWSAC has a 4.0 million egg Chinook salmon permitted capacity, which has not been utilized since 1996 when Chinook salmon eggs were last harvested at Wally Noerenberg Hatchery. Current permitted egg capacities, in millions of eggs, for the 7 largest aquaculture associations in Alaska are listed below:

Hatchery non-profit corporation	Chinook Salmon	Chum Salmon	Coho Salmon	Pink Salmon	Sockeye Salmon	Total
Cook Inlet Aquaculture Assn. (CIAA)	4.00	0	6.16	235.00	50.01	295.17
Douglas Island Pink and Chum (DIPAC)	1.25	125.00	1.65	50.00	33.50	211.40
Kodiak Region Aquaculture Assn. (KRAA)	0.45	28.00	2.80	215.00	20.60	266.85
Northern Southeast Regional Aquaculture Assn. (NSRAA)	9.00	165.80	11.64	0.30	2.00	188.74
Prince William Sound Aquaculture Assn. (PWSAC)	4.0	165.00	4.0	462.00	49.15	684.15
Southern Southeast Regional Aquaculture Assn. (SSRAA)	3.50	172.00	14.5	0	2.70	192.7
Valdez Fisheries Development Assn. (VFDA)	0.30	0	2.00	230.00	0	232.30
all others	3.00	40.00	10.78	86.00	5.00	144.78
Statewide egg capacity totals (millions)	25.50	695.80	53.53	1,278.30	162.96	2,216.09

In 2010, PWSAC and VFDA contributed 94.4% of the total Area E salmon harvest of 78.0 million fish. PWSAC and VFDA produced approximately 69.2 million (97%) of the 71.3 million pink salmon harvested and 159,252 (45.3%) coho salmon of the 351,437 harvested overall in Area E. In addition, PWSAC produced 4.2 million (97.6%) of the 4.3 million chum salmon harvested as well as 1.6 million (81.0%) sockeye salmon of the 2.0 million harvested overall in Area E (Table 1 and Appendix E1).

Gulkana Hatchery

The Gulkana Hatchery (GH) consists of 2 rearing facilities (Gulkana I and II) located above Paxson Lake on the east fork of the Gulkana River approximately 260 miles north of Cordova. This facility is owned by ADF&G and has been managed by PWSAC since 1993. Gulkana I was constructed in 1973 after spawning sockeye were identified in several warm water springs adjacent to the east fork of the Gulkana River. These springs produce approximately 1,600 l/s of water, of which 1,100–1,600 l/s are required for hatchery operations. Gulkana II was constructed in 1987 to increase sockeye production and begin production of Chinook salmon. Chinook salmon reared at this facility were released in limited quantities at Monsoon Lake and in the Gulkana River from 1987 to 1991. The combined facilities have released between 180,000 and 32.3 million fry annually since 1974 (Appendix E8). Annual total Gulkana produced sockeye salmon runs since 1997 have ranged from 88,750 to over 1.1 million fish (Appendix E7).

In 2010, the overall run of sockeye salmon produced by the Gulkana hatcheries totaled 434,608 fish. This was significantly higher than the PWSAC total return forecast of 187,200 fish and 7.7% below ADF&G's forecast return of 471,000 fish. A total of 18,812 sockeye salmon were reported harvested for broodstock (Appendix E1). Over 132,000 fish returned to Crosswind Lake. Of those sampled 5.4% were unmarked. In addition, of the 1.7 million outmigrating smolt counted at a weir at the outlet of Crosswind Lake in early 2010, 9.8% were unmarked. These and historical numbers are shown in the below.

Crosswind Lake Adults					
Year Sampled	Marked	Unmarked	Unmarked Percentage of sample	Total Outmigrating/Returning	Number Unmarked
2007	137	20	12.7%	5,506	701
2008	41	111	73.0%	9,592	7,005
2009	123	38	23.6%	38,670	9,127
2010	141	8	5.4%	132,192	7,098
Crosswind Lake Smolts					
2009	151	114	43.0%	1,065,381	458,315
2010	293	32	9.8%	1,693,401	166,735

Prior to the beginning of stocking in 1984 only extremely low levels of sockeye salmon were present in this lake. Thus, unmarked fish must either be wild stock indigenous fish, the progeny of hatchery returns to the lake, or unmarked GH released fish.

Harvest from the Chitina Subdistrict Personal Use and the Glennallen Subdistrict subsistence fisheries was 68,180 Gulkana produced sockeye salmon. In addition, an estimated 533 were harvested by sport fisherman in the Copper and Gulkana Rivers. The Copper River District commercial gillnet fleet harvested 47.8% of the total hatchery run, or 207,915 sockeye salmon (Appendix E7).

The 2010 GH sockeye salmon harvest contributions by period and the historical GH contributions, fry releases, total hatchery runs and estimated marine survivals are in appendices E6–E8.

Wally Noerenberg Hatchery

WNH is located on state park lands in Lake Bay on the southern end of Esther Island in PWS. The hatchery was completed in 1985 and produced 5 species of salmon until 1987 when sockeye production was moved to Main Bay Hatchery (MBH). Further, Chinook salmon production was discontinued in 1997 to increase coho salmon production. Water for hatchery operations is supplied by Esther Lake, a 200 hectare lake with a volume of 2.5 million cubic meters, via deep and shallow intakes. These 2 water sources allow manipulation of water temperature with limited need for mechanical heating or cooling, and are capable of producing approximately 22,000 l/s, of which 5,500–11,000 l/s are required for hatchery operations. In addition to releases at the WNH facility, there are 2 chum salmon remote release sites, Port Chalmers located on Montague Island, and Sawmill Bay, adjacent to AFK hatchery.

In 2010, the total run of chum salmon, released as fry from WNH as well as both remote release sites, was 4.2 million fish. The overall run was more than the PWSAC forecast run of 3.6 million chum salmon. (Appendix E1). Errors in the thermal marking program have created uncertainty in the run of chum salmon to each release site. Chum salmon returning to all release locations originated from brood years 2004 to 2007 releases. PWSAC reported cumulative survival rates for these brood years of 3.8%, 2.1%, 4.3% and 0.04%, respectively (PWSAC 2010, WNH Annual Report, Schedule C-1, Item 12). A total of 598,922 chum salmon (594,206 hatchery and 4,716 wild) were harvested for hatchery cost recovery at WNH and were worth $2.7 million dollars (October 1, 2010 PWSAC Board of Directors report, page 34). This was $32,802 dollars above the chum salmon cost recovery goal. A total of 176,926 chum salmon were collected for broodstock and of those, 155,719 carcasses were sold ($164,795) as part of a ‘full utilization’ strategy (Appendix E12). The commercial fleet harvested 3.5 million or 82.8% of the total WNH chum salmon run including remote releases at AFK and Port Chalmers (Appendix E1).

In 2010, the total run of pink salmon produced by WNH was 17.3 million fish and above the preseason forecast of 5.9 million pink salmon. These fish originated from the BY2008 release and had a survival rate of 13.5%. A total of 1,573,529 pink salmon were harvested for hatchery cost recovery at WNH. A total of 199,202 pink salmon were collected by PWSAC for broodstock and of those, 190,418 carcasses were sold as part of a ‘full utilization’ strategy. The commercial fleet harvested 15.5 million WNH pink salmon, 89.8% of the total pink salmon run to this facility (Appendices E1, E3, and E12).

In 2010, the total run of coho salmon produced by the WNH was 10,899 fish. The majority of these fish (9,871) originated from the brood year 2007 release and had a survival rate of 9.31%. The overall run was lower than the preseason forecast of 8,100 coho salmon. The commercial fleet harvested 5,215 coho salmon from the Coghill District of which all but 717 are thought to be of hatchery origin. PWSAC collected 1,399 coho salmon for broodstock for a total of 945,000 green eggs. This is one quarter of the 4.0 million eggs that PWSAC is permitted for this species (Appendices E1, E5, and E12).

Historical pink, chum, and coho salmon fry releases, total hatchery runs and estimated marine survival for WNH salmon are in Appendices E1, E2, E3, E5, and E12. WNH’s contributions to pink salmon harvest in the Coghill, Eshamy, Eastern, Montague, Northern, and Southwestern districts are in Appendices E10, E13, E19, E22, E23, and E26, respectively. WNH’s contributions to chum salmon harvest in the Coghill and Montague districts are in Appendices

E11 and E21, respectively. WNH's contributions to coho salmon harvest are in Appendix E5. WNH 2010 cost recovery summary is located in Appendix E12.

Main Bay Hatchery

MBH is situated in the Eshamy District, approximately 20 miles west of the northern end of Knight Island. MBH was built on U.S. Forest Service land in 1981 by FRED as a chum salmon production facility. In 1987, returning adult chum salmon were collected for broodstock to increase chum salmon production at WNH while sockeye salmon fry were transferred from WNH to MBH to be raised to smolts, making MBH the first sockeye salmon smolt production facility in the state. Although owned by ADF&G, PWSAC has operated MBH under contract since 1991. At one time, MBH produced sockeye salmon from 6 distinct populations including early-run Eyak Lake, mid-run Coghill Lake, and late-run Eshamy Lake sockeye, but to streamline operations, minimize run over and limit contamination concerns focus turned to rearing Coghill Lake sockeye in 1998. Water for hatchery operations is supplied by Main Lake, a 334 hectare lake with a volume of 140 million cubic meters. A pipeline from the lake produces approximately 566 l/s, of which 85–566 l/s are required for hatchery operations. MBH has released between 300,000 and 10.8 million sockeye salmon annually since 1988 (Appendix E18).

In 2010, the total run of sockeye salmon produced by the Main Bay Hatchery was 1.2 million fish, exceeding the forecasted run of 884,000 sockeye salmon. A total of 14,212 sockeye salmon were utilized for broodstock purposes and carcasses were not sold. The commercial fleet harvested 1.2 million fish or 98.5% of the total sockeye salmon run (Appendices E1, E17). Detailed MBH contributions to the CPF, total contribution summaries, and historical fry release information are in Appendices E1, E9, E13, E15–E18, and E25.

Solomon Gulch Hatchery

SGH is located near Valdez, 2 miles from the southern terminus of the Alaska pipeline. The hatchery is owned and operated by VFDA. Hatchery operations began in the fall of 1982 when the incubation room was completed and the first pink and coho salmon eggs were transferred in December. In 1983 the adult delivery system and rearing building were completed and the first return of pink salmon arrived at the hatchery. From 1982 to 1995 chum salmon were released from SGH with annual runs ranging from 450 to 442,000 fish and average annual runs of 66,000 fish. SGH currently produces pink and coho salmon with annual runs ranging from 95,000–23.9 million and 34–473,000, respectively, and average annual runs of 7.8 million and 121,000 fish, respectively. Water for hatchery operations is supplied by Solomon Lake, a 324 hectare lake with a volume of 48.1 million cubic meters. A pipeline from the lake produces approximately 8,300 l/s, of which 553–8,300 l/s are required for hatchery operations.

In 2010, the overall run of pink salmon produced by the SGH was 18.4 million fish. These fish originated from the brood year 2008 release, and had a survival rate of approximately 8.1% which was below the preseason forecast of 22.6 million fish. A total of 1,954,653 pink salmon (1,982,823 hatchery and 76,023 wild stock), were harvested for hatchery cost recovery. A total of 227,388 pink salmon were collected for broodstock. In addition all broodstock carcasses were sold as part of the 'full utilization' strategy. An additional 14,805 fish met watershed escapement needs. The commercial fleet harvested 16.1 million fish or 87.4% of the pink salmon run to this facility (Appendix E1, E3, and E20).

In 2010, the overall run of coho salmon produced by SGH was 114,684 fish. These fish originated from the brood year 2007 release and had a survival rate of 7.9%. The overall run was below the preseason forecast of 274,663 coho salmon. The commercial fleet harvested 2,918 SGH coho salmon, 4.5% of the total coho salmon run to this facility. VFDA harvested 43,722 coho salmon for cost recovery, 2,847 were collected for broodstock, an estimated 2,000 fish escaped into the local watersheds, and lastly an estimated 71,000 fish were harvested by sport users (Appendices E1, E5, and E20).

Historical pink and coho salmon fry releases, total hatchery run and estimated marine survival for SGH are in Appendices E1, E2, E3 and E5. SGH's contributions to pink salmon harvest in the Coghill, Eshamy, Eastern, Montague, Northern, and Southwestern districts is located in Appendices E10, E13, E19, E22, E23, and E26, respectively. VFDA's contributions to coho salmon harvest are located in Appendix E5. VFDA 2010 cost recovery summary is located in Appendix E20.

Cannery Creek Hatchery

CCH is located in Unakwik Inlet, approximately halfway between Valdez and Whittier. CCH, constructed in 1978, is owned by ADF&G and has been operated by PWSAC under contract since 1988. The facility was originally constructed as a pink and chum salmon hatchery, but the chum program was discontinued in 1989 due to extremely cold lake water from January through March. Water for hatchery operations is supplied by Cannery Lake which has a surface area of 53 hectares and produces 504 l/s of which 47–504 l/s are required for hatchery operations.

In 2010, the overall run of pink salmon produced by CCH was 19.7 million fish. These fish originated from the brood year 2008 release, and had a survival rate of approximately 13.8% which was more than the preseason projection of 6.3 million fish. A total of 367,793 pink salmon were harvested for CCH cost recovery. A total of 179,115 pink salmon were collected for broodstock and of those 167,693 carcasses were sold as part of the 'full utilization strategy. An additional 5,000 to 500,000 pink salmon went unharvested. The commercial fleet harvested 18.9 million or 96.0% of the total pink salmon run to this facility (Appendices E1, E3, and E24).

Historical pink salmon fry releases, total hatchery run and estimated marine survival for CCH are in Appendices E1, E2, E3, and E24. CCH's contributions to pink salmon harvest in the Coghill, Eastern, Northern, and Southwestern districts are in Appendices E10, E19, E23, and E26, respectively. CCH 2010 cost recovery summary is located in Appendix E24.

Armin F. Koernig Hatchery

AFK is located on Evans Island in southwestern PWS, 2 miles southwest of Chenega village. Converted from an existing cannery in 1974, AFK was operated by ADF&G for a short time before ownership and operations were taken over by PWSAC in 1976. In 1975, PWSAC collected adult pink salmon and conducted egg take in Ewan Bay about 25 air miles from the hatchery. Once water-hardened, the salmon eggs were flown in buckets to a temporary hatchery incubation room over the course of 8 days. Construction delays hindered the completion of the hatchery so chum salmon production was not started in 1975 and the pink eggs were seeded into Larson Creek to ensure their survival. AFK became a fully operational hatchery in 1977 with pink salmon broodstock collected from Larson Creek. Additional pink and chum salmon eggs were collected in Galena Bay to round out production. Chum salmon production was discontinued in 1986 but was resumed in 1996 for 2 years. AFK was rebuilt in 1991 and water

for hatchery operations is supplied by San Juan Lake which has an area of 6 hectares. A pipeline from the lake produces approximately 1,700 l/s, of which approximately 200–1,382 l/s are required for hatchery operations. AFK hatchery currently produces pink salmon, and chum salmon from WNH are remotely released from this facility.

In 2010, the overall run of pink salmon produced at AFK hatchery was 13.8 million fish, this was above the anticipated run of 6.2 million pink salmon. These fish originated from the BY2008 release and had a survival rate of 9.5%. A total of 699,840 pink salmon were harvested for hatchery cost recovery. A total of 161,013 pink salmon were harvested for broodstock of which 160,922 carcasses were sold as part of the 'full utilization' program. An additional 7,700 pink salmon went unharvested as part of brood collection. The commercial fleet harvested 12.9 million or 93.6% of the total pink salmon run to this facility (Appendices E1, E3, and E27).

Historical pink salmon fry releases, total hatchery runs and estimated marine survival for AFK are in Appendices E1, E2, E3, and E27. AFK's contributions to pink salmon harvest in the Coghill, Eshamy, Eastern, Montague, Northern, and Southwestern districts are in Appendices E10, E13, E19, E22, E23, and E26, respectively. AFK 2010 cost recovery summary is located in Appendix E27.

2010 PRINCE WILLIAM SOUND HERRING FISHERIES

PRESEASON OUTLOOK AND HARVEST STRATEGY

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. lat. 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 management purposes, PWS herring is treated as a single stock that spawns from mid-April to early May. At the 1994 BOF meeting the minimum spawning biomass threshold was raised from 8,400 to 22,000 tons for the PWS stock; no fishery may be opened if the estimated spawning biomass is below this level. The 22,000-ton threshold is 25% of the potential spawning biomass from an unfished stock (for methods, see Funk and Rowell 1995). The higher threshold established manageable harvest levels while reducing the risk of overfishing and driving the population to low abundance. When the stock size is between 22,000 and 42,500 tons, the *PWS Herring Management Plan* (5 AAC 27.365) allocates the projected available surplus to the 5 fisheries based on a 0–20 % harvest rate. The maximum harvest rate of 20% is applied when stock size is greater than 42,500 tons. The sac roe seine fishery is allocated 58.1% of the available surplus; the food/bait fishery 16.3%; the pound spawn-on-kelp fishery 14.2%; the wild spawn-on-kelp fishery 8.0 %; and the gillnet sac roe fishery is allocated 3.4%. The sac roe fishery has dominated harvests with a peak in the early 1990's followed by a precipitous decline and a fishery closure since 1999 (Appendices G2 and G3).

During the 1999 and 2003 BOF meetings several regulatory changes were made to PWS herring fisheries. In 1999, regulations were standardized for PWS herring buyer, buyer's agent, and fishermen's fish ticket reporting requirements with those in other parts of the state. The 1999

BOF further created new regulations that would increase the legal depth of a purse seine used in the fall food/bait fishery and specified herring spawn-on-kelp pound marking requirements. Also, in December 1999 the BOF closed Tatitlek Narrows to all commercial herring fishing. This closure was repealed at the 2003 BOF meeting (5 AAC 27.350 (b) repealed 24 April 2003). The 2003 BOF meeting established a regulation requiring a Commercial Fisheries Entry Commission (CFEC) permit holder intending to operate a pound register with the Cordova ADF&G office by March 15 of that year. A further regulation change restricted the number of kelp blades annually based on the number of permit holders registered.

The PWS herring purse seine fishery is composed of 104 permanent and 2 interim permits. Purse seines can be 150 fathoms long and 1,025 meshes deep; mesh size is not regulated. There are 24 gillnet permits in PWS. Gillnets are limited to 100 fathoms in aggregate length and 120 meshes in depth during the spring sac roe fishery (1 March through 30 June). Gillnets may be 150 fathoms in aggregate length for the food and bait fishery. Mesh size is regulated from a minimum of 2 1/8 inches to a maximum of 3 inches. Historical sac roe harvests are presented in Appendices G3–G4. There are 128 herring pound permits in PWS. Seine specifications for the closed pound fishery are the same as the sac roe seine fishery. Open and closed pound fisheries can be managed separately or in combination. The size of the pound is limited to 2,000 square feet at the surface and walls of a closed pound cannot exceed 30 feet in depth. The herring allocation for this fishery is divided among the number of permit holders and ADF&G establishes the maximum number of blades of kelp a permit may maintain in the pound based on the number of permits registered to fish by 15 March. The historical pound spawn-on-kelp harvest peaked in the early 1990s and has declined since that time with multiple season closures (Appendix G6). The wild spawn-on-kelp fishery, utilizing native PWS kelp, occurs after a major spawning event takes place on marketable species of kelp. Wild kelp is taken by divers or by hand picking depending on the type of kelp available for harvest and market demand. The historical wild spawn-on-kelp fishery harvests are given in Appendix G5. Once instituted, pound fisheries dominated harvests of wild spawn-on-kelp (Appendix G7). The food/bait fishery season may run from October 1 through January 31; however, industry concerns over product quality usually results in a delay of the season's opening date until November. Purse seine size is not restricted for the food/bait fishery and trawling or gillnetting may also occur. The historical food/bait fishery harvests are given in Appendices G7–G8. Historical fishery harvest values for all PWS fisheries are presented in Appendix G9.

SEASON SUMMARY

Hydroacoustic, net sampling, and aerial surveys were conducted in 2010 to assess herring biomass, disease prevalence, age composition, and growth. The 2010 PWS herring biomass was estimated to be below the minimum spawning biomass threshold of 22,000 tons, based on acoustic estimates and mile-days of spawn observations from 2009. Based on herring stock assessment information, all 2010 herring fisheries were closed.

In March and April 2010, acoustic surveys of adult herring were conducted with the ADF&G vessel R/V *Solstice* and the M/V *Auklet*, contracted by the Prince William Sound Science Center (PWSSC). The R/V *Solstice* conducted broad scale surveys in eastern PWS up to Tatitlek Narrows. Detailed acoustics data were collected in Port Gravina, between St. Matthews Bay and Knowles Head, and in Port Fidalgo between Two Moon Bay and Irish Cove. The preliminary acoustics results from the ADF&G and PWSSC surveys will be provided when complete.

Herring disease assessment has been included as part of the annual age, sex, and size assessment ADF&G has completed each spring since 1993. Disease sampling in 2002 documented a viral hemorrhagic septicemia virus (VHSV) prevalence of 14%. Although this did not appear to seriously impact the adult population, it may have increased mortality of juveniles. Also, the prevalence of *Ichthyophonus hoferi* increased significantly between 2002 (14%) and 2005 (25%). In March and April, ADF&G examined herring for prevalence of focal skin reddening and the pathogen Ichthyophonus hoferi. Prevalence of focal skin reddening associated with VHSV was not detected; however, prevalence of I. hoferi varied from 13.3% in Simpson Bay to 43.3% in Port Gravina. Evidence suggests both VHSV and *I. hoferi* may occur in approximately 4-year cycles. The last *I. hoferi* peak was in 2001 and prevalence of *I. hoferi* is positively correlated with age. Therefore, there may have been increased mortality from *I. hoferi* in older age groups in 2006 and 2007. If this trend continues, mortality of the predominant age class may increase significantly. ADF&G is monitoring these disease indices.

A total of 30.8 mile-days of spawn were observed in spring 2010; less than the mile-days of spawn in any year in which commercial fishing occurred since 1973. Almost 20 mile-days were assessed as dissipating or drift of milt during the 19 survey days. Most of the spawning occurred in the eastern portion of PWS (27.4 mile-day) while the Montague (0.75 mile-days) and Kayak Island (2.7 mile-days) areas had much smaller spawning events (Appendix G13).

ADF&G collected additional age, sex, and size data along with disease information throughout PWS during the fall of 2010. Updates on the status of the PWS herring population will be announced as new information becomes available.

2010–2011 HERRING SEASON OUTLOOK

Given the PWS herring spawning population, current size and age structure, a commercial harvest is not anticipated in 2011. 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.

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TABLES AND FIGURES

Table 1.–Prince William Sound Management Area commercial salmon harvest by gear type and district, 2010.

District	Permits	Chinook	Sockeye	Coho	Pink	Chum	Total
Eastern	163	2	840	5,865	16,423,602	14,383	16,444,692
Northern	141	0	780	895	17,916,832	2,438	17,920,945
Coghill	95	0	779	434	10,919,455	3,207	10,923,875
Northwestern	0	0	0	0	0	0	0
Southwestern	145	19	60,329	1,142	16,978,392	166,464	17,206,346
Montague	1	0	0	2	191	19	212
Southeastern	6	0	0	0	19,293	0	19,293
Unakwik	4	1	31	0	34	26	92
Purse seine total	174	22	62,759	8,338	62,257,799	186,537	62,515,455
Bering River	74	0	51	80,560	2	0	80,613
Copper River	495	9,645	636,214	210,621	21,149	15,694	893,323
Coghill	428	206	87,465	5,498	3,333,106	2,512,005	5,938,280
Eshamy	413	92	962,478	1,385	117,965	529,860	1,611,780
Montague	113	188	5,512	76	15,794	243,456	265,026
Unakwik	1	0	15	0	0	0	15
Drift gillnet total	519	10,131	1,691,735	298,140	3,488,016	3,301,015	8,789,037
Eshamy	29	17	282,467	69	16,766	80,516	379,835
Set gillnet total	29	17	282,467	69	16,766	80,516	379,835
Solomon Gulch	1	0	0	43,722	2,373,002	5,042	2,421,766
Cannery Creek	1	0	0	0	542,484	0	542,484
Wally Noerenberg	1	0	0	0	1,763,948	749,763	2,513,711
Main Bay	1	0	0	0	0	0	0
Armin F. Koernig	1	0	0	0	865,277	0	865,277
Hatchery Total[a]		0	0	43,722	5,544,711	754,805	6,343,238
Test Fishery	1	0	0	0	1,152	0	1,152
Home Pack	364	957	8,183	1,168	21	152	10,481
Donated Fish	0	0	0	0	0	0	0
Misc. Total		957	8,183	1,168	1,173	152	11,633
Prince William Sound total		11,127	2,045,144	351,437	71,308,465	4,323,025	78,039,198

[a] Hatchery sales for hatchery operating costs.

Table 2.–Total commercial salmon harvest by species from all gear types, Prince William Sound Area, 1950–2010.

Year		Gear	Chinook		Sockeye		Coho		Pink		Chum	
1950	[a]	DGN +SGN	17,783	(96.8%)	827,107	(94.5%)	146,839	(63.8%)	44,852	(2.4%)	16,079	(3.5%)
1950	[a]	PS	365	(2.0%)	23,742	(2.7%)	49,743	(21.6%)	966,078	(52.2%)	319,684	(70.1%)
1950	[a]	Troll	22	(0.1%)	0	(0.0%)	9,454	(4.1%)	0	(0.0%)	0	(0.0%)
1950	[a]	Fish Trap	193	(1.1%)	24,680	(2.8%)	24,060	(10.5%)	839,842	(45.4%)	120,183	(26.4%)
		Total	18,363		875,529		230,096		1,850,772		455,946	
1951	[b]	DGN	17,483	(82.8%)	458,262	(69.1%)	200,748	(80.8%)	4,064	(0.5%)	5,877	(1.1%)
1951	[b]	SGN	19	(0.1%)	74,397	(11.2%)	1,795	(0.7%)	14,724	(1.8%)	22,011	(4.0%)
1951	[b]	PS	951	(4.5%)	89,544	(13.5%)	7,278	(2.9%)	344,310	(42.9%)	357,877	(65.2%)
1951	[b]	Troll	26	(0.1%)	0	(0.0%)	87	(0.0%)	0	(0.0%)	0	(0.0%)
1951	[b]	Fish Trap	2,630	(12.5%)	41,396	(6.2%)	38,452	(15.5%)	439,900	(54.8%)	163,490	(29.8%)
		Total	21,109		663,599		248,360		802,998		549,255	
1952	[b]	DGN	29,418	(99.8%)	1,136,693	(93.9%)	178,353	(78.0%)	59,071	(2.7%)	18,963	(3.4%)
1952	[b]	SGN	20	(0.1%)	36,305	(3.0%)	2,557	(1.1%)	66,927	(3.1%)	20,994	(3.8%)
1952	[b]	PS	27	(0.1%)	8,137	(0.7%)	11,846	(5.2%)	1,199,455	(55.3%)	425,581	(77.3%)
1952	[b]	Troll	1	(0.0%)	0	(0.0%)	21	(0.0%)	1	(0.0%)	1	(0.0%)
1952	[b]	Fish Trap	0	(0.0%)	29,505	(2.4%)	35,735	(15.6%)	842,386	(38.9%)	85,215	(15.5%)
		Total	29,466		1,210,640		228,512		2,167,840		550,754	
1953	[b]	DGN	12,225	(99.4%)	572,942	(92.2%)	29,959	(44.8%)	11,993	(0.6%)	3,674	(1.0%)
1953	[b]	SGN	7	(0.1%)	14,809	(2.4%)	1,355	(2.0%)	66,285	(3.3%)	23,009	(6.5%)
1953	[b]	PS	60	(0.5%)	12,014	(1.9%)	6,531	(9.8%)	856,887	(42.9%)	237,146	(67.2%)
1953	[b]	Troll	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
1953	[b]	Fish Trap	4	(0.0%)	21,767	(3.5%)	29,033	(43.4%)	1,061,414	(53.2%)	88,931	(25.2%)
		Total	12,296		621,532		66,878		1,996,579		352,760	
1954	[b]	DGN	15,764	(100.0%)	1,099,693	(99.4%)	249,905	(99.8%)	144	(1.2%)	273	(4.3%)
1954	[b]	SGN	1	(0.0%)	6,185	(0.6%)	436	(0.2%)	12,142	(98.8%)	6,071	(95.7%)
1954	[b]	PS	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
1954	[b]	Troll	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
1954	[b]	Fish Trap	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
		Total	15,765		1,105,878		250,341		12,286		6,344	
1955	[b]	DGN	20,563	(100.0%)	670,826	(98.1%)	228,308	(99.7%)	199	(0.7%)	14	(0.3%)
1955	[b]	SGN	0	(0.0%)	12,924	(1.9%)	596	(0.3%)	26,873	(99.3%)	4,662	(99.7%)
1955	[b]	PS	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
1955	[b]	Troll	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
1955	[b]	Fish Trap	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
		Total	20,563		683,750		228,904		27,072		4,676	
1956	[b]	DGN	11,849	(96.0%)	582,012	(78.8%)	162,732	(82.4%)	1,177	(0.0%)	59	(0.0%)
1956	[b]	SGN	1	(0.0%)	77,514	(10.5%)	789	(0.4%)	32,105	(0.7%)	14,490	(2.9%)
1956	[b]	PS	373	(3.0%)	40,728	(5.5%)	5,731	(2.9%)	2,757,727	(60.9%)	423,792	(83.5%)
1956	[b]	Troll	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
1956	[b]	Fish Trap	118	(1.0%)	38,094	(5.2%)	28,330	(14.3%)	1,735,576	(38.3%)	68,917	(13.6%)
		Total	12,341		738,348		197,582		4,526,585		507,258	
1957	[b]	DGN	8,226	(89.5%)	574,726	(90.2%)	86,149	(80.5%)	2,536	(0.4%)	3,247	(0.5%)
1957	[b]	SGN	0	(0.0%)	35,964	(5.6%)	755	(0.7%)	22,689	(3.5%)	13,809	(2.0%)
1957	[b]	PS	604	(6.6%)	12,528	(2.0%)	5,574	(5.2%)	330,584	(50.8%)	567,363	(80.3%)

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Table 2.–Page 2 of 8.

Year		Gear	Chinook		Sockeye		Coho		Pink		Chum	
1957	b	Troll	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
1957	b	Fish Trap	360	(3.9%)	14,029	(2.2%)	14,603	(13.6%)	295,060	(45.3%)	122,469	(17.3%)
		Total	9,190		637,247		107,081		650,869		706,888	
1958	b	DGN	7,037	(36.9%)	331,289	(96.0%)	102,812	(82.0%)	8,904	(0.1%)	182	(0.0%)
1958	b	SGN	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
1958	b	PS	11	(0.1%)	9,261	(2.7%)	3,354	(2.7%)	4,590,097	(72.9%)	609,689	(88.7%)
1958	b	Troll	12,018	(63.0%)	0	(0.0%)	14,471	(11.5%)	489	(0.0%)	3	(0.0%)
1958	b	Fish Trap	12	(0.1%)	4,560	(1.3%)	4,730	(3.8%)	1,699,338	(27.0%)	77,574	(11.3%)
		Total	19,078		345,110		125,367		6,298,828		687,448	
1959	b	DGN	9,910	(87.3%)	327,166	(100.0%)	190,819	(99.4%)	946	(80.5%)	67	(100.0%)
1959	b	SGN	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
1959	b	PS	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
1959	b	Troll	1,447	(12.7%)	0	(0.0%)	1,123	(0.6%)	229	(19.5%)	0	(0.0%)
1959	b	Fish Trap	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
		Total	11,357		327,166		191,942		1,175		67	
1960	c	DGN	8,741	(100.0%)	393,557	(91.8%)	206,212	(87.0%)	476	(0.0%)	319	(0.1%)
1960	c	SGN	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
1960	c	PS	0	(0.0%)	35,176	(8.2%)	30,722	(13.0%)	1,841,899	(100.0%)	381,858	(99.9%)
1960	c	Troll	NA		NA		NA		NA		NA	
		Total	8,741		428,733		236,934		1,842,375		382,177	
1961	c	DGN	13,573	(100.0%)	657,366	(92.3%)	170,729	(98.1%)	16,200	(0.7%)	4,052	(1.8%)
1961	c	SGN	0	(0.0%)	54,057	(7.6%)	1,303	(0.7%)	109,142	(4.7%)	21,589	(9.6%)
1961	c	PS	0	(0.0%)	418	(0.1%)	2,011	(1.2%)	2,174,440	(94.5%)	199,033	(88.6%)
1961	c	Troll	NA		NA		NA		NA		NA	
		Total	13,573		711,841		174,043		2,299,782		224,674	
1962	c	DGN + SGN	12,793	(100.0%)	742,493	(97.3%)	321,375	(95.8%)	14,389	(0.2%)	7,558	(0.9%)
1962	c	PS	0	(0.0%)	20,822	(2.7%)	13,993	(4.2%)	6,466,736	(99.8%)	831,949	(99.1%)
1962	c	Troll	NA		NA		NA		NA		NA	
		Total	12,793		763,315		335,368		6,481,125		839,507	
1963	d	DGN	41,193	(96.0%)	415,205	(100.0%)	291,345	(93.6%)	23,712	(3.5%)	43,941	(45.2%)
1963	d	SGN	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
1963	d	PS	47	(0.1%)	174	(0.0%)	2,731	(0.9%)	661,844	(96.4%)	53,306	(54.8%)
1963	d	Troll	1,652	(3.9%)	0	(0.0%)	17,238	(5.5%)	835	(0.1%)	62	(0.1%)
		Total	42,892		415,379		311,314		686,391		97,309	
1964	d	DGN	12,793	(99.5%)	742,493	(95.2%)	321,375	(91.2%)	14,389	(0.3%)	7,558	(1.4%)
1964	d	SGN	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
1964	d	PS	65	(0.5%)	37,498	(4.8%)	30,968	(8.8%)	4,193,055	(99.7%)	531,551	(98.6%)
1964	d	Troll	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
		Total	12,858		779,991		352,343		4,207,444		539,109	
1965	d	DGN	15,404	(93.4%)	858,788	(90.7%)	123,077	(73.2%)	4,617	(0.2%)	4,665	(2.3%)
1965	d	SGN	3	(0.0%)	11,278	(1.2%)	51	(0.0%)	332	(0.0%)	383	(0.2%)
1965	d	PS	562	(3.4%)	76,701	(8.1%)	39,263	(23.4%)	2,455,978	(99.8%)	196,360	(97.5%)
1965	d	Troll	523	(3.2%)	0	(0.0%)	5,722	(3.4%)	347	(0.0%)	7	(0.0%)
		Total	16,492		946,767		168,113		2,461,274		201,415	

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Table 2.–Page 3 of 8.

Year		Gear	Chinook		Sockeye		Coho		Pink		Chum	
1966	d	DGN	11,464	(94.9%)	1,061,596	(93.9%)	166,012	(87.5%)	5,638	(0.2%)	3,126	(0.7%)
1966	d	SGN	0	(0.0%)	20,503	(1.8%)	728	(0.4%)	35,499	(1.3%)	7,772	(1.8%)
1966	d	PS	177	(1.5%)	48,909	(4.3%)	20,319	(10.7%)	2,659,935	(98.5%)	415,818	(97.4%)
1966	d	Troll	437	(3.6%)	0	(0.0%)	2,578	(1.4%)	188	(0.0%)	6	(0.0%)
		Total	12,078		1,131,008		189,637		2,701,260		426,722	
1967	d	DGN	9,929	(73.6%)	544,423	(96.2%)	206,625	(83.6%)	39,506	(1.5%)	19,250	(7.0%)
1967	d	SGN	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
1967	d	PS	421	(3.1%)	21,283	(3.8%)	18,325	(7.4%)	2,586,006	(98.4%)	255,133	(93.0%)
1967	d	Troll	3,147	(23.3%)	0	(0.0%)	22,223	(9.0%)	1,404	(0.1%)	71	(0.0%)
		Total	13,497		565,706		247,173		2,626,916		274,454	
1968	d	DGN	9,167	(86.3%)	650,036	(89.7%)	303,096	(96.4%)	15,860	(0.6%)	15,753	(4.6%)
1968	d	SGN	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
1968	d	PS	152	(1.4%)	74,414	(10.3%)	7,064	(2.2%)	2,432,315	(99.3%)	326,012	(95.4%)
1968	d	Troll	1,306	(12.3%)	0	(0.0%)	4,407	(1.4%)	396	(0.0%)	2	(0.0%)
		Total	10,625		724,450		314,567		2,448,571		341,767	
1969	e	DGN	14,148	(81.3%)	819,891	(80.3%)	81,588	(91.5%)	5,508	(0.1%)	9,724	(3.0%)
1969	e	SGN	13	(0.1%)	56,785	(5.6%)	182	(0.2%)	22,133	(0.5%)	7,120	(2.2%)
1969	e	PS	691	(4.0%)	143,737	(14.1%)	5,978	(6.7%)	4,800,991	(99.4%)	304,371	(94.8%)
1969	e	Troll	2,552	(14.7%)	1	(0.0%)	1,450	(1.6%)	795	(0.0%)	6	(0.0%)
		Total	17,404		1,020,414		89,198		4,829,427		321,221	
1970	e	DGN	19,392	(95.0%)	1,168,945	(94.1%)	241,071	(95.6%)	21,607	(0.8%)	8,126	(3.5%)
1970	e	SGN	4	(0.0%)	15,396	(1.2%)	515	(0.2%)	40,222	(1.4%)	4,703	(2.0%)
1970	e	PS	204	(1.0%)	58,159	(4.7%)	9,486	(3.8%)	2,748,709	(97.8%)	218,692	(94.5%)
1970	e	Troll	818	(4.0%)	2	(0.0%)	1,194	(0.5%)	84	(0.0%)	0	(0.0%)
		Total	20,418		1,242,502		252,266		2,810,622		231,521	
1971	e	DGN	16,664	(82.7%)	684,909	(92.3%)	297,200	(90.7%)	5,883	(0.1%)	16,652	(2.9%)
1971	e	SGN	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
1971	e	PS	1,075	(5.3%)	57,036	(7.7%)	30,023	(9.2%)	7,306,580	(99.9%)	562,898	(97.1%)
1971	e	Troll	2,403	(11.9%)	0	(0.0%)	474	(0.1%)	267	(0.0%)	2	(0.0%)
		Total	20,142		741,945		327,697		7,312,730		579,552	
1972	e	DGN	22,475	(97.7%)	938,344	(96.1%)	123,768	(99.3%)	32,075	(56.2%)	35,743	(77.6%)
1972	e	SGN	33	(0.1%)	37,771	(3.9%)	520	(0.4%)	25,013	(43.8%)	10,345	(22.4%)
1972	e	PS	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
1972	e	Troll	495	(2.2%)	0	(0.0%)	382	(0.3%)	2	(0.0%)	0	(0.0%)
		Total	23,003		976,115		124,670		57,090		46,088	
1973	e	DGN	20,451	(90.3%)	454,211	(96.0%)	197,828	(99.4%)	101,688	(4.9%)	108,729	(14.7%)
1973	e	SGN	28	(0.1%)	8,969	(1.9%)	78	(0.0%)	9,724	(0.5%)	10,914	(1.5%)
1973	e	PS	237	(1.0%)	9,864	(2.1%)	812	(0.4%)	1,954,432	(94.6%)	620,374	(83.8%)
1973	e	Troll	1,922	(8.5%)	0	(0.0%)	301	(0.2%)	0	(0.0%)	0	(0.0%)
		Total	22,638		473,044		199,019		2,065,844		740,017	
1974	e	DGN	19,191	(93.2%)	730,673	(98.6%)	75,460	(99.2%)	336,047	(73.3%)	76,082	(85.3%)
1974	e	SGN	4	(0.0%)	6,394	(0.9%)	11	(0.0%)	68,300	(14.9%)	5,408	(6.1%)
1974	e	PS	192	(0.9%)	4,273	(0.6%)	22	(0.0%)	54,268	(11.8%)	7,720	(8.7%)
1974	e	Troll	1,215	(5.9%)	0	(0.0%)	548	(0.7%)	4	(0.0%)	0	(0.0%)

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Year		Gear	Chinook		Sockeye		Coho		Pink		Chum	
1975	e	DGN	20,501	(92.8%)	519,425	(95.0%)	78,397	(93.3%)	186,758	(4.2%)	41,970	(41.4%)
1975	e	SGN	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
1975	e	PS	1,598	(7.2%)	27,195	(5.0%)	5,660	(6.7%)	4,265,685	(95.8%)	59,306	(58.6%)
1975	e	PS	224	(1.0%)	0	(0.0%)	9	(0.0%)	0	(0.0%)	0	(0.0%)
		Total	22,099		546,620		84,057		4,452,443		101,276	
1976	e	DGN	31,825	(97.2%)	963,415	(95.5%)	154,529	(96.3%)	160,506	(5.3%)	111,504	(30.1%)
1976	e	SGN	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
1976	e	PS	493	(1.5%)	45,425	(4.5%)	5,845	(3.6%)	2,861,920	(94.7%)	259,153	(69.9%)
1976	e	Troll	409	(1.2%)	0	(0.0%)	120	(0.1%)	0	(0.0%)	0	(0.0%)
		Total	32,727		1,008,840		160,494		3,022,426		370,657	
1977	e	DGN	22,365	(97.8%)	812,755	(86.1%)	178,674	(99.6%)	419,529	(9.2%)	136,517	(23.8%)
1977	e	SGN	9	(0.0%)	9,889	(1.0%)	2	(0.0%)	24,743	(0.5%)	4,218	(0.7%)
1977	e	PS	490	(2.1%)	121,287	(12.8%)	741	(0.4%)	4,091,421	(90.2%)	431,958	(75.4%)
		Total	22,864		943,931		179,417		4,535,693		572,693	
1978	e	DGN	29,886	(98.2%)	486,441	(96.2%)	311,499	(99.5%)	55,387	(2.0%)	115,900	(23.7%)
1978	e	SGN	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
1978	e	PS	549	(1.8%)	19,068	(3.8%)	1,431	(0.5%)	2,728,464	(98.0%)	373,871	(76.3%)
		Total	30,435		505,509		312,930		2,783,851		489,771	
1979	e	DGN	18,617	(92.7%)	304,546	(82.4%)	310,777	(98.4%)	269,921	(1.7%)	80,406	(23.0%)
1979	e	SGN	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
1979	e	PS	1,461	(7.3%)	65,037	(17.6%)	4,997	(1.6%)	15,343,689	(98.3%)	269,193	(77.0%)
		Total	20,078		369,583		315,774		15,613,610		349,599	
1980	e	DGN	8,561	(99.1%)	78,096	(37.4%)	335,255	(99.4%)	367,700	(2.6%)	69,126	(14.3%)
1980	e	SGN	0	(0.0%)	2,000	(1.0%)	38	(0.0%)	2,471	(0.0%)	134	(0.0%)
1980	e	PS	82	(0.9%)	128,628	(61.6%)	1,830	(0.5%)	13,790,852	(97.4%)	412,954	(85.6%)
		Total	8,643		208,724		337,123		14,161,023		482,214	
1981	e	DGN	20,530	(98.8%)	636,739	(81.2%)	393,788	(99.2%)	564,357	(2.7%)	142,744	(7.6%)
1981	e	SGN	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
1981	e	PS	252	(1.2%)	147,719	(18.8%)	3,375	(0.8%)	19,993,579	(97.3%)	1,745,987	(92.4%)
		Total	20,782		784,458		397,163		20,557,936		1,888,731	
1982	e	DGN	47,744	(99.7%)	2,286,348	(96.8%)	599,960	(95.2%)	194,359	(1.0%)	254,310	(19.0%)
1982	e	SGN	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
1982	e	PS	127	(0.3%)	76,187	(3.2%)	30,204	(4.8%)	20,207,907	(99.0%)	1,082,693	(81.0%)
		Total	47,871		2,362,535		630,164		20,402,266		1,337,003	
1983	e	DGN	53,558	(99.4%)	858,954	(94.5%)	356,036	(97.4%)	409,989	(3.1%)	246,198	(23.5%)
1983	e	SGN	1	(0.0%)	1,328	(0.1%)	40	(0.0%)	168,134	(1.3%)	4,463	(0.4%)
1983	e	PS	320	(0.6%)	48,203	(5.3%)	9,423	(2.6%)	12,716,040	(95.7%)	798,378	(76.1%)
		Total	53,879		908,485		365,499		13,294,163		1,049,039	
1984	e	DGN	39,798	(99.7%)	1,151,485	(86.2%)	595,475	(95.6%)	1,302,766	(6.2%)	346,325	(27.4%)
1984	e	SGN	1	(0.0%)	24,057	(1.8%)	347	(0.1%)	277,219	(1.3%)	3,042	(0.2%)
1984	e	PS	80	(0.2%)	159,531	(11.9%)	27,292	(4.4%)	19,603,191	(92.5%)	913,412	(72.3%)
1984	e	Troll	35	(0.1%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
		Total	39,914		1,335,073		623,114		21,183,176		1,262,779	

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Year		Gear	Chinook		Sockeye		Coho		Pink		Chum	
1985	e	DGN	42,834	(98.4%)	1,321,716	(91.1%)	1,008,037	(98.4%)	507,896	(2.1%)	267,384	(20.7%)
1985	e	SGN	1	(0.0%)	3,439	(0.2%)	74	(0.0%)	33,284	(0.1%)	1,295	(0.1%)
1985	e	PS	694	(1.6%)	124,993	(8.6%)	16,441	(1.6%)	23,330,611	(97.7%)	1,025,026	(79.2%)
1985	e	Hatchery	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
		Total	43,529		1,450,148		1,024,552		23,871,791		1,293,705	
1986	e	DGN	41,420	(98.3%)	1,206,583	(93.7%)	412,045	(96.8%)	74,847	(0.7%)	239,361	(14.0%)
1986	e	SGN	9	(0.0%)	1,043	(0.1%)	86	(0.0%)	42,123	(0.4%)	5,764	(0.3%)
1986	e	PS	699	(1.7%)	80,587	(6.3%)	11,460	(2.7%)	10,399,605	(91.0%)	1,439,618	(84.4%)
1986	e	Hatchery	0	(0.0%)	0	(0.0%)	2,156	(0.5%)	909,219	(8.0%)	20,683	(1.2%)
		Total	42,128		1,288,213		425,747		11,425,794		1,705,426	
1987	e	DGN	41,522	(98.8%)	1,584,886	(91.0%)	141,143	(80.4%)	755,168	(2.6%)	345,531	(17.7%)
1987	e	SGN	34	(0.1%)	5,514	(0.3%)	336	(0.2%)	88,866	(0.3%)	48,439	(2.5%)
1987	e	PS	489	(1.2%)	151,468	(8.7%)	27,158	(15.5%)	25,528,640	(87.0%)	1,557,140	(79.7%)
1987	e	Hatchery	0	(0.0%)	12	(0.0%)	7,015	(4.0%)	2,986,061	(10.2%)	2,549	(0.1%)
		Total	42,045		1,741,880		175,652		29,358,735		1,953,659	
1988	e	DGN	31,377	(98.7%)	726,362	(94.5%)	444,714	(92.9%)	1,668,449	(14.1%)	569,068	(30.8%)
1988	e	SGN	101	(0.3%)	18,526	(2.4%)	284	(0.1%)	182,135	(1.5%)	94,627	(5.1%)
1988	e	PS	326	(1.0%)	23,353	(3.0%)	27,332	(5.7%)	7,792,900	(65.9%)	1,145,680	(61.9%)
1988	e	Hatchery	1	(0.0%)	74	(0.0%)	6,189	(1.3%)	2,184,703	(18.5%)	40,841	(2.2%)
		Total	31,805		768,315		478,519		11,828,187		1,850,216	
1989	e	DGN	31,267	(98.1%)	1,158,832	(99.4%)	223,317	(73.0%)	79,209	(0.5%)	101,383	(15.2%)
1989	e	SGN	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
1989	e	PS	610	(1.9%)	7,370	(0.6%)	30,311	(9.9%)	9,532,789	(54.6%)	540,978	(80.9%)
1989	e	Hatchery	8	(0.0%)	11	(0.0%)	52,307	(17.1%)	7,853,419	(45.0%)	26,714	(4.0%)
		Total	31,885		1,166,213		305,935		17,465,417		669,075	
1990	e	DGN	21,955	(99.2%)	878,312	(96.4%)	419,080	(80.0%)	2,084,456	(4.7%)	573,550	(59.4%)
1990	e	SGN	56	(0.3%)	10,204	(1.1%)	532	(0.1%)	369,589	(0.8%)	94,494	(9.8%)
1990	e	PS	115	(0.5%)	22,213	(2.4%)	89,997	(17.2%)	32,964,133	(74.7%)	272,518	(28.2%)
1990	e	Hatchery	2	(0.0%)	108	(0.0%)	14,199	(2.7%)	8,732,658	(19.8%)	24,554	(2.5%)
		Total	22,128		910,837		523,808		44,150,836		965,116	
1991	e	DGN	35,027	(99.3%)	1,530,596	(88.3%)	574,879	(89.6%)	289,566	(0.9%)	256,939	(73.0%)
1991	e	SGN	76	(0.2%)	184,028	(10.6%)	511	(0.1%)	20,075	(0.1%)	49,394	(14.0%)
1991	e	PS	156	(0.4%)	18,704	(1.1%)	13,339	(2.1%)	26,585,034	(80.9%)	32,071	(9.1%)
1991	e	Hatchery	0	(0.0%)	14	(0.0%)	52,625	(8.2%)	5,955,561	(18.1%)	13,471	(3.8%)
		Total	35,259		1,733,342		641,354		32,850,236		351,875	
1992	e	DGN	40,234	(97.4%)	1,424,398	(80.7%)	505,167	(81.6%)	326,042	(3.8%)	239,309	(72.2%)
1992	e	SGN	101	(0.2%)	144,568	(8.2%)	1,242	(0.2%)	390,097	(4.5%)	4,695	(1.4%)
1992	e	PS	116	(0.3%)	32,972	(1.9%)	38,984	(6.3%)	4,863,595	(56.3%)	30,088	(9.1%)
1992	e	Hatchery	850	(2.1%)	163,086	(9.2%)	73,530	(11.9%)	3,054,233	(35.4%)	57,392	(17.3%)
		Total	41,301		1,765,024		618,923		8,633,967		331,484	
1993	e	DGN	30,446	(95.2%)	1,594,215	(86.4%)	435,877	(97.9%)	200,252	(3.5%)	676,255	(57.3%)
1993	e	SGN	55	(0.2%)	101,717	(5.5%)	832	(0.2%)	84,568	(1.5%)	20,369	(1.7%)
1993	e	PS	58	(0.2%)	34,575	(1.9%)	5,437	(1.2%)	3,238,236	(56.5%)	9,458	(0.8%)
1993	e	Hatchery	1,437	(4.5%)	113,738	(6.2%)	3,259	(0.7%)	2,212,903	(38.6%)	475,148	(40.2%)
		Total	31,996		1,844,245		445,405		5,735,959		1,181,230	

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Year		Gear	Chinook		Sockeye		Coho		Pink		Chum	
1994	e	DGN	47,574	(98.0%)	1,255,470	(83.0%)	988,138	(93.4%)	325,283	(0.9%)	582,823	(55.4%)
1994	e	SGN	9	(0.0%)	97,664	(6.5%)	628	(0.1%)	311,134	(0.8%)	6,908	(0.7%)
1994	e	PS	121	(0.2%)	80,699	(5.3%)	46,905	(4.4%)	25,671,910	(69.7%)	82,113	(7.8%)
1994	e	Hatchery	842	(1.7%)	79,541	(5.3%)	22,454	(2.1%)	10,521,439	(28.6%)	380,365	(36.1%)
		Total	48,546		1,513,374		1,058,125		36,829,766		1,052,209	
1995	e	DGN	66,216	(98.7%)	1,383,171	(91.1%)	855,514	(88.7%)	242,041	(1.5%)	449,308	(59.4%)
1995	e	SGN	19	(0.0%)	30,814	(2.0%)	695	(0.1%)	28,118	(0.2%)	6,621	(0.9%)
1995	e	PS	128	(0.2%)	40,796	(2.7%)	95,349	(9.9%)	10,546,358	(66.3%)	68,892	(9.1%)
1995	e	Hatchery	719	(1.1%)	63,326	(4.2%)	13,248	(1.4%)	5,090,152	(32.0%)	231,539	(30.6%)
		Total	67,082		1,518,107		964,806		15,906,669		756,360	
1996	e	DGN	56,360	(99.8%)	2,756,822	(91.9%)	309,047	(67.3%)	84,879	(0.3%)	662,779	(31.5%)
1996	e	SGN	13	(0.0%)	132,268	(4.4%)	309	(0.1%)	16,648	(0.1%)	9,276	(0.4%)
1996	e	PS	64	(0.1%)	24,021	(0.8%)	111,012	(24.2%)	17,656,080	(67.8%)	364,821	(17.3%)
1996	e	Hatchery	19	(0.0%)	86,959	(2.9%)	38,951	(8.5%)	8,291,205	(31.8%)	1,066,683	(50.7%)
		Total	56,456		3,000,070		459,319		26,048,812		2,103,559	
1997	e	DGN	52,178	(99.4%)	3,671,438	(88.2%)	24,797	(30.9%)	309,778	(1.2%)	727,387	(32.8%)
1997	e	SGN	12	(0.0%)	196,005	(4.7%)	163	(0.2%)	76,610	(0.3%)	8,475	(0.4%)
1997	e	PS	204	(0.4%)	28,924	(0.7%)	55,223	(68.9%)	15,595,495	(60.6%)	680,084	(30.6%)
1997	e	Hatchery	88	(0.2%)	266,335	(6.4%)	3	(0.0%)	9,734,102	(37.9%)	804,416	(36.2%)
		Total	52,482		4,162,702		80,186		25,715,985		2,220,362	
1998	e	DGN	69,514	(98.3%)	1,521,303	(90.4%)	123,748	(70.9%)	507,438	(1.8%)	353,270	(28.3%)
1998	e	SGN	1	(0.0%)	25,533	(1.5%)	91	(0.1%)	33,916	(0.1%)	214	(0.0%)
1998	e	PS	227	(0.3%)	20,428	(1.2%)	50,607	(29.0%)	19,327,718	(68.1%)	399,240	(32.0%)
1998	e	Hatchery	980	(1.4%)	115,914	(6.9%)	87	(0.0%)	8,507,352	(30.0%)	494,416	(39.6%)
		Total	70,722		1,683,178		174,533		28,376,424		1,247,140	
1999	e	DGN	62,814	(99.0%)	1,897,001	(93.7%)	145,754	(85.8%)	169,899	(0.4%)	728,043	(24.6%)
1999	e	SGN	131	(0.2%)	74,378	(3.7%)	1,092	(0.6%)	43,443	(0.1%)	11,101	(0.4%)
1999	e	PS	475	(0.7%)	24,914	(1.2%)	23,046	(13.6%)	31,425,027	(69.8%)	1,444,200	(48.8%)
1999	e	Hatchery	0	(0.0%)	28,777	(1.4%)	0	(0.0%)	13,383,078	(29.7%)	777,180	(26.3%)
		Total	63,420		2,025,070		169,892		45,021,447		2,960,524	
2000	e	DGN	32,173	(99.3%)	1,294,703	(90.5%)	449,538	(62.9%)	473,282	(1.2%)	1,676,693	(32.5%)
2000	e	SGN	41	(0.1%)	101,105	(7.1%)	662	(0.1%)	139,008	(0.4%)	12,319	(0.2%)
2000	e	PS	189	(0.6%)	34,692	(2.4%)	264,085	(37.0%)	27,147,419	(69.8%)	1,744,575	(33.8%)
2000	e	Hatchery	0	(0.0%)	218	(0.0%)	1	(0.0%)	11,125,819	(28.6%)	1,729,876	(33.5%)
		Total	32,403		1,430,718		714,286		38,885,528		5,163,463	
2001	e	DGN	39,866	(98.6%)	1,918,836	(84.9%)	267,798	(54.8%)	685,686	(1.9%)	1,166,598	(37.7%)
2001	e	SGN	25	(0.1%)	176,060	(7.8%)	1,006	(0.2%)	127,737	(0.4%)	7,057	(0.2%)
2001	e	PS	554	(1.4%)	123,004	(5.4%)	198,334	(40.6%)	21,517,861	(61.1%)	988,409	(31.9%)
2001	e	Hatchery	0	(0.0%)	43,073	(1.9%)	21,781	(4.5%)	12,914,314	(36.6%)	936,028	(30.2%)
		Total	40,445		2,260,973		488,919		35,245,598		3,098,092	

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Year	Gear	Chinook		Sockeye		Coho		Pink		Chum	
2002 [e]	DGN	39,384	(99.3%)	1,907,520	(84.3%)	617,075	(94.9%)	132,499	(0.7%)	1,797,115	(28.2%)
2002 [e]	SGN	30	(0.1%)	241,660	(10.7%)	525	(0.1%)	64,421	(0.3%)	22,987	(0.4%)
2002 [e]	PS	260	(0.7%)	18,837	(0.8%)	32,730	(5.0%)	7,966,259	(42.0%)	1,972,459	(30.9%)
2002 [e]	Hatchery	1	(0.0%)	93,722	(4.1%)	1	(0.0%)	10,787,752	(56.9%)	2,580,926	(40.5%)
	Total	39,675		2,261,739		650,331		18,950,931		6,373,487	
2003 [e]	DGN	48,056	(99.8%)	1,946,105	(71.4%)	434,634	(83.3%)	118,951	(0.2%)	753,883	(19.8%)
2003 [e]	SGN	0	(0.0%)	215,733	(7.9%)	663	(0.1%)	28,537	(0.1%)	6,265	(0.2%)
2003 [e]	PS	120	(0.2%)	197,407	(7.2%)	66,838	(12.8%)	38,661,721	(74.4%)	1,481,727	(38.9%)
2003 [e]	Hatchery	0	(0.0%)	366,770	(13.5%)	19,782	(3.8%)	13,156,974	(25.3%)	1,563,019	(41.1%)
	Total	48,176		2,726,015		521,917		51,966,183		3,804,894	
2004 [e]	DGN	38,432	(99.6%)	1,500,223	(79.3%)	575,122	(92.8%)	81,090	(0.3%)	581,762	(29.1%)
2004 [e]	SGN	11	(0.0%)	91,412	(4.8%)	825	(0.1%)	51,655	(0.2%)	10,381	(0.5%)
2004 [e]	PS	156	(0.4%)	17,530	(0.9%)	33,990	(5.5%)	11,573,514	(49.2%)	881,129	(44.0%)
2004 [e]	Hatchery	0	(0.0%)	282,632	(14.9%)	9,974	(1.6%)	11,825,224	(50.3%)	528,676	(26.4%)
	Total	38,599		1,891,797		619,911		23,531,483		2,001,948	
2005 [e]	DGN	35,024	(99.4%)	1,606,130	(80.8%)	360,574	(67.8%)	228,463	(0.4%)	888,847	(42.3%)
2005 [e]	SGN	0	(0.0%)	109,532	(5.5%)	882	(0.2%)	126,135	(0.2%)	3,452	(0.2%)
2005 [e]	PS	224	(0.6%)	63,482	(3.2%)	142,672	(26.8%)	47,017,421	(78.4%)	568,847	(27.1%)
2005 [e]	Hatchery	0	(0.0%)	207,605	(10.4%)	27,417	(5.2%)	12,572,614	(21.0%)	638,320	(30.4%)
	Total	35,248		1,986,749		531,545		59,944,633		2,099,466	
2006 [e]	DGN	30,603	(99.2%)	2,012,665	(79.8%)	477,430	(62.5%)	145,348	(0.7%)	314,487	(14.4%)
2006 [e]	SGN	9	(0.0%)	124,087	(4.9%)	352	(0.0%)	20,863	(0.1%)	9,883	(0.5%)
2006 [e]	PS	227	(0.7%)	37,745	(1.5%)	268,574	(35.2%)	11,828,266	(54.5%)	1,032,627	(47.3%)
2006 [e]	Hatchery	0	(0.0%)	348,276	(13.8%)	17,198	(2.3%)	9,727,499	(44.8%)	824,558	(37.8%)
	Total	30,839		2,522,773		763,554		21,721,976		2,181,555	
2007 [e]	DGN	39,300	(98.2%)	2,645,002	(81.9%)	190,025	(57.8%)	188,950	(0.3%)	1,100,667	(30.8%)
2007 [e]	SGN	18	(0.0%)	196,537	(6.1%)	365	(0.1%)	13,796	(0.0%)	24,651	(0.7%)
2007 [e]	PS	713	(1.8%)	66,004	(2.0%)	108,593	(33.0%)	51,270,207	(80.8%)	1,353,892	(37.8%)
2007 [e]	Hatchery	0	(0.0%)	321,330	(10.0%)	29,644	(9.0%)	11,995,924	(18.9%)	1,099,730	(30.7%)
	Total	40,031		3,228,873		328,627		63,468,877		3,578,940	
2008 [e]	DGN	11,643	(98.8%)	1,061,224	(81.7%)	325,249	(59.1%)	960,113	(2.3%)	2,561,113	(50.5%)
2008 [e]	SGN	18	(0.2%)	162,403	(12.5%)	151	(0.0%)	20,455	(0.0%)	53,627	(1.1%)
2008 [e]	PS	127	(1.1%)	74,912	(5.8%)	202,003	(36.7%)	33,727,052	(79.6%)	1,820,049	(35.9%)
2008 [e]	Hatchery	0	(0.0%)	0	(0.0%)	22,623	(4.1%)	7,639,384	(18.0%)	641,332	(12.6%)
	Total	11,788		1,298,539		550,026		42,347,004		5,076,121	
2009 [e]	DGN	9,801	(97.7%)	1,555,669	(81.4%)	275,636	(91.9%)	400,524	(2.2%)	2,292,015	(71.2%)
2009 [e]	SGN	47	(0.5%)	152,642	(8.0%)	49	(0.0%)	4,251	(0.0%)	50,748	(1.6%)
2009 [e]	PS	28	(0.3%)	70,473	(3.7%)	6,739	(2.2%)	10,765,944	(58.7%)	269,470	(8.4%)
2009 [e]	Hatchery	0	(0.0%)	133,873	(7.0%)	17,424	(5.8%)	7,411,111	(40.4%)	608,541	(18.9%)
	Total	10,036		1,912,305		299,848		18,355,212		3,219,320	

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Table 2.–Page 8 of 8.

Year	Gear		Chinook		Sockeye		Coho		Pink		Chum	
10-Year Avg.	DGN	32,428	(99.1%)	1,744,808	(81.1%)	397,308	(72.6%)	341,491	(0.9%)	1,313,318	(35.9%)
	SGN	20	(0.1%)	157,117	(7.3%)	548	(0.1%)	59,686	(0.2%)	20,137	(0.6%)
	PS	260	(0.8%)	70,409	(3.3%)	132,456	(24.2%)	26,147,566	(69.8%)	1,211,318	(33.1%)
	Hatchery	0	(0.0%)	179,750	(8.4%)	16,585	(3.0%)	10,915,662	(29.1%)	1,115,101	(30.5%)
	Total	32,708		2,152,083		546,896		37,464,404		3,659,874	
2010 [e]	DGN	10,131	(99.6%)	1,691,735	(83.1%)	298,140	(89.4%)	3,488,016	(4.9%)	3,301,015	(76.4%)
2010 [e]	SGN	17	(0.2%)	282,467	(13.9%)	69	(0.0%)	16,766	(0.0%)	80,516	(1.9%)
2010 [e]	PS	22	(0.2%)	62,759	(3.1%)	8,338	(2.5%)	62,257,799	(87.3%)	186,537	(4.3%)
2010 [e]	Hatchery	0	(0.0%)	0	(0.0%)	27,074	(8.1%)	5,546,994	(7.8%)	754,805	(17.5%)
	Total	10,170		2,036,961		333,621		71,309,575		4,322,873	

[a] 1950 harvest numbers are from USFW Annual Management Report.

[b] 1951–1959 harvest numbers are fish ticket data published in USFW Bureau of Comm Fish report, "Alaska Commercial Salmon Catch Statistics, 1951–1959" by Robert R. Simpson. 1960.

[c] 1960–1962 harvest numbers are from annual ADF&G Annual Management Reports.

[d] 1963–1968 harvest numbers are ADF&G fish ticket data from tractor feed IBM printouts in bound "Computer Catch Statistics, Prince William Sound".

[e] 1969–2010 harvest numbers are fish ticket data from Zephyr database query.

Table 3.–Mean price and estimated exvessel value of the total commercial salmon harvest by gear type, Prince William Sound, 2010.

PURSE SEINE			Average		
Species	Number	Pounds [a]	Weight	Price [a]	Value
Chinook	22	405	18.41	$1.57	$634
Sockeye	62,759	393,402	6.27	1.79	$705,231
Coho	8,338	69,570	8.34	$0.70	$48,476
Pink	62,257,799	223,054,644	3.58	0.35	$78,063,374
Chum	186,537	1,309,539	7.02	$0.78	$1,019,498
	62,515,455	224,827,560			$79,837,212
DRIFT GILLNET			Average		
Species	Number	Pounds	Weight	Price	Value
Chinook	10,131	197,495	19.49	$5.19	$1,025,380
Sockeye	1,691,735	10,316,727	6.10	$1.79	$18,486,735
Coho	298,140	2,726,959	9.15	$1.29	$3,523,008
Pink	3,488,016	13,036,181	3.74	$0.26	$3,446,356
Chum	3,301,015	22,824,709	6.91	$0.52	$11,973,968
	8,789,037	49,102,071			$38,455,447
SET GILLNET [b]			Average		
Species	Number	Pounds	Weight	Price	Value
Chinook	17	256	15.06	$2.95	$756
Sockeye	282,467	1,804,845	6.39	$1.72	$3,103,081
Coho	69	550	7.97	$0.45	$250
Pink	16,766	63,743	3.80	$0.32	$20,573
Chum	80,516	558,461	6.94	$0.81	$450,989
	379,835	2,427,855			$3,575,649
HATCHERY SALES [c]			Average		
Species	Number	Pounds	Weight	Price	Value
Chinook	0	0		$0.00	$0
Sockeye	0	0	0.00	$0.00	$0
Coho	27,074	189,635	7.00	$0.24	$44,808
Pink	5,544,711	20,263,103	3.65	$0.44	$8,911,203
Chum	754,805	4,737,752	6.28	$0.61	$2,894,835
	6,326,590	25,190,490			$11,850,846
OTHER GEAR [d]			Average		
Species	Number	Pounds	Weight	Price	Value
Chinook	0	0	0	$0	$0
Sockeye	0	0	0	$0	$0
Coho	0	0	0	$0	$0
Pink	0	0	0	$0	$0
Chum	0	0	0	$0	$0
	0	0	0	$0	$0

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Table 3.–Page 2 of 2.

Gear Type	Value of Catch	No. of Permits	Average Earnings
Purse Seine	$79,837,212	174	$458,835
Drift Gillnet	$38,455,447	519	$74,095
Set Gillnet	$3,575,649	29	$123,298
Subtotal- Value of Common Property Fishery Catch	$121,868,308		
Hatchery	$11,850,846		
Other Gear	$0		
GRAND TOTAL	$133,719,154		

[a] Mean prices are based on weighted average prices given voluntarily by processors and hatchery operators. Pounds of fish was based on fish ticket reporting and does not represent pounds reported in Commercial Operator Annual Reports.

[b] Sockeye salmon price is based on the received price to the hatchery operator.

[c] Number and pounds from fish ticket data. Value from hatchery annual reports.

[d] Includes the sales of confiscated fish.

Table 4.–Average price paid to permit holders for salmon, Prince William Sound, 1988–2010.

	Chinook Salmon			Sockeye Salmon			Coho Salmon			Pink Salmon			Chum Salmon		
	Gillnet			Gillnet			Gillnet			Gillnet			Gillnet		
	Copper & Bering	PWS	Purse Seine	Copper & Bering	PWS	Purse Seine	Copper & Bering	PWS	Purse Seine	Copper & Bering	PWS	Purse Seine	Copper & Bering	PWS	Purse Seine
1988	$2.23	$2.43	$2.23	$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	$2.41	$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	$1.50	$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	$1.00	$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	$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	$0.63	$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	$0.63	$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	$0.67	$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	$0.55	$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	$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	$1.10	$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	$1.15	$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	$0.95	$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	$0.65	$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	$0.34	$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	$0.48	$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	$0.45	$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	$0.52	$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	$1.26	$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	$0.97	$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	$1.40	$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	$1.71	$2.09	$1.42	$1.32	$1.30	$1.13	$0.42	$0.22	$0.27	$0.24	$0.28	$0.52	$0.53
10-year Average	$4.43	$1.56	$0.87	$1.80	$1.07	$0.84	$0.76	$0.56	$0.46	$0.25	$0.12	$0.15	$0.24	$0.32	$0.31
2010	$5.50	$2.13	$1.57	$2.58	$1.72	$1.79	$1.27	$0.58	$0.70	$0.29	$0.34	$0.35	$0.36	$0.80	$0.78

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

Table 5.–Estimated exvessel value of the total commercial salmon harvest by gear type with previous 10-year average, Prince William Sound, 2000–2010.

PURSE SEINE											Previous 10-yr	
Species	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average	2010
Chinook	2,706	5,435	1,353	924	1,270	1,787	4,940	9,330	2,487	985	3,122	634
Sockeye	195,169	539,388	58,142	847,966	46,573	207,022	219,984	338,262	540,113	584,595	357,721	705,231
Coho	965,404	398,532	69,207	226,619	121,688	103,312	1,426,736	546,805	2,056,932	22,522	593,776	48,476
Pink	13,728,606	9,584,465	2,425,505	10,716,380	4,293,551	13,104,242	6,688,126	28,839,799	39,059,344	7,890,237	13,633,026	78,063,374
Chum	3,964,546	2,863,466	2,423,525	1,717,083.00	1,228,965	773,620	3,007,947	3,499,189	8,002,952	1,123,335	2,860,463	1,019,498
	$18,856,431	$13,391,287	$4,977,731	$13,508,972	$5,692,047	$14,189,982	$11,347,734	$33,233,386	$49,661,828	$9,621,674	$17,448,107	$79,837,212
DRIFT GILLNET												
Species												
Chinook	2,698,417	2,791,619	2,691,215	3,810,019	4,050,947	3,575,253	3,145,401	3,886,795	1,511,402	956,053	2,911,712	1,025,380
Sockeye	13,554,212	14,158,076	14,964,894	13,791,971	13,436,808	15,849,204	19,375,916	26,169,047	11,533,354	17,386,798	16,022,028	18,486,735
Coho	2,486,184	790,544	2,027,738	1,762,604	3,561,659	2,374,703	3,972,107	1,391,204	3,937,198	3,197,336	2,550,128	3,523,008
Pink	177,559	144,896	23,889	27,904	12,134	84,308	54,070	82,356	1,195,812	363,373	216,630	3,446,356
Chum	3,550,614	3,371,206	2,206,854	821,818	976,553	1,965,383	845,703	2,542,327	10,853,908	9,227,837	3,636,220	11,973,968
	$22,466,986	$21,256,342	$21,914,590	$20,214,316	$22,038,101	$23,848,851	$27,393,197	$34,071,729	$29,031,674	$31,131,396	$25,336,718	$38,455,447
SET GILLNET												
Species												
Chinook	2,902	787	765	0	189	0	143	1,267	533	1,302	789	756
Sockeye	912,603	844,123	1,701,077	1,070,058	454,709	608,528	822,232	1,318,799	1,238,739	1,451,897	1,042,276	3,103,081
Coho	3,346	1,686	388	1,611	1,635	4,737	1,869	873	1,414	241	1,780	250
Pink	53,160	22,048	10,848	6,324	7,439	23,542	8,325	5,416	20,966	3,419	16,149	20,573
Chum	25,641	20,045	27,638	6,742	17,261	6,880	29,925	53,380	231,785	197,332	61,663	450,989
	$997,652	$888,689	$1,740,716	$1,084,735	$481,233	$643,687	$862,493	$1,379,735	$1,493,437	$1,654,191	$1,122,657	$3,575,649
HATCHERY SALES												
Species												
Chinook	0	0	15	0	0	0	0	0	0	0	2	0
Sockeye	478	174,418	418,114	1,769,179	997,020	2,383,400	2,173,808	1,790,819	0	1,088,363	1,079,560	0
Coho	2	9,459	1	0	35,733	0	102,792	161,995	67,879	145,267	52,313	44,808
Pink	6,358,529	6,430,468	4,989,921	6,068,403	5,718,678	7,288,894	7,300,390	6,809,392	7,574,535	5,208,870	6,374,808	8,911,203
Chum	4,007,449	3,070,274	3,794,069	1,643,243	779,268	1,704,693	2,893,174	2,105,903	2,465,426	1,816,012	2,427,951	2,894,835
	$10,366,458	$9,684,619	$9,202,119	$9,480,825	$7,530,699	$11,376,987	$12,470,164	$10,868,110	$10,107,840	$8,258,512	$9,934,633	$11,850,846

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Table 5.–Page 2 of 2.

OTHER GEAR											Previous 10-yr	
Species	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average	2010
Chinook	1,266	0	200	26	493	81	0	0	0	0	207	0
Sockeye	5,944	509	1,324	195	614	289	0	0	0	0	887	0
Coho		468	0	0	0	0	0	0	0	0	52	0
Pink		382	0	2812	0	0	0	0	0	0	355	0
Chum		4,206	5	0	0	0	0	0	0	0	468	0
	$7,210	$5,565	$1,529	$3,033	$1,107	$370	$0	$0	$0	$0	$1,881	$0
AVERAGE EARNINGS	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009		2010
Purse Seine	$143,942	$88,101	$41,481	$127,443	$54,210	$137,767	$102,232	$299,400	$352,212	$62,478	$140,927	$458,835
Drift Gillnet	$41,994	$39,731	$41,039	$39,327	$42,219	$46,807	$55,452	$67,335	$57,262	$60,922	$49,209	$74,095
Set Gillnet	$35,630	$27,772	$62,168	$38,741	$17,823	$23,840	$33,173	$53,067	$59,737	$61,266	$41,322	$123,298
NUMBER OF PERMITS FISHED												
Purse Seine	131	152	120	106	105	103	111	111	141	154	123	174
Drift Gillnet	535	535	534	514	522	508	494	506	507	511	517	519
Set Gillnet	28	32	28	28	27	27	26	26	25	27	27	29

Table 6.–Preseason harvest and total run projections for the 2010 commercial common property salmon fishery by district and species, Prince William Sound Area.

		Chinook		Sockeye		Coho		Pink		Chum	
District/Facility [a]	Forecast type [b]	Point Estimate	Range	Point Estimate	Range	Point Estimate	Range	Point Estimate	Range	Point Estimate	Range
Copper River [c]	commercial harvest	17		1,270	604 - 1,936	303	55 - 551				
Bering River [d]	commercial harvest			17	0 - 52	49	0 - 115				
Coghill [e]	commercial harvest			41	20 - 303						
Eshamy [e]	commercial harvest			26	0 - 60						
Unakwik [f]	commercial harvest			7	2 - 11						
General PWS Districts	commercial harvest							803	0 - 2,222	155	53 - 257
Total Wild Stock		17		1,361	604 - 1,961	352	55 - 563	803	0 - 2,222	155	53 - 257
Solomon Gulch	total return					178	50 - 275	10,632	7,464 - 22,620		
Armin F. Koernig	total return							6,200	5,900 - 7,600	344	259 - 400
Wally Noerenberg [g]	total return					8	6 - 10	5,900	2,500 - 9,200	2,681	2,186 - 3,177
Cannery Creek	total return							5,100	700 - 9,600		
Main Bay [h]	total return			884	702 - 967						
Gulkana	total return			471	283 - 659						
Total Hatchery				1,355	757 - 1,170	186	50 - 275	27,832	9,862 - 27,317	3,025	2,201 - 3,202
Total Hatchery and Wild		17		2,716		538		28,635		3,180	

Note: All values are in thousands.

[a] Formal forecast procedures are used for estimating wild stock runs of pink and chum salmon in PWS. Hatchery contributions are based on known fry releases and average marine survival rates. Harvest estimates are made only for species that constitute a significant portion of the catch.

[b] The Alaska Department of Fish and Game provides commercial harvest forecasts for all wild stocks and Gulkana Hatchery sockeye salmon total return. Hatchery operators provide total return forecasts. Harvest projections do not include salmon harvested by hatcheries for cost recovery.

[c] 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).

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

[e] 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.

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

[g] Wally Noerenberg Hatchery chum salmon harvest estimate includes all on-site and remote release runs of chum salmon.

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

Table 7.–Spawning escapement goals for Area E salmon stocks, 2010.

Species/Stock	Goal Lower	Goal Upper	Long-term Average Target[a]	Type[b]	Year Implemented[c]	Evaluation Method
Chinook salmon						
Copper River	24,000	and up	27,000	SEG [d]	2003	Mark-recapture
Coho salmon						
Bering River	13,000	– 33,000		SEG	2003	Aerial surveys
Copper River Delta	32,000	– 67,000		SEG	2003	Aerial surveys
Sockeye salmon						
Bering River	20,000	– 35,000		SEG	2003	Aerial surveys
Upper Copper River [e]	300,000	– 500,000	361,000	SEG	2003	Didson Sonar
Copper River Delta [f]	55,000	– 130,000	84,500	SEG	2003	Aerial surveys
Coghill Lake	20,000	– 40,000		SEG	2003	Weir
Eshamy Lake	13,000	– 28,000		BEG	2009	Weir
Pink Salmon						
Even–Year Broodline (all districts combined) [g, h]						
	1,250,000	– 2,750,000		SEG	2003	Aerial surveys
Odd–Year Broodline (all districts combined) [g, h]						
	1,250,000	– 2,750,000		SEG	2003	Aerial surveys
Chum salmon [i]						
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	8,000	and up	18,750	SEG [d]	2006	Aerial surveys
Northwestern	5,000	and up	13,000	SEG [d]	2006	Aerial surveys
Southeastern	8,000	and up	25,000	SEG [d]	2006	Aerial surveys

[a] These goals are to be managed for escapements that on average match the estimated historical average escapement listed.

[b] The goal types for Area E stocks include Biological Escapement Goal (BEG) and Sustainable Escapement Goal (SEG). These are defined in 5 AAC 39.222 Policy for the management of sustainable salmon fisheries.

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

[d] These goals are lower bound SEG goals per 5 AAC 39.222 update.

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

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

[g] The Prince William Sound pink salmon goals are split into district specific targets using the historical averages by broodline.

[h] The pink and chum salmon escapements are estimated by the area under the curve (AUC) of weekly aerial surveys adjusted for stream life.

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

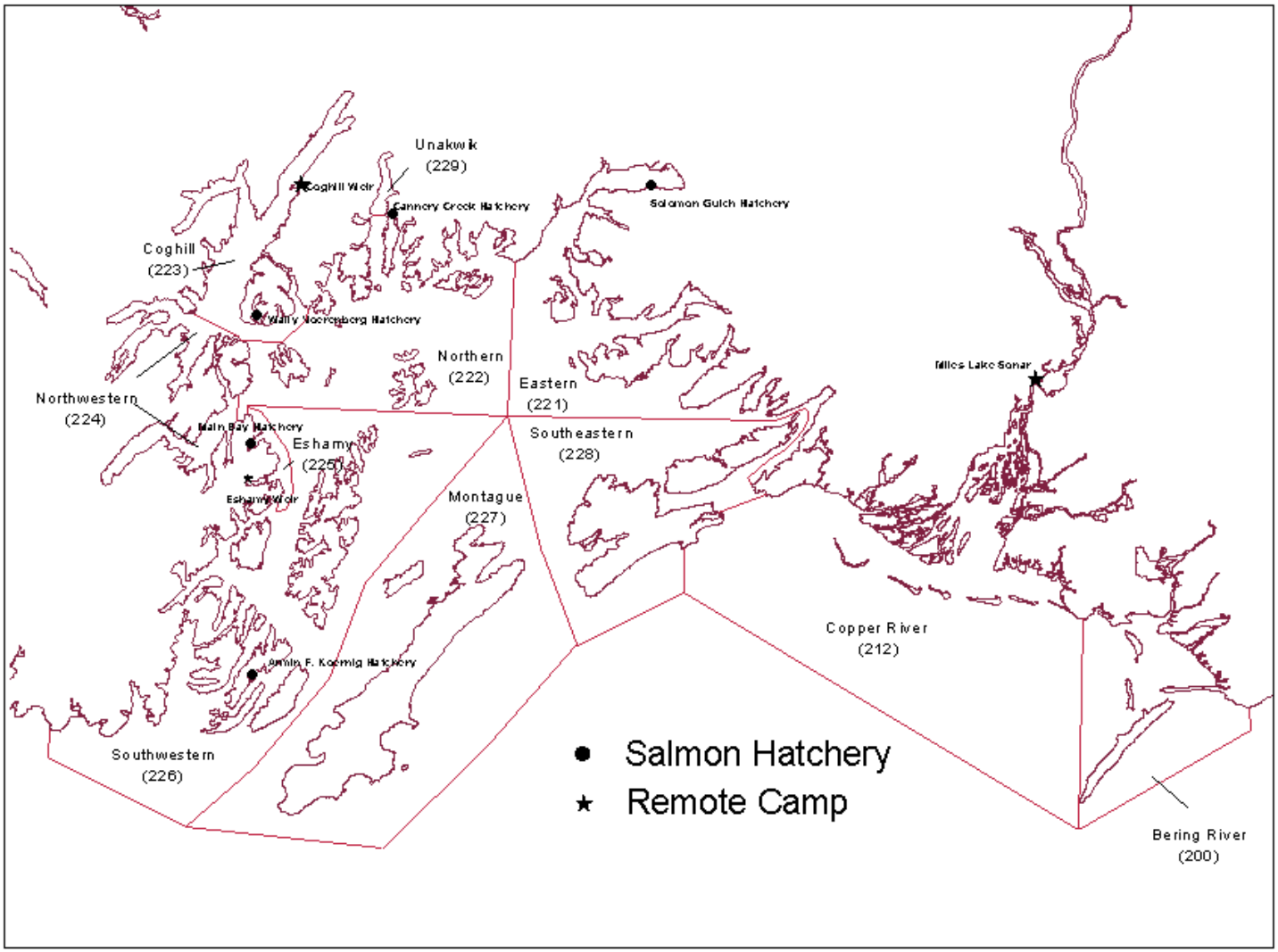

Figure 1.–Prince William Sound Management Area showing commercial fishing districts, salmon hatcheries, weir locations, and Miles Lake sonar camp.

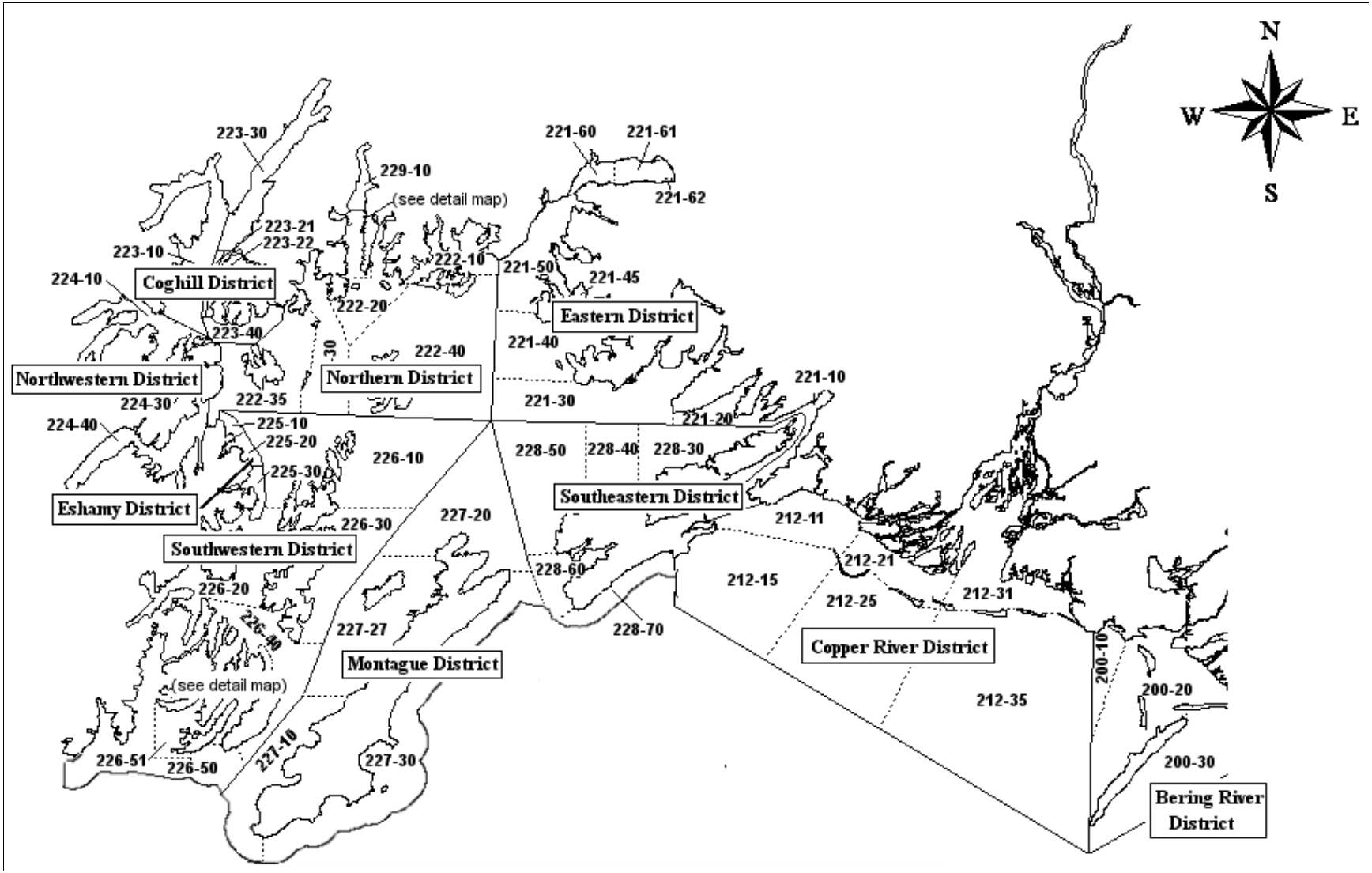

Figure 2.–Prince William Sound Area showing commercial fishing districts and statistical reporting areas.

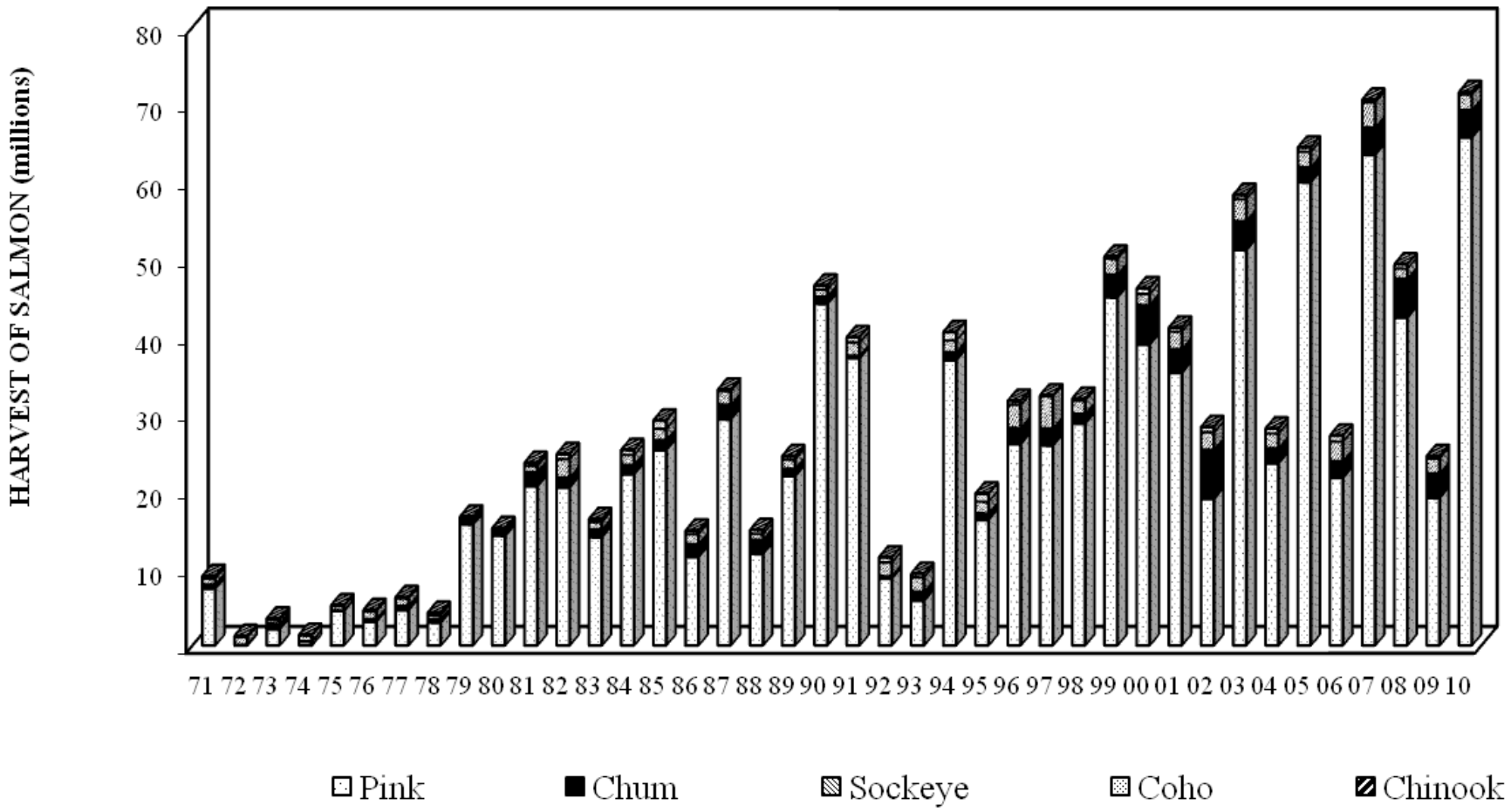

Figure 3.–Commercial salmon harvests in Prince William Sound, 1971–2010.

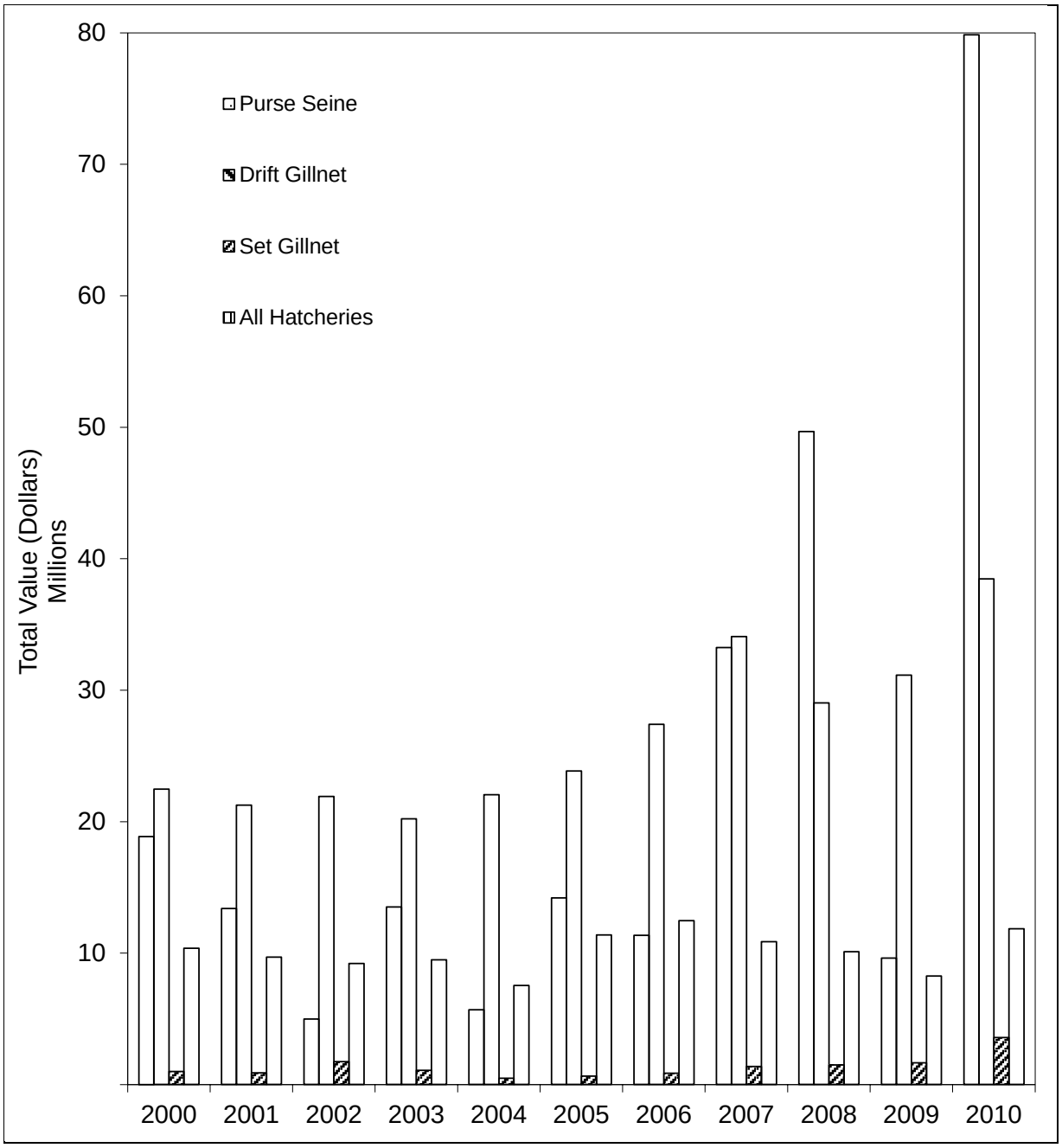

Figure 4.–Exvessel value of the commercial salmon harvest by gear type, 2000–2010.

APPENDIX A

Appendix A1.–Total estimated sockeye salmon runs to the Copper River by end user or destination with previous 10-year average, 2000–2010.

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	10-year Average	2010
Commercial harvest[a]	880,334	1,323,577	1,248,503	1,188,052	1,048,004	1,331,664	1,496,754	1,901,773	320,815	896,621	1,163,610	636,214
Commercial, homepack[a]	651	2,113	1,138	4,077	525	1,785	1,539	2,023	2,172	6,528	2,255	7,064
Commercial, donated[a]	434	0	128	35	74	83	114	180	80	47	118	0
Educational drift gillnet permit[a]	0	0	151	0	0	42	16	62	29	8	31	61
Subsistence (Cordova, drift gillnet)[b]	4,360	3,072	3,067	1,607	1,822	830	4,355	6,148	3,969	1,764	3,099	1,980
Federal Subsistence (PWS/Chugach Nat'l Forest, dipnet, spear, rod and reel)	0	0	0	0	0	109	150	36	32	46	37	36
Subsistence (Batzulnetas, dipnet, fish wheel or spear)[b]	0	62	208	164	182	0	0	1	1	0	62	106
Subsistence (Glennallen Subdistrict, dipnet, fish wheel or spear)[b]	58,241	79,117	47,892	44,209	52,130	60,966	52,759	61,477	40,204	43,738	54,073	66,667
Federal Subsistence (Glennallen subdistrict, dipnet, fish wheel or spear)	0	0	7,950	13,616	17,704	19,973	16,711	15,225	11,347	11,822	11,435	12,779
Personal Use Reported (Chitina Subdistrict, dipnet)[b]	103,269	121,304	75,747	71,053	93,182	106,797	102,443	112,753	70,597	81,432	93,858	116,549
Federal Subsistence (Chitina subdistrict, dipnet)	0	0	575	717	1,215	1,265	1,379	929	789	817	769	2,061
Upriver sport harvest[c]	12,361	8,169	7,761	7,108	6,464	8,135	14,297	23,028	11,431	13,415	11,217	15,958
Delta sport harvest[c]	2,189	298	798	631	952	656	113	1,704	1,225	1,014	958	1,314
Upriver spawning escapement[d]	300,194	509,519	584,427	473,888	451,455	535,201	607,136	631,190	497,767	482,714	507,349	511,245
Delta spawning escapement[e]	196,090	142,130	151,470	146,300	138,770	116,812	197,792	176,570	135,900	138,584	154,042	167,810
Hatchery broodstock/Excess[f]	75,385	75,620	62,361	45,024	6,618	92,455	97,192	28,648	44,865	43,409	57,158	176,123
Total estimated sockeye salmon run size	1,633,508	2,264,981	2,192,176	1,996,481	1,819,097	2,276,773	2,592,750	2,961,747	1,141,223	1,721,959	2,060,070	1,715,967

[a] Numbers are from fish ticket data. Homepack numbers for sockeye are voluntarily reported.

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

[c] 2008 upriver and delta Sport harvest data unavailable at time of writing. Number is average of respective Sport harvest from previous 5 years.

[d] Beginning in 1999 sockeye salmon spawning escapement is based on the total number of fish passed 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 only) minus upriver subsistence, personal use, sport, hatchery broodstock, and onsite hatchery surplus. The number of sockeye passed the Miles Lake sonar was determined by multiplying the total number of fish passed the sonar by the percentage of sockeye salmon in the total upriver subsistence and personal use fisheries.

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

[f] Hatchery broodstock and onsite excess are from the PWSAC 2010 annual reports.

Appendix A2.–Total estimated sockeye salmon runs to the Copper River by origin with previous 10-year average, 2000–2010.

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	10-year Average	2010
Upriver wild contribution[a]	642,232	1,576,634	1,372,063	1,380,383	1,354,173	1,753,627	1,773,532	2,264,576	852,496	1,260,759	1,423,047	973,932
Delta wild contribution[b]	514,399	380,346	393,448	413,253	371,485	306,563	531,312	564,547	202,811	324,799	400,296	289,285
Gulkana contribution[c]	476,876	308,001	426,665	202,845	93,438	216,583	287,906	132,625	85,916	136,402	236,726	452,751
Total estimated sockeye salmon run size	1,633,508	2,264,981	2,192,176	1,996,481	1,819,097	2,276,773	2,592,750	2,961,747	1,141,223	1,721,959	2,060,070	1,715,967

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

[b] Delta wild sockeye contribution is estimated as the total Copper River district harvest multiplied by percent sockeye (delta escapement by the total number of sockeye passed the Miles Lake sonar) then adding delta escapement and delta sport harvest.

[c] Gulkana sockeye contributions from 1995–2003 are based on coded wire tag (CWT) recovery; contributions from 2004–2007 are based on strontium marks from commercial and subsistence samples and the historical average of sport CWT percentage.

Appendix A3.–Total estimated Chinook salmon run to the Copper River by end user or destination with previous 10-year average, 2000–2010.

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	10-year Average	2010
Commercial harvest[a]	31,259	39,524	38,734	47,721	38,191	34,624	30,278	39,095	11,437	9,457	32,032	9,645
Commercial, homepack[a]	740	935	773	1,073	539	760	779	1,019	537	876	803	906
Commercial, donated[a]	6	0	4	3	5	11	3	0	4	0	4	0
Educational drift gillnet permit[a]	0	0	25	0	0	92	11	70	47	50	30	31
Subsistence (Cordova, drift gillnet)[b]	689	826	549	710	1,106	260	779	1,145	470	212	675	276
Subsistence (Batzulnetas, dipnet, fish wheel or spear)[b]	0	0	0	0	0	0	0	0	0	0	0	0
Subsistence (Glennallen Subdistrict, dipnet, fish wheel or spear)[b]	4,782	3,254	3,424	2,395	3,166	2,080	2,444	3,106	2,238	2,330	2,922	1,970
Federal Subsistence (Glennallen subdistrict, dipnet, fish wheel or spear)	0	0	564	554	636	345	430	569	705	494	430	299
Personal Use harvests (Chitina Subdistrict, dipnet)[b]	3,007	2,803	1,745	1,644	2,108	1,773	2,071	2,388	1,690	199	1,943	589
Federal Subsistence (Chitina subdistrict, dipnet)	0	0	33	18	7	22	13	26	22	8	15	17
Sport harvest[c]	5,531	4,904	5,098	5,717	3,435	4,093	3,425	5,123	3,618	1,355	4,230	2,500
Upriver spawning escapement[d]	24,727	28,817	22,009	34,436	31,212	22,020	59,406	35,137	33,070	28,015	31,885	16,948
Total estimated Chinook salmon run size	70,741	81,063	72,958	94,271	80,405	66,080	99,639	87,678	53,838	42,996	74,967	33,181

[a] Numbers are from fish ticket data.

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

[c] Upriver Chinook salmon sport harvest only; there is no delta Chinook salmon sport harvest. The 2008 Sport harvest data is unavailable at time of writing. The 2008 harvest estimate is an average of Chinook salmon Sport harvests from the previous 5 years.

[d] 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, 1960–2010.

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	1,248,503	504,223	3,677	31,627	1,826,764
2003	47,721	1,188,052	363,489	12,934	10,110	1,622,306
2004	38,191	1,048,004	467,859	5,175	3,386	1,562,615
2005	34,624	1,331,664	263,465	34,987	3,515	1,668,255
2006	30,278	1,496,754	318,285	30,844	17,203	1,893,364
2007	39,095	1,901,773	117,182	80,715	9,657	2,148,422
2008	11,437	320,815	202,621	1,437	1,279	1,705,827
2009	9,457	896,621	207,776	16,759	8,629	1,139,242
10-Year Average	32,032	1,163,610	300,132	20,572	9,356	1,525,701
2010	9,645	636,214	210,621	21,149	15,694	893,323

Appendix A5.–Copper River District commercial drift gillnet salmon harvest by period, 2010.

		Emergency Order	Permits			Chinook		Sockeye		Coho		Pink		Chum	
Period [a]	Date	Issued	Hours	Fished	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
01	05/13-05/13	2-F-E-001-10	12	239	269	969	20,877	6,641	36,277	0	0	0	0	1,516	9,276
02	05/17-05/17	2-F-E-002-10	12	447	500	1,475	29,670	34,962	194,004	0	0	0	0	5,890	36,580
03[b]	05/20-05/20	2-F-E-003-10	12	456	519	1,783	31,861	46,966	264,575	0	0	0	0	4,759	29,368
04[b]	05/24-05/24	2-F-E-004-10	12	421	492	1,157	20,423	41,340	233,035	0	0	0	0	219	1,434
05[b]	05/27-05/27	2-F-E-007-10	12	420	513	1,439	24,808	36,421	204,274	0	0	0	0	495	3,148
06[b]	06/07-06/07	2-F-E-014-10	12	242	305	829	16,716	44,545	263,419	2	15	0	0	173	1,208
07[b]	06/10-06/10	2-F-E-018-10	12	200	231	547	11,534	20,010	114,862	0	0	0	0	0	0
8	06/14-06/14	2-F-E-021-10	12	129	159	508	12,710	19,512	113,289	17	111	0	0	59	342
09	06/17-06/17	2-F-E-026-10	12	123	156	321	7,976	18,624	105,869	6	38	1	3	1,114	7,213
10	06/21-06/21	2-F-E-030-10	12	91	111	169	4,497	16,193	96,759	3	34	0	0	24	160
11	06/24-06/24	2-F-E-035-10	12	93	128	134	3,580	18,566	109,736	10	78	0	0	18	133
12	06/28-06/29	2-F-E-040-10	24	97	155	97	2,271	22,859	132,509	19	132	3	10	10	80
13	07/01-07/02	2-F-E-044-10	24	84	127	56	1,555	19,425	116,799	7	61	0	0	13	116
14	07/05-07/06	2-F-E-050-10	36	43	66	19	473	15,687	94,545	1	7	1	4	36	303
15	07/08-07/10	2-F-E-055-10	60	85	201	46	1,215	60,660	360,409	128	967	50	198	145	1,155
16	07/12-07/14	2-F-E-057-10	60	171	342	34	760	52,635	321,893	477	2,841	2,845	11,205	328	2,470
17	07/15-07/17	2-F-E-062-10	60	177	450	16	290	71,651	438,633	1,204	8,773	4,019	13,874	322	2,313
18	07/19-07/21	2-F-E-064-10	48	196	354	20	246	35,855	220,161	1,362	9,932	1,529	5,707	227	1,681
19	07/22-07/24	2-F-E-070-10	48	113	184	7	82	23,381	141,509	684	5,244	2,902	9,770	74	545
20	07/26-07/28	2-F-E-072-10	48	62	93	3	34	14,331	87,908	475	3,302	994	3,744	100	738
21	07/29-07/31	2-F-E-076-10	60	75	92	8	98	8,939	57,064	665	5,040	2,585	9,963	51	363
22	08/02-08/04	2-F-E-079-10	48	27	37	1	27	3,450	21,123	668	5,020	1,836	6,578	55	373
23	08/05-08/07	2-F-E-087-10	48	13	21	2	45	1,275	7,662	762	5,332	3,934	12,698	39	280
24	08/09-08/10	2-F-E-089-10	36	17	24	0	0	555	3,154	932	7,744	281	1,114	16	115
25	08/12-08/13	2-F-E-093-10	36	23	29	0	0	379	2,179	1,083	9,746	98	415	5	40
26	08/16-08/17	2-F-E-095-10	24	39	49	1	12	321	1,915	2,970	27,872	38	154	0	0

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Period [a]	Date	Emergency Order Issued	Permits Hours	Permits Fished	Permits Landings	Chinook Number	Chinook Pounds	Sockeye Number	Sockeye Pounds	Coho Number	Coho Pounds	Pink Number	Pink Pounds	Chum Number	Chum Pounds
27	08/19-08/20	2-F-E-099-10	24	52	84	1	4	396	2,358	5,394	48,213	1	3	0	0
28	08/23-08/24	2-F-E-102-10	24	157	298	1	11	305	1,927	38,654	347,919	11	42	4	27
29	08/26-08/27	2-F-E-107-10	24	251	344	1	8	109	704	21,946	202,236	6	21	1	7
30	08/30-08/31	2-F-E-109-10	24	249	362	0	0	83	537	36,167	333,766	6	21	1	7
31	09/02-09/03	2-F-E-114-10	24	224	296	0	0	69	442	25,067	236,328	6	22	0	0
32	09/06-09/07	2-F-E-122-10	24	203	322	0	0	22	146	26,273	250,908	2	8	0	0
33	09/09-09/10	2-F-E-123-10	24	169	229	0	0	47	345	17,912	169,826	1	4	0	0
34	09/13-09/15	2-F-E-124-10	48	109	196	1	10	0	0	17,907	169,846	0	0	0	0
35	09/16-09/18	2-F-E-125-10	48	70	97	0	0	0	0	6,166	59,424	0	0	0	0
36	09/20-09/22	2-F-E-126-10	48	32	50	0	0	0	0	3,474	34,501	0	0	0	0
37	09/23-09/25	2-F-E-127-10	48	3	3	0	0	0	0	186	1,783	0	0	0	0
38	09/27-09/29	2-F-E-128-10	48	0	0	0	0	0	0	0	0	0	0	0	0
39	09/30-10/02	2-F-E-129-10	48	0	0	0	0	0	0	0	0	0	0	0	0
40	10/04-10/06	2-F-E-130-10	60	0	0	0	0	0	0	0	0	0	0	0	0
41	10/07-10/10	2-F-E-131-10	84	0	0	0	0	0	0	0	0	0	0	0	0
Total			1,392	495	7,888	9,645	191,793	0 636,214	3,750,021	0 210,621	1,947,039	0 21,149	75,558	0 15,694	99,475
Average Weights							19.89		5.89		9.24		3.57		6.34

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

[b] 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, 2010.

			Permits		Chinook		Sockeye		Coho		Pink		Chum	
Week	Dates	Hours	Fished	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
20	05/09 - 05/15	12	239	269	969	20,877	6,641	36,277	0	0	0	0	1,516	9,276
21	05/16 - 05/22	24	469	1,019	3,258	61,531	81,928	458,579	0	0	0	0	10,649	65,948
22	05/23 - 05/29	24	454	1,005	2,596	45,231	77,761	437,309	0	0	0	0	714	4,582
23	05/30 - 06/05	0	0	0	0	0	0	0	0	0	0	0	0	0
24	06/06 - 06/12	24	260	536	1,376	28,250	64,555	378,281	2	15	0	0	173	1,208
25	06/13 - 06/19	24	142	315	829	20,686	38,136	219,158	23	149	1	3	1,173	7,555
26	06/20 - 06/26	24	106	239	303	8,077	34,759	206,495	13	112	0	0	42	293
27	06/27 - 07/03	48	106	282	153	3,826	42,284	249,308	26	193	3	10	23	196
28	07/04 - 07/10	96	92	267	65	1,688	76,347	454,954	129	974	51	202	181	1,458
29	07/11 - 07/17	120	211	792	50	1,050	124,286	760,526	1,681	11,614	6,864	25,079	650	4,783
30	07/18 - 07/24	96	206	538	27	328	59,236	361,670	2,046	15,176	4,431	15,477	301	2,226
31	07/25 - 07/31	108	89	185	11	132	23,270	144,972	1,140	8,342	3,579	13,707	151	1,101
32	08/01 - 08/07	96	31	58	3	72	4,725	28,785	1,430	10,352	5,770	19,276	94	653
33	08/08 - 08/14	72	31	53	0	0	934	5,333	2,015	17,490	379	1,529	21	155
34	08/15 - 08/21	48	65	133	2	16	717	4,273	8,364	76,085	39	157	0	0
35	08/22 - 08/28	48	266	642	2	19	414	2,631	60,600	550,155	17	63	5	34
36	08/29 - 09/04	48	271	658	0	0	152	979	61,234	570,094	12	43	1	7
37	09/05 - 09/11	48	221	551	0	0	69	491	44,185	420,734	3	12	0	0
38	09/12 - 09/18	96	120	293	1	10	0	0	24,073	229,270	0	0	0	0
39	09/19 - 09/25	96	33	53	0	0	0	0	3,660	36,284	0	0	0	0
40	09/26 - 10/02	96	0	0	0	0	0	0	0	0	0	0	0	0
41	10/03 - 10/09	125	0	0	0	0	0	0	0	0	0	0	0	0
42	10/10 - 10/16	19	0	0	0	0	0	0	0	0	0	0	0	0
Total		1,392	495	7,888	9,645	191,793	636,214	3,750,021	210,621	1,947,039	21,149	75,558	15,694	99,475
Average Weights						19.88		5.89		9.24		3.57		6.33

Appendix A7.–Daily salmon escapement estimates at Miles Lake sonar, 2010.

		Estimated Daily Escapement Counts						Minimum Inriver Escapement Objective		Maximum Inriver Escapement Objective	
Date	Water Level	North Bank	South Bank	Daily	Cumulative	0600 Count	Projected Daily	Daily	Cumulative	Daily	Cumulative
20-May	NA	24	NA	24	24		0	5,264	12,049	6,839	15,656
21-May	NA	137	1,440	1,577	1,601	6	24	5,938	17,987	7,716	23,372
22-May	NA	304	1,773	2,077	3,678	456	1,824	9,139	27,126	11,876	35,248
23-May	39.96	612	2,468	3,080	6,758	996	3,984	10,430	37,556	13,553	48,801
24-May	40.04	876	4,674	5,550	12,308	786	3,144	11,512	49,068	14,958	63,759
25-May	40.30	1,513	5,820	7,333	19,641	1,338	5,352	13,139	62,207	17,073	80,832
26-May	40.60	1,489	7,542	9,031	28,672	1,518	6,072	16,215	78,422	21,070	101,902
27-May	41.03	2,221	5,754	7,975	36,647	1,698	6,792	15,348	93,770	19,943	121,844
28-May	41.34	1,692	7,944	9,636	46,283	2,070	8,280	16,322	110,091	21,209	143,053
29-May	41.53	5,033	9,162	14,195	60,478	2,640	10,560	16,381	126,473	21,286	164,339
30-May	41.75	2,785	15,024	17,809	78,287	4,044	16,176	17,882	144,355	23,236	187,575
31-May	42.04	2,862	13,608	16,470	94,757	3,621	14,484	15,681	160,036	20,376	207,951
1-Jun	42.22	3,596	15,012	18,608	113,365	3,997	15,988	17,992	178,028	23,379	231,330
2-Jun	42.27	4,683	17,640	22,323	135,688	3,949	15,796	16,267	194,296	21,138	252,468
3-Jun	42.29	3,719	21,762	25,481	161,169	4,574	18,296	16,122	210,417	20,949	273,417
4-Jun	42.40	4,983	21,126	26,109	187,278	3,870	15,480	14,865	225,283	19,316	292,733
5-Jun	42.18	6,824	18,708	25,532	212,810	5,390	21,560	16,160	241,443	20,998	313,731
6-Jun	41.86	8,127	17,970	26,097	238,907	4,452	17,808	13,727	255,170	17,837	331,568
7-Jun	41.70	7,422	16,148	23,570	262,477	5,678	22,712	15,059	270,228	19,567	351,135
8-Jun	41.72	5,295	11,478	16,773	279,250	3,603	14,412	15,775	286,003	20,498	371,633
9-Jun	41.75	2,876	11,348	14,224	293,474	3,348	13,392	13,586	299,589	17,654	389,287
10-Jun	41.47	2,250	8,514	10,764	304,238	2,358	9,432	12,176	311,765	15,821	405,108
11-Jun	41.79	3,294	7,890	11,184	315,422	2,328	9,312	11,117	322,882	14,445	419,553
12-Jun	41.73	2,725	7,200	9,925	325,347	2,418	9,672	9,832	332,713	12,775	432,328
13-Jun	41.60	2,670	5,466	8,136	333,483	1,962	7,848	8,575	341,288	11,142	443,470
14-Jun	41.50	3,720	4,725	8,445	341,928	1,722	6,888	8,373	349,662	10,880	454,351
15-Jun	41.41	4,052	5,298	9,350	351,278	2,128	8,512	8,862	358,524	11,515	465,866
16-Jun	41.47	4,626	5,676	10,302	361,580	1,716	6,864	8,650	367,173	11,240	477,105
17-Jun	41.47	3,552	5,166	8,718	370,298	1,926	7,704	8,567	375,741	11,132	488,238
18-Jun	41.58	2,940	4,998	7,938	378,236	1,992	7,968	8,301	384,042	10,787	499,025
19-Jun	41.18	3,834	4,380	8,214	386,450	2,112	8,448	8,576	392,618	11,143	510,168

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		Estimated Daily Escapement Counts						Minimum Inriver Escapement Objective		Maximum Inriver Escapement Objective	
Date	Water Level	North Bank	South Bank	Daily	Cumulative	0600 Count	Projected Daily	Daily	Cumulative	Daily	Cumulative
20-Jun	41.24	2,700	4,230	6,930	393,380	1,950	7,800	8,160	400,777	10,602	520,770
21 Jun	41.30	1,892	4,056	5,948	399,328	1,410	5,640	7,946	408,724	10,326	531,096
22 Jun	41.45	1,839	4,149	5,988	405,316	1,326	5,304	7,620	416,344	9,901	540,997
23 Jun	41.72	1,952	4,218	6,170	411,486	1,464	5,856	7,123	423,466	9,255	550,253
24 Jun	41.88	1,325	4,314	5,639	417,125	1,482	5,928	7,072	430,539	9,190	559,442
25 Jun	42.07	1,230	5,124	6,354	423,479	1,302	5,208	6,991	437,529	9,084	568,526
26 Jun	42.21	1,118	7,386	8,504	431,983	1,620	6,480	7,800	445,329	10,135	578,661
27 Jun	42.24	2,130	7,320	9,450	441,433	1,974	7,896	7,847	453,176	10,197	588,858
28 Jun	42.26	1,609	5,940	7,549	448,982	1,596	6,384	7,694	460,871	9,998	598,856
29 Jun	42.30	1,381	7,542	8,923	457,905	2,298	9,192	7,558	468,428	9,821	608,676
30 Jun	42.37	2,029	9,672	11,701	469,606	2,196	8,784	6,978	475,407	9,067	617,744
1 Jul	42.33	3,722	10,428	14,150	483,756	2,958	11,832	6,632	482,039	8,618	626,362
2 Jul	42.35	2,748	12,078	14,826	498,582	3,318	13,272	6,152	488,190	7,993	634,355
3 Jul	42.32	2,094	10,640	12,734	511,316	3,128	12,512	6,273	494,464	8,152	642,507
4 Jul	42.34	2,322	10,026	12,348	523,664	2,928	11,712	6,392	500,855	8,305	650,812
5 Jul	42.28	1,938	9,696	11,634	535,298	2,766	11,064	6,530	507,385	8,485	659,297
6 Jul	42.30	1,854	14,280	16,134	551,432	3,360	13,440	6,607	513,992	8,585	667,882
7 Jul	42.35	2,227	17,892	20,119	571,551	4,032	16,128	6,250	520,242	8,122	676,003
8 Jul	42.34	4,174	19,254	23,428	594,979	5,772	23,088	6,363	526,606	8,269	684,272
9 Jul	42.46	7,938	23,250	31,188	626,167	6,588	26,352	6,471	533,076	8,408	692,680
10 Jul	42.61	7,973	23,088	31,061	657,228	8,106	32,424	6,365	539,441	8,271	700,951
11 Jul	42.75	5,232	17,250	22,482	679,710	6,624	26,496	6,271	545,713	8,149	709,100
12 Jul	42.75	5,292	17,538	22,830	702,540	3,480	13,920	7,711	553,423	10,019	719,119
13 Jul	42.65	5,712	14,772	20,484	723,024	4,926	19,704	7,379	560,802	9,588	728,707
14 Jul	42.54	6,543	12,702	19,245	742,269	4,548	18,192	7,428	568,230	9,652	738,358
15 Jul	42.49	7,133	11,508	18,641	760,910	5,370	21,480	7,732	575,962	10,048	748,406
16 Jul	42.43	4,943	16,926	21,869	782,779	6,278	25,112	7,281	583,243	9,461	757,867
17 Jul	42.43	5,553	9,918	15,471	798,250	4,047	16,188	5,993	589,237	7,788	765,655
18 Jul	42.52	4,621	6,912	11,533	809,783	2,862	11,448	6,325	595,562	8,219	773,874
19 Jul	42.59	2,826	6,906	9,732	819,515	2,496	9,984	5,628	601,190	7,313	781,187
20 Jul	42.57	2,748	4,539	7,287	826,802	1,446	5,784	5,219	606,409	6,781	787,968

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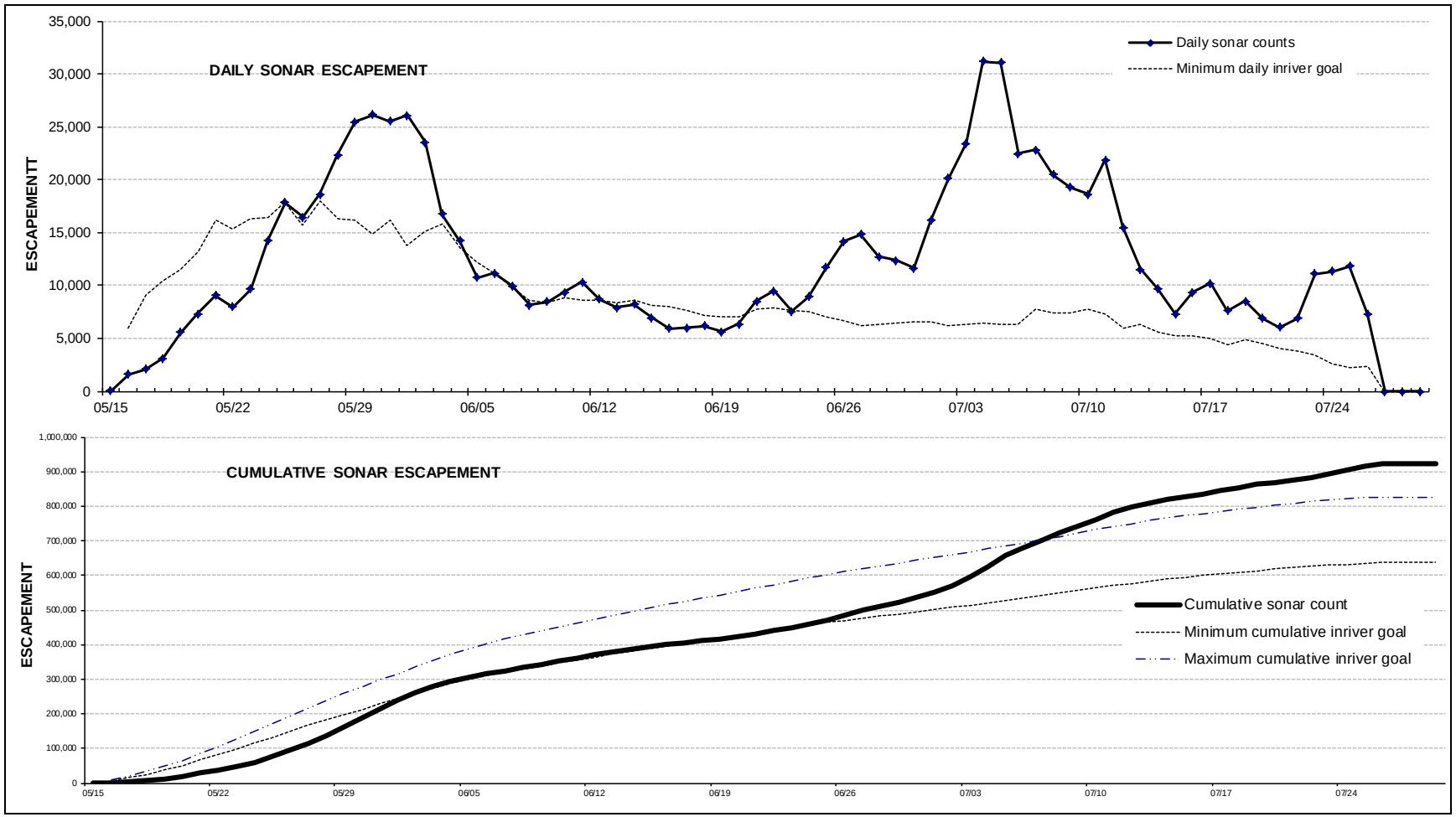
		Estimated Daily Escapement Counts						Minimum Inriver Escapement Objective		Maximum Inriver Escapement Objective	
Date	Water Level	North Bank	South Bank	Daily	Cumulative	0600 Count	Projected Daily	Daily	Cumulative	Daily	Cumulative
21 Jul	42.64	2,322	7,032	9,354	836,156	2,154	8,616	5,209	611,618	6,769	794,737
22 Jul	42.80	3,685	6,492	10,177	846,333	2,123	8,492	5,002	616,619	6,499	801,236
23 Jul	42.91	2,875	4,752	7,627	853,960	2,214	8,856	4,360	620,979	5,665	806,901
24 Jul	42.94	2,898	5,640	8,538	862,498	2,130	8,520	4,814	625,794	6,256	813,157
25 Jul	42.90	1,656	5,202	6,858	869,356	1,776	7,104	4,482	630,275	5,824	818,980
26 Jul	42.75	1,767	4,272	6,039	875,395	2,268	9,072	3,987	634,262	5,180	824,161
27 Jul	42.65	1,818	5,052	6,870	882,265	1,674	6,696	3,740	638,002	4,860	829,021
28 Jul	42.81	3,612	7,464	11,076	893,341	2,844	11,376	3,457	641,459	4,492	833,513
29 Jul	42.84	4,046	7,308	11,354	904,695	2,342	9,368	2,581	644,040	3,354	836,866
30 Jul	42.78	3,000	8,790	11,790	916,485	2,790	11,160	2,282	646,322	2,965	839,831
31 Jul	42.79	2,688	4,638	7,326	923,811	1,848	7,392	2,316	648,638	3,009	842,841

Note: Anticipated counts are not available prior to 15 May because the sonar has only been deployed three times prior to 15 May (2003, 2004, 2005).

Appendix A8.–Minimum and maximum inriver sonar goal versus actual daily and cumulative salmon escapement, Miles Lake Sonar 2010.



Appendix A9.–Salmon escapement at the Miles Lake Sonar, 1978–2010.

Year	Total	Rank
1978	107,011	33
1979	248,709	32
1980	283,856	31
1981	535,263	25
1982	467,306	28
1983	545,724	23
1984	536,806	24
1985	436,313	30
1986	457,421	29
1987	480,917	27
1988	488,398	26
1989	607,797	17
1990	581,859	21
1991	579,435	22
1992	601,952	18
1993	833,387	10
1994	715,577	13
1995	599,265	19
1996	906,239	5
1997	1,148,079	1
1998	866,957	6
1999	850,951	8
2000	587,497	20
2001	833,569	9
2002	819,794	11
2003	700,543	15
2004	669,514	16
2005	855,125	7
2006	959,706	2
2007	919,600	4
2008	718,344	12
2009	709,748	14
10-Year Average	777,344	
2010	923,811	3

Appendix A10.–Anticipated and actual semi-weekly harvest of sockeye, Chinook and coho salmon in the Copper River District drift gillnet fishery, 2010.

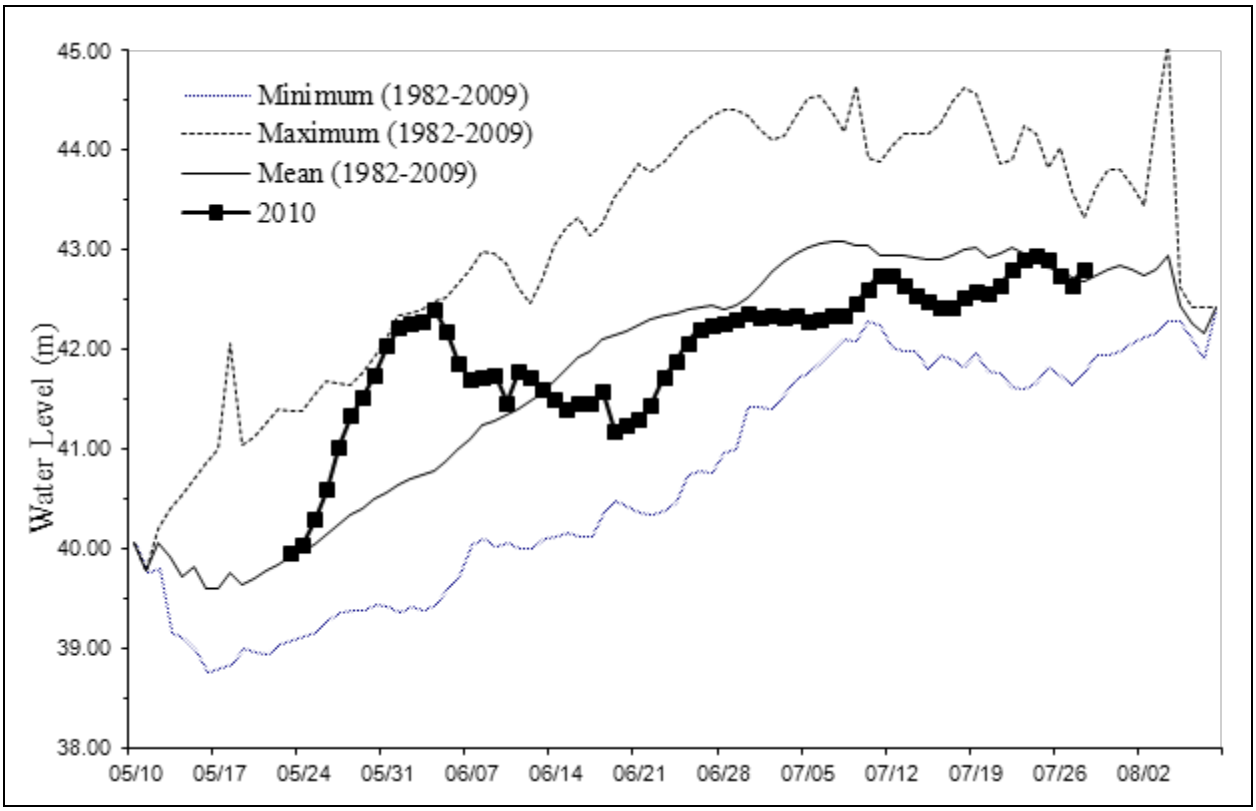
Semi-Weekly Date		Fishing Time (Hours)	Anticipated Sockeye salmon Harvest [a]	Actual Sockeye salmon Harvest	Anticipated Chinook salmon Harvest[b]	Actual Chinook salmon Harvest	Weekly Anticipated Coho salmon Harvest [c]	Actual Coho salmon Harvest
05/15	Sat	12	8,986	6,641	785	969	0	0
05/19	Wed	12	45,217	34,962	2,572	1,475		
05/22	Sat	12	71,302	46,966	2,066	1,783	1	0
05/26	Wed	12	111,927	41,340	2,583	1,157		
05/29	Sat	12	83,153	36,421	1,509	1,439	20	0
06/02	Wed	12	119,470	0	2,141	829		
06/05	Sat	12	86,392	0	1,249	547	15	0
06/09	Wed	12	75,888	44,545	1,200	508		
06/12	Sat	12	43,144	20,010	700	321	37	2
06/16	Wed	12	64,710	19,512	697	169		
06/19	Sat	12	38,944	18,624	342	134	80	23
06/23	Wed	24	57,570	16,193	286	97		
06/26	Sat	24	45,794	18,566	162	56	194	13
06/30	Wed	36	57,455	22,859	116	19		
07/03	Sat	60	39,365	19,425	59	46	336	26
07/07	Wed	60	63,148	15,687	60	34		
07/10	Sat	60	47,510	60,660	22	16	641	129
07/14	Wed	48	56,986	52,635	21	20		
07/17	Sat	48	37,541	71,651	11	7	1,624	1,681
07/21	Wed	48	38,734	35,855	10	3		
07/24	Sat	60	20,515	23,381	5	8	1,937	2,046
07/28	Wed	48	17,585	14,331	3	1		
07/31	Sat	48	10,641	8,939	1	2	3,395	1,140
08/04	Wed	36	9,704	3,450	1	0		
08/07	Sat	36	5,318	1,275	1	0	9,405	1,430
08/11	Wed	24	5,641	555	1	1		
08/14	Sat	24	2,190	379	1	1	22,236	2,015
08/18	Wed	24	2,317	321	1	1		
08/21	Sat	24	644	396	0	1	43,013	8,364
08/25	Wed	24	1,023	305	1	0		
08/28	Sat	24	290	109	0	0	62,526	60,600
09/01	Wed	24	357	83	0	0		
09/04	Sat	24	135	69	0	0	64,224	61,234
09/08	Wed	48	123	22	0	1		
09/11	Sat	48	22	47	0	0	52,138	44,185
09/15	Wed	48	22	0	0	0		
09/18	Sat	48	7	0	0	0	28,082	24,073
09/22	Wed	48	0	0	0	0		
09/25	Sat	48	0	0	0	0	10,562	3,660
09/29	Wed	60	0	0	0	0		
10/02	Sat	84	0	0	0	0	1,909	0
10/06	Wed	0	0	0	0	0		
10/09	Sat	0	0	0	0	0	521	0
Total		1,392	1,269,769	636,214	16,607	9,645	302,896	210,621

[a] Sockeye salmon anticipated harvest is based on the midpoint preseason forecast (1,269,733) and the 1998–2007 harvest timing.

[b] Chinook salmon anticipated harvest is based on the preseason harvest forecast (16,607) 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, not a range based on midpoint preseason forecast.

[c] Coho salmon anticipated harvest is based on the midpoint preseason forecast (302,896) and the 1969–2009 harvest timing.

Appendix A11.–Water height at the Million Dollar Bridge, 2010.



Appendix A12.–Aerial escapement indices by statistical week and location for sockeye salmon returning to the Copper River Delta, 2010.

System [b]	Weekly Escapement Indicies (Statistical Week Ending Date Listed) [a]																	Site [c]	System [d]	Anticipated, (by drainage)
	19-Jun	26-Jun	3-Jul	10-Jul	17-Jul	24-Jul	31-Jul	7-Aug	14-Aug	21-Aug	28-Aug	4-Sep	11-Sep	25-Sep	2-Oct	9-Oct	16-Oct	23-Oct	30-Oct			
Eyak River																						
Eyak River				3,390[e]		360		0		0		0	0	0						3,390	27,723	9,972 – 23,571
West Shore Beaches				120		160		720		750[e]		650	310	140						750		
East Shore Beaches				560		7,320[e]		6,960		2,750		1,800	4,010[e]	2,320						11,330		
Middle Arm Beaches [f]				1,300		1,310		4,300[e]		3,200		560	2,700[e]	1,480						7,000		
North Shore Beaches				2,530[e]		0		1,800		0		190	390	11						2,530		
Hatchery Creek Delta				590		510		280		230		820[e]	300	2						820		
Hatchery Creek				40		50[e]		40		40		0	0	0						50		
Power Creek Delta				1,270[e]		42		320		0		0	40	40						1,270		
Power Creek				130		131		583[e]		0		0	0	0						583		
Ibeck Creek																						
Ibeck Creek				NS		NS		0		0		0	10	10						10	10	
Alaganik Slough																						
Alaganik Slough				740[e]		0		0		0		0	0	0						740	5,090	8,359 – 19,758
McKinley Lake				1,000		2,980[e]		1,010		0		500	140	101						2,980		
Salmon Creek West Fork				0		410		750[e]		400		0	20	0						750		
Salmon Creek East Fork				0		0		200		620[e]		40	0	0						620		
26/27 Mile Creek																						
26/27 Mile Creek				0		0		0		0		0	0	0						0	0	2,182 – 5,157
39 Mile Creek																						
39 Mile Creek				1		260		620[e]		490		60	130	81						620	620	5,772 – 13,642
Goat Mountain												0										
Goat Mountain Creek				120		100		140		0		0	0	0						140	140	549 – 1,298
Pleasant Creek																						
Pleasant Creek				2,430		3,460[e]		350		10		0	0	0						3,460	3,460	1,075 – 2,542
Martin River																						
Martin River - Lower				50		62		0		0		0	0	0						62	62	
Ragged Point River				50		360[e]		0		0		0	20	0						360	1,010	
Ragged Point Lake Outlet				0		20[e]		0		20		0	0	0						20		
Ragged Point Lake				0		40		100		630[e]		350	330	350						630		

-continued-

Appendix A12.–Page 2 of 2.

System [a]	Weekly Escapement Indicies (Statistical Week Ending Date Listed) [b]																	Site c	System e	Anticipated, (by drainage)
	19-Jun	26-Jun	3-Jul	10-Jul	17-Jul	24-Jul	31-Jul	7-Aug	14-Aug	21-Aug	28-Aug	4-Sep	11-Sep	25-Sep	2-Oct	9-Oct	16-Oct	23-Oct	30-Oct			
Martin River - Upper [f]				2,930[e]		620	20	0		0		0	0	0						2,930	2,930	
Martin Lake Outlet				1,000		270	0	0		0		0	0	0						1,000	19,660	17,598 – 41,596
Martin Lake				8,250[e]		1,260	80	0		0		0	200	0						8,250		
Martin Lake Feeders				8,040		10,410[e]	4,980	231		0		0	0	0						10,410		
Pothole River				3,110[e]		2,030	360	0		40		100	170							3,110	4,440	
Pothole Lake				20		1,330[e]	640	120		150		530	450							1,330		
Little Martin River				0		30[e]	0	0		0		0	20	0						30	680	
Little Martin Lake				20		250	650[e]	650[e]		350		280	190							650		
Tokun																						
Tokun Springs				100		330[e]	100	2		0		120	0							330	15,810	5,352 – 12,649
Tokun River				1,280[e]		90	50	20		200		110	51							1,280		
Tokun Lake Outlet				1,000		0	0	0		0		0	2							1,000		
Tokun Lake				5,010		13,200[e]	8,150	4,820		8,430		7,502	6,770							13,200		
Martin River Slough																						
Martin River Slough				2,270[e]		712	280	120		0		0	0							2,270	2,270	4,141 – 9,787
Total	0	0	0	47,351	0	48,107	33,483	0	15,103		14,140	17,262	12,168				0	0		83,905		
Lower SEG	14,273	17,627	28,229	30,055	31,424	32,059	32,568	24,976	26,465	24,382	19,762	17,446	12,467	6,776	4,373	2,611	1,204	1,289				55,000
Average SEG (avg anticipated escapement)	21,902	27,050	43,318	46,121	48,222	49,196	49,977	38,326	40,611	37,415	30,326	26,772	19,131	10,398	6,711	4,006	1,848	1,978				84,400
Upper SEG	33,736	41,665	66,722	71,040	74,276	75,775	76,979	59,034	62,553	57,630	46,711	41,236	29,467	16,016	10,337	6,170	2,846	3,047				130,000

Note: NS = no survey.

[a] 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.

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

[c] The escapement estimates for each site is in the footnoted survey estimate. 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 estimate by site within a system.

[e] Survey count was used as the peak survey for the site without duplication of counts from survey sites along migratory corridors (see footnote c).

[f] Site typically has a protracted run timing or two temporally segregated spawning populations at one location. Aerial counts from more then one day may be footnoted and used in the escapement estimate if the surveyor indicates that these counts represented different fish.

Appendix A13.–Copper River and Bering River area sockeye salmon escapement indices, 2000–2010.

Stream/Lake [a,b]	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	10-yr Average	2010
Eyak Lake	20,500	7,400	13,375	12,900	14,300	9,130	26,290	28,640	9,290	11,980	15,381	25,000
Hatchery Creek	2,800	950	1,700	0	500	290	2,700	980	560	680	1,116	870
Power Creek	6,700	2,450	1,600	850	1,500	566	2,320	1,030	220	260	1,750	1,853
Ibek Creek	[c]	1,500	0	475	2,300	500	620	142	41	100	631	10
McKinley Lake	2,850	2,080	4,200	3,200	4,500	360	4,306	3,740	3,510	3,520	3,227	2,980
Salmon Creek	4,220	9,650	4,900	1,800	7,400	7,260	4,660	2,630	820	500	4,384	1,370
26/27 Mile Creek	3,300	4,000	850	475	1,125	3,000	3,200	700	8	0	1,666	0
39 Mile Creek	6,500	9,000	10,000	7,800	2,600	2,900	2,700	2,710	2,950	160	4,732	620
Goat Mountain	60	5	70	0	700	1,250	1,450	363	100	30	403	140
Pleasant Creek	2,300	8,100	2,425	6,850	3,525	50	6,600	4,860	4,920	2,610	4,224	3,460
Martin River	2,650	200	700	3,425	2,275	800	1,570	9,270	6,440	2,610	2,994	2,992
Ragged Pt. River/Lake	3,600	2,900	3,375	4,750	1,975	500	3,050	3,870	3,430	610	2,806	1,010
Martin Lake	22,900	7,100	10,600	18,900	17,300	23,300	23,300	4,200	8,970	19,071	15,564	19,660
Pothole Lake	3,050	1,910	8,400	1,500	1,350	1,200	5,600	2,430	5,800	2,540	3,378	4,440
L. Martin Lake	830	825	2,540	2,175	1,610	1,500	600	450	1,060	421	1,201	680
Tokun Lake/River	6,485	5,695	6,500	3,600	3,775	1,800	4,280	16,920	18,321	22,680	9,006	15,480
Martin River Slough	9,300	7,300	4,500	4,450	2,650	4,000	5,650	5,350	900	1,520	4,562	2,270
Copper River Delta Total	98,045	71,065	75,735	73,150	69,385	58,406	98,896	88,285	67,340	69,292	76,960	82,835
Upper Copper River [d]	300,194	509,519	584,427	473,888	451,455	535,201	607,136	631,190	497,767	482,714	507,349	511,245
Copper River District Total	398,239	580,584	660,162	547,038	520,840	593,607	706,032	719,475	565,107	552,006	584,309	594,080
Bering River/Lake	21,050	7,750	19,540	32,075	22,550	19,890	9,310	8,550	17,545	11,250	16,951	3,280
Shepherd Creek	950	60	60	205	195	1,220	60	0	180	91	302	46
Stillwater Creek	320	320	350	375	500	0	140	450	111	190	276	81
Kushtaka Lake	700	293	265	185	15	230	61	40	100	90	198	140
Katalla River	1,200	400	4,500	17,000	1,875	9,550	5,100	12,130	260	1,850	5,387	820
Bering River Area Total	24,220	8,823	24,715	49,840	25,135	30,890	14,671	21,170	18,196	13,471	23,113	4,367
Copper/Bering River Total	422,459	589,407	684,877	596,878	545,975	624,497	720,703	740,645	583,303	565,477	607,422	598,447

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

[b] The stream/lake represents the combined survey sites corresponding to the "system" designations presented elsewhere in the 2009 Annual Management Report.

[c] Peak escapement estimates were not possible for these systems due to poor weather or water conditions.

[d] Upriver escapement estimate from Miles Lake sonar counts.

Appendix A14.–Aerial survey indices of sockeye salmon escapement to the upper Copper River drainage, 1997–2010.

	Yearly Survey Indices [a]														Anticipated
Location	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Estimate [b]
Mentasta Lake		6,100	715	1,200	13,000	5,400	4,800	6,000	7,090	7,790	8,507	3,379	3,320	2,870	3,277
Fish Creek-Mentasta		1,400	450	800	3,500	900		[c]	3,330	3,700	323	1,440	680	400	963
Bad Crossing 1 & 2		7,800	195	19	2,000	157	90	30	5,120	620	1,683	520	1,691	1,390	2,604
Suslota Lake		1,060	0	3,000	2,500	1,500	2,750	1,975	1,230	1,300	30	86	320	6	1,416
Tanada Lake			350	3,200	200	950	0	3,950	683	30	563	986	1,290	[c]	3,849
Dickey Lake		350	11	0	1	0	0	10	55	185	71	37	20	3	115
Keg Creek	420	160	125	0	1	30	38	0	7	190	0	1	423	0	725
Swede Lake		770	270	135	500	150	325	225	7	2,570	731	343	109	320	531
Mahlo Creek	11,800	12,300	325	1,000	400	5,000	6,850	500	1,950	5,000	14,512	10,261	11,735	4,570	2,648
Mendeltna Creek	400		120	2,800	800	1,875	1,200	50	318	700	473	727	1,945	1,550	2,470
St. Anne Creek	4,800	4,100	1,300	1,100	300	3,500	3,750	970	1,692	6,560	11,970	14,000	8,123	2,420	4,888
Tonsina Lake								0		20	20	3	0	[c]	1,080
Long Lake								[c]		1,400	505	382	14	10	1,577
Tana River							250	[c]	[c]	1,392	312	434	19	100	1,345
Salmon Creek (Bremner)			0	500	1,500	1,400	300	[c]	217	790	750	3,500	530	340	825
Fish Lake		4,900	1,880	5,000	5,000	125	1,300	0	281	7,250	1,066	158	0	89	6,418
Mud Creek.- Summit Lake		700	820	140	450	2,800	3,900	40	[c]	1,800	2,705	11,410	0	2,759	7,445
Paxson Inlet-Mud Creek		15,200	5,700	2,200	7,000	4,800	2,800	2,200	363	2,470	9,317	4,665	2,720	2,301	6,560
Mud Creek and Lake			20	30	300	30	75	5	145	310	2	10	0	20	172
Paxson Lake Outlet		200	1,800	1,000	200	140		5	155	270	324	596	0	560	2,661
Totals	17,420	55,040	14,081	22,124	37,652	28,757	28,428	15,960	22,643	44,347	53,864	52,938	32,939	19,708	51,569

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

[b] Calculated using the 1983–1992 average.

[c] No survey flown.

Appendix A15.–Estimated age and sex composition of sockeye salmon harvested in the Copper River District commercial common property drift gillnet fishery, 2010.

Strata Combined:	05/13 - 10/10	Brood Year and Age Class [a]											
Sampling dates:	05/13 - 07/31	2007		2006			2005			2004		2003	
Sample size:	4,780	0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	2.4	Total
Female	Percentage of sample	0.0	0.0	1.1	7.6	0.0	0.0	32.4	0.3	0.2	1.8	0.0	45.5
	Number in harvest	64	0	7,059	48,302	0	64	206,289	1,654	1,356	11239.1	0	276,028
Male	Percentage of sample	0.1	0.0	1.5	10.8	0.0	0.0	37.1	0.2	0.2	1.8	0.0	54.5
	Number in harvest	405	64	9,860	68,780	283	0	236,159	1,297	1,427	11434.9	297	330,006
Total	Percentage of sample	0.1	0.0	2.8	19.3	0.0	0.0	73.0	0.5	0.4	3.8	0.0	100
	Number in harvest	638	64	17,847	122,548	218	64	464,397	3,120	2,783	24236.9	297	636,214
	Standard error	230	64	1,520	4,068	218	64	4,513	663	675	1563.46	210	

[a] Fish with resorbed scales have been removed: Strata 6 had 8, 7-1, 8-18, 9-45.

Appendix A16.–Temporally stratified age and sex composition of Chinook salmon harvested in the Copper River District common property drift gillnet fishery, 2010.

Strata Combined:	05/13 - 10/10	Brood Year and Age Class								
Sampling dates:	05/13 - 06/10	2007	2006		2005		2004		2003	
Sample size:	725	1.1	1.2	2.1	1.3	2.2	1.4	2.3	2.4	Total
Female	Percentage of sample	2.1	16.7	1.1	28.1	0.6	6.4	1.8	0.2	57.2
	Number in harvest	203	1,610	101	2,707	55	622	173	16	5,488
Male	Percentage of sample	0.0	7.9	0.1	20.2	0.3	11.8	1.2	1.1	42.8
	Number in harvest	0	763	6	1,951	27	1,135	114	108	4,103
Total	Percentage of sample	2.1	24.8	1.2	48.5	0.9	18.3	3.0	1.3	100.0
	Number in harvest	203	2,390	114	4,682	82	1,763	287	124	9,645
	Standard error	142	279	102	349	27	247	144	102	

Appendix A17.–Estimated age and sex composition of coho salmon harvested in the Copper River District commercial common property drift gillnet fishery, 2010.

Strata Combined:	05/13 - 10/10	Brood Year and Age Class			
Sampling dates:	08/24 - 09/22	2007	2006	2005	
Sample size:	1,082	1.1	2.1	3.1	Total
Female	Percentage of sample	19.9	24.6	0.0	44.9
	Number in harvest	41,962	51,907	0	93,869
Male	Percentage of sample	27.2	27.3	0.1	55.1
	Number in harvest	57,354	57,530	176	115,060
Total	Percentage of sample	47.7	52.3	0.1	100.0
	Number in harvest	100,363	110,082	176	210,621
	Standard error	3,197	3,199	176	

Appendix A18.–Total estimated coho salmon run to the Copper River by end user or destination with previous 10-year average, 2000–2010.

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	10-year Average	2010
Commercial harvest[a]	304,944	251,473	504,223	363,489	467,859	263,465	318,285	117,182	202,621	207,776	300,132	210,621
Commercial, homepack[a]	0	24	187	0	2	119	137	340	423	767	200	1,026
Commercial, donated[a]	0	5,141	0	0	0	0	0	0	154	0	530	0
Educational drift gillnet permit[a]	0	0	0	0	0	0	0	0	0	0	0	0
Subsistence (Cordova, drift gillnet)[b]	44	70	28	36	46	15	1	15	53	22	33	27
Federal Subsistence (PWS/Chugach Nat'l Forest, dipnet, spear, rod and reel)	0	0	0	0	0	141	100	68	119	185	61	68
Subsistence (Batzulnetas, fish wheel, dip net or spear)[b]	0	0	na	na	0	0	0	0	0	0	0	0
Subsistence (Glennallen Subdistrict, dip net or fish wheel)[b]	511	1,101	524	450	541	97	210	231	482	194	434	293
Federal Subsistence (Glennallen subdistrict, dipnet or fish wheel)	0	0	81	152	152	126	28	34	156	34	76	64
Personal Use (Chitina Subdistrict, dipnet)[b]	3,540	2,385	1,712	2,168	2,304	1,562	1,886	1,492	2,346	1,452	2,085	2,195
Federal Subsistence (Chitna subdistrict, dipnet)	0	0	0	70	18	0	20	40	74	11	23	33
Delta sport harvest[c]	4,155	12,052	6,525	14,166	14,512	9,727	5,477	6,749	7,706	14,384	9,545	9,822
Upriver sport harvest[c]	324	92	384	277	131	72	54	0	57	36	143	31
Upriver spawning escapement[d]	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown
Delta spawning escapement[e]	85,660	80,662	174,830	144,110	199,010	199,364	178,140	102,430	153,784	82,588	140,058	112,934
Total estimated coho salmon run size	399,178	353,000	688,494	524,918	684,575	474,688	504,338	228,581	367,975	307,449	453,320	337,114

[a] Numbers are from fish ticket data.

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

[c] The 2008 delta and upriver Sport harvest estimates are unavailable at this time. The 2008 harvest estimates are a 5 year average of coho salmon delta and upriver Sport harvest.

[d] Numbers of upriver coho salmon spawners is unavailable.

[e] The Delta spawning index is calculated by doubling the final peak aerial survey index.

Appendix A19.–Aerial escapement indices by statistical week and location for coho salmon returning to the Copper River Delta, 2010.

		Weekly Escapement Indicies (Statistical Week Ending Date Listed)[a]															
Drainage	System[b]	24-Jul	31-Jul	7-Aug	14-Aug	21-Aug	28-Aug	4-Sep	11-Sep	18-Sep	25-Sep	2-Oct	9-Oct	16-Oct	23-Oct	Site [c]	System [d]	Anticipated (by drainage)
Eyak River	Eyak River			90		120		1,701[e]	8,040		10,050					10,050	14,350	6,916
	East Shore Beaches			0		0		3,000	1,600		1,000					3,000		
	West Shore Beaches			0		0		0	110[e]		0					110		
	Middle Arm Beaches			0		0		0	0		0					0		
	North Shore Beaches			0		0		200	0		160					200		
	Hatchery Creek Delta			0		0		640[e]	450		270					640		
	Hatchery Creek			0		0		0	0[e]		0					0		
	Power Creek Delta			0		0		120	20		1					120		
	Power Creek			0		0		230	0		0					230		
Ibeck Creek	Ibeck Creek			176		1,410		0	3,250		3,381					3,381	3,381	6,227
Scott River	Scott Lake			0		0		0	0		0					0	700	
	Scott River			0		0		10	700		110					700		
	Elsner Lake [f]			0		0		0	0		0					0		
Alaganik Slough	Alaganik Slough			0		0		330[e]	104		173					330	1,504	4,020
	18/20 Mile Creek			0		0		50	144		31					144		
	McKinley Lake			0		0		300	100		10					300		
	Salmon Creek West Fork			0		500		120	420		300					500		
	Salmon Creek East Fork			0		0		0	210		230					230		
26/27 Mile Creek	26/27 Mile Creek			0		0		0	0		0					0	0	829
39 Mile Creek	39 Mile Creek			0		1,020		1,340[e]	1,080		790					1,340	1,340	3,831
Goat Mountain Cr.	Goat Mountain Creek			0		0		60	331[e]		280					331	331	1,181
Pleasant Creek	Pleasant Creek			0		0		470	1,300[e]		1,700					1,700	1,700	
Martin River	Martin River - Lower			32		0		720	690		630					720	720	
	Ragged Point River			330		340		170[e]	0		41					340	690	849
	Ragged Point Lake Outlet			10		0		30	0		0					30		
	Ragged Point Lake			0		320		250[e]	30		0					320		
	Martin River - Upper			351		1,090		4,780[e]	4,840		3,080					4,840	4,840	6,522
	Martin Lake Outlet			0		900[e]		0	0		1,020					1,020	3,511	1,936
	Martin Lake			360		30		100	0		400					400		
	Martin Lake Feeders			0		550		1,350[e]	1,123		2,091					2,091		

-continued-

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Drainage	System[b]	Weekly Escapement Indicies (Statistical Week Ending Date Listed)[a]															
		24-Jul	31-Jul	7-Aug	14-Aug	21-Aug	28-Aug	4-Sep	11-Sep	18-Sep	25-Sep	2-Oct	9-Oct	16-Oct	23-Oct	Site [c]	System [d]	Anticipated (by drainage)
	Pothole River			100		200		800	20		30					800	2,000	1,370
	Pothole Lake			70		1,200		530	430		120					1,200		
	Little Martin River			0		0		80	192		460					460	460	5,413
	Little Martin Lake			0		0		0	0		0					0		
	Tokun Springs			50		10[e]		220	50		70					220	1,370	1,376
	Tokun River			230		450		300	20		310					450		
	Tokun Lake Outlet			0		0		0	0		0					0		
	Tokun Lake			0		0		700	300		300					700		
Martin River Slough	Martin River Slough			1,320		3,510		4,180	4,160		4,180					4,180	4,180	9,531
Copper River Aerial Survey Daily Total		0	0	3,119	0	11,650	0	22,781	29,714	0	31,218	0	0	0	0		41,077	
Lower SEG		86	1,225	2,025	5,846	9,298	16,147	21,447	18,286	16,908	15,542	17,896	8,474			9,841		32,000
Average SEG, (average anticipated escapement)		134	1,914	3,164	9,134	14,528	25,229	33,510	28,571	26,418	24,284	27,962	13,241			15,377		50,001
Upper SEG		180	2,565	4,240	12,239	19,468	33,807	44,904	38,285	35,401	32,540	37,470	17,743			20,605		67,000

[a] 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.

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

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

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

[e] Survey count was used as the peak survey for the site.

[f] 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, 2000–2010.

Stream/Lake [a,b]	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Previous 10-yr Average	2010
Eyak Lake	2,130	7,800	17,425	10,050	12,700	2,812	1,940	5,810	17,030	950	7,865	13,360
Hatchery Creek	1,900	450	1,400	0	1,450	0	160	710	370	2,320	876	640
Power Creek	1,450	480	2,000	1,500	500	40	360	800	1,140	990	926	350
Ibeck Creek	7,000	14,000	23,900	26,000	32,000	34,900	36,300	13,200	10,265	9,963	20,753	3,381
Scott & Elsner River [c]	300	600	2,400	125	475	1,400	200	1,520	3,281	1,170	1,147	700
18/20 Mile	420	420	1,450	205	1,560	610	740	550	161	150	627	144
McKinley Lake	120	800	2,200	0	275	140	1,400	280	300	450	597	630
Salmon Creek	2,600	200	1,100	725	6,100	2,250	200	150	700	1,540	1,557	730
26/27 Mile	1,000	400	240	275	850	820	60	480	10	100	424	0
39 Mile	5,000	1,800	4,500	1,250	3,120	9,900	4,400	3,300	5,460	1,570	4,030	1,340
Goat Mountain	430	330	160	125	450	4,500	3,100	1,400	920	1,220	1,264	331
Pleasant Creek [c]	45	210	0	2,000	3,950	3,790	7,030	500	2,800	680	2,101	1,700
Martin River	4,500	3,755	13,325	10,200	11,600	1,050	9,100	8,830	9,323	1,651	7,333	5,560
Ragged Point River/Lake	330	440	3,400	375	575	650	360	260	302	590	728	690
Martin Lake	1,350	311	1,850	6,300	4,475	24,100	2,900	4,775	2,770	1,360	5,019	3,511
Pothole Lake	245	390	3,400	4,000	500	140	120	870	3,661	2,750	1,608	2,000
Little Martin Lake	3,000	3,010	500	1,000	7,900	2,100	7,500	2,700	8,760	2,810	3,928	460
Tokun River/Lake	710	1,600	540	550	1,750	2,030	700	830	3,020	850	1,258	1,370
Martin River Slough	10,600	4,100	10,025	7,500	9,750	9,850	12,700	5,770	7,780	10,180	8,826	4,180
Copper River Delta Total	43,130	41,096	89,815	72,180	99,980	101,082	89,270	52,735	78,053	41,294	70,864	41,077
Katalla River	2,800	2,900	5,000	10,000	6,500	12,100	8,900	5,510	3,340	1,590	5,864	4,190
Bering River/Lake	10,370	21,040	15,375	13,750	10,125	15,040	13,052	4,910	8,491	6,320	11,847	9,820
Dick Creek	2,500	760	1,700	2,050	2,750	362	1,660	530	1,410	1,210	1,493	1,070
Shepherd Creek	450	300	675	700	1,125	100	60	130	370	10	392	1,090
Nichawak River	4,300	1,300	1,420	900	1,475	6,900	3,200	11,900	10,120	4,690	4,621	901
Gandil River	600	900	330	900	2,000	4,450	640	2,650	840	1,610	1,492	1,200
Controller Bay	5,360	2,807	9,700	4,175	6,210	5,590	5,680	7,332	4,251	6,330	5,744	3,040
Bering River Area Total	26,380	30,007	34,200	32,475	30,185	44,542	33,192	32,962	28,822	21,760	31,453	21,311
Copper/Bering Total	69,510	71,103	124,015	104,655	130,165	145,624	122,462	85,697	106,875	63,054	102,316	62,388

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

[b] The stream/lake in this table represents combined survey sites corresponding to the "system" designations for the current year survey results presented elsewhere in the 20 Annual Management Report.

[c] Not an index stream.

Appendix A21.–Total commercial salmon harvest by species in the Bering River District, 1974–2010.

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	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	330	91,784	214,632	309	20,408	327,463
1985	215	26,561	419,276	214	9,642	455,908
1986	128	19,038	115,809	15	243	135,233
1987	34	16,926	15,864	54	7	32,885
1988	19	7,152	86,539	23	181	93,914
1989	30	9,225	26,952	7	2	36,216
1990	14	8,332	42,952	2	1	51,301
1991	28	19,181	110,951	4	195	130,359
1992	21	19,721	125,616	4	1	145,363
1993	130	33,951	115,833	82	22	150,018
1994	121	27,926	259,003	34	63	287,147
1995	44	21,585	282,045	26	229	303,929
1996	111	37,712	93,763	0	30	131,616
1997	23	9,651	97	2	0	9,773
1998	70	8,439	12,284	5	2	20,800
1999	42	13,697	9,852	204	96	23,891
2000	5	1,279	56,329	0	0	57,613
2001	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	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
10-Year Average	99	17,453	51,759	943	8	70,263
2010	0	51	80,560	2	0	80,613

Note: In 1980 fishing was prohibited before August 11.

Appendix A22.–Aerial escapement indices by statistical week and location for sockeye salmon returning to the Bering River District, 2010.

		Weekly Escapement Indicies (Statistical Week Ending Date Listed)[a]																						
Drainage	System[b]	19-Jun	26-Jun	3-Jul	10-Jul	17-Jul	24-Jul	31-Jul	7-Aug	14-Aug	21-Aug	28-Aug	4-Sep	11-Sep	18-Sep	25-Sep	2-Oct	9-Oct	16-Oct	23-Oct	30-Oct	Site[c]	System[d]	Anticipated (by drainage)
Bering River	Bering River				270[e]		270		0		0		0			0						270	4,530	21,903
	Bering Lake				3,010		1,620		690		100		0			0						3,010		
	Dick Creek				2		60		1,250		170[e]		0			0						1,250		
	Shepherd Creek - Lagoon				0		0		0		0		NS			0						0	70	4,375
	Shepherd Creek				0		0		46		0		NS			0						46		
	Carbon Creek				0		0		24		0[e]		NS			0						24		
	Clear Creek				NS		NS		80		81[e]		NS			0						81	81	1,197
	Kushtaka Lake				NS		NS		140		110[e]		NS			0						140		
	Shockum Creek				NS		NS		0		130[e]		NS			0						130	270	1,226
Katalla River[c]	Katalla River[f]				100		820		60		0		0			0						820	820	
Bering River District Weekly Index		0	0	0	3,382	0	2,770	0	2,290	0	591	0	0	0	0	0	0	0	0	0	0	4,951	4,951	
Lower SEG		1,370	4,985	6,207	9,341	16,889	16,946	16,872	14,415	12,893	6,595	3,705	2,271	1,601	876	1,130								23,000
Average SEG (avg anticipated escapement)		1,710	6,221	7,746	11,656	21,075	21,145	21,054	17,988	16,089	8,229	4,623	2,834	1,998	1,093	1,410								28,701
Upper SEG		2,085	7,586	9,446	14,214	25,701	25,787	25,675	21,936	19,620	10,036	5,638	3,456	2,436	1,332	1,719								35,000
Anticipated Escapement Index																								

Note: NS = no survey.

[a] 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.

[b] The survey sites represent the majority of known sockeye salmon spawning locations in the Bering River drainage.

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

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

[e] Survey count was used as the peak survey for the site without duplication of counts for survey sites along migratory corridors (see footnote c).

[f] This stream is not included in the estimated escapement for the Bering River drainage, it is a non-index stream.

Appendix A23.–-Bering River District commercial drift gillnet salmon harvest by period, 2010.

		Weekly Escapement Indicies (Statistical Week Ending Date Listed)[a]																					
Drainage	System[b]	19-Jun	26-Jun	3-Jul	10-Jul	17-Jul	24-Jul	31-Jul	7-Aug	14-Aug	21-Aug	28-Aug	4-Sep	11-Sep	18-Sep	25-Sep	2-Oct	9-Oct	16-Oct	23-Oct	30-Oct	Site[c]	System[d]	Anticipated (by drainage)
Bering River	Bering River				270[e]		270		0		0		0			0						270	4,530	21,903
	Bering Lake				3,010		1,620		690		100		0			0						3,010		
	Dick Creek				2		60		1,250		170[e]		0			0						1,250		
	Shepherd Creek - Lagoon				0		0		0		0		NS			0						0	70	4,375
	Shepherd Creek				0		0		46		0		NS			0						46		
	Carbon Creek				0		0		24		0[e]		NS			0						24		
	Clear Creek				NS		NS		80		81[e]		NS			0						81	81	1,197
	Kushtaka Lake				NS		NS		140		110[e]		NS			0						140		
	Shockum Creek				NS		NS		0		130[e]		NS			0						130	270	1,226
	Katalla River [f]				100		820		60		0		0			0						820	820	
Bering River District Weekly Index		0	0	0	3,382	0	2,770	0	2,290	0	591	0	0	0	0	0	0	0	0	0	0	4,951	4,951	
Lower SEG		1,370	4,985	6,207	9,341	16,889	16,946	16,872	14,415	12,893	6,595	3,705	2,271	1,601	876	1,130								23,000
Average SEG (avg anticipated escapement)		1,710	6,221	7,746	11,656	21,075	21,145	21,054	17,988	16,089	8,229	4,623	2,834	1,998	1,093	1,410								28,701
Upper SEG		2,085	7,586	9,446	14,214	25,701	25,787	25,675	21,936	19,620	10,036	5,638	3,456	2,436	1,332	1,719								35,000
Anticipated Escapement Index																								

Note: NS = no survey was conducted.

[a] 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.

[b] The survey sites represent the majority of known sockeye salmon spawning locations in the Bering River drainage.

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

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

[e] Survey count was used as the peak survey for the site without duplication of counts for survey sites along migratory corridors (see footnote c).

[f] This stream is not included in the estimated escapement for the Bering River drainage, it is a non-index stream.

Appendix A24.–Bering River District commercial drift gillnet salmon harvest by statistical week, 2010.

			Permits		Chinook		Sockeye		Coho		Pink		Chum	
Week	Dates	Hours	Fished	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
32	08/01 - 08/07	96	0	0	0	0	0	0	0	0	0	0	0	0
33	08/08 - 08/14	72	0	0	0	0	0	0	0	0	0	0	0	0
34	08/15 - 08/21	48	[a]	[a]	[a]	[a]	[a]	[a]	[a]	[a]	[a]	[a]	[a]	[a]
35	08/22 - 08/28	48	32	76	0	0	11	77	10,519	94,234	0	0	0	0
36	08/29 - 09/04	48	40	115	0	0	3	20	14,183	126,966	0	0	0	0
37	09/05 - 09/11	48	46	163	0	0	0	0	25,324	224,684	0	0	0	0
38	09/12 - 09/18	96	52	209	0	0	37	251	26,096	237,940	2	7	0	0
39	09/19 - 09/25	96	16	31	0	0	0	0	4,349	39,208	0	0	0	0
40	09/26 - 10/02	96	0	0	0	0	0	0	0	0	0	0	0	0
41	10/03 - 10/09	125	0	0	0	0	0	0	0	0	0	0	0	0
42	10/10 - 10/16	19	0	0	0	0	0	0	0	0	0	0	0	0
Total		792	74	595	0	0	51	348	80,560	723,877	2	7	0	0
Average Weights						NA		6.82		8.99		3.50		NA

[a] Confidential data, less than 3 permit holders delivering.

Appendix A25.–Aerial escapement indices by statistical week and location for coho salmon returning to the Bering River District, 2010.

		Weekly Escapement Indicies (Statistical Week Ending Date Listed)[a]															
Drainage	System[b]	24-Jul	31-Jul	7-Aug	14-Aug	21-Aug	28-Aug	4-Sep	11-Sep	18-Sep	25-Sep	2-Oct	9-Oct	16-Oct	23-Oct	Site[c]	System[d]	Anticipated (by drainage)
Bering River	Bering River			90		240		1,860	3,240		1,860					3,240	10,890	7,720
	Bering Lake			2,030		2,580		4,780	3,390		6,580					6,580		
	Dick Creek			0		510		1,070	840		210					1,070		
	Shepherd Creek - Lagoon			0		0		NS	0		1,020					1,020	1,090	
	Shepherd Creek			0		0		NS	0		70					70		
	Carbon Creek [e]			0		0		NS	0[f]		0					0		
Katalla River	Katalla River			340		550		2,710[f]	4,040		4,190					4,190	4,190	4,993
Lower Bering River	Gandil River			NS		1		740	1,200		740					1,200	2,101	2,910
	Nichawak River			NS		0		720	901		820					901		
Controller Bay	Campbell River			NS		0		0	0		1,080					1,080	3,040	7,378
	Edwardes River			NS		0		190	1,160		0					1,160		
	Okalee River			NS		0		800[f]	20		0					800		
	Other Clear Streams [e]			NS		0		0	0		1,080					1,080		
Bering River District Weekly Index		0	0	2,460	0	3,881	0	12,870	14,791	0	17,650	0	0	0	0	22,391	21,311	
Lower SEG		434	487	2,533	4,002	8,732	8,803	6,969	5,041	4,199	5,156	1,042	1,692					13,000
Average SEG, (average anticipated escapement)		768	861	4,482	7,080	15,448	15,574	12,330	8,919	7,429	9,122	1,844	2,993					23,001
Upper SEG		1,102	1,236	6,431	10,158	22,165	22,345	17,691	12,797	10,659	13,089	2,645	4,294					33,000

Note: NS = no survey.

[a] 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.

[b] The survey sites represent the majority of known coho salmon spawning locations in the Bering River drainage.

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

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

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

[f] Survey count was used as the peak survey for the site without duplication of counts for survey sites along migratory corridors (see footnote c).

APPENDIX B

Appendix B1.–Anticipated daily and cumulative salmon escapement versus actual escapement through the Coghill River weir, 2010.

	Sockeye Salmon						Pink Salmon		
	Actual		Projected SEG Lower		Projected SEG Upper		Actual		
Date	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Comments
06/10	0	0	3	3	6	6	0	0	Weir is fish tight
06/11	0	0	9	13	19	25	0	0	
06/12	7	7	15	28	31	56	0	0	
06/13	31	38	37	65	73	129	0	0	passed 1 chum
06/14	34	72	39	104	78	207	0	0	passed 5 chum
06/15	40	112	28	132	57	264	0	0	
06/16	69	181	80	212	161	425	0	0	passed 1 chum
06/17	139	320	121	333	242	667	0	0	passed 5 chum
06/18	40	360	126	459	251	918	0	0	Many seals and otters below the weir
06/19	27	387	141	600	283	1,201	0	0	2 chum salmon passed
06/20	358	745	163	764	327	1,528	0	0	0 chum passed
06/21	350	1,095	269	1,032	537	2,065	0	0	daily number includes 27 jack sockeye
06/22	623	1,718	286	1,319	573	2,637	0	0	daily number includes 9 jack sockeye, 37 chum passed
06/23	507	2,225	257	1,576	514	3,151	0	0	daily number includes 21 jacks. 49 chum passed
06/24	217	2,442	311	1,887	623	3,774	0	0	Daily number includes 19 jacks, 22 chum passed
06/25	501	2,943	519	2,406	1,037	4,811	22	22	Daily number includes 24 jacks, 18 chum passed.
06/26	216	3,159	442	2,848	884	5,695	7	29	9 chum passed. Jim O'R. + Katie at camp for training.
06/27	426	3,585	483	3,331	967	6,662	10	39	20 chum passed weir.
06/28	1,117	4,702	756	4,087	1,512	8,174	14	53	25 chum passed weir.
06/29	0	4,702	654	4,741	1,308	9,482	0	53	weir closed to build fish numbers
06/30	0	4,702	981	5,723	1,963	11,445	0	53	weir closed to build fish numbers
07/01	0	4,702	1,161	6,884	2,323	13,768	0	53	weir closed to build fish numbers
07/02	57	4,759	732	7,616	1,464	15,232	1	54	weir closed to build fish numbers
07/03	81	4,840	823	8,439	1,646	16,879	0	54	weir closed to build fish numbers
07/04	154	4,994	778	9,217	1,555	18,434	0	54	weir closed to build fish numbers. ASL = 420 sockeye ; Rich, Katie, & Jim helped

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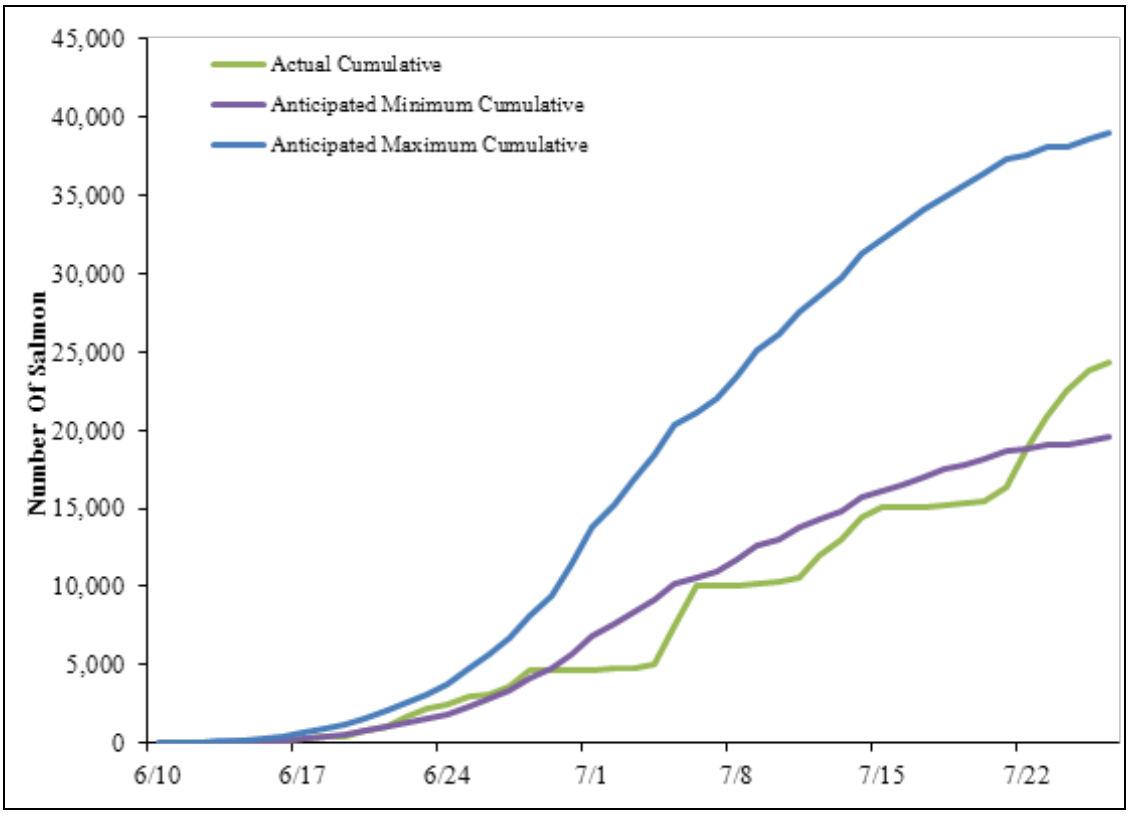
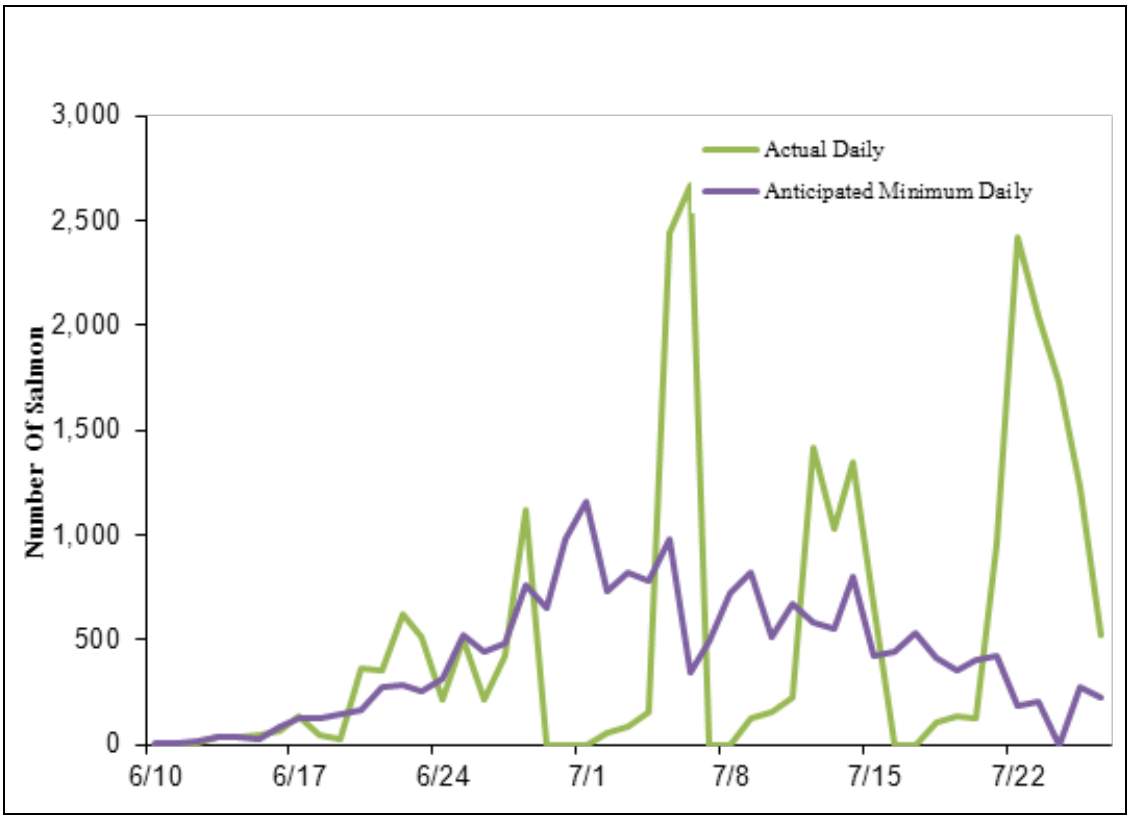
Appendix B1.–Page 2 of 2.

	Sockeye Salmon						Pink Salmon		
	Actual		Projected SEG Lower		Projected SEG Upper		Actual		
Date	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Comments
07/05	2,436	7,430	977	10,194	1,954	20,388	15	69	6 chum passed weir. ASL = 1st set completed
07/06	2,672	10,102	340	10,534	679	21,067	5	74	15 chum passed.
07/07	0	10,102	491	11,025	982	22,049	0	74	Holding fish back pending sample. Water level = 0.72, 35 ASL sockeye sampled.
07/08	0	10,102	725	11,750	1,450	23,500	1	75	Holding fish for ASL sampling. Water level = 0.68. ASL=130 of 540
07/09	124	10,226	823	12,573	1,646	25,145	8	83	Holding fish back pending sample. Water level = 0.72, ASL total = 277 sockeye sampled. Genetics sample finished. Otolith finished.
07/10	157	10,383	508	13,080	1,016	26,161	2	85	Holding fish back pending sample. ASL total = 434. 16 jacks passed.
07/11	228	10,611	669	13,749	1,338	27,499	4	89	Finished AWL. Opened weir.
07/12	1,412	12,023	577	14,326	1,154	28,653	0	89	1 chum passed, 62 jacks passed and counted.
07/13	1,026	13,049	549	14,875	1,098	29,751	13	102	2 chum passed.
07/14	1,348	14,397	796	15,671	1,591	31,342	1	103	0 chum passed
07/15	662	15,059	427	16,098	853	32,195	3	106	1 chum passed. Started holding fish back pending sample.
07/16	0	15,059	438	16,536	876	33,071	0	106	Holding fish back pending sample. 18 ASL so far.
07/17	0	15,059	532	17,067	1,064	34,135	29	135	Sampled 116 Reds
07/18	106	15,165	408	17,475	816	34,951	33	168	233 ASL
07/19	132	15,297	349	17,824	698	35,649	227	395	132 ASL reds (Cumulative sampling 365) 1000 Pinks behind weir
07/20	123	15,420	398	18,222	796	36,444	62	457	Cumulative ASL 486,1500 pinks behind weir,123 reds includes 48 jack reds
07/21	963	16,383	419	18,642	839	37,283	736	1,193	540 ASL completed, 1,000 pink behind weir
07/22	2,417	18,800	179	18,821	358	37,642	1,541	2,734	
07/23	2,043	20,843	207	19,028	414	38,056	3,318	6,052	
07/24	1,727	22,570	0	19,028	0	38,056	8,098	14,150	
07/25	1,224	23,794	275	19,303	550	38,606	12,092	26,242	water level rising.
07/26	518	24,312	224	19,526	447	39,053	9,721	35,963	Pulled weir due to rising water.
07/27			86	19,613	172	39,225			
07/28			93	19,706	186	39,411			
07/29			0	19,706	0	39,411			
07/30			32	19,738	65	39,476			
07/31			72	19,810	144	39,620			

Appendix B2.–Anticipated cumulative and daily sockeye salmon escapement versus actual escapement through the Coghill River weir, 2010.





Appendix B3.–Salmon escapement by species in the Coghill District, 1971–2010.

Year	Sockeye[a]	Pink[b]	Chum[b]
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
2003	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
2008	29,298	145,177	39,660
2009	23,186	125,907	5,208
10-Year Average	37,760	198,132	15,283
2010	24,312	355,108	51,589

Note: Historical data revised in 1990.

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

[b] Pink and chum escapements estimated for streams by aerial survey.

Appendix B4.–Coghill District commercial drift gillnet salmon harvest by period, 2010.

Period [a]	Date	Emergency Order Issued	Permits Hours	Fished	Landings	Chinook Number	Chinook Pounds	Sockeye Number	Sockeye Pounds	Coho Number	Coho Pounds	Pink Number	Pink Pounds	Chum Number	Chum Pounds
1	05/24-05/26		60	53	237	5	111	8	45	0	0	0	0	84,197	610,171
2	05/27-05/30	Eo 2-F-E-008-10	84	201	974	26	393	84	479	0	0	0	0	279,695	1,932,817
3	05/31-06/02	Eo 2-F-E-010-10	60	251	1,048	41	705	318	1,922	0	0	0	0	182,408	1,228,487
4	06/03-06/04	Eo 2-F-E-012-10	36	252	757	33	468	315	1,860	1	10	1	4	146,654	989,221
5	06/07-06/08	Eo 2-F-E-015-10	36	242	796	12	154	891	5,626	0	0	0	0	164,432	1,116,362
6	06/10-06/11	Eo 2-F-E-019-10	36	273	843	12	142	8,348	58,034	0	0	0	0	196,528	1,325,797
7	06/14-06/15	Eo 2-F-E-023-10	24	290	558	5	81	2,044	12,559	3	21	3	11	109,936	728,291
8	06/17-06/17	Eo 2-F-E-025-10	12	169	292	2	36	960	6,016	0	0	0	0	84,494	571,161
9	06/21-06/22	Eo 2-F-E-028-10	24	225	593	4	31	3,333	21,552	4	33	7	37	151,003	1,045,679
10	06/24-06/25	Eo 2-F-E-034-10	24	210	562	1	5	3,026	19,492	1	13	6	20	141,881	979,551
11	06/28-06/29	Eo 2-F-E-039-10	24	195	572	1	34	5,048	34,198	10	74	38	134	173,190	1,199,319
12	06/30-06/30	Eo 2-F-E-042-10	12	264	509	1	3	9,886	64,707	7	56	427	1,455	130,989	909,864
13	07/01-07/02	Eo 2-F-E-043-10	36	216	633	7	55	11,174	72,767	3	25	583	2,299	149,148	1,060,128
14	07/05-07/07	Eo 2-F-E-049-10	60	208	715	5	100	12,475	81,627	18	147	5,727	22,593	198,341	1,378,547
15	07/08-07/10	Eo 2-F-E-054-10	60	189	574	7	85	8,328	53,555	39	290	20,478	73,417	194,331	1,330,390
16	07/12-07/14	Eo 2-F-E-056-10	60	144	421	12	179	9,322	60,343	142	1,228	59,380	228,503	75,363	513,577
17	07/15-07/18	Eo 2-F-E-063-10	84	82	211	14	112	3,603	24,681	80	623	31,189	108,333	22,202	163,533
18	07/19-07/21	Eo 2-F-E-065-10 & Eo 2-F-E-066-10	60	66	180	10	104	2,876	18,407	271	2,129	46,507	162,493	13,581	100,711
19	07/22-07/22	Eo 2-F-E-068-10	14	49	71	0	0	1,028	6,172	36	306	26,961	96,636	4,506	31,853
20	07/23-07/23	Eo 2-F-E-068-10	14	30	51	0	0	845	5,185	17	154	24,939	93,374	3,065	22,262
21	07/24-07/24	Eo 2-F-E-068-10	14	28	44	0	0	631	4,445	7	63	23,516	87,860	2,288	16,376
22	07/25-07/25	Eo 2-F-E-082-10	14	13	21	0	0	231	1,497	10	83	16,994	59,552	1,067	7,223
23	07/27-07/27	Eo 2-F-E-082-10	14	13	15	0	0	198	1,379	2	25	5,322	15,969	209	1,501
24	08/01-08/01	Eo 2-F-E-084-10	14	54	112	0	0	86	571	47	385	104,989	363,776	299	2,165
25	08/03-08/03	Eo 2-F-E-085-10	14	115	204	1	14	134	824	149	1,210	265,894	926,483	258	1,819
26	08/05-08/05	Eo 2-F-E-086-10	14	164	297	1	5	259	1,582	251	1,965	247,508	998,753	294	1,946
27	08/06-08/06	Eo 2-F-E-086-10	14	178	272	1	6	226	1,428	216	1,863	240,509	858,648	182	1,300
28	08/07-08/07	Eo 2-F-E-086-10	14	176	246	1	8	115	740	144	1,111	178,089	715,618	141	997
29	08/08-08/08	Eo 2-F-E-091-10	17	116	186	0	0	63	399	106	948	155,922	555,396	130	955
30	08/09-08/09	Eo 2-F-E-091-10	17	129	183	0	0	106	710	147	1,087	177,397	687,847	110	708

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Period [a]	Date	Emergency Order Issued	Permits Hours	Fished	Landings	Chinook Number	Chinook Pounds	Sockeye Number	Sockeye Pounds	Coho Number	Coho Pounds	Pink Number	Pink Pounds	Chum Number	Chum Pounds
31	08/10-08/10	Eo 2-F-E-091-10	17	159	222	0	0	101	654	141	1,192	196,726	716,263	84	592
32	08/11-08/11	Eo 2-F-E-091-10	17	175	300	0	0	97	649	177	1,480	224,498	887,417	134	986
33	08/12-08/12	Eo 2-F-E-092-10	17	188	280	0	0	110	699	180	1,452	222,515	816,152	87	615
34	08/13-08/13	Eo 2-F-E-092-10	17	185	288	0	0	64	407	200	1,650	203,130	774,665	84	605
35	08/14-08/14	Eo 2-F-E-092-10	17	126	232	1	12	60	379	275	2,301	165,578	622,758	80	571
36	08/15-08/15	Eo 2-F-E-097-10	17	94	163	1	5	67	425	208	1,695	103,469	404,293	87	627
37	08/16-08/16	Eo 2-F-E-097-10	17	141	240	0	0	116	717	431	3,502	145,963	539,165	82	580
38	08/17-08/17	Eo 2-F-E-097-10	17	126	238	0	0	108	714	437	3,544	129,559	490,167	115	808
39	08/18-08/18	Eo 2-F-E-097-10	17	108	166	0	0	65	413	289	2,420	97,819	356,966	73	535
40	08/19-08/19	Eo 2-F-E-101-10	17	43	84	0	0	343	2,107	253	2,117	35,588	138,760	57	403
41	08/20-08/20	Eo 2-F-E-101-10	17	74	126	1	4	79	504	383	3,150	64,741	240,034	53	368
42	08/21-08/21	Eo 2-F-E-101-10	17	52	72	1	10	56	378	199	1,624	34,975	132,600	56	392
43	08/22-08/22	Eo 2-F-E-104-10	17	21	34	0	0	48	287	168	1,405	20,828	83,331	40	284
44	08/23-08/23	Eo 2-F-E-104-10	17	33	54	0	0	141	861	220	1,923	24,714	95,301	27	179
45	08/24-08/24	Eo 2-F-E-105-10	17	34	51	0	0	30	192	142	1,276	20,649	82,070	17	120
46	08/25-08/25	Eo 2-F-E-105-10	17	12	15	0	0	14	97	53	411	7,120	27,066	3	21
47	08/26-08/26	Eo 2-F-E-106-10	17	7	8	0	0	5	35	31	223	2,848	10,851	4	28
48	08/27-08/27	Eo 2-F-E-106-10	17	0	0	0	0	0	0	0	0	0	0	0	0
49	08/28-08/28	Eo 2-F-E-106-10	17	0	0	0	0	0	0	0	0	0	0	0	0
50	08/29-08/29	Eo 2-F-E-111-10	17	0	0	0	0	0	0	0	0	0	0	0	0
51	08/30-08/30	Eo 2-F-E-111-10	17	0	0	0	0	0	0	0	0	0	0	0	0
52	08/31-08/31	Eo 2-F-E-112-10	17	0	0	0	0	0	0	0	0	0	0	0	0
53	09/01-09/01	Eo 2-F-E-112-10	17	0	0	0	0	0	0	0	0	0	0	0	0
54	09/02-09/02	Eo 2-F-E-113-10	16	0	0	0	0	0	0	0	0	0	0	0	0
55	09/03-09/03	Eo 2-F-E-113-10	16	0	0	0	0	0	0	0	0	0	0	0	0
56	09/04-09/04	Eo 2-F-E-113-10	16	0	0	0	0	0	0	0	0	0	0	0	0
57	09/05-09/05	Eo 2-F-E-114-10	16	0	0	0	0	0	0	0	0	0	0	0	0
58	09/06-09/06	Eo 2-F-E-114-10	16	0	0	0	0	0	0	0	0	0	0	0	0
59	09/07-09/07	Eo 2-F-E-114-10	16	0	0	0	0	0	0	0	0	0	0	0	0
60	09/08-09/10	Eo 2-F-E-117-10	48	0	0	0	0	0	0	0	0	0	0	0	0
61	09/11-09/15	Eo 2-F-E-118-10	110	0	0	0	0	0	0	0	0	0	0	0	0
62	09/16-09/18	Eo 2-F-E-119-10	62	0	0	0	0	0	0	0	0	0	0	0	0
63	09/19-09/22	Eo 2-F-E-120-10	86	0	0	0	0	0	0	0	0	0	0	0	0
Total			1,759	428	14,750	0	206	2,862	0	87,465	572,319	0	5,498	45,214	0	3,333,106	12,477,070	0	2,512,005	17,280,425
Average Weights								13.89			6.54			8.22			3.74			6.88

Appendix B5.–Coghill District commercial purse seine salmon harvest by period, 2010.

		Emergency Order	Permits			Chinook		Sockeye		Coho		Pink		Chum	
Period [a]	Date	Issued	Hours	Fished	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
18	07/19-07/21	Eo 2-F-E-065-10 and Eo 2-F-E-066-10	20	2	2	0	0	154	927	22	187	10,334	31,938	520	3,529
19	07/22-07/22	Eo 2-F-E-068-10	14	2	2	0	0	67	422	1	10	12,616	56,323	325	2,421
20	07/23-07/23	Eo 2-F-E-068-10	14	2	3	0	0	36	217	0	0	15,612	68,227	598	4,385
21	07/24-07/24	Eo 2-F-E-068-10	14	6	6	0	0	11	76	0	0	36,940	119,439	178	1,275
22	07/25-07/25	Eo 2-F-E-082-10	14	13	15	0	0	282	1,528	4	27	134,915	456,256	1,068	7,873
23	07/27-07/27	Eo 2-F-E-082-10	14	1	1	0	0	0	0	0	0	243	730	16	124
24	08/01-08/01	Eo 2-F-E-084-10	14	42	83	0	0	51	306	24	218	948,001	3,340,434	226	1,747
25	08/03-08/03	Eo 2-F-E-085-10	14	50	137	0	0	57	339	34	282	1,833,360	6,733,157	163	1,143
26	08/05-08/05	Eo 2-F-E-086-10	14	57	101	0	0	15	85	9	70	952,217	3,570,699	27	207
27	08/06-08/06	Eo 2-F-E-086-10	14	41	68	0	0	5	28	30	221	675,610	2,600,901	15	106
28	08/07-08/07	Eo 2-F-E-086-10	14	48	74	0	0	2	12	13	104	715,176	2,640,665	3	23
29	08/08-08/08	Eo 2-F-E-091-10	17	65	116	0	0	20	113	29	325	1,189,280	4,452,816	24	138
30	08/09-08/09	Eo 2-F-E-091-10	17	48	90	0	0	21	131	24	184	708,817	2,882,627	28	199
31	08/10-08/10	Eo 2-F-E-091-10	17	40	92	0	0	16	96	40	320	741,819	2,888,664	1	8
32	08/11-08/11	Eo 2-F-E-091-10	17	37	81	0	0	3	24	0	0	671,259	2,430,784	0	0
33	08/12-08/12	Eo 2-F-E-092-10	17	44	84	0	0	5	30	9	72	750,056	2,881,113	4	30
34	08/13-08/13	Eo 2-F-E-092-10	17	29	64	0	0	4	25	5	40	479,743	1,998,713	0	0
35	08/14-08/14	Eo 2-F-E-092-10	17	31	54	0	0	1	5	20	194	378,342	1,457,079	0	0
36	08/15-08/15	Eo 2-F-E-097-10	17	28	63	0	0	0	0	2	16	245,817	949,779	2	15
37	08/16-08/16	Eo 2-F-E-097-10	17	14	16	0	0	0	0	18	149	66,868	249,321	0	0
38	08/17-08/17	Eo 2-F-E-097-10	17	5	5	0	0	0	0	0	0	29,494	92,866	0	0
39	08/18-08/18	Eo 2-F-E-097-10	17	8	10	0	0	1	7	3	25	79,824	292,267	1	8
40	08/19-08/19	Eo 2-F-E-101-10	17	10	10	0	0	1	6	14	117	43,172	147,637	7	53
41	08/20-08/20	Eo 2-F-E-101-10	17	10	12	0	0	1	6	9	71	41,493	172,568	0	0
42	08/21-08/21	Eo 2-F-E-101-10	17	10	11	0	0	2	13	19	158	55,990	183,953	1	10
43	08/22-08/22	Eo 2-F-E-104-10	17	8	8	0	0	8	50	18	118	35,082	118,554	0	0
44	08/23-08/23	Eo 2-F-E-104-10	17	6	6	0	0	13	73	44	376	37,146	113,189	0	0
45	08/24-08/24	Eo 2-F-E-105-10	17	5	5	0	0	0	0	6	42	13,264	44,796	0	0
46	08/25-08/25	Eo 2-F-E-105-10	17	2	2	0	0	0	0	2	16	5,856	20,899	0	0
47	08/26-08/26	Eo 2-F-E-106-10	17	1	1	0	0	0	0	0	0	2,834	8,502	0	0
48	08/27-08/27	Eo 2-F-E-106-10	17	0	0	0	0	0	0	0	0	0	0	0	0

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Appendix B5.–Page 2 of 2.

Period [a]	Date	Emergency Order Issued	Permits Hours	Fished	Landings	Chinook Number	Chinook Pounds	Sockeye Number	Sockeye Pounds	Coho Number	Coho Pounds	Pink Number	Pink Pounds	Chum Number	Chum Pounds
49	08/28-08/28	Eo 2-F-E-106-10	17	0	0	0	0	0	0	0	0	0	0	0	0
50	08/29-08/29	Eo 2-F-E-111-10	17	0	0	0	0	0	0	0	0	0	0	0	0
51	08/30-08/30	Eo 2-F-E-111-10	17	0	0	0	0	0	0	0	0	0	0	0	0
52	08/31-08/31	Eo 2-F-E-112-10	17	0	0	0	0	0	0	0	0	0	0	0	0
53	09/01-09/01	Eo 2-F-E-112-10	17	1	1	0	0	3	16	35	280	8,275	29,633	0	0
54	09/02-09/02	Eo 2-F-E-113-10	16	0	0	0	0	0	0	0	0	0	0	0	0
55	09/03-09/03	Eo 2-F-E-113-10	16	0	0	0	0	0	0	0	0	0	0	0	0
56	09/04-09/04	Eo 2-F-E-113-10	16	0	0	0	0	0	0	0	0	0	0	0	0
57	09/05-09/05	Eo 2-F-E-114-10	16	0	0	0	0	0	0	0	0	0	0	0	0
58	09/06-09/06	Eo 2-F-E-114-10	16	0	0	0	0	0	0	0	0	0	0	0	0
59	09/07-09/07	Eo 2-F-E-114-10	16	0	0	0	0	0	0	0	0	0	0	0	0
60	09/08-09/10	Eo 2-F-E-117-10	48	0	0	0	0	0	0	0	0	0	0	0	0
61	09/11-09/15	Eo 2-F-E-118-10	110	0	0	0	0	0	0	0	0	0	0	0	0
62	09/16-09/18	Eo 2-F-E-119-10	62	0	0	0	0	0	0	0	0	0	0	0	0
63	09/19-09/22	Eo 2-F-E-120-10	86	0	0	0	0	0	0	0	0	0	0	0	0
Total			839	95	1,223	0	0	0	779	4,535	0	434	3,622	0	10,919,455	41,034,528	0	3,207	23,294
Average Weights							NA			5.82157			8.34516			3.75792824			7.26333

Appendix B6.–Coghill District commercial drift gillnet salmon harvest by statistical week, 2010.

			Permits		Chinook		Sockeye		Coho		Pink		Chum	
Week	Dates	Hours	Fished	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
22	05/23 - 05/29	124	172	940	20	314	63	366	0	0	0	0	294,802	2,067,984
23	05/30 - 06/05	116	295	2,076	85	1,363	662	3,940	1	10	1	4	398,152	2,692,712
24	06/06 - 06/12	72	292	1,639	24	296	9,239	63,660	0	0	0	0	360,960	2,442,159
25	06/13 - 06/19	36	302	850	7	117	3,004	18,575	3	21	3	11	194,430	1,299,452
26	06/20 - 06/26	48	264	1,155	5	36	6,359	41,044	5	46	13	57	292,884	2,025,230
27	06/27 - 07/03	72	296	1,714	9	92	26,108	171,672	20	155	1,048	3,888	453,327	3,169,311
28	07/04 - 07/10	120	236	1,289	12	185	20,803	135,182	57	437	26,205	96,010	392,672	2,708,937
29	07/11 - 07/17	124	160	613	26	291	12,623	82,883	217	1,815	84,921	317,351	94,491	652,756
30	07/18 - 07/24	122	79	365	10	104	5,682	36,350	336	2,688	127,571	459,848	26,514	195,556
31	07/25 - 07/31	28	20	36	0	0	429	2,876	12	108	22,316	75,521	1,276	8,724
32	08/01 - 08/07	70	198	1,131	4	33	820	5,145	807	6,534	1,036,989	3,863,278	1,174	8,227
33	08/08 - 08/14	119	229	1,691	1	12	601	3,897	1,226	10,110	1,345,766	5,060,498	709	5,032
34	08/15 - 08/21	119	187	1,089	3	19	834	5,258	2,200	18,052	612,114	2,301,985	523	3,713
35	08/22 - 08/28	119	57	162	0	0	238	1,472	614	5,238	76,159	298,619	91	632
36	08/29 - 09/04	116	0	0	0	0	0	0	0	0	0	0	0	0
37	09/05 - 09/11	112	0	0	0	0	0	0	0	0	0	0	0	0
38	09/12 - 09/18	156	0	0	0	0	0	0	0	0	0	0	0	0
39	09/19 - 09/25	86	0	0	0	0	0	0	0	0	0	0	0	0
Total		1,759	428	14,750	206	2,862	87,465	572,319	5,498	45,214	3,333,106	12,477,070	2,512,005	17,280,425
Average Weights						13.89		6.54		8.22		3.74		6.88

Appendix B7.–Coghill District commercial purse seine salmon harvest by statistical week, 2010.

			Permits		Chinook		Sockeye		Coho		Pink		Chum	
Week	Dates	Hours	Fished	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
30	07/18 - 07/24	62	7	13	0	0	268	1,642	23	197	75,502	275,927	1,621	11,610
31	07/25 - 07/31	28	13	16	0	0	282	1,528	4	27	135,158	456,986	1,084	7,997
32	08/01 - 08/07	70	77	463	0	0	130	770	110	895	5,124,364	18,885,856	434	3,226
33	08/08 - 08/14	119	73	581	0	0	70	424	127	1,135	4,919,316	18,991,796	57	375
34	08/15 - 08/21	119	38	127	0	0	5	32	65	536	562,658	2,088,391	11	86
35	08/22 - 08/28	119	9	22	0	0	21	123	70	552	94,182	305,940	0	0
36	08/29 - 09/04	116	1	1	0	0	3	16	35	280	8,275	29,633	0	0
37	09/05 - 09/11	112	0	0	0	0	0	0	0	0	0	0	0	0
38	09/12 - 09/18	156	0	0	0	0	0	0	0	0	0	0	0	0
39	09/19 - 09/25	86	0	0	0	0	0	0	0	0	0	0	0	0
Total		987	95	1,223	0	0	779	4,535	434	3,622	10,919,455	41,034,528	3,207	23,294
Average Weights						0		5.82		8.35		3.76		7.26

Appendix B8.–Total commercial common property harvest by species in the Coghill District, 1984–2010.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
	Drift Gillnet					
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
10-Year Average	148	134,778	41,703	176,146	1,134,542	1,487,317
2010	206	87,465	5,498	3,333,106	2,512,005	5,938,280
	Purse 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

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Year	Chinook	Sockeye	Coho	Pink	Chum	Total
	Drift Gillnet					
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
10-Year Average	7	16,431	11,738	3,119,798	285,108	3,433,082
2010	0	779	434	10,919,455	3,207	10,923,875

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
	Combined Purse Seine and Drift Gillnet					
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
10-Year Average	155	151,209	53,441	3,295,944	1,419,650	4,920,399
2010	206	88,244	5,932	14,252,561	2,515,212	16,862,155

Appendix B9.–Temporally stratified age and sex composition of sockeye salmon harvested in the Coghill District commercial common property drift gillnet and purse seine fisheries, 2010.

Stratum dates:	05/24 - 09/15	Brood Year and Age Class [a]					
Sampling date:	07/01 - 07/01	2006		2005		2004	
Sample size: [b]	379	0.3	1.2	1.3	2.2	2.3	Total [c]
	Sample size						
Female	Percentage of sample	0.0	13.7	21.4	0.8	1	36.7
	Number in harvest	0	12,107	18,860	699	699	32,364
Male	Percentage of sample	0.3	26.4	34.3	2.1	0	63.3
	Number in harvest	233	23,283	30,268	1,863	233	55,880
Total	Percentage of sample	0.3	40.1	55.7	2.9	1	100.0
	Number in harvest	233	35,391	49,128	2,561	931	88,244
	Standard error	233	2,225	2,255	762	464	

[a] 16 fish with resorbed scales have been removed.

[b] All samples taken from the drift gillnet fishery.

[c] Total includes 779 fish harvested in the purse seine fishery.

Appendix B10.–Estimated age and sex composition of the sockeye salmon escapement through the weir on the outlet stream of Coghill Lake, 2010.

Strata Combined:	06/10 - 07/27	Brood Year and Age Class [a]						
Sampling dates:	06/20 - 07/21	2007	2006		2005		2004	
Sample size:	1,348	1.1	1.2	2.1	1.3	2.2	2.3	Total
Female	Percentage of sample	6.8	19.1	1.9	5.5	10.7	0.2	44.4
	Number in escapement	1,647	4,642	450	1,344	2,608	51	10,742
Male	Percentage of sample	6.0	34.2	2.2	4.2	8.6	0.1	55.6
	Number in escapement	1,470	8,311	531	1,026	2,079	17	13,433
Total	Percentage of sample	12.8	53.6	4.0	9.8	19.4	0.3	100.0
	Number in escapement	3,118	13,039	981	2,386	4,720	68	24,312
	Standard error	218	321	134	198	262	34	

[a] Fish with resorbed scales have been removed; Strata 1 had 46, 2 - 51, 3 - 42.

Appendix B11.–Total commercial common property salmon harvest by period in the Unakwik District drift gillnet and purse seine fisheries, 2010.

Period	Date [a]	Emergency Orders Issued	Hours	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
						Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
						Drift Gillnet									
01	06/14-06/15	2-F-E-023-10	24	0	0	0	0	0	0	0	0	0	0	0	0
02	06/17-06/18	2-F-E-025-10	24	0	0	0	0	0	0	0	0	0	0	0	0
03	06/21-06/22	2-F-E-028-10	24	0	0	0	0	0	0	0	0	0	0	0	0
04	06/24-06/25	2-F-E-034-10	24	0	0	0	0	0	0	0	0	0	0	0	0
05	06/28-06/29	2-F-E-039-10	24	0	0	0	0	0	0	0	0	0	0	0	0
06	07/01-07/02	2-F-E-043-10	24	0	0	0	0	0	0	0	0	0	0	0	0
07	07/05-07/06	2-F-E-049-10	36	0	0	0	0	0	0	0	0	0	0	0	0
08b	07/08-07/09	2-F-E-054-10	36	0	0	0	0	0	0	0	0	0	0	0	0
09	07/12-07/13	2-F-E-056-10	36	0	0	0	0	0	0	0	0	0	0	0	0
10	07/15-07/16	2-F-E-063-10	36	0	0	0	0	0	0	0	0	0	0	0	0
11	07/19-07/20	2-F-E-065-10	36	0	0	0	0	0	0	0	0	0	0	0	0
12	07/22-07/22	2-F-E-069-10	14	1	1	0	0	15	71	0	0	0	0	0	0
13	07/26-07/26	2-F-E-071-10	14	0	0	0	0	0	0	0	0	0	0	0	0
Total			352	10	1	0	0	15	71	0	0	0	0	0	0
Average Weight							0.00		4.73		0.00		0.00		0.00
						Purse Seine									
01	06/14-06/15	2-F-E-023-10	24	0	0	0	0	0	0	0	0	0	0	0	0
02	06/17-06/18	2-F-E-025-10	24	0	0	0	0	0	0	0	0	0	0	0	0
03	06/21-06/22	2-F-E-028-10	24	1	1	0	0	21	107	0	0	0	0	0	0
04	06/24-06/25	2-F-E-034-10	24	1	1	0	0	5	30	0	0	0	0	0	0
05	06/28-06/29	2-F-E-039-10	24	1	1	0	0	0	0	0	0	0	0	22	163
06	07/01-07/02	2-F-E-043-10	24	0	0	0	0	0	0	0	0	0	0	0	0
07	07/05-07/06	2-F-E-049-10	36	1	1	1	22	5	31	0	0	34	106	4	29
08	07/08-07/09	2-F-E-054-10	36	0	0	0	0	0	0	0	0	0	0	0	0
09	07/12-07/13	2-F-E-056-10	36	0	0	0	0	0	0	0	0	0	0	0	0
10	07/15-07/16	2-F-E-063-10	36	0	0	0	0	0	0	0	0	0	0	0	0
11	07/19-07/20	2-F-E-065-10	36	0	0	0	0	0	0	0	0	0	0	0	0
12	07/22-07/22	2-F-E-069-10	14	0	0	0	0	0	0	0	0	0	0	0	0
13	07/26-07/26	2-F-E-071-10	14	0	0	0	0	0	0	0	0	0	0	0	0
Total			352	2	4	1	22	31	168	0	0	34	106	26	192
Average Weight							0.0		5.42		0.0		0.0		7.38

[a] All waters designated for commercial salmon fishing in the Unakwik District were open for all periods.

Appendix B12.–Total commercial common property salmon harvest by species in the Unakwik District, 1983–2010.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
			Drift 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
10-Year Average	2	6,408	5	246	268	6,928
2010	0	15	0	0	0	15
			Purse 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

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Year	Chinook	Sockeye	Coho	Pink	Chum	Total
			Drift Gillnet			
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
10-Year Average	0	394	2	10,474	16	10,885
2010	1	31	0	34	26	92
			Combined 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
10-Year Average	3	6,802	6	10,720	283	17,812
2010	1	46	1	34	26	108

Appendix B13.–Total Port Chalmers Subdistrict commercial common property salmon drift gillnet harvest by period, 2010.

		Emergency				Chinook		Sockeye		Coho		Pink		Chum	
Period	Date	Orders Issued	Hours	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1[a]	05/24-05/26	Eo 2-F-E-005-10	60	9	21	3	46	0	0	0	0	0	0	4,492	33,920
2[a]	05/27-05/30	Eo 2-F-E-008-10	84	10	24	1	17	0	0	3	21	0	0	2,563	18,412
3[a]	05/31-06/02	Eo 2-F-E-010-10	60	24	70	139	1,058	0	0	0	0	1	3	4,170	33,264
4[a]	06/03-06/06	Eo 2-F-E-012-10	84	28	97	4	86	3	17	0	0	6	23	7,524	57,296
5[a]	06/07-06/09	Eo 2-F-E-015-10	60	25	85	5	51	18	110	0	0	0	0	17,521	134,908
6[a]	06/10-06/13	Eo 2-F-E-019-10	84	35	102	12	170	39	233	0	0	2	6	10,016	73,922
7[a]	06/14-06/16	Eo 2-F-E-023-10	60	26	77	1	18	236	1,486	0	0	0	0	9,157	67,868
8[a]	06/17-06/20	Eo 2-F-E-025-10	84	59	215	4	78	695	4,617	1	6	3	9	29,313	220,584
9[a]	06/21-06/23	Eo 2-F-E-028-10	60	49	175	3	32	303	1,825	9	61	138	544	31,468	234,661
10[a]	06/24-06/27	Eo 2-F-E-034-10	84	45	181	15	121	2,050	12,615	30	121	545	1,729	31,830	230,601
11[a]	06/28-06/30	Eo 2-F-E-039-10	60	24	96	0	0	576	3,644	1	7	234	828	24,386	182,164
12[a]	07/01-07/04	Eo 2-F-E-043-10	84	26	121	0	0	411	2,561	1	6	1,263	3,892	29,174	217,297
13[a]	07/05-07/07	Eo 2-F-E-049-10	60	21	79	0	0	850	6,755	0	0	3,782	12,844	17,929	137,274
14[b]	07/08-07/11	Eo 2-F-E-054-10	84	21	91	1	10	321	2,552	10	79	244	808	17,046	129,357
15[b]	07/12-07/14	Eo 2-F-E-056-10	60	8	29	0	0	4	24	3	26	24	95	4,966	38,144
16[b]	07/15-07/18	Eo 2-F-E-063-10	84	0	0	0	0	0	0	0	0	0	0	0	0
17[b]	07/19-07/21	Eo 2-F-E-065-10	60	0	0	0	0	0	0	0	0	0	0	0	0
18[b]	07/22-07/25	Eo 2-F-E-069-10	84	0	0	0	0	0	0	0	0	0	0	0	0
19[b]	07/26-07/28	Eo 2-F-E-071-10	60	0	0	0	0	0	0	0	0	0	0	0	0
20[b]	07/29-07/31	Eo 2-F-E-077-10	40	7	15	0	0	6	42	18	160	9,552	35,466	971	7,180
21[bc]	07/31-07/31	Eo 2-F-E-083-10	14	0	0	0	0	0	0	0	0	0	0	0	0
Total			1,410	113	1,478	188	1,687	5,512	36,481	76	487	15,794	56,247	242,526	1,816,852
Average Weight							8.97		6.62		6.41		3.56		7.49

[a] Waters of the Port Chalmers Subdistrict were open. The Port Chalmers Subdistrict consists of waters on the west side of Montague Island that are east of a line connecting the following points: 60°20.00' N., 147°26.59' W., 60°14.75' N., 147°35.35' W., 60°02.50' N., 147°44.41' W. Regulatory closed waters and anadromous stream closures within Port Chalmers were not in effect. Drift gillnet gear greater than 60 mesh in depth was permitted.

[b] Waters of the Port Chalmers Subdistrict east of a line from Graveyard Point 60° 20.00' N., 147° 13.25' W., to a point of land 3 miles south of Gilmour Point at 60°13.50' N., 147°18.00' W., was open.

[c] Waters of the Port Chalmers Subdistrict open to purse seine gear only.

Appendix B14.–Port Chalmers Subdistrict drift gillnet commercial salmon harvest by statistical week, 2010.

			Permits		Chinook		Sockeye		Coho		Pink		Chum	
Week	Dates	Hours	Fished	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
22	05/23 - 05/29	124	11	32	3	46	0	0	0	0	0	0	5,582	41,920
23	05/30 - 06/05	144	35	160	144	1,161	1	5	3	21	7	26	11,304	86,803
24	06/06 - 06/12	144	44	178	16	203	42	259	0	0	1	3	25,096	192,128
25	06/13 - 06/19	144	60	266	5	90	570	3,546	1	6	4	12	34,676	257,944
26	06/20 - 06/26	144	65	364	19	177	1,957	12,225	35	157	419	1,427	62,826	463,136
27	06/27 - 07/03	144	39	232	0	0	1,723	10,842	5	32	1,663	5,257	54,974	410,906
28	07/04 - 07/10	144	26	180	1	10	1,202	9,492	9	67	4,051	13,718	38,925	294,768
29	07/11 - 07/17	144	17	51	0	0	11	70	5	44	97	338	8,172	62,067
30	07/18 - 07/24	144	0	0	0	0	0	0	0	0	0	0	0	0
31[a]	07/25 - 07/31	134	7	15	0	0	6	42	18	160	9,552	35,466	971	7,180
Total		1,410	113	1,478	188	1,687	5,512	36,481	76	487	15,794	56,247	242,526	1,816,852
Average Weights						8.97		6.62		6.41		3.56		7.49

[a] Only purse seine gear was permitted during the 14-hour period on July 31. Harvest from this period is confidential.

Appendix B15.–Total commercial common property harvest by species in the Port Chalmers Subdistrict, 2004–2010.

Year	Number of Permits Fished	Gear Type	Chinook	Sockeye	Coho	Pink	Chum	Total
2004	48	purse seine	120	887	522	102,352	342,968	446,849
2005	39	purse seine	210	1,965	103	718,044	238,503	958,825
2006	51	purse seine	185	1,808	28	144,417	445,762	592,200
2007	57	purse seine	671	5,507	40	492,435	740,554	1,239,207
2008	81	purse seine	88	10,225	23	216,013	1,233,909	1,460,258
2009	207	drift gillnet	87	10,208	2,318	67,978	672,918	753,509
6-Year Average			227	5,100	506	290,207	612,436	908,475
2010	113	drift gillnet	188	5,512	76	15,794	243,456	265,026

Note: Prior to 2004, the Port Chalmers Subdistrict (227-27) was part of the North Montague Subdistrict (227-20).

Appendix B16.–Estimated age and sex composition of chum salmon harvested in the Port Chalmers subdistrict of the Montague District commercial common property drift gillnet and purse seine fisheries, 2010.

Strata Combined:	05/24 - 07/31	Brood Year and Age Class			
Sampling dates:	06/11 - 06/11	2006	2005	2004	
Sample size: [a]	394	0.3	0.4	0.5	Total [b]
Female	Percentage of sample	8.9	29.2	0.5	43.2
	Number in harvest	21,546	70,794	1,231	93,571
Male	Percentage of sample	9.1	40.9	0.8	56.8
	Number in harvest	22,161	99,111	1,847	123,119
Total	Percentage of sample	19.0	79.2	1.8	100.0
	Number in harvest	46,170	192,066	4,309	242,545
	Standard error	4,803	4,967	1,616	

[a] All samples taken from the drift gillnet fishery.

[b] Total harvest includes 19 fish from the purse seine fishery.

APPENDIX C

Appendix C1.–Anticipated daily and cumulative salmon escapement versus actual escapement past the Eshamy River weir, 2010.

	Sockeye salmon						Pink salmon[a]		Chum salmon		Coho salmon	
			Apportioned BEG (13,000 to 28,000)									
	Actual		Projected Minimum		Projected Maximum		Actual		Actual		Actual	
Date	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative
07/10	0	0	50	634	108	1365	0	0	0	0	0	0
07/11	0	0	64	698	137	1,502	0	0	0	0	0	0
07/12	0	0	50	747	107	1,609	0	0	0	0	0	0
07/13	32	32	54	802	117	1,726	0	0	0	0	0	0
07/14	27	59	67	868	143	1,870	0	0	0	0	0	0
07/15	44	103	66	934	143	2,012	0	0	7	7	0	0
07/16	112	215	95	1,029	204	2,216	0	0		7	0	0
07/17	38	253	80	1,108	171	2,387	0	0	6	13	0	0
07/18	15	268	69	1,178	149	2,536	0	0	0	13	0	0
07/19	341	609	67	1,244	144	2,680	1	1	10	23	0	0
07/20	133	742	57	1,301	123	2,803	0	1	0	23	0	0
07/21	192	934	105	1,406	225	3,028	3	4	6	29	0	0
07/22	81	1,015	102	1,508	219	3,247	1	5	4	33	0	0
07/23	217	1,232	104	1,611	223	3,471	5	10	5	38	0	0
07/24	52	1,284	152	1,763	327	3,798	0	10	1	39	0	0
07/25	151	1,435	185	1,948	398	4,196	2	12	2	41	0	0
07/26	240	1,675	212	2,160	456	4,652	5	17	4	45	0	0
07/27	41	1,716	184	2,343	395	5,047	5	22	1	46	0	0
07/28	600	2,316	155	2,498	334	5,381	4	26	3	49	0	0
07/29	29	2,345	112	2,611	242	5,623	0	26	1	50	0	0
07/30	1,004	3,349	242	2,853	521	6,145	2	28	3	53	0	0
07/31	718	4,067	144	2,997	311	6,456	10	38	5	58	0	0
08/01	668	4,735	66	3,063	142	6,597	7	45	6	64	0	0
08/02	486	5,221	151	3,214	325	6,923	5	50	4	68	0	0
08/03	1,469	6,690	144	3,358	310	7,232	27	77	4	72	0	0
08/04	507	7,197	194	3,552	417	7,650	7	84	1	73	0	0
08/05	879	8,076	165	3,717	356	8,005	5	89	3	76	0	0
08/06	718	8,794	202	3,919	435	8,441	33	122	0	76	0	0
08/07	646	9,440	237	4,156	511	8,951	35	157	1	77	1	1
08/08	340	9,780	289	4,445	623	9,574	10	167	2	79	0	1
08/09	274	10,054	300	4,745	646	10,220	14	181	0	79	1	2
08/10	713	10,767	364	5,109	784	11,003	72	253	0	79	0	2
08/11	262	11,029	296	5,405	638	11,641	20	273	0	79	1	3
08/12	564	11,593	347	5,752	748	12,389	60	333	0	79	3	6
08/13	30	11,623	347	6,099	747	13,137	7	340	0	79	0	6
08/14	1,577	13,200	440	6,539	948	14,085	280	620	3	82	18	24
08/15	268	13,468	391	6,931	843	14,927	38	658	0	82	0	24
08/16	205	13,673	431	7,362	929	15,856	37	695	0	82	0	24
08/17	322	13,995	362	7,723	779	16,635	81	776	0	82	0	24
08/18	691	14,686	441	8,164	950	17,585	262	1,038	0	82	31	55
08/19	86	14,772	329	8,494	709	18,294	42	1,080	0	82	2	57

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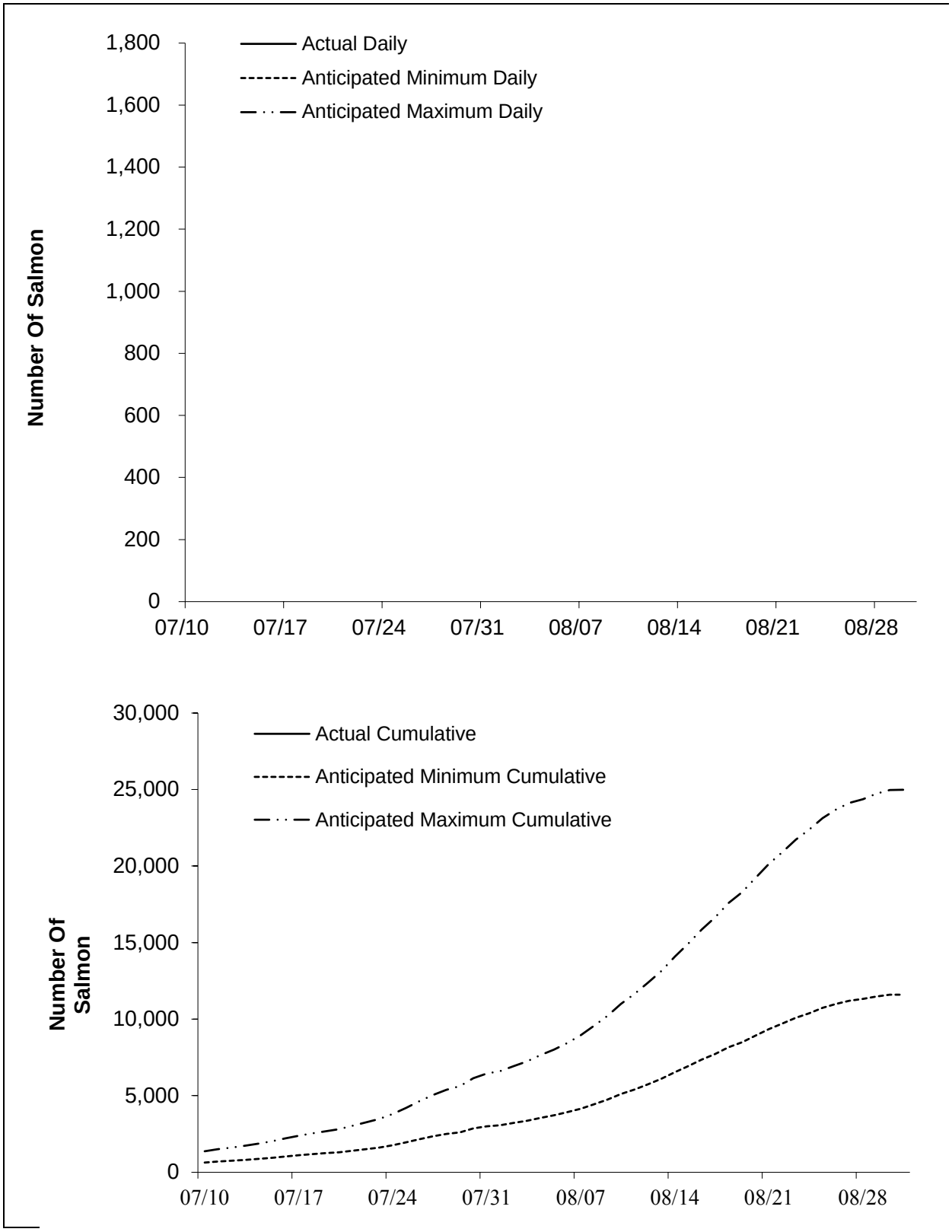
	Sockeye salmon						Pink salmon[a]		Chum salmon		Coho salmon	
			Apportioned BEG (13,000 to 28,000)									
	Actual		Projected Minimum		Projected Maximum		Actual		Actual		Actual	
Date	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative
08/20	607	15,379	427	8,921	920	19,214	189	1,269	2	84	14	71
08/21	121	15,500	432	9,353	930	20,144	96	1,365	0	84	4	75
08/22	116	15,616	349	9,702	752	20,896	66	1,431	0	84	4	79
08/23	123	15,739	380	10,082	819	21,715	87	1,518	0	84	5	84
08/24	139	15,878	304	10,386	655	22,370	75	1,593	0	84	15	99
08/25	65	15,943	350	10,737	754	23,125	81	1,674	0	84	4	103
08/26	140	16,083	267	11,003	574	23,699	168	1,842	0	84	0	103
08/27	40	16,123	196	11,199	421	24,120	147	1,989	0	84	4	107
08/28	40	16,163	115	11,314	248	24,368	151	2,140	0	84	2	109
08/29	128	16,291	167	11,481	360	24,728	128	2,268	0	84	5	114
08/30	NA	16,291	109	11,590	235	24,963	NA	2,268	NA	84	NA	114
08/31	NA	16,291	7	11,597	15	24,978	NA	2,268	NA	84	NA	114

[a] The weir is designed to prohibit passage of sockeye salmon, smaller pink salmon may pass through the weir uncounted.

Appendix C2.–Anticipated daily and cumulative sockeye salmon escapement versus actual escapement past the Eshamy River weir, 2010.



Appendix C3.–Salmon escapement by species past the Eshamy River weir, 1967-2010.

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 [a]	0	954	97	3,179	0	4,230
1972 [b]	0	28,683	0	0	0	28,683
1973	0	10,202	205	1,698	0	12,105
1974 [b]	0	633	0	0	0	633
1975 [b]	0	1,724	0	0	0	1,724
1976 [b]	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 [c]	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
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 [c]	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	N/A	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
10-Year Average	1	29,612	195	10,027	378	40,212
2010	0	16,291	114	2,268	84	18,757

Note: For the breakdown of jacks versus adult sockeye salmon see specific year's daily escapement enumeration table. N/A= Count is not available.

[a] Estimate may be low due to holes in weir; actual escapement is estimated to be more than 3,000 sockeye salmon.

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

[c] The Eshamy River weir was not in operation.

Appendix C4.–Total drift gillnet common property salmon harvest by period in the Eshamy District, 2010.

Period	Date	Emergency Orders	Hours	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
						Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
01[a]	05/24-05/26	2-F-E-005-10	60	0	0	0	0	0	0	0	0	0	0	0	0
02[a]	05/27-05/30	2-F-E-008-10	84	0	0	0	0	0	0	0	0	0	0	0	0
03[a]	05/31-06/02	2-F-E-010-10	60	9	26	11	166	69	425	0	0	0	0	3,043	21,442
04[a]	06/03-06/06	2-F-E-012-10	84	34	93	7	95	1,696	10,277	0	0	2	8	11,699	77,002
05[a]	06/07-06/09	2-F-E-015-10	60	109	174	5	70	3,145	19,637	0	0	4	12	16,266	107,264
06[a]	06/10-06/13	2-F-E-019-10	84	139	362	3	54	15,457	93,273	0	0	9	36	29,981	196,796
07[a]	06/14-06/16	2-F-E-023-10	60	243	677	16	258	50,933	312,512	2	17	18	64	69,187	475,808
08[a]	06/17-06/20	2-F-E-025-10	84	301	1,196	16	149	108,821	667,236	82	524	158	567	75,278	521,548
09[a]	06/21-06/23	2-F-E-028-10	60	295	954	4	52	91,177	569,667	17	144	230	919	49,380	338,265
10[a]	06/24-06/27	2-F-E-034-10	84	328	1,428	7	66	185,057	1,143,886	57	435	872	3,620	88,200	603,321
11[a]	06/28-06/30	2-F-E-039-10	60	283	897	4	50	122,448	747,556	46	317	992	4,490	53,808	365,414
12[a]	07/01-07/04	2-F-E-043-10	84	296	1,186	6	67	163,792	1,014,457	80	598	4,911	20,530	58,341	400,269
13[a]	07/05-07/07	2-F-E-049-10	60	179	564	2	16	78,056	477,702	128	886	12,256	45,713	38,544	261,847
14[ab]	07/08-07/10	2-F-E-054-10	60	158	426	3	43	42,826	263,544	75	569	21,239	72,782	23,776	162,745
15[abc]	07/12-07/14	2-F-E-056-10	60	93	265	3	21	35,376	218,107	47	360	15,284	53,522	4,351	30,732
16[abd]	07/15-07/18	2-F-E-063-10	84	78	215	2	17	21,771	142,346	78	660	15,399	59,058	4,075	30,084
17[abc]	07/19-07/21	2-F-E-065-10	60	56	130	3	29	16,950	109,268	186	1,406	15,322	50,599	3,146	22,522
18[abc]	07/22-07/24	2-F-E-069-10	60	25	83	0	0	9,254	64,141	21	166	7,139	27,228	433	3,184
19[abce]	07/26-07/28	2-F-E-071-10	60	33	50	0	0	5,714	39,961	68	607	2,069	8,314	68	460
20[fgh]	08/02-08/03	2-F-E-080-10	36	27	58	0	0	4,441	28,085	209	1,487	15,148	51,548	278	1,779
21[aghi]	08/05-08/07	2-F-E-088-10	60	3	5	0	0	403	2,426	31	215	3,006	12,597	3	21
22[fgj]	08/09-08/10	2-F-E-090-10	36	15	19	0	0	2,942	18,960	45	357	1,424	5,727	1	7
23[agj]	08/12-08/13	2-F-E-094-10	36	9	11	0	0	1,605	10,462	65	530	1,453	5,833	0	0
24[fgj]	08/16-08/17	2-F-E-096-10	36	3	5	0	0	545	3,558	148	1,064	1,030	4,132	2	14
25[agj]	08/19-08/20	2-F-E-100-10	36	0	0	0	0	0	0	0	0	0	0	0	0
26[fgj]	08/23-08/24	2-F-E-103-10	36	0	0	0	0	0	0	0	0	0	0	0	0
27[a]	08/26-08/27	2-F-E-108-10	24	0	0	0	0	0	0	0	0	0	0	0	0
28[f]	08/30-08/31	2-F-E-110-10	24	0	0	0	0	0	0	0	0	0	0	0	0
29[a]	09/02-09/03	2-F-E-132-10	24	0	0	0	0	0	0	0	0	0	0	0	0
30[f]	09/06-09/07	2-F-E-132-10	24	0	0	0	0	0	0	0	0	0	0	0	0
Total			1,680	413	8,824	92	1,153	962,478	5,957,486	1,385	10,342	117,965	427,299	529,860	3,620,524
Average Weight							12.53		6.19		7.47		3.62		6.83

[a] Waters of the Eshamy District excluding the AGZ were open.

[b] Mesh size restricted to 5 inch minimum.

[c] Waters of the Eshamy District north of Loomis Creek (60°29.44'N, 147°58.42'W) were open for 24 hours. MBY THA and SHA were open for 60 hours.

[d] Waters of the Eshamy District north of Loomis Creek (60°29.44'N, 147°58.42'W) were open for 24 hours. MBY THA and SHA were open for 84 hours.

[e] Period closed 7/27 due to grounding of MV Cape Cross in Main Bay.

[f] Waters of the Eshamy District including the AGZ were open.

[g] MBH THA and SHA open.

[h] Eshamy Bay west of a line from 147°57.83'W, 60°28.00'N to 147°58.63'W, 60°28.73'W was open for 12 hours.

[i] Confidential data less than 3 permits delivering.

[j] Eshamy Lagoon west of a line from 60° 27.63' N. latitude, by 148° 05.250' W. longitude to 60° 27.25' N. latitude, by 148° 04.28' W. longitude and east of a line from 60° 27.300' N. latitude, by 148° 05.740' W. longitude to 60° 27.20' N. latitude, by 148° 05.62' W. longitude open for 12 hours.

Appendix C5.–Total set gillnet common property salmon harvest by period in the Eshamy District, 2010.

Period	Date	Emergency Orders	Hours	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
						Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
01[a]	05/24-05/26	2-F-E-005-10	60	5	19	0	0	40	283	0	0	0	0	381	2,662
02[a]	05/27-05/30	2-F-E-008-10	84	7	34	0	0	172	1,177	0	0	0	0	1,365	9,508
03[a]	05/31-06/02	2-F-E-010-10	60	14	68	5	72	506	3,259	0	0	0	0	3,364	22,580
04[a]	06/03-06/06	2-F-E-012-10	84	13	86	1	8	1,578	11,112	0	0	0	0	4,328	29,463
05[a]	06/07-06/09	2-F-E-015-10	60	23	121	3	59	6,254	40,792	0	0	2	9	6,676	46,446
06[a]	06/10-06/13	2-F-E-019-10	84	25	203	3	43	10,876	69,133	0	0	5	22	7,821	52,125
07[a]	06/14-06/16	2-F-E-023-10	60	25	168	0	30	14,733	93,503	0	0	4	15	6,783	47,159
08[a]	06/17-06/20	2-F-E-025-10	84	26	233	2	15	23,785	151,951	5	27	21	87	7,760	54,602
09[a]	06/21-06/23	2-F-E-028-10	60	25	206	1	6	25,378	163,675	0	0	80	338	6,870	48,656
10[a]	06/24-06/27	2-F-E-034-10	84	26	277	0	0	41,098	263,131	2	14	100	320	8,877	61,860
11[a]	06/28-06/30	2-F-E-039-10	60	27	229	0	0	34,718	218,473	0	0	128	655	6,879	47,107
12[a]	07/01-07/04	2-F-E-043-10	84	28	319	0	0	51,631	324,561	2	15	1,025	4,870	9,741	67,642
13[a]	07/05-07/07	2-F-E-049-10	60	26	125	2	23	15,530	98,080	2	16	824	3,159	3,187	22,315
14[ab]	07/08-07/10	2-F-E-054-10	60	27	154	0	0	14,903	95,460	1	9	2,643	10,125	3,401	24,069
15[abc]	07/12-07/14	2-F-E-056-10	60	20	102	0	0	13,062	81,769	5	41	2,036	7,188	860	6,237
16[abd]	07/15-07/18	2-F-E-063-10	84	16	116	0	0	13,365	85,169	18	122	3,514	13,474	1,231	8,922
17[abc]	07/19-07/21	2-F-E-065-10	60	14	64	0	0	5,932	40,453	9	78	2,114	6,913	690	4,902
18[abc]	07/22-07/24	2-F-E-069-10	60	9	51	0	0	4,797	36,413	2	18	2,554	9,879	239	1,772
19[ebcf]	07/26-07/28	2-F-E-071-10	60	7	16	0	0	1,424	9,582	2	16	207	825	17	117
20[agh]	08/02-08/03	2-F-E-080-10	36	5	19	0	0	2,642	16,612	21	194	1,215	4,640	42	291
21[eghi]	08/05-08/07	2-F-E-088-10	60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
22[agj]	08/09-08/10	2-F-E-090-10	36	0	0	0	0	0	0	0	0	0	0	0	0
23[egj]	08/12-08/13	2-F-E-094-10	36	0	0	0	0	0	0	0	0	0	0	0	0
24[agj]	08/16-08/17	2-F-E-096-10	36	0	0	0	0	0	0	0	0	0	0	0	0
25[egj]	08/19-08/20	2-F-E-100-10	36	0	0	0	0	0	0	0	0	0	0	0	0
26[agj]	08/23-08/24	2-F-E-103-10	36	0	0	0	0	0	0	0	0	0	0	0	0
27[e]	08/26-08/27	2-F-E-108-10	24	0	0	0	0	0	0	0	0	0	0	0	0
28[a]	08/30-08/31	2-F-E-110-10	24	0	0	0	0	0	0	0	0	0	0	0	0
29[e]	09/02-09/03	2-F-E-132-10	24	0	0	0	0	0	0	0	0	0	0	0	0
30[a]	09/06-09/07	2-F-E-132-10	24	0	0	0	0	0	0	0	0	0	0	0	0
Total			1,680	29	2,610	17	256	282,467	1,804,845	69	550	16,766	63,743	80,516	558,461
Average Weight							15.06		6.39		7.97		3.80		6.94

[a] Waters of the Eshamy District excluding the AGZ were open.

[b] Mesh size restricted to 5 inch minimum.

[c] Waters of the Eshamy District north of Loomis Creek (60°29.44'N, 147°58.42'W) were open for 24 hours. MBY THA and SHA were open for 60 hours.

[d] Waters of the Eshamy District north of Loomis Creek (60°29.44'N, 147°58.42'W) were open for 24 hours. MBY THA and SHA were open for 84 hours.

[e] Waters of the Eshamy District including the AGZ were open.

[f] Period closed 7/27 due to grounding of MV Cape Cross in Main Bay.

[g] MBH THA and SHA open.

[h] Eshamy Bay west of a line from 147°57.83'W, 60°28.00'N to 147°58.63'W, 60°28.73'W was open for 12 hours.

[i] Confidential data less than 3 permits delivering.

[j] Eshamy Lagoon west of a line from 60° 27.63' N. latitude, by 148° 05.250' W. longitude to 60° 27.25' N. latitude, by 148° 04.28' W. longitude and east of a line from 60° 27.300' N. latitude, by 148° 05.740' W. longitude to 60° 27.20' N. latitude, by 148° 05.62' W. longitude open for 12 hours.

Appendix C6.–Eshamy District commercial drift gillnet salmon harvest by statistical week, 2010.

			Permits		Chinook		Sockeye		Coho		Pink		Chum	
Week	Dates	Hours	Fished	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
22	05/23 - 05/29	124	0	0	0	0	0	0	0	0	0	0	0	0
23	05/30 - 06/05	144	32	95	16	215	1,169	7,152	0	0	1	3	11,426	76,988
24	06/06 - 06/12	144	169	406	9	148	13,313	80,026	0	0	13	51	39,319	257,961
25	06/13 - 06/19	144	321	1,728	28	372	140,154	860,257	80	513	143	513	133,380	917,315
26	06/20 - 06/26	144	353	2,309	14	141	255,449	1,587,279	72	558	947	3,912	129,729	893,577
27	06/27 - 07/03	144	357	2,225	11	139	309,534	1,896,825	119	874	5,152	21,943	130,290	884,504
28	07/04 - 07/10	120	255	1,220	6	71	143,858	888,633	216	1,545	34,435	122,319	73,359	501,376
29	07/11 - 07/17	124	116	452	4	29	54,298	341,651	123	1,005	28,495	104,984	7,990	57,710
30	07/18 - 07/24	140	62	241	4	38	29,053	192,211	209	1,587	24,649	85,423	4,015	28,812
31	07/25 - 07/31	60	33	50	0	0	5,714	39,961	68	607	2,069	8,314	68	460
32	08/01 - 08/07	96	28	63	0	0	4,844	30,511	240	1,702	18,154	64,145	281	1,800
33	08/08 - 08/14	72	20	30	0	0	4,547	29,422	110	887	2,877	11,560	1	7
34	08/15 - 08/21	72	3	5	0	0	545	3,558	148	1,064	1,030	4,132	2	14
35	08/22 - 08/28	60	0	0	0	0	0	0	0	0	0	0	0	0
36	08/29 - 09/04	48	0	0	0	0	0	0	0	0	0	0	0	0
37	09/05 - 09/11	24	0	0	0	0	0	0	0	0	0	0	0	0
Total		1,660	413	8,824	92	1,153	962,478	5,957,486	1,385	10,342	117,965	427,299	529,860	3,620,524
Average Weights						12.53		6.19		7.47		3.62		6.83

Appendix C7.–Eshamy District commercial set gillnet salmon harvest by statistical week, 2010.

			Permits		Chinook		Sockeye		Coho		Pink		Chum	
Week	Dates	Hours	Fished	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
22	05/23 - 05/29	124	7	42	0	0	160	1,096	0	0	0	0	1,396	9,745
23	05/30 - 06/05	144	15	139	6	80	1,522	10,492	0	0	0	0	7,046	47,855
24	06/06 - 06/12	144	25	303	5	90	15,500	99,787	0	0	6	26	14,295	97,116
25	06/13 - 06/19	144	26	393	3	57	35,825	227,688	5	27	24	99	13,933	97,347
26	06/20 - 06/26	144	26	467	1	6	59,791	386,678	2	14	157	577	14,150	99,432
27	06/27 - 07/03	144	28	556	0	0	89,723	562,719	1	8	969	4,729	18,637	128,689
28	07/04 - 07/10	120	28	342	2	23	38,681	246,130	4	32	3,676	14,169	7,976	56,010
29	07/11 - 07/17	124	20	197	0	0	24,682	155,046	9	76	4,677	17,630	1,870	13,573
30	07/18 - 07/24	140	15	136	0	0	12,474	88,758	25	183	5,541	19,824	1,150	8,260
31	07/25 - 07/31	60	7	16	0	0	1,424	9,582	2	16	207	825	17	117
32	08/01 - 08/07	96	5	21	0	0	2,685	16,869	21	194	1,509	5,864	46	317
33	08/08 - 08/14	72	0	0	0	0	0	0	0	0	0	0	0	0
34	08/15 - 08/21	72	0	0	0	0	0	0	0	0	0	0	0	0
35	08/22 - 08/28	60	0	0	0	0	0	0	0	0	0	0	0	0
36	08/29 - 09/04	48	0	0	0	0	0	0	0	0	0	0	0	0
37	09/05 - 09/11	24	0	0	0	0	0	0	0	0	0	0	0	0
Total		1,660	29	2,612	17	256	282,467	1,804,845	69	550	16,766	63,743	80,516	558,461
Average Weights						15.06		6.39		7.97		3.80		6.94

Appendix C8.–Total commercial harvest in the Eshamy District, 1980–2010.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
			Drift Gillnet			
1980	0	684	25	3,225	130	4,064
1981	0	0	0	0	0	0
1982	0	0	0	0	0	0
1983	1	924	8	162,541	3,427	166,901
1984	7	23,490	282	247,326	15,451	286,556
1985	1	667	0	24,899	1,021	26,588
1986	0	4	1	938	65	1,008
1987	2	642	3	3,225	7,060	10,932
1988	94	50,868	794	348,873	206,060	606,689
1989 [a]	0	0	0	0	0	0
1990	110	12,967	574	165,362	264,772	443,785
1991	107	296,234	468	44,516	202,183	543,508
1992	158	373,596	1,017	153,018	50,974	578,763
1993	8	80,807	673	45,974	27,045	154,507
1994	2	61,848	623	254,535	9,497	326,505
1995	21	29,851	1,468	60,712	13,284	105,336
1996	19	179,064	1,056	19,043	23,552	222,734
1997	17	475,498	426	146,324	34,768	657,033
1998	2	98,002	252	101,068	343	199,667
1999	30	86,032	2,036	127,082	13,120	228,300
2000	634	235,085	5,396	375,250	27,511	643,876
2001	47	499,972	10,423	367,588	21,316	899,346
2002	428	589,199	3,532	122,365	104,284	819,808
2003	19	575,608	1,764	61,565	16,057	655,013
2004	21	215,460	1,467	55,832	43,228	316,008
2005	15	79,227	1,636	110,499	3,493	194,870
2006	15	381,911	5,429	89,755	30,841	507,951
2007	27	538,183	2,556	42,822	81,410	664,998
2008	48	560,869	1,930	103,325	251,493	917,665
2009	67	539,293	1,695	77,539	286,361	904,955
10-Year Average	132	421,481	3,583	140,654	86,599	652,449
2010	92	962,478	1,385	117,965	529,860	1,611,780

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				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	[a]	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
10-Year Average		20	157,117	548	59,686	20,137	237,508
2010		17	282,467	69	16,766	80,516	379,835

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Year	Chinook	Sockeye	Coho	Pink	Chum	Total
			Combined 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 [a]	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
10-Year Average	152	578,598	4,131	200,340	106,736	889,957
2010	109	1,244,945	1,454	134,731	610,376	1,991,615

[a] Fishing was closed because of oil contamination on the beaches.

Appendix C9.–Estimated age and sex composition of sockeye salmon harvested in the Eshamy District commercial gillnet fishery, 2010.

Strata Combined:	05/24 - 09/07	Brood Year and Age Class [a]								
Sampling dates:	06/17 - 07/08	2007		2006		2005		2004		
Sample size:	1,333	0.2	1.1	0.3	1.2	1.3	2.2	1.4	2.3	Total
Female	Percentage of sample	0.0	0.0	0.1	14.4	25.6	0.1	0	0	40
	Number in harvest	0	0	902	178,990	318,778	1,412	0	646	500,729
Male	Percentage of sample	0.1	0.1	0.1	21.9	37.2	0.1	0	0	60
	Number in harvest	902	1,412	1,548	272,942	462,640	646	1,412	2,704	744,207
Total	Percentage of sample	0.1	0.1	0.2	36.3	62.8	0.2	0	0	100
	Number in harvest	902	1,412	2,450	451,933	781,419	2,058	1,412	3,350	1,244,936
	Standard error	902	1,412	1,428	17,367	17,449	1,553	1,412	1,800	

[a] Fish with resorbed scales have been removed; Strata # 1 had 5, # 2 - 4, # 3 - 52.

Appendix C10.–Estimated age and sex composition of the sockeye salmon escapement through the Eshamy River weir, 2010.

Strata Combined:	07/12 - 08/29	Brood Year and Age Class [a]						
Sampling dates:	07/20 - 08/29	2007	2006		2005		2004	
Sample size:	1,408	1.1	1.2	2.1	1.3	2.2	2.3	Total
Female	Percentage of sample	0.0	38.0	0.0	5.8	4.4	0.8	49
	Number in escapement	0	6,190	0	937	722	132	7,982
Male	Percentage of sample	1.0	41.5	1.8	1.6	4.9	0.3	51
	Number in escapement	156	6,758	289	264	799	43	8,309
Total	Percentage of sample	1.0	79.5	1.8	7.4	9.3	1.1	100
	Number in escapement	156	12,948	289	1,201	1,522	175	16,291
	Standard error	34	176	47	119	126	46	

[a] Fish with resorbed scales have been removed; Strata #1 - 12, #2 - 35. Ages from Strata #3 are based on length frequency data.

APPENDIX D

Appendix D1.–Prince William Sound commercial common property purse seine harvest by day, 2010.

			Chinook		Sockeye		Coho		Pink		Chum	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
05/28	5	5	2	30	0	0	0	0	0	0	1,391	9,975
05/29	4	4	2	63	0	0	0	0	0	0	2,691	17,138
05/30	7	8	2	29	0	0	0	0	0	0	1,631	10,907
05/31	8	8	0	0	0	0	0	0	0	0	1,870	12,522
06/01	5	5	1	12	0	0	0	0	0	0	1,257	9,910
06/02	10	10	0	0	9	58	0	0	0	0	3,795	25,326
06/03	17	17	1	32	54	295	0	0	12	50	4,727	34,520
06/04	6	6	0	0	7	29	0	0	0	0	1,959	12,279
06/05	7	7	0	0	45	351	0	0	0	0	1,105	9,809
06/06	15	16	0	0	139	854	0	0	0	0	4,252	28,669
06/07	8	8	0	0	12	92	0	0	0	0	1,543	10,122
06/08	14	15	2	30	83	550	0	0	21	56	3,095	22,975
06/09	14	14	0	0	104	665	0	0	55	168	1,550	11,904
06/10	17	17	0	0	140	953	0	0	46	292	2,188	15,694
06/11	15	15	0	0	339	2,070	0	0	46	164	2,653	20,062
06/12	19	19	0	0	894	5,589	0	0	28	137	4,479	30,039
06/13	11	12	0	0	329	2,116	1	8	58	159	1,747	11,431
06/14	33	33	3	59	1,420	9,198	0	0	67	215	9,075	64,048
06/15	1	1	0	0	34	204	0	0	0	0	25	202
06/16	20	20	0	0	1,597	9,978	0	0	48	152	7,465	48,483
06/17	20	20	0	0	2,358	15,568	1	12	112	368	6,618	51,453
06/18	20	20	0	0	2,459	15,011	0	0	22	68	7,432	51,051
06/19	14	14	0	0	2,435	15,647	0	0	185	538	5,317	37,705
06/20	15	15	0	0	896	5,353	0	0	40	134	3,342	21,057
06/21	20	20	0	0	1,672	10,231	1	5	301	836	4,766	37,103
06/22	13	13	0	0	1,398	7,768	0	0	271	779	2,992	20,164
06/23	19	19	1	26	3,459	21,622	0	0	151	842	8,152	52,245
06/24	12	12	0	0	2,489	16,038	0	0	93	304	2,666	18,796
06/25	33	33	0	0	9,477	62,216	0	0	718	2,274	12,973	90,875
06/26	15	16	1	30	3,748	25,363	0	0	326	1,163	4,112	28,753
06/27	5	5	0	0	908	4,903	0	0	28	109	1,345	8,907
06/28	23	23	0	0	3,521	21,825	0	0	214	517	7,842	51,319
06/29	12	12	1	12	1,071	6,249	0	0	57	211	2,128	15,463

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			Chinook		Sockeye		Coho		Pink		Chum	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
06/30	22	22	0	0	3,682	21,501	0	0	238	741	7,069	47,860
07/01	7	7	0	0	2,047	11,759	0	0	337	1,015	2,642	19,764
07/02	28	28	0	0	4,217	26,967	0	0	1,044	3,268	7,150	50,052
07/03	12	12	0	0	1,126	6,444	0	0	239	719	2,039	14,421
07/04	23	23	0	0	1,946	12,733	0	0	537	1,382	4,316	32,820
07/05	11	11	1	22	1,027	6,879	0	0	389	1,101	1,241	9,065
07/06	5	5	0	0	1,084	7,621	0	0	238	632	2,630	19,486
07/07	143	185	3	36	961	5,444	21	109	1,257,977	3,934,515	4,032	28,161
07/08	3	3	0	0	1,043	5,693	0	0	418	1,302	3,957	27,778
07/09	149	168	0	0	205	1,229	12	81	1,096,935	3,552,093	3,388	23,773
07/10	2	2	0	0	324	1,940	0	0	45	458	75	522
07/11	3	3	0	0	761	5,177	0	0	372	2,878	1,841	12,899
07/12	1	1	0	0	42	250	0	0	324	1,005	143	1,003
07/13	156	262	0	0	42	239	44	356	2,602,888	8,597,249	222	1,651
07/14	142	179	0	0	13	83	4	22	1,416,002	4,845,505	254	1,710
07/15	137	187	0	0	59	346	2	19	1,198,283	4,434,312	291	2,061
07/16	140	171	0	0	40	245	5	24	1,088,291	3,713,022	305	2,220
07/17	135	161	0	0	17	100	2	25	1,105,658	4,016,898	181	1,343
07/18	128	146	0	0	31	194	6	45	888,324	3,120,132	209	1,540
07/19	120	133	0	0	14	84	0	0	508,803	1,747,747	97	709
07/20	125	159	0	0	72	392	4	30	1,017,085	3,561,949	1,015	7,418
07/21	122	147	0	0	197	1,172	34	289	885,767	3,186,046	855	5,931
07/22	116	145	0	0	604	3,700	7	60	1,104,641	3,829,850	3,523	25,526
07/23	99	112	0	0	75	450	17	105	568,912	1,999,227	1,045	7,437
07/24	125	153	0	0	133	859	19	192	643,142	2,290,526	879	6,443
07/25	19	23	0	0	429	2,657	11	77	208,334	704,157	1,212	8,917
07/27	105	106	0	0	20	117	31	238	306,277	1,080,576	617	4,515
07/28	110	111	0	0	74	487	84	633	492,088	1,698,929	1,103	8,479
07/29	67	67	0	0	6	38	45	293	83,150	314,982	789	5,398
07/30	7	10	0	0	6	35	72	589	49,745	216,421	517	4,331
07/31	12	12	0	0	25	157	280	1,885	87,140	328,299	924	7,501
08/01	147	317	0	0	194	1,135	361	3,479	3,495,704	12,293,104	1,180	8,647
08/02	2	2	0	0	1	6	23	212	9,147	33,764	122	860
08/03	157	411	0	0	121	678	251	1,295	4,902,442	17,557,749	283	1,831
08/04	1	1	0	0	3	14	19	172	3,212	12,852	50	472

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			Chinook		Sockeye		Coho		Pink		Chum	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
08/05	159	302	0	0	83	465	41	282	3,085,787	11,182,854	244	1,674
08/06	151	271	0	0	34	205	51	404	2,676,209	9,844,830	41	287
08/07	155	244	0	0	71	407	33	254	2,566,341	9,183,405	212	1,391
08/08	155	272	0	0	30	173	29	325	2,869,690	10,758,233	31	187
08/09	153	300	0	0	42	247	94	669	3,055,262	11,206,643	44	323
08/10	155	315	0	0	44	216	49	384	3,151,982	11,503,585	12	81
08/11	156	307	0	0	18	125	12	110	2,987,047	10,816,577	11	70
08/12	153	319	0	0	10	59	18	144	2,860,098	10,659,596	8	58
08/13	152	342	0	0	62	369	19	160	2,886,599	10,785,563	8	63
08/14	149	275	0	0	33	190	51	442	2,169,102	7,871,563	14	98
08/15	150	268	0	0	14	69	43	416	1,883,375	6,882,504	6	43
08/16	134	190	0	0	38	225	255	2,063	1,376,703	4,980,829	18	139
08/17	134	194	2	24	315	1,674	647	5,401	1,541,996	5,668,738	21	144
08/18	104	115	0	0	31	191	124	911	626,787	2,205,822	15	108
08/19	93	117	0	0	27	165	182	1,621	575,193	2,069,615	86	674
08/20	91	93	0	0	31	170	173	1,335	514,143	1,917,936	97	680
08/21	75	82	0	0	11	69	75	663	480,920	1,621,594	15	107
08/22	84	93	0	0	52	318	451	3,462	634,895	2,298,622	1,246	9,749
08/23	55	56	0	0	28	166	44	376	345,533	1,136,372	9	64
08/24	40	43	0	0	32	192	52	486	189,508	714,971	19	139
08/25	31	31	0	0	11	68	27	223	137,497	469,199	1	10
08/26	20	21	0	0	1	2	28	244	97,251	359,955	0	0
08/27	10	10	0	0	0	0	9	74	47,630	176,573	0	0
08/28	9	9	0	0	0	0	12	96	44,210	165,732	0	0
08/29	5	5	0	0	0	0	0	0	36,603	141,638	0	0
08/30	7	8	0	0	0	0	0	0	39,786	143,921	0	0
08/31	4	4	0	0	0	0	0	0	6,885	23,480	0	0
09/01	3	3	0	0	3	16	38	305	28,167	101,214	0	0
09/05	7	8	0	0	0	0	0	0	56,387	194,167	0	0
09/06	2	2	0	0	0	0	0	0	35,143	123,004	0	0
09/07	8	9	0	0	0	0	4,039	34,994	33,860	118,511	0	0
09/08	3	3	0	0	0	0	145	1,311	27,002	97,209	0	0
09/09	7	17	0	0	0	0	240	2,160	122,819	397,993	0	0
09/10	4	4	0	0	0	0	0	0	40,362	138,255	0	0
Total	174	8,279	22	405	62,759	393,402	8,338	69,570	62,257,799	223,054,644	186,537	1,309,539
Average Weight				18.41		6.25		8.34		3.58		7.02

Appendix D2.–Area E commercial salmon harvest by species, excluding Copper River and Bering River Districts, 1971–2010.

Year[a]	Chinook	Sockeye	Coho	Pink	Chum	Total
1971	3,551	88,368	30,551	7,310,964	574,265	8,007,699
1972[b]	547	197,526	1,634	54,783	45,370	299,860
1973	2,405	124,802	1,399	2,056,878	729,839	2,915,323
1974[b]	1,590	129,366	801	448,773	88,544	669,074
1975	2,519	189,613	6,142	4,452,805	100,479	4,751,558
1976	1,044	112,809	6,171	3,018,991	370,478	3,509,493
1977	648	310,358	843	4,513,082	572,610	5,397,541
1978	1,042	222,083	1,495	2,913,721	485,147	3,623,488
1979	2,015	150,040	6,843	15,607,620	326,414	16,092,932
1980	189	189,816	2,952	14,157,057	482,016	14,832,030
1981	404	251,222	4,383	20,524,470	1,878,716	22,659,195
1982	255	1,055,099	24,362	20,396,222	1,335,368	22,811,306
1983	1,048	92,111	10,496	14,038,796	1,041,309	15,183,760
1984	489	311,955	12,420	22,086,806	1,201,842	23,613,512
1985	1,104	493,278	19,753	25,056,663	1,280,093	26,850,891
1986	1,330	488,715	12,277	11,407,271	1,683,049	13,592,642
1987	874	540,109	47,751	29,198,507	1,904,494	31,691,735
1988	1,037	183,572	75,709	11,817,323	1,832,114	13,909,755
1989	1,113	140,090	203,574	21,860,582	995,962	23,201,321
1990	447	58,497	234,525	44,163,479	959,838	45,416,786
1991	445	507,815	145,311	37,134,311	331,906	38,119,788
1992	1,475	780,932	202,311	8,635,448	328,568	9,948,734
1993	2,148	418,948	48,310	5,761,436	1,173,341	7,404,183
1994	1,376	334,183	121,518	36,874,188	1,039,095	38,370,360
1995	1,364	230,057	140,314	16,045,396	702,216	17,119,347
1996	700	606,525	172,448	26,036,570	2,077,996	28,894,239
1997	1,186	1,197,776	64,360	25,828,078	2,224,725	29,316,125
1998	2,013	365,591	74,105	28,664,281	1,266,887	30,372,877
1999	1,055	339,037	81,841	44,993,247	2,963,838	48,379,018
2000	1,133	548,790	353,013	38,875,724	5,158,397	44,937,057
2001	861	932,070	239,947	35,237,137	3,097,005	39,507,020
2002	958	1,013,396	37,586	18,947,254	6,341,864	26,341,058
2003	256	1,519,598	98,947	51,962,716	3,793,499	57,375,016
2004	864	831,356	56,430	23,526,306	1,998,511	26,413,467
2005	1,217	579,643	230,180	59,852,105	1,993,427	62,656,572
2006	1,118	990,880	388,722	21,691,138	2,164,338	25,236,196
2007	873	1,310,694	202,153	63,383,923	3,569,283	68,466,926
2008	962	979,077	307,837	42,352,208	5,074,804	48,714,888
2009	404	1,011,990	46,580	18,565,070	3,212,148	22,836,192
2010	576	1,401,815	42,500	71,288,429	4,307,249	77,040,569
10 year average	809	1,057,052	165,088	40,680,629	3,555,213	45,458,790

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

[b] General purse seine season closed.

Appendix D3.–Prince William Sound commercial common property pink salmon harvest for all gear types, by district, 1975–2010.

Year	Eastern	Northern	Coghill	Northwestern	Eshamy	Southwestern	Montague	Southeastern	Total[a]
1975	712,328	171,657	303,597	420,891		1,673,887	118,467	875,456	4,276,283
1976	1,380,943	384,267	217,696	207,190		589,458		82,366	2,861,920
1977	1,673,044	147,964	230,215	208,727		930,469	77,104	824,374	4,091,897
1978	1,516,076	933,013	13,059					216,696	2,678,844
1979	4,500,032	115,886	38,560	59,423		5,111,073	1,347,413	4,160,925	15,333,312
1980	3,140,134	1,271,177	134,876	306,109		7,507,776	950	1,271,389	13,632,411
1981	4,797,583	1,194,621	34,155	46,874		10,371,220	278,879	3,221,268	19,944,600
1982	2,959,601	2,331,903	1,000,524	520,972	3,997	10,801,771	6,444	747,116	18,372,328
1983	2,430,063	1,021,345	273,131	714,522		5,957,068	158,241	1,482,013	12,036,383
1984	4,525,029	2,194,904	996,483	1,412,822	544,082	10,197,349	11,587	1,245,042	21,127,298
1985	6,715,143	1,002,872	523,773	527,132	58,183	10,843,752	1,448,809	2,733,562	23,853,226
1986	2,488,540	944,871	214,593	285,184	43,061	6,374,535		147,268	10,498,052
1987	6,964,549	2,419,611	1,578,568	750,877	89,902	13,341,940	111,011	955,988	26,212,446
1988	481,324	286,743	2,932,072	7,738	529,329	5,411,424		1,776	9,650,406
1989	3,151,096	6,464,090	3,925,487	181,565	[b]	[b]	[b]	73,177	13,795,415
1990	7,970,364	5,482,585	2,692,788	891,444	534,951	17,811,479	10,658	12,325	35,406,594
1991	2,617,222	4,150,612	2,211,575		64,591	17,849,425			26,893,425
1992	489,228	1,142,061	363,887		543,115	3,039,775			5,578,066
1993		413,308	493,747		130,542	2,475,798			3,513,395
1994	11,554,320	7,171,038	3,597,094		565,669	3,408,093			26,296,214
1995	4,235,638	3,656,119	1,078,693		88,830	1,707,745	18,239	11,418	10,796,682
1996	6,059,063	5,039,988	1,543,869		35,691	5,046,919			17,725,530
1997 [c]	4,534,365	3,162,822	2,030,586		222,934	5,929,544	65,107	28,040	15,973,398
1998 [c]	2,231,061	5,035,736	3,228,761		134,984	8,425,853	430,525	350,081	19,837,001
1999	12,305,629	4,981,085	3,542,130		170,525	9,511,998	189,641	914,907	31,615,915
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		495,325	3,072,848	807,010	534,538	22,321,897
2002	355,964	594,245	1,277,637		186,786	5,710,938	32,857	1,075	8,159,502
2003	14,945,744	5,909,643	11,439,915		90,102	5,789,419	60,287	514,452	38,749,562
2004	9,512,987	45,355	43,690		107,487	1,628,219	102,352	260,992	11,701,082
2005	20,516,356	10,175,784	3,318,875		236,634	11,376,513	844,658	770,570	47,239,390
2006	5,712,890	1,331,740	1,373,036		110,618	3,269,037	144,417	21,805	11,963,543
2007	22,059,138	6,221,016	2,399,997		56,618	17,907,847	878,371	1,869,245	51,392,232
2008	11,008,956	8,589,490	10,053,149	0	1,154,319	8,134,915	1,460,258	0	40,401,087
2009	95,071	2,064,871	1,305,714		81,790	7,481,863	87,952	36,698	11,153,959
2010	18,798,887	18,459,350	16,016,511		134,734	17,843,669	15,985	19,293	71,288,429
10 year average	11,905,623	5,379,639	4,818,557	0	265,441	8,221,527	443,415	402,867	31,437,068

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

[b] These districts were closed due to the Exxon Valdez oil spill.

[c] Eastern and Northern District totals exclude discarded salmon.

Appendix D4.–Aerial escapement indices for pink and chum salmon by district, 2010.

Pink Salmon

District	Escapement Midpoint	Even Cycle Escapement Goal Range			1976-2010 Even years Mean Index	Observed Escapement Index [a]	Deviation From Midpoint
Eastern	677,500	425,000	-	930,000	448,376	490,952	-27.5%
Northern/Unakwik	282,500	175,000	-	390,000	172,909	287,570	1.8%
Coghill	182,500	115,000	-	250,000	133,593	335,108	83.6%
Northwestern	175,000	110,000	-	240,000	110,357	211,709	21.0%
Eshamy	10,000	5,000	-	15,000	4,019	9,585	-4.1%
Southwestern	207,500	130,000	-	285,000	118,357	126,489	-39.0%
Montague	122,500	75,000	-	170,000	102,144	144,821	18.2%
Southeastern	342,500	215,000	-	470,000	282,153	404,862	18.2%
Total	2,000,000				1,371,909	2,011,096	0.6%

Chum Salmon

District	Escapement Range [b]		1976-2010 Mean Index	Observed Escapement Index [a]	Deviation From Midpoint
Eastern	50,000	and up	107,179	91,514	83.0%
Northern/Unakwik	20,000	and up	39,840	38,382	91.9%
Coghill	8,000	and up	19,337	51,589	544.9%
Northwestern	5,000	and up	14,515	30,074	501.5%
Eshamy	None		87	62	NA
Southwestern [c]	None		2,935	10,523	NA
Montague [c]	None		4,732	13,010	NA
Southeastern	8,000	and up	28,375	85,138	964.2%
Total[d]	91,000	and up	209,246	296,696	226.0%

[a] Based on weekly aerial survey counts of 209 index spawning streams in Prince William Sound. This does not represent the total spawning escapement but rather a comparable annual index.

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

[c] Escapement goal removed in 2003 after review.

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

Appendix D5.–Pink salmon escapement indices by district, 1965–2010.

Year	Eastern	Northern	Coghill	Northwestern	Eshamy	Southwestern	Montague	Southeastern	Total
	Escapement Indices								
1965	257,853	59,820	91,584	159,011	9,340	65,380	77,042	255,926	975,956
1966	544,980	288,710	135,440	79,960	11,720	115,570	42,220	204,570	1,423,170
1967	255,240	144,200	65,240	82,980	5,020	42,950	10,020	236,610	842,260
1968	364,930	151,120	108,020	117,430	10,770	172,770	52,350	179,120	1,156,510
1969	160,600	94,770	39,020	23,830	0	57,890	1,550	26,910	404,570
1970	387,090	125,360	95,170	82,660	7,610	66,790	73,880	140,660	979,220
1971	352,800	126,210	62,160	14,320	1,710	79,140	296,730	179,480	1,112,550
1972	344,470	83,900	30,960	39,020	1,100	29,530	33,140	79,060	641,180
1973	309,040	69,660	493,780	2,910	0	52,320	119,520	177,780	1,225,010
1974	256,880	206,750	56,940	163,930	6,240	160,980	11,750	94,650	958,120
1975	412,560	38,260	452,430	4,990	0	77,270	85,380	194,670	1,265,560
1976	402,792	106,248	53,908	41,886	0	32,639	7,852	66,953	712,278
1977	409,082	47,897	320,680	72,591	0	179,682	185,174	302,561	1,517,667
1978	298,037	88,816	67,084	65,514	0	110,363	30,761	94,811	755,386
1979	755,752	271,952	125,544	155,077	0	286,489	308,412	998,751	2,901,977
1980	300,871	105,551	148,066	85,663	0	81,095	100,985	272,811	1,095,042
1981	650,401	206,282	140,436	108,158	0	137,759	488,066	435,217	2,166,319
1982	508,204	198,838	309,202	121,085	0	134,827	114,421	462,541	1,849,118
1983	450,165	138,993	284,164	171,938	0	145,779	217,597	594,470	2,003,106
1984	1,143,775	439,886	365,226	412,278	0	304,859	169,612	734,202	3,569,838
1985	720,386	166,768	238,728	181,797	0	152,429	316,483	571,406	2,347,997
1986	384,382	131,956	109,798	78,027	3,513	69,388	45,492	163,378	985,934
1987	517,221	114,522	67,761	67,809	3,450	129,192	144,085	328,177	1,372,217
1988	394,111	140,981	42,985	69,627	0	118,359	67,928	137,173	971,164
1989	357,249	95,445	48,802	72,591	18,578	168,518	164,540	307,953	1,233,676
1990	428,723	110,638	45,558	94,359	17,274	136,721	106,603	296,029	1,235,905
1991	427,069	159,909	84,790	89,437	19,152	176,887	239,782	528,766	1,725,792

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Year	Eastern	Northern	Coghill	Northwestern	Eshamy	Southwestern	Montague	Southeastern	Total
	Escapement Indices								
1992	194,962	72,323	23,122	42,805	2,716	64,652	47,029	94,928	542,537
1993	314,727	95,602	41,666	45,847	9,348	98,573	144,784	315,093	1,065,640
1994	613,866	178,151	65,648	141,290	11,799	143,479	58,820	196,228	1,409,281
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	214,723	168,816	52,340	6,900	163,347	381,054	853,180	2,462,862
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	957,327	262,502	375,147	103,931	5,206	130,356	320,494	691,769	2,846,732
2004	724,663	163,858	79,010	51,306	2,300	108,192	183,891	687,903	2,001,123
2005	1,025,756	579,079	528,264	401,640	32,396	272,572	566,002	1,330,407	4,736,116
2006	248,592	211,603	145,511	127,836	11,247	118,205	149,798	178,009	1,190,802
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	404,862	2,011,096
	Even Cycle Average (1966–2010)								
	433,440	172,670	123,096	107,366	4,773	116,351	89,215	251,166	1,298,077
	Odd Cycle Average (1965–2009)								
	484,868	156,924	185,162	97,820	5,966	135,820	221,195	470,990	1,746,037

Note: Historical data revised in 1989. Coghill and Northwestern escapement numbers correspond to current district boundaries. Northern District includes both Northern and Unakwik district counts combined.

Appendix D6.–Weekly aerial survey indices of pink salmon escapement by statistical area, 2010.

Survey Location	Statistical Area	Week Ending Dates[a] 6/5	7/3	7/17	7/24	7/31	8/7	8/14	8/21	8/28	9/4	9/11	9/18	9/25	Escapement Index[b]
Orca Inlet	221-10		0	0	3,200	40	0	0	1,000	7,200	30	0			6,637
Simpson & Sheep Bay	221-20	0	0	10	300	13,825	6,800		52,900		77,250			5	66,744
Port Gravina	221-30	0	0	0	0	32,250	20,200		55,300		82,450		8,340	0	77,834
Port Fidalgo	221-40	0			50	54,600	39,000		83,800		64,000		5,600	44,000	146,769
Valdez Arm	221-50	0	0	0	1,900	30,400	31,500		77,400		84,400		67,002	125	187,468
Port Valdez	221-61		0	0					11,000						5,500
Eastern District		0	0	10	5,450	131,115	97,500	0	281,400	7,200	308,130	0	80,942	44,130	490,952
Columbia & Long Bay	222-10		0	0	0	25,325	21,800		49,665		14,675		0		76,915
Wells Bay & Unakwik Inlet	222-20	0	0	592	75	84,900	94,000	46,600	74,700		46,600		945		149,564
Eaglek Bay	222-30			1,090	5,320	19,000	29,750	20,200	24,600		17,000		625		60,103
Northern District		0	0	1,682	5,395	129,225	145,550	66,800	148,965		78,275		1,570		286,582
West Side Port Wells	223-10			150	13,900	12,750	71,300	65,600	56,200		35,630		4,210		100,912
Esther Passage	223-20			0	0	100	3,200	3,900	100		4,300		60		9,257
College Fiord	223-30			0	26,000	25,000	150,300	215,200	95,300		195,900		510		224,939
Coghill District				150	39,900	37,850	224,800	284,700	151,600		235,830		4,780		335,108
Passage Canal & Cochrane	224-10			700	14,000	4,050	44,900	45,500	48,500		18,603		350		80,856
Culross Passage	224-30			0	0	0	20,810	20,700	75,100		42,140		3,515		64,732
Port Nellie Juan	224-40			0	14,500	1,375	15,400	19,450	29,000		8,750		185		66,121
Northwestern District				700	28,500	5,425	81,110	85,650	152,600		69,493		4,050		211,709
Main Bay	225-20			0	0	0	20	450	3,400		3,300		5		3,977
Eshamy Bay	225-30			0	100	20	300	2,100	2,700		2,500		40		5,608
Eshamy District				0	100	20	320	2,550	6,100		5,800		45		9,585
Herring Bay	226-10			0	0	0	50		1,000				0		2,336
Chenega Is. & Dangerous Pass.	226-20					750	20,650	36,050	76,500	1,710	26,375	2,392			81,198
East Knight Is.	226-30					800	11,100	13,000	9,400		5,200	1,205			25,186
Bainbridge & Latouche	226-40					0	875	4,700	13,150	3,837	10,730	3,025			17,073
Port Bainbridge	226-50					0	200	200	700	300	10	1			696
Southwestern District				0	0	1,550	32,875	53,950	100,750	5,847	42,315	6,623	0		126,489

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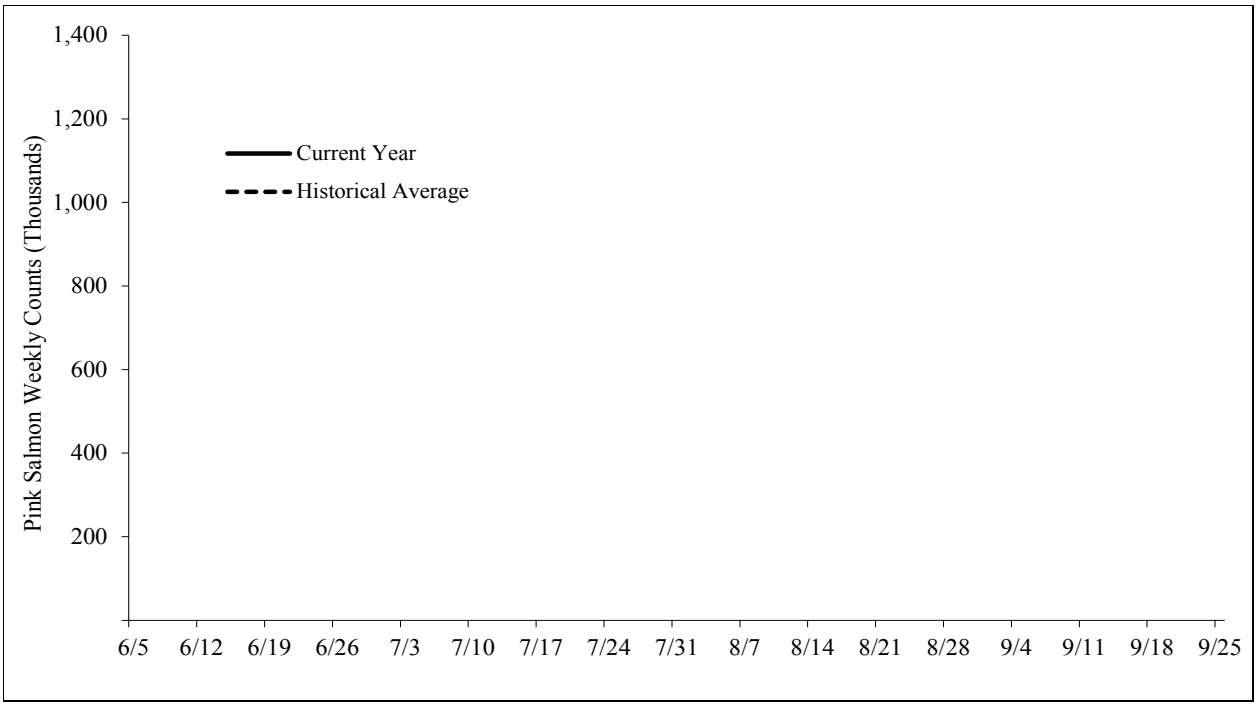
Survey Location	Statistical Area	Week Ending Dates[a] 6/5	7/3	7/17	7/24	7/31	8/7	8/14	8/21	8/28	9/4	9/11	9/18	9/25	Escapement Index[b]
Montague Strait	227-10					2,200	12,235	1,565	87,150	53,275	32,215	24,776			38,538
Green Is.	227-20					4,060	2,050	500	43,800	89,350	8,000	2,127			106,284
Montague District						6,260	14,285	2,065	130,950	142,625	40,215	26,903			144,821
Orca Is. & East Hawkins	228-10				0		0	0	2,800		400	15			2,233
Hawkins Cutoff	228-20				1,600		3,000	0	30,400	40,700		5			33,249
North Hawkins & Canoe Pass.	228-30				3,495		11,700	4,000	78,900		22,050	223			65,012
Double Bay	228-40				400		0	0	54,400	54,301		10			44,675
Johnstone Point	228-50				600		0	400	5,800	7,050		832			4,767
Port Etches	228-60				15,400	1,500	251,400	0	49,300	159,400		56,600		200	160,739
Southeastern District					21,495	1,500	266,100	4,400	221,600	261,451	22,450	57,685		200	310,676
Upper Unakwik Inlet	229-10	0		0	0	100	0		300		1,200		0		988
Unakwik District		0		0	0	100	0		300		1,200		0		988
TOTAL OF 9 DISTRICTS		0	0	2,542	100,840	313,045	862,540	500,115	1,194,265	417,123	803,708	91,211	91,387	44,330	1,916,910

Note: NS = No survey due to run timing or bad survey conditions; NC= No count because of stream conditions (i.e., water clarity).

[a] There are 215 streams in the aerial survey program. All streams are flown at least once a week as run timing dictates. During the peak of the run, streams may be flown twice a week for timely escapement data. When more than one survey per week was flown the weekly observation is the average of the two counts if observing conditions during both were good, or the maximum of the two counts if conditions during the minimum count were poor.

[b] The escapement index is based on a geometric method used since the inception of the systematic survey program in the early 1960s. In this method, aerial observers are assumed to count without error or bias. Linear interpolations between observations are used to estimate numbers of fish in the stream on days when no surveys are flown. All daily observations and interpolations are summed across the season. Because fish seen on day i+1 may include fish seen on day i, the sum of all daily observations and interpolations must be divided by some residence time for fish in the streams to account for duplicate observations. The residence time of 17.5 days has historically been used in this calculation and is from tagging studies completed by National Marine Fisheries Service on Olsen Creek in the early 1960s. Because observer bias does occur and because both observer bias and stream life are stream specific, escapement indices in this table may be used for interannual comparisons, but should not be interpreted as the true escapement.

Appendix D7.–Current year and historical weekly pink salmon escapement performance of index spawning streams, 2010.



Appendix D8.–Total chum salmon harvests and escapement indices, including hatchery sales harvests and broodstock, 1965–2010.

	Chum Salmon Escapements [a]									Hatchery		Common Property	Total
Year	Eastern	Northern	Coghill	Northwest	Eshamy	Southwest	Montague	Southeast	Total	Sales	Brood	Harvest [b]	Run [c]
1965	69,180	20,980	20,768	18,907	0	1,829	17,500	46,480	195,644			201,043	396,687
1966	75,690	24,870	10,540	5,770	0	2,180	14,100	9,410	142,560			426,628	569,188
1967	74,570	23,270	7,450	1,670	0	6,200	4,980	9,070	127,210			274,234	401,444
1968	48,960	10,620	8,780	800	0	580	220	4,610	74,570			342,939	417,509
1969	58,690	17,340	8,410	780	0	0	0	6,320	91,540			320,977	412,517
1970	34,430	4,020	11,880	2,720	0	550	0	7,950	61,550			230,661	292,211
1971	49,730	11,870	6,600	5,600	100	1,430	27,990	6,450	109,770			574,265	684,035
1972	112,950	70,760	28,160	22,980	0	4,010	3,340	26,990	269,190			45,370	314,560
1973	213,170	140,030	72,610	13,250	0	1,020	3,110	48,080	491,270			729,839	1,221,109
1974	72,010	55,510	29,280	6,580	0	240	80	3,200	166,900			88,544	255,444
1975	30,040	8,910	3,640	430	0	1,280	140	2,850	47,290			100,479	147,769
1976	16,031	23,971	31,398	2,000	0	0	0	100	73,500			370,478	443,978
1977	38,710	33,719	79,957	7,270	0	400	0	6,149	166,205			575,839	742,044
1978	92,065	25,715	15,966	15,884	0	500	0	6,100	156,230			485,147	641,377
1979	48,212	18,850	7,823	6,026	0	0	0	3,914	84,825			324,040	408,865
1980	21,595	17,836	20,919	1,800	0	2,500	270	7,193	72,113	6		412,948	485,067
1981	67,702	28,231	2,389	14,135	0	650	0	15,630	128,737	118		1,745,869	1,874,724
1982	151,529	60,354	21,586	11,036	0	1,300	0	15,950	261,755	0	86,200	1,335,368	1,683,323
1983	109,414	78,610	55,127	26,017	0	2,000	0	14,407	285,575	0	44,000	1,030,546	1,360,121
1984	97,001	48,466	13,500	5,150	0	0	0	4,625	168,742	4,886	3,000	1,196,785	1,373,413
1985	37,310	24,561	14,514	10,256	0	500	20	2,450	89,611	3,840	0	1,302,090	1,395,541
1986	129,882	46,263	16,300	20,743	0	1,987	0	12,363	227,538	20,683	12,523	1,662,366	1,923,110
1987	189,855	27,134	22,472	25,571	0	1,150	300	46,420	312,902	2,549	15,574	1,902,063	2,233,088
1988	255,515	78,297	42,536	41,468	0	2,055	500	64,609	484,980	42,694	108,271	1,792,616	2,428,561
1989	115,385	44,823	22,434	25,252	300	10,891	0	20,574	239,659	129,551	74,513	862,551	1,306,274
1990	109,072	126,480	20,494	33,421	50	3,945	957	7,241	301,660	24,554	107,284	935,284	1,368,782
1991	66,483	18,153	7,055	9,034	0	2,075	925	9,203	112,928	13,471	114,814	318,435	559,648

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	Chum Salmon Escapements [a]									Hatchery		Common Property	Total
Year	Eastern	Northern	Coghill	Northwest	Eshamy	Southwest	Montague	Southeast	Total	Sales	Brood	Harvest [b]	Run[c]
1992	47,292	12,458	7,583	10,258	300	2,940	784	3,891	85,506	57,392	183,940	271,176	598,014
1993	49,904	19,265	7,404	17,692	0	1,250	30	19,173	114,718	475,148	140,330	706,196	1,436,392
1994	40,476	23,942	14,176	12,992	100	2,225	0	4,057	97,968	380,365	114,654	677,848	1,270,835
1995	75,655	28,899	11,596	4,883	0	2,250	1,000	23,200	147,483	231,539	172,542	486,510	1,038,074
1996	137,908	55,568	19,669	24,405	0	2,231	5,216	47,334	292,331	1,066,705	253,751	1,011,291	2,624,078
1997	93,146	19,429	3,101	8,387	0	800	4,000	43,274	172,137	811,179	178,933	1,413,546	2,575,795
1998	86,227	28,867	22,764	7,553	0	1,602	10,690	52,103	209,806	519,215	179,875	747,672	1,656,568
1999	242,713	36,886	5,057	4,544	0	2,393	8,725	36,181	336,499	777,180	207,073	2,186,658	3,507,410
2000	196,253	23,655	20,488	10,150	16	11,440	66,202	34,969	363,173	1,729,876	85,441	3,428,521	5,607,011
2001	198,683	75,473	13,388	6,373	700	5,187	10,408	37,526	347,738	936,028	171,046	2,153,920	3,608,732
2002	94,046	30,531	7,430	16,194	60	3,985	565	104,906	257,717	2,580,936	209,833	3,760,934	6,809,420
2003	198,921	44,565	19,729	12,736	110	12,373	9,015	116,131	413,580	1,540,227	200,933	3,981,763	6,136,503
2004	108,833	42,456	9,685	10,371	0	1,810	4,170	42,344	219,669	528,676	208,795	1,473,242	2,430,382
2005	113,135	30,657	11,979	12,696	500	1,951	0	25,547	196,465	535,773	280,881	1,461,146	2,474,265
2006	109,403	52,069	15,900	25,860	660	7,293	10,642	26,739	248,565	824,558	217,146	1,356,997	2,647,266
2007	123,814	49,740	14,052	10,778	69	4,095	16,648	60,464	279,660	1,099,730	173,452	2,479,210	4,032,052
2008	74,740	38,798	39,660	28,051	0	3,090	5,085	21,614	211,038	472,905	148,747	4,235,043	5,067,733
2009	84,636	18,578	5,208	14,146	69	9,917	17,733	86,528	236,815	465,427	156,835	2,612,300	3,471,377
2010	91,514	38,382	51,589	30,074	62	10,523	13,010	85,138	320,291	754,805	183,926	3,567,286	4,826,308
Avg.	98,967	38,258	19,631	13,102	67	2,970	5,616	27,814	206,426	517,097	139,114	1,252,145	1,894,752

[a] Coghill and Northwestern District escapement numbers correspond to current district boundaries. The Northern District includes Unakwik District counts.

[b] Includes the commercial common property harvest of both wild and hatchery stocks. Does not include hatchery sales harvests.

[c] Represents the sum of the common property harvest, hatchery sales and brood(including roe recovery), plus the escapement index. Does not account for wild stock escapement into nonindex streams.

Appendix D9.–Weekly aerial survey indices of chum salmon escapement by statistical area, 2010.

Survey Location	Statistical Area	Week Ending Dates[a] 6/5	7/3	7/17	7/24	7/31	8/7	8/14	8/21	8/28	9/4	9/11	9/18	9/25	Escapement Index[b]
Orca Inlet	221-10		0	0	1,210	0	2,350	5,000	2,300	0	0	0			5,322
Simpson & Sheep Bay	221-20	0	0	100	1,100	3,640	200		7,400		8,940			0	13,017
Port Gravina	221-30	60	720	2,200	6,400	20,330	16,500		13,000		13,015		0	0	33,387
Port Fidalgo	221-40	0			1,510	13,295	1,900		10,000		9,610		0	1,500	19,634
Valdez Arm	221-50	0	0	250	7,050	3,850	900		16,000		5,975		350	15	20,153
Port Valdez	221-61		0	0					0						0
Eastern District		60	720	2,550	17,270	41,115	21,850	5,000	48,700	0	37,540	0	350	1,515	91,514
Columbia & Long Bay	222-10		0	330	9,000	3,950	3,000		0		905		0		9,307
Wells Bay & Unakwik Inlet	222-20	0	40	400	6,050	11,330	14,310	7,300	19,000		7,720		56		26,484
Eaglek Bay	222-30			0	0	1,235	2,140	1,140	100		810		25		2,417
Northern District		0	40	730	15,050	16,515	19,450	8,440	19,100		9,435		81		38,207
West Side Port Wells	223-10			0	0	1,550	17,360	24,340	26,400		5,125		120		28,490
Esther Passage	223-20			0	0	0	120	45	0		35		5		145
College Fiord	223-30			0	0	2,000	8,000	15,000	20,000		10,000		0		22,953
Coghill District				0	0	3,550	25,480	39,385	46,400		15,160		125		51,589
Passage Canal & Cochrane	224-10			0	0	1,210	7,980	5,425	8,000		85		5		8,896
Culross Passage	224-30			0	0	0	1,010	400	0		0		15		648
Port Nellie Juan	224-40			0	0	70	725	2,210	24,300		0		2		20,529
Northwestern District				0	0	1,280	9,715	8,035	32,300		85		22		30,074
Main Bay	225-20			0	0	0	0	0	10		0		0		7
Eshamy Bay	225-30			0	0	0	5	40	35		0		0		56
Eshamy District				0	0	0	5	40	45		0		0		62
Herring Bay	226-10			0	0	0	0		15				0		34
Chenega Is. & Dangerous Pass.	226-20					8,630	1,455	2,395	4,155	0	0	2			9,098
East Knight Is.	226-30					0	700	800	220		0	0			1,110
Bainbridge & Latouche	226-40					0	95	150	220	0	0	0			261
Port Bainbridge	226-50					0	10	15	10	0	0	0			20
Southwestern District				0	0	8,630	2,260	3,360	4,620	0	0	2	0		10,523
Montague Strait	227-10					200	6,880	16,950	0	0	0	0			1,146
Green Is.	227-20					70	11,035	5,210	0	0	0	0			11,864
Montague District						270	17,915	22,160	0	0	0	0			13,010

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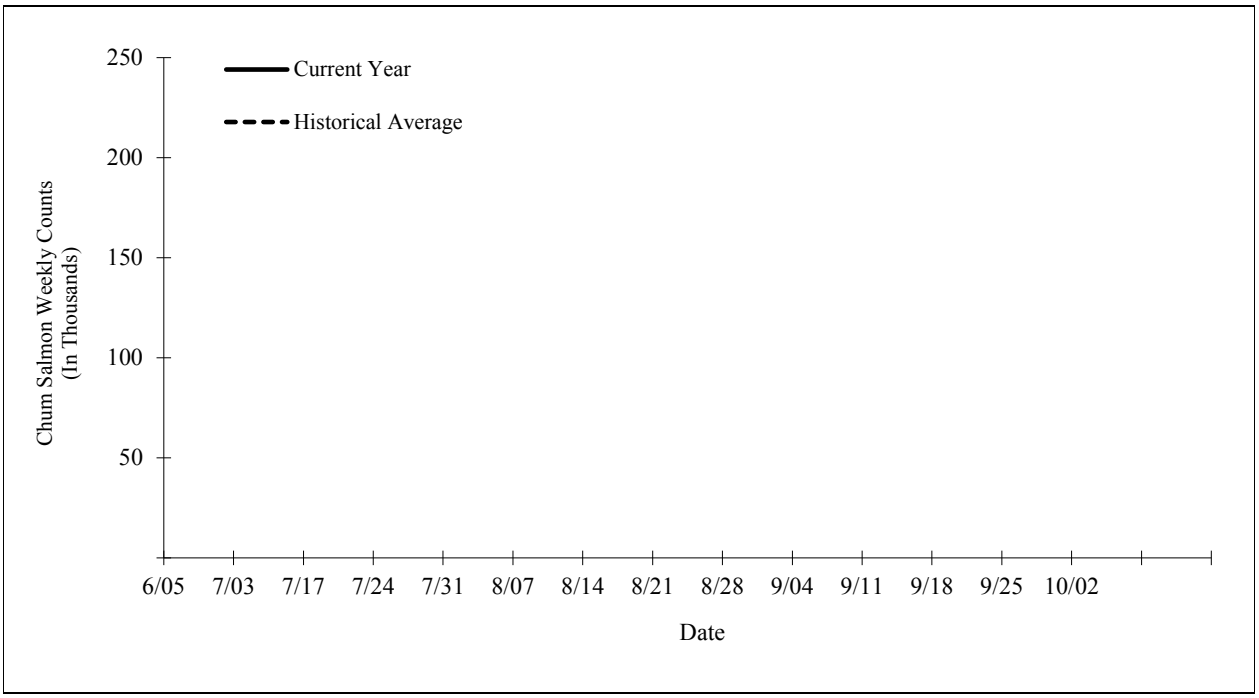
Survey Location	Statistical Area	Week Ending Dates[a] 6/5	7/3	7/17	7/24	7/31	8/7	8/14	8/21	8/28	9/4	9/11	9/18	9/25	Escapement Index[b]
Orca Is. & East Hawkins	228-10				0		160	3,800	0		0	0			2,376
Hawkins Cutoff	228-20				630		1,650	17,000	0	0		0			7,888
North Hawkins & Canoe Pass.	228-30				90		1,480	27,500	0		1,180	0			15,518
Double Bay	228-40				80		21,300	21,400	0	0		0			17,437
Johnstone Point	228-50				225		3,550	3,515	0	0		0			3,046
Port Etches	228-60				2,705	1,500	11,540	61,200	15,000	0		0		0	38,873
Southeastern District					3,730	1,500	39,680	134,415	15,000	0	1,180	0		0	85,138
Upper Unakwik Inlet	229-10	0		0	0	0	0		300		0		0		174
Unakwik District		0		0	0	0	0		300		0		0		174
TOTAL OF 9 DISTRICTS		60	760	3,280	36,050	72,860	136,355	220,835	166,465	0	63,400	2	578	1,515	320,291

Note: NS = No survey due to run timing or bad survey conditions; NC= No count because of stream conditions (i.e., water clarity).

[a] There are 215 streams in the aerial survey program. All streams are flown at least once a week as run timing dictates. During peak pink salmon runs streams may be flown twice a week for timely escapement data. When more than one survey per week was flown the weekly observation is the average of the two counts if observing conditions during both were good or, the maximum of the two counts if conditions during the minimum count were poor.

[b] The escapement index is based on a geometric method used since the inception of the systematic survey program in the early 1960s. In this method, aerial observers are assumed to count without error or bias. Linear interpolations between observations are used to estimate numbers of fish in the stream on days when no surveys are flown. All daily observations and interpolations are summed across the season. Because fish seen on day i+1 may include fish seen on day i, the sum of all daily observations and interpolations must be divided by some residence time for fish in the streams to account for duplicate 'observations. The residence time of 17.5 days has historically been used in this calculation and is from tagging studies completed by National Marine Fisheries Service on Olsen Creek in the early 1960s. Because observer bias does occur and because both observer bias and stream life are stream specific, escapement indices in this table may be used for interannual comparisons, but should not be interpreted as the true escapement.

Appendix D10.–Current year and historical weekly chum salmon escapement performance of index spawning streams, 2010.



Appendix D11.–Aerial survey escapement indices of sockeye salmon from selected systems, 2010.

	Stream	Week Ending Date [a]										
		27	29	30	31	32	33	34	36	37	38	39
System Name	Number	7/3	7/17	7/24	7/31	8/7	8/14	8/21	9/4	9/11	9/18	9/25
Billy's Cr.	218	950	25	800		25		5	30		10	
Cowpen Cr.	242			20	20	10			100		175	
Miners River	244				200	320		345			20	
Red Cr.	300					30	10		10			
Cochrane Creek	461							10	10			
Shrode Cr.	476		40	210		250	1,400	450	520		250	
Gumboot Cr.	507							5				
Jackpot River	608					330	480	930	75	45		
Brizgaloff Cr	623					10						
Bainbridge	630				600	520	560	400	10	45		
Shelter Bay	662											3
Total		950	65	1,030	820	1,495	2,450	2,145	755	90	455	3

[a] Counts are obtained in conjunction with the pink and chum salmon aerial survey program. Many of these sockeye salmon systems are difficult to survey by air, thus counts may not represent total live abundance at a particular time.

Appendix D12.–Temporally stratified age and sex composition of chum salmon harvested in the Prince William Sound commercial purse seine common property fishery, 2010.

				Brood Year and Age Class					
				2007	2006	2005	2004	2003	
				0.2	0.3	0.4	0.5	0.6	Total [a]
Coghill District [b]									
Stratum dates:	05/24	-	09/15						
Sampling date:	06/03	-	07/21						
Sample size:	1,958								
Female	Percentage of sample			0.1	50.3	5.4	0.2	0.1	56.0
	Number in harvest			2	1,613	174	7	2	1,797
Male	Percentage of sample			0.2	37.6	5.9	0.2	0.0	43.8
	Number in harvest			5	1,207	188	5	0	1,405
Total	Percentage of sample			0.2	87.9	11.3	0.4	0.1	100.0
	Number in harvest			7	2,820	362	11	2	3,207
SW District									
Stratum dates:	05/27	-	09/15						
Sampling date:	06/18	-	06/18						
Sample size:	337								
Female	Percentage of sample				33.8	25.2	1.8		60.8
	Number in harvest				56,311	41,986	2,964		101,261
Male	Percentage of sample				22.6	16.3	0.3		39.2
	Number in harvest				37,541	27,168	494		65,203
Total	Percentage of sample				56.4	41.5	2.1		100.0
	Number in harvest				93,852	69,154	3,458		166,464
All Districts Combined									
Strata Combined:	05/24	-	09/15						
Sampling dates:	06/03	-	07/21						
Sample size:	2,295								
Female	Percentage of sample			0.0	34.1	24.8	1.8		60.7
	Number in harvest			2	57,925	42,160	2,970		103,058
Male	Percentage of sample			0.0	22.8	16.1	0.3		39.3
	Number in harvest			5	38,748	27,356	499		66,608
Total	Percentage of sample			0.0	57.0	41.0	2.0		100
	Number in harvest			7	96,673	69,516	3,469		169,666

[a] Total harvest for the Coghill District represents fish harvested in the commercial common property purse seine fishery.

[b] All samples were taken from the Coghill District commercial common property drift gillnet harvest.

Appendix D13.–Summary of commercial purse seine salmon fishery periods, dates, duration and emergency orders issued by district, 2010.

Eastern (221)			Northern (222)			Coghill (223)			Northwestern (224)			Southwestern (226)			Montague (227)			Southeastern (228)			Unakwik (229)[a]			Emergency
Date	Hours		Date	Hours		Dates	Hours		Dates	Hours		Date	Hours		Dates	Hours		Date	Hours		Date	Hours		Orders
												05/27-5/30	84	abc										2-F-E-006-10
												05/31-06/02	60	ab										2-F-E-011-10
												06/03-06/06	84	ab										2-F-E-011-10
												06/07-06/09	60	ab										2-F-E-011-10
												06/10-06/13	84	ab										2-F-E-011-10
												06/14-06/16	60	ab							06/14-06/15	24	a	2-F-E-011-10, 2-F-E-023-10
												06/17-06/20	84	bd							06/17-06/18	24	a	2-F-E-031-10, 2-F-E-025-10
												06/21-06/23	60	be							06/21-06/22	24	a	2-F-E-032-10, 2-F-E-028-10
												06/24-06/25	24	be							06/24-06/25	24	a	2-F-E-036-10, 2-F-E-034-10
												06/25-06/27	48	be										2-F-E-037-10
												06/27-06/30	84	bf										2-F-E-041-10
																					06/28-06/29	24	a	2-F-E-039-10
												07/01-07/04	84	bf							07/01-07/02	24	a	2-F-E-045-10, 2-F-E-043-10
												07/05-07/07	60	bf							07/05-07/06	24	a	2-F-E-051-10, 2-F-E-049-10
07/07	12	abcde																						2-F-E-052-10
												07/08-07/11	84	bf							07/08-07/09	36	a	2-F-E-060-10, 2-F-E-054-10
07/09	12	abdef																						2-F-E-133-10
												07/12-07/14	60	bf							07/12-07/13	36	a	2-F-E-058-10, 2-F-E-056-10
07/13	14	abdef																						2-F-E-059-10
07/14	14	abdef																						2-F-E-059-10
07/15	14	abdef										07/15-07/18	84	bf							07/15-07/16	36	a	2-F-E-061-10, 2-F-E-134-10, 2-F-E-063-10
07/16	14	abdeg																						2-F-E-061-10
07/17	14	abdef																						2-F-E-061-10
07/18	14	abdhe																						2-F-E-066-10
07/19	14	bdefi										07/19-07/21	60	bf							07/19-07/20	36	a	2-F-E-066-10, 2-F-E-065-10
07/20	14	bdefj																						2-F-E-067-10
07/21	14	bdefj				7/21	20	a																2-F-E-067-10, 2-F-E-066-10
07/22	14	bdefj	07/22	36	ab	7/22	14	a				7/22	14	be							7/22	14	a	2-F-E-068-10, 2-F-E-069-10
07/23	14	bdefj				7/23	14	a				7/23	14	be										2-F-E-068-10
07/24	14	bdefj				7/24	14	a				7/24	14	be										2-F-E-068-10
						7/25	14	ab				7/25	14	be										2-F-E-082-10
																					7/26	14	a	2-F-E-071-10
07/27	14	bdejk				07/27	14	b																2-F-E-081-10, 2-F-E-082-10
07/28	14	bdejml																						2-F-E-083-10
07/29	14	bdejk																						2-F-E-081-10
07/30	14	bdejk																						2-F-E-081-10
07/31	14	bdiklq													07/31	14	a							2-F-E-083-10
08/01	14	bdejkn	08/01	14	cde	08/01	14	c				08/01	14	g										2-F-E-084-10
08/02	14	bdejk																						2-F-E-084-10
08/03	14	bdejkn	08/03	14	cdf	08/03	14	d				08/03	14	hi										2-F-E-085-10
08/04	14	bdejk																						2-F-E-085-10
08/05	14	bdejkn	08/05	14	cdg	08/05	14	d				08/05	14	hi										2-F-E-086-10
08/06	14	bdejkn	08/06	14	cdgh	08/06	14	d				08/06	14	hij										2-F-E-086-10
08/07	14	bdejkn	08/07	14	cdg	08/07	14	d				08/07	14	hi										2-F-E-086-10
08/08	17	no	08/08	17	dfi	08/08	17	ef	08/08	17	a	08/08	17	hi				08/08	17	a				2-F-E-091-10
08/09	17	no	08/09	17	dfi	08/09	17	ef	08/09	17	a	08/09	17	hijk				08/09	17	a				2-F-E-091-10
08/10	17	no	08/10	17	dfi	08/10	17	ef	08/10	17	a	08/10	17	hi				08/10	17	a				2-F-E-091-10
08/11	17	no	08/11	17	dfi	08/11	17	ef	08/11	17	a	08/11	17	hi				08/11	17	a				2-F-E-091-10
08/12	17	no	08/12	17	dgi	08/12	17	ef	08/12	17	a	08/12	17	hl				08/12	17	a				2-F-E-092-10
08/13	17	no	08/13	17	dgi	08/13	17	ef	08/13	17	a	08/13	17	hijk				08/13	17	a				2-F-E-092-10
08/14	17	no	08/14	17	dgi	08/14	17	ef	08/14	17	a	08/14	17	hl				08/14	17	a				2-F-E-092-10

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Eastern (221)			Northern (222)			Coghill (223)			Northwestern (224)			Southwestern (226)			Montague (227)		Southeastern (228)			Unakwik (229)		Emergency
Date	Hours		Date	Hours		Dates	Hours		Dates	Hours		Date	Hours		Dates	Hours	Date	Hours		Date	Hours	Orders
08/15	17	no	08/15	17	dgi	08/15	17	fg	08/15	17	a	08/15	17	hm			08/15	17	a			2-F-E-097-10
08/16	17	no	08/16	17	dgi	08/16	17	fg	08/16	17	a	08/16	17	hm			08/16	17	a			2-F-E-097-10
08/17	17	no	08/17	17	dei	08/17	17	fg	08/17	17	a	08/17	17	hl			08/17	17	a			2-F-E-097-10
08/18	17	no	08/18	17	dei	08/18	17	fg	08/18	17	a	08/18	17	hl			08/18	17	a			2-F-E-097-10
08/19	17	no	08/19	17	deij	08/19	17	fh	08/19	17	a	08/19	17	gh			08/19	17	a			2-F-E-101-10
08/20	17	no	08/20	17	deij	08/20	17	fh	08/20	17	a	08/20	17	gh			08/20	17	a			2-F-E-101-10
08/21	17	no	08/21	17	deij	08/21	17	fh	08/21	17	a	08/21	17	gh			08/21	17	a			2-F-E-101-10
08/22	17	n	08/22	17	ei	08/22	17	hi	08/22	17	a	08/22	17	no			08/22	17	a			2-F-E-104-10
08/23	17	n	08/23	17	ei	08/23	17	hi	08/23	17	a	08/23	17	hop			08/23	17	a			2-F-E-104-10
08/24	17	n	08/24	17	ei	08/24	17	hi	08/24	17	a	08/24	17	hoqr			08/24	17	a			2-F-E-105-10
08/25	17	n	08/25	17	ei	08/25	17	hi	08/25	17	a	08/25	17	hop			08/25	17	a			2-F-E-105-10
08/26	17	n	08/26	17	ei	08/26	17	hi	08/26	17	a	08/26	17	ors			08/26	17	a			2-F-E-106-10
08/27	17	n	08/27	17	ei	08/27	17	hi	08/27	17	a	08/27	17	hopq			08/27	17	a			2-F-E-106-10
08/28	17	n	08/28	17	ei	08/28	17	hi	08/28	17	a	08/28	17	hopq			08/28	17	a			2-F-E-106-10
08/29	17	n	08/29	17	ei	08/29	17	hi	08/29	17	a	08/29	17	hopq			08/29	17	a			2-F-E-111-10
08/30	17	n	08/30	17	ei	08/30	17	hi	08/30	17	a	08/30	17	hopq			08/30	17	a			2-F-E-111-10
08/31	17	n	08/31	17	ei	08/31	17	ij	08/31	17	a	08/31	17	hopq			08/31	17	a			2-F-E-112-10
09/01	17	n	09/01	17	ei	09/01	17	ij	09/01	17	a	09/01	17	hopq			09/01	17	a			2-F-E-112-10
09/02	16	p	09/02	16	fi	09/02	16	ij	09/02	16	a	09/02	16	ghqt			09/02	16	a			2-F-E-113-10
09/03	16	p	09/03	16	fi	09/03	16	ij	09/03	16	a	09/03	16	ghqt			09/03	16	a			2-F-E-113-10
09/04	16	p	09/04	16	fi	09/04	16	ij	09/04	16	a	09/04	16	ghqt			09/04	16	a			2-F-E-113-10
09/05	16	q	09/05	16	ik	09/05	16	ij	09/05	16	a	09/05	16	abhqt			09/05	16	a			2-F-E-116-10
09/06	16	q	09/06	16	ik	09/06	16	ij	09/06	16	a	09/06	16	abhqt			09/06	16	a			2-F-E-116-10
09/07	16	cdeq	09/07	16	ik	09/07	16	ij	09/07	16	a	09/07	16	abhqt			09/07	16	a			2-F-E-116-10
9/8-9/10	48	cder	9/8-9/10	48	ik	9/8-9/10	48	ij	9/8-9/10	48	a	9/8-9/10	48	abhqt			9/8-9/10	48	a			2-F-E-116-10, 2-F-E-117-10
9/11-9/15	110	cder	9/11-9/15	110	ik	9/11-9/15	110	ij	9/11-9/15	110	a	9/11-9/15	110	abhqt			9/11-9/15	110	a			2-F-E-118-10
9/16-9/18	62	cder	9/16-9/18	62	ik	9/16-9/18	62	ij	9/16-9/18	62	a	9/16-9/18	62	abhqt			9/16-9/18	62	a			2-F-E-119-10
9/19-9/22	86	cder	9/19-9/22	86	ik	9/19-9/22	86	ij	9/19-9/22	86	a	9/19-9/22	86	abhqt			9/19-9/22	86	a			2-F-E-120-10

Note: Footnoted explanations of Emergency Order activity are provided below, ordered by district.

Eastern District

[a] Waters of the Eastern District north of a line from 61º 02.855'N., 146º 44.204'W. to 61º 02.373'N., 146º 43.407'W. to 61º 02.992'N., 146º 39.165'W. were open.

[b] Waters in Port Valdez north of a line from 61º 07.452'N., 146º 23.751'W. to 61º 07.452'N., 146º 29.799'W. were closed.

[c] Waters inside of a line from the brown oil boom container van between Solomon Gulch Hatchery and Allison Point, along the yellow SERVS buoys around VFDA Hatchery to the brown oil boom container east of the hatchery between VFDA and PetroStar were closed.

[d] Waters within the Valdez small boat harbor, and all waters within 50 yards of the entrance to the Valdez small harbor were closed.

[e] Regulatory closed waters north of a line between Potato Point and Entrance Point were not in effect.

[f] Waters in Port Valdez east of a line from 61º 05.00' N, 146º 21.50' W to 61º 05.70' N, 146º 21.50' W and south of a line from 61º 06.00' N, 146º 21.50' W to 61º 06.00' N, 146º 15.10' W. were closed.

[g] Waters in Port Valdez east of a line from 61º 05.00' N, 146º 21.50' W to 61º 05.70' N, 146º 21.50' W and south of a line from 61º 05.70' N, 146º 21.50' W to 61º 05.70' N, 146º 15.10' W. were closed.

[h] Waters in Port Valdez east of a line at 146º 20.00' W. Longitude were closed.

[i] Waters of the Eastern District, within Port Valdez, east of 146º 37.540' W. Longitude were open.

[j] Waters of the Eastern District, within Port Valdez, east of a line from 61º 04.89' N, 146º 37.54' W to 61º 06.73' N, 146º 38.27' W, were open.

[k] Waters in Port Valdez east of a line at 146º 22.00' W. Longitude were closed.

[l] From 6:00 am to 12:00 pm, waters in Port Valdez east of a line from 61º 05.00' N, 146º 21.50' W to 61º 06.00' N, 146º 21.50' W and south of a line from 61º 06.00' N, 146º 21.50' W to 61º 06.00' N, 146º 15.10' W., were closed.

[m] From 12:00 pm to 8:00 pm, waters in Port Valdez east of a line at 146º 22.00' W. Longitude, were closed.

[n] Waters of the Eastern District west of 146º 04.25' W. Longitude and south of a line at the latitude of Point Freemantle were open.

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[o] SHTF closed water areas were in effect.
[p] Waters of the Eastern District west of a longitude line at Sheep Point and south of a line at the latitude of Point Freemantle were open.
[q] Waters of the Eastern District west of a longitude line at Sheep Point and south of a line between Potato Point and Entrance Point were open.
[r] Waters in Port Valdez east of a line from 61º 05.00' N, 146º 21.50' W to 61º 06.00' N, 146º 21.50' W and south of a line from 61º 06.00' N, 146º 21.50' W to 61º 06.00' N, 146º 15.10' W. were closed.
[r] Waters of the Eastern District west of a longitude line at Sheep Point were open.

Northern District

[a] Waters in the Northern District, in the Perry Island Subdistrict, within Hidden Bay, west of 148º 06.00 W. Long., were open.
[b] Anadromous stream closures within Hidden Bay were not in effect.
[c] Waters of the Northern District, excluding waters south and west of a line from Point Perry to Meares Point and waters west of a line extending due south from Meares Point to the southern boundary of the Northern District were open.
[d] SHTF closed water areas were in effect.
[e] Waters of the CCH THA and SHA were closed.
[f] Waters of the CCH SHA north and east of a line from 61º 00.970' N. Lat., 147º 32.620' W. Long. southward to a point on the shore at 61º 00.444' N. Lat., 147º 31.497' W. Long. were closed.
[g] Waters of the CCH SHA were closed.
[h] Waters in the Northern District, in the Perry Island Subdistrict, within Hidden Bay, west of 148º 06.40 W. Long., were open.
[i] Waters of the Northern District were open.
[j] Waters of the CCH Subdistrict north of 60º 58.00' N. Lat. were closed.
[k] Anadromous stream closures within the CCH THA and SHA were not in effect.

Coghill District

[a] Waters in the Esther Subdistrict north of 60° 46.10'N. Latitude and west of 147º 55.10' W. Long, including the WNH THA and SHA to a line of buoys in front of the barrier seine were open to purse seine and drift gillnet.
[b] Waters of College Fjord north of Point Pakenham were open.
[c] Waters of the Esther Subdistrict, excluding waters west of the longitude of Hodgkins Point and within the WNH THA and SHA, were open to commercial purse seine and drift gillnet.
[d] Waters of the Esther Subdistrict, excluding waters south of 60° 46.10'N. Latitude and within the WNH SHA, were open to commercial purse seine and drift gillnet.
[e] Waters of the WNH SHA inside a line of buoys in front of the barrier seine were closed to purse seine and drift gillnet.
[f] Waters of the Coghill District, excluding waters of Esther pass between a line at 60º 49.510' N. Lat. and a line at 148º 03.800'W. Long., were open to purse seine and drift gillnet.
[g] Waters of the WNH SHA east and north of a line from 60º 47.823' N. Lat., 148º 05.318' W. Long. to 60º 48.054' N. Lat., 148º 05.643' W. Long. were closed to purse seine and drift gillnet.
[h] Waters of the WNH THA and SHA were closed.
[i] Waters of the Coghill District were open.
[j] Waters of the WNH SHA were closed.

Northwestern District

[a] Waters of the Northwestern District were open.

Southwestern District

[a] Waters of Sawmill Bay, including the AFK Hatchery Terminal Harvest Area (THA) and Special Harvest Area (SHA), inside of a line from 60° 03.66'N. lat., 147° 59.11' W. long. to 60° 02.63' N. lat., 148° 01.70' W. long. were open.
[b] Anadromous stream closures within the AFK Hatchery THA and SHA were not in effect.
[c] Waters of the AFK Hatchery SHA south of a line from 60° 03.38'N. lat., 148° 03.35' W. long. to 60° 02.73' N. lat., 148° 03.65' W. long. were closed.
[d] Waters of Sawmill Bay, including the AFK Hatchery Terminal Harvest Area (THA) and Special Harvest Area (SHA), inside of a line from 60° 03.66'N. lat., 147° 59.11' W. long. to 60° 02.63' N. lat., 148° 01.80' W. long. were open.
[e] Waters of Sawmill Bay, including the AFK Hatchery Terminal Harvest Area (THA) and Special Harvest Area (SHA), inside of a line from 60° 03.66'N. lat., 147° 59.11' W. long. to 60° 02.77' N. lat., 148° 01.00' W. long. to 60° 02.76' N. lat., 148° 01.66' W. long. were open.
[f] Waters within the AFK Hatchery SHA west of 148° 01.950' W long. were open.

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[g] Waters of the AFK THA were open.

[h] Waters of the Southwestern District, east of Point Helen and waters within 1 nautical mile of Latouche Island east of Pt. Grace and east of the southern tip of the Latouche Island, were open.

[i] Waters of the AFK hatchery THA and SHA east of a line from 60º 03.176' N. Lat., 148º 03.877' W. Long. to 60º 02.861' N. Lat., 148º 03.703' W. Long. were open.

[j] Waters of the Port San Juan Subdistrict and waters of Prince of Wales Passage, south of a line from 60º 12.04' N. Lat., 148º 03.03' W. Long. to 60º 09.60' N. Lat., 147º 58.59' W. Long and north of a latitude line at 60º 02.76' N. Lat., were open.

[k] Waters within one-half nautical mile of Knight Island south of 60º 14.800' N. Lat. were open.

Waters of the AFK hatchery THA and SHA north and east of a line from 60º 03.398' N. Lat., 148º 03.326' W. Long. to 60º 03.017' N. Lat., 148º 02.547' W. Long. were open.

[m] Waters of the AFK hatchery THA and SHA north and east of a line from 60º 03.398' N. Lat., 148º 03.326' W. Long. to 60º 02.842' N. Lat., 148º 03.567' W. Long. were open.

[n] Waters of the Southwestern District north of Point Helen, waters of the Port San Juan Subdistrict, waters of Bainbridge Passage north of a latitude line at 60º 07.000' N. Lat., and waters of Prince of Wales Passage, north of a latitude line at 60º 02.760' N. Lat., were open.

[o] Waters of the AFK hatchery THA and SHA were closed.

[p] Waters of the Port San Juan Subdistrict north of 60º 03.630' N. Lat. were open.

[q] Waters of the Southwestern District north of 60º 12.600' N. Lat. were open.

[r] Waters of the Port San Juan Subdistrict south of 60º 03.970' N. Lat. were open.

[s] Waters of the Southwestern District, north of Point Helen and waters within 1 nautical mile of Latouche Island east of Pt. Grace and east of the southern tip of the Latouche Island, were open.

[t] Waters of the Port San Juan Subdistrict were open.

Montague District

[a] Waters of the Port Chalmers Subdistrict, east of a line from Graveyard Point (60° 20.00' N., 147° 13.25' W.) to a point of land three miles south of Gilmour Point at 60° 13.50' N., 147° 18.00' W., were open.

[b] Waters of the Montague District were open.

Southeastern District

[a] Waters of the Southeastern District, excluding waters north and east of a line between Johnstone Pt. and Hook Point, were open.

Unakwik District

[a] All waters designated for commercial salmon fishing in the Unakwik District were open for all periods.

APPENDIX E

Appendix E1.–Summary of salmon runs to Prince William Sound and Copper River hatcheries, 2010.

Sockeye salmon [a]

Hatchery	BY 2005 Release	BY 2006 Release	2010 Forecast Run [b]	Estimated CPF Contribution	Estimated Sales Harvest Contribution [c]	Broodstock & Unharvested Contribution [d]	Estimated Total Run [e]	Eggs Collected
Gulkana hatchery I	18,751,871	20,860,000	441,878		0			30,100,000
Gulkana hatchery II	1,470,585	1,140,000	29,122	276,628	0	157,980	434,608	1,750,000
Main Bay	9,276,000	8,637,000	884,000	1,200,936	0 [f]	18,196	1,219,132	12,100,000
Total Sockeye Salmon	29,498,456	30,637,000	1,355,000	1,477,564	0	176,176	1,653,740	43,950,000

Coho salmon [a,g]

Hatchery or release site	BY 2007 Release	2010 Forecast Run [b]	Estimated CPF Contribution	Estimated Sales Harvest Contribution [c]	Broodstock & Unharvested Contribution [d]	Estimated Total Run [g]	Eggs Collected
Solomon Gulch	1,525,927	274,663	74,142	43,722	2,847	120,711	2,037,954
Wally Noerenberg	226,000	8,100	28,146	0	1,399	29,545	945,000
Total Coho Salmon	1,751,927	282,763	102,288	43,722	4,246	150,256	2,982,954

Pink salmon [a]

Hatchery	BY 2008 Release	2010 Forecast Run [b]	Estimated CPF Contribution	Estimated Sales Harvest Contribution [c]	Broodstock & Unharvested Contribution [d]	Estimated Total Run	Eggs Collected
Solomon Gulch	226,202,628	22,620,000	16,056,653	1,982,823	325,893	18,365,369	236,298,472
Armin F. Koernig	145,000,000	6,500,000	12,919,670	699,840	188,604	13,808,114	162,000,000
Wally Noerenberg	128,000,000	5,800,000	15,490,283	1,564,746	204,202	17,259,231	148,000,000
Cannery Creek	141,000,000	6,300,000	18,932,177	367,793	429,115	19,729,085	152,000,000
Total Pink Salmon	640,202,628	41,220,000	63,398,783	4,615,202	1,147,814	69,161,799	698,298,472

Chum salmon [a] 0.095228372

Hatchery or release site	BY 2004 Release	BY 2005 Release	BY 2006 Release	BY 2007 Release	2010 Forecast Run [b]	Estimated CPF Contribution	Estimated Sales Harvest Contribution [c]	Broodstock & Unharvested Contribution [d]	Estimated Total Run	Eggs Collected
Sawmill Bay	15,163,742	15,797,568	15,500,000	32,100,000	350,000			0		34,000,000
Wally Noerenberg	71,343,434	90,403,140	73,500,000	76,900,000	2,500,000	1,976,703	328,104	183,926		131,000,000
Port Chalmers	40,478,815	39,815,183	40,100,000	38,900,000	700,000	1,513,308	215,218	0	4,217,259	0
Total Chum Salmon	126,985,991	146,015,891	129,100,000	147,900,000	3,550,000	3,490,011	543,322	183,926	4,217,259	165,000,000

Total-All Salmon						68,468,646	5,202,246	1,512,162	75,183,054	910,231,426

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[a] Contribution estimates from PWSAC and VFDA hatcheries are based on analysis of otolith recoveries, historical data, and location of harvest as reported on fish tickets.

[b] Gulkana Hatchery run forecasts were completed by ADF&G; all other hatchery run forecasts were completed by Prince William Sound Aquaculture and Valdez Fisheries Development Association.

[c] Includes whole fish purse seine and raceway harvest, but does not include carcass sales from viable broodstock.

[d] Includes viable broodstock, ground fish, fish given away, holding mortalities, watershed spawners, and fish remaining in the bay after all harvests were complete.

[e] Does not include donated, discarded, and confiscated salmon.

[f] Includes Solf Lake marked sockeye salmon.

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

Appendix E2.–Sales harvests of salmon by species from private not-for-profit hatcheries in Prince William Sound as reported on fish tickets, 1977–2010.

Year	Hatchery [a]	Sockeye Sales[b]	Sockeye Broodstock Sales[c]	Coho Sales[b]	Coho Broodstock Sales[c]	Pink Sales[b]	Pink Broodstock Sales[c]	Chum Sales[b]	Chum Broodstock Sales[c]	Total
1977	AFK					15545				15545
1978	AFK					114,188				114,188
1979	AFK					223,748				223,748
1980	AFK, N					346,728		6		346,734
1981	AFK					707,037		118		707,155
1982	AFK					1,354,732				1,354,732
1983	AFK					616,963				616,963
1984	AFK, SG					415,393		4,886		420,279
1985	AFK, SG					1,209,960		3,840		1,213,800
1986	AFK, SG			2,156		905,464		20,683		928,303
1987 [d]	AFK, SG, E, CC			7,015		2,691,190		2,549		2,700,754
1988	AFK, SG, E			6,110		1,632,701		42,694		1,681,505
1989 [e]	AFK, SG, WNH, CC, MB			52,307		7,812,373		131,362		7,996,042
1990	AFK, SG, WNH, CC			14,199		8,732,658		24,554		8,771,411
1991	AFK, SG, WNH, CC			52,625		5,955,561		13,471		6,021,657
1992	AFK, SG, WNH, CC, MB	163,086		73,530		3,049,394		57,392		3,343,402
1993	AFK, SG, WNH, CC, MB	113,738		3,259		2,212,403		475,148		2,804,548
1994	AFK, SG, WNH, CC, MB	79,541		22,454		10,521,439		380,365		11,003,799
1995	AFK, SG, WNH, CC, MB	63,326		13,248		5,100,819		231,539		5,408,932
1996 [f]	AFK, SG, WNH, CC, MB	86,911		38,945		8,291,205		1,066,683		9,483,744
1997	AFK, SG, WNH, CC, MB,GH	266,335		2,933		9,854,675		811,179		10,935,122
1998	AFK, SG, WNH, CC, MB,GH	148,288		20,199		8,825,226		519,215		9,512,928
1999	AFK, SG, WNH, CC, GH	28,769		0		13,130,211		777,180		13,936,168
2000	AFK, SG, WNH, CC, MB	218		1		11,125,819		1,729,876		12,855,914
2001	AFK, SG, WNH, CC, MB	43,073		21,781		12,914,314		936,028		13,915,196
2002	AFK, SG, WNH, CC, MB	93,722		1		10,787,752		2,580,926		13,462,402
2003	AFK, SG, WNH, CC, MB	366,770		0	19,782	12,426,375	730,599	1,540,227	22,792	15,083,753
2004	AFK, SG, WNH, CC, MB	279,902		0		11,825,224		528,676		12,633,802
2005	AFK, SG, WNH, CC, MB	207,605		27,417	60,676	12,529,283	1,246,992	535,783	98,695	14,607,756
2006 [g]	AFK, SG, WNH, CC, MB	348,156		17,198	5,090	9,727,499	239,905	824,558	22,105	10,917,531
2007	AFK, SG, WNH, CC, MB	321,330	0	11,954	17,690	11,990,924	912,585	1,099,730	173,452	14,354,213
2008	AFK, SG, WNH, CC	0	0	267	22,356	6,563,243	1,076,140	478,690	162,643	8,303,339
2009	AFK, SG, WNH, CC, MB	133,873	0	17,424	0	6,760,475	1,107,515	608,541	143,114	8,770,942
10-Year Average		179,465		9,604		10,665,091		1,086,304		12,490,485
2010	AFK, SG, WNH, CC, MB	0	0	46,569	12,788	4,607,329	939,276	594,045	155,719	6,355,726

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[a] Hatcheries: N = NERKA Inc.
SG = Solomon Gulch Hatchery (VFDA).
AFK = Armin F. Koernig (PWSAC) (formerly Port San Juan Hatchery).
CC = Cannery Creek (PWSAC) (formerly operated by ADF&G).
E = Esther Hatchery (PWSAC) (renamed WNH in 1989).
WNH = Wally Noerenberg Hatchery (PWSAC) (formerly Esther Hatchery).
MB = Main Bay (PWSAC) (formerly operated by ADF&G).
GH = Gulkana Hatchery (Crosswind Lake Weir)(formerly operated by ADF&G).

[b] Salmon harvested to generate revenues to offset operating costs. Does not include broodstock sales.

[c] Includes all reported broodstock sales (carcasses from eggtakes and roe extraction).

[d] PWSAC administered a sales harvest at the state owned Cannery Creek hatchery. The majority of coho salmon sold were carcasses and surplus brood fish from the Solomon Gulch hatchery.

[e] PWSAC administered a sales harvest at the state owned Main Bay Hatchery to harvest surplus chum salmon from the closure of the common property fishery.

[f] Includes 269,848 pink salmon Peter Pan Seafoods bought from VFDA and then discarded after roe extraction. Also includes approximately 250,000 chum processed by PWSAC for meal production and roe extraction.

[g] Includes 1,227 pink salmon incidentally harvested in the MBH cost recovery fishery.

Appendix E3.–Historical thermally marked otolith releases (1998-2011), harvest contributions and total returns of pink salmon to Prince William Sound hatcheries, return years 1998–2010.

Brood Year	Return Year	Fry Release	Hatchery Contribution to Broodstock Esc. [a]	Total Sales Harvest	Hatchery Contribution to Sales Harvest	Hatchery Contribution to the CCPF [b]	Total Hatchery Return	Estimated Marine Survival
Solomon Gulch Hatchery								
1996	1998	188,862,094	295,438	3,428,348	3,076,945	1,226,679	4,599,062	2.44%
1997	1999	195,162,163	954,305	4,379,659	4,354,601	9,465,378	14,774,284	7.57%
1998	2000	213,906,642	520,934	4,033,635	3,983,473	7,635,581	12,139,988	5.68%
1999	2001	195,763,690	524,857	3,970,310	3,932,080	11,458,958	15,915,895	8.13%
2000	2002	203,897,201	420,062	4,430,173	4,368,519	360,850	5,149,431	2.53%
2001	2003	202,573,328	1,636,618	4,188,294	4,184,463	11,871,024	17,692,105	8.73%
2002	2004	206,397,607	300,362	3,782,011	3,597,708	7,262,379	11,160,448	5.41%
2003	2005	215,000,000	585,196	3,534,939	3,534,939	13,713,349	17,833,484	8.29%
2004	2006	222,218,569	481,121	3,855,271	3,762,010	4,840,097	9,083,228	4.09%
2005	2007	216,921,213	294,054	3,967,798	3,967,798	19,586,090	23,847,942	10.99%
2006	2008	220,408,302	283,434	4,267,840	4,226,915	10,946,866	15,457,215	7.01%
2007	2009	199,639,850	478,100	742,660	714,431	29,942	1,222,473	0.61%
2008	2010	226,202,628	325,893	2,035,063	1,982,823	16,056,601	18,365,317	8.12%
2009	2011	223,083,753						
Armin F. Koernig Hatchery								
1996	1998	52,384,532	643,153	1,634,956	1,582,038	5,037,454	7,262,645	13.86%
1997	1999	105,974,235	1,352,746	2,814,760	2,994,037	5,108,346	9,455,129	8.92%
1998	2000	133,156,995	235,813	2,017,913	1,998,334	4,646,469	6,880,616	5.17%
1999	2001	142,537,692	368,706	2,929,441	2,803,175	1,668,025	4,839,906	3.40%
2000	2002	150,287,930	368,694	2,285,050	2,291,770	5,098,103	7,758,567	5.16%
2001	2003	155,982,828	1,135,571	1,436,990	1,436,990	4,494,486	7,067,047	4.53%
2002	2004	146,407,222	750,252	3,485,375	2,816,777	1,293,453	4,860,481	3.32%
2003	2005	174,200,000	793,048	2,898,305	2,898,305	6,429,875	10,121,228	5.81%
2004	2006	131,197,783	459,670	2,379,170	2,364,838	2,391,723	5,216,231	3.98%
2005	2007	159,616,613	265,216	3,040,328	3,045,323	12,449,638	15,760,177	9.87%
2006	2008	179,000,000	193,982	893,600	708,534	5,209,753	6,112,269	3.41%
2007	2009	144,000,000	252,120	4,007,244	4,000,465	6,290,036	10,542,621	7.32%
2008	2010	145,000,000	188,604	704,355	699,840	12,919,310	13,807,754	9.52%
2009	2011	149,000,000						

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Brood Year	Return Year	Fry Release	Hatchery Contribution to Broodstock Esc. [a]	Total Sales Harvest	Hatchery Contribution to Sales Harvest	Hatchery Contribution to the CCPF [b]	Total Hatchery Return	Estimated Marine Survival
Wally Noerenberg Hatchery								
1996	1998	106,440,456	1,163,890	2,437,615	2,427,120	4,817,354	8,408,364	7.90%
1997	1999	103,675,208	886,277	3,860,431	3,861,891	4,828,682	9,576,850	9.24%
1998	2000	123,869,678	255,851	3,536,232	3,520,212	4,980,503	8,756,566	7.07%
1999	2001	116,069,339	325,003	4,937,169	4,949,180	1,906,503	7,180,686	6.19%
2000	2002	127,651,881	350,000	3,471,338	3,426,483	1,840,319	5,616,802	4.40%
2001	2003	106,229,524	982,982	4,400,958	4,400,958	12,422,082	17,806,022	16.76%
2002	2004	119,553,743	360,928	2,292,300	2,292,300	144,533	2,797,761	2.34%
2003	2005	110,000,000	1,043,736	3,619,170	3,619,170	4,515,479	9,178,385	8.34%
2004	2006	84,060,920	321,679	2,327,268	2,327,268	1,459,313	4,108,260	4.89%
2005	2007	84,795,328	236,438	3,472,456	3,456,332	3,831,328	7,524,098	8.87%
2006	2008	77,200,000	202,568	1,265,683	1,068,239	7,429,854	8,700,661	11.27%
2007	2009	136,000,000	242,345	1,343,506	1,316,027	1,664,792	3,223,164	2.37%
2008	2010	128,000,000	204,202	1,573,529	1,564,746	15,489,918	17,258,866	13.48%
2009	2011	136,000,000						
Cannery Creek Hatchery								
1996	1998	136,838,852	904,945	1,324,307	1,305,144	4,869,014	7,079,103	5.17%
1997	1999	137,571,564	1,293,460	2,076,361	2,014,448	5,414,942	8,722,850	6.34%
1998	2000	131,195,588	280,811	1,538,039	1,575,341	4,688,206	6,544,358	4.99%
1999	2001	132,236,317	428,859	1,089,998	1,103,072	589,171	2,121,102	1.60%
2000	2002	139,226,716	345,082	601,191	616,354	627,065	1,588,501	1.14%
2001	2003	138,626,713	551,247	2,400,133	2,400,133	5,390,008	8,341,388	6.02%
2002	2004	135,584,680	540,129	2,265,538	2,265,538	135,021	2,940,688	2.17%
2003	2005	139,400,000	590,559	2,436,874	2,436,874	10,452,306	13,479,739	9.67%
2004	2006	126,575,805	431,920	1,164,563	1,155,733	1,319,036	2,906,689	2.30%
2005	2007	138,157,160	348,619	1,443,191	1,443,191	5,638,233	7,430,043	5.38%
2006	2008	141,000,000	206,926	1,270,289	1,056,676	9,749,992	11,013,594	7.81%
2007	2009	131,000,000	340,864	667,071	644,852	2,275,948	3,261,664	2.49%
2008	2010	141,000,000	429,115	374,792	367,793	18,931,980	19,728,888	13.99%
2009	2011	139,000,000						

[a] Includes broodstock (for eggtake and roe extraction), ground fish, fish given away, holding mortalities, watershed spawners, and fish remaining in the bay after all harvests were complete.

[b] Commercial common property fisheries.

Appendix E4.–Historical harvest contributions, coded wire tag (CWT) and thermally marked otolith releases, and total returns of pink salmon to all hatcheries combined, 1977–2010.

Brood Year (BY)	Return Year	Fry Release [b]	CWT/Otolith Applied to Fry Release [c] [d]	Hatchery Contributions[a] Hatchery Cost Recovery Harvest [d]	Commercial Common Property Harvest	Other Harvests [e]	Broodstock Escapement [f]	Total Return	Estimated Marine Survival
1975	1977	1,000,000	0	7,745	4,000	0	16,112	27,857	2.79%
1976	1978	11,010,577	0	114,188	0	0	40,432	154,620	1.40%
1977	1979	16,950,784	0	223,748	275,000	0	54,207	552,955	3.26%
1978	1980	25,600,739	0	346,728	1,092,048	0	145,061	1,583,837	6.19%
1979	1981	24,194,000	0	707,037	1,430,747	0	268,501	2,406,285	9.95%
1980	1982	91,076,000	0	1,354,732	4,303,900	0	239,945	5,898,577	6.48%
1981	1983	91,951,000	0	686,963	3,338,366	0	258,062	4,283,391	4.66%
1982	1984	115,107,533	0	415,393	3,313,423	0	341,259	4,070,075	3.54%
1983	1985	116,336,000	0	1,209,960	6,259,923	0	640,340	8,110,223	6.97%
1984	1986	191,306,265	0	905,464	5,662,315	0	466,471	7,034,250	3.68%
1985	1987	231,538,713	646,561	2,691,190	14,197,065	0	1,158,908	18,047,163	7.79%
1986	1988	218,830,647	568,688	1,632,701	8,748,000	0	824,302	11,205,003	5.12%
1987	1989	532,045,966	939,498	5,767,911	10,561,099	0	856,927	19,052,529 [g]	3.58%
1988	1990	507,688,297	1,074,099	6,691,160	24,379,475	0	749,910	33,315,579 [g]	6.56%
1989	1991	615,139,948	1,128,899	5,201,860	20,900,355	3,573,805	1,324,255	32,750,955 [g]	5.32%
1990	1992	603,519,636	1,091,403	2,626,248	4,345,805	30,290	789,880	8,579,332 [g]	1.42%
1991	1993	495,700,200	823,128	1,544,727	2,392,162	14,648	921,073	6,177,575 [g]	1.25%
1992	1994	567,320,470	950,976	7,613,582	21,173,273	56,396	1,422,306	35,100,601 [g]	6.19%
1993	1995	488,575,978	941,811	4,703,457	9,072,469	78,020	1,154,635	14,475,842 [g]	2.96%
1994	1996	613,158,229	1,017,782	5,363,551	14,502,198	0	544,531	24,284,522 [g]	3.96%
1995	1997	651,675,427	1,079,354	9,780,451	14,893,055	226	1,974,521	26,648,253	4.09%
1996	1998	484,525,934	484,525,934	8,666,960	16,145,999	6,931	3,008,251	27,828,141	5.74%
1997	1999	542,356,070	542,356,934	12,988,616	24,838,848	237,318	4,529,055	42,593,837	7.85%
1998	2000	602,128,903	602,128,903	11,055,419	22,099,196	728	1,293,409	34,448,752	5.72%
1999	2001	586,607,038	586,607,038	12,765,960	15,625,341	1,204	1,647,425	30,039,930	5.12%
2000	2002	621,063,728	621,063,728	10,703,126	7,926,335	992	1,497,115	20,127,568	3.24%
2001	2003	603,412,393	603,412,393	12,422,544	34,177,600	606	4,306,418	50,907,168	8.44%
2002	2004	607,943,252	607,943,252	11,825,224	8,835,385	652	1,951,671	22,612,932	3.72%
2003	2005	638,600,000	638,600,000	12,529,283	35,111,009	272	5,013,716	52,654,280	8.25%
2004	2006	564,053,077	564,053,077	9,726,272	10,010,169	384	1,694,390	21,431,215	3.80%

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Brood Year (BY)	Return Year	Fry Release [b]	CWT/Otolith Applied to Fry Release [c] [d]	Hatchery Contributions[a] Hatchery Cost Recovery Harvest [d]	Commercial Common Property Harvest	Other Harvests [e]	Broodstock Escapement [f]	Total Return	Estimated Marine Survival
2005	2007	599,490,314	599,490,314	11,888,945	41,505,289	653	1,144,327	54,539,214	9.10%
2006	2008	617,608,302	617,608,302	7,060,364 [h]	33,336,465	715	886,910 [i]	41,284,454	6.68%
2007	2009	610,639,859	610,639,859	6,675,775 [h]	10,260,718	1,295	1,313,429 [i]	18,251,217	2.99%
2008	2010	640,202,628	640,202,628	4,691,225	65,725,418	1,152	1,147,814	71,565,609	11.18%

[a] Data from ADF&G contribution estimates. No otolith collections were made from broodstock escapements after 1999 because the 1997–1999 data indicated broodstock escapements were < 0.05 % wild stock fish. Otolith sampling has been a low priority in the hatchery cost recovery (CR) harvests since 1999 because sampling in the 1997–1999 CR harvests indicated few wild fish (< 2%). Contributions do not include harvest from the Bering and Copper River Districts.

[b] Data for BY 1985 and 1987–1995 provided by the ADF&G CWT project; Prince William Sound Aquaculture (PWSAC) provided data for all other years.

[c] Brood years 1985–1995 pink salmon were part of the ADF&G CWT project; after 1995, all hatchery pink salmon were thermally marked.

[d] Data for brood years 1985–1995 are from the ADF&G CWT project; after 1995, data obtained from otolith analysis.

[e] Includes donated, discarded, and confiscated fish in addition to all fish harvested in the Southwestern District otolith test fishery.

[f] Beginning in 1994, broodstock numbers include fish processed for roe. Broodstock escapements prior to 1997 may not include fish remaining in the bay and watershed spawners and may underestimate broodstock escapement.

[g] Revised contribution based on individual hatchery CWT adjustment factors. The individual categories were not adjusted; only the total return and estimated marine survival.

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

[i] Broodstock escarpment includes broodstock sales (carcasses from eggtake), holding mortalities, watershed spawners, and fish remaining in the bay after all harvests were complete.

Appendix E5.–Historical harvest contributions, thermally marked otolith releases, and total returns of coho salmon to Prince William Sound hatcheries, brood years 1988–2010.

Solomon Gulch Hatchery

Brood Year	Return Year	Fry Release	Hatchery Contribution to the CCPF	Hatchery Contribution to Subs/PU Harvest	Hatchery Contribution to Sport Harvest [a]	Hatchery Contribution to Broodstock Esc. [b]	Hatchery Contribution to Cost Recovery. [c]	Total Hatchery Return	Estimated Marine Survival
1988	1991	807,153	4,157	0	10,393	1,461	39,176	55,187	6.84%
1989	1992	993,633	5,000	0	17,580	2,651	26,776	52,007	5.23%
1990	1993	1,226,044	102	0	12,841	1,658	2,343	16,944	1.38%
1991	1994	461,388	0	1,000	18,633	11,376	22,091	53,100	11.51%
1992	1995	915,087	78,006	1,000	37,265	16,045	21,592	153,908	16.82%
1993	1996	1,325,316	87,360	0	42,822	21,772	13,713	165,667	12.50%
1994	1997	1,875,823	47,500	0	36,311	13,605	9,818	107,234	5.72%
1995	1998	1,315,183	23,717	1,627	37,088	3,880	19,068	85,380	6.49%
1996	1999	1,748,486	67,232	0	36,125	2,541	12,679	118,577	6.78%
1997	2000	1,863,528	342,490	3,800	67,563	1,625	24,887	440,365	23.63%
1998	2001	1,625,599	147,000	3,854	76,615	1,778	25,595	254,842	15.68%
1999	2002	1,519,328	25,017	0	53,321	21,323	8,000	107,661	7.09%
2000	2003	1,821,889	63,132	0	86,769	17,379	4,087	171,367	9.41%
2001	2004	1,275,145	26,711	0	67,298	2,585	9,897	106,491	8.35%
2002	2005	1,442,274	129,966	0	76,638	2,102	30,686	239,392	16.60%
2003	2006	1,968,366	210,382	0	69,832	2,455	16,172	298,841	15.18%
2004	2007	1,511,592	58,299	0	90,100	3,564	17,748	169,711	11.23%
2005	2008	1,973,604	154,383	0	68,927	3,101	22,356	248,767	12.60%
2006	2009	1,828,100	914	0	50,623	3,955	17,424	72,916	3.99%
2007	2010	1,525,927	2,918	0	71,224	2,847	43,722	120,711	7.91%

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Wally Noerenberg Hatchery

Brood Year	Return Year	Fry Release	Hatchery Contribution to the CCPF	Hatchery Contribution to Subs/PU Harvest	Hatchery Contribution to Sport Harvest [a]	Hatchery Contribution to Broodstock Esc. [b]	Hatchery Contribution to Cost Recovery. [c]	Total Hatchery Return	Estimated Marine Survival
1988	1991	2,397,419	71,947	0	5,788 [d]	6,469	13,990	98,194	4.10%
1989	1992	2,223,282	114,165	0	2,017 [d]	0	46,121	162,303	7.30%
1990	1993	1,831,198	39,658	0	2,279 [d]	4,857	1,532	48,326	2.64%
1991	1994	1,303,077	81,396	0	3,909 [d]	5,439	13,258	104,002	7.98%
1992	1995	1,483,936	34,680	0	2,307 [d]	4,964	5,152	47,103	3.17%
1993	1996	2,063,934	26,245	0	5,264 [d]	4,081	39,506	75,096	3.64%
1994	1997	275,406	5,626	0	3,561 [d]	5,674	0	14,861	5.40%
1995	1998	203,651	2,800	0	4,307 [d]	1,541	0	8,648	4.25%
1996	1999	407,715	338	0	4,194 [d]	2,533	0	7,065	1.73%
1997	2000	1,068,338	111,256	0	9,749 [d]	2,551	0	123,556	11.57%
1998	2001	375,670	2,488	0	13,960 [e]	3,277	0	19,725	5.25%
1999	2002	219,967	3,215	0	16,770 [e]	2,389	0	22,374	10.17%
2000	2003	485,834	9,624	0	17,858 [e]	1,314	0	28,796	5.93%
2001	2004	920,858	9,333	0	17,323 [e]	150	637	27,443	2.98%
2002	2005	989,383	53,257	0	31,023 [e]	11,450	19	95,749	9.68%
2003	2006	1,057,922	113,997	0	19,768 [e]	17,079	0	150,844	14.26%
2004	2007	1,052,897	84,867	0	33,323 [e]	2,129	11,975	132,294	12.56%
2005	2008	1,850,000	116,641	0	15,790 [e]	2,609	267	135,307	7.31%
2006	2009	1,930,000	20,209	0	14,753	2,064	0	37,026	1.92%
2007	2010	226,000	5,215	0	22,931	1,399	0	29,545	13.07%

[a] These estimates assume all coho salmon harvested in PWS are from SGH or WNH production.

[b] 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.

[c] Commercial common property fisheries.

[d] Sport fish harvest was calculated by summing coho harvest from northwest PWS and Orca Inlet as reported in the 2007 AMR for Recreational Fisheries in PWS.

[e] Sport fish harvest was calculated by summing Whittier harvest and Orca Inlet harvest as reported in the AMR for Recreational Fisheries in PWS.

Appendix E6.–Sockeye salmon hatchery and wild stock contributions to the Copper River drift gillnet commercial common property fishery by period, 2010.

Dates	Period	Hours	Origin [a] Gulkana Nr.	Gulkana Percent	Main Bay Nr.	Main Bay Percent	Hatchery Total	Wild Nr.	Wild Percent	Total
05/13 - 05/13	01 [a]	12	0	0.0%	0	0.0%	0	6,641	100.0%	6,641
05/17 - 05/17	02 [a]	12	0	0.0%	0	0.0%	0	34,962	100.0%	34,962
05/20 - 05/20	03 [b]	12	1,409	3.0%	1,978	4.2%	3,386	43,580	92.8%	46,966
05/24 - 05/24	04 [b]	12	1,240	3.0%	1,741	4.2%	2,981	38,359	92.8%	41,340
05/27 - 05/27	05 [b]	12	1,093	3.0%	1,534	4.2%	2,626	33,795	92.8%	36,421
06/07 - 06/07	06	12	1,336	3.0%	1,876	4.2%	3,212	41,333	92.8%	44,545
06/10 - 06/10	07	12	200	1.0%	0	0.0%	200	19,810	99.0%	20,010
06/14 - 06/14	08	12	1,171	6.0%	275	1.4%	1,446	18,066	92.6%	19,512
06/17 - 06/17	09	12	1,862	10.0%	196	1.1%	2,058	16,566	88.9%	18,624
06/21 - 06/21	10	12	2,753	17.0%	0	0.0%	2,753	13,440	83.0%	16,193
06/24 - 06/24	11	12	5,941	32.0%	913	4.9%	6,854	11,712	63.1%	18,566
06/28 - 06/29	12	24	9,601	42.0%	0	0.0%	9,601	13,258	58.0%	22,859
07/01 - 07/02	13	24	9,518	49.0%	202	1.0%	9,721	9,704	50.0%	19,425
07/05 - 07/06	14	36	10,353	66.0%	0	0.0%	10,353	5,334	34.0%	15,687
07/08 - 07/10	15	60	39,429	65.0%	632	1.0%	40,061	20,599	34.0%	60,660
07/12 - 07/14	16	60	31,055	59.0%	1,097	2.1%	32,151	20,484	38.9%	52,635
07/15 - 07/17	17	60	42,274	59.0%	1,666	2.3%	43,940	27,711	38.7%	71,651
07/19 - 07/21	18	48	17,210	48.0%	779	2.2%	17,990	17,865	49.8%	35,855
07/22 - 07/24	19	48	12,392	53.0%	0	0.0%	12,392	10,989	47.0%	23,381
07/26 - 07/28	20	48	9,029	63.0%	0	0.0%	9,029	5,302	37.0%	14,331
07/29 - 07/31	21 [c]	60	5,632	63.0%	0	0.0%	5,632	3,307	37.0%	8,939
08/02 - 08/04	22 [c]	48	2,174	63.0%	0	0.0%	2,174	1,277	37.0%	3,450
08/05 - 08/07	23 [c]	48	803	63.0%	0	0.0%	803	472	37.0%	1,275
08/09 - 08/10	24 [c]	36	350	63.0%	0	0.0%	350	205	37.0%	555
08/12 - 08/13	25 [c]	36	239	63.0%	0	0.0%	239	140	37.0%	379
08/16 - 08/17	26 [c]	24	202	63.0%	0	0.0%	202	119	37.0%	321
08/19 - 08/20	27 [c]	24	249	63.0%	0	0.0%	249	147	37.0%	396
08/23 - 08/24	28 [c]	24	192	63.0%	0	0.0%	192	113	37.0%	305
08/26 - 08/27	29 [c]	24	69	63.0%	0	0.0%	69	40	37.0%	109
08/30 - 08/31	30 [c]	24	52	63.0%	0	0.0%	52	31	37.0%	83
09/02 - 09/03	31 [c]	24	43	63.0%	0	0.0%	43	26	37.0%	69
09/06 - 09/07	32 [c]	24	14	63.0%	0	0.0%	14	8	37.0%	22
09/09 - 09/10	33 [c]	24	30	63.0%	0	0.0%	30	17	37.0%	47
09/13 - 09/15	34 [d]	48	0		0		0	0		0
09/16 - 09/18	35 [d]	48	0		0		0	0		0
09/20 - 09/22	36 [d]	48	0		0		0	0		0
09/23 - 09/25	37 [d]	48	0		0		0	0		0
09/27 - 09/29	38 [d]	48	0		0		0	0		0
09/30 - 10/02	39 [d]	48	0		0		0	0		0
10/04 - 10/06	40 [d]	60	0		0		0	0		0
10/07 - 10/10	41 [d]	84	0		0		0	0		0
Total			207,915	32.7%	12,888	2.0%	220,803	415,411	65.3%	636,214

[a] No samples collected. Entire harvest assigned to wild stock.

[b] No samples collected. Proportion estimates based on period 6 results.

[c] No samples collected. Proportion estimates based on period 20 results.

[d] No harvest reported.

Appendix E7.–Gulkana sockeye salmon harvests and total contribution, 1977–2010.

Year	Hatchery Contributions			Brood Stock/ Escapement[d]	Total Hatchery Run
	Commercial[a]	Subsistence/ Personal Use[b]	Sport[c]		
1977	183	12	0	122	318
1978	720	74	2	1,300	2,096
1979	900	393	9	3,425	4,727
1980	350	589	34	4,250	5,223
1981	3,600	478	13	4,650	8,741
1982	3,600	322	6	5,740	9,669
1983	6,600	1,167	23	6,502	14,292
1984	5,318	450	14	14,650	20,433
1985	31,955	2,121	114	20,680	54,870
1986	30,404	2,667	113	20,975	54,159
1987	47,347	3,071	184	28,200	78,802
1988	92,552	9,351	260	30,125	132,288
1989	175,643	13,734	534	47,075	236,986
1990	64,917	7,203	209	19,100	91,429
1991	102,009	9,449	228	40,659	152,346
1992	87,120	11,455	261	32,396	131,232
1993	149,844	14,812	370	97,249	262,274
1994	94,656	9,157	175	69,750	173,738
1995	147,844	15,289	343	65,640	229,116
1996	314,916	16,144	855	145,903	477,818
1997	266,724	8,857	190	129,017	404,788
1998	524,985	31,824	1,045	119,130	676,984
1999	945,287	42,281	861	130,735	1,119,163
2000	366,372	34,113	1,006	73,115	474,606
2001	196,326	35,699	369	80,485	312,879
2002	335,451	28,305	585	60,254	424,595
2003	138,056	19,513	263	44,961	202,793
2004	59,540	27,117	184	6,695	93,537
2005	95,897	28,031	223	91,058	215,209
2006	163,691	26,860	179	96,552	287,282
2007	94,232	9,656	97	27,602	131,587
2008	21,669	19,175	229	47,667	88,740
2009	59,948	29,355	371	43,409	133,083
10-Year Average	153,118	25,782	351	57,180	236,431
2010	207,915	68,180	827	157,980	434,902

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

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

[c] Sport fishery contributions are the sum of sport harvest from Copper River mainstem and Gulkana Rivers 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 E8.–Gulkana Hatchery salmon fry releases, 1974–2010.

Release Year	Chinook Salmon			Sockeye Salmon					
	Monsoon Lake	Gulkana River (E. Fork)	Total Chinook Salmon Released	Gulkana I&II (Paxson Lake)	Summit Lake	Crosswind Lake	Harding Lake	Ten Mile Lake	Total Sockeye Salmon Released
1974				79,691				99,620	179,311
1975				785,110				101,446	886,556
1976				626,007				101,600	727,607
1977				516,326				112,248	628,574
1978				479,864				104,058	583,922
1979				940,666				99,589	1,040,255
1980				1,105,397	1,340,660				2,446,057
1981				3,388,682	1,860,491				5,249,173
1982				5,985,270	2,047,947				8,033,217
1983				5,470,056	4,312,628				9,782,684
1984				6,079,838	4,739,293				10,819,131
1985				10,130,942	9,296,882	1,419,095			20,846,919
1986				8,586,509	14,999,085				23,585,594
1987				9,905,907	12,491,826				22,397,733
1988		1,388	1,388	6,389,963	12,026,642	2,487,396	503,375		21,407,376
1989	15,977		15,977	10,870,655	12,004,491	3,130,373	515,046		26,520,565
1990				14,127,313	6,445,011	4,906,005	505,305		25,983,634
1991	26,209		26,209	11,288,721	6,109,833	5,469,759			22,868,313
1992	30,488	34,842	65,330	11,640,000	7,049,000	8,420,000			27,109,000
1993				5,866,230	2,661,549	5,627,346			14,155,125
1994				11,008,964	7,637,009	9,144,382			27,790,355
1995				12,345,894	7,418,311	9,973,600			29,737,805
1996				12,241,896	8,400,148	9,732,911			30,374,955
1997				12,286,366	8,987,213	10,516,107			31,789,686
1998				11,589,845	10,162,655	10,512,299			32,264,799
1999				11,551,836	9,191,217	9,984,392			30,727,445
2000				10,705,795	3,300,504	8,331,080			22,337,379
2001				7,870,334	493,516	5,585,665			13,949,515
2002				11,922,685	5,805,231	8,174,754			25,902,670
2003				11,284,330	6,599,519	8,360,966			26,244,815
2004				12,408,512	6,574,962	8,359,115			27,342,589
2005				3,308,065	0	3,703,295			7,011,360
2006				5,523,920	4,681,325	10,017,211			20,222,456
2007				6,000,000	6,000,000	10,000,000			22,000,000
2008				6,000,000	6,000,000	9,980,000			21,980,000
2009				6,000,000	6,000,000	10,000,000			22,000,000
10-Year Average				8,102,364	4,545,506	8,251,209			20,899,078
2010				6,010,000	6,000,000	10,000,000			22,010,000

Appendix E9.–Sockeye salmon hatchery and wild stock contributions to the Coghill District commercial common property fishery by period, 2010.

			Origin									
			Gulkana[a]		Main Bay		Solf Lake		Hatchery	Wild		
Dates	Period	Hours	Nr.	Proportion	Nr.	Proportion	Nr.	Proportion	Total	Nr.	Proportion	Total
05/24 - 05/26	01	60 [b]	ND	ND	8	100.0%	0	0.0%	8	0	0.0%	8
05/27 - 05/30	02	84 [b]	ND	ND	84	100.0%	0	0.0%	84	0	0.0%	84
05/31 - 06/02	03	60 [b]	ND	ND	318	100.0%	0	0.0%	318	0	0.0%	318
06/03 - 06/04	04	36 [b]	ND	ND	315	100.0%	0	0.0%	315	0	0.0%	315
06/07 - 06/08	05	36	ND	ND	891	100.0%	0	0.0%	891	0	0.0%	891
06/10 - 06/11	06	36 [c]	ND	ND	8,348	100.0%	0	0.0%	8,348	0	0.0%	8,348
06/14 - 06/15	07	24	ND	ND	1,971	96.4%	0	0.0%	1,971	73	3.6%	2,044
06/17 - 06/17	08	12	ND	ND	916	95.5%	0	0.0%	916	44	4.5%	960
06/21 - 06/22	09	24	ND	ND	2,727	81.8%	0	0.0%	2,727	606	18.2%	3,333
06/24 - 06/25	10	24	ND	ND	2,696	89.1%	0	0.0%	2,696	330	10.9%	3,026
06/28 - 06/29	11	24	ND	ND	4,038	80.0%	0	0.0%	4,038	1010	20.0%	5,048
06/30 - 06/30	12	12	ND	ND	8,013	81.1%	0	0.0%	8,013	1873	18.9%	9,886
07/01 - 07/02	13	36	ND	ND	9,052	81.0%	0	0.0%	9,052	2122	19.0%	11,174
07/05 - 07/07	14	60	ND	ND	10,577	84.8%	0	0.0%	10,577	1898	15.2%	12,475
07/08 - 07/10	15	60	ND	ND	6,636	79.7%	0	0.0%	6,636	1692	20.3%	8,328
07/12 - 07/14	16	60	ND	ND	7,397	79.3%	101	1.1%	7,498	1824	19.6%	9,322
07/15 - 07/18	17	84	ND	ND	2,574	71.4%	103	2.9%	2,677	926	25.7%	3,603
07/19 - 07/21	18	60 [c]	ND	ND	2,047	67.6%	0	0.0%	2,047	983	32.4%	3,030
07/22 - 07/22	19	14	ND	ND	821	75.0%	0	0.0%	821	274	25.0%	1,095
07/23 - 07/23	20	14	ND	ND	587	66.7%	0	0.0%	587	294	33.3%	881
07/24 - 07/24	21	14	ND	ND	550	85.7%	0	0.0%	550	92	14.3%	642
07/25 - 07/25	22	14	ND	ND	345	67.3%	10	1.9%	355	158	30.8%	513
07/27 - 07/27	23	14	ND	ND	141	71.4%	0	0.0%	141	57	28.6%	198
08/01 - 08/01	24	14 [e]	ND	ND	98	71.4%	0	0.0%	98	39	28.6%	137
08/03 - 08/03	25	14 [e]	ND	ND	136	71.4%	0	0.0%	136	55	28.6%	191
08/05 - 08/05	26	14 [e]	ND	ND	196	71.4%	0	0.0%	196	78	28.6%	274
08/06 - 08/06	27	14 [e]	ND	ND	165	71.4%	0	0.0%	165	66	28.6%	231
08/07 - 08/07	28	14 [e]	ND	ND	84	71.4%	0	0.0%	84	33	28.6%	117
08/08 - 08/08	29	17 [e]	ND	ND	59	71.4%	0	0.0%	59	24	28.6%	83
08/09 - 08/09	30	17 [e]	ND	ND	91	71.4%	0	0.0%	91	36	28.6%	127
08/10 - 08/10	31	17 [e]	ND	ND	84	71.4%	0	0.0%	84	33	28.6%	117
08/11 - 08/11	32	17 [e]	ND	ND	71	71.4%	0	0.0%	71	29	28.6%	100
08/12 - 08/12	33	17 [e]	ND	ND	82	71.4%	0	0.0%	82	33	28.6%	115
08/13 - 08/13	34	17 [e]	ND	ND	49	71.4%	0	0.0%	49	19	28.6%	68
08/14 - 08/14	35	17 [e]	ND	ND	44	71.4%	0	0.0%	44	17	28.6%	61
08/15 - 08/15	36	17 [e]	ND	ND	48	71.4%	0	0.0%	48	19	28.6%	67
08/16 - 08/16	37	17 [e]	ND	ND	83	71.4%	0	0.0%	83	33	28.6%	116
08/17 - 08/17	38	17 [e]	ND	ND	77	71.4%	0	0.0%	77	31	28.6%	108

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Dates	Period	Hours	Origin									
			Gulkana[a]		Main Bay		Solf Lake		Hatchery	Wild		
			Nr.	Proportion	Nr.	Proportion	Nr.	Proportion	Total	Nr.	Proportion	Total
08/18 - 08/18	39	17 [e]	ND	ND	47	71.4%	0	0.0%	47	19	28.6%	66
08/19 - 08/19	40	17 [e]	ND	ND	246	71.4%	0	0.0%	246	98	28.6%	344
08/20 - 08/20	41	17 [e]	ND	ND	57	71.4%	0	0.0%	57	23	28.6%	80
08/21 - 08/21	42	17 [e]	ND	ND	41	71.4%	0	0.0%	41	17	28.6%	58
08/22 - 08/22	43	17 [e]	ND	ND	40	71.4%	0	0.0%	40	16	28.6%	56
08/23 - 08/23	44	17 [e]	ND	ND	110	71.4%	0	0.0%	110	44	28.6%	154
08/24 - 08/24	45	17 [e]	ND	ND	21	71.4%	0	0.0%	21	9	28.6%	30
08/25 - 08/25	46	17 [e]	ND	ND	10	71.4%	0	0.0%	10	4	28.6%	14
08/26 - 08/26	47	17 [e]	ND	ND	4	71.4%	0	0.0%	4	1	28.6%	5
08/27 - 08/27	48	17 [f]	ND	ND	0	0.0%	0	0.0%	0	0	0.0%	0
08/28 - 08/28	49	17 [f]	ND	ND	0	0.0%	0	0.0%	0	0	0.0%	0
08/29 - 08/29	50	17 [f]	ND	ND	0	0.0%	0	0.0%	0	0	0.0%	0
08/30 - 08/30	51	17 [f]	ND	ND	0	0.0%	0	0.0%	0	0	0.0%	0
08/31 - 08/31	52	17 [f]	ND	ND	0	0.0%	0	0.0%	0	0	0.0%	0
09/01 - 09/01	53	17 [e]	ND	ND	2	71.4%	0	0.0%	2	1	28.6%	3
09/02 - 09/02	54	16 [f]	ND	ND	0	0.0%	0	0.0%	0	0	0.0%	0
09/03 - 09/03	55	16 [f]	ND	ND	0	0.0%	0	0.0%	0	0	0.0%	0
09/04 - 09/04	56	16 [f]	ND	ND	0	0.0%	0	0.0%	0	0	0.0%	0
09/05 - 09/05	57	16 [f]	ND	ND	0	0.0%	0	0.0%	0	0	0.0%	0
09/06 - 09/06	58	16 [f]	ND	ND	0	0.0%	0	0.0%	0	0	0.0%	0
09/07 - 09/07	59	16 [f]	ND	ND	0	0.0%	0	0.0%	0	0	0.0%	0
09/08 - 09/10	60	64 [f]	ND	ND	0	0.0%	0	0.0%	0	0	0.0%	0
09/11 - 09/15	61	110 [f]	ND	ND	0	0.0%	0	0.0%	0	0	0.0%	0
Total			0	0.0	72,998	82.7%	214	0.2%	73,213	15,031	17.0%	88,244

ND = No data.

[a] The Gulkana Hatchery contribution is assumed to be zero based on historical data. No samples were examined for strontium chloride marks.

[b] No samples collected. Proportion estimates based on period 5 results.

[c] One specimen with otolith thermal mark identifcation TRAPPERLAKE06 found in period 06 sample for district 223.

[d] No samples collected. Proportion estimates based on period 23 results.

[e] Three specimens found with otolith thermal mark identifcation TRAPPERLAKE06 in period 18 sample for district 223.

[f] No harvest reported.

Appendix E10.–Pink salmon hatchery and wild stock contributions to the Coghill District commercial common property fishery by period, 2010.

			Origin										
			Solomon Gulch		Cannery Creek		W. Noerenberg		A.F. Koernig		Hatchery	Wild	
Dates	Period	Hours	Nr.	Proportion	Nr.	Proportion	Nr.	Proportion	Nr.	Proportion	Total	Nr. Proportion	Total
05/24 - 05/26	01	60 [a]	0		0	0.0%	0	0.0%	0	0.0%	0	0 0.0%	0
05/27 - 05/30	02	84 [a]	0		0	0.0%	0	0.0%	0	0.0%	0	0 0.0%	0
05/31 - 06/02	03	60 [a]	0		0	0.0%	0	0.0%	0	0.0%	0	0 0.0%	0
06/03 - 06/04	04	36 [b]	0		0	0.0%	0	0.0%	0	0.0%	0	1 54.9%	1
06/07 - 06/08	05	36 [a]	0		0	0.0%	0	0.0%	0	0.0%	0	0 0.0%	0
06/10 - 06/11	06	36 [a]	0		0	0.0%	0	0.0%	0	0.0%	0	0 0.0%	0
06/14 - 06/15	07	24 [b]	1		0	0.0%	0	0.0%	0	0.0%	1	2 54.9%	3
06/17 - 06/17	08	12 [a]	0		0	0.0%	0	0.0%	0	0.0%	0	0 0.0%	0
06/21 - 06/22	09	24 [b]	3		0	0.0%	0	0.0%	0	0.0%	3	4 54.9%	7
06/24 - 06/25	10	24 [b]	3		0	0.0%	0	0.0%	0	0.0%	3	3 54.9%	6
06/28 - 06/29	11	24 [b]	17		0	0.0%	0	0.0%	0	0.0%	17	21 54.9%	38
06/30 - 06/30	12	12 [b]	193		0	0.0%	0	0.0%	0	0.0%	193	234 54.9%	427
07/01 - 07/02	13	36 [b]	263		0	0.0%	0	0.0%	0	0.0%	263	320 54.9%	583
07/05 - 07/07	14	60 [b]	2,583		0	0.0%	0	0.0%	0	0.0%	2,583	3,144 54.9%	5,727
07/08 - 07/10	15	60	9,235		0	0.0%	0	0.0%	0	0.0%	9,235	11,243 54.9%	20,478
07/12 - 07/14	16	60	39,587		0	0.0%	2,474	4.2%	0	0.0%	42,061	17,319 29.2%	59,380
07/15 - 07/18	17	84	15,595		0	0.0%	2,970	9.5%	0	0.0%	18,565	12,624 40.5%	31,189
07/19 - 07/21	18	60	9,474		0	0.0%	21,907	38.5%	0	0.0%	31,381	25,460 44.8%	56,841
07/22 - 07/22	19	14	0		426	1.1%	17,873	45.2%	0	0.0%	18,299	21,278 53.8%	39,577
07/23 - 07/23	20	14	1,096		0	0.0%	26,303	64.9%	0	0.0%	27,399	13,152 32.4%	40,551
07/24 - 07/24	21	14	0		0	0.0%	51,640	85.4%	0	0.0%	51,640	8,817 14.6%	60,456
07/25 - 07/25	22	14	0		1,519	1.0%	120,008	79.0%	0	0.0%	121,527	30,382 20.0%	151,909
07/27 - 07/27	23	14	0		146	2.6%	1,318	23.7%	0	0.0%	1,464	4,101 73.7%	5,565
08/01 - 08/01	24	14	0		10,969	1.0%	954,272	90.6%	0	0.0%	965,241	87,749 8.3%	1,052,990
08/03 - 08/03	25	14	0		0	0.0%	1,817,911	86.6%	194,776	9.3%	2,012,687	86,567 4.1%	2,099,254

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			Origin										
			Solomon Gulch		Cannery Creek		W. Noerenberg		A.F. Koernig		Hatchery	Wild	
Dates	Period	Hours	Nr.	Proportion	Nr.	Proportion	Nr.	Proportion	Nr.	Proportion	Total	Nr.	Proportion	Total
08/05 - 08/05	26	14	0		37,491	3.1%	1,074,754	89.6%	0	0.0%	1,112,245	87,480	7.3%	1,199,725
08/06 - 08/06	27	14	16,359		212,670	23.2%	654,371	71.4%	0	0.0%	883,400	32,719	3.6%	916,119
08/07 - 08/07	28	14	0		37,219	4.2%	828,131	92.7%	0	0.0%	865,350	27,915	3.1%	893,265
08/08 - 08/08	29	17	0		140,125	10.4%	952,851	70.8%	196,175	14.6%	1,289,152	56,050	4.2%	1,345,202
08/09 - 08/09	30	17 [c]	0		78,266	8.8%	724,865	81.8%	64,620	7.3%	867,751	18,463	2.1%	886,214
08/10 - 08/10	31	17	0		68,011	7.2%	870,534	92.8%	0	0.0%	938,545	0	0.0%	938,545
08/11 - 08/11	32	17 [d]	0		111,492	12.4%	763,188	85.2%	0	0.0%	874,680	21,077	2.4%	895,757
08/12 - 08/12	33	17	0		171,630	17.6%	755,173	77.6%	0	0.0%	926,803	45,768	4.7%	972,571
08/13 - 08/13	34	17	0		190,803	27.9%	471,986	69.1%	0	0.0%	662,789	20,085	2.9%	682,873
08/14 - 08/14	35	17	0		353,548	65.0%	190,372	35.0%	0	0.0%	543,920	0	0.0%	543,920
08/15 - 08/15	36	17	0		30,639	8.8%	294,136	84.2%	6,128	1.8%	330,903	18,383	5.3%	349,286
08/16 - 08/16	37	17 [e]	0		70,144	33.0%	129,139	60.7%	1,867	0.9%	201,149	11,682	5.5%	212,831
08/17 - 08/17	38	17	0		90,887	57.1%	59,077	37.1%	0	0.0%	149,964	9,089	5.7%	159,053
08/18 - 08/18	39	17 [f]	0		62,670	35.3%	106,648	60.0%	1,083	0.6%	170,401	7,242	4.1%	177,643
08/19 - 08/19	40	17	0		10,565	13.4%	65,313	82.9%	960	1.2%	76,839	1,921	2.4%	78,760
08/20 - 08/20	41	17	0		12,211	11.5%	90,360	85.1%	1,221	1.1%	103,792	2,442	2.3%	106,234
08/21 - 08/21	42	17	0		16,451	18.1%	69,675	76.6%	3,871	4.3%	89,997	968	1.1%	90,965
08/22 - 08/22	43	17	0		4,301	7.7%	50,749	90.8%	860	1.5%	55,910	0	0.0%	55,910
08/23 - 08/23	44	17	0		5,426	8.8%	56,434	91.2%	0	0.0%	61,860	0	0.0%	61,860
08/24 - 08/24	45	17	0		737	2.2%	31,701	93.5%	1,474	4.3%	33,913	0	0.0%	33,913
08/25 - 08/25	46	17 [g]	0		282	2.2%	12,130	93.5%	564	4.3%	12,976	0	0.0%	12,976
08/26 - 08/26	47	17 [g]	0		124	2.2%	5,311	93.5%	247	4.3%	5,682	0	0.0%	5,682
08/27 - 08/27	48	17 [a]	0		0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/28 - 08/28	49	17 [a]	0		0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/29 - 08/29	50	17 [a]	0		0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/30 - 08/30	51	17 [a]	0		0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0

			Origin										
			Solomon Gulch		Cannery Creek		W. Noerenberg		A.F. Koernig		Hatchery	Wild	
Dates	Period	Hours	Nr.	Proportion	Nr.	Proportion	Nr.	Proportion	Nr.	Proportion	Total	Nr. Proportion	Total
08/31 - 08/31	52	17 [a]	0		0	0.0%	0	0.0%	0	0.0%	0	0 0.0%	0
09/01 - 09/01	53	17 [g]	0		180	2.2%	7,735	93.5%	360	4.3%	8,275	0 0.0%	8,275
09/02 - 09/02	54	16 [a]	0		0	0.0%	0	0.0%	0	0.0%	0	0 0.0%	0
09/03 - 09/03	55	16 [a]	0		0	0.0%	0	0.0%	0	0.0%	0	0 0.0%	0
09/04 - 09/04	56	16 [a]	0		0	0.0%	0	0.0%	0	0.0%	0	0 0.0%	0
09/05 - 09/05	57	16 [a]	0		0	0.0%	0	0.0%	0	0.0%	0	0 0.0%	0
09/06 - 09/06	58	16 [a]	0		0	0.0%	0	0.0%	0	0.0%	0	0 0.0%	0
09/07 - 09/07	59	16 [a]	0		0	0.0%	0	0.0%	0	0.0%	0	0 0.0%	0
09/08 - 09/10	60	64 [a]	0		0	0.0%	0	0.0%	0	0.0%	0	0 0.0%	0
09/11 - 09/15	61	110 [a]	0		0	0.0%	0	0.0%	0	0.0%	0	0 0.0%	0
Totals			94,408		1,718,934	12.1%	11,281,310	79.2%	474,207	3.3%	13,568,859	683,702 4.8%	14,252,561

[a] No harvest reported.

[b] No samples collected. Proportion estimates based on period 15 results.

[c] No samples collected. Proportion estimates based on average of period 29 and period 31 results.

[d] No samples collected. Proportion estimates based on average of period 31 and period 33 results.

[e] No samples collected. Proportion estimates based on average of period 36 and period 38 results.

[f] No samples collected. Proportion estimates based on average of period 38 and period 40 results.

[g] No samples collected. Proportion estimates based on period 45 results.

Appendix E11.–Chum salmon hatchery and wild stock contributions to the Coghill District commercial common property harvest, 2010.

Dates	Period	Hours	Wally Noerenberg Nr.	Wally Noerenberg Proportion	Port Chalmers Nr.	Port Chalmers Proportion	Hatchery Total	Wild Nr.	Wild Proportion	Total
05/24 - 05/26	01	60 [a]	45,200	53.7%	37,224	44.2%	82,424	1,773	2.1%	84,197
05/27 - 05/30	02	84 [a]	150,152	53.7%	123,655	44.2%	273,807	5,888	2.1%	279,695
05/31 - 06/02	03	60	97,924	53.7%	80,644	44.2%	178,568	3,840	2.1%	182,408
06/03 - 06/04	04	36	103,497	61.5%	59,141	35.2%	162,638	5,544	3.3%	168,182
06/07 - 06/08	05	36	98,659	60.0%	65,773	40.0%	164,432	0	0.0%	164,432
06/10 - 06/11	06	36	108,718	55.3%	85,720	43.6%	196,528	0	0.0%	196,528
06/14 - 06/15	07	24	62,821	57.1%	45,907	41.8%	108,728	1,208	1.1%	109,936
06/17 - 06/17	08	12	40,530	48.0%	43,277	51.2%	83,807	687	0.8%	84,494
06/21 - 06/22	09	24	95,950	63.5%	55,053	36.5%	151,003	0	0.0%	151,003
06/24 - 06/25	10	24	70,178	49.5%	70,178	49.5%	140,355	1,526	1.1%	141,881
06/28 - 06/29	11	24	87,507	50.5%	83,860	48.4%	171,367	1,823	1.1%	173,190
06/30 - 06/30	12	12	72,317	55.2%	58,672	44.8%	130,989	0	0.0%	130,989
07/01 - 07/02	13	36	78,499	52.6%	70,649	47.4%	149,148	0	0.0%	149,148
07/05 - 07/07	14	60	108,007	54.5%	88,370	44.6%	196,377	1,964	1.0%	198,341
07/08 - 07/10	15	60	111,335	57.3%	74,898	38.5%	186,234	8,097	4.2%	194,331
07/12 - 07/14	16	60	31,732	42.1%	40,458	53.7%	72,190	3,173	4.2%	75,363
07/15 - 07/18	17	84	8,778	39.5%	11,359	51.2%	20,137	2,065	9.3%	22,202
07/19 - 07/21	18	60	5,004	35.5%	6,823	48.4%	11,827	2,274	16.1%	14,101
07/22 - 07/22	19	14	2,070	42.9%	1,725	35.7%	3,796	1,035	21.4%	4,831
07/23 - 07/23	20	14 [b]	1,560	42.6%	1,218	33.2%	2,777	886	24.2%	3,663
07/24 - 07/24	21	14	1,043	42.3%	759	30.8%	1,802	664	26.9%	2,466
07/25 - 07/25	22	14	685	32.1%	1,047	49.1%	1,732	403	18.9%	2,135
07/27 - 07/27	23	14 [c]	28	12.5%	0	0.0%	28	197	87.5%	225
08/01 - 08/01	24	14	128	24.3%	312	59.5%	440	85	16.2%	525
08/03 - 08/03	25	14	241	57.1%	180	42.9%	421	0	0.0%	421
08/05 - 08/05	26	14 [d]	183	57.1%	138	42.9%	321	0	0.0%	321
08/06 - 08/06	27	14 [d]	113	57.1%	84	42.9%	197	0	0.0%	197
08/07 - 08/07	28	14 [d]	82	57.1%	62	42.9%	144	0	0.0%	144
08/08 - 08/08	29	17 [d]	88	57.1%	66	42.9%	154	0	0.0%	154
08/09 - 08/09	30	17 [d]	79	57.1%	59	42.9%	138	0	0.0%	138
08/10 - 08/10	31	17 [d]	49	57.1%	36	42.9%	85	0	0.0%	85
08/11 - 08/11	32	17 [d]	77	57.1%	57	42.9%	134	0	0.0%	134
08/12 - 08/12	33	17 [d]	52	57.1%	39	42.9%	91	0	0.0%	91
08/13 - 08/13	34	17 [d]	48	57.1%	36	42.9%	84	0	0.0%	84
08/14 - 08/14	35	17 [d]	46	57.1%	34	42.9%	80	0	0.0%	80
08/15 - 08/15	36	17 [d]	51	57.1%	38	42.9%	89	0	0.0%	89
08/16 - 08/16	37	17 [d]	47	57.1%	35	42.9%	82	0	0.0%	82
08/17 - 08/17	38	17 [d]	66	57.1%	49	42.9%	115	0	0.0%	115
08/18 - 08/18	39	17 [d]	42	57.1%	32	42.9%	74	0	0.0%	74
08/19 - 08/19	40	17 [d]	37	57.1%	27	42.9%	64	0	0.0%	64
08/20 - 08/20	41	17 [d]	30	57.1%	23	42.9%	53	0	0.0%	53
08/21 - 08/21	42	17 [d]	33	57.1%	24	42.9%	57	0	0.0%	57
08/22 - 08/22	43	17 [d]	23	57.1%	17	42.9%	40	0	0.0%	40

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Dates	Period	Hours	Wally Noerenberg Nr.	Wally Noerenberg Proportion	Port Chalmers Nr.	Port Chalmers Proportion	Hatchery Total	Wild Nr.	Wild Proportion	Total
08/23 - 08/23	44	17 [d]	15	57.1%	12	42.9%	27	0	0.0%	27
08/24 - 08/24	45	17 [d]	10	57.1%	7	42.9%	17	0	0.0%	17
08/25 - 08/25	46	17 [d]	2	57.1%	1	42.9%	3	0	0.0%	3
08/26 - 08/26	47	17 [d]	2	57.1%	2	42.9%	4	0	0.0%	4
08/27 - 08/27	48	17 [e]	0	0.0%	0	0.0%	0	0	0.0%	0
08/28 - 08/28	49	17 [e]	0	0.0%	0	0.0%	0	0	0.0%	0
08/29 - 08/29	50	17 [e]	0	0.0%	0	0.0%	0	0	0.0%	0
08/30 - 08/30	51	17 [e]	0	0.0%	0	0.0%	0	0	0.0%	0
08/31 - 08/31	52	17 [e]	0	0.0%	0	0.0%	0	0	0.0%	0
09/01 - 09/01	53	17 [e]	0	0.0%	0	0.0%	0	0	0.0%	0
09/02 - 09/02	54	16 [e]	0	0.0%	0	0.0%	0	0	0.0%	0
09/03 - 09/03	55	16 [e]	0	0.0%	0	0.0%	0	0	0.0%	0
09/04 - 09/04	56	16 [e]	0	0.0%	0	0.0%	0	0	0.0%	0
09/05 - 09/05	57	16 [e]	0	0.0%	0	0.0%	0	0	0.0%	0
09/06 - 09/06	58	16 [e]	0	0.0%	0	0.0%	0	0	0.0%	0
09/07 - 09/07	59	16 [e]	0	0.0%	0	0.0%	0	0	0.0%	0
09/08 - 09/10	60	64 [e]	0	0.0%	0	0.0%	0	0	0.0%	0
09/11 - 09/15	61	110 [e]	0	0.0%	0	0.0%	0	0	0.0%	0
Total			1,383,734	54.5%	1,107,783	43.7%	2,493,608	43,132	1.7%	2,536,740

[a] No samples collected. Proportions based on period 3 results.
[b] No samples collected. Proportions based on average of period 19 and period 21 results.
[c] Small sample (< 20 specimens).
[d] No samples collected. Proportions based on period 25 results.
[e] No harvest reported.

Appendix E12.–Daily salmon sales and sex ratios, sales summary, and broodstock summary at the Wally Noerenberg Hatchery, 2010.

	Pink Salmon					Chum Salmon					Coho Salmon	
Date	% Female	Sales Harvest[a]	Sales Harvest Cumulative	Brood Stock[b]	Brood Stock Cumulative	% Female	Sales Harvest[a]	Sales Harvest Cumulative	Brood Stock[b]	Brood Stock Cumulative	Sales Harvest	Sales Harvest Cumulative
06/03	-----	0	0	0	0	29.2%	21,528	21,528	0	0	0	0
06/04	-----	0	0	0	0	36.1%	18,027	39,555	0	0	0	0
06/05	-----	0	0	0	0	36.7%	8,558	48,113	0	0	0	0
06/06	-----	0	0	0	0	44.2%	15,536	63,649	0	0	0	0
06/07	-----	0	0	0	0	32.5%	22,493	86,142	0	0	0	0
06/08	-----	0	0	0	0	38.0%	17,049	103,191	0	0	0	0
06/09	-----	0	0	0	0	36.9%	7,894	111,085	0	0	0	0
06/10	-----	0	0	0	0	37.6%	25,485	136,570	0	0	0	0
06/11	-----	0	0	0	0	44.6%	23,415	159,985	0	0	0	0
06/12	-----	0	0	0	0	47.0%	11,344	171,329	0	0	0	0
06/13	-----	0	0	0	0	43.5%	9,516	180,845	0	0	0	0
06/14	-----	0	0	0	0	47.6%	24,292	205,137	0	0	0	0
06/15	-----	0	0	0	0		0	205,137	0	0	0	0
06/16	-----	0	0	0	0	57.0%	11,227	216,364	0	0	0	0
06/17	-----	0	0	0	0	57.5%	28,208	244,572	0	0	0	0
06/18	-----	0	0	0	0	51.9%	21,031	265,603	0	0	0	0
06/19	-----	0	0	0	0	51.1%	14,814	280,417	0	0	0	0
06/20	-----	0	0	0	0	57.0%	26,671	307,088	0	0	0	0
06/21	-----	0	0	0	0	53.2%	29,787	336,875	0	0	0	0
06/22	-----	0	0	0	0	54.9%	16,340	353,215	0	0	0	0
06/23	-----	0	0	0	0	61.4%	62,689	415,904	0	0	0	0
06/24	-----	0	0	0	0	56.7%	30,460	446,364	0	0	0	0
06/25	-----	0	0	0	0	66.9%	16,871	463,235	0	0	0	0
06/26	-----	0	0	0	0	64.8%	38,551	501,786	0	0	0	0
06/27	-----	0	0	0	0	69.9%	36,344	538,130	211	211	0	0
06/28	-----	0	0	0	0	-----	986	539,116	4,434	4,645	0	0
06/29	-----	0	0	0	0	-----	573	539,689	4,404	9,049	0	0
06/30	-----	0	0	0	0	-----	619	540,308	10,012	19,061	0	0
07/01	-----	0	0	0	0	-----	1,109	541,417	10,663	29,724	0	0
07/02	-----	0	0	0	0	-----	814	542,231	10,361	40,085	0	0
07/03	-----	0	0	0	0	-----	929	543,160	10,822	50,907	0	0
07/04	-----	0	0	0	0	-----	724	543,884	11,315	62,222	0	0
07/05	-----	0	0	0	0	-----	620	544,504	11,466	73,688	0	0
07/06	-----	0	0	0	0	-----	646	545,150	13,734	87,422	0	0
07/07	-----	0	0	0	0	-----	638	545,788	12,041	99,463	0	0
07/08	-----	0	0	0	0	-----	613	546,401	12,771	112,234	0	0
07/09	-----	0	0	0	0	-----	725	547,126	10,958	123,192	0	0
07/10	-----	0	0	0	0	-----	1,135	548,261	13,886	137,078	0	0
07/11	-----	0	0	0	0	-----	740	549,001	10,939	148,017	0	0
07/12	-----	0	0	0	0	-----	15,240	564,241	682	148,699	0	0
07/13	-----	0	0	0	0	-----	908	565,149	9,128	157,827	0	0
07/14	-----	0	0	0	0	-----	854	566,003	8,868	166,695	0	0
07/15	-----	0	0	0	0	-----	10,661	576,664	902	167,597	0	0
07/16	-----	0	0	0	0	-----	7,936	584,600	519	168,116	0	0
07/17	-----	0	0	0	0	-----	0	584,600	355	168,471	0	0
07/18	-----	0	0	0	0	-----	0	584,600	980	169,451	0	0
07/19	-----	0	0	0	0	-----	8,058	592,658	907	170,358	0	0

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	Pink Salmon					Chum Salmon					Coho Salmon	
Date	% Female	Sales Harvest[a]	Sales Harvest Cumulative	Brood Stock[b]	Brood Stock Cumulative	% Female	Sales Harvest[a]	Sales Harvest Cumulative	Brood Stock[b]	Brood Stock Cumulative	Sales Harvest	Sales Harvest Cumulative
07/20	-----	0	0	0	0	-----	0	592,658	6,568	176,926	0	0
07/21	-----	0	0	0	0	-----	0	592,658	0	176,926	0	0
07/22	-----	0	0	0	0	-----	0	592,658	0	176,926	0	0
07/23	-----	0	0	0	0	-----	0	592,658	0	176,926	0	0
07/24	-----	0	0	0	0	-----	0	592,658	0	176,926	0	0
07/25	-----	0	0	0	0	-----	0	592,658	0	176,926	0	0
07/26	9.4%	53,626	53,626	0	0	-----	1,386	594,044	0	176,926	0	0
07/27	9.8%	83,113	136,739	0	0	-----	0	594,044	0	176,926	0	0
07/28		0	136,739	0	0	-----	0	594,044	0	176,926	0	0
07/29	10.7%	156,758	293,497	0	0	-----	0	594,044	0	176,926	0	0
07/30	15.6%	268,237	561,734	0	0	-----	0	594,044	0	176,926	0	0
07/31	14.5%	280,523	842,257	0	0	-----	0	594,044	0	176,926	0	0
08/01	-----		842,257	0	0	-----	0	594,044	0	176,926	0	0
08/02	-----	340,146	1,182,403	0	0	-----	0	594,044	0	176,926	0	0
08/03	-----		1,182,403	0	0	-----	0	594,044	0	176,926	0	0
08/04	34.8%	178,915	1,361,318	0	0	-----	0	594,044	0	176,926	0	0
08/05	-----	0	1,361,318	0	0	-----	0	594,044	0	176,926	0	0
08/06	-----	0	1,361,318	0	0	-----	0	594,044	0	176,926	0	0
08/07	-----	0	1,361,318	0	0	-----	0	594,044	0	176,926	0	0
08/08	-----	0	1,361,318	0	0	-----	0	594,044	0	176,926	0	0
08/09	-----	0	1,361,318	0	0	-----	0	594,044	0	176,926	0	0
08/10	-----	0	1,361,318	0	0	-----	0	594,044	0	176,926	0	0
08/11	-----	0	1,361,318	0	0	-----	0	594,044	0	176,926	0	0
08/12	-----	0	1,361,318	0	0	-----	0	594,044	0	176,926	0	0
08/13	-----	0	1,361,318	0	0	-----	0	594,044	0	176,926	0	0
08/14	-----	0	1,361,318	0	0	-----	0	594,044	0	176,926	0	0
08/15	-----	0	1,361,318	0	0	-----	0	594,044	0	176,926	0	0
08/16	-----	0	1,361,318	0	0	-----	0	594,044	0	176,926	0	0
08/17	-----	0	1,361,318	0	0	-----	0	594,044	0	176,926	0	0
08/18	-----	0	1,361,318	0	0	-----	0	594,044	0	176,926	0	0
08/19	-----	0	1,361,318	0	0	-----	0	594,044	0	176,926	0	0
08/20	-----	0	1,361,318	0	0	-----	0	594,044	0	176,926	0	0
08/21	-----	0	1,361,318	0	0	-----	0	594,044	0	176,926	0	0
08/22	-----	65,213	1,426,531	0	0	-----	0	594,044	0	176,926	0	0
08/23	-----	0	1,426,531	0	0	-----	0	594,044	0	176,926	0	0
08/24	-----	3,489	1,430,020	13,729	13,729	-----	0	594,044	0	176,926	0	0
08/25	-----	6,528	1,436,548	15,180	28,909	-----	0	594,044	0	176,926	0	0
08/26	-----	4,882	1,441,430	15,925	44,834	-----	0	594,044	0	176,926	0	0
08/27	-----	4,698	1,446,128	17,566	62,400	-----	0	594,044	0	176,926	0	0
08/28	-----	6,611	1,452,739	15,297	77,697	-----	0	594,044				
08/29	-----	10,335	1,463,074	15,765	93,462	-----	0	594,044				
08/30	-----	2,614	1,465,688	23,862	117,324	-----	0	594,044				
08/31	-----	1,266	1,466,954	21,359	138,683	-----	0	594,044				
09/01	-----	963	1,467,917	17,863	156,546	-----	0	594,044				
09/02	-----	736	1,468,653	17,459	174,005	-----	0	594,044				
09/03	-----	1,652	1,470,305	18,238	192,243	-----	0	594,044				
09/04	-----	26,875	1,497,180	1,495	193,738	-----	0	594,044				

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	Pink Salmon					Chum Salmon					Coho Salmon	
Date	% Female	Sales Harvest[a]	Sales Harvest Cumulative	Brood Stock[b]	Brood Stock Cumulative	% Female	Sales Harvest[a]	Sales Harvest Cumulative	Brood Stock[b]	Brood Stock Cumulative	Sales Harvest	Sales Harvest Cumulative
09/05	-----	27,949	1,525,129	54	193,792		0	594,044				
09/06	-----	23,202	1,548,331	876	194,668		0	594,044				
09/07	-----	15,834	1,564,165	610	195,278		0	594,044				
09/08	-----	0	1,564,165	106	195,384		0	594,044				
09/09	-----	9,358	1,573,523	647	196,031		0	594,044				
09/10				3,171	199,202							

Hatchery escapement summary[c]	Pink salmon	Chum Salmon	Coho Salmon
Purse seine whole fish harvest	1,426,531	538,130	0
Raceway harvest[d]	132,903	43,281	0
Viable broodstock (spawned, eggs in incubators)	190,418	155,912	317
Unviable broodstock (green/over-ripe/bad)	14,089	10,908	-----
Unspawned fish (e.g., excess males/females)	0	1,743	35
Holding mortalities (raceway, pen mortalities)	8,784	20,996	19
Estimated unharvested return[e]	5,000	7,000	1,028
Estimated total hatchery escapement	1,777,725	777,970	1,399

Sales Summary	Pink Salmon	Chum Salmon	Coho Salmon
Purse seine whole fish sales	1,426,531	538,130	0
Raceway sales[f]	146,992	55,914	0
Carcass sales[g]	190,418	155,912	0
Total sales	1,763,941	749,956	0

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

[b] Broodstock daily harvest numbers include viable broodstock and holding mortalities.

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

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

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

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

[g] Represents the sale of "viable broodstock" carcasses.

Appendix E13.–Sockeye salmon hatchery and wild stock contributions to the Eshamy District commercial common property fishery by period, 2010.

Dates	Period	Hours	Main Bay		Solf Lake		Gulkana [a]		Hatchery	Wild		
			Nr.	Proportion	Nr.	Proportion	Nr.	Proportion	Total	Nr.	Proportion	Total
05/24 - 05/26	01 [b]	60	38	96.2%	0	0.0%	ND	-----	38	2	3.8%	40
05/27 - 05/30	02 [b]	84	165	96.2%	0	0.0%	ND	-----	165	7	3.8%	172
05/31 - 06/02	03 [b]	60	553	96.2%	0	0.0%	ND	-----	553	22	3.8%	575
06/03 - 06/06	04	84	3,148	98.3%	0	0.0%	ND	-----	3,148	126	1.7%	3,274
06/07 - 06/09	05	60	9,242	94.6%	0	0.0%	ND	-----	9,242	157	5.4%	9,399
06/10 - 06/13	06	84	24,902	97.8%	0	0.0%	ND	-----	24,902	1431	2.2%	26,333
06/14 - 06/16	07	60	64,238	98.9%	0	0.0%	ND	-----	64,238	1428	1.1%	65,666
06/17 - 06/20	08	84	131,116	99.0%	0	0.0%	ND	-----	131,116	1,490	1.0%	132,606
06/21 - 06/23	09	60	115,341	97.9%	0	0.0%	ND	-----	115,341	1214	2.1%	116,555
06/24 - 06/27	10	84	221,394	96.8%	0	0.0%	ND	-----	221,394	4,761	3.2%	226,155
06/28 - 06/30	11	60	152,150	95.8%	0	0.0%	ND	-----	152,150	5016	4.2%	157,166
07/01 - 07/04	12	84	206,353	95.8%	0	0.0%	ND	-----	206,353	9,070	4.2%	215,423
07/05 - 07/07	13	60	89,646	96.3%	0	0.0%	ND	-----	89,646	3,940	3.7%	93,586
07/08 - 07/10	14	60	55,591	93.2%	0	0.0%	ND	-----	55,591	2,138	6.8%	57,729
07/12 - 07/14	15	60	45,135	87.4%	0	0.0%	ND	-----	45,135	3,303	12.6%	48,438
07/15 - 07/18	16	84	30,690	92.1%	0	0.0%	ND	-----	30,690	4437	7.9%	35,127
07/19 - 07/21	17	60	21,076	78.3%	0	0.0%	ND	-----	21,076	1,806	21.7%	22,882
07/22 - 07/24	18	60	10,996	94.4%	0	0.0%	ND	-----	10,996	3055	5.5%	14,051
07/26 - 07/28	19	60	6,750	94.4%	0	0.0%	ND	-----	6,750	397	5.6%	7,147
08/02 - 08/03	20 [c]	36	6,690	94.4%	0	0.0%	ND	-----	6,690	394	5.6%	7,083
08/05 - 08/07	21 [c]	60	421	94.4%	0	0.0%	ND	-----	421	25	5.6%	446
08/09 - 08/10	22 [c]	36	2,779	94.4%	0	0.0%	ND	-----	2,779	163	5.6%	2,942
08/12 - 08/13	23 [c]	36	1,516	94.4%	0	0.0%	ND	-----	1,516	89	5.6%	1,605
08/16 - 08/17	24 [c]	36	515	0.0%	0	0.0%	ND	-----	515	30	0.0%	545
08/19 - 08/20	25 [d]	36	0	0.0%	0	0.0%	ND	-----	0	0	0.0%	0
08/23 - 08/24	26 [d]	36	0	0.0%	0	0.0%	ND	-----	0	0	0.0%	0
08/26 - 08/27	27 [d]	24	0	0.0%	0	0.0%	ND	-----	0	0	0.0%	0
08/30 - 08/31	28 [d]	24	0	0.0%	0	0.0%	ND	-----	0	0	0.0%	0
09/02 - 09/03	29 [d]	24	0	0.0%	0	0.0%	ND	-----	0	0	0.0%	0
09/06 - 09/07	30 [d]	24	0	96.4%	0	0.0%	ND	-----	0	0	3.6%	0
Total			1,200,444	96.2%	0	0.0%		--	1,200,444	44,500	3.8%	1,244,945

ND = No data.

[a] The Gulkana Hatchery contribution is assumed to be zero based on historical data. No samples were examined for strontium chloride marks.

[b] No samples collected. Proportion estimates based on period 4 results.

[c] No samples collected. Proportion estimates based on period 19 results.

[d] No harvest reported.

Appendix E14.–Pink salmon hatchery and wild stock contributions to the Eshamy District commercial common property fishery by period, 2010.

Dates	Period	Hours	Origin											
			Solomon Gulch		Cannery Creek		W. Noerenberg		A.F. Koernig		Hatchery	Wild		
			Nr.	Proportion	Nr.	Proportion	Nr.	Proportion	Nr.	Proportion	Total	Nr.	Proportion	Total
05/24 - 05/26	01 [a]	60	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
05/27 - 05/30	02 [a]	84	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
05/31 - 06/02	03 [a]	60	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
06/03 - 06/06	04 [b]	84	1	0.0%	0	0.0%	0	0.0%	0	0.0%	1	1	0.0%	2
06/07 - 06/09	05 [b]	60	4	63.0%	0	0.0%	0	0.0%	0	0.0%	4	2	37.0%	6
06/10 - 06/13	06 [b]	84	9	63.0%	0	0.0%	0	0.0%	0	0.0%	9	5	37.0%	14
06/14 - 06/16	07 [b]	60	14	63.0%	0	0.0%	0	0.0%	0	0.0%	14	8	37.0%	22
06/17 - 06/20	08 [b]	84	113	63.0%	0	0.0%	0	0.0%	0	0.0%	113	66	37.0%	179
06/21 - 06/23	09	60	195	63.0%	0	0.0%	0	0.0%	0	0.0%	195	115	37.0%	310
06/24 - 06/27	10 [b]	84	612	63.0%	0	0.0%	0	0.0%	0	0.0%	612	360	37.0%	972
06/28 - 06/30	11 [c]	60	648	63.0%	0	0.0%	0	0.0%	0	0.0%	648	472	37.0%	1,120
07/01 - 07/04	12 [d]	84	3,133	57.9%	0	0.0%	0	0.0%	0	0.0%	3,133	2,803	42.1%	5,936
07/05 - 07/07	13	60	6,903	52.8%	0	0.0%	0	0.0%	0	0.0%	6,903	6,177	47.2%	13,080
07/08 - 07/10	14	60	7,572	52.8%	0	0.0%	0	0.0%	0	0.0%	7,572	16,310	47.2%	23,882
07/12 - 07/14	15	60	2,809	31.7%	0	0.0%	468	0.0%	0	0.0%	3,277	14,043	68.3%	17,320
07/15 - 07/18	16	84	0	16.2%	0	0.0%	1,146	2.7%	0	0.0%	1,146	17,767	81.1%	18,913
07/19 - 07/21	17	60	1,529	0.0%	0	0.0%	612	6.1%	0	0.0%	2,141	15,295	93.9%	17,436
07/22 - 07/24	18	60	0	8.8%	0	0.0%	692	3.5%	692	0.0%	1,385	8,308	87.7%	9,693
07/26 - 07/28	19	60	0	0.0%	0	0.0%	228	7.1%	0	7.1%	228	2,048	85.7%	2,276
08/02 - 08/03	20 [e]	36	0	0.0%	0	0.0%	1,636	10.0%	0	0.0%	1,636	14,727	90.0%	16,363
08/05 - 08/07	21 [e]	60	0	0.0%	0	0.0%	330	10.0%	0	0.0%	330	2,970	90.0%	3,300
08/09 - 08/10	22 [e]	36	0	0.0%	0	0.0%	142	10.0%	0	0.0%	142	1,282	90.0%	1,424
08/12 - 08/13	23 [e]	36	0	0.0%	0	0.0%	145	10.0%	0	0.0%	145	1,308	90.0%	1,453
08/16 - 08/17	24 [e]	36	0	0.0%	0	0.0%	103	10.0%	0	0.0%	103	927	90.0%	1,030
08/19 - 08/20	25 [a]	36	0	0.0%	0	0.0%	0	10.0%	0	0.0%	0	0	90.0%	0
08/23 - 08/24	26 [a]	36	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/26 - 08/27	27 [a]	24	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/30 - 08/31	28 [a]	24	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/02 - 09/03	29 [a]	24	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/06 - 09/07	30 [a]	24	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Total			23,542	0.0%	0	0.0%	5,503	0.0%	692	0.0%	29,738	104,993	0.0%	134,731

[a] No harvest reported.

[b] No samples collected. Proportion estimates based on period 9 results.

[c] No samples collected. Proportion estimates based on average of period 9 and period 13 results.

[d] No samples collected. Proportion estimates based on period 13 results.

[e] No samples collected. Proportion estimates based on period 19 results.

Appendix E15.–Chum salmon hatchery and wild stock contributions to the Eshamy District commercial common property fishery by period, 2010.

Dates	Period	Hours	Hatchery Marks[a]								
			Port Chalmers		W. Noerenberg		Hatchery	Wild			
			Nr.	Proportion	Nr.	Proportion	Total	Nr.	Proportion	Total
05/24 - 05/26	01 [b]	60	112	29.5%	269	70.5%	381	0	0.0%	381
05/27 - 05/30	02 [b]	84	403	29.5%	962	70.5%	1,365	0	0.0%	1,365
05/31 - 06/02	03 [c]	60	2,563	29.5%	3,844	70.5%	6,407	0	0.0%	6,407
06/03 - 06/06	04	84	4,729	40.0%	11,298	60.0%	16,027	0	0.0%	16,027
06/07 - 06/09	05 [d]	60	10,611	29.5%	10,897	70.5%	21,508	574	0.0%	22,082
06/10 - 06/13	06	84	14,633	48.1%	21,543	49.4%	36,176	1,626	2.6%	37,802
06/14 - 06/16	07	60	29,095	38.7%	46,875	57.0%	75,970	0	4.3%	75,970
06/17 - 06/20	08	84	31,370	38.3%	51,668	61.7%	83,038	0	0.0%	83,038
06/21 - 06/23	09	60	15,820	37.8%	38,086	62.2%	53,906	2,344	0.0%	56,250
06/24 - 06/27	10	84	38,651	28.1%	56,628	67.7%	95,279	1,798	4.2%	97,077
06/28 - 06/30	11	60	18,834	39.8%	37,668	58.3%	56,502	4,185	1.9%	60,687
07/01 - 07/04	12	84	18,633	31.0%	45,149	62.1%	63,782	4,300	6.9%	68,082
07/05 - 07/07	13	60	11,860	27.4%	25,039	66.3%	36,899	4,832	6.3%	41,731
07/08 - 07/10	14	60	12,294	28.4%	12,294	60.0%	24,589	2,588	11.6%	27,177
07/12 - 07/14	15	60	845	45.2%	3,028	45.2%	3,873	1,338	9.5%	5,211
07/15 - 07/18	16	84	569	16.2%	1,516	58.1%	2,085	3,222	25.7%	5,306
07/19 - 07/21	17	60	521	10.7%	1,326	28.6%	1,847	1,989	60.7%	3,836
07/22 - 07/24	18 [e]	60	91	13.6%	232	34.6%	324	348	51.9%	672
07/26 - 07/28	19 [c]	60	0	13.6%	43	34.6%	43	43	51.9%	85
08/02 - 08/03	20 [e]	36	43	0.0%	111	50.0%	154	166	50.0%	320
08/05 - 08/07	21 [e]	60	1	13.6%	2	34.6%	3	4	51.9%	7
08/09 - 08/10	22 [e]	36	0	13.6%	0	34.6%	0	1	51.9%	1
08/12 - 08/13	23 [f]	36	0	13.6%	0	34.6%	0	0	51.9%	0
08/16 - 08/17	24 [e]	36	0	0.0%	1	0.0%	1	1	0.0%	2
08/19 - 08/20	25 [f]	36	0	13.6%	0	34.6%	0	0	51.9%	0
08/23 - 08/24	26 [f]	36	0	0.0%	0	0.0%	0	0	0.0%	0
08/26 - 08/27	27 [f]	24	0	0.0%	0	0.0%	0	0	0.0%	0
08/30 - 08/31	28 [f]	24	0	0.0%	0	0.0%	0	0	0.0%	0
09/02 - 09/03	29 [f]	24	0	0.0%	0	0.0%	0	0	0.0%	0
09/06 - 09/07	30 [f]	24	0	0.0%	0	0.0%	0	0	0.0%	0
Total			211,679	0.0%	368,479	0.0%	580,159	29,357	0.0%	609,516

[a] Brood year 2006 chum salmon released indiscriminately at WNH, Pt. Chalmers and AFK irrespective of otolith mark.

[b] No samples collected. Proportions based on period 4 results.

[c] Small sample (< 20 specimens).

[d] Period 5 sample included three specimens with WNH08B otolith thermal mark identification (approximately 4% of sample or 860 fish compared to total period harvest.)

[e] No samples collected. Proportions based on period 17 results.

[f] No harvest reported.

Appendix E16.–Daily salmon sales and sex ratios, sales summary, and broodstock summary at the Main Bay Hatchery, 2010.

	Sockeye Salmon				
Date	% Female	Sales Harvest[a]	Sales Harvest cumulative	Brood Stock[b]	Brood Stock cumulative
07/01	-----	0	0	55	55
07/02	-----	0	0	53	108
07/03	-----	0	0	90	198
07/04	-----	0	0	0	198
07/05	-----	0	0	101	299
07/06	-----	0	0	81	380
07/07	-----	0	0	0	380
07/08	-----	0	0	95	475
07/09	-----	0	0	47	522
07/10	-----	0	0	133	655
07/11	-----	0	0	206	861
07/12	-----	0	0	175	1,036
07/13	-----	0	0	191	1,227
07/14	-----	0	0	266	1,493
07/15	-----	0	0	231	1,724
07/16	-----	0	0	325	2,049
07/17	-----	0	0	270	2,319
07/18	-----	0	0	202	2,521
07/19	-----	0	0	474	2,995
07/20	-----	0	0	353	3,348
07/21	-----	0	0	470	3,818
07/22	-----	0	0	375	4,193
07/23	-----	0	0	541	4,734
07/24	-----	0	0	333	5,067
07/25	-----	0	0	16	5,083
07/26	-----	0	0	0	5,083
07/27	-----	0	0	0	5,083
07/28	-----	0	0	0	5,083
07/29	-----	0	0	3	5,086
07/30	-----	0	0	0	5,086
07/31	-----	0	0	111	5,197
08/01	-----	0	0	856	6,053
08/02	-----	0	0	46	6,099
08/03	-----	0	0	1014	7,113
08/04	-----	0	0	13	7,126
08/05	-----	0	0	1017	8,143
08/06	-----	0	0	21	8,164
08/07	-----	0	0	1021	9,185
08/08	-----	0	0	38	9,223
08/09	-----	0	0	1031	10,254
08/10	-----	0	0	30	10,284

-continued-

Date	Sockeye Salmon % Female	Sockeye Salmon Sales Harvest[a]	Sockeye Salmon Sales Harvest Cumulative	Sockeye Salmon Brood Stock[b]	Sockeye Salmon Brood Stock Cumulative
08/11	-----	0	0	1031	11,315
08/12	-----	0	0	40	11,355
08/13	-----	0	0	435	11,790
08/14	-----	0	0	47	11,837
08/15	-----	0	0	415	12,252
08/16	-----	0	0	37	12,289
08/17				571	12,860
08/18				1165	14,025
08/19				0	14,025
08/20				0	14,025
08/21				0	14,025
08/22				0	14,025
08/23				0	14,025
08/24				187	14,212
08/25				0	14,212

Hatchery Escapement Summary[c]	Sockeye Salmon
Purse seine whole fish harvest	0
Raceway harvest[d]	0
Viable broodstock (spawned, eggs in incubators)	6,617
Unviable broodstock (green/over-ripe/bad)	294
Unspawned fish (e.g., excess males/females)	7,038
Holding mortalities (raceway, pen mortalities)	263
Estimated unharvested return[e]	3,984
Estimated total return to hatchery	18,196

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

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

[b] Broodstock daily harvest numbers include viable broodstock and holding mortalities.

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

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

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

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

[g] Represents the sale of "viable broodstock" carcasses.

Appendix E17.–Main Bay sockeye salmon harvests and total contribution, 1990–2010.

	Hatchery Contributions					Total
Year	Commercial	Subsistence/ Personal Use[a]	Sport	Brood Stock/ Escapement	Cost Recovery	Hatchery Contribution
1990	9,000	0	0	0	0	9,000
1991	480,200	0	0	4,700	0	484,900
1992	368,427	0	0	6,185	158,893	533,505
1993	208,709	0	0	8,020	97,594	314,323
1994	214,737	0	0	72,335	85,511	372,583
1995	134,778	0	0	11,148	62,782	208,708
1996	406,100	0	0	7,979	83,430	497,509
1997	845,871	0	0	16,498	236,031	1,098,400
1998	128,702	0	6,738	10,596	111,026	257,062
1999	143,511	0	7,150	7,104	0	157,765
2000	339,305	200	2,360	5,426	0	347,291
2001	770,884	400	3,500	10,508	50,458	835,750
2002	846,534	2,971	4,000	7,352	93,794	954,651
2003	1,047,133	0	4,000	6,878	366,768	1,424,779
2004	355,821	0	1,200	17,578	279,139	653,738
2005	233,089	0	750	44,366	188,904	467,109
2006	668,780	0	500	15,854	350,742	1,035,876
2007	819,244	0	500	20,285	321,330	1,161,359
2008	835,241	0	500	15,659	0	851,400
2009	756,130	0	500	10,815	131,553	898,998
10-Year Average	667,216	357	1,781	15,472	178,269	863,095
2010	1,347,644	0	500	18,196	0	1,366,340

[a] Commercial proportion from otolith marks, Sport and Subsistence/Personal Use from average proportion of previous estimates

Appendix E18.–Main Bay Hatchery salmon fry releases, 1983–2010.

	Sockeye Salmon					Pink Salmon	Chum Salmon
Release Year	Primary Return Years	Coghill Lake stock	Eshamy Lake stock	Eyak Lake stock	Total Released	Total Released	Total Released
1983						25,751,531	8,644,179
1984						41,945,403	7,490,291
1985						29,286,498	11,033,065
1986	1990/91					32,728,663	5,258,175
1987	1991/92					2,660,000	76,646,750
1988	1992/93	330,025			330,025		
1989	1993/94	3,925,357			3,925,357	10,200,000	
1990	1994/95	2,616,498			2,616,498		
1991	1995/96	1,960,774	1,843,176		3,803,950		
1992	1996/97	1,546,929	2,475,390	47,609	4,069,928		
1993	1997/98	3,288,689	966,750	63,822	4,319,261		
1994	1998/99	3,289,824	691,633		3,981,457		
1995	1999/00	4,049,763	1,546,011	90,348	5,686,122		
1996	2000/01	4,194,174	114,475	82,514	4,391,163		
1997	2001/02	239,023	845,190	131,503	1,215,716		
1998	2002/03		2,485,000	181,000	2,666,000		
1999	2003/04		4,165,786	2,913,460	7,079,246		
2000	2004/05	8,401,117			8,401,117		
2001	2005/06	7,612,350			7,612,350		
2002	2006/07	7,858,190			7,858,190		
2003	2008/08	6,576,535			6,576,535		
2004	2008/09	9,057,829			9,057,829		
2005	2009/10	10,868,642			10,868,642		
2006	2010/11	9,516,461			9,516,461		
2007	2011/12	9,393,000			9,393,000		
2008	2012/13	9,384,000			9,384,000		
2009	2013/14	9,419,000			9,419,000		
10-Year Average		8,808,712			8,808,712		
2010	20014/15	8,160,000			8,160,000		

Appendix E19.–Pink salmon hatchery and wild stock contributions to the Eastern District commercial common property fishery by period, 2010.

Dates	Period	Hours	Origin										
			Solomon Gulch		Cannery Creek		W. Noerenberg		A.F. Koernig		Hatchery	Wild		
			Nr.	Proportion	Nr.	Proportion	Nr.	Proportion	Nr.	Proportion	Total	Nr.	Proportion	Total
07/07 - 07/07	01	12	1,241,880	98.7%	0	0.0%	0	0.0%	0	0.0%	1,241,880	15,922	1.3%	1,257,802
07/09 - 07/09	02	12	1,062,656	96.9%	0	0.0%	0	0.0%	0	0.0%	1,062,656	34,279	3.1%	1,096,935
07/13 - 07/13	03 [a]	14	2,531,231	97.2%	0	0.0%	0	0.0%	0	0.0%	2,531,231	71,657	2.8%	2,602,888
07/14 - 07/14	04	14	1,382,288	97.6%	0	0.0%	0	0.0%	0	0.0%	1,382,288	33,714	2.4%	1,416,002
07/15 - 07/15	05	14	1,185,801	99.0%	0	0.0%	0	0.0%	0	0.0%	1,185,801	12,482	1.0%	1,198,283
07/16 - 07/16	06	14	1,052,373	96.8%	0	0.0%	0	0.0%	0	0.0%	1,052,373	35,079	3.2%	1,087,452
07/17 - 07/17	07	14	1,036,554	93.8%	0	0.0%	0	0.0%	0	0.0%	1,036,554	69,104	6.3%	1,105,658
07/18 - 07/18	08	14	879,071	99.0%	0	0.0%	0	0.0%	0	0.0%	879,071	9,253	1.0%	888,324
07/19 - 07/19	09 [b]	14	503,840	99.0%	0	0.0%	0	0.0%	0	0.0%	503,840	4,963	1.0%	508,803
07/20 - 07/20	10	14	984,963	99.1%	0	0.0%	0	0.0%	0	0.0%	984,963	9,036	0.9%	993,999
07/21 - 07/21	11 [c]	14	849,825	99.0%	0	0.0%	0	0.0%	0	0.0%	849,825	8,371	1.0%	858,196
07/22 - 07/22	12	14	1,047,554	99.0%	0	0.0%	0	0.0%	0	0.0%	1,047,554	11,027	1.0%	1,058,581
07/23 - 07/23	13 [d]	14	535,122	97.4%	0	0.0%	0	0.0%	0	0.0%	535,122	14,308	2.6%	549,430
07/24 - 07/24	14	14	566,381	95.8%	0	0.0%	0	0.0%	0	0.0%	566,381	24,625	4.2%	591,006
07/27 - 07/27	15	14	293,283	95.8%	0	0.0%	0	0.0%	0	0.0%	293,283	12,751	4.2%	306,034
07/28 - 07/28	16	14	466,458	94.8%	0	0.0%	0	0.0%	0	0.0%	466,458	25,630	5.2%	492,088
07/29 - 07/29	17	14	79,152	95.2%	0	0.0%	0	0.0%	800	1.0%	79,952	3,198	3.8%	83,150
07/30 - 07/30	18 [e]	14	49,745	100.0%	0	0.0%	0	0.0%	0	0.0%	49,745	0	0.0%	49,745
07/31 - 07/31	19	14	80,387	92.5%	1,641	1.9%	0	0.0%	0	0.0%	82,027	4,922	5.7%	86,949
08/01 - 08/01	20 [f]	14	41,710	92.5%	851	1.9%	0	0.0%	0	0.0%	42,561	2,554	5.7%	45,115
08/02 - 08/02	21 [f]	14	8,457	92.5%	173	1.9%	0	0.0%	0	0.0%	8,629	518	5.7%	9,147
08/03 - 08/03	22 [g]	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/04 - 08/04	23 [h]	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	3,212	100.0%	3,212
08/05 - 08/05	24 [g]	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/06 - 08/06	25 [g]	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/07 - 08/07	26 [h]	14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	58,807	100.0%	58,807
08/08 - 08/08	27 [g]	17	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/09 - 08/09	28 [g]	17	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/10 - 08/10	29 [g]	17	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/11 - 08/11	30 [g]	17	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/12 - 08/12	31 [g]	17	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/13 - 08/13	32 [g]	17	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/14 - 08/14	33 [g]	17	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/15 - 08/15	34 [g]	17	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0

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Dates		Period	Hours	Origin										
				Solomon Gulch		Cannery Creek		W. Noerenberg		A.F. Koernig		Hatchery	Wild		
				Nr.	Proportion	Nr.	Proportion	Nr.	Proportion	Nr.	Proportion	Total	Nr.	Proportion	Total
08/16	08/16	35 [g]	17	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/17	08/17	36 [h]	17	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	1,559	100.0%	1,559
08/18	08/18	37 [g]	17	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/19	08/19	38 [h]	17	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	2,581	100.0%	2,581
08/20	08/20	39 [h]	17	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	2,199	100.0%	2,199
08/21	08/21	40 [g]	17	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/22	08/22	41 [h]	17	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	32,494	100.0%	32,494
08/23	08/23	42 [g]	17	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/24	08/24	43 [g]	17	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/25	08/25	44 [g]	17	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/26	08/26	45 [g]	17	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/27	08/27	46 [g]	17	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/28	08/28	47 [g]	17	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/29	08/29	48 [g]	17	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/30	08/30	49 [g]	17	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/31	08/31	50 [g]	17	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/01	09/01	51 [g]	17	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/02	09/02	52 [g]	16	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/03	09/03	53 [g]	16	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/04	09/04	54 [g]	16	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/05	09/05	55 [g]	16	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/06	09/06	56 [g]	16	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/07	09/07	57 [g]	16	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/08	09/10	58 [g]	64	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/11	09/15	59 [g]	110	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Total				15,878,731	96.9%	2,664	0.0%	0	0.0%	800	0.0%	15,882,195	504,244	3.1%	16,386,439

[a] No samples collected. Proportion estimates based on average of period 2 and period 4 results.

[b] No samples collected. Proportion estimates based on average of period 8 and period 10 results.

[c] No samples collected. Proportion estimates based on average of period 10 and period 12 results.

[d] No samples collected. Proportion estimates based on average of period 12 and period 14 results.

[e] Small sample (< 20 specimens).

[f] No samples collected. Proportion estimates based on period 19 results.

[g] No harvest reported.

[h] No samples collected. Entire harvest assumed to be wild.

Appendix E20.–Daily salmon sales and sex ratios, sales summary, and broodstock summary at the Solomon Gulch Hatchery, 2010.

	Pink Salmon					Coho Salmon	
Date	% Female	Sales Harvest[a]	Sales Harvest Cumulative	Brood Stock[b]	Brood Stock Cumulative	Sales Harvest	Sales Harvest Cumulative
06/25	--	43,575	43,575	0	0	0	0
06/26	--	20,981	64,556	0	0	0	0
06/27	--	43,963	108,519	0	0	0	0
06/28	--	23,475	131,994	0	0	0	0
06/29	--	67,583	199,577	0	0	0	0
06/30	--	85,924	285,501	0	0	0	0
07/01	--	64,522	350,023	0	0	0	0
07/02	--	56,163	406,186	0	0	0	0
07/03	--	132,563	538,749	0	0	0	0
07/04	--	172,647	711,396	0	0	0	0
07/05	--	306,768	1,018,164	0	0	0	0
07/06	--	156,977	1,175,141	0	0	0	0
07/07	--	7,399	1,182,540	0	0	0	0
07/08	--	62,885	1,245,425	0	0	0	0
07/10	--	189,346	1,434,771	0	0	0	0
07/11	--	259,434	1,694,205	0	0	0	0
07/12	--	179,761	1,873,966	0	0	0	0
07/26		0	1,873,966	18,635	18,635	0	0
07/27		0	1,873,966	20,987	39,622	0	0
07/28		3,368	1,877,334	17,701	57,323	0	0
07/29		1,238	1,878,572	18,036	75,359	0	0
07/30		2,283	1,880,855	18,581	93,940	0	0
08/02	--	79,473	1,960,328	15,766	109,706	0	0
08/03		0	1,960,328	13,916	123,622	0	0
08/04		0	1,960,328	19,077	142,699	0	0
08/05		0	1,960,328	17,403	160,102	0	0
08/06		5,000	1,965,328	18,154	178,256	0	0
08/09		1,593	1,966,921	23,820	202,076	0	0
08/10		1,888	1,968,809	19,180	221,256	0	0
08/11		2,078	1,970,887	18,287	239,543	0	0
08/12		1,416	1,972,303	17,270	256,813	0	0
08/13		10,911	1,983,214	13,195	270,008	0	0
08/16		5,062	1,988,276	11,172	281,180	0	0
08/17		2,061	1,990,337	12,601	293,781	0	0
08/18		2,911	1,993,248	12,950	306,731	0	0
08/19		12,865	2,006,113	3,541	310,272	0	0
08/20		18,579	2,024,692	0	310,272	0	0
08/23		11,426	2,036,118	0	310,272	0	0
08/24		13,266	2,049,384	0	310,272	0	0
08/25		7,560	2,056,944	0	310,272	0	0

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	Pink Salmon					Coho Salmon	
Date	% Female	Sales Harvest[a]	Sales Harvest Cumulative	Brood Stock[b]	Brood Stock Cumulative	Sales Harvest	Sales Harvest Cumulative
08/26		5,328	2,062,272	0	310,272	0	0
08/27		2,741	2,065,013	0	310,272	0	0
08/28		0	2,065,013	0	310,272	0	0
08/29		0	2,065,013	0	310,272	0	0
08/30		0	2,065,013	0	310,272	997	997
08/31		0	2,065,013	0	310,272	1,029	2,026
09/01		0	2,065,013	704	310,272	993	3,019
09/02		0	2,065,013	0	310,272	1,004	4,023
09/03		0	2,065,013	0	310,272	1,002	5,025
09/04		0	2,065,013	0	310,272	1,004	6,029
09/05		0	2,065,013	0	310,272	0	6,029
09/06		0	2,065,013	0	310,272	0	6,029
09/07		0	2,065,013	0	310,976	1,500	7,529
09/08		0	2,065,013	0	310,976	1,000	8,529
09/09		0	2,065,013	0	310,976	1,400	9,929
09/10		0	2,065,013	0	310,976	1,501	11,430
09/11		0	2,065,013	0	310,976	1,509	12,939
09/12		0	2,065,013	0	310,976	0	12,939
09/13		0	2,065,013	0	310,976	2,000	14,939
09/14		0	2,065,013	0	310,976	2,016	16,955
10/08		0	2,065,013	0	310,976	2,987	19,942
10/12		0	2,065,013	0	310,976	2,761	22,703
10/14		0	2,065,013	0	310,976	3,556	26,259
10/19		0	2,065,013	0	310,976	1,311	27,570

Hatchery escapement summary[c]	Pink salmon	Coho Salmon
Purse seine whole fish harvest	1,953,439	0
Raceway harvest[d]	112,723	43,722
Viable broodstock (spawned, eggs in incubators)	206,772	754
Unviable broodstock (green/over-ripe/bad)	16,359	14
Unspawned fish (excess males and females)	80,865	142
Holding mortalities (raceway, pen mortalities)	4,257	79
Estimated unharvested return[e]	14,805	2,000
Estimated total return to hatchery	2,389,220	46,711

Sales Summary	Pink salmon	Coho Salmon
Purse seine whole fish sales	1,953,439	0
Raceway whole fish sales	214,204	43,722
Carcass sales[f]	206,772	847
Total sales	2,374,415	44,569

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

[b] Broodstock daily harvest numbers include viable broodstock and holding mortalities.

[c] Determined by fish tickets and VFDA egg-take log, and annual report.

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

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

[f] Represents the sale of "viable broodstock" carcasses.

Appendix E21.–Chum salmon hatchery and wild stock contributions to the Montague District commercial common period, 2010.

			Origin							
			Port Chalmers		Wally Noerenberg		Hatchery	Wild		
Dates	Period	Hours	Nr.	Proportion	Nr.	Proportion	Total	Nr.	Proportion	Total
05/24 - 05/26	01 [a]	60	3,171	70.6%	1,321	29.4%	4,492	0	0.0%	4,492
05/27 - 05/30	02 [a]	84	1,809	70.6%	754	29.4%	2,563	0	0.0%	2,563
05/31 - 06/02	03 [b]	60	2,245	53.8%	1,925	46.2%	4,170	0	0.0%	4,170
06/03 - 06/06	04	84	5,311	70.6%	2,213	29.4%	7,524	0	0.0%	7,524
06/07 - 06/09	05	60	12,368	70.6%	5,153	29.4%	17,521	0	0.0%	17,521
06/10 - 06/13	06	84	4,566	45.6%	5,155	51.5%	9,721	295	2.9%	10,016
06/14 - 06/16	07	60	6,429	70.2%	2,728	29.8%	9,157	0	0.0%	9,157
06/17 - 06/20	08	84	21,290	72.6%	7,097	24.2%	28,387	926	3.2%	29,313
06/21 - 06/23	09	60	21,634	68.8%	8,850	28.1%	30,485	983	3.1%	31,468
06/24 - 06/27	10	84	21,403	67.2%	9,878	31.0%	31,281	549	1.7%	31,830
06/28 - 06/30	11	60	15,145	62.1%	8,728	35.8%	23,873	513	2.1%	24,386
07/01 - 07/04	12	84	18,779	64.4%	10,395	35.6%	29,174	0	0.0%	29,174
07/05 - 07/07	13	60	8,449	47.1%	9,068	50.6%	17,517	412	2.3%	17,929
07/08 - 07/11	14	84	9,278	54.4%	7,768	45.6%	17,046	0	0.0%	17,046
07/12 - 07/14	15	60	2,180	43.9%	2,665	53.7%	4,845	121	2.4%	4,966
07/15 - 07/18	16 [c]	84	0	0.0%	0	0.0%	0	0	0.0%	0
07/19 - 07/21	17 [c]	60	0	0.0%	0	0.0%	0	0	0.0%	0
07/22 - 07/25	18 [c]	84	0	0.0%	0	0.0%	0	0	0.0%	0
07/26 - 07/28	19 [c]	60	0	0.0%	0	0.0%	0	0	0.0%	0
07/29 - 07/31	20 [b]	40	441	45.5%	265	27.3%	706	265	27.3%	971
07/31 - 07/31	21 [d]	14	8	43.9%	10	53.7%	19	0	2.4%	19
Total			154,508	63.7%	83,972	34.6%	238,481	4,064	1.7%	242,545

[a] No samples collected. Proportions based on period 4 results.

[b] Small sample (< 20 otoliths).

[c] No harvest reported.

[d] No samples collected. Proportions based on period 15 results.

Appendix E22.–Pink salmon hatchery and wild stock contributions to the Montague District commercial common property fishery by period, 2010.

			Origin											
			Solomon Gulch		Cannery Creek		W. Noerenberg		A.F. Koernig		Hatchery	Wild		
Dates	Period	Hours	Nr.	Proportion	Nr.	Proportion	Nr.	Proportion	Nr.	Proportion	Total	Nr.	Proportion	Total
05/24 - 05/26	01 [a]	60	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
05/27 - 05/30	02 [a]	84	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
05/31 - 06/02	03 [b]	60	1	80.0%	0	0.0%	0	0.0%	0	0.0%	1	0	20.0%	1
06/03 - 06/06	04 [b]	84	5	80.0%	0	0.0%	0	0.0%	0	0.0%	5	1	20.0%	6
06/07 - 06/09	05 [b]	60	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
06/10 - 06/13	06 [b]	84	2	80.0%	0	0.0%	0	0.0%	0	0.0%	2	0	20.0%	2
06/14 - 06/16	07 [a]	60	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
06/17 - 06/20	08 [b]	84	2	80.0%	0	0.0%	0	0.0%	0	0.0%	2	1	20.0%	3
06/21 - 06/23	09 [b]	60	110	80.0%	0	0.0%	0	0.0%	0	0.0%	110	28	20.0%	138
06/24 - 06/27	10 [b]	84	436	80.0%	0	0.0%	0	0.0%	0	0.0%	436	109	20.0%	545
06/28 - 06/30	11 [b]	60	187	80.0%	0	0.0%	0	0.0%	0	0.0%	187	47	20.0%	234
07/01 - 07/04	12 [b]	84	1,010	80.0%	0	0.0%	0	0.0%	0	0.0%	1,010	253	20.0%	1,263
07/05 - 07/07	13 [b]	60	3,026	80.0%	0	0.0%	0	0.0%	0	0.0%	3,026	756	20.0%	3,782
07/08 - 07/11	14 [c]	84	195	80.0%	0	0.0%	0	0.0%	0	0.0%	195	49	20.0%	244
07/12 - 07/14	15 [b]	60	19	80.0%	0	0.0%	0	0.0%	0	0.0%	19	5	20.0%	24
07/15 - 07/18	16 [a]	84	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/19 - 07/21	17 [a]	60	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/22 - 07/25	18 [a]	84	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/26 - 07/28	19 [a]	60	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/29 - 07/31	20 [b]	40	7,642	80.0%	0	0.0%	0	0.0%	0	0.0%	7,642	1,910	20.0%	9,552
07/31 - 07/31	21 [b]	14	153	80.0%	0	0.0%	0	0.0%	0	0.0%	153	38	20.0%	191
Total			12,788	80.0%	0	0.0%	0	0.0%	0	0.0%	12,788	3,197	20.0%	15,985

[a] No harvest reported.

[b] No samples collected. Proportion estimates based on period 14 results.

[c] Small sample (< 20 specimens).

Appendix E23.–Pink salmon hatchery and wild stock contributions to the Northern District commercial common property fishery by period, 2010.

			Origin											
			Solomon Gulch		Cannery Creek		W. Noerenberg		A.F. Koernig		Hatchery	Wild		
Dates	Period	Hours	Nr.	Proportion	Nr.	Proportion	Nr.	Proportion	Nr.	Proportion	Total	Nr.	Proportion	Total
07/22 - 07/23	01 [a]	36	0	0.0%	20,903	90.6%	961	4.2%	240	1.0%	22,104	961	4.2%	23,065
08/01 - 08/01	02	14	0	0.0%	1,909,355	90.6%	87,786	4.2%	21,947	1.0%	2,019,089	87,786	4.2%	2,106,875
08/03 - 08/03	03	14	0	0.0%	1,987,969	96.9%	21,149	1.0%	0	0.0%	2,009,118	42,297	2.1%	2,051,415
08/05 - 08/05	04	14	0	0.0%	1,324,976	86.3%	168,251	11.0%	0	0.0%	1,493,227	42,063	2.7%	1,535,290
08/06 - 08/06	05	14	0	0.0%	1,012,107	72.9%	260,256	18.8%	0	0.0%	1,272,364	115,669	8.3%	1,388,033
08/07 - 08/07	06	14	0	0.0%	810,566	79.1%	186,337	18.2%	0	0.0%	996,902	27,951	2.7%	1,024,853
08/08 - 08/08	07	17	0	0.0%	770,724	99.0%	0	0.0%	0	0.0%	770,724	8,113	1.0%	778,837
08/09 - 08/09	08 [b]	17	0	0.0%	973,368	90.1%	84,396	7.8%	0	0.0%	1,057,764	22,506	2.1%	1,080,270
08/10 - 08/10	09	17	0	0.0%	918,240	81.3%	176,585	15.6%	0	0.0%	1,094,825	35,317	3.1%	1,130,142
08/11 - 08/11	10 [c]	17	0	0.0%	983,542	90.6%	84,788	7.8%	0	0.0%	1,068,330	16,958	1.6%	1,085,288
08/12 - 08/12	11	17	0	0.0%	1,145,249	100.0%	0	0.0%	0	0.0%	1,145,249	0	0.0%	1,145,249
08/13 - 08/13	12	17	0	0.0%	924,812	79.2%	231,203	19.8%	0	0.0%	1,156,015	12,169	1.0%	1,168,184
08/14 - 08/14	13	17	0	0.0%	807,526	97.9%	8,591	1.0%	0	0.0%	816,116	8,591	1.0%	824,707
08/15 - 08/15	14	17	0	0.0%	667,958	82.3%	126,828	15.6%	0	0.0%	794,786	16,910	2.1%	811,696
08/16 - 08/16	15 [d]	17	0	0.0%	488,745	79.5%	111,615	18.2%	0	0.0%	600,361	14,352	2.3%	614,713
08/17 - 08/17	16	17	0	0.0%	219,863	76.7%	59,289	20.7%	0	0.0%	279,152	7,411	2.6%	286,563
08/18 - 08/18	17 [e]	17	0	0.0%	126,656	87.3%	15,770	10.9%	0	0.0%	142,427	2,639	1.8%	145,066
08/19 - 08/19	18	17	0	0.0%	141,988	97.9%	1,527	1.1%	0	0.0%	143,514	1,527	1.1%	145,041
08/20 - 08/20	19	17	0	0.0%	85,897	74.0%	1,210	1.0%	27,826	24.0%	114,933	1,210	1.0%	116,143
08/21 - 08/21	20	17	0	0.0%	74,507	95.1%	0	0.0%	3,854	4.9%	78,361	0	0.0%	78,361
08/22 - 08/22	21	17	0	0.0%	90,724	97.9%	0	0.0%	0	0.0%	90,724	1,930	2.1%	92,654
08/23 - 08/23	22	17	0	0.0%	101,060	100.0%	0	0.0%	0	0.0%	101,060	0	0.0%	101,060
08/24 - 08/24	23	17	0	0.0%	31,418	93.8%	698	2.1%	698	2.1%	32,815	698	2.1%	33,513
08/25 - 08/25	24	17	0	0.0%	39,642	88.5%	4,197	9.4%	466	1.0%	44,306	466	1.0%	44,772
08/26 - 08/26	25 [f]	17	0	0.0%	8,472	100.0%	0	0.0%	0	0.0%	8,472	0	0.0%	8,472

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			Origin										
			Solomon Gulch		Cannery Creek		W. Noerenberg		A.F. Koernig		Hatchery	Wild	
Dates	Period	Hours	Nr.	Proportion	Nr.	Proportion	Nr.	Proportion	Nr.	Proportion	Total	Nr.	Proportion	Total
08/27 - 08/27	26 [g]	17	0	0.0%	6,000	88.5%	635	9.4%	71	1.0%	6,705	71	1.0%	6,776
08/28 - 08/28	27 [g]	17	0	0.0%	3,654	88.5%	387	9.4%	43	1.0%	4,084	43	1.0%	4,127
08/29 - 08/29	28 [h]	17	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/30 - 08/30	29 [g]	17	0	0.0%	4,161	88.5%	441	9.4%	49	1.0%	4,650	49	1.0%	4,699
08/31 - 08/31	30 [h]	17	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/01 - 09/01	31 [g]	17	0	0.0%	17,613	88.5%	1,865	9.4%	207	1.0%	19,685	207	1.0%	19,892
09/02 - 09/02	32 [h]	16	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/03 - 09/03	33 [h]	16	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/04 - 09/04	34 [h]	16	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/05 - 09/05	35 [g]	16	0	0.0%	24,098	88.5%	2,552	9.4%	284	1.0%	26,933	284	1.0%	27,216
09/06 - 09/06	36 [h]	16	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/07 - 09/07	37 [g]	16	0	0.0%	29,980	88.5%	3,174	9.4%	353	1.0%	33,507	353	1.0%	33,860
09/08 - 09/10	38 [h]	64	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/11 - 09/15	39 [h]	110	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Totals			0	0.0%	15,751,774	87.9%	1,640,491	9.2%	56,037	0.3%	17,448,302	468,530	2.6%	17,916,832

[a] No samples collected. Proportion estimates based on period 2 results.

[b] No samples collected. Proportion estimates based on average of period 7 and period 9 results.

[c] No samples collected. Proportion estimates based on average of period 9 and period 11 results.

[d] No samples collected. Proportion estimates based on average of period 14 and period 16 results.

[e] No samples collected. Proportion estimates based on average of period 16 and period 18 results.

[f] Small sample (< 20 specimens).

[g] No samples collected. Proportion estimates based on period 24 results.

[h] No harvest reported.

Appendix E24.–Daily salmon sales and sex ratios, sales summary, and broodstock summary at the Cannery Creek Hatchery, 2010.

	Pink Salmon				
Date	% Female	Sales Harvest[a]	Sales Harvest cumulative	Brood Stock[b]	Brood Stock cumulative
07/29	17.9%	59,030	59,030	0	0
07/30	14.0%	67,895	126,925	0	0
07/31	19.0%	89,562	216,487	0	0
08/01		0	216,487	0	0
08/02		49,479	265,966	0	0
08/24		0	0	10	10
08/25		5,133	271,099	13,442	13,452
08/26		3,707	274,806	17,580	31,032
08/27		3,018	277,824	16,705	47,737
08/28		1,314	279,138	7,847	55,584
08/29		1,982	281,120	13,134	68,718
08/30		1,769	282,889	16,338	85,056
08/31		756	283,645	14,724	99,780
09/01		1,131	284,776	19,287	119,067
09/02		1,679	286,455	19,210	138,277
09/03		591	287,046	19,550	157,827
09/04		1,105	288,151	16,047	173,874
09/05		13,044	301,195	761	174,635
09/06		13,649	314,844	1,315	175,950
09/07		14,529	329,373	1,067	177,017
09/08		18,943	348,316	817	177,834
09/09		15,296	363,612	1,048	178,882
09/10				233	179,115

Hatchery escapement summary[c]	Pink salmon
Purse seine whole fish harvest	265,966
Raceway harvest[d]	69,290
Viable broodstock (spawned, eggs in incubators)	167,693
Unviable broodstock (green/over-ripe/bad)	17,693
Unspawned fish (e.g., excess males/females)	10,663
Holding mortalities (raceway, pen mortalities)	11,422
Estimated unharvested return[e]	5,000
Estimated total return to hatchery	547,727

Sales Summary	Pink salmon
Purse seine whole fish sales	265,966
Raceway sales[f]	108,835
Carcass sales[g]	167,693
Total sales	542,494

[a] Whole fish from purse seine and raceway sales.
[b] Broodstock daily harvest numbers include viable broodstock and holding mortalities.
[c] Determined by fish tickets and VFDA egg-take log, and annual report.
[d] Raceway harvest includes whole fish as well as roe extraction not conducted as eggtake.
[e] Fish remaining in saltwater and freshwater after all hatchery harvest is complete.
[f] Sum of raceway harvest, unviable broodstock and unspawned fish.
[g] Represents the sale of "viable broodstock" carcasses.

Appendix E25.–Sockeye salmon hatchery and wild stock contributions to the Southwestern District commercial common property fishery by period, 2010.

Dates	Period	Hours	Origin									
			Gulkana [a]		Main Bay		Solf Lake		Hatchery	Wild		
			Nr.	Proportion	Nr.	Proportion	Nr.	Proportion	Total	Nr.	Proportion	Total
05/27 - 05/30	01 [b]	84	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
05/31 - 06/02	02 [c]	60	0	0.0%	8	90.5%	0	0.0%	8	1	9.5%	9
06/03 - 06/06	03	84	0	0.0%	222	90.5%	0	0.0%	222	23	9.5%	245
06/07 - 06/09	04 [d]	60	0	0.0%	0	0.0%	0	0.0%	0	199	100.0%	199
06/10 - 06/13	05	84	0	0.0%	1,619	95.1%	0	0.0%	1,619	83	4.9%	1,702
06/14 - 06/16	06	60	0	0.0%	3,051	100.0%	0	0.0%	3,051	0	0.0%	3,051
06/17 - 06/20	07	84	0	0.0%	7,388	90.7%	0	0.0%	7,388	760	9.3%	8,148
06/21 - 06/23	08	60	0	0.0%	6,358	97.7%	0	0.0%	6,358	150	2.3%	6,508
06/24 - 06/25	09 [d]	24	0	0.0%	5,567	100.0%	0	0.0%	5,567	0	0.0%	5,567
06/25 - 06/27	10 [e]	48	0	0.0%	10,229	97.3%	58	0.5%	10,287	231	2.2%	10,518
06/27 - 06/30	11	84	0	0.0%	8,322	94.5%	97	1.1%	8,419	387	4.4%	8,806
07/01 - 07/04	12	84	0	0.0%	8,496	91.0%	0	0.0%	8,496	840	9.0%	9,336
07/05 - 07/07	13	60	0	0.0%	2,769	92.6%	0	0.0%	2,769	221	7.4%	2,990
07/08 - 07/11	14 [f]	84	0	0.0%	1,943	91.3%	0	0.0%	1,943	185	8.7%	2,128
07/12 - 07/14	15 [f]	60	0	0.0%	38	91.3%	0	0.0%	38	4	8.7%	42
07/15 - 07/18	16 [b]	84	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/19 - 07/21	17 [f]	60	0	0.0%	34	91.3%	0	0.0%	34	3	8.7%	37
07/22 - 07/22	18	14	0	0.0%	107	90.0%	0	0.0%	107	12	10.0%	119
07/23 - 07/23	19 [b]	14	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/24 - 07/24	20	14	0	0.0%	93	90.6%	0	0.0%	93	10	9.4%	103
07/25 - 07/25	21 [g]	14	0	0.0%	133	90.6%	0	0.0%	133	14	9.4%	147
08/01 - 08/01	22 [g]	14	0	0.0%	31	90.6%	0	0.0%	31	3	9.4%	34
08/03 - 08/03	23 [g]	14	0	0.0%	26	90.6%	0	0.0%	26	3	9.4%	29
08/05 - 08/05	24 [g]	14	0	0.0%	5	90.6%	0	0.0%	5	0	9.4%	5
08/06 - 08/06	25 [g]	14	0	0.0%	12	90.6%	0	0.0%	12	1	9.4%	13
08/07 - 08/07	26 [g]	14	0	0.0%	12	90.6%	0	0.0%	12	1	9.4%	13
08/08 - 08/08	27 [g]	17	0	0.0%	6	90.6%	0	0.0%	6	1	9.4%	7
08/09 - 08/09	28 [g]	17	0	0.0%	14	90.6%	0	0.0%	14	1	9.4%	15
08/10 - 08/10	29 [g]	17	0	0.0%	1	90.6%	0	0.0%	1	0	9.4%	1
08/11 - 08/11	30 [g]	17	0	0.0%	10	90.6%	0	0.0%	10	1	9.4%	11
08/12 - 08/12	31 [g]	17	0	0.0%	1	90.6%	0	0.0%	1	0	9.4%	1
08/13 - 08/13	32 [g]	17	0	0.0%	24	90.6%	0	0.0%	24	2	9.4%	26

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Dates		Period		Hours	Origin: Gulkana [a] Nr.	Gulkana [a] Proportion	Main Bay Nr.	Main Bay Proportion	Solf Lake Nr.	Solf Lake Proportion	Hatchery Total	Wild Nr.	Wild Proportion	Total
08/14 -	08/14	33	[g]	17	0	0.0%	27	90.6%	0	0.0%	27	3	9.4%	30
08/15 -	08/15	34	[g]	17	0	0.0%	12	90.6%	0	0.0%	12	1	9.4%	13
08/16 -	08/16	35	[g]	17	0	0.0%	22	90.6%	0	0.0%	22	2	9.4%	24
08/17 -	08/17	36	[g]	17	0	0.0%	269	90.6%	0	0.0%	269	28	9.4%	297
08/18 -	08/18	37	[g]	17	0	0.0%	27	90.6%	0	0.0%	27	3	9.4%	30
08/19 -	08/19	38	[g]	17	0	0.0%	5	90.6%	0	0.0%	5	1	9.4%	6
08/20 -	08/20	39	[g]	17	0	0.0%	14	90.6%	0	0.0%	14	1	9.4%	15
08/21 -	08/21	40	[g]	17	0	0.0%	8	90.6%	0	0.0%	8	1	9.4%	9
08/22 -	08/22	41	[g]	17	0	0.0%	34	90.6%	0	0.0%	34	3	9.4%	37
08/23 -	08/23	42	[g]	17	0	0.0%	14	90.6%	0	0.0%	14	1	9.4%	15
08/24 -	08/24	43	[g]	17	0	0.0%	29	90.6%	0	0.0%	29	3	9.4%	32
08/25 -	08/25	44	[g]	17	0	0.0%	10	90.6%	0	0.0%	10	1	9.4%	11
08/26 -	08/26	45	[b]	17	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/27 -	08/27	46	[b]	17	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/28 -	08/28	47	[b]	17	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/29 -	08/29	48	[b]	17	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/30 -	08/30	49	[b]	17	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
08/31 -	08/31	50	[b]	17	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/01 -	09/01	51	[b]	17	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/02 -	09/02	52	[b]	16	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/03 -	09/03	53	[b]	16	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/04 -	09/04	54	[b]	16	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/05 -	09/05	55	[b]	16	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/06 -	09/06	56	[b]	16	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/07 -	09/07	57	[b]	16	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/08 -	09/10	58	[b]	64	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/11 -	09/15	59	[b]	110	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/12 -	09/12	52	[b]	12	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Total							0	0.0%	155	0.3%	57,142	3,187	5.3%	60,329

[a] The Gulkana Hatchery contribution is assumed to be zero based on historical data. No samples were examined for strontium chloride marks.
[b] No harvest reported.
[c] No samples collected. Proportion estimates based on period 3 results.
[d] Small sample (< 20 specimens).
[e] No samples collected. Proportion estimates based on average of period 9 and period 11 results.
[f] No samples collected. Proportion estimates based on average of period 18 and period 20 results.
[g] No samples collected. Proportion estimates based on period 20 results.

Appendix E26.–Pink salmon hatchery and wild stock contributions to the Southwestern District commercial common property fishery by period, 2010.

			Origin											
			Solomon Gulch		Cannery Creek		W. Noerenberg		A.F. Koernig		Hatchery	Wild		
Dates	Period	Hours	Nr.	Proportion	Nr.	Proportion	Nr.	Proportion	Nr.	Proportion	Total	Nr.	Proportion	Total
05/27 - 05/30	01	84[a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
05/31 - 06/02	02	60[a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
06/03 - 06/06	03	84[b]	12	100.0%	0	0.0%	0	0.0%	0	0.0%	12	0	0.0%	12
06/07 - 06/09	04	60[b]	76	100.0%	0	0.0%	0	0.0%	0	0.0%	76	0	0.0%	76
06/10 - 06/13	05	84[c]	178	100.0%	0	0.0%	0	0.0%	0	0.0%	178	0	0.0%	178
06/14 - 06/16	06	60[b]	115	100.0%	0	0.0%	0	0.0%	0	0.0%	115	0	0.0%	115
06/17 - 06/20	07	84[b]	359	100.0%	0	0.0%	0	0.0%	0	0.0%	359	0	0.0%	359
06/21 - 06/23	08	60	463	64.1%	0	0.0%	0	0.0%	0	0.0%	463	260	35.9%	723
06/24 - 06/25	09	24[b]	214	100.0%	0	0.0%	0	0.0%	0	0.0%	214	0	0.0%	214
06/25 - 06/27	10	48[b]	925	100.0%	0	0.0%	0	0.0%	0	0.0%	925	0	0.0%	925
06/27 - 06/30	11	84[b]	535	100.0%	0	0.0%	0	0.0%	0	0.0%	535	0	0.0%	535
07/01 - 07/04	12	84[d]	716	33.2%	0	0.0%	25	1.2%	890	41.3%	1,632	525	24.3%	2,157
07/05 - 07/07	13	60[d]	255	33.2%	0	0.0%	9	1.2%	317	41.3%	581	187	24.3%	768
07/08 - 07/11	14	84[d]	277	33.2%	0	0.0%	10	1.2%	345	41.3%	632	203	24.3%	835
07/12 - 07/14	15	60[e]	8	2.3%	0	0.0%	8	2.3%	267	82.6%	283	41	12.8%	324
07/15 - 07/18	16	84[e]	20	2.3%	0	0.0%	20	2.3%	693	82.6%	732	107	12.8%	839
07/19 - 07/21	17	60[e]	73	2.3%	0	0.0%	73	2.3%	2,609	82.6%	2,756	404	12.8%	3,160
07/22 - 07/22	18	14	331	2.3%	0	0.0%	331	2.3%	11,764	82.6%	12,426	1,823	12.8%	14,249
07/23 - 07/23	19	14[a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
07/24 - 07/24	20	14	160	1.1%	0	0.0%	0	0.0%	14,556	95.8%	14,716	480	3.2%	15,196
07/25 - 07/25	21	14[f]	386	0.5%	0	0.0%	0	0.0%	71,873	97.9%	72,260	1,159	1.6%	73,419
08/01 - 08/01	22	14[f]	2,083	0.5%	0	0.0%	0	0.0%	387,382	97.9%	389,465	6,248	1.6%	395,713
08/03 - 08/03	23	14	0	0.0%	0	0.0%	0	0.0%	1,017,667	100.0%	1,017,667	0	0.0%	1,017,667
08/05 - 08/05	24	14	6,232	1.0%	12,464	2.1%	12,464	2.1%	560,888	93.8%	592,048	6,232	1.0%	598,280
08/06 - 08/06	25	14	0	0.0%	95,288	15.6%	122,513	20.0%	353,927	57.8%	571,728	40,838	6.7%	612,566
08/07 - 08/07	26	14	0	0.0%	7,995	1.0%	31,979	4.2%	719,536	93.8%	759,510	7,995	1.0%	767,505
08/08 - 08/08	27	17	9,490	1.1%	180,315	20.0%	379,610	42.1%	294,198	32.6%	863,612	37,961	4.2%	901,573
08/09 - 08/09	28	17[g]	6,664	0.5%	182,478	14.4%	313,114	24.7%	727,953	57.5%	1,230,209	35,966	2.8%	1,266,175
08/10 - 08/10	29	17	0	0.0%	112,943	8.8%	94,119	7.4%	1,054,135	82.4%	1,261,197	18,824	1.5%	1,280,021
08/11 - 08/11	30	17[h]	0	0.0%	93,145	7.6%	110,002	8.9%	985,924	80.1%	1,189,071	41,429	3.4%	1,230,500
08/12 - 08/12	31	17	0	0.0%	60,934	6.3%	101,557	10.5%	751,523	77.9%	914,014	50,779	5.3%	964,793
08/13 - 08/13	32	17	0	0.0%	106,172	8.6%	483,672	39.0%	566,250	45.7%	1,156,094	82,578	6.7%	1,238,672
08/14 - 08/14	33	17	0	0.0%	69,004	7.1%	82,805	8.6%	772,842	80.0%	924,651	41,402	4.3%	966,053
08/15 - 08/15	34	17	0	0.0%	29,148	3.5%	58,296	7.1%	699,554	84.7%	786,998	38,864	4.7%	825,862

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Appendix E26.–Page 2 of 2.

			Origin											
			Solomon Gulch		Cannery Creek		W. Noerenberg		A.F. Koernig		Hatchery	Wild		
Dates	Period	Hours	Nr.	Proportion	Nr.	Proportion	Nr.	Proportion	Nr.	Proportion	Total	Nr.	Proportion	Total
08/16 - 08/16	35	17[i]	0	0.0%	51,762	7.4%	103,525	14.9%	520,846	74.9%	676,133	18,989	2.7%	695,122
08/17 - 08/17	36	17	0	0.0%	139,134	11.4%	278,268	22.7%	797,702	65.2%	1,215,104	9,276	0.8%	1,224,380
08/18 - 08/18	37	17[j]	0	0.0%	47,954	11.9%	62,416	15.5%	283,726	70.6%	394,095	7,802	1.9%	401,897
08/19 - 08/19	38	17	0	0.0%	48,050	12.5%	32,033	8.3%	292,303	76.0%	372,387	12,012	3.1%	384,399
08/20 - 08/20	39	17	0	0.0%	14,918	4.2%	37,296	10.5%	290,906	82.1%	343,119	11,189	3.2%	354,308
08/21 - 08/21	40	17	0	0.0%	43,321	12.5%	36,101	10.4%	259,927	75.0%	339,349	7,220	2.1%	346,569
08/22 - 08/22	41	17	0	0.0%	74,166	15.6%	64,278	13.5%	311,499	65.6%	449,943	24,722	5.2%	474,665
08/23 - 08/23	42	17	1,979	1.1%	19,793	10.5%	21,772	11.6%	134,593	71.6%	178,137	9,897	5.3%	188,034
08/24 - 08/24	43	17	0	0.0%	15,477	10.8%	22,355	15.7%	92,861	65.1%	130,693	12,038	8.4%	142,731
08/25 - 08/25	44	17	0	0.0%	9,025	10.4%	13,538	15.6%	59,793	68.8%	82,356	4,513	5.2%	86,869
08/26 - 08/26	45	17	1,228	1.4%	0	0.0%	3,683	4.3%	76,123	88.6%	81,034	4,911	5.7%	85,945
08/27 - 08/27	46	17	0	0.0%	6,809	16.7%	2,270	5.6%	27,236	66.7%	36,315	4,539	11.1%	40,854
08/28 - 08/28	47	17	0	0.0%	3,817	9.5%	9,544	23.8%	24,813	61.9%	38,174	1,909	4.8%	40,083
08/29 - 08/29	48	17	0	0.0%	4,067	11.1%	10,168	27.8%	22,369	61.1%	36,603	0	0.0%	36,603
08/30 - 08/30	49	17[k]	0	0.0%	3,342	9.5%	8,354	23.8%	21,721	61.9%	33,416	1,671	4.8%	35,087
08/31 - 08/31	50	17[k]	0	0.0%	656	9.5%	1,639	23.8%	4,262	61.9%	6,557	328	4.8%	6,885
09/01 - 09/01	51	17[a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/02 - 09/02	52	16[a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/03 - 09/03	53	16[a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/04 - 09/04	54	16	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/05 - 09/05	55	16[k]	0	0.0%	2,778	9.5%	6,945	23.8%	18,058	61.9%	27,782	1,389	4.8%	29,171
09/06 - 09/06	56	16[k]	0	0.0%	3,347	9.5%	8,367	23.8%	21,755	61.9%	33,470	1,673	4.8%	35,143
09/07 - 09/07	57	16[a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
09/08 - 09/10	58	64[k]	0	0.0%	18,113	9.5%	45,282	23.8%	117,732	61.9%	181,127	9,056	4.8%	190,183
09/11 - 09/15	59	110[a]	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0	0.0%	0
Total			32,781	0.2%	1,456,415	8.6%	2,558,441	15.1%	12,373,316	72.9%	16,420,953	557,439	3.3%	16,978,392

[a] No otolith contribution estimates. Allocated to wild stocks.
[b] No otolith contribution estimates. Proportions based on period 12 results.
[c] No otolith contribution estimates. Proportions based on an average of period 16 and period 14 results.
[d] No otolith contribution estimates. Proportions based on an average of period 36 and period 38 results.
[e] No otolith contribution estimates. Proportions based on period 38 results.
[f] No samples collected. Proportion estimates based on average of period 20 and 23 results.
[g] No samples collected. Proportion estimates based on average of period 27 and 29 results.
[h] No samples collected. Proportion estimates based on average of period 29 and 31 results.
[i] No samples collected. Proportion estimates based on average of period 34 and 36 results.
[j] No samples collected. Proportion estimates based on average of period 36 and 38 results.
[k] No samples collected. Proportion estimates based on period 47 results.

Appendix E27.–Daily salmon sales and sex ratios, sales summary, and broodstock summary at the Armin F. Koernig Hatchery, 2010.

	Pink Salmon				
Date	% Female	Sales Harvest[a]	Sales Harvest Cumulative	Brood Stock[b]	Brood Stock Cumulative
07/27	7.0%	18,994	18,994	0	0
07/28	8.6%	160,569	179,563	0	0
07/30	13.2%	191,013	370,576	0	0
07/31	16.8%	71,853	442,429	0	0
08/18	52.2%	105,278	547,707	0	0
08/24		2,112	549,819	11,605	11,605
08/25		2,055	551,874	11,258	22,863
08/26		5,217	557,091	12,801	35,664
08/27		2,829	559,920	6,797	42,461
08/28		4,346	564,266	10,948	53,409
08/29		4,903	569,169	15,015	68,424
08/30		3,045	572,214	13,981	82,405
08/31		2,880	575,094	18,599	101,004
09/01		2,929	578,023	18,302	119,306
09/02		2,785	580,808	19,371	138,677
09/03		2,691	583,499	17,290	155,967
09/04		15,815	599,314	5,046	161,013
09/05		24,887	624,201	0	161,013
09/06		20,084	644,285	0	161,013
09/07		22,385	666,670	0	161,013
09/08		21,192	687,862	0	161,013
09/09		16,493	704,355	0	161,013

Hatchery Escapement Summary[c]	Pink Salmon
Purse seine whole fish harvest	547,707
Raceway harvest[d]	105,041
Viable broodstock (spawned, eggs in incubators)	160,922
Unviable broodstock (green/over-ripe/bad)	36,082
Unspawned fish (e.g., excess males/females)	15,525
Holding mortalities (raceway, pen mortalities)	91
Estimated unharvested return[e]	7,700
Estimated total return to hatchery	873,068

Sales Summary	Pink Salmon
Purse seine whole fish sales	547,707
Raceway sales[f]	156,648
Carcass sales[g]	160,922
Total sales	865,277

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

[b] Broodstock daily harvest numbers include viable broodstock and holding mortalities.

[c] Determined by fish tickets and VFDA egg-take log, and annual report.

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

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

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

[g] Represents the sale of "viable broodstock" carcasses.

APPENDIX F.

Appendix F1.–Salmon harvest and effort in the Copper River District subsistence drift gillnet fishery, 1961–2010.

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

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	Permits				Reported Harvest[a]			
Year	Issued	Returned	Fished	Not fished[b]	Chinook	Sockeye	Coho	Total
2006	421	399	300	121	779	4,355	1	5,135
2007	469	440	295	145	1,145	6,148	15	7,308
2008	506	480	248	232	470	3,969	53	4,492
2009	323	293	128	165	212	1,764	22	1,998
10-Year Average	409	385	242	146	675	3,099	33	3,807
2010	325	314	139	175	276	1,980	27	2,283

[a] Reported harvest only.

[b] As reported on returned permits.

Appendix F2.–Salmon harvest and effort in the Prince William Sound general area subsistence fishery, 1965–2010.

	Permits				Reported Harvest[a]						
Year	Issued	Returned	Fished	Not fished[b]	Chinook	Sockeye	Coho	Pink	Chum	Unknown	Total
1965	22	16	0	0	0	0	0	179	25	0	204
1966	3	3	0	0	0	3	19	20	50	0	92
1967	4	3	0	0	0	0	4	4	0	0	8
1968	4	3	0	0	0	0	20	156	0	22	198
1969	7	3	0	0	0	0	16	0	0	0	16
1970	1	1	0	0	0	0	0	0	0	0	0
1971	3	2	0	0	0	0	0	46	0	0	46
1972	0	0	0	0	0	0	0	0	0	0	0
1973	19	16	0	0	0	0	289	0	0	0	289
1974	3	1	0	0	0	0	0	0	0	0	0
1975	2	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0
1977	4	4	0	0	0	0	0	0	0	0	0
1978	3	2	0	0	0	0	0	0	0	0	0
1979	15	2	0	0	0	0	0	0	0	0	0
1980	26	15	0	0	0	7	6	0	0	0	13
1981	12	8	0	0	0	3	29	0	2	0	34
1982	35	27	0	0	0	84	4	31	24	0	143
1983	26	21	0	0	0	22	36	9	79	0	146
1984	8	8	0	0	0	10	0	11	2	0	23
1985	22	16	0	0	1	27	16	14	26	0	84
1986	25	14	0	0	0	5	15	0	0	0	20
1987	18	17	0	0	5	31	6	0	16	0	58
1988	7	7	0	0	2	51	7	10	9	0	79
1989	11	7	0	0	0	0	0	0	3	0	3
1990	8	7	0	0	0	0	7	4	0	0	11
1991	9	5	2	3	0	2	0	0	0	0	2
1992	10	6	1	5	0	20	0	0	0	0	20
1993	6	6	4	2	1	104	10	0	0	0	115
1994	5	4	2	2	0	0	0	0	0	0	0
1995	4	2	0	2	0	0	0	0	0	0	0
1996	10	7	0	7	0	0	0	0	0	0	0
1997	4	3	1	2	0	3	0	0	0	0	3
1998	4	3	0	3	0	0	0	0	0	0	0
1999	3	3	0	3	0	0	0	0	0	0	0
2000	3	3	0	3	0	0	0	0	0	0	0
2001	5	5	0	5	0	0	0	0	0	0	0
2002	11	9	2	7	0	31	0	9	7	0	47
2003	3	3	0	3	0	48	0	0	3	0	51
2004	12	11	5	6	0	8	0	0	3	0	11
2005	14	13	1	12	0	4	0	0	0	0	4
2006	11	9	2	7	0	20	0	30	0	0	50
2007	3	3	1	2	0	30	0	0	0	0	30
2008	11	10	4	6	1	32	0	0	0	0	33
2009	1	1	0	1	0	0	0	0	0	0	0
10-Year Average	7	7	2	5	0	17	0	4	1	0	23
2010	2	2	1	1	0	0	0	0	0	0	0

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

[b] As reported on returned permits.

Appendix F3.–Salmon harvest and effort in the Tatitlek and Chenega subsistence fisheries, 1988–2010.

	Permits				Reported Harvest[a]						
Year	Issued	Returned	Fished	Not fished[b]	Chinook	Sockeye	Coho	Pink	Chum	Unknown	Total
Tatitlek											
1988	17	13	9	4	2	210	211	143	245	0	811
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	NR	NR	NR	NR	NR	NR	NR	NR	0
2008	2	1	1	NR	0	60	0	0	0	0	60
2009	12	4	3	1	0	170	131	0	0	0	301
10-Year Average	13	5	4	1	0	151	197	48	19	0	415
2010	8	5	5	0	0	165	142	0	10	0	317
Chenega											
1988	10	6	5	1	1	50	8	251	294	0	604
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
10-Year Average	11	6	4	2	6	229	86	83	103	0	507
2010	9	5	5	0	0	55	0	6	87	0	148

[a] Reported harvest only.

[b] As reported on returned 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, 1998–2010.

					Reported Harvest				Expanded Harvest					
			Permits		Salmon				Salmon				Other Species	
Year	District	Gear	Issued	Returned	Chinook	Sockeye	Coho	Total	Chinook	Sockeye	Coho	Total	Steelhead	Other
1998	Glennallen	Dipnet	272	244	232	7,616	96	7,944	NA	NA	NA	NA	NA	NA
	Glennallen	Fish wheel	738	703	1,520	53,652	411	55,583	1,842	64,463	533	66,838	35	0
	Chitina	Dipnet	10,006	9,747	6,583	134,299	2,100	142,982	6,723	137,161	2,145	146,029	0	46
	total		11,016	10,694	8,335	195,567	2,607	206,509	8,565	201,624	2,678	212,867	35	46
1999	Glennallen	Dipnet	336	295	351	8,928	131	9,410	NA	NA	NA	NA	NA	NA
	Glennallen	Fish wheel	765	712	2,707	61,971	922	65,600	3,278	77,369	1,121	81,768	31	0
	Chitina	Dipnet	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	8,816	208,841	3,123	220,780	9,191	219,027	3,249	231,467	31	34
2000	Glennallen	Dipnet	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	52	0
	Chitina	Dipnet	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	52	203
2001	Glennallen	Dipnet	408	367	280	8,532	25	8,837	NA	NA	NA	NA	NA	NA
	Glennallen	Fish wheel	832	809	2,974	70,585	1,076	74,635	3,553	82,858	1,144	87,555	64	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		10,702	9,532	6,057	200,421	3,486	209,964	6,666	214,966	3,864	225,496	64	484
2002	Glennallen	Dipnet	460	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	Dipnet	6,805	5,733	1,745	75,747	1,712	79,204	2,023	85,968	1,934	89,925	0	317
	total		7,927	6,743	5,169	123,639	2,236	131,044	5,676	136,818	2,464	144,958	25	317
2003	Glennallen	Dipnet	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	Dipnet	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	Dipnet	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	Dipnet	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

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Appendix F4.–Page 2 of 2.

			Permits		Reported Harvest				Expanded Harvest					
					Salmon				Salmon				Other Species	
Year	District	Gear	Issued	Returned	Chinook	Sockeye	Coho	Total	Chinook	Sockeye	Coho	Total	Steelhead	Other
2005	Glennallen	Dipnet	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	Dipnet	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	Dipnet	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	Dipnet	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
2007	Glennallen	Dipnet	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	Dipnet	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	Dipnet	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	Dipnet	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	Dipnet	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	Dipnet	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
2000-2009 10-year Average	Glennallen	Dipnet	423	358	357	6,799	46	7,599						
	Glennallen	Fish wheel	674	636	2,565	47,275	388	54,765	3,109	57,337	458	60,903	27	29
	Chitina	Dipnet	8,072	6,872	1,943	93,858	2,085	110,989	2,232	105,383	2,445	110,060	0	405
	total		9,170	7,865	4,865	147,931	2,519	173,353	5,341	162,720	2,903	170,964	27	434
2010	Glennallen	Dipnet	620	510	598	11,253	65	11,916	659	12,636	72	13,367	0	1
	Glennallen	Fish wheel	702	646	1,372	55,414	228	57,014	1,537	61,695	255	63,487	12	161
	Chitina	Dipnet	9,316	7,764	589	116,549	2,195	119,333	666	131,834	2,483	134,983	0	360
	total		10,638	8,920	2,559	183,216	2,488	188,263	2,862	206,165	2,810	211,837	12	522

Appendix F5.–Salmon harvest and effort in the Batzulnetas subsistence harvests, 1987–2010.

	Permits				Reported Harvest[a]			
Year	Issued	Returned	Fished	Not fished[b]	Chinook	Sockeye	Coho	Total
1987	0	0	0	0	0	22	0	22
1988	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0
1993	1	0	0	0	0	160	0	160
1994	5	0	0	0	0	997	0	997
1995	4	0	0	0	0	16	0	16
1996	0	0	0	0	0	0	0	0
1997	3	0	0	0	0	427	0	427
1998	1	0	0	0	0	582	0	582
1999	1	0	0	0	0	55	0	55
2000	0	0	0	0	0	0	0	0
2001	0	0	0	0	0	62	0	62
2002	1	1	1	0	0	208	0	208
2003	1	1	1	0	0	164	0	164
2004	1	1	1	0	0	182	0	182
2005	1	1	0	1	0	0	0	0
2006	0	NA	NA	NA	0	0	0	0
2007	1	1	1	0	0	1	0	1
2008	1	1	1	0	0	1	0	1
2009	0	0	0	0	0	0	0	0
10-Year Average	1	1	1	0	0	62	0	62
2010	3	3	NA	NA	0	106	0	106

[a] Reported harvest only.

[b] As reported on returned permits.

Appendix F6.–Salmon harvest and effort in the PWS and upper Copper River Federal subsistence fisheries, 2002–2010.

	Permits				Reported Harvest[a]			
Year	Issued	Returned	Fished	Not fished[b]	Chinook	Sockeye	Coho	Total
Chitina Subdistrict								
2002	122	89	NA	NA	33	575	0	608
2003	100	82	NA	NA	18	717	70	805
2004	109	83	NA	NA	7	1,215	18	1,240
2005	76	64	NA	NA	22	1,265	0	1,287
2006	75	64	NA	NA	13	1,379	20	1,412
2007	98	87	75	12	26	929	40	995
2008	82	70	0	0	22	789	74	885
2009	68	62	27	35	8	817	11	836
2010	92	79	51	24	17	2,061	33	2,111
Glennallen Subdistrict								
2002	201	162	NA	NA	564	7,950	81	8,595
2003	221	184	NA	NA	554	13,616	152	14,322
2004	262	206	NA	NA	636	17,704	152	18,492
2005	267	229	NA	NA	345	19,973	126	20,444
2006	254	222	NA	NA	430	16,711	28	17,169
2007	281	237	223	14	569	15,225	34	15,828
2008	270	219	0	0	705	11,347	156	12,208
2009	274	233	177	56	494	11,822	34	12,350
2010	269	236	200	35	299	12,779	64	13,142
PWS/Chugach Subdistrict								
2005	46	45	22	23	0	109	141	250
2006	49	48	23	25	0	150	100	250
2007	33	33	17	16	0	36	68	104
2008	45	45	23	22	0	32	119	151
2009	39	38	22	16	0	46	185	231
2010	33	33	16	17	0	36	68	104
Total Federal Subsistence Harvests								
2002	323	251	NA	NA	597	8,525	81	9,203
2003	321	266	NA	NA	572	14,333	222	15,127
2004	371	289	NA	NA	643	18,919	170	19,732
2005	389	338	NA	NA	367	21,347	267	21,981
2006	378	334	NA	NA	443	18,240	148	18,831
2007	412	357	315	42	595	16,190	142	16,927
2008	397	334	23	22	727	12,168	349	13,244
2009	381	333	226	107	502	12,685	230	13,417
2010	394	348	267	76	316	14,876	165	15,357

NA = data not available.

[a] Reported harvest only.

[b] As reported on returned permits.

Appendix F7.–Salmon retained from the commercial harvest for personal use (homepack) by district, species, and gear type, in Prince William Sound and the Copper River and Bering River districts, 1994–2010.

Prince William Sound (Drift Gillnet, Set Gillnet and Purse Seine)

		Chinook			Sockeye			Coho			Pink			Chum		
Year	Permits	Seine	Drift Gillnet	Set Gillnet	Seine	Drift Gillnet	Set Gillnet	Seine	Drift Gillnet	Set Gillnet	Seine	Drift Gillnet	Set Gillnet	Seine	Drift Gillnet	Set Gillnet
1994	5	0	5	0	0	0	12	0	32	0	0	0	0	0	0	0
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
10-Year Average	10	1	11	1	0	75	10	0	22	0	0	1	0	0	4	0
2010	85	0	51	0	2	1,062	55	51	9	0	0	5	0	0	70	0

Copper River District (all drift gillnet)

Year	Permits	Chinook	Sockeye	Coho
1994	192	751	947	21
1995	318	1,688	0	0
1996	345	2,169	0	0
1997	284	1,243	0	0
1998	309	1,411	1,435	14
1999	297	1,115	1,333	36
2000	245	740	651	0
2001	289	935	2,113	24
2002	247	773	1,138	187
2003	287	1,073	4,077	0
2004	174	539	525	2
2005	228	760	1,785	119
2006	264	779	1,539	137
2007	280	1,019	2,023	340
2008	223	537	2,172	423
2009	328	876	6,528	767
10-Year Average	257	1,529	1,228	717
2010	333	906	7,064	717

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Prince William Sound (Drift Gillnet, Set Gillnet and Purse Seine)																	
		Chinook			Sockeye			Coho			Pink			Chum		
Year	Permits	Seine	Drift Gillnet	Set Gillnet	Seine	Drift Gillnet	Set Gillnet	Seine	Drift Gillnet	Set Gillnet	Seine	Drift Gillnet	Set Gillnet	Seine	Drift Gillnet	Set Gillnet

Bering River District (all drift gillnet)

Year	Permits	Chinook	Sockeye	Coho
1994	3	12	0	0
1995	5	11	0	0
1996	7	31	0	0
1997	1	3	0	0
1998	5	7	0	0
1999	2	2	20	102
2000	1	3	0	0
2001	2	2	0	0
2002	1	1	0	0
2003	6	6	52	0
2004	2	0	1	10
2005	2	2	0	0
2006	4	9	6	0
2007	2	2	0	0
2008	4	9	6	0
2009	1	0	0	20
10-Year Average	3	5	5	3
2010	5	0	0	82

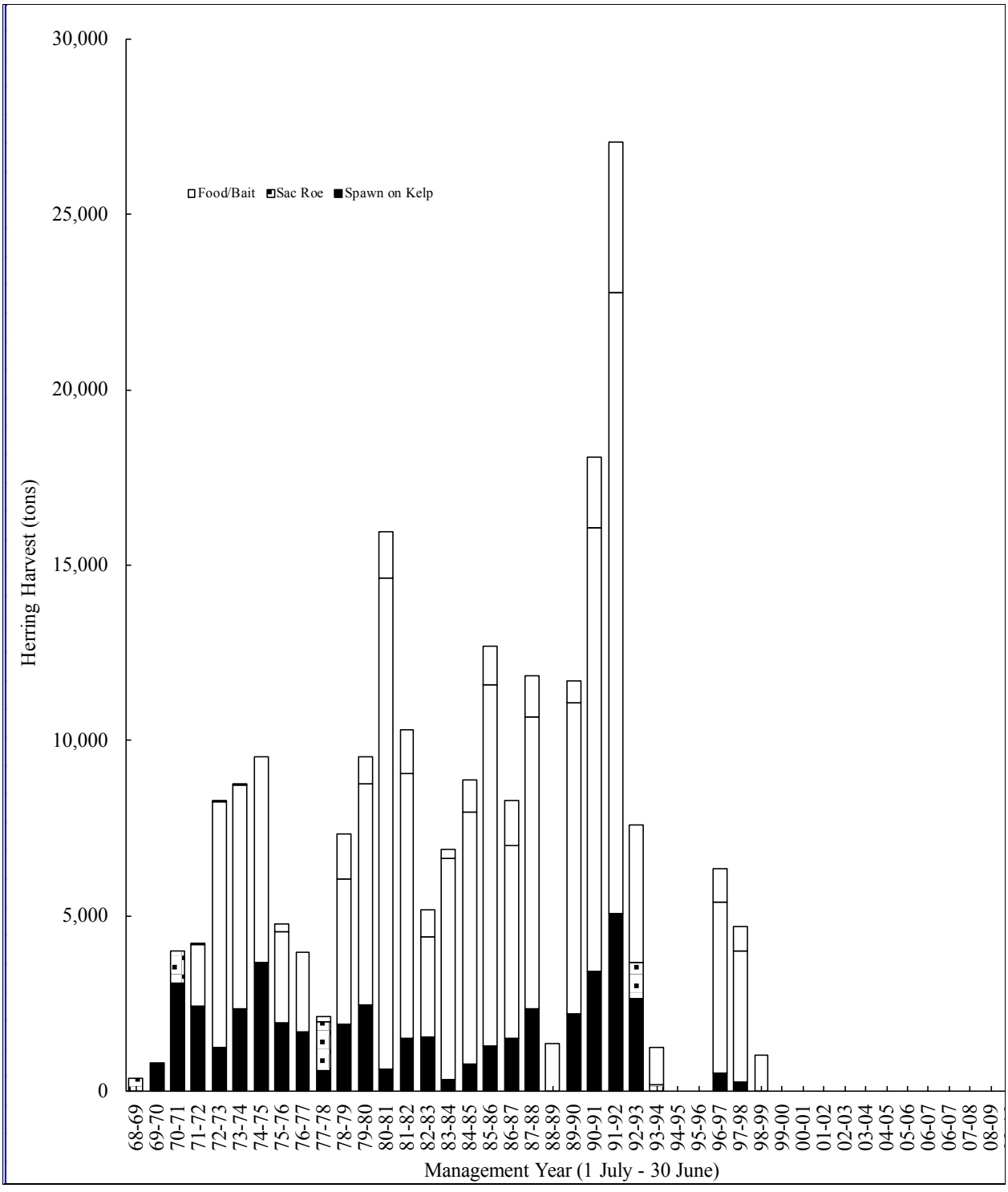
Appendix F8.–Area E commercial homepack and subsistence harvests by permit holder community of residence, 2010.

Commercial Homepack[a]							
Community	Permits	Chinook	Sockeye	Coho	Pink	Chum	Total
Anchor Point	1		1				1
Anchorage	20	34	395	28	0	20	477
Copper Center	1		2				2
Cordova	204	672	4,548	472	8	58	5,758
Delta Junction	3	12	41	25			78
Dutch Harbor	1		16	42		4	62
Eagle River	1		12				12
Girdwood	4	3	56				59
Homer	29	30	763	188	15	55	1,051
Kasilof	3	13	19	16		1	49
Kenai	1			5			5
Kodiak	1	4					4
Palmer	2	1	5				6
Petersburg	1		84				84
Seward	7	13	28				41
Soldotna	3	10	50				60
Valdez	2	10	10				20
Wasilla	9	18	118	22	0	1	159
Willow	3		82	10			92
USA balance	68	137	1,953	358	0	13	2,461
Total	364	957	8,183	1,166	23	152	10,481
Area E Subsistence[b]							
Community	Permits	Chinook	Sockeye	Coho	Pink	Chum	Total
Anchor Point	1	0	0	0	0	0	0
Anchorage	20	4	37	0	0	5	46
Chenega Bay	4	0	91	50	54	85	280
Chugiak	2	0	0	0	0	0	0
Coffman Cove	1	0	0	0	0	0	0
Cordova	277	266	1,924	27	0	17	2,234
Delta Junction	1	0	0	0	0	0	0
Eagle River	3	2	18	0	0	0	20
Fairbanks	1	0	0	0	0	0	0
Girdwood	3	0	0	0	0	0	0
Homer	2	0	0	0	0	0	0
Hoohah	1	0	0	0	0	0	0
Hope	1	5	7	0	0	0	12
Nome	1	0	0	0	0	0	0
North Pole	1	0	0	42	0	0	42
Palmer	3	0	4	0	2	2	8
Seward	1	0	0	0	0	0	0
Sitka	1	0	0	0	0	0	0
Sterling	1	0	0	0	0	0	0
Tatitlek	3	0	95	50	0	0	145
Valdez	5	0	30	0	0	10	40
Wasilla	5	0	0	0	0	0	0
Total	338	277	2,206	169	56	119	2,827

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

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

APPENDIX G.



Appendix G1.–Prince William Sound commercial Pacific herring harvest by management year and fishery, 1968–2010.

Appendix G2.–Pacific herring sac roe purse seine and drift gillnet fishery effort, anticipated harvest, and actual harvest, 1969–2010.

	Purse Seine Fishery							Drift Gillnet Fishery							Total
Calendar Year	Opening Dates	Hours	Effort (Boats)	Guideline Harvest [a]	Harvest (tons)	CPUE (tons/Boat Hr)	Estimated Roe %	Opening Dates	Hours	Effort (Boats)	Guideline Harvest [a]	Harvest (tons)	CPUE (tons/Boat Hr)	Estimated Roe %	Harvest (tons)
1969	03/01 - 06/30		5		325.4										325.4
1970	03/01 - 06/30														
1971	03/01 - 06/30		12		919.2										919.2
1972	03/01 - 06/30		18		1,777.2										1,777.2
1973	04/23 - 05/09		31		6,991.9										6,991.9
1974	04/10 - 04/17		72		6,371.0			04/10 - 04/17		3		3.8			6,374.8
1975	04/15 - 04/22	14.0	76		5,853.8	5.50			14.0						5,853.8
1976	05/08 & 06/01	13.0	66		2,584.2	3.01			13.0						2,584.2
1977	04/09 - 04/10	38.0	58		2,265.6	1.03		04/09 - 04/10	38.0	1		1.6	0.04		2,267.1
1978	04/17 - 04/21 [b]	106.0	75	5,000	1,329.5	0.17		04/17 - 04/21	106.0	38		61.7	0.02		1,391.2
1979	04/07 - 04/19	215.5	89	5,000	4,138.0	0.22		CLOSED [c]							4,138.0
1980	04/01 - 04/09	162.0	76	5,000	6,042.2	0.49		04/17 - 05/05		16		264.4			6,306.7
1981	04/01 - 04/09	60.0	106	5,000	13,768.2	2.16		04/16 - 04/18	53.0	18		234.5	0.25		14,002.8
1982	04-23	2.0	95	5,000	7,148.3	37.62	10-14%	04/24 - 04/26	54.0	18		393.9	0.41	12-15%	7,542.2
1983	04-13	1.0	103 [d]	5,000	2,728.5	26.49	11.0%	04/21 - 04/22	24.0	22		105.4	0.20	11.0%	2,833.9
1984	04-14	3.0	105 [e]	5,000	5,946.1	18.88	10-11%	04/18 - 04/22	59.0	23	250	342.7	0.25	8-14%	6,288.8
1985	04/28 - 04/29	4.0	103 [f]	5,000	6,764.1	16.42	10-12%	04/29 - 05/01	34.0	21	250	413.3	0.58	10-12%	7,177.4
1986	04-17	3.0	106	5-7,000	9,828.1	30.91	11.0%	04/24 - 04/28	90.0	24	3-400	448.6	0.21	11.4%	10,276.7
1987	04/08 - 04/09	1.5	96	3-5,000	4,982.2	34.60	10.0%	04/10 - 04/11	24.0	24	2-300	533.3	0.93	9.5%	5,515.5
1988	04/21 - 04/22	2.0	105	4-5,000	7,977.3	37.99	10.5%	04-23	5.5	24	275	353.0	2.67	10.0%	8,330.3
1989	Season Closed [g]			6,400							375				0
1990	04/12	0.3	96	6,038	8,362.1	290.35	10.0%	04/13	4.0	24	353	505.4	5.26	10.6%	8,867.5
1991	04/09, 04/10, & 04/19	1.3	104	11,233	11,923.0 [h]	85.32	10.5%	04/18	10.5	24	657	742.0	2.94	11.06%	12,665.1
1992	04/13, 04/17, & 04/21	2.0	104	14,100	16,784.2 [i]	80.69	10.0%	04/23 - 04/24	11.0	24	825	940.6	3.56	10.8%	17,724.8
1993	No Harvest			15,586				04/15, 04/17-04/19	36.0	24	912	1,029.9	1.19	11.01%	1,029.9
1994	Season Closed [j]			0	151.0 [k]						0				151.0
1995	Season Closed [j]			0							0				0
1996	Season Closed [j]			0							0				0
1997	04/13,04/15	1.8	71	2,965	4,703.5	36.80	9.75%	04/09	2.5	22	175	175.7	3.19	8.00%	4,879.2
1998	04/06	0.5	46	3,367	3,329.7	144.77	9.6%	04/11, 04/12	6.5	20	197	415.1	3.19	11.0%	3,744.8

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	Purse Seine Fishery							Drift Gillnet Fishery							Total
Calendar Year	Opening Dates	Effort Hours	(Boats)	Guideline Harvest [a]	Harvest (tons)	CPUE (tons/Boat Hr)	Estimated Roe %	Opening Dates	Effort Hours	(Boats)	Guideline Harvest [a]	Harvest (tons)	CPUE (tons/Boat Hr)	Estimated Roe %	Harvest (tons)
1999	Season Closed [j]			3,447							202				0
2000	Season Closed [j]			0							0				
2001	Season Closed [j]			0							0				
2002	Season Closed [j]			0							0				
2002	Season Closed [j]			0							0				
2004	Season Closed [j]			0							0				
2005	Season Closed [j]			0							0				
2006	Season Closed [j]			0							0				
2007	Season Closed [j]			0							0				
2008	Season Closed [j]			0							0				
2009	Season Closed [j]			0							0				
2010	Season Closed [j]			0							0				

[a] Guideline harvest based on preseason harvest projection beginning in 1986.

[b] An additional opening on 6/14 for 6 hours resulted in no harvest.

[c] Drift gillnet fishery closed by BOF action.

[d] Of 103 permit holders participating, 72 actually made deliveries.

[e] Of 105 permit holders participating, 101 actually made deliveries.

[f] Of 103 permit holders participating, 62 made deliveries at Montague Island and 90 made deliveries in the north-shore area.

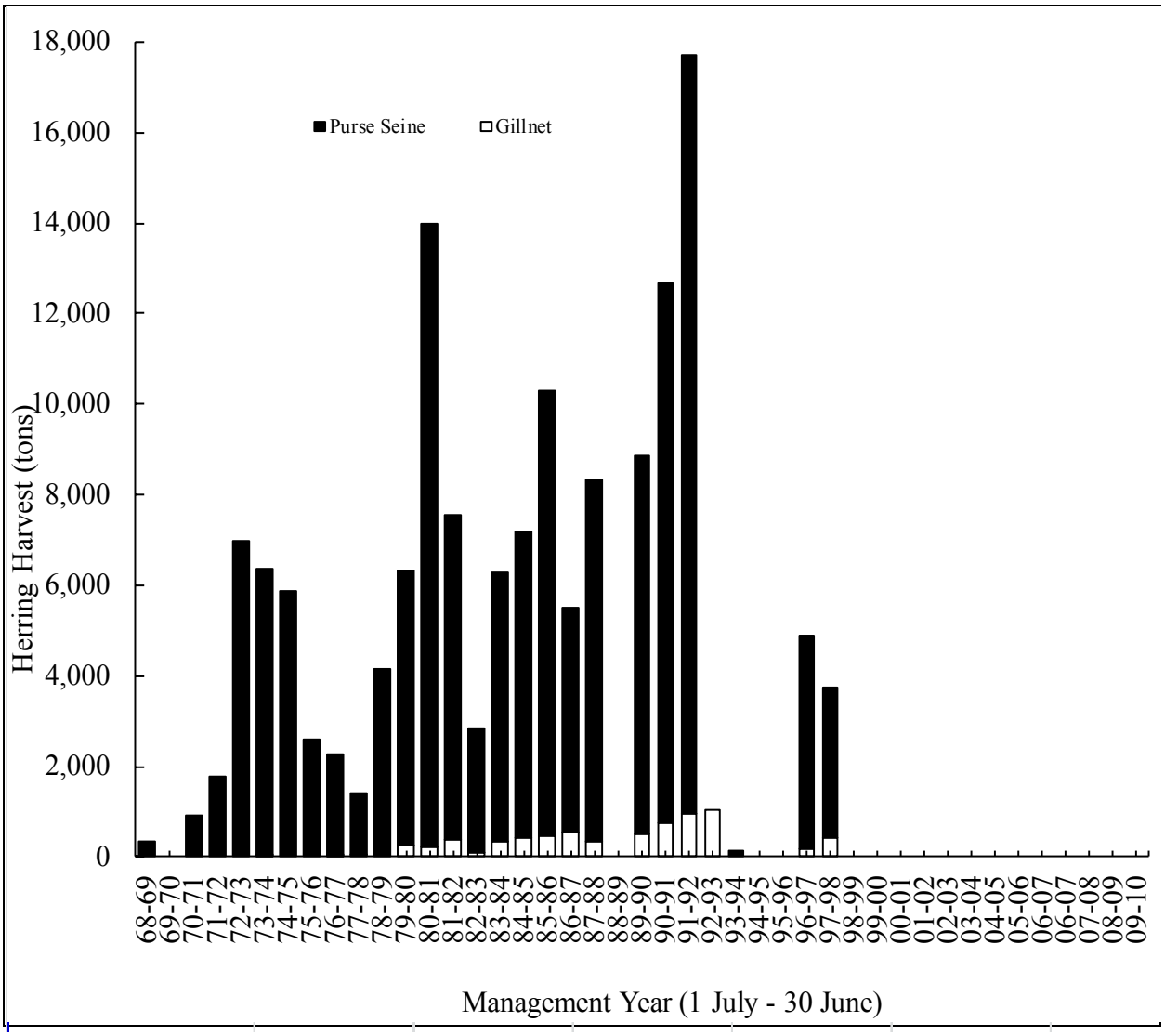
[g] All herring commercial fisheries in PWS were closed during spring 1989 because of the potential for contamination from the *T/V Exxon Valdez* oil spill.

[h] Total for 1991 includes a 92.2 ton test fishing set made by ADF&G for aerial survey calibration.

[i] Total for 1992 includes a 192.5 ton test fishing harvest made by ADF&G for aerial survey calibration.

[j] Season closed because the herring biomass was forecast to be less than the 22,000 ton spawning biomass threshold.

[k] Harvest for 1994 consisted of a single test fishing harvest made by ADF&G for aerial survey calibration.



Appendix G3.–Prince William Sound commercial Pacific herring sac roe purse seine and gillnet harvest by management year, 1968–2010.

Appendix G4.–Pacific herring spawn-on-kelp harvest produced in pounds, 1979–2010.

Calendar Year	Fishery Dates [c]	Effort				Guideline Harvest (tons)	Blades per Permit Holder		Spawn-on-Kelp Harvest (tons)			Herring Utilized [b] (tons)
		CFEC Permits [d]	Permits Committed [e]	Producing Permits [a]								
				Closed [f]	Open [g]		Closed [f]	Open [g]	Ribbon	Macrocystis	Total	
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	1200		0	202.4	202.4	2,530.5
1992	04/07 - 04/24	127	127	127		276	1770		0	242.2	242.2	3,027.7
1993	04/10 - 04/22	128	124	52		305	1950		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	[j]	128	36	13	20	823	425	660	0	10.7	10.7	104.3
1999	[k]	128	27	7	2	843	435	680	0	6.2	6.2	48.8
2000	Season Closed [i]											
2001	Season Closed [i]											
2002	Season Closed [i]											
2003	Season Closed [i]											
2004	Season Closed [i]											
2005	Season Closed [i]											
2006	Season Closed [i]											
2007	Season Closed [i]											
2008	Season Closed [i]											
2009	Season Closed [i]											
2010	Season Closed [i]											

-continued-

[a] 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 tons of herring are used to produce each ton of spawn-on-kelp product.

[c] Dates that the fishery was opened to purse seines for the capture and placement of herring into pounds.

[d] Prior to 1994, Commissioner's permits issued to applicants registering prior to 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.

[e] 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.

[g] 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 *T/V Exxon Valdez* oil spill.

[i] Season closed because the herring biomass was forecast to be less than the 22,000 ton spawning biomass threshold.

[j] Opening dates for each area were: Montague Island 4/04, Eastern 4/05, Northern 4/09, and Southeastern 4/13. All areas closed by regulation on 12/31/1998.

[k] Opening dates for each area were: Montague Island 04/01, St. Matthews Bay 04/20. All areas closed by emergency order on 04/25/1999.

Appendix G5.–Natural spawning pacific herring spawn-on-kelp harvests, 1969–2010.

Calendar Year	Fishery Dates	Effort Hours (Nr. of Divers)	Guideline Harvest (tons)	Harvest by Kelp Species and Grounds Price ($/lb) Ribbon Percent	Ribbon Price	Sieve Percent	Sieve Price	Fucus Percent	Fucus Price	Other Percent	Other Price	Spawn-on-Kelp Harvest lbs.	Spawn-on-Kelp Harvest tons	Herring Utilized [a] tons
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	Mostly Ribbon	- Some Sieve and Hair			$0.60-0.75				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	23%		50%				27% [b]	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	60%	$1.25	40%	$0.85				603,880	301.9	2,415.5
1981	04-25	12	196	200	38%	$1.25	60%	$0.85			2% [b]	$0.60	122,532	61.3	490.1
1982	05/05 - 05/08	73	152	187	83%	$1.42	11%	$0.95			6% [b]	$0.74	291,430	145.7	1,165.7
1983	04/27	12	185	187	51%	$2.00-2.45	35%	$1.50-1.70			14% [c]		298,362	149.2	1,193.4
1984	Season Closed [d]		225 [e]	187											
1985	05/06 & 05/08	20	106	169	51%	$1.25	49%	$0.50					60,832	30.4	243.3
1986	04/30 - 05/03	86	29	142	97%	$1.75		$0.80			[b]	$0.80	95,205	47.6	380.8
1987	04/15 - 04/17	44	59	103	90%	$1.70		$0.85			[b]	$0.80	176,485	88.2	705.9
1988	04/29 & 04/30	12	159	103	64%	$1.50	24%	$0.75-1.00			12% [b]	$0.75-1.00	194,762	97.4	779.0
1989	Season Closed [f]			110											
1990	04/21 - 04/22	16	134	104	37%	$0.99	6%	$0.52			57% [b]	$0.88	237,575	118.8	950.3
1991	05/11 - 05/17	95	48	195					100%	$0.75-0.85			215,147	107.6	860.8
1992	04/24 - 04/30	101	217	243	21%	$0.70			76%	$0.40	3%		504,663	252.3	2,018.7
1993	04/19 - 04/24	114	83	268					100%	$0.55			325,181	162.6	1,300.7
1994	Season Closed [g]			110											
1995	Season Closed [g]														
1996	Season Closed [g]														
1997	04/25 & 04/26	26.4	45	56.4					100%				52,800	26.4	211.2

-continued-

Calendar Year	Fishery Dates	Effort Hours	Effort (Nr. of Divers)	Guideline Harvest (tons)	Harvest by Kelp Species and Grounds Price ($/lb) Ribbon Percent	Ribbon Price	Sieve Percent	Sieve Price	Fucus Percent	Fucus Price	Other Percent	Other Price	Spawn-on-Kelp Harvest lbs.	Spawn-on-Kelp Harvest tons	Herring Utilized [a] tons
1998	04/22 - 04/27	62	35	464	16%	$0.80			84%	$0.50			34,695	17.3	138.8
1999	Season Closed [g]			475											
2000	Season Closed [g]														
2001	Season Closed [g]														
2002	Season Closed [g]														
2004	Season Closed [g]														
2005	Season Closed [g]														
2006	Season Closed [g]														
2007	Season Closed [g]														
2008	Season Closed [g]														
2009	Season Closed [g]														
2010	Season Closed [g]														

[a] 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] Hair kelp.

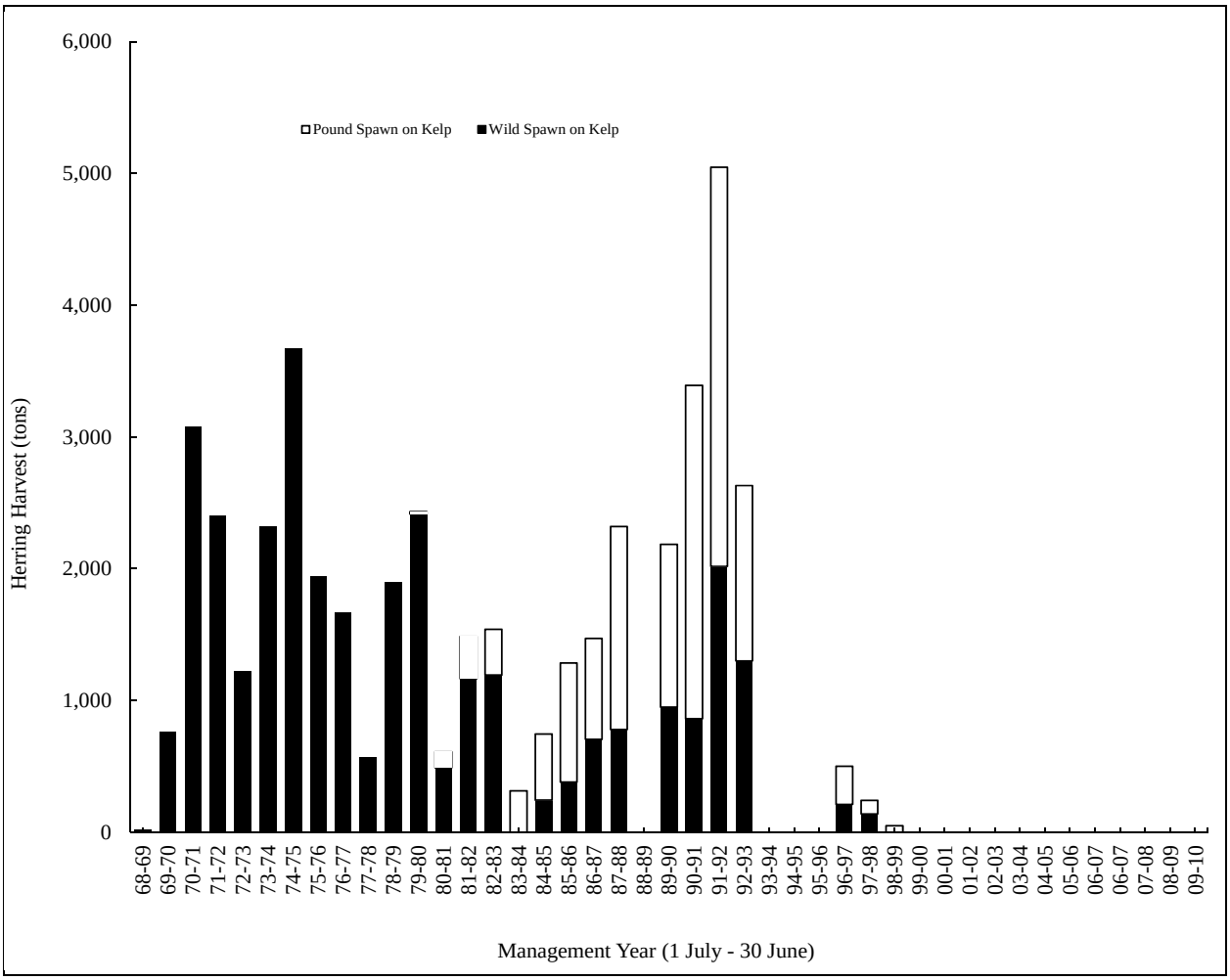
[c] Mostly *Macrocystis*. Some hair kelp.

[d] Season remained closed due to lack of suitable spawn.

[e] Permits issued.

[f] All herring commercial fisheries in Prince William Sound were closed spring 1989 because of the potential for contamination of catches from the *T/V Exxon Valdez* oil spill.

[g] Season closed because the herring biomass was forecast to be less than the 22,000 ton spawning biomass threshold.



Appendix G6.–Prince William Sound commercial spawn-on-kelp Pacific herring usage by management year, 1968–2010.

Appendix G7.–Prince William Sound commercial Pacific herring food/bait fishery effort and harvests, management years 1969–2010.

Harvest	Fishing			Purse Seine		Pair Trawl		Mid-Water Trawl		Otter Trawl		Total
Management	Dates		Guideline	Effort	Harvest	Effort	Harvest	Effort	Harvest	Effort	Harvest	Harvest
Year	Opened	Closed	Harvest	(Boats)	(tons)	(Boats)	(tons)	(Boats)	(tons)	(Boats)	(tons)	(tons)
1969-1970	10/01/69	06/30/70 [a]		-	14.0							14.0
1970-1971	10/01/70	06/30/71 [a]										0
1971-1972	10/01/71	06/30/72 [a]		-	20.0							20.0
1972-1973	10/01/72	05/09/73 [a]		-	9.0							9.0
1973-1974	08/27/73	04/17/74 [a]	[b]	-	8.5							8.5
1974-1975	07/15/74	03/10/75	[b]									0
1975-1976	06/01/75	06/25/75 [c]	[b]	4	226.7							226.7
1976-1977	02/01/77	03/09/77	[b]									0
1977-1978	10/01/77	02/28/78	[b]	-	17.0	-	145.3					162.3
1978-1979	10/16/78	? [d]	[b]	-	195.4	7	988.7	-	9.4	-	81.0	1,274.4
1979-1980	09/16/79	02/28/80 [e]	1,400	-	510.8	4	145.1	-	103.2	-	2.6	761.7
1980-1981	09/15/80	11/07/80	1,400	-	1,030.4	6	275.7					1,306.1
1980-1982	09/15/81	09/30/81	1,400	7	1,189.4	-	73.1					1,262.5
1982-1983	09/15/82	01/31/83	1,400	6	797.3							797.3
1983-1984	09/15/83	01/31/84	1,400	-	257.6							257.6
1984-1985	09/15/84	01/31/85	1,400	-	936.2							936.2
1985-1986	09/01/85	02/15/86	1,400	6	1,118.1							1,118.1
1986-1987	09/01/86	10/24/86	1,400	6	1,276.2							1,276.2
1987-1988	09/02/87	11/12/87 [f]	1,400	7	1,189.4							1,189.4
1988-1989	11/01/88	11/05/88	1,400	8	1,335.3							1,335.3
1989-1990	11/01/89	01/31/90	1,694	-	646.1							646.1
1990-1991	09/21/90	11/24/90 [g]	3,151	5	1,955.0			-	60.8			2,015.9
1991-1992	10/01/91	10/14/91	3,956	14	4,258.5							4,258.5
1992-1993	10/01/92	10/22/92	3,416 [h]	17	3,900.3							3,900.3
1993-1994	10/07/93	10/10/93	978 [i]	8	1,087.0							1,087.0
1994-1995	Season Closed [j]											0
1995-1996	Season Closed [j]											0
1996-1997	11/01/96	11/03/96	825	6	933.9							933.9
1997-1998 [k]	11/1/97, 02/19/98 -	02/28/98	945	12	679.7							679.7
1998-1999	11/02/98,	11/04/98, 11/06/98	967	11 [l]	1,003.3	-	-					1,003.3

-continued-

Harvest Management Year	Fishing Dates Opened	Fishing Dates Closed	Guideline Harvest	Purse Seine Effort (Boats)	Purse Seine Harvest (tons)	Pair Trawl Effort (Boats)	Pair Trawl Harvest (tons)	Mid-Water Trawl Effort (Boats)	Mid-Water Trawl Harvest (tons)	Otter Trawl Effort (Boats)	Otter Trawl Harvest (tons)	Total Harvest (tons)
1999-2000	Season Closed [j]											
2000-2001	Season Closed [j]											
2001-2002	Season Closed [j]											
2002-2003	Season Closed [j]											
2003-2004	Season Closed [j]											
2004-2005	Season Closed [j]											
2005-2006	Season Closed [j]											
2006-2007	Season Closed [j]											
2007-2008	Season Closed [j]											
2008-2009	Season Closed [j]											
2009-2010	Season Closed [j]											

[a] Openings set by regulation. Ending date coincides with regulatory ending of sac roe season.

[b] No official quota, but unofficial goal was 1,500 tons.

[c] 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.

[d] Fishery closed from 1 January to 6 January 1979.

[e] Fishery closed from 1 January to 15 February 1980.

[f] 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 emergency order 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.

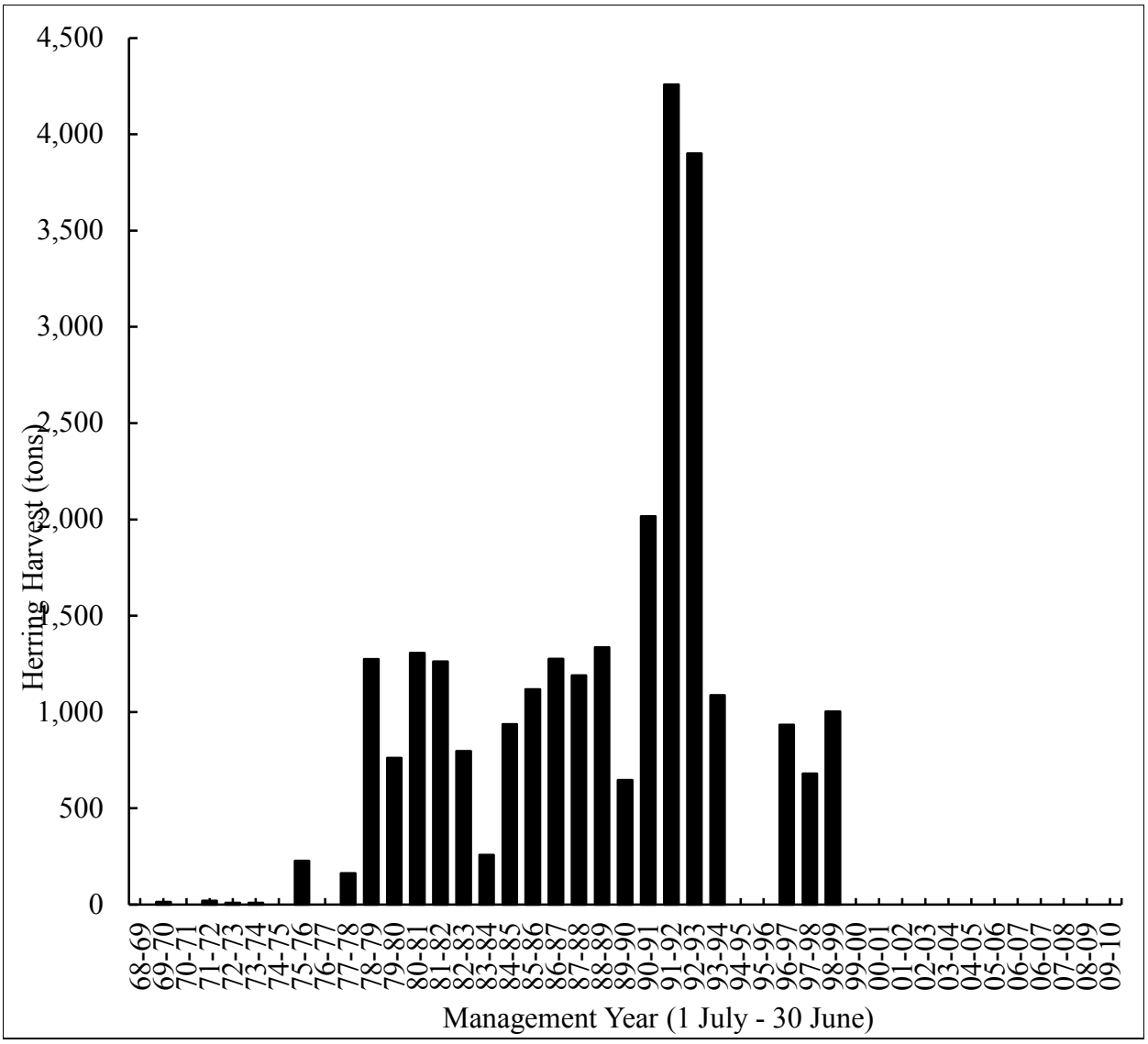
[h] Preseason guideline harvest level based on spawn deposition biomass estimate. Final guideline harvest based on age-structured analysis was issued in January 1993 and was 4,373 tons.

[i] Preseason guideline harvest level based on preliminary aerial survey biomass estimate of 40,000 tons.

[j] Season closed because the herring biomass was forecast to be less than the 22,000 ton spawning biomass threshold.

[k] Season reopened in spring 1998 based on final age structured assessment modelling. Of the total harvest, 578.1 tons were taken in November 1997 and 101.6 tons were taken in February 1998.

[l] Includes sale from ADF&G test fishing near Knowles Head, 31 October 1998.



Appendix G8.–Prince William Sound commercial food/bait Pacific herring harvest, management years 1968–2010.

Appendix G9.–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, 1978–2010.

	Sac Roe Fisheries				Spawn-on-Kelp Fisheries				Food-and-Bait Fishery		
	Purse Seine		Drift Gillnet		Wild Spawn on Kelp		Pounds		Mixed Gear		
Calendar Year	Price Per Ton	Total Value	Price Per Ton	Total Value	Price per lb	Total Value	Price Per lb [a]	Total Value	Price Per Ton	Total Value	TOTAL 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 HARVEST		$ 3.50	$ 176,439	$ 260	$ 65,460	$ 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 CLOSED								$ 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 HARVEST		$ 400	$ 411,960	$ 0.55	$ 178,860	$ 10.00	$ 2,000,000	$ 200	$ 217,400	$ 2,808,220
1994	SEASON CLOSED								SEASON CLOSED		
1995	SEASON CLOSED								SEASON CLOSED		
1996	SEASON CLOSED								$ 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	SEASON CLOSED						$ 8.00	$ 99,000	SEASON CLOSED		
2000	SEASON CLOSED								SEASON CLOSED		
2001	SEASON CLOSED								SEASON CLOSED		
2002	SEASON CLOSED								SEASON CLOSED		
2004	SEASON CLOSED								SEASON CLOSED		
2005	SEASON CLOSED								SEASON CLOSED		
2006	SEASON CLOSED								SEASON CLOSED		
2007	SEASON CLOSED								SEASON CLOSED		
2008	SEASON CLOSED								SEASON CLOSED		
2009	SEASON CLOSED								SEASON CLOSED		
2010	SEASON CLOSED								SEASON CLOSED		

[a] The price per pound for spawn on kelp in pounds is based on the final product weight, not harvest weight.

Appendix G10.–Annual Pacific herring biomass indices for harvest management years 1973–2010.

Harvest Management Year	Total Spring Use and Harvest Mortality [a] (tons)	Aerial Survey Estimates: Peak Biomass Estimate [b] (tons)	Aerial Survey Estimates: Maximum Possible Observed Biomass [c]	Aerial Survey Estimates: Miles of Spawn [d]	Aerial Survey Estimates: Mile Days of Spawn [e]	Unexploited Esc. Biomass: Age Structured Analysis [f] (tons)	Pre-Fishery Run Biomass: Age Structured Analysis [f] (tons)	Observed Peak Acoustic Biomass Estimates: Fall (tons)	Observed Peak Acoustic Biomass Estimates: Spring (tons)	Prior Year Forecast (tons)
1973-1974	6,375	41,080	107,290	38.5	96.0	ND	ND	ND	ND	ND
1974-1975	5,854	ND	ND	34.2	54.0	ND	ND	ND	ND	ND
1975-1976	2,584	7,330	25,247	32.8	41.2	ND	ND	ND	ND	ND
1976-1977	2,267	16,830	17,460	39.3	78.2	ND	ND	ND	ND	ND
1977-1978	1,391	13,410	36,540	28.7	50.8	ND	ND	ND	ND	ND
1978-1979	4,138	42,100	107,390	54.5	89.0	ND	ND	ND	ND	ND
1979-1980	6,323	62,110	122,050	50.5	95.5	57,858	62,749	ND	ND	ND
1980-1981	14,124	77,810	161,690	85.4	144.0	64,909	78,132	ND	ND	ND
1981-1982	7,861	68,790	97,620	49.0	85.5	61,149	68,602	ND	ND	ND
1982-1983	3,181	41,850	107,710	67.4	93.5	65,948	68,674	ND	ND	ND
1983-1984	6,604	58,870	158,760	60.1	104.8	79,001	84,809	ND	ND	ND
1984-1985	7,679	20,830	60,954	101.2	156.7	100,215	107,317	ND	ND	ND
1985-1986	11,180	15,180	54,820	72.4	146.8	83,832	94,329	ND	ND	ND
1986-1987	6,281	26,530	52,192	65.3	186.8	71,766	76,810	ND	ND	ND
1987-1988	9,871	34,270	67,175	166.3	269.8	111,833	120,546	ND	ND	43,992
1988-1989	[h]	56,915	186,708	98.4	228.1	122,620	122,620	ND	ND	54,899
1989-1990	10,103	57,900	145,013	94.1	164.4	97,782	107,854	ND	ND	51,692
1990-1991	15,196	42,765	141,375	58.0	71.5	67,735	81,510	ND	ND	96,666
1991-1992	20,752	53,835	130,569	74.7	119.8	87,223	105,197	ND	ND	121,342
1992-1993	2,360	20,725	109,865	20.4	50.3	32,787	34,921	ND	ND	134,133
1993-1994	151	19,640	154,008	14.6	23.1	17,791	17,791	20,998	ND	29,787
1994-1995	0	7,113	20,868	20.4	28.2	17,264	17,264	13,840	14,639	19,009
1995-1996	0	10,691	37,771	27.2	37.3	21,805	21,805	26,776	25,346	24,332
1996-1997	5,170	10,858	57,114	42.7	64.3	27,577	32,015	3,086	44,083	37,599
1997-1998	3,849	13,817	50,124	38.7	62.0	22,275	25,732	ND	19,456	38,640
1998-1999	49	6,366	10,872	25.4	40.7	19,662	19,713	ND	22,397	39,557
1999-2000	0	1,610	2,889	19.5	31.7	16,063	16,063	ND	8,024	23,987

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Appendix G10.–Page 2 of 2.

Harvest Management Year	Total Spring Use and Harvest Mortality [a] (tons)	Aerial Survey Estimates: Peak Biomass Estimate [b] (tons)	Aerial Survey Estimates: Maximum Possible Observed Biomass [c]	Aerial Survey Estimates: Miles of Spawn [d]	Aerial Survey Estimates: Mile Days of Spawn [e]	Unexploited Esc. Biomass: Age Structured Analysis [f] (tons)	Pre-Fishery Run Biomass: Age Structured Analysis [f] (tons)	Observed Peak Acoustic Biomass Estimates: Fall (tons)	Observed Peak Acoustic Biomass Estimates: Spring (tons)	Prior Year Forecast (tons)
2000-2001	0	587	1,075	16.0	14.8	11,600	11,600	ND	7,035	NA
2001-2002	0	646	1,433	21.5	23.6	13,791	13,791	ND	11,791	NA
2002-2003	0	5,600	8,951	25.2	26.1	19,433	19,433	ND	29,864	NA
2003-2004	0	12,305	17,650	29.7	30.4	23,290	23,290	ND	21,046	NA
2004-2005	0	4,773	5,230	29.9	31.7	16,372	16,372	ND	16,801 [i]	21,064
2005-2006	0	540	609	19.9	21.7	12,570	12,570	ND	7,850 [i]	17,554
2006-2007	0	770	1,615	NA[j]	18.3	13,496	13,496	ND	14,431 [i]	15,830
2007-2008	0	10,700	13,740	NA[j]	45.4	17,277	17,277	ND	22,852 [i]	10,252
2008-2009	0	1,933	2,913	NA[j]	29.8	NA [k]	NA [k]	ND	16,815 [i]	17,903
2009-2010	0	4,180	15,160	NA[j]	28.1	NA [k]	NA [k]	ND	79,979 [i]	NA[k]

[a] 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 lbs.). Does not include Kayak Island estimates.

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

[d] Total linear miles of spawn (statute miles).

[e] 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). The 2010 estimate does not include Kayak Island data.

[f] Unexploited escapement and run biomass estimates from age structured analysis, September 2008.

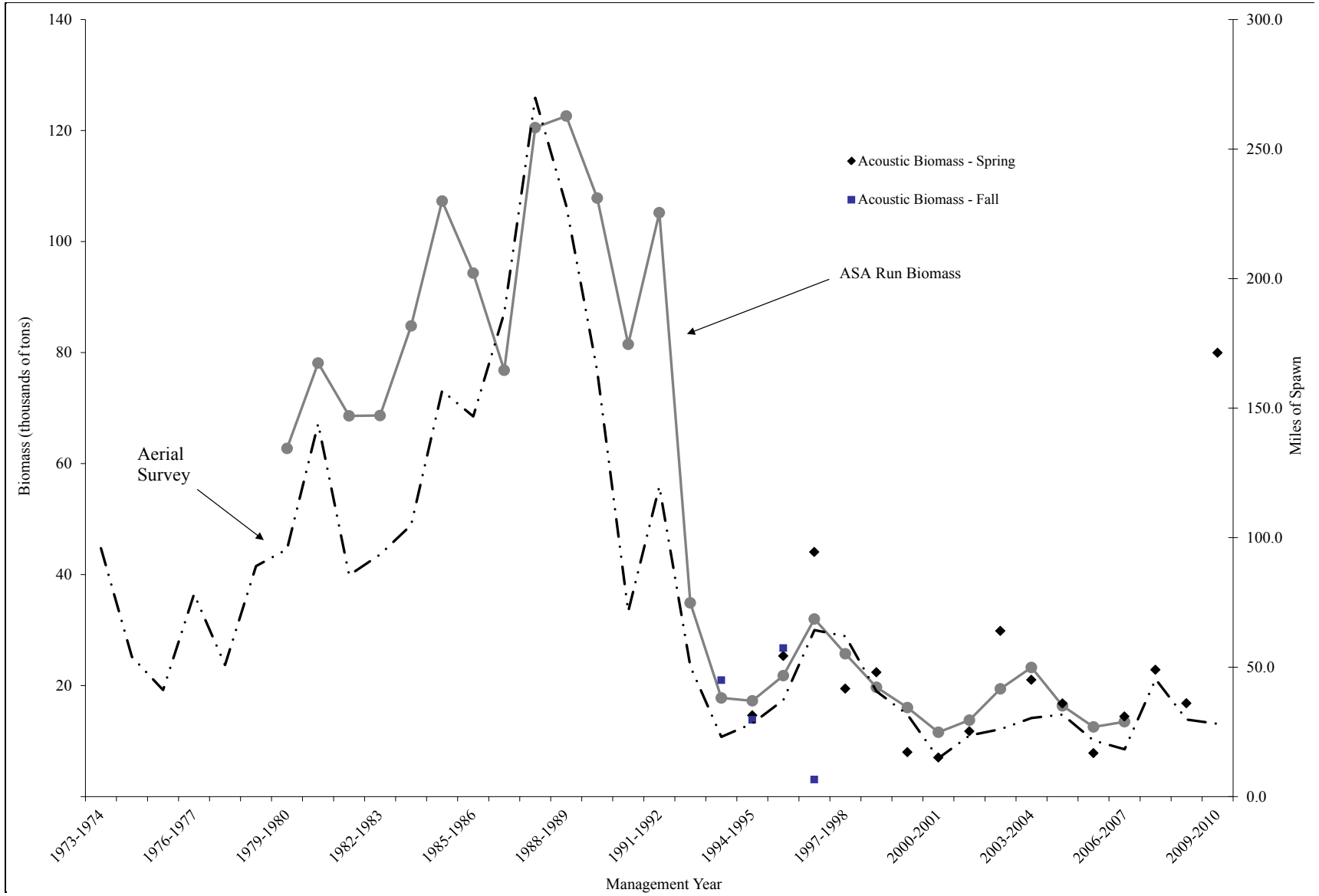
[g] Partial estimate of spawning biomass from feasibility study.

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

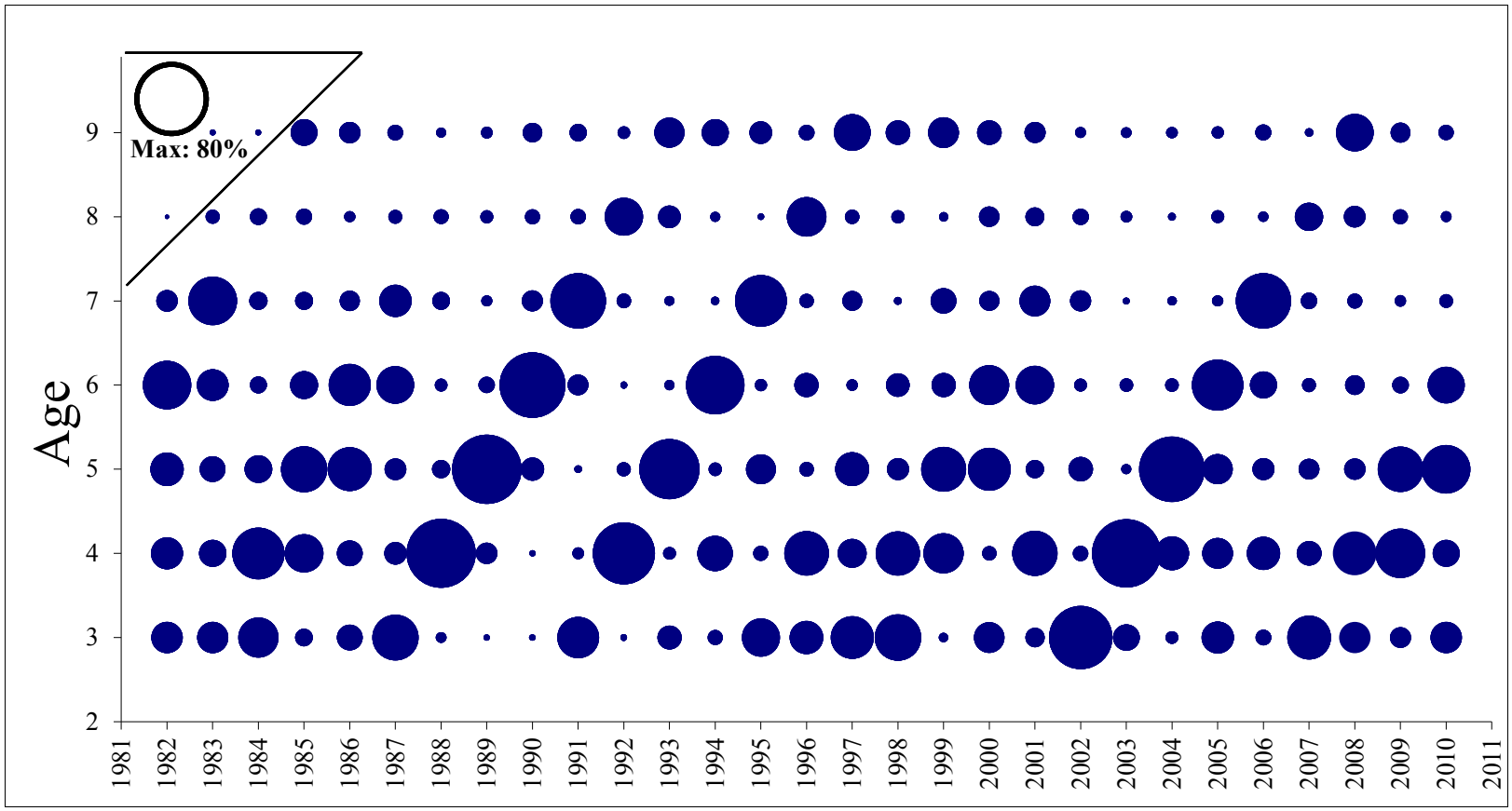
[i] Acoustics estimates for 2005–2010 are from ADF&G surveys only and are not adjusted for maturity or subsequent harvest. Therefore, they represent the total biomass and not the spawning biomass.

[j] Miles of spawn estimate for 2007–2010 are not available.

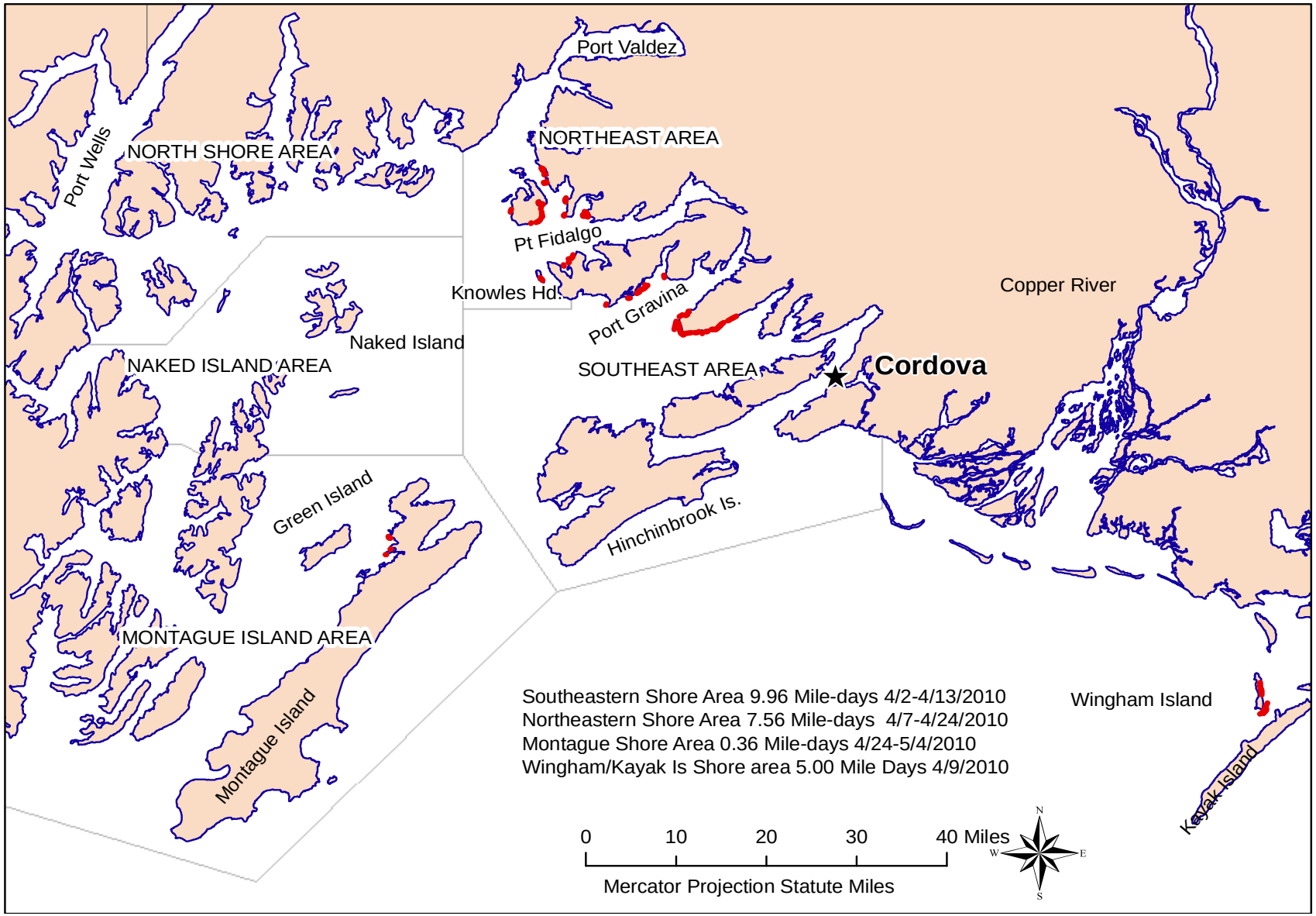
[k] No model projections are available for 2010.



Appendix G11.–Prince William Sound annual Pacific herring biomass indices by management year, 1973–2010, and forecast run biomass from the 2009 ASA model.



Appendix G12.–Pacific herring percentage contribution by number of each age group to the spring run biomass, 1982–2010.



Appendix G13.–Location of spawning herring and miles of spawn observed during aerial surveys in Prince William Sound, 2010.