Fishery Management Report No. 08-53

2007 Prince William Sound Area Finfish Management Report

by

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and

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

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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by

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ABSTRACT

The 2007 Prince William Sound (PWS) Area commercial salmon harvest was 70.6 million fish. The harvest was comprised of 63.5 million pink salmon *Oncorhynchus gorbuscha*, 3.2 million sockeye *O. nerka*, 3.6 million chum *O. keta*, 328,980 coho *O. kisutch*, and 41,149 Chinook salmon *O. tshawytscha*. Approximately 60% of the harvest, 57.2 million fish, was common property harvest and 13.4 million were sold for hatchery cost recovery (exclusive of broodstock, post egg-take roe sales). 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 is $79.6 million, including hatchery sales. During the 2007 season, 506 drift gillnet permit holders fished. Drift gillnet harvest was estimated to be $34.1 million, for an average exvessel value of $67,300. Set gillnet harvest was estimated to be $1.3 million for an average exvessel value for the 26 participating permits of $53,000. Seine fishery harvest was estimated to be $33.2 million for an average exvessel value of $299,400 for 111 permit holders. Revenue generated for hatchery operations (exclusive of roe/meal sales) was approximately $13.2 million. The PWS and Copper River drainage personal use and subsistence fisheries harvested a total of 176,000 fish. Approximately 11,000 subsistence and personal use permits were issued to Alaska residents. The commercial Pacific herring *Clupea pallasi* fishery in Prince William Sound was closed in 2007 for the ninth consecutive year because the spawning biomass remained below the 22,000 tons regulatory threshold.

Key words: Prince William Sound, salmon *Oncorhynchus*, herring *Clupea pallasi*, harvest, drift gillnet, set gillnet, purse seine, common property fishery, hatchery cost recovery

PRINCE WILLIAM SOUND AND COPPER RIVER COMMERCIAL SALMON FISHERIES

MANAGEMENT AREA DESCRIPTION

The Prince William Sound (PWS) management area encompasses all coastal waters and inland drainages entering the north central Gulf of Alaska between Cape Suckling and Cape Fairfield (Figure 1 and Figure 2). This area includes the Bering River, Copper River and all of Prince William Sound with 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. 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.

Six hatcheries contribute to the area's 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 on the north shore of PWS, and Armin F. Koernig (AFK) Hatchery in southwestern PWS produce pink salmon *O. gorbuscha*, Wally Noerenberg Hatchery (WNH) in northwestern PWS produces pink, chum *O. keta*, and coho salmon *O. kisutch* and Main Bay Hatchery (MBH) in western PWS produces sockeye salmon. Valdez Fisheries Development Association (VFDA) operates Solomon Gulch Hatchery (SGH) in Port Valdez and produces pink and coho salmon.

Gear utilized in the salmon fisheries includes purse seine, drift and set gillnet. Drift gillnet permits are the most numerous and are permitted to fish in the Bering River, Copper River, Coghill, Unakwik, and Eshamy Districts. Set gillnet gear is permitted to fish only in the Eshamy District. Purse seine gear is permitted to fish in the Eastern, Northern, Unakwik, Coghill, Northwestern, Southwestern, Montague and Southeastern Districts.

As an avenue for the commercial fishing industry to formally provide management recommendations to ADF&G, representatives from PWS area processors, gear groups, and aquaculture associations sit on an advisory body known as the PWS SHTF (Salmon Harvest Task Force).

When Pacific Herring *Clupea pallasi* spawning biomass allows, an annual harvest level is determined for each of the 5 commercial fisheries. Gillnet sac roe, purse seine sac roe, spawn-on-kelp not in pounds, and spawn-on-kelp in pounds fisheries occur in the spring. A herring food/bait fishery occurs in the fall. The guideline harvest level established by the Prince William Sound Herring Management Plan, 5 AAC 27.365 govern all of the herring fisheries. The management objective for herring is to target fisheries on a high quality segment of the biomass while maintaining a minimum spawning biomass.

OVERVIEW OF AREA WIDE SALMON FISHERIES

The 2007 Prince William Sound Area commercial salmon harvest was 70.6 million fish. The harvest was composed of 63.5 million pink, 3.2 million sockeye, 3.6 million chum, 328,980 coho, and 41,149 Chinook salmon (Table 1, Figure 3). Sockeye, pink, and chum salmon harvests were above the 10 year average while coho and Chinook salmon harvests were below (Table 2). The 2007 preliminary exvessel value estimates for the 3 commercial gear groups harvesting both wild and enhanced salmon, excluding hatchery cost recovery, are $33.2 million (48.4%) for seine, $34.1 million (49.6%) for drift gillnet, and $1.4 million (2.0%) for set gillnet (Table 3, Figure 4). The average prices per pound paid to fishermen were comparable to those paid in previous years (Table 4). Both the drift gillnet and purse seine harvest values are the highest on record (Table 5). Approximately 81% of the harvest, 57.2 million fish, was common property harvest and 13.4 million fish were sold for hatchery cost recovery. Personal use, educational permits, and donated fish accounted for less than one percent. Hatchery runs of pink and chum salmon were above forecast levels. The sockeye salmon run to the MBH was delayed and 27% below the forecasted 1.1 million fish. In spite of this, PWSAC was able to achieve their sockeye salmon cost recovery goal. No commercial fisheries for herring occurred in 2007 as a result of the spawning biomass being below the regulatory threshold of 22,000 metric tons of herring.

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 as the result of the 5-year average enhanced exvessel value for the set gillnet gear group exceeded 5%, set gillnet permit holders were limited to no more than 36 hours per week after July 10.

SALMON SEASON SUMMARY BY DISTRICT

COPPER RIVER DISTRICT

For more detailed information on this district see Appendices A1–A21 and Appendix E.

The Alaska Department of Fish and Game (ADF&G), with direction from the BOF, has consistently endeavored to manage 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. To these ends, the past decade can be measured more by its successes than shortfalls. At the December 1999 BOF meeting in Valdez, the 5 AAC 24.361 Copper River

Chinook Salmon Fishery 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 Alaska Board of Fisheries 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 the number of early Chinook salmon available to users in the uppermost reaches of the Copper River.

Management tools currently available to ADF&G, including inriver sonar, aerial survey observations, and harvest data, provide fishery managers with indices of abundance that are used to guide management of the Copper River fisheries. In managing commercial harvest to provide for upriver escapement and allocations, the department's primary monitoring tool is the escapement index provided by the sonar counters at Miles Lake. Since 1996, combined upriver subsistence and personal use harvests have ranged from a low of 131,000 salmon in 2002 to a high of 240,000 in 1997 with an average of 183,000. A general increasing trend in subsistence harvests is reflected annually through additions to the inriver goal. Additionally, aerial escapement indices, marked otolith data, and weir data have provided supporting information as to the relative success the department has had in meeting provisions of the Copper River District Salmon Management Plan. Achieving biological escapement goals and satisfying other management plan provisions have remained the department's primary management objectives.

The Copper River District commercial fishing season has historically opened in mid-May. This followed decades of "book openings" that ran from Monday mornings to Friday evenings. 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, changing patterns in the fishery, and reallocations by the BOF. Two commercial fishing periods per week has been the recent pattern with the duration of a given fishing period dependant upon trends in escapement, harvest, and environmental conditions.

The current upriver sustainable escapement goal (SEG) for wild stock sockeye salmon is 300,000 to 500,000 fish. Adopted in 1972 and placed into regulation in 1980 (Fried 1994), the sockeye salmon spawning escapement goal was 300,000 fish until 2003 when the BOF adopted a range of 300,000–500,000 as the SEG (5 AAC 24.360(a)).

The Copper River District Salmon Management Plan outlines the biological and allocation categories that comprise the inriver goal for the Miles Lake sonar. Spawning escapement, subsistence harvest, personal use harvest, sport fishery harvest, hatchery brood, "other salmon", and hatchery surplus are the categories included in the management plan's inriver goal.

The components of the 2007 inriver goal were as follows:

Spawning escapement	300,000 to 500,000 sockeye salmon
Other salmon	17,500 salmon
Subsistence/Personal Use harvest	180,000 salmon
Sport fishery	15,000 salmon
Gulkana broodstock	20,000 sockeye
Gulkana Hatchery surplus	44,100 sockeye
Total	576,600 to 776,600 salmon

Of the 7 categories contained within the inriver goal, the most significant increases over time have been in the 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 increased primarily in response to large forecasts of enhanced sockeye salmon and increasing subsistence and personal use harvests.

The category of subsistence and personal use salmon within the inriver goal is set annually using the average of the previous 5-year harvests. In 2007, the 5-year average harvest from both the Glennallen Subdistrict and Chitina Subdistrict were combined and incorporated into the inriver goal. The number of hatchery surplus sockeye salmon within the inriver goal is determined annually using the GH 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 the Copper River District. It is important to note that these surplus salmon do not fulfill any biological escapement needs, nor are they specifically linked to any upriver subsistence harvest or sport allocations. A significant percentage of the hatchery surplus is taken during July and August in these upriver fisheries.

Preseason Outlook and Harvest Strategy

The 2007 commercial harvest forecast for the Copper River District was 44,000 Chinook, 1.2 million sockeye, and 278,000 coho salmon (Table 6 and Appendix H). Enhanced sockeye salmon returns to the GH were forecast to be 298,400 fish. PWSAC requires approximately 20,000 fish for broodstock leaving 278,400 hatchery sockeye salmon available for commercial, subsistence and sport harvests. The 2007 inriver goal for salmon passing Miles Lake was 576,600 to 776,600 fish. This number equated to a preseason sonar goal of 566,918 to 763,561 salmon by August 4, the season ending date for sonar counting at Miles Lake in 2007.

The traditional fishing schedule for the Copper River District is 2 evenly spaced periods per week, with periods generally occurring on Mondays and Thursdays. The duration of fishing periods is adjusted by EO as needed. It was agreed upon at the SHTF meeting on April 23 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. 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 the 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.

Typically, coho salmon management begins in the second week of August. The historical precedent is to provide an initial single opening per week of 24 hours that is increased to either 48 hours, or a second fishing period is added as harvest or aerial survey numbers warrant. Aerial

escapement estimates for the early portion of the coho salmon return are frequently not immediately available as other species of salmon remain in tributaries and can make accurate aerial identification problematic. Additionally, weather at this time of the year typically can make 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 2007 Copper River sockeye salmon run was 2,967,290 fish with 1(64.9%) commercially harvested, 190,384 (6.4%) harvested by upriver subsistence and personal use users, and 5 year average harvest of 8,753 (0.3%) by upriver sport users. Sport users on the Copper River Delta harvested an estimated 639 (<0.1%) sockeye salmon. Educational permit and subsistence harvest in the Copper River District was estimated to be 6,246 fish (0.2%). The remaining 829,870 fish (28.0%) comprised the upriver and delta wild sockeye salmon escapement with an additional 27,602 fish (0.9%) returning to the Gulkana hatchery (Appendix A1). Overall, 2,275,220 (76.7%) of the sockeye salmon entering the Copper River District originated from upriver wild spawning systems, 559,927 (18.9%) from delta spawning systems and 132,143 (4.5%) overall came from the Gulkana hatchery (Appendix A2).

The 2007 total Chinook salmon run was 87,725 fish with 39,095 (44.6%) commercially harvested and 1,215 (1.4%) harvested through educational and subsistence permits in the Copper River District. A total of 6,089 (6.9%) were harvested by upriver personal use and subsistence users, 4,353 (4.9%) were harvested by sport users, and the remaining 41.0%, (35,957) were spawning escapement (Appendix A3). This is within the SEG of 24,000 or more 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 1,901,773, 64.4% above the projected 1,157,093 and 31.2% above the previous 10-year average of 1,449,657 sockeye salmon (Appendices A4 and A5). The harvest of 39,095 Chinook salmon was 11.7% below the previous 10-year average of 44,277 fish. The salmon escapement estimate to the upper Copper River, 926,438 fish, surpassed the inriver escapement goal range of 576,000 to 776,000 salmon and was above the 10-year average of 825,463 (Appendices A6 through A9). River stage height was within the historic range as shown in Appendix A10. The escapement index count for the Copper River Delta systems was 88,285 sockeye salmon, and was within the SEG range of 55,000–130,000 fish and was comparable to historical escapement (Appendices A11 and A12). Two aerial surveys of upper Copper River index streams were conducted by the gillnet manager. Counts for these surveys are in Appendices A13 and A14.

Based on strontium chloride otolith mark analysis, 94,232 Gulkana Hatchery sockeye salmon were harvested in the Copper River commercial fishery in 2007 accounting for 5.0% of the total sockeye salmon commercial harvest (Appendix E6). This is below the previous 10-year average of 309,233 hatchery sockeye salmon (Appendix E7). The majority were 5-year-old fish from the 2002 Gulkana Hatchery release of 25.9 million fry (Appendix E8). Additionally in 2007, there were an estimated 7,307 MBH sockeye salmon harvested in the Copper River District (Appendix E6).

The first Copper River District commercial fishing period started at 7:00 am on Monday, May 14 and was open for 12 hours as was the second opening on Thursday, May 17 at 7:00 am. During the first period, waters inside of the barrier islands from Copper Sands to Coffee Creek were closed as per regulation 5 AAC 24.361(b). The harvest from this period was 1,564 Chinook, and

22,088 sockeye salmon. Harvest from the second period was 2,433 Chinook and 74,865 sockeye salmon (Appendix A5). This significant increase in harvest of both species during the second fishing period was likely due to the inside waters being open as well as the minus 3.8 low tide that occurred at 8:27 am on May 17. The anticipated harvest from this period was 4,498 Chinook and 31,096 sockeye salmon (Appendix A9). The third 12-hour period occurred on Monday, May 21 with a harvest of 3,562 Chinook and 109,188 sockeye salmon. The inside waters were closed during this period. The harvest during this period was above the expected level of 100,330 sockeye salmon with 109,188 landed, and below the level of 8,095 expected for Chinook salmon with 3,562 landed.

As the result of extensive shore ice, neither the Miles Lake north or south bank sonar became operational until Monday, May 21 when 123 salmon were observed. This was over 5,000 salmon below the minimum anticipated inriver goal for this date of 5,192. Lower than expected passage by the Miles Lake sonar on May 21 and 22 led to an escapement shortfall of over 23,000 salmon, thus a second opening during this week was not warranted. Passage by the sonar from May 23 through May 25 remained below expected with 4,216 salmon counted versus an expected minimum count of 54,376. Both staff and members of the fishing community noted similarities between the 2007 return and the 2006 return in which the salmon run was both late and compressed. In 2006, ADF&G elected to forego 2 openings as the result of an escapement shortfall of close to 74,000 salmon on May 28. Shortly thereafter, salmon passage at the Miles Lake sonar increased to near record levels with over 250,000 salmon passing the sonar in the following week, exceeding the minimum inriver goal for June 4 by over 100,000 salmon. In light of this and a slight upturn in the midnight to 0600 sonar count on May 26, the department announced a 12-hour period starting at 7:00 am on Monday, May 28.

The harvest from the May 28 period of 256,559 sockeye and 6,796 Chinook salmon exceeded the anticipated harvest for these species of 90,618 and 4,715 salmon respectively. Likewise, escapement by the sonar from May 26 through May 28 steadily increased with daily sonar counts surpassing the minimum inriver escapement objective on May 28. Passage by the sonar on May 29 of 23,008 was significantly above the daily escapement objective count of 14,316 salmon. Given that there was still a shortfall of over 55,000 salmon below the cumulative minimum inriver escapement objective, a 12-hour fishing period was announced for Thursday, May 31. The harvest from this period of 107,195 sockeye and 3,310 Chinook salmon was above the anticipated harvest of 75,395 and 3,969 respectively. Sonar passage from May 30 through June 1 increased dramatically with average daily counts of 32,000 salmon. This is more than double the daily minimum inriver escapement objective for this period. With steadily increasing numbers of salmon past the sonar coupled with above anticipated harvests, an additional 12-hour period on Saturday, June 2 was announced. Harvest from this period was robust with 109,665 sockeye and 4,530 Chinook salmon harvested by 453 permit holders. A 12-hour period was announced for Monday, June 4. Sonar passage from June 2–5 remained significantly above minimum inriver goals with the cumulative sonar count surpassing the minimum cumulative inriver escapement objective on June 2. During this period 73,925 sockeye and 1,769 Chinook salmon were harvested versus an anticipated harvest of 102,490 sockeye and 4,710 Chinook salmon. By June 5 a total of 264,437 salmon had been counted at Miles Lake, surpassing the minimum inriver objective of 211,009 salmon by over 50,000 fish. In light of this, a 12-hour period was announced for Wednesday, June 6 with a Friday opening anticipated. While sonar passage remained elevated from June 6–9 supporting both the Wednesday and Friday, June 8 12-hour periods, harvest levels diminished as a result of decreased fleet participation due to stormy

conditions. In addition, the Bering and Coghill districts were opened for fishing periods during this week, thereby further reducing fleet participation in the Copper River District fishery. The cumulative harvest on June 9, (statistical week 23) was 841,793 sockeye and 26,639 Chinook salmon. This was above the anticipated harvest of 559,484 sockeye and below the 10-year harvest average of 37,279 Chinook salmon and was above the 2006 harvest of was 588,140 sockeye and 21,637 Chinook salmon for this time period. There were 2 fishing periods in statistical week 24 (June 10–16), 36 hours on Monday, June 11 and 60 hours on Thursday, June 14. This increased time was offered as the result of Miles Lake sonar counts that remained consistently above the daily minimum inriver goals and catches that were well above anticipated levels. The harvest for these periods during statistical week 24 combined was 259,279 sockeye and 7,120 Chinook salmon with 391 permits making deliveries in the first period and 370 in the second period. This compares to an anticipated harvest of 82,688 sockeye and 3,700 Chinook for this time period.

The first aerial survey of the Copper River Delta this season that was flown on June 11 and had an aerial index count of 2,310 versus an anticipated SEG range of 7,270–17,184 sockeye salmon. While this was below the anticipated range, the delayed return of salmon in the main stem Copper River indicated that a continued aggressive fishing schedule was appropriate.

ADF&G announced two 48-hour fishing periods during statistical week 25, (June 17–23). Harvest from these periods combined was 238,405 sockeye and 3,710 Chinook salmon. This compares to an anticipated harvest of 77,526 sockeye and 1,653 Chinook salmon for this week. An aerial survey conducted on Friday, June 22 documented 2,064 sockeye salmon. This compares to an anticipated SEG index of 14,273–33,736. Conditions during this survey were fair with cloud cover and elevated silt levels making observational conditions less than ideal. Escapement past the Miles Lake sonar during this time period remained elevated with 55,998 salmon counted versus an inriver goal of 49,009 for statistical week 25. In light of reduced escapement in index streams on the Copper River delta, the 2 fishery openings during the following week were reduced to 24 hours each. Harvests from these periods combined were 96,752 sockeye and 893 Chinook salmon. This compares to an anticipated harvest of 102,360 sockeye and 934 Chinook salmon for statistical week 26 (June 24–30). An aerial survey was flown on Tuesday, June 26 documenting 28,130 sockeye salmon in index streams. This was within the SEG range of 17,627–41,665 for this statistical week. Salmon escapement past the Miles Lake sonar during this statistical week was more than double the minimum inriver goal of 44,850 with a total of 106,894 salmon counted. In light of escapement levels significantly above the minimum required for both delta and upriver stocks, 2 fishing periods were assigned in week 27, 48 hours beginning at 7:00 am on Monday, July 2, and 60 hours beginning at 7:00 am on Thursday, July 5. This fishing schedule was maintained for the next 6 weeks until the last week of the commercial sockeye salmon season. Two aerial surveys of delta index systems were conducted in July. Both of these documented levels of escapement above the minimum SEG. Sonar counts in July generally remained significantly above the daily anticipated levels. The cumulative sonar count on July 31 was 898,942 salmon, more than 60% above the minimum inriver goal of 560,084 salmon for that date. The overall commercial harvest in July from statistical weeks 27– 31 (July 1– August 4) was 439,185 sockeye salmon and 725 Chinook salmon. This compares to the 2006 harvest of 360,397 sockeye and 426 Chinook salmon and an anticipated 2007 harvest of 319,156 sockeye and 696 Chinook salmon during this time period. The average number of permits fishing in any given period in the Copper River District from statistical weeks 27– 31 was 145. This is 10% above the number fishing last year (131) during

this period. There were 2 fishing periods in statistical week 32 (August 5–11) totaling 108 hours. Overall harvest from this week was significantly less than in previous weeks with 15,016 sockeye, 3,269 coho and 4 Chinook salmon landed by 86 permit holders in the first period and 51 in the second period. The anticipated harvest was 8,508 sockeye, 16,053 coho (Appendix A19) and 5 Chinook salmon. An aerial survey was flown on Tuesday, August 7 where 27,682 sockeye salmon were observed. In response to diminished harvest and concern regarding the building coho return, fishing time in statistical week 33 (August 12–18) was reduced to 48 hours divided equally between the Monday and Thursday fishing periods. The combined harvest from these periods was 7,211 sockeye, 3,431 coho, and 3 Chinook salmon that were harvested by 60 permit holders. An aerial survey was flown on Friday, August 17 where 32,113 sockeye and 5,841 coho salmon were observed (Appendix A20). This was within the SEG range (26,465–62,553) for sockeye and below the SEG range (5,846– 12,239) for coho salmon. Historically, management for coho salmon has begun when the number of coho landed surpasses the number of sockeye.

The Miles Lake sonar was operated through statistical week 31 (July 29–August 4). As has been the case over much of the last decade, significant numbers of salmon were passing the sonar (6,360) when it was turned off for the season on August 4. The total estimated salmon passage at Miles Lake for 2007 was 926,438 salmon. This was above the 2007 inriver goal range of 576,600 to 776,600 salmon. This ranks as the third largest sonar count on record for a given season. The highest passage occurred in 1997 when a total of 1,148,079 salmon were counted by the sonar at Miles Lake. The second highest was in 2006 with 959,706 counted by the sonar.

The final 2007 escapement index value for Copper River delta sockeye salmon stocks was 88,285 and was within the SEG for delta stocks of 55,000–130,000 sockeye salmon. Since 1998 this value has ranged from a low of 58,406 in 2005, to a high of 100,975 in 1999 with an average index value of 79,023 (Appendices A11 and A12).

Upper Copper River aerial survey index counts for sockeye and Chinook salmon may be found in Appendices A13 and A14, respectively.

The majority of the sockeye salmon harvested commercially, 83.5%, were 5-year-old fish from brood year 2002, with 4-year-old fish and 6-year-old fish making up 7.4% and 9.0%, respectively. Less than 1% of the return were 7-year-old fish from brood year 2000. Over half of the sockeye salmon harvested, 55.5%, were males. (Appendix A15). The majority of the Chinook salmon harvested commercially, 64.3%, were 5-year-old fish from brood year 2002, with 6-year-old and 4-year-old fish making up 25.9% and 9.4%, respectively. Approximately 0.4% of the return were 7-year-old fish from brood year 2000. Over half of the Chinook salmon harvested, 52.8%, were males (Appendix A16).

Coho Salmon Fishery Season Summary

The 2007 total run size is estimated to be 237,449 coho salmon. A total of 117,182 (49.3%) coho salmon were harvested commercially, of these 340 were reported retained as “homepacks”; 15 coho salmon were harvested from the Copper River District in a subsistence gillnet; 1,492 (0.6%) coho salmon were harvested by personal use dipnetters in Chitina; 231 coho salmon were harvested in the Glennallen dipnet and fishwheel subsistence fisheries, an estimated 10,223 coho salmon were harvested by sport users on the Copper River delta near Cordova, and an estimated 184 coho salmon were harvested by upriver sport users (Appendix A18). Additionally, 142 coho salmon were reported harvested in federally managed subsistence fisheries (Appendix F6). The

Copper River delta spawning escapement is estimated at 107,640 coho salmon (Appendix A18). The aerial survey index for this season was 52,735 and was within the SEG index range of 32,000 to 67,000 (Appendix A21). This index value is at least 20,000 fish below the range of all years from 2002 to 2006 but above those from 1999 to 2001, where delta coho stock returns were depressed (Appendix A21). The total run size for coho salmon in the Copper River in 2007 is not known given that the number of coho salmon migrating upriver is unknown.

The commercial coho salmon harvest of 117,182 was substantially (57.4%) below the projected harvest of 278,161 (Appendix A18 and Appendix H). Aerial estimates of coho salmon escapement were conducted from early August until late October. During these 13 weeks a total of 11 surveys were flown (Appendix A20).

ADF&G met with the PWS SHTF and the public in April, where discussions included Copper River coho salmon management. It was decided that a single 24-hour period per week schedule would be maintained until escapement warranted either extending or decreasing fishing time. Deciding on the most appropriate fishing strategy to apply to the coho salmon run has been a contentious issue in the past. Two distinct fishing periods per week potentially allow for 2 "clean up" harvests to occur when milling coho salmon may be vulnerable to harvest. Unlike upriver sockeye and Chinook salmon that migrate to distant interior systems, Copper River delta coho and delta sockeye salmon typically linger in the near-shore region for a period of time prior to entering fresh water. The contention is that a single long period (~36–48 hours) per week will allow a broader window of time for these fish to mill in the estuary, thus a higher probability of escaping the fishery. Arriving at a harvest strategy consensus between processors and the fishing fleet has proven difficult to achieve.

For ADF&G, the pattern of weak coho salmon runs to the Copper River District from 1996 to 2001 overrides the harvest strategy concern. Prior to 2002, harvests fell below projections and seasons ended prematurely due to weak returns. In 1997, coho salmon escapement into Copper River delta streams was weak enough to close the commercial season and a bag limit reduction was imposed for sport fishers. In 1998, weather during the fall precluded an accurate assessment of coho salmon escapement. Because of the recent history of poor coho salmon runs and inconclusive escapement data, ADF&G has been approaching management of this species with caution.

An aerial survey was flown on Friday, August 17 with 32,113 sockeye and 5,841 coho salmon observed. This was within the SEG range (26,465–62,553) for sockeye and at the SEG range (5,846–12,239) for coho salmon. However, given the presence of significant numbers of sockeye salmon in index streams, actual levels of coho salmon may have been under estimated.

The harvest of coho (8,909) surpassed the number of sockeye landed (2,607) during the first 24-hour period of the coho salmon season in statistical week 34 (August 19–25) that occurred on Monday, August 20 with 141 permits delivering. The anticipated harvest for this week was 50,567 coho salmon and 1,654 sockeye salmon (Appendix A9 and A19). During the previous year in 2006 there were 60,690 coho salmon delivered by 213 permit holders during the single 36-hour period that occurred in statistical week 34. An aerial survey was flown on Saturday, August 25 that documented 8,711 coho and 29,871 sockeye salmon in index systems. This compares to SEG ranges of 9,298–19,468 coho and 24,382–57,360 sockeye salmon in index streams in statistical week 34. In light of the marginal escapement and below expected harvest, a single 24-hour opening was scheduled in week 35 (August 26–September 1) on Monday, August

27. The harvest from this period was 21,534 coho and 819 sockeye salmon versus an anticipated harvest of 60,161 coho and 389 sockeye salmon. An aerial survey was flown on Wednesday, August 29 that documented 20,670 coho and 28,262 sockeye salmon. This was above the SEG ranges of 16,147–33,807 for coho and 19,762–46,711 for sockeye salmon during statistical week 35. In response to a harvest that was less than half of the expected harvest, coupled with escapement numbers that were below the midpoint for coho salmon, a single 24-hour opening was announced for statistical week 36 (September 2–8). There were 22,700 coho and 613 sockeye salmon harvested by 203 permit holders during the Monday, September 3 opening. This compares to an anticipated harvest of 56,875 coho and 195 sockeye salmon. In 2006 there were 58,776 coho delivered by 274 permit holders during the two 24-hour periods that occurred in statistical week 36. An aerial survey was conducted on Thursday, September 6 that documented 17,752 coho salmon in index streams. This was below the SEG range of 21,447–44,904 for statistical week 36. In statistical week 37 (September 9–15) there was one 24-hour fishing period on Monday, September 10. During this period 130 permit holders delivered 23,215 coho salmon. This compares to an anticipated harvest of 33,197 coho salmon for this statistical week, and a harvest in 2006 of 29,135 coho salmon by 131 permit holders during 2 fishing periods in statistical week 37. Two aerial surveys were flown in statistical week 38 (September 16–22). On Monday, September 17, 21,502 coho salmon were documented in index streams, and a second survey flown on Saturday, September 22 documented 36,365 coho salmon in index streams. Combined, the 2 surveys produced an index count of 38,246 that was above the minimum of the SEG range of 16,908–35,401. There were two 24-hour fishing periods in statistical week 38. A total of 21,877 coho salmon were harvested by 56 permit holders during the combined periods. This compares to an anticipated harvest of 13,157 coho salmon, and a 2006 harvest of 8,920 coho salmon by 83 permit holders during the two 48-hour periods in week 38. The primary buyer of coho salmon in Cordova ended their buying for the season on Friday, September 21. There were 2 commercial fishing periods in statistical week 39 (September 23–29). There were 2,024 coho salmon landed by 26 permit holders during the first 24-hour period on Monday, September 24, and a single delivery by one permit holder during the 60-hour period that began at 7:00 am on Thursday, September 27. There were 4 more fishing periods prior to the closing of the commercial coho season in the Copper River District on October 14. There were additional aerial surveys of the Copper River District flown on September 27 and October 3, 9 and 21. These surveys all documented levels of both coho and sockeye salmon that were within the SEG range. The majority of the coho salmon harvested commercially, 59.3%, were 3-year-olds from brood year 2004, with 4-year-old and 5-year-old fish making up 40.4% and 0.3%, respectively. Just over half, 52.2%, of the coho salmon harvest was males (Appendix A17).

BERING RIVER DISTRICT

For more detailed information on this district see Appendices A21–A26.

Preseason Outlook and Harvest Strategy

Opening in early June, the Bering River District is managed concurrently with the Copper River District.

Sockeye Salmon Season Summary

The 2007 harvest of 16,470 sockeye salmon from the Bering River District was below the 10 year harvest average of 18,451 fish (Appendix A22). The sockeye salmon aerial escapement

index count in the Bering River District index streams was 21,471 salmon. This was below the SEG range of 23,000–35,000 fish. The Bering River drainage, the largest sockeye salmon spawning system in the district, had a peak index count of 6,662 sockeye salmon on July 15. The Katalla River also had a seasonal peak count on that date of 12,130. This compares to an anticipated range of 16,946–25,787 sockeye salmon for that statistical week for these 2 systems combined (Appendix A23).

The first period for the 2007 season began on June 4 and was for 12 hours (Appendix A24). There were no deliveries reported from this period, or for the next two 12-hour periods that started on June 6 and June 8. The fourth fishing period that began on Monday, June 11 was for 36 hours. During this period 2 permit holders reported landing 2 Chinook and 278 sockeye salmon. There were no harvests reported from the following 60-hour period that began on Thursday, June 14. There were 15,996 sockeye and 86 Chinook salmon harvested by 40 permit holders during the 2 periods that occurred in statistical week 25 (June 17–23). An aerial survey was conducted on Friday, June 22 under marginal conditions that documented 280 sockeye salmon in the district versus an anticipated SEG index count of 4,985–7,586 salmon. A 24-hour period occurred on Monday, June 25 however there were no deliveries reported. An aerial survey was conducted on Tuesday, June 26 during which 3,010 sockeye salmon were observed versus an anticipated SEG index count of 6,207–9,446 fish. In light of the depressed harvests and continuing below expected aerial survey index counts, no further fishing periods were announced until management for coho salmon began on August 20. A total of 8 aerial surveys of index streams were conducted during this time with consistently below expected levels of sockeye salmon observed. Observational conditions in the Bering River system in general were good with adequate visibility for an accurate index count. Observational conditions in the Katalla River were good as well, in spite of large numbers of odd-year pink salmon from late-July and into September that made sockeye and coho salmon counting challenging.

Coho Salmon Season Summary

Excellent observational conditions allowed regular aerial surveys of index streams (Appendix A25). However, ‘excellent observational conditions’ implies extended periods of insignificant rainfall that minimizes suspended glacial silt and high water. This may delay coho migration into Copper River and Bering river delta systems due to low water levels. Early surveys in August showed below anticipated levels of coho salmon in index streams. Surveys in late September and October (after rain events) documented levels of coho salmon that were above the upper end of the SEG. Aerial surveys were conducted into late October with significant escapement observed over one month after the last commercial delivery.

In 2007 the Bering River District coho salmon fishery began on August 20 with a 24-hour fishing period. The district was managed concurrently with the Copper River District until the close of the commercial salmon season on October 14. Peak fishing effort was during statistical weeks 36 (September 2–8) and 37 (September 9–15) when 15 permits in each week harvested 2,553 and 2,636 coho salmon respectively (Appendix A26). The second of these periods was also the peak harvest for the season. The actual total harvest of 9,305 was below the anticipated 10-year harvest average of 48,167 coho salmon. Conversely, the coho salmon escapement goal was exceeded with a peak escapement index of 33,062 versus a SEG of 13,000 to 33,000 for the Bering River District (Appendix A25). Minimal rainfall in August and early-September appears to have delayed coho salmon entry into the commercial fishery until mid-September at which

point processors had stopped buying fish (September 21) and most permit holders had stopped fishing for the season.

COGHILL DISTRICT

For more detailed information on this district see Appendices B1–B7.

Preseason Outlook and Harvest Strategy

The 2007 forecast of sockeye salmon returning to Coghill Lake was 140,000 fish. Meeting the minimum biological escapement goal of 25,000 sockeye salmon would leave 110,000 fish for the CPF (Common Property Fishery) (Table 6). Enhanced chum salmon returns to the Wally Noerenberg Hatchery (WNH) were forecast to be nearly 1.9 million fish (Table 6). PWSAC's projection for cost recovery and broodstock requirements was approximately 844,000 fish, leaving 1.1 million chum salmon for the CPF. The projected return of pink salmon to the WNH facility was 4.2 million fish (Table 6). Of those, PWSAC's projection for cost recovery and broodstock requirements was approximately 1.8 million fish, leaving approximately 2.4 million pink salmon available to the CPF. An estimated 67,700 coho salmon were projected to return to the WNH (Table 6). These were anticipated to be early timed SGH/Corbin Creek stock fish.

PWSAC, in consultation with ADF&G elected to harvest 60% of the pink, chum and sockeye salmon as cost recovery before having CPF openings in the various hatchery subdistricts. ADF&G retained the option of opening the CPF in the event that cost recovery did not keep pace with run entry to minimize loss of fish quality.

Season Summary

The Coghill weir was fully deployed and fish tight on June 14. The weir was maintained until July 28 when it was dismantled. Sockeye salmon escapement was 70,001 through July 27, and above the midpoint SEG of 25,000 fish (Appendices B1, B2, and B3).

The total CPF, purse seine and drift gillnet combined, sockeye salmon harvest for the Coghill District was 185,902 fish; the total CPF harvests for chum, pink, and coho salmon was 1.5 million, 2.4 million, and 85,584, respectively (Appendix B4 and B5). In their 2007 WNH Annual Report, PWSAC reported a chum salmon cost recovery harvest of 920,198 fish and a broodstock harvest of 173,452 fish, as well as a pink salmon cost recovery harvest of 3.4 million fish and a broodstock harvest of 322,000 fish (Appendix E13). In addition PWSAC had an incidental harvest of 11,975 coho salmon during the end of pink salmon cost recovery. PWSAC did not harvest broodstock at WNH from the returning coho salmon given that their release at WNH in 2006 was a mix of BY2004 Solomon Gulch Hatchery stock and Mile 18 Copper River coho salmon. Instead, PWSAC elected to harvest 129 coho salmon from Fleming Spit where only a single stock, Mile 18 fish, had been released in 2004. The coho salmon egg-take goal for 2007 was 1.18 million eggs but PWSAC was unable to achieve that goal with a collection of only 255,000 eggs because of lack of fish at Fleming Spit.

There were 98,828 MBH sockeye harvested in the Coghill District commercial fishery, accounting for 53.2% of the 185,901 total sockeye salmon harvested (Appendix E9). There were 1.5 million chum salmon harvested in this district by the CPF, with 98.3% having been released at the WNH, 8,832, 0.6% straying from Port Chalmers, and a wild stock harvest of 15,572 fish (Appendix E11). Of these fish, 173,430 sockeye and 1,009,377 chum salmon were harvested by the drift gillnet fleet (Appendices B4, B5 and B6).

The common property gillnet fishery began in the Coghill District on May 28. A general schedule of 2 openings, 24 to 48 hours in length, per week was established. These coincided with openings in the Copper River and Bering River districts. This schedule was maintained until July 19 with management for the common property pink salmon fishery beginning shortly thereafter. During statistical week 22 (May 27–June 2) 6 permit holders harvested 4,296 chum and 1 sockeye salmon during the two 24-hour openings. Typically the gillnet fleet targets returning WNH chum salmon in the early season and broadens their focus in late-June to include interception of returning MBH fish and wild sockeye salmon returning to Coghill Lake. During statistical week 23 (June 3–9) 29 permit holders in the first period and 27 in the second period landed a total of 77 sockeye and 40,341 chum salmon. As of June 9, PWSAC had harvested a total of 39,537 chum salmon for cost recovery. This was ahead of the projected cumulative cost recovery harvest for that date of 24,310. Fleet participation increased significantly during the following week (June 10–16) with 60 permit holders in the first period and 76 in the second reporting 168,102 chum and 1,878 sockeye salmon harvested. As of June 16 PWSAC had harvested 143,048 chum salmon for cost recovery versus a projected harvest of 96,905 fish. During statistical week 25 (June 17–23) 106 permit holders in the first period and 62 in the second period harvested a total of 12,615 sockeye and 109,956 chum salmon. PWSAC harvested 127,068 chum salmon for cost recovery during that same week.

On June 17, 4 days after the Coghill Lake weir was installed the actual cumulative count of 889 sockeye salmon surpassed the anticipated minimum cumulative SEG for that date of 408 fish. Fish passage by the weir remained steady with 5,057 sockeye salmon past the weir at the end of this statistical week, more than double the SEG of 1,827 for that date. In light of the above expected chum salmon return and robust sockeye salmon passage at the Coghill weir, two 48-hour fishing periods were opened in statistical week 26 (June 24–30) and deep gillnet gear (greater than 60 meshes in depth) was permitted. During this week 143 permit holders reported delivering 28,644 sockeye and 305,604 chum salmon. PWSAC reported harvesting 237,825 chum salmon during this week with a total harvest of 507,941 towards their stated cost recovery goal of 655,000 chum salmon. Sockeye salmon passage at the Coghill river weir remained elevated with 15,292 past the weir at the end of statistical week 26 on June 30 versus a minimum cumulative SEG goal of 5,594 fish. In response to this, anadromous stream closures were suspended and drift gillnetting was permitted to the mouth of the Coghill River during the two 48-hour openings in statistical week 27 (July 1–7). In spite of this, overall passage at the weir remained elevated above the minimum SEG with 19,421 past the weir on July 7 versus a minimum cumulative goal of 12,096 fish for that date. Passage at the weir continued to be very strong for the next 2 weeks with daily counts frequently exceeding 2,000 sockeye salmon. Counts peaked on July 14 at 16,594 sockeye salmon past the weir.. Sockeye harvest during these 2 weeks from July 1–14 was good, with over 60,000 reported by 140 permit holders in the first week and nearly 35,000 reported by 142 permits in the first period and 81 permits in the second period of the second week.

As of July 7 PWSAC had harvested 553,000 chum salmon and on July 10 exceeded their amended cost recovery goal of 795,000 with 803,766 salmon harvested (Appendix E13). The cost recovery goal was adjusted mid-season because the average size of returning chum salmon was smaller than anticipated. PWSAC continued harvesting cost recovery chum salmon along with brood stock through July 31 with a final cost recovery harvest of 920,198 chum salmon. On Thursday, July 12 ADF&G opened the WNH SHA and THA up to a line of buoys in front of the barrier seine to drift gillnet harvest for 12 hours beginning at 8:00 am and to purse seine the

following day for 12 hours. ADF&G allowed purse seine gear into the Coghill District earlier than allowed by regulation because chum salmon run entry was out-pacing the gillnet fleet's ability and the department had quality concerns. The purse seine period was extended on Friday until 8:00 pm Sunday, July 14. Drift gillnet harvest from the 84-hour Thursday through Sunday period was 16,702 sockeye and 35,937 chum salmon with 81 permit holders participating. Seine harvest from the 60 hours during this period that seine gear was permitted was 295,791 chum and 0 sockeye salmon harvested by seine 16 permit holders. Following this in statistical week 29 (July 15–21) there were 33,435 sockeye and 58,416 chum salmon harvested by 96 drift gillnet permit holders during the 108 hours that this district was open to this gear type. In addition, 20 purse seine permit holders harvested 3,055 sockeye and 156,135 chum salmon from the WNH SHA and THA during 2 periods this statistical week.

Passage at the Coghill River weir from July 15–21 remained high with 12,345 sockeye salmon passing the weir during this period for a cumulative count of 66,635 fish on July 21. The projected passage for this week was 3,558 sockeye salmon for a minimum projected cumulative SEG of 21,398 sockeye salmon. Passage the following week remained strong with a final count 70,001 sockeye salmon on July 27 the last day of counting prior to removing the weir for the season. This was above the minimum SEG for this date of 23,333, and ranks as the ninth largest sockeye salmon return to the Coghill River since 1971. Drift gillnet harvest during statistical week 30 (July 22–28) declined sharply with only 11 permits delivering 1,288 sockeye and 3,260 chum salmon. There were no deliveries reported by drift gillnet permit holders during the next 2 statistical weeks. There were 183 coho salmon delivered by 2 permit holders in the second half of statistical week 33 (August 12–18). Drift gillnet participation increased the following week with 6 drift gillnet permit holders during the first period and 16 during the second delivering a total of 10,820 coho and 136 sockeye salmon during the 144 hours that this district was open to commercial purse seine and drift gillnet harvest. Drift gillnet participation continued to increase the following week, (and seine to decrease) with 60 gillnet permit holders during the first period and 76 during the second delivering a total of 31,074 coho and 118 sockeye salmon. As the result of the pink salmon harvest for both gear types (12,594) falling behind the harvest of coho salmon (16,365) during the 60-hour August 26–29 fishing period, and in accordance with 5 AAC 24.370(e)(5)(B) drift gillnet gear became the only legal gear type for the remainder of the fishing season in this district. As the result of the returning WNH coho salmon being of Solomon Gulch Hatchery (SGH) Corbin Creek stock and having an earlier run timing than the 18-Mile Creek stock, harvest and participation diminished markedly in statistical week 36 (September 2–8). A total of 53 permit holders delivered 15,171 coho salmon during the 144 hours that the district was open during this statistical week. The following week saw the last commercial deliveries from this district with 21 permit holders delivering a measly 2,674 coho salmon during the first 84-hour period of the week. There were 4 additional openings through statistical week 39 (September 23–29) with no additional deliveries reported.

The 2007 sockeye salmon drift gillnet harvest for the Coghill District was 173,430 fish, which is above the 10-year average of 128,568 sockeye salmon. The 2007 sockeye salmon gillnet harvest from the Coghill District ranks as the eighth largest sockeye harvest from this district since 1984 (Appendix B6.) The 2007 coho salmon drift gillnet harvest for the Coghill District was 60,982 fish, which is over twice the 10-year average of 26,601 fish.

The estimated age and sex compositions of sockeye, harvested in the commercial fishery and at the Coghill weir can be found in Appendices B7 and B8.

UNAKWIK DISTRICT

For more information on this district see Appendices B9 and B10.

Preseason Outlook and Harvest Strategy

The Unakwik District 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; however, water clarity is marginal, thus escapement indices are considered imprecise at best. A major pink salmon hatchery, Cannery Creek Hatchery, borders the southern boundary of the district.

Season Summary

The total 2007 Unakwik District harvest was 15,693 sockeye and 226 chum salmon (Appendix B9 and B10). There was 1 reported landing by a purse seine permit holder during the 2007 season of 547 sockeye and 4 chum salmon. The overall sockeye salmon harvest in 2007 was above the 10-year average of 7,217 fish. (Appendix B10). The Unakwik District opened on June 11 for a 36-hour period, and followed a schedule of 2 evenly spaced periods per week, concurrent with that of the Copper River District, until the district was closed for the season on July 25. Peak harvest occurred during period 9 (July 9–11), with 3,304 sockeye salmon landed by 7 permit holders.

ESHAMY DISTRICT

For more detailed information about this district see Appendices C1–C8.

Preseason Outlook and Harvest Strategy

The 2007 forecast of sockeye salmon returning to Eshamy Lake was 36,000. Meeting the mid-point BEG of 30,000, would leave approximately 6,000 fish for the common property set and drift gillnet fisheries. Total onsite returns to Main Bay Hatchery (MBH) were projected by PWSAC to be 1.1 million sockeye salmon. The entire projected run was stock of Coghill Lake origin, of which 7,930 fish were to be used for broodstock and 363,000 fish were to be harvested for cost recovery, with the remaining 760,070 fish available for CPF harvest. Once cost recovery harvesting was initiated and meeting anticipated levels, limited CPF opportunity was anticipated to occur within the hatchery subdistrict. At the April SHTF meeting, the first gillnet opening in the Crafton Island Subdistrict was slated to occur during the week of June 10. Additionally it was decided upon that the fishing periods starting on Thursday would begin in the mornings, rather than the evenings as had previously been the schedule. As indicated at previous meetings, if needed, fishing periods were to be reduced to less than 12 hours, as an alternative to omitting a fishing period. Under the Prince William Sound Management and Salmon Enhancement Allocation plan (5 AAC 24.370), the set gillnet gear group allocation for 2007 was 4% of the 5-year average value of PWSAC enhanced salmon stocks. If the set gillnet gear group were to catch 5% or more of the of the 5-year average value of PWSAC enhanced stocks, beginning July 10 the following year, they will be limited to no more than 36 hours of fishing time per week. Because the 5-year average value, from 2001 through 2005, was 6.3%, weekly time limits after July 10 were to be imposed.

Season Summary

The Eshamy weir was fully deployed and fish tight on July 6. The weir was maintained and fish counted until September 10 (Appendix C1 and C2). Total escapement through the weir prior to its dismantling on September 11 consisted of 16,646 sockeye, 29,409 pink, 243 chum, and 831 coho salmon. The 2007 sockeye salmon escapement was below the 10-year average of 33,669 fish (Appendix C3), and did not meet the minimum BEG of 20,000 for this system.

The run timing of Coghill Lake sockeye stock returning to the MBH is 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 2007 season was a 36-hour period occurring in statistical week 24 (June 10–16) on Monday, June 11 (Appendix C4 and C5). During this period 2,443 sockeye salmon were landed by 18 permit holders fishing in the Eshamy District exclusive of the Main Bay Hatchery SHA (Special Harvest Area), THA (Terminal Harvest Area), and AGZ (Alternate Gear Zone). A second fishing period 24 hours in length occurred beginning at 8:00 am, occurred on Thursday, June 14. During this period 17 set gillnetters landed 2,302 sockeye in the Crafton Island Subdistrict. There were no landings reported by drift gillnet permit holders. The following week (June 17–23) had 2 openings. The first opening on Monday, June 18 was for 24 hours and excluded the Main Bay Subdistrict. During this period 18 drift gillnet permit holders reported harvesting 3,276 sockeye and 3,986 chum salmon. Nineteen set gillnet permit holders reported landing 4,639 sockeye and 2,297 chum salmon. PWSAC reported initiating cost recovery on June 19 with a harvest of 9,437 sockeye salmon towards the cost recovery goal of 363,000 fish. The following period began at 8:00 am Thursday, June 21 was for 48 hours with the Main Bay Subdistrict east of the THA open for the first 24 hours only as recommended by PWSAC. A combined total of 46,564 sockeye and 20,863 chum salmon were delivered by the set and drift gillnet permit holders with 6,032 of those sockeye reported harvested in the Main Bay Subdistrict. A total of 106,484 sockeye and 40,052 chum salmon were harvested by both fleets combined during the two 24-hour openings that occurred in the Crafton Island Subdistrict during statistical week 26 (June 24–30) with deep gillnet gear permitted. PWSAC reported having harvested 48,557 sockeye salmon as of June 30 (Appendix E16). This compares to a projected harvest of 214,050 fish for this date based on a standard Coghill stock run timing and a cost recovery target value of 363,000 fish. There were 2 openings during the following week (July 1–7). During the 24-hour Monday, July 2 opening 86 drift and 21 set gillnet permit holders reported a combined harvest of 52,705 sockeye salmon from waters south of Falls Bay. The second opening was for 12 hours and included waters of the Main Bay Subdistrict east of the THA as per recommended by PWSAC. A total of 141,261 sockeye salmon were harvested during this period by 175 drift and 21 set gillnet permit holders. Of those, 112,798 were harvested by the drift gillnet fleet and 28,463 were harvested by set gillnet permit holders in the Eshamy District, excluding the THA, SHA and AGZ. Cost recovery during this week was lackadaisical with PWSAC reporting only 78,268 sockeye salmon harvested for a July 7 cumulative cost recovery harvest of 126,825 fish. The total harvest for July 7 was 477,062 sockeye salmon versus an anticipated total harvest of 539,794 for that date. The Eshamy River weir was installed on July 5 and began counting fish on the following day with a total count of 79 sockeye salmon on Saturday, July 7. In light of what appeared to be a lower than anticipated sockeye salmon return to the MBH, only two 12-hour periods were offered in the Eshamy District, excluding the Main Bay Subdistrict during statistical week 28 (July 8–14). The cumulative commercial harvest for these periods combined was 217,048 sockeye salmon. During this week PWSAC reported a total of 105,637 cost recovery fish harvested for a

cumulative cost recovery total of 232,462 fish towards a final goal of 363,000 sockeye salmon. Additionally, set gillnet commercial fishing opportunity was restricted to 36 hours per week or less after July 10 in accordance with 5 AAC 24.370 Prince William Sound Management and Salmon Allocation Plan as the result of the 2001–2005 ex-vessel value having exceeded 5% of the total common property fishery for enhanced salmon. Weir passage during this statistical week was lower than expected with only 393 sockeye salmon counted from July 8–14 versus an expected passage of 628 fish during that period.

In light of below expected MBH and Eshamy River returns, and lagging cost recovery harvests, fishing time was limited to only two 12-hour periods in statistical week 29 (July 15–21) and the area was restricted to waters of the Eshamy District north of Loomis Creek, excluding the THA, SHA and AGZ. The commercial harvest from these 2 periods was 58,023 sockeye salmon. PWSAC reported 63,217 sockeye salmon harvested during this week for cost recovery. This compares favorably with the expected cost recovery harvest for this week of 29,024 sockeye salmon. However, the reported cumulative harvest of 295,679 fish on July 21 was still lagging behind the projected cumulative harvest of 319,261 as the result of apparent weakness in the early portion of the MBH return. Passage at the Eshamy weir remained depressed in statistical week 29 (July 15–21) with 127 passing the weir versus an anticipated 816 fish. Cumulative passage for July 21 was 599 versus a minimum anticipated cumulative BEG target of 2,186 fish for that date. In response to the below anticipated passage at the Eshamy River weir, fishing was again limited to waters north of Loomis Creek during the first 12-hour period of statistical week 30 (July 22–28). Additionally, the Main Bay Subdistrict remained closed as PWSAC harvested the remaining portion of their cost recovery goal in the hatchery subdistrict. In light of continued reduced passage at the Eshamy weir, the Thursday fishing period was skipped this week. However, the Main Bay Subdistrict including the SHA, THA and AGZ was opened for 36 hours to the common property fishery beginning at 8:00 am on Saturday, July 28. The commercial harvest from this period was 34,027 sockeye salmon with 15 set gillnet and 55 drift gillnet permit reporting deliveries. Reduced passage at the Eshamy weir continued through this week with 389 sockeye salmon counted from July 22–28. This compare to an expected passage of 1,585 fish during this period. The cumulative passage as of July 28 was 988 fish versus a minimum anticipated cumulative BEG target of 3,771 for that date. In light of this, commercial fishing effort was restricted to the hatchery subdistrict during the 48-hour opening that began at 8:00 am on Monday, July 30 as well as during the 60-hour opening that began at 8:00 am on Thursday, August 2. Combined harvest from these 2 periods was 34,433 sockeye salmon with 7 set and 13 drift gillnet permit holders wetting their gear. A total of 455 sockeye salmon were counted at the Eshamy River weir during this week versus an anticipated minimum BEG target of 1,525 for this period of time. There were 2 fishing periods in statistical week 32 (August 5–11) totaling 108 hours. A total of 15,088 sockeye salmon were delivered during the first opening by 5 drift and 1 set gillnet permit holders. There were no further commercial deliveries reported from the second period during this week, or during the open commercial periods prior to the Eshamy District closing for the season on September 1.

The peak harvest for both drift and set gillnet in the Eshamy District occurred during the eighth period on July 5, where 175 drift gillnet permit holders harvested 112,798 sockeye salmon and 21 set gillnet permit holders harvested 28,463 sockeye salmon during the 12-hour period. In total, 266 drift gillnet and 26 set gillnet permit holders participated in the Eshamy District in 2007 harvesting 734,720 sockeye salmon with 695,458 (94.7%) of Main Bay Hatchery origin

(Appendix E14). The commercial CPF sockeye salmon harvest for both gear types was above the previous 10-year average of 459,150 fish as documented in Appendix C6.

The estimated age and sex compositions of sockeye, harvested in the commercial fishery and at the Eshamy weir can be found in Appendices C7 and C8.

GENERAL PURSE SEINE DISTRICTS

For more detailed information on this district see Appendices D1–D12.

Preseason Outlook and Harvest Strategy

The general purse seine districts are managed to achieve wild pink and chum salmon SEG by district and allow for the orderly harvest of surplus wild and hatchery stocks. Escapement of pink and chum salmon is monitored through the season by weekly aerial surveys of 208 index streams. Management to achieve hatchery corporate escapement goals is accomplished by opening and closing hatchery Subdistricts and terminal harvest areas. Subdistrict and terminal harvest area openings are also utilized to target fishing effort on hatchery stocks when wild salmon escapement is weak. PWSAC had the largest cost recovery goal on record in 2007, with a combined total of $10.3. This year also saw changes as to how cost recovery was conducted with no hatchery designated fleet for pink salmon. PWSAC contracted 2 boats for the chum salmon cost recovery which may have contributed to the cost recovery short fall for Armin F. Koernig Hatchery (AFK) chum salmon.

Chum Salmon

The 2007 chum salmon forecast in Prince William Sound was 3.4 million fish. The majority of that forecast, 2.9 million fish (84%), was PWSAC hatchery production. A breakdown of PWSAC's forecasts included 1.9 million chum salmon to WNH, 625,000 fish to Port Chalmers, and 404,000 fish to AFK. Approximately 844,000 chum salmon (45%) were expected to be harvested out of the 1.9 million WNH return for cost recovery and broodstock. Approximately 246,000 chum salmon (61%) were expected to be harvested out of the 404,000 AFK return for cost recovery. All Port Chalmers and 158,000 of the AFK chum salmon were designated for harvest in the purse seine CPF. Based on ADF&G's wild chum salmon forecast of 454,000 fish, there was a potential common property harvest of 254,000 wild chum salmon.

Pink Salmon

The 2007 pink salmon harvest forecast for PWS was 40.6 million fish. This estimate included 10.9 million wild stock fish, 12.2 million VFDA hatchery fish, and 17.6 million PWSAC hatchery fish. Approximately 7.2 million pink salmon (41%) of the projected 17.6 million pink salmon returning to the PWSAC hatcheries were expected to be required for cost recovery and broodstock goals. The remaining 10.4 million PWSAC fish were anticipated to be available for commercial common property harvest. Approximately 5.0 million pink salmon (41%) of the projected 12.2 million pink salmon returning to the VFDA hatchery were anticipated to be required for cost recovery and broodstock. The remaining 7.2 million VFDA fish were anticipated to be available for commercial common property harvest. A total of 10.9 million wild stock pink salmon were projected to be available for harvest leaving 2.0 million fish for escapement.

At the SHTF meeting, ADF&G identified potentially large 2007 pink salmon returns, based on the strong even year return pattern. The SHTF discussed the pink salmon harvest strategy in

anticipation of a potential large pink salmon return. The department, processors and fishers discussed options to avoid roe stripping that occurred in 2003 and 2005 when large returns overwhelmed capacity and poor quality decreased the value of the fishery. This year's strategy would focus on an aggressive fishing schedule to keep pace with a potential large hatchery run entry. An aggressive fishing schedule would be based on monitoring early signs of a large return including pink salmon harvests in Port Chalmers, Copper, and Bering districts, early and large cost recovery harvests at Entrance Point, and aerial survey counts. As usual, ADF&G would open additional areas as wild stock aerial survey estimates indicated adequate numbers of returning fish to meet escapement goals.

Coho Salmon

Both VFDA and PWSAC produced moderate numbers of coho salmon in 2007. PWSAC's expected 2007 return of coho salmon to WNH was 67,700 fish. The Coghill District is managed for pink salmon until the number of coho salmon exceeds the number of pink salmon. The 2007 VFDA coho salmon return was anticipated to be 162,000 fish.

CHUM SALMON SEASON SUMMARY

PWSAC amended the WNH chum salmon cost recovery goal from 655,000 fish to 795,000 fish because the average fish weight was smaller than anticipated. PWSAC subsequently harvested 920,000 chum salmon for cost recovery, exceeding the amended goal by 125,000 fish. PWSAC's annual report lists 921,000 fish harvested for cost recovery along with 5,890 fish taken during brood collection for roe harvest. ADF&G repeatedly asked for an explanation for why the cost recovery goal was exceeded, but did not receive a response from PWSAC staff. PWSAC did not achieve the AFK chum salmon cost recovery goal with a harvest of 174,000 out of an amended 330,000 fish harvest goal. The PWS 2007 chum salmon purse seine CPF of 1.4 million fish was composed of approximately 101,000 wild fish and 1.3 million hatchery fish.

Aerial surveys to assess wild chum salmon escapements in the Eastern and Northern Districts began in mid-June. Surveys in all other purse seine districts started in early July. Wild chum salmon escapement estimates were above anticipated counts in most areas. Fishing effort was focused on large hatchery pink salmon returns, minimizing the boats targeting wild chum salmon.

The escapement estimate of 258,848 chum salmon was well above the SEG of 91,000 fish. The chum salmon escapement was at least double the escapement goal for all districts except the Coghill District (Appendix D).

PINK SALMON SEASON SUMMARY

The 2007 harvest of 63.5 million pink salmon is the largest PWS harvest on record. This harvest was composed of 51.3 million purse seine CPF fish, 14,000 set gillnet, 189,000 drift gillnet fish and 12.0 million (4.0 million VFDA and 8.0 million PWSAC) cost recovery fish (Table 1).

Aerial surveys to assess early chum and pink salmon escapements in the Eastern and Northern districts began in early June. Surveys began in all other PWS purse seine districts in July. Pink salmon escapement indices were within the SEG range for all districts except the Montague District.

EASTERN DISTRICT SUMMARY

VFDA's anticipated 2007 adult return of pink salmon to the Solomon Gulch Hatchery was 12.2 million fish, assuming a 5.6% marine survival from the 2006 release of 217.0 million fry. A total of 323,000 salmon were anticipated to be needed to meet egg take objectives at the hatchery. The 2007 VFDA pink salmon return was managed on a revenue goal of $2.9 million from the cost recovery sale of 4.7 million fish. Approximately 7.2 million pink salmon were forecast to be available for CPF after cost recovery.

The Eastern District CPF harvest of 22.1 million pink salmon was composed of 18.9 million VFDA fish, 43,700 CCH fish, 26,100 WNH fish, 13,600 AFK fish and 3.1 million wild pink salmon. The 2007 VFDA enhanced pink salmon return of 23.6 million pink salmon (including all districts) was almost double the forecast and was composed of 19.6 million CPF fish and 4.0 million cost recovery fish. The VFDA cost recovery harvest was composed of 4.0 million VFDA fish, 50,200 wild pink salmon and 27,300 WNH fish. Additionally, 662,200 VFDA pink salmon were harvested in the CPF outside of the Eastern District, including 301,900 fish harvested in the Southwestern District and 194,500 fish harvested in the Montague District. The 2007 Eastern District harvest by species was 22.1 million pink salmon, 81,100 chum salmon, 9,400 sockeye salmon, 58,300 coho salmon, and 38 Chinook salmon (Appendix D).

After record returns in 2003 and 2005 that resulted in roe stripping in Port Valdez ADF&G and the industry have adapted management strategies to anticipate a large return and prevent roe stripping. These adaptations allowed for the record harvest in 2007 with no roe stripping. ADF&G monitored indications of a large pink salmon return including a pink salmon harvest of >150,000 fish in Port Chalmers prior to July 1. Pink salmon harvests in the Copper and Bering districts were not large but the department received reports of abundant pink salmon presence in those districts (jumpers). Early season cost recovery harvests at Entrance Point also suggested the run would be large. Aerial survey counts were only slightly ahead of anticipated levels in many areas of the Eastern District and did not reflect the magnitude of the coming return. As indications of a large return became apparent the department coordinated with the industry (processors, seine fleet, and VFDA) to prosecute an aggressive fishing schedule with multiple consecutive days of CPF interspersed with cost recovery. The strategy was to keep-up with run entry to prevent a build-up of fish that could deteriorate in quality. The biggest difference between 2007 and the previous large returns that resulted in roe stripping was the expanded processor capacity. In PWS, during the 2003 season, only 4 days had a harvest of greater than 1.0 million fish per day. In 2005 the number of days with a harvest of greater than 1.0 million fish per day increased to 9 days and in 2007 that number was 26 days with 7 of those days having a harvest of over 2.0 million fish. The strategy also included ‘cleaning-up’ a small build-up of early arrival male fish that tend to hold in the closed area in front of the hatchery. In the past, these early arrival males have deteriorated in quality and then tidally washed in-and-out of the closed area contaminating the catch by mixing with high quality fish. The mass of early arrival males may act as an attractant to other fish, resulting in a rapid build-up of fish. An early ‘clean-up’ of these fish may have helped maintain quality and prevent a build-up.

While these early arrival fish may complicate management as discussed above, it is still important that these early timed fish are represented in the broodstock. Care should be taken in the future to insure an appropriate proportion (determined by the run timing curve) of these early arrivals are present in the brood stock. In 2007, late in the run VFDA felt that the number of fish

in front of the hatchery was appropriate to seed the hatchery. However, during one of the final periods in the SHA, large tides washed a portion of these fish into open water and they were quickly harvested. The department also received reports that some boats were fishing over the closure line set by EO to protect broodstock. This unintended harvest jeopardized the brood collection and VFDA was in danger of not attaining their brood goal. They had to wait as the last of the run came in to finish brood, potentially selecting for later run timing fish. This type of potential selective hatchery practice should be avoided if at all possible and, in recognition of this year's events, management steps should be taken to prevent its recurrence. A couple of likely steps will be the use of a bigger brood exclusion zone and having enforcement present during key periods to monitor the fleet for illegal brood targeting effort.

Wild stock interception in the VFDA cost recovery was identified as a management concern after 103,000 wild stock pink salmon were identified in the 2006 cost recovery. In 2007 ADF&G expanded the SHA to the mouth of Port Valdez at the beginning of cost recovery operations. ADF&G maintained that expanded cost recovery area throughout the season, but required stock composition sampling to insure that wild stock interception was kept to a minimum. This practice should be continued in the future. If in the future wild stock escapement estimates are lower than anticipated in the northern part of the Valdez Arm the area should be reduced. ADF&G worked closely with VFDA to monitor the wild stock proportion, even authorizing cost recovery effort into Valdez Arm, to better gage run entry strength as well as stock composition. In 2007 the interception was reduced to 50,000, higher than the department would like, but better than the 103,000 wild stock harvest in 2006.

Wild stock pink salmon escapement index was within the SEG range in the Eastern District. The 2007 adjusted aerial pink salmon survey index was 375,000 fish, above the odd-year SEG lower bound of 355,000 fish but below the 567,500 mid-point. The 2007 adjusted aerial chum salmon survey index of 124,000 fish was above the SEG of 50,000 chum salmon (Appendix D). Aerial surveys ended early this year because of budget, weather, and personnel issues. It is likely that the index was higher than calculated due to the early suspension of surveys.

The purse seine fleet harvested approximately 58,300 coho salmon, the majority of which are assumed to be VFDA enhanced coho salmon. Port Valdez was closed to the commercial CPF north of a line from Entrance Point to Potato Point beginning on August 25. The Valdez Narrows opened September 4 to target surplus VFDA produced coho salmon. (Appendix D). VFDA expressed concern that allowing the fleet into Port Valdez near the hatchery could jeopardize coho salmon broodstock collection. A total of 1,000 salmon were anticipated to be needed for VFDA broodstock. Per VFDA's request, ADF&G provided a closed area buffer around the hatchery to protect coho broodstock.

The majority of purse seine wild chum salmon harvest in PWS occurred in the Eastern District with a harvest of 79,900 (2,600 hatchery fish were also harvested).

SOUTHEASTERN DISTRICT SUMMARY

The Southeastern District had a total of 28 CPF periods, all occurring in conjunction with periods in the Eastern District. The first fishing period occurred on July 15. Peak effort occurred on July 25 with 27 permit holders fishing and peak harvest occurred on July 22 with a harvest of 225,700 pink salmon. Effort declined in August and the 9 periods after August 18 had no effort. The 2007 Southeastern District harvest was composed of 1.9 million pink, 14,000 chum, 1,400 sockeye, 700 coho, and 2 Chinook salmon (Appendix D). Much of the effort in PWS was focused at the

terminal areas and adjacent wild stock because of the large hatchery returns. This resulted in a somewhat limited effort in the Southeastern District for much of the season. Most of the effort occurred during the time between early run timed VFDA pink salmon and later PWSAC returns and was focused on the north-shore of Hawkins Island.

Southeastern District wild stock pink salmon escapements remained above the anticipated escapement counts for most of season. The 2007 adjusted aerial pink salmon survey index was 443,914 fish, which was above the minimum odd-year SEG range of 155,000–345,000 fish, but below the SEG mid-point of 535,000 fish. The 2007 adjusted aerial chum salmon survey index was 60,464 fish above the SEG 8,000 chum salmon (Appendix D).

SOUTHWESTERN DISTRICT SUMMARY

Fishing to target remote release chum salmon at the AFK SHA, in the Southwestern District, started with a 156-hour period on May 28. PWSAC intended to take 246,000 (61%) of the forecast 404,000 chum salmon return for cost recovery. ADF&G opened the area to commercial fishing with the intent of gauging run entry and keeping the area cleaned-up at the beginning of the return. During the first 156-hour period 18,000 chum salmon were harvested and the area was closed to allow for cost recovery.

The remote release chum salmon program at AFK proved to be problematic. Run entry remained slow with cost recovery harvests below 10,000 fish until mid-June. The chum salmon average weight of 6.25 lbs was smaller than the 8.0 lbs used in the forecast. Consequently, PWSAC amended their cost recovery goal inseason from 250,000 to 332,000 fish to make up for the difference. It became difficult for PWSAC to get tenders to travel the longer distance to the Southwestern District as the pink and chum salmon returns increased in other areas of PWS. There was also little incentive to send tenders due to the slow run entry. No harvest occurred from July 1 until July 12 resulting in a build-up of fish in the SHA. ADF&G became concerned about quality and straying of those fish given the lack of harvest effort. Because of those concerns, ADF&G opened the area to the CPF, counter to PWSAC's recommendation to keep the area closed for cost recovery. The CPF harvest was of poor quality and straying of AFK chum salmon into area streams was documented. Ultimately, PWSAC fell short of their chum salmon cost recovery goal at AFK with a harvest of 174,263 fish, 52% of the amended cost recovery goal.

Clearly, the AFK chum salmon program at AFK did not perform well: the run came in under forecast for the third year in a row, the resource was wasted by not harvesting it in a timely manner, the prosecution of the fishery was complicated by the inability of PWSAC to sustain cost recovery harvest effort and tender support, and ADF&G's straying concerns were confirmed with large numbers of hatchery salmon documented in area streams. The AFK chum salmon FTP will be renewed in 2008 with several stipulations to prevent these problems from occurring in the future. Those stipulations include a mandatory CPF opening if no cost recovery harvest occurs for a period longer than 5 days and $10,000 of funding for monitoring of straying in those streams where AFK hatchery chums salmon were observed in 2007.

The Southwestern District had an extremely productive pink salmon season. The AFK pink salmon return performed above the 7.2 million forecast with a Sound wide return of 15.5 million fish. Approximately 17.9 million mixed stock pink salmon were harvested in the Southwestern District, with stock contribution estimates of 12.2 million AFK, 1.2 million CCH, 1.6 million WNH, 302,000 VFDA, and 2.6 million wild pink salmon. PWSAC amended the pink salmon

cost recovery goal, increasing it from 2.6 million to 3.1 million fish to compensate for the AFK chum salmon cost recovery shortfall. Single day effort peaked with 62 permit holders harvesting 1.6 million pink salmon on August 5.

In mid-August, a large concentration of pink salmon (>250,000) was reported to be holding in Prince of Wales passage. In multiple past years enhanced pink salmon were known to hold in this area and it was assumed that most of those fish were composed of hatchery origin. ADF&G opened the CPF in the Prince of Wales Passage despite lower than anticipated Southwestern District escapement counts. ADF&G considered that the risk of harvesting an unknown number of wild pink salmon was outweighed by the opportunity to clean-up more than 250,000 hatchery pink salmon. Otolith samples were collected from that area but were disposed of prior to analysis.

In 2007 the Southwestern District pink salmon escapement index of 116,100 fish was within the pink salmon SEG range of 100,000–225,000 fish, but below the odd-year SEG midpoint of 162,500 fish. The Southwestern District has minimal chum salmon and has no SEG or population estimates for that species. ADF&G managed for PWS wild salmon stocks (Eshamy Lake sockeye and northern/western PWS chum and pink salmon) by limiting fishing area to waters south and east of Point Helen. The intent of this demarcation was to allow Knight Island Passage to serve as a closed migration corridor for those stocks. At the same time, leaving the southern portions of the Southwestern District and the east side of Knight Island open allowed for an active fishery that targeted AFK pink salmon and other migrating hatchery stocks, while maintaining an acceptable level of wild stock harvest.

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 in the Southwestern District, conducted by the R/V Solstice, provided pink salmon harvest rate, stock composition, and sex ratio data. Test fishing at Point Elrington found high abundance, capturing 600–4,000 pink salmon per 15-minute set, with an high proportion (>75%) of hatchery fish. In 2007, the test fishery provided early corroboration of large returns. Because of the relatively low proportion of wild stocks in the test fishery and adequate wild stock escapements, the department had limited wild stock conservation concerns and prosecuted a liberal commercial CPF throughout much of the season. In summary, the 2007 Southwestern District harvest was composed of 17.9 million pink, 42,400 chum, 23,700 sockeye, 21,500 coho, and 2 Chinook salmon (Appendix D).

NORTHERN DISTRICT SUMMARY

The 2007 Northern District CPF harvest was composed of 6.2 million pink, 9,901 chum, 12,568 sockeye, 2,940 coho, and 2 Chinook salmon (Appendix D). Additionally, PWSAC harvested 1.4 million pink salmon out of a 2.2 million fish cost recovery goal in the Northern District. The CCH total return (harvested in all districts) was 7.1 million fish compared to a preseason forecast of 6.1 million fish. Wild stock pink escapement index of 156,063 fish was within the odd-year SEG range of 110,000–235,000 fish but below the mid-point of 172,500 fish. Wild stock chum escapement index of 48,299 was above the 20,000 fish SEG (Appendix D).

The Northern District was open for eleven 14-hour CPF periods between July 30 and August 18 during which time 81% of the 6.2 million pink salmon harvest occurred. The fishery had large harvests (>375,000 fish per period) throughout that time. The 6.2 million pink salmon CPF harvest was composed of 1.2 million wild stock pink salmon and 4.2 million CCH, 658,326

WNH, 49,415 AFK, and 72,244 VFDA fish (Appendix D and E). The 2007 management strategy in the Northern District consisted of keeping Unakwik Inlet closed north of Pay Day Point to allow for cost recovery and to protect wild chum salmon in Siwash and Jonah bays. Similarly, the SHTF markers were used to close Eaglek Bay and other areas as needed to protect wild stocks in that area.

MONTAGUE DISTRICT SUMMARY

The 2007 Montague District harvest was composed of 741,020 chum, 878,371 pink, 5,921 sockeye, 573 coho, and 677 Chinook salmon (Appendix D). The Montague District wild pink salmon escapement index of 142,769 fish was below the odd-year SEG range of 155,000–345,000 fish. By the end of season, the aerial survey counts at the stream mouths were 120% higher than anticipated. This indicated that an adequate number of fish were present in the district but had not yet entered the steams to be counted towards the SEG. Aerial surveys ended early this year because of budget, weather, and personnel issues. It is likely that the index was higher than calculated due to the early suspension of surveys. The Montague District had an estimated 16,648 chum salmon escapement but has no chum salmon escapement goals for the Montague District (Appendix D). It is likely that these are stray hatchery salmon from the Port Chalmers remote chum salmon release.

The Port Chalmers remote chum salmon release performed well in 2007 exceeding the 625,000 fish forecast with a harvest of 741,020 fish. A fishing schedule of 8 consecutive 156-hour periods was initiated in the Montague District on May 28 through July 22 to harvest those fish. The peak Port Chalmers harvest occurred during the week of June 18 with a harvest of 242,000 fish. Based on otolith sampling, the harvest was composed of 1,847 wild chum salmon and 739,173 enhanced fish. However, the chronic problems with the PWSAC chum salmon marking program makes it impossible to determine the true origin of those fish.

COGHILL DISTRICT SUMMARY

PWSAC's 2007 forecast for pink salmon returning to WNH was 4.2 million fish. With goals of 264,000 pink salmon for broodstock, and approximately 1.5 million pink salmon for cost recovery, PWSAC would require 42.3% of the anticipated return of pink salmon to WNH. By regulation, management for pink salmon returning to WNH in the Coghill District begins after July 21.

The 2007 Coghill District purse seine harvest was composed of 465,448 chum, 2.3 million pink, 12,472 sockeye, 24,602 coho, and 9 Chinook salmon (Appendix D). In 2007 PWSAC exceeded their 1.5 million pink salmon WNH cost recovery goal with a harvest of 3.5 million fish. PWSAC also harvested 12,000 coho salmon for cost recovery although there was no coho salmon cost recovery planned for in the AMP. An unknown amount of roe sales occurred but ADF&G has been unable to quantify it because PWSAC has not provided that information.

ADF&G has concerns that PWSAC is using selective hatchery practices. In recent years it appears that broodstock was not collected proportionally throughout the run and disproportionally represent later timed fish. For example this year PWSAC had not collected any broodstock by late June while the run timing curve indicates the run is over 30% complete. A similar pattern of broodstock collection appears to have occurred in past years but the department has been unable to further evaluate this issue because PWSAC has refused to provide related

information. This issue is being addressed with specific language added to the WNH Annual Management Plan so that broodstock is collected proportionally to run timing throughout the run.

Commercial fisheries management was complicated in 2007 because PWSAC did not provide ADF&G with specific management recommendations. At times it was unclear what their intentions were or what areas under their purview should be left closed or opened. Additionally, PWSAC made management decisions that did not support the common goal of an organized fishery and completion of cost recovery goals. For example, there was a build up of chum salmon at the WNH terminal area that exceeded the gillnet fleet's harvest capacity. At that time the department recommended that PWSAC harvest those fish to complete the cost recovery shortfall at AFK and the incomplete cost recovery goal at MBH. This strategy would have cleaned-up the excess run entry and completed cost recovery at all 3 hatcheries, and allowed for more liberal CPF gillnet and purse seine openings. However, PWSAC declined to harvest those fish and the department was forced to open the area to purse seine fishing earlier than the regulatory opening of July 21 to address the problem. AFK fell short of the cost recovery goal and the Eshamy District had restricted area openings for an extended time as the cost recovery goal there was slowly completed.

The Coghill District wild stock pink salmon escapement index of 197,405 fish was within the odd-year SEG range of 125,000–275,000 fish. Wild stock chum escapement index of 14,052 was above the 8,000 SEG (Appendix D). Management strategy in the Coghill District was to focus effort on hatchery fish due to marginal Port Wells escapement indices. This was accomplished by closing waters south and west of a point southwest of Esther Rocks. This allowed for effective fishing around Esther Island but migration corridors along Culross Island and the west side of Port Wells remained closed. The intent of this strategy was to allow wild stocks to pass into the Northwestern District and the Port Wells area of the Coghill District. ADF&G closely monitored wild stocks in these areas because they have been lower than ideal in recent years.

PRINCE WILLIAM SOUND AND COPPER RIVER SUBSISTENCE FISHERIES

For more detailed information on this district see Appendices F1–F7.

The Prince William Sound Subsistence Management Area includes all waters of Alaska between the longitude of Cape Fairfield and the longitude of Cape Suckling. 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). Herring spawn on kelp may be taken above water from March 15 through June 15. Herring spawn on kelp may be harvested using dive gear only during periods open for the wild herring spawn-on-kelp commercial fishery. Lingcod may be taken for subsistence purposes only from July 1 through December 31. Additionally, herring, smelt, rockfish, and other groundfish may also be harvested for subsistence purposes in the Prince William Sound Area.

Subsistence and personal use harvests have increased in recent years, both in the Prince William Sound and Upper Copper River District management areas. The largest subsistence fisheries occur on the upper Copper River, from upstream of regulatory markers 200 yards above Haley Creek to the Copper River's confluence with the Slana River.

A major change occurred in the Upper Copper River District fishery for the 2003 season. At the 2003 BOF meeting, the board 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 only 2 subsistence fisheries north of Miles Lake: the Glennallen Subdistrict fishery, where the gear is primarily fishwheels and dipnets, and the Batzulnetas subsistence fishery, which is also primarily a dipnet and fishwheel fishery. 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.

Prince William Sound and Lower Copper River

Subsistence fishing is allowed from May 15 until 2 days before the commercial opening of Copper River District, 7 days per week. Boundary lines for Copper River District subsistence fishing are the same as for the commercial drift gillnet fishery. Once the commercial season has commenced, subsistence fishing is allowed only during commercial fishing periods or by emergency order. Two days following the closure of the Copper River District to commercial salmon fishing, subsistence fishing is allowed, 7 days a week, until September 30. Within the Copper River District, drift gillnets are the only legal subsistence fishing gear and nets may have a maximum length of 50 fathoms. In 2007, 469 permits were issued for the Copper River District subsistence fishery, of which 29 were not returned. Of the 440 permits that were returned, 145 permit holders reported not fishing. A harvest of 1,145 Chinook, 6,148 sockeye, and 15 coho salmon were reported from the 295 permits that reported fishing (Appendix F1).

In 2007, 3 subsistence permits were issued for general waters (waters outside those described in 5 AAC 01.647 and 5 AAC 01.648) in the Prince William Sound Area. All 3 permits were returned at the end of the season. Two permit holders reported that they did not fish. The one permit holder that fished reported a harvest total of 30 sockeye salmon (Appendix F2).

In addition to traditional subsistence harvest, both residents and non-residents engaged in commercial fishing are permitted to retain any portion of their commercial finfish catch for said person's own use ("home pack"); these fish cannot be bartered or sold, but may be used as bait in another commercial fishery (5 AAC 39.010). Any commercially caught Chinook salmon not sold must be reported on a fish ticket. During the 2007 season in Area E, 2,087 sockeye, 1,029 Chinook, 363 coho, 102 chum and 43 pink salmon in total were reported as retained from 712 landings made by 300 commercial permit holders (Appendix A1, A3, A18 and F3).

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, or spear. In 2007 a total of 33 federal permits were issued. All permits returned, with 36 sockeye and 68 coho salmon reported as harvested. Current and historical federal harvest numbers are listed in Appendix F4.

Tatitlek and Chenega Area Subsistence Fisheries

Two subsistence areas were established in 1988 primarily 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 Valdez narrows in portions of the Northern and Eastern districts (5 AAC 01.648(b)). Residents of both Chenega and Tatitlek are 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, however permits may only be issued in these villages. Permit holders are allowed to fish in these areas from May 15, seven days per week, until 2 days before the initial commercial fishing period in the associated commercial fishing districts: Southwestern District (Chenega) and Montague District or Eastern District (Tatitlek). Once the commercial fishing season is established, the 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, the subsistence fisheries are open, 7 days per week, until September 30 in the Chenega subsistence area and until October 31 in the Tatitlek subsistence area.

In 2007, 4 permits were issued for the Chenega subsistence area, of which 3 permits were returned. Of those returned permits, 2 permit holders reported fishing, with a total harvest of 2 Chinook, 293 sockeye, 27 coho, 4 pink, and 55 chum salmon. In the Tatitlek area 14 permits were issued, no permits were returned. (Appendix F5).

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. During the 1996 BOF meeting, 5 AAC 01.616 was modified, and a harvest range of 60,000–75,000 subsistence salmon was established to accommodate for variability in harvest levels and allow for increased harvests between board cycles; this harvest range was increased by the board to 61,000–82,500 in 2005. Participants 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, can not exceed 200 salmon for a household of one 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 2007, a total of 467 dipnet permits and 707 fishwheel permits were issued to subsistence users in the Glennallen Subdistrict. A combined total of 3,106 Chinook and 61,477 sockeye salmon were reported harvested in the Glennallen Subdistrict. This compares to the previous 10-year average of 60,779 sockeye and 2,874 Chinook salmon for this subdistrict. Total effort has remained somewhat constant over the last 10-years, with an average number of 710 fishwheel permits and 366 dipnet permits issued per season. Historically, sockeye salmon dominate the harvest, representing approximately 95% of the reported harvest, followed by Chinook and coho salmon (Appendices A1, A3, and F6). Additionally, approximately 25% of the Chinook salmon harvested were landed by 2% of the permit holders, indicating that some individuals effectively target Chinook salmon for subsistence uses.

In 2002, the federal government began issuing permits allowing subsistence harvests on federal lands in the Glennallen Subdistrict. Legal types of fishing gear are dipnet, fish wheel, or spear. In 2007, a total of 292 federal permits for the Glennallen Subdistricts were issued and 235 permits were returned. A total 15,225 sockeye, 569 Chinook and 34 coho salmon were reported harvested. Current and historical federal harvest numbers are listed in Appendix F4.

Batzulnetas Subsistence Fishery

The Batzulnetas fishery, as described in 5 AAC 01.647(i), encompasses all waters from the regulatory markers near the mouth of Tanada Creek and approximately one-half mile downstream from that mouth and in Tanada Creek between ADF&G regulatory markers identifying the open waters of the creek; salmon may be taken, as established by emergency order, starting June 1; fishing periods during the month of June 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. Permits can be issued throughout the season and must be completed and returned to the department by October 31.

In 1987, an interim subsistence fishery was provided by emergency regulation at Batzulnetas to settle the United States District Court case of John vs. Alaska. The fishery, during this first year, was conducted near the mouth of Tanada Creek during July and August near the historical village site of Batzulnetas. Eight permits were issued in that year to individuals, or family groups, from the communities of Mentasta and Dot Lake. 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. No permits were issued for this fishery between 1988 and 1992 and 1996. Between 1993 and 2002 the average harvest was 211 sockeye salmon. From 1999 to 2002 only one permit was issued each year with a harvest of 55 sockeye salmon in 1999, 55 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. There were no reported harvests in the Batzulnetas subsistence fishery in 2005, 2006, or 2007 (Appendix A1 and F7).

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. The BOF changed this fishery from a personal use fishery to a subsistence fishery starting in 2000; the fishery was again designated a personal use fishery 2003. Permit allowances for the Chitina Subdistrict personal use fishery remained similar to the Copper River District subsistence fishery regulations, with 3 major 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 historic levels. Annual bag limits 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 board 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 range 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 open on June 1; an emergency order may be issued to close the fishery, effective June 1, and an EO to reopen the season shall be issued on or before June 11 depending on the strength and timing of the sockeye run. Additionally, inseason adjustments to the fishery, as necessitated by fluctuations in salmon escapement, shall be made by EO. In 2007, there were 11 EOs issued to make adjustments to the dip net fishery. The first

period opened through EO authority started on June 9 and the last period closed on August 31. The fishery is open by regulation from Sept 1–30.

Reported harvest for the Chitina Subdistrict personal use fishery in 2007 was 2,388 Chinook, 112,753 sockeye, and 1,492 coho salmon. Ten-year average harvests for these species were 3,268, 108,786, and 1,932, respectively. There were 8,490 permits issued for the Chitina Personal Use fishery in 2007. This is slightly below the 10-year average of 8,521 permits issued (Appendices A1, A3, F6, and F7).

In 2002, the federal government began issuing permits allowing subsistence harvests on federal lands in the Chitina Subdistrict. The only legal gear type is a dipnet. In 2007, a total of 97 federal permits were issued. The 2007 reported harvest from 86 returned permits was 929 sockeye, 26 Chinook and 40 coho salmon. Current and historical federal harvest numbers are listed in Appendix F4.

PRINCE WILLIAM SOUND AND COPPER RIVER SALMON ENHANCEMENT

For more detailed information on this district see Appendix E.

Fisheries enhancement has played a significant role in Prince William Sound and Copper River salmon production for over 3 decades. Natural salmon production in PWS and the Copper River systems continue to demonstrate wide fluctuations as the result of environmental factors. These include stream bed scouring, de-watering, and redd freeze-out on the spawning grounds, all of which can contribute to lowered in-river survival rates. Hatchery facilities in PWS and the upper Copper River were initiated by the Fisheries Research and Enhancement Division (FRED) of ADF&G in the mid-1970s, and are currently operated by 2 non-profit corporations: the Prince William Sound Aquaculture Corporation (PWSAC) and the Valdez Fisheries Development Association (VFDA). 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 hatchery salmon in Alaska, with a permitted capacity of 665.8 million eggs. PWSAC is the largest producer of enhanced pink salmon in Alaska, with a permitted capacity of 462.0 million eggs. This 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 also the largest producer of enhanced chum salmon in Alaska, with a permitted capacity of 148.0 million eggs. PWSAC is the second largest producer of sockeye salmon in the state, with a permitted capacity of 47.75 million eggs. In addition to the aforementioned species, PWSAC and VFDA have a permitted coho capacity of 4.0 million and 2.0 million eggs, respectively. Furthermore, 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 the AFK Hatchery. 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	0.00	6.16	235.00	50.01	295.17
Douglas Island Pink and Chum (DIPAC)	0.95	121.00	1.65	50.00	33.50	207.10
Kodiak Island Aquaculture Assn. (KIAA)	0.30	25.00	2.80	215.00	20.60	263.70
Northern Southeast Regional Aquaculture Assn. (NSRAA)	9.00	155.80	10.84	0.30	2.00	177.94
Prince William Sound Aquaculture Assn. (PWSAC)	4.00	148.00	4.00	462.00	47.75	665.75
Southern Southeast Regional Aquaculture Assn. (SSRAA)	3.50	128.30	10.90	0.00	2.70	145.40
Valdez Fisheries Development Assn. (VFDA)	0.30	0.00	2.00	230.00	0.00	232.30
all others	3.00	40.00	10.78	86.00	5.00	144.78
Statewide egg capacity totals (millions)	25.05	618.10	49.13	1,278.30	161.56	2,132.14

In 2007, PWSAC and VFDA together contributed 59.7 million salmon to Area E commercial and upriver subsistence, personal use and sport harvests (Appendices E1 and E2).

PWSAC and VFDA combined produced 54.6 million (85.9%) of the 63.5 million pink salmon and 238,000 coho salmon (72.3%) of the 329,000 harvested in common property fisheries in Area E (appendices E4 and E5). In addition PWSAC produced 3.4 million (96.1%) of the 3.6 million chum salmon harvested as well as 1.2 million sockeye salmon (39.1%) of the 3.2 million harvested overall in Area E.

Gulkana Hatchery

The 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 which 1,100–1,600 l/s are required for hatchery operations. Gulkana II was constructed in 1987. Chinook salmon were reared at this facility and released in limited quantities at Monsoon Lake and in the Gulkana River from 1987–1991. The combined facilities have released between 80,000 and 32.3 million fry annually since 1974 (Appendix E8). Gulkana Hatchery sockeye salmon returns have ranged from 93,922 to over 1.1 million fish since 1997 (Appendix E7).

In 2007, the run of sockeye salmon produced by the Gulkana hatcheries totaled 132,143 fish (Appendix E1). This was lower than PWSAC's forecast run of 298,400 sockeye salmon. A total of 19,776 sockeye salmon were used for broodstock. The commercial gillnet fleet harvested 94,232 sockeye salmon (71.3%) of the total hatchery return.

The 2007 GH sockeye salmon harvest contributions by period and the historical GH contributions, fry release, total hatchery return and estimated marine survival may be found in Appendices E6–E8.

Wally Noerenberg Hatchery

The WNH is owned by PWSAC and was built in 1985 using monies borrowed from the State of Alaska's Fisheries Enhancement Revolving Loan Fund. WNH is located at the terminus of Lake Bay on the southern end of Esther Island in PWS, in the Coghill District. Water for hatchery operations is supplied by Esther Lake, a 200 hectare lake with a volume of 2.5 million cubic meters. A pipeline from the lake produces approximately 22,000 l/s, of which 5,500–11,000 l/s are required for hatchery operations. WNH currently produces pink, chum and coho salmon. Sockeye and Chinook salmon were also cultured at WNH, however the sockeye salmon program was transferred to the Main Bay Hatchery in 1990 and the Chinook salmon program was discontinued in 1997 to increase coho salmon production.

Historically, the thermal otolith marking of chum salmon and release of appropriately marked fish to intended sites has been problematic. These problems continued in 2007. On March 5, 2007, at a meeting of the PWSAC Executive Committee, the general manager announced that PWSAC was unable to release marked fish at the intended locations due to adverse weather. Without consulting ADF&G PWSAC planed to release a portion of the emerging 35.0 million Pt. Chalmers otolith marked chum salmon in Lake Bay at the WNH, and the remainder at AFK hatchery. Port Chalmers would then be stocked using a mix of Lake Bay marked fish and AFK hatchery marked fish. The remainder of the Lake Bay marked fish would be released in Lake Bay. Ultimately, mixed mark fish were released at multiple locations because of logistical problems. Combined with previous years of mark mixing the program will be unable to identify the release origin of fish until 2012.

This continues the problems of the PWSAC chum salmon marking program identified in the 2006 PWSAC Performance Review. The release of chum salmon with the same marks at multiple sites has compromised evaluation of the different release sites. The performance review documented inconsistencies for many years. An internal PWSAC report details how fish were accidentally released in the wrong locations, accidentally held in salt water, and many other transfer problems. The report summarizes that there was not a single year without missing data used to track where marked fish were released. The report concludes that marks intended for one location were released at another location multiple times. Further, there was incomplete documentation to track the program and problems were never documented.

Discussions about marking and release sites between ADF&G and PWSAC have not been informative. PWSAC apparently knew about some of these problems but did not provide any relevant information to the department. The department only became aware of this year’s problems when it was referred to at PWSAC board meetings.

In 2007, the overall return of chum salmon released at the WNH (excluding remote releases) is unclear given that release locations are not certain or there were multiple release locations for an individual thermal mark. In addition to releases at the WNH facility, there are 2 remote release sites, Port Chalmers and the AFK hatchery. The estimated total return of chum salmon at WNH as well as both remote release sites was 3.6 million fish (Appendix E1). Chum salmon returning to these locations originated from brood years 2001–2004 releases. PWSAC reports cumulative survival rates at WNH for these brood years of 3.6%, 1.1%, 3.9% and 0.1%, respectively (Prince William Sound Aquaculture Corporation. 2007 Annual Report, Schedule C–1, Item 12). The overall WNH return was significantly higher than the projected return of 1.9 million chum salmon. A total of 920,198 chum salmon were harvested for hatchery cost recovery at WNH and

according to PWSAC were worth approximately $2.2 million dollars. Additionally, PWSAC reported that 10,955 pounds of roe was sold from 5,890 chum salmon harvested during egg-take. It is not clear how that much roe could be recovered from that few fish. A total of 176,452 chum salmon were harvested for broodstock and roe sales purposes. The commercial fleet harvested 65.2% of the total WNH chum salmon return including remote releases at AFK and Pt. Chalmers (Appendices E22 and E23).

In 2007, the WNH pink salmon return totaled 7.5 million fish (Appendix E1). These fish originated entirely from the BY2004 release and had a survival rate of 8.9% (Appendix E3). The return was higher than the preseason projection of 4.2 million pink salmon. No roe was reported to have been sold from broodstock harvested pink salmon. The commercial fleet harvested 3.8 million WNH pink salmon, 50.9% of the total pink salmon return to this facility. A total of 231,438 pink salmon were harvested by PWSAC for broodstock (Appendix E13). PWSAC reported zero green and over-ripe fish from pink salmon broodstock in 2007. A total of 3.5 million pink salmon, worth approximately $1.9 million, were harvested for hatchery cost recovery. The total pink salmon cost recovery goal was $4.5 million.

In 2007, the WNH coho salmon return totaled 94,907 fish (Appendix E1). These fish originated entirely from the BY2004 release and had a survival rate of 9.0% (PWSAC 2007). The run was higher than the preseason projection of 67,700 coho salmon. The commercial fleet harvested 80,803 WNH coho salmon, 85.1% of the total coho salmon run to this facility. PWSAC had an incidental harvest of 11,975 coho salmon during pink salmon cost recovery operations. Given that the fish returning to WNH were of mixed origin 129 coho salmon were taken for broodstock from Fleming Spit where only Mile 18 stock had been released in 2006. The coho salmon egg-take goal for 2007 was 1.18 million eggs but PWSAC failed to achieve that goal with a collection of only 255,000 eggs because of lack of fish at Fleming Spit.

Historical pink, chum and coho salmon harvest contributions, fry release, total hatchery return and estimated marine survival for the WNH are located in Appendices E1, E2, E3, E5, E12 and E13.

Main Bay Hatchery

The MBH was constructed in 1981, is owned by ADF&G, and has been operated under contract by PWSAC since 1991. The MBH is situated in the Eshamy District, approximately 20 miles west of the northern end of Knight Island. 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 5,500 l/s, of which 4,100–5,500 l/s are required for hatchery operations. Originally built to raise chum salmon, Main Bay currently produces only sockeye salmon, although pink salmon were produced until 1990. The MBH has annually released between 330,000 and 10.8 million sockeye salmon since 1986 (Appendix E19).

In 2007, the total return of sockeye salmon produced by the Main Bay hatchery totaled 1.2 million fish (Appendix E1). The anticipated return was 1.1 million sockeye salmon. A total of 321,330 sockeye salmon, worth $2.7 million were harvested for hatchery cost recovery. The commercial fleet harvested 70.6% of the total return, or 819,244 sockeye salmon. A total of 8,285 fish were harvested for broodstock purposes with an estimated 12,000 unharvested fish remaining. PWSAC exceeded the 11.0 million eggs limit permitted for broodstock with 13.0 million eggs collected from those fish because of higher than average fecundity. According to their annual report PWSAC subsequently destroyed 2.0 million eggs. ADF&G was not notified of this incident.

Detailed MBH contributions to the CPF, cost recovery and total contribution summaries as well as historical fry release information are located in Appendices E14–E19.

Solomon Gulch Hatchery

The SGH is owned by the state of Alaska and is managed by VFDA. This facility is located near Valdez, 2 miles from the southern terminus of the Alaska pipeline. 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. SGH produces coho and pink salmon.

In 2007, the overall return of pink salmon produced by the SGH totaled 23.8 million fish (Appendix E1). These fish originated entirely from the BY2005 release and had a survival rate of approximately 11% (VFDA 2007). Similar to the PWSAC forecast return, the return of pink salmon was nearly double than the preseason projection of 12.2 million. A total of 4.0 million pink salmon, worth approximately $2.2 million dollars, were harvested for hatchery cost recovery. Additional revenue was generated by selling 13,816 pounds of roe from fish harvested for broodstock purposes. Also revenue was generated from the sale of 145,000 broodstock carcasses. The commercial fleet harvested 19.6 million SGH pink salmon, 82.1% of the total pink salmon return to this facility.

In 2007, the return of coho salmon produced by the SGH totaled 150,528 fish (Appendix E5). These fish originated entirely from the BY2004 release and had a survival rate of 11.0% (SGH Annual Report, 2007). The run was lower than the preseason projection of 162,000 coho salmon. The commercial fleet harvested 58,299 SGH coho salmon, 35.5% of the total coho salmon return to this facility. VFDA reported harvesting 17,748 coho salmon for cost recovery and 3,364 for broodstock. The remaining 70,917 (49.6%) were harvested by sport fishers.

Historical pink and coho salmon harvest contributions, fry release, total hatchery return and estimated marine survival for the SGH are located in Appendix E3. SGH's contribution to pink and coho salmon harvests in the Eastern district is located in Appendix E20. The 2007 cost recovery summary is located in Appendix E21. A summary of coho and pink salmon runs to PWS hatcheries are located in Appendix E1.

Cannery Creek Hatchery

The CCH was constructed in 1978 and is owned by ADF&G and has been operated by PWSAC under contract since 1988. CCH is located in Unakwik Inlet, approximately halfway between Valdez and Whittier. The facility was originally constructed as a combined pink and chum salmon hatchery. Water for hatchery operations is supplied by Cannery Lake which has a surface area of 53 hectares. The chum program was not as successful as the pink salmon program due to the extremely cold lake water from January through March and was discontinued in 1990.

In 2007, the overall return of pink salmon produced by the CCH totaled 7.4 million fish (Appendix E1). These fish originated entirely from the BY2005 release and had a survival rate of approximately 5.4% (Appendix E3). The return was greater than the preseason projection of 6.1 million pink salmon. A total of 1.4 million pink salmon, worth approximately $802,000, were harvested for hatchery cost recovery. No roe was reported sold from fish harvested for broodstock purposes. PWSAC reported zero green and over-ripe fish from pink salmon broodstock in 2007. The commercial fleet harvested 5.6 million CCH pink salmon, 75.9% of the total pink salmon return to this facility. A total of 278,619 pink salmon were harvested for

broodstock. Historical pink salmon harvest contributions, fry release, total hatchery return and estimated marine survival for the CC hatchery are located in Appendices E2, E3, E24 and E25.

Armin F. Koernig Hatchery

The AFK was converted from an existing cannery in 1974 and is owned outright by PWSAC. The AFK is located on Evans Island in southern PWS, 2 miles from the village of Chenega. 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 currently produces only pink salmon, although chum salmon were produced in 1996 and 1997. However, chum salmon from WNH are remotely released from this facility. See WNH section for details regarding the 2007 release.

In 2007, the overall return of pink salmon produced at AFK totaled 15.8 million fish (Appendix E1). These fish originated from the BY2005 release and had a survival rate of 9.9% (Appendix E3). This was nearly double the anticipated return of 8.0 million pink salmon. A total of 3.0 million pink salmon, worth approximately $1.7 million, were harvested for hatchery cost recovery. A total of 200,716 pink salmon were harvested for broodstock. No roe was reported sold from fish harvested for broodstock purposes. PWSAC reported zero green and over-ripe fish from pink salmon broodstock in 2007. The commercial fleet harvested 79.0% of the total return, 12.4 million pink salmon.

Historical AFK pink salmon harvest contributions to the Southwest District, fry release, total hatchery return and estimated marine survival for AFK are located in Appendices E3, E28 and E29.

2007 PRINCE WILLIAM SOUND HERRING FISHERIES

PRESEASON OUTLOOK AND HARVEST STRATEGY

The Prince William Sound (PWS) herring management area encompasses all coastal waters of the Gulf of Alaska between Cape Suckling and Cape Fairfield, extending offshore to 59° N. latitude. A total of 5 herring fisheries may occur annually. During the spring season, 2 fisheries target herring for sac roe using either 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 possible fisheries is managed depending on observed population size and age structure.

For management purposes, all herring fisheries target what is treated as a single major stock of herring that spawns from mid-April to early May. At the 1994 BOF meeting in Cordova, 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 set at 25% of the average unfished PWS biomass calculated using methods similar to those in Funk and Rowell (1995). The higher threshold will establish manageable harvest levels while reducing the risk of driving the population to low abundance through overfishing. 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 catches with a peak in the early 1990's followed by a precipitous decline and a fishery closure that began in 1999 and continued through 2007 (Appendix G1 and G2).

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 fishers' 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 put into regulation the requirement that a CFEC permit holder who intends to operate a pound must register with ADF&G's Cordova office by March 15 of that year. A further regulation change included restriction of the number of kelp blades annually based on the number of permit holders registered.

The Prince William Sound herring purse seine fishery is comprised 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 Prince William Sound. 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 harvest is presented in Appendices G2–3. There are 128 herring pound permits in Prince William Sound. 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 historic pound spawn-on-kelp harvest peaked in the early 1990's and has declined since that time with multiple season closures (Appendix G4). The wild spawn-on-kelp fishery, utilizing native Prince William Sound 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 historic wild spawn-on-kelp fishery harvest is given in Appendix G5. Once instituted, pound fisheries dominated harvests compared to wild spawn on kelp (Appendix G6). 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 harvest is given in Appendices G7–9. Historical fishery harvest values for all Prince William Sound fisheries are presented in Appendix G9.

SEASON SUMMARY

Based on current herring stock assessment information, all 2007 herring fisheries including the purse seine and gillnet sac roe harvests, the spawn-on-kelp in pound fishery, the wild spawn-on-kelp harvest, and the food and bait fishery were closed. The Prince William Sound herring biomass estimate was below the minimum spawning biomass threshold of 22,000 tons.

According to 5 AAC 27.365(b) Prince William Sound herring management plan, no fishery may be opened if the estimated spawning biomass is below this threshold level.

Age structured assessment modeling was used to project the 2007 and 2008 biomass of Pacific herring. The PWS herring biomass forecast for 2007 was 15,830 tons; while the PWS herring spawning biomass forecast for 2008 is approximately 10,000 tons. Hydroacoustic, net sampling, and aerial surveys were conducted in 2007 to assess herring biomass, disease prevalence, age composition, and growth.

In March and April, acoustic surveys were conducted with the ADF&G vessel R/V *Solstice* and the M/V *Auklet*, contracted by the Prince William Sound Science Center (PWSSC). Broad scale surveys were conducted in eastern Prince William Sound west to Tatitlek Narrows; north and central Montague Island; around Green Island, and from Sawmill Bay to Whale Bay. Detailed acoustics data were collected on major concentrations of herring in Two Moon, Landlocked, Olsen, St. Matthews, and Sawmill bays, and between St. Matthews Bay and Red Head. Age composition samples varied by location and sample gear- spawning fish samples (Eastern PWS) were predominately age 8, but samples from other locations were predominately younger fish (age 1, 2, and 3). The department collected additional age, sex, and size data along with disease assessment data throughout PWS during the fall of 2007. The 2007 biomass estimates from the department's acoustics survey were 10,635 tons (total biomass) and 4,734 tons (spawning biomass). These estimates do not include the data collected by the PWSSC.

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 rates 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 *I. hoferi*. Prevalence of focal skin reddening associated with viral hemorrhagic septicemia virus (VHSV) was low; however, prevalence of *I. hoferi* was high (25%) and is consistent with the increasing age of the predominant 1999 age class. Evidence is increasing that 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 in older age groups from *I. hoferi* in 2006 and 2007. If this trend continues, mortality of the predominant age class may increase significantly. The department will continue to monitor these disease indices.

Aerial surveys documented a peak biomass estimate of 770 tons of herring versus 540 tons last year, 4,773 tons in 2005 and 12,305 tons in 2004. An estimated total of 1,615 tons of herring were seen throughout PWS, with the largest estimate of 350 tons observed in Port Gravina. A total of 18.3 mile-days of spawn were observed in spring 2007, the second lowest since 1973. The largest spawning events occurred between Hells Hole and Red Head with 2.8 miles of spawn followed by 1.75 miles in Snug Corner and 1.2 miles in Drier Bay. 5.4 mile-days of spawn were documented in the Southeast Shore Area, 4.6 mile-days in the Northeast Shore Area, 0.2 mile-days in the North Shore Area, 0.1 mile-days in the Naked Island Area, and 8.1 mile-days in the Montague Island Area (Appendix G13). Age composition based on spawning samples show that the predominant age class in 2007 was the 3-year old fish that represented 25% of those sampled (Appendix G12).

ADF&G collected additional age, sex, and size data along with disease information throughout PWS during the fall of 2007. Additional updates on the status of the PWS herring population will be announced as new information becomes available.

2007–2008 HERRING SEASON OUTLOOK

Given the PWS herring spawning population, current size and age structure, a commercial harvest is not anticipated in 2008. Consecutive years of low recruitment will further delay the recovery of the herring population to a size that is 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 VHS 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, 2007.

District	Permits	Chinook	Sockeye	Coho	Pink	Chum	Total
Eastern	115	38	9,357	58,299	22,059,138	81,077	22,207,909
Northern	63	2	12,568	2,940	6,221,016	9,901	6,246,427
Coghill	51	9	12,472	24,602	2,334,590	465,448	2,837,121
Southwestern	82	2	23,702	21,476	17,907,847	42,445	17,995,472
Montague	60	677	5,921	573	878,371	741,020	1,626,562
Southeastern	44	2	1,437	703	1,869,245	13,997	1,885,384
Unakwik	1	0	547	0	0	4	551
Purse Seine		730	66,004	108,593	51,270,207	1,353,892	52,799,426
Bering River	63	88	16,470	9,305	6	1	25,870
Copper River	494	39,095	1,901,773	117,182	80,715	9,657	2,148,422
Coghill	271	89	173,430	60,982	65,407	1,009,377	1,309,285
Eshamy	266	27	538,183	2,556	42,822	81,410	664,998
Unakwik	19	1	15,146	0	0	222	15,369
Drift Gillnet		39,300	2,645,002	190,025	188,950	1,100,667	4,163,944
Eshamy	26	18	196,537	365	13,796	24,651	235,367
Set Gillnet		18	196,537	365	13,796	24,651	235,367
Solomon Gulch	1	0	0	17,690	4,041,689	0	4,059,379
Cannery Creek	1	0	0	0	1,443,191	0	1,443,191
Wally Noerenberg	1	0	0	11,954	3,465,721	920,198	4,397,873
Main Bay	1	0	321,330	0	0	5,269	326,599
Armin F. Koernig	1	0	0	0	3,040,323	174,263	3,214,586
Hatchery [a]		0	321,330	29,644	11,990,924	1,099,730	13,441,628
Educational Permit	1	70	62	0	150	20	302
Personal Use	290	1,029	2,087	353	43	102	3,614
Donated Fish	5	2	180	0	760	6	948
Misc.	296	1,101	2,329	353	953	128	4,864
Prince William Sound Total		41,149	3,231,202	328,980	63,464,830	3,579,068	70,645,229

[a] Hatchery sales for hatchery operating costs.

Table 2.–Total commercial salmon harvest by species from all gear types, Prince William Sound Area, 1971–2007.

	Harvest					
Year [a]	Chinook	Sockeye	Coho	Pink	Chum	Total
1971	20,142	741,945	327,697	7,312,730	579,552	8,982,066
1972	23,003	976,115	124,670	57,090	46,088	1,226,966
1973	22,638	473,044	199,019	2,065,844	740,017	3,500,562
1974	20,602	741,340	76,041	458,619	89,210	1,385,812
1975	22,325	546,634	84,109	4,453,041	101,286	5,207,395
1976	32,751	1,008,912	160,494	3,022,426	370,657	4,595,240
1977	22,864	943,943	179,417	4,536,459	573,166	6,255,849
1978	30,435	505,509	312,930	2,917,499	489,771	4,256,144
1979	20,078	369,583	315,774	15,615,810	349,615	16,670,860
1980	8,643	208,724	337,123	14,161,023	482,214	15,197,727
1981	20,782	784,469	396,163	20,558,304	1,888,822	23,648,540
1982	47,871	2,362,328	623,877	20,403,423	1,336,878	24,774,377
1983	53,879	908,469	365,469	13,977,116	1,048,737	16,353,670
1984	39,774	1,303,515	609,484	22,119,309	1,229,185	25,301,267
1985	43,735	1,464,563	1,025,046	25,252,924	1,321,538	29,107,806
1986	42,128	1,288,712	426,240	11,410,302	1,700,906	14,868,288
1987	41,909	1,737,989	175,214	29,230,303	1,919,415	33,104,830
1988 [a]	31,797	767,674	477,816	11,820,121	1,843,317	14,940,725
1989 [a]	32,006	1,175,238	424,980	21,886,466	1,001,809	24,520,499
1990 [a]	22,163	911,607	524,274	44,165,077	967,384	46,590,505
1991 [b]	35,355	1,734,544	641,854	37,135,561	352,321	39,899,635
1992 [c]	41,306	1,771,612	619,460	8,637,116	334,376	11,403,870
1993 [d]	32,005	1,851,133	445,612	5,761,097	1,186,365	9,276,212
1994 [e]	48,558	1,514,329	1,058,154	36,886,301	1,058,213	40,565,555
1995 [e]	67,083	1,523,464	992,798	16,221,493	864,245	19,669,083
1996 [e]	56,457	3,000,602	459,253	26,042,942	2,103,559	31,662,813
1997 [e]	52,482	4,163,074	83,113	25,836,563	2,227,190	32,362,422
1998 [e]	70,910	1,715,778	194,621	28,685,115	1,271,911	31,938,335
1999 [e]	63,434	2,035,293	244,754	45,003,656	2,989,255	50,336,392
2000 [e]	32,411	1,430,838	714,286	38,885,528	5,163,760	46,226,823
2001 [e]	40,461	2,261,097	494,135	35,246,524	3,099,794	41,142,011
2002 [e]	39,706	2,262,134	650,331	18,950,931	6,373,491	28,276,593
2003 [e]	49,227	2,838,679	502,135	51,136,305	3,779,657	58,306,003
2004 [e]	39,142	1,892,525	619,884	23,531,483	2,001,918	28,084,952
2005 [e]	36,118	1,988,771	536,675	59,896,419	1,996,956	64,446,609
2006 [e]	31,634	2,524,496	761,044	21,673,378	2,181,482	27,172,034
10-Year Average	45,553	2,311,269	480,098	34,884,590	3,108,541	40,829,217
2007 [e]	41,149	3,231,202	328,980	63,464,830	3,579,068	70,645,229

[a] Includes confiscated and educational special use permits. Also includes hatchery sales harvests and carcass sales.

[b] Includes confiscated and educational special use permits, hatchery sales harvests, donated and discarded catches.

[c] Includes harvests from confiscated and educational special use permits, hatchery sales harvest, and test fisheries.

[d] Includes harvests from confiscated permits, hatchery sales harvests, donated fish harvest, and test fisheries.

[e] Includes harvests from confiscated permits, all hatchery sales harvests (excluding roe salvage), and test fisheries.

Table 3.–Mean price and estimated exvessel value of the total commercial salmon harvest by gear type, Prince William Sound, 2007.

PURSE SEINE Species	Number	Pounds [a]	Average Weight	Average Price [a]	Value
Chinook	730	12,512	17.14	$0.75	$9,330
Sockeye	66,004	366,322	5.55	$0.92	$338,262
Coho	108,593	955,618	8.80	$0.57	$546,805
Pink	51,270,207	181,496,533	3.54	$0.16	$28,839,799
Chum	1,353,892	11,954,866	8.83	$0.29	$3,499,189
	52,799,426	194,785,852			$33,233,386
DRIFT GILLNET Species	Number	Pounds	Average Weight	Average Price	Value
Chinook	39,300	865,386	22.02	$4.49	$3,886,795
Sockeye	2,645,002	16,425,462	6.21	$1.59	$26,169,047
Coho	190,025	1,645,617	8.66	$0.85	$1,391,204
Pink	188,950	718,010	3.80	$0.11	$82,356
Chum	1,100,667	7,902,789	7.18	$0.32	$2,542,327
	4,163,944	27,557,264			$34,071,729
SET GILLNET [b] Species	Number	Pounds	Average Weight	Average Price	Value
Chinook	18	469	26.06	$2.70	$1,267
Sockeye	196,537	1,261,768	6.42	$1.05	$1,318,799
Coho	365	2,902	7.95	$0.30	$873
Pink	13,796	51,045	3.70	$0.11	$5,416
Chum	24,651	162,943	6.61	$0.33	$53,380
	235,367	1,479,127			$1,379,735
HATCHERY SALES [c] Species	Number	Pounds	Average Weight	Average Price	Value
Chinook	0	0		$0.00	$0
Sockeye	321,330	2,129,139	6.63	$0.84	$1,790,819
Coho	29,644	226,948	7.66	$0.71	$161,995
Pink	11,990,924	39,224,608	3.27	$0.17	$6,809,392
Chum	1,099,730	7,251,733	6.59	$0.29	$2,105,903
	13,441,628	48,832,428			$10,868,110
OTHER GEAR [d] Species	Number	Pounds	Average Weight	Average 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

Gear Type	Value of Catch	No. of Permits	Average Earnings
Purse Seine	$33,233,386	111	$299,400
Drift Gillnet	$34,071,729	506	$67,335
Set Gillnet	$1,379,735	26	$53,067
Subtotal- Value of CPF Catch	$68,684,849		
Hatchery	$10,868,110		
Other Gear	$0		
GRAND TOTAL	$79,552,958		

[a] Mean prices are based on weighted average prices given voluntarily by processors and hatchery operators. Pounds of fish are 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, 1991–2007.

	Chinook Salmon		Sockeye Salmon					Coho Salmon		Pink Salmon	Chum Salmon
	Copper and Bering Districts	Prince William Sound	Copper River	Bering River	Coghill and Unakwik Districts	Eshamy	General Purse Seine	Copper and Bering Districts	Prince William Sound	PWS	PWS
1991	$1.65	$1.00	$1.28	$1.28	$1.28	$1.28	$1.00	$0.65	$0.45	$0.12	$0.40
1992	$2.50	$1.55	$2.50	$2.50	$1.55	$1.55	$1.55	$0.90	$0.90	$0.18	$0.55
1993	$1.82	$1.07	$1.32	$1.40	$0.93	$0.86	$0.83	$0.80	$0.77	$0.16	$0.68
1994	$1.43	$0.80	$1.27	$1.06	$0.94	$1.19	$0.88	$0.74	$0.60	$0.16	$0.45
1995	$2.19	$0.91	$1.67	$1.44	$0.75	$1.06	$0.94	$0.52	$0.42	$0.18	$0.45
1996	$1.96	$0.71	$1.38	$1.21	$0.82	$0.85	$0.73	$0.53	$0.36	$0.07	$0.13
1997	$2.00	$1.00	$0.88	$0.88	$0.80	$0.80	$0.85	$0.30	$0.30	$0.12	$0.27
1998	$2.07	$0.94	$1.49	$1.35	$1.24	$1.11	$1.06	$0.46	$0.33	$0.13	$0.22
1999	$3.44	$1.28	$1.84	$1.81	$1.60	$0.89	$1.18	$0.58	$0.33	$0.15	$0.21
2000	$4.02	$1.59	$1.72	$1.72	$1.14	$1.14	$0.90	$0.57	$0.42	$0.15	$0.28
2001	$3.30	$0.92	$1.35	$1.35	$0.77	$0.77	$0.74	$0.32	$0.26	$0.13	$0.37
2002	$3.34	$0.92	$1.29	$1.29	$0.64	$1.14	$0.56	$0.35	$0.26	$0.09	$0.15
2003	$3.48	$0.48	$1.16	$1.16	$0.80	$0.80	$0.71	$0.48	$0.42	$0.08	$0.17
2004	$4.69	$0.82	$1.81	$1.81	$0.85	$0.85	$0.55	$0.69	$0.39	$0.10	$0.20
2005	$4.70	$0.94	$1.79	$1.79	$1.03	$1.03	$0.54	$0.83	$0.75	$0.08	$0.18
2006	$5.03	$1.27	$1.83	$1.79	$1.15	$1.15	$1.05	$0.92	$0.61	$0.16	$0.33
10-year Average	**$3.61**	**$1.02**	**$1.52**	**$1.50**	**$1.00**	**$0.97**	**$0.81**	**$0.55**	**$0.41**	**$0.12**	**$0.24**
2007	$4.50	$1.19	$1.81	$1.81	$1.06	$1.05	$0.92	$0.90	$0.74	$0.16	$0.29

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 an estimate, and do not reflect postseason adjustments and bonuses. Caution should be used if 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, 1997–2007.

PURSE SEINE												Previous 10-yr
Species	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Average
Chinook	3,422	4,386	7,427	2,706	5,435	1,353	924	1,270	1,787	4,940	9,330	3,365
Sockeye	151,532	127,854	141,923	195,169	539,388	58,142	847,966	46,573	207,022	219,984	338,262	253,555
Coho	125,946	124,325	329,317	965,404	398,532	69,207	226,619	121,688	103,312	1,426,736	546,805	389,109
Pink	6,795,323	8,565,392	9,456,108	13,728,606	9,584,465	2,425,505	10,716,380	4,293,551	13,104,242	6,688,126	28,839,799	8,535,770
Chum	1,742,759	950,912	3,128,816	3,964,546	2,863,466	2,423,525	1,717,083.00	1,228,965	773,620	3,007,947	3,499,189	2,180,164
	$8,818,982	$9,772,869	$13,063,591	$18,856,431	$13,391,287	$4,977,731	$13,508,972	$5,692,047	$14,189,982	$11,347,734	$33,233,386	$11,361,962
DRIFT GILLNET												
Species												
Chinook	2,367,538	3,341,148	5,510,840	2,698,417	2,791,619	2,691,215	3,810,019	4,050,947	3,575,253	3,145,401	3,886,795	3,398,240
Sockeye	19,796,170	13,223,761	20,048,000	13,554,212	14,158,076	14,964,894	13,791,971	13,436,808	15,849,204	19,375,916	26,169,047	15,819,901
Coho	57,798	379,366	733,022	2,486,184	790,544	2,027,738	1,762,604	3,561,659	2,374,703	3,972,107	1,391,204	1,814,573
Pink	83,398	249,293	43,612	177,559	144,896	23,889	27,904	12,134	84,308	54,070	82,356	90,106
Chum	1,567,526	1,035,808	1,529,765	3,550,614	3,371,206	2,206,854	821,818	976,553	1,965,383	845,703	2,542,327	1,787,123
	$23,872,430	$18,229,376	$27,865,239	$22,466,986	$21,256,342	$21,914,590	$ 20,214,316	$22,038,101	$23,848,851	$27,393,197	$34,071,729	$22,909,943
SET GILLNET												
Species												
Chinook	159	25	592	2,902	787	765	0	189	0	143	1,267	556
Sockeye	1,055,286	177,723	407,497	912,603	844,123	1,701,077	1,070,058	454,709	608,528	822,232	1,318,799	805,384
Coho	340	336	1,877	3,346	1,686	388	1,611	1,635	4,737	1,869	873	1,782
Pink	20,477	16,659	8,721	53,160	22,048	10,848	6,324	7,439	23,542	8,325	5,416	17,754
Chum	17,242	337	13,630	25,641	20,045	27,638	6,742	17,261	6,880	29,925	53,380	16,534
	$1,093,504	$195,079	$432,317	$997,652	$888,689	$1,740,716	$1,084,735	$481,233	$643,687	$862,493	$1,379,735	$842,011
HATCHERY SALES												
Species												
Chinook	1,252	22,621	0	0	0	15	0	0	0	0	0	2,389
Sockeye	1,381,948	953,857	143,855	478	174,418	418,114	1,769,179	997,020	2,383,400	2,173,808	1,790,819	1,039,608
Coho	7,090	63,980	0	2	9,459	1	0	35,733	0	102,792	161,995	21,906
Pink	5,814,214	6,283,525	6,312,337	6,358,529	6,430,468	4,989,921	6,068,403	5,718,678	7,288,894	7,300,390	6,809,392	6,256,536
Chum	1,758,276	1,261,354	2,380,321	4,007,449	3,070,274	3,794,069	1,643,243	779,268	1,704,693	2,893,174	2,105,903	2,329,212
	$8,965,780	$8,585,338	$8,836,513	$10,366,458	$9,684,619	$9,202,119	$9,480,825	$7,530,699	$11,376,987	$12,470,164	$10,868,110	$9,649,950

-continued-

Table 5.–Page 2 of 2.

OTHER GEAR	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Average	Previous 10-yr Average
Chinook		0	5,004	448	1,266	0	200	26	493	81	0	0	752
Sockeye		2,085	2,085	68,525	5,944	509	1,324	195	614	289	0	0	8,157
Coho		0	10	106		468	0	0	0	0	0	0	65
Pink		1	271	81,476		382	0	2812	0	0	0	0	9,438
Chum		190	13	358	600	4,206	5	0	0	0	0	0	537
		$2,276	$7,383	$150,913	$7,811	$5,564	$1,529	$3,033	$1,107	$370	$0	$0	$17,998

AVERAGE EARNINGS	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006		
Purse Seine	$77,359	$65,590	$93,983	$143,942	$88,101	$41,481	$127,443	$54,210	$137,767	$102,232	$299,400	$93,211
Drift Gillnet	$45,909	$34,922	$53,280	$41,994	$39,731	$41,039	$39,327	$42,219	$46,807	$55,452	$67,335	$44,068
Set Gillnet	$42,058	$12,192	$20,587	$35,630	$27,772	$62,168	$38,741	$17,823	$23,840	$33,173	$53,067	$31,398

NUMBER OF PERMITS FISHED												
Purse Seine	114	149	139	131	152	120	106	105	103	111	111	123
Drift Gillnet	520	522	523	535	535	534	514	522	508	494	506	521
Set Gillnet	26	16	21	28	32	28	28	27	27	26	26	26

Table 6.–Preseason harvest or total run projections for the 2007 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	44	26 - 62	1,157	544 - 1,770	278	59 - 497				
Bering River [d]	commercial harvest			18	9 - 28	42	0 - 95				
Coghill [e]	commercial harvest			110	0 - 281						
Eshamy [e]	commercial harvest			6	0 - 16						
Unakwik [f]	commercial harvest			7	4 - 10						
General PWS Districts	commercial harvest							10,900	0 - 31,260	254	143 - 365
Total Wild Stock		44		1,298	544 - 1,792	320	59 - 506	10,900	0 - 31,260	254	143 - 365
Solomon Gulch [g]	total return							12,169	7,158 - 16,703		
Armin F. Koernig [g]	total return							7,217	5,850 - 8,584	404	364 - 447
Wally Noerenberg [g,h]	total return					68	47 - 89	4,211	3,103 - 5,319	1,892	1,687 - 2,097
Cannery Creek [g]	total return							6,143	4,450 - 7,835		
Main Bay [g,i]	total return			1,131	828 - 1,434						
Gulkana [j]	total return			298	239 - 358						
Total Hatchery				1,429	862 - 1,478	68	47 - 89	29,740	10,719 - 21,032	2,296	1,726 - 2,144
Total Hatchery and Wild		44		2,727		388		40,640		2,550	

[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 provided forecasts of commercial harvest for all wild stocks and Gulkana Hatchery sockeye salmon. All forecasts provided by the nonprofit aquaculture associations were for total runs. The harvest projections do not include salmon harvest 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] Harvest projections calculated by hatchery operator - not by ADF&G.

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

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

[j] Wild fish runs are estimated by fishing district and enhanced runs are estimated by facility of origin. The Alaska Department of Fish and Game completed all wild stock forecasts and the Gulkana Hatchery forecast. Valdez Fisheries Development Association provided the Solomon Gulch Hatchery pink salmon forecast and Prince William Sound Aquaculture Association provided all other enhanced forecasts except the Gulkana Hatchery forecast.

Table 7.–A listing of finfish processors, their location of operation, and type of product processed, Prince William Sound area, 2007.

Processor Name	Company Name	Address	Executive Name	Type of Product
F/V Polar Bear	Alaskan Marine Resources, LLC	PO Box 1976 , Cordova, AK, 99574	Charles Smith	Salmon roe
F/V Royal Sea	Bear & Wolf, LLC	4209 21st Ave W. Suite 400 , Seattle, WA, 98199	Peter Kuttel	Salmon and Salmon roe
F/V Prince William	Steven R Smith	PO Box 1724 , Cordova, AK, 99574	Steven R Smith	Salmon roe
F/V Meghan Denise	Wild Salmon	PO Box 1389 , Cordova, AK, 99574	Dennis M Zadra	Salmon
Copper River Fine Seafoods	Copper River Fine Seafoods, Inc	PO Box 158 , Cordova, AK, 99574	William A Bailey III	Salmon
Fees Custom Seafood	Edward W Fee	9321 Arlene St # 10 , Anchorage, AK, 99502	Edward W Fee	Salmon and Salmon roe
Favco, Inc	Favco, Inc	PO Box 190968 , Anchorage, AK, 99519	Randy Rau	Salmon
Great Pacific Seafoods- Whittier	Great Pacific Seafoods, Inc	Whittier Ave , Whittier, AK, 99693	Glen Brackett	Salmon
Great Pacific Seafoods- Anchorage	Great Pacific Seafoods, Inc	4401 W. Old Int. Airport Rd , Anchorage, AK, 99502	Judi Murdock	Salmon
Seward Fisheries	Icicle Seafoods, Inc	601 Port Ave , Seward, AK, 99664	Charles McEldowney	Salmon and Salmon roe
Inlet Fish Producers-Kenai	Inlet Fish Producers, Inc	PO Box 114 , Kenai, AK, 99611	Robert Utrup	Salmon
Norquest Seafoods- Cordova	Trident Seafoods, Inc	5245 Shilshole Ave N W , Seattle, WA, 98107	Bill Gilbert	Salmon and Salmon roe
North Pacific Processors- Cordova	North Pacific Processors, Inc	PO Box 31179 , Seattle, WA, 98103	Ken Roemhildt	Salmon and Salmon roe
Ocean Beauty- Cordova	Ocean Beauty Seafoods, Inc	PO Box 548 , Cordova, AK, 99574	Hap Symmonds	Salmon and Salmon roe
Ocean Beauty- Seward	Ocean Beauty Seafoods, Inc	PO Box 570 , Seward, AK, 99664	William Fejes	Salmon and Salmon roe
Peter Pan- Valdez	Peter Pan Seafoods, Inc	South Harbor Drive , Valdez, AK, 99686	Mark Hansen	Salmon and Salmon roe
Prime Select Seafood	Prime Select Seafoods, Inc	PO Box 846 , Cordova, AK, 99574	Susan Laird	Salmon
Nautilus Foods Processors	Waterkist Corporation	PO Box 727 , Valdez, AK, 99686	Tom Waterer	Salmon

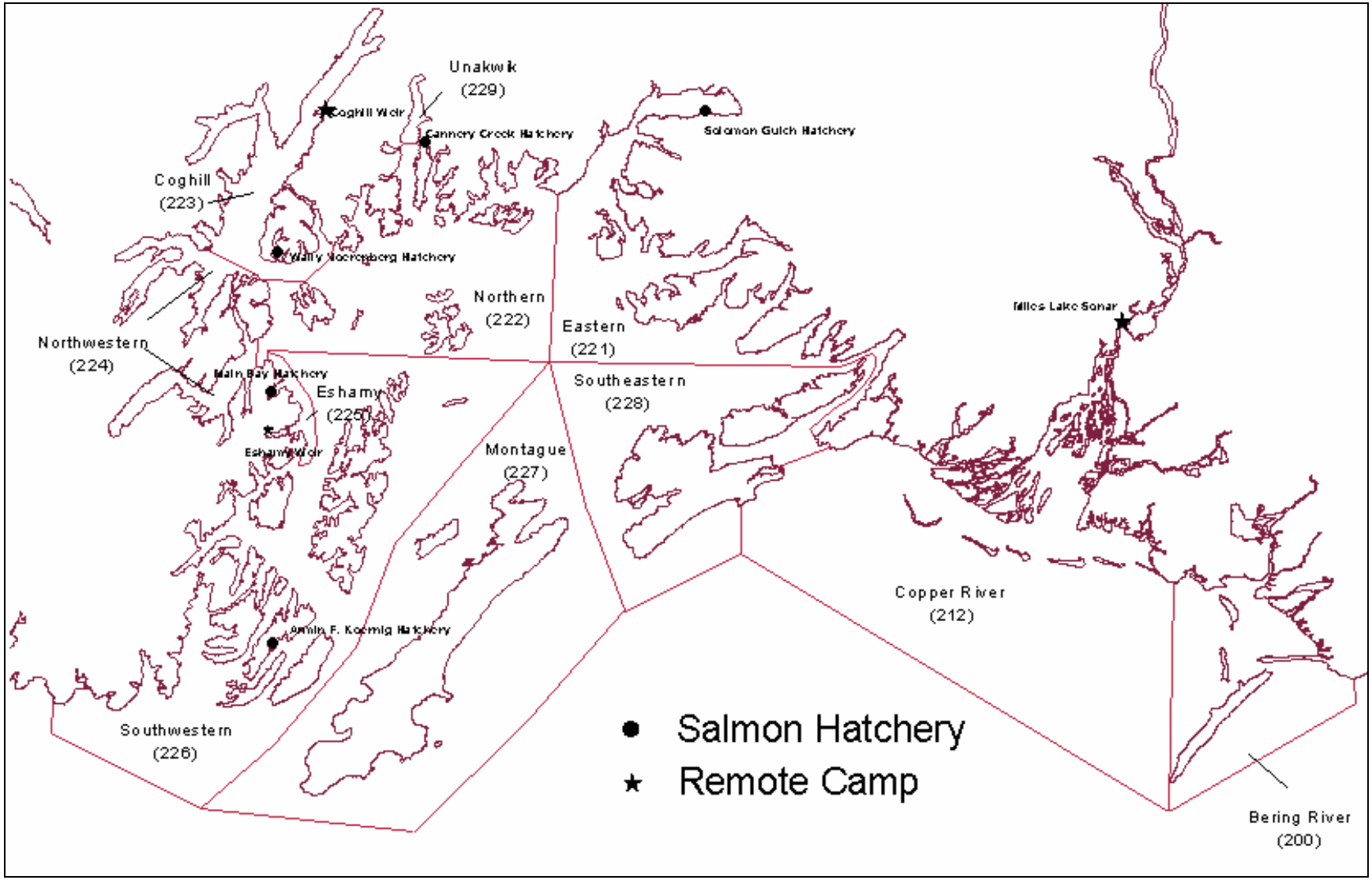

Figure 1.–Prince William Sound Management Area showing commercial fishing districts, salmon hatcheries, weir locations, and Miles Lake sonar camp.

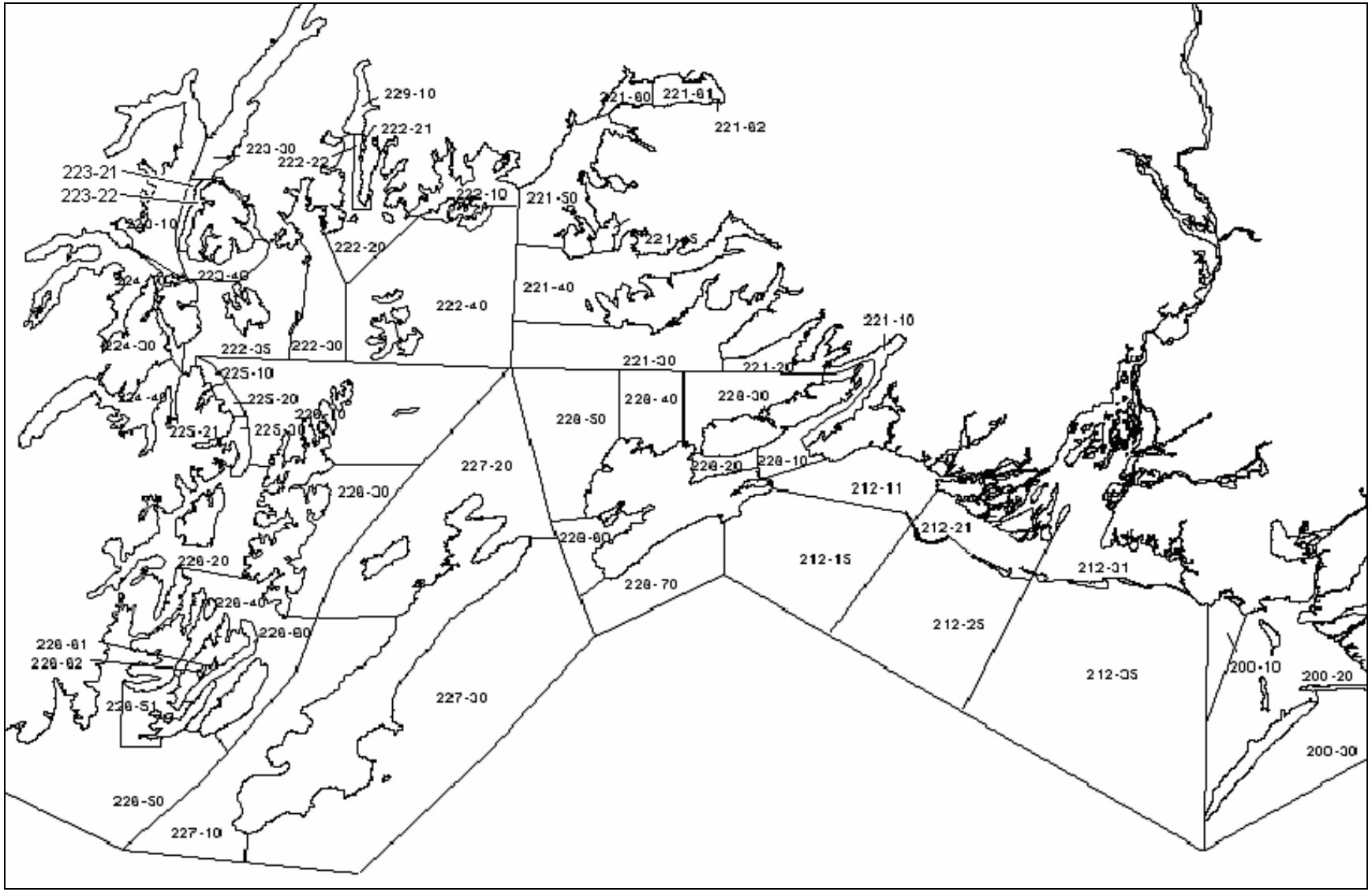

Figure 2.–Prince William Sound Area showing commercial fishing districts and statistical reporting areas.

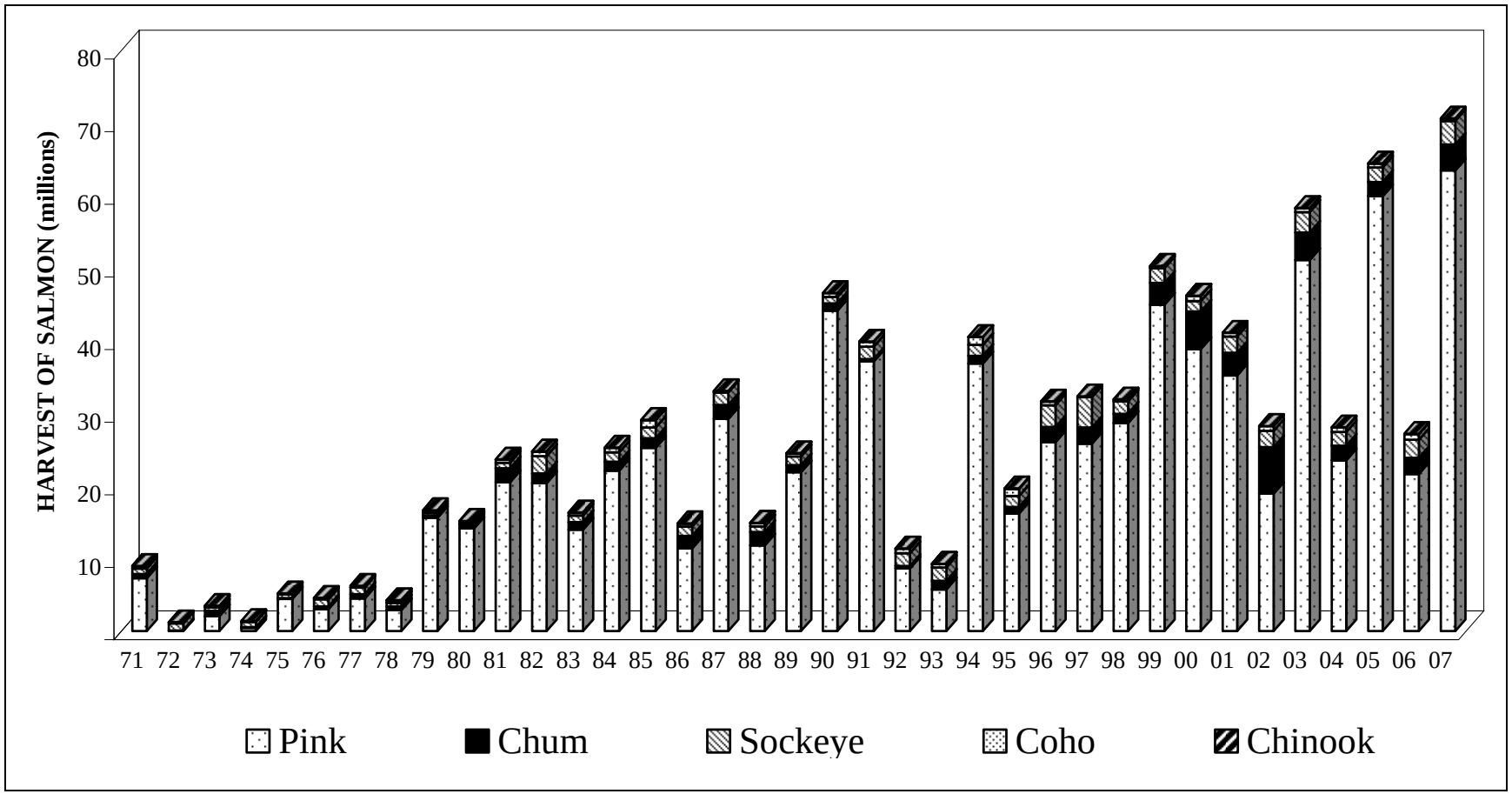

Figure 3.–Commercial salmon harvests in Prince William Sound, 1971–2007.

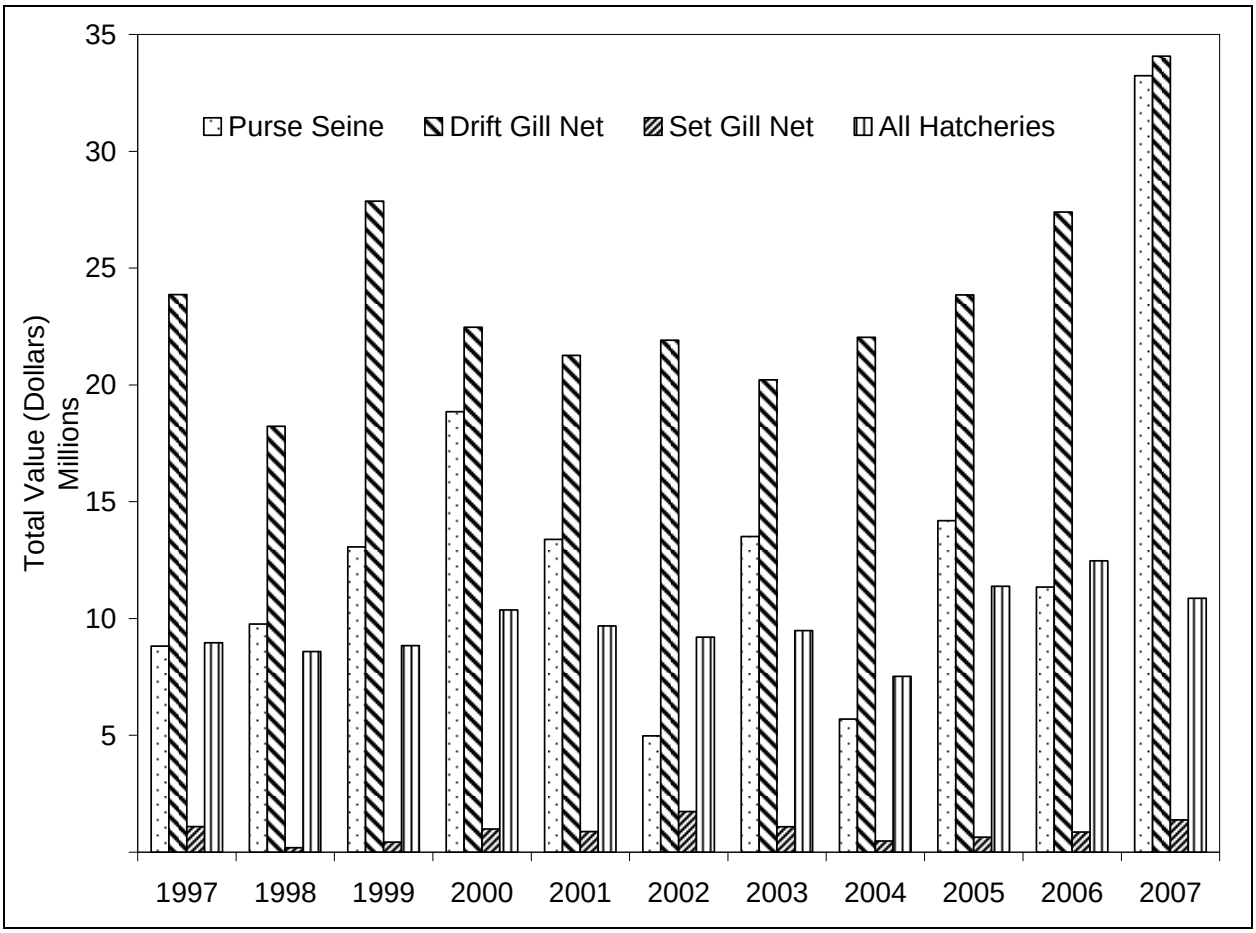

Figure 4.–Exvessel value of the commercial salmon harvest by gear type, 1997–2007.

APPENDIX A

Appendix A1.–Total estimated sockeye salmon runs to the Copper River by end user or destination with previous 10-year average, 1997-2007.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	10-year Average	2007
Commercial harvest[a]	2,955,431	1,341,692	1,682,559	880,334	1,323,577	1,248,503	1,188,052	1,048,004	1,331,664	1,496,754	1,449,657	1,901,773
Commercial, homepack[a]	0	1,435	1,333	651	2,113	1,138	4,077	525	1,785	1,598	1,466	2,023
Commercial, donated[a]	0	0	0	434	0	128	35	74	83	114	87	0
Educational drift gillnet permit[a]	0	0	0	0	0	151	0	0	42	16	21	62
Subsistence (Cordova, drift gillnet)[b]	1,001	850	1,330	4,360	3,072	3,067	1,607	1,822	728	4,355	2,219	6,148
Federal Subsistence (PWS/Chugach Nat'l Forest, dipnet, spear, rod and reel)									109	150	130	36
Subsistence (Batzulnetas, dipnet, fish wheel or spear)[b]	427	582	55	0	62	208	164	182	0	0	168	0
Subsistence (Glennallen Subdistrict, dipnet, fish wheel or spear)[b]	78,300	61,268	70,899	58,241	78,390	47,892	44,209	52,130	60,966	55,492	60,779	61,477
Federal Subsistence (Glennallen subdistrict, dipnet, fish wheel or spear)						7,950	13,616	17,609	14,446	16,711	14,066	15,225
Personal Use (Chitina Subdistrict, dipnet)[b]	146,311	134,299	134,168	103,269	120,030	75,872	71,459	93,182	106,868	102,443	108,790	112,753
Federal Subsistence (Chitina subdistrict, dipnet)						575	717	1,550	746	1,379	993	929
Upriver sport harvest[c]	12,293	11,184	11,101	12,361	8,169	7,761	7,108	6,464	8,135	14,297	9,887	8,753
Copper River delta sport harvest[c]	972	2,015	2,855	2,189	298	798	631	952	656	158	1,152	639
Upriver spawning escapement[d]	749,571	510,585	471,903	302,464	506,655	586,405	475,930	454,055	518,216	605,043	518,083	653,300
Copper River delta spawning escapement[e]	114,140	175,000	201,950	196,090	142,130	151,470	146,300	138,770	116,812	197,792	158,045	176,570
Hatchery broodstock/Excess[f]	129,017	119,130	130,735	73,115	80,485	60,254	44,961	6,695	91,058	96,552	83,200	27,602
Total estimated sockeye salmon run size	4,187,463	2,358,040	2,708,888	1,633,508	2,264,981	2,192,172	1,998,866	1,822,014	2,252,314	2,592,854	2,401,110	2,967,290

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

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

[c] 2007 upriver and Copper River delta Sport harvest data unavailable at time of writing. Numbers are average of previous 5 years Sport harvests.

[d] Upriver spawning escapement prior to 1999 is based on the Miles Lake sonar passage multiplied by the percentage of sockeye salmon in the total upriver subsistence and personal use fisheries to adjust the Miles Lake sonar count to sockeye salmon only. The upriver subsistence, personal use, sport, hatchery broodstock, and onsite surplus are then subtracted from the adjusted Miles Lake sonar counts. Beginning in 1999 sockeye salmon spawning escapement is based on the Miles Lake sonar passage minus the Chinook salmon inriver midpoint abundance estimate, upriver subsistence, personal use, sport, hatchery broodstock and onsite surplus.

[e] Copper River delta spawning escapement estimated by doubling the peak aerial survey index.

[f] Hatchery broodstock and on site excess are from the Gulkana Hatchery annual reports.

Appendix A2.–Total estimated sockeye salmon runs to the Copper River by origin with previous 10-year average, 1997-2007.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	10-year Average	2007
Upriver wild contribution[a]	3,365,147	1,224,711	971,338	645,826	1,571,649	1,374,673	1,383,912	1,358,419	1,724,944	1,766,018	1,538,664	2,275,220
Copper River delta wild contribution[b]	416,633	456,404	618,269	512,992	380,101	392,805	411,798	369,672	311,646	531,130	440,145	559,927
Gulkana contributions[c]	405,682	676,925	1,119,282	474,690	313,230	424,694	203,156	93,922	215,724	295,706	422,301	132,143
Total estimated sockeye salmon run size	4,187,463	2,358,040	2,708,888	1,633,508	2,264,981	2,192,172	1,998,866	1,822,014	2,252,314	2,592,854	2,401,110	2,967,290

[a] Upriver wild contribution prior to 1999 is based on the Miles Lake sonar count multiplied by the percent of sockeye salmon harvested in upriver subsistence fisheries, added to this is the commercial Copper River harvest and Copper River subsistence harvest. Subtracted from this are the Copper River delta wild stock and the Gulkana hatchery contributions to these two fisheries. Beginning in 1999, the upriver wild contribution is based on the Miles Lake sonar passage minus the Chinook salmon inriver abundance estimate, added to this is the commercial Copper River harvest and Copper River subsistence harvest. Subtracted from this are the Copper River delta wild stock, delta sport harvest and the Gulkana hatchery contributions to these two fisheries.

[b] Copper River delta wild contribution is calculated by dividing the Copper River delta escapement, (2x survey counts) by the estimated number of sockeye past the Miles Lake sonar. This is multiplied by the total harvest from the Copper River District. Added to this is the delta escapement and delta sport harvest.

[c] Gulkana contribution is based on CWT recovery from 1995-2003, 2004-2007 contribution is based on strontium marks of commercial and subsistence samples and 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, 1997-2007.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	10-year Average	2007
Commercial harvest[a]	51,273	68,827	62,337	31,259	39,524	38,734	47,721	38,191	34,624	30,278	44,277	39,095
Commercial, homepack[a]	1,243	1,411	1,115	740	935	773	1,073	539	760	779	937	1,016
Commercial, donated[a]	0	0	0	6	0	4	3	5	11	3	3	0
Educational drift gillnet permit[a]	0	0	0	0	0	25	0	0	92	11	13	70
Subsistence (Cordova, drift gillnet)[b]	200	295	353	689	826	549	710	1,106	219	779	573	1,145
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]	2,439	1,751	2,922	4,782	3,341	3,424	2,395	3,166	2,080	2,444	2,874	3,106
Federal Subsistence (Glennallen subdistrict, dipnet, fish wheel or spear)						564	554	634	265	430	489	569
Personal Use harvests (Chitina Subdistrict, dipnet)[b]	5,359	6,583	5,625	3,007	2,761	1,746	1,642	2,108	1,776	2,071	3,268	2,388
Federal Subsistence (Chitna subdistrict, dipnet)						33	18	9	10	13	17	26
Sport harvest[c]	8,346	8,245	6,742	5,531	4,904	5,098	5,717	3,435	4,092	3,425	5,554	4,353
Upriver spawning escapement[d]	14,338	11,386	16,157	24,490	26,534	21,574	22,802	23,911	21,604	59,406	24,220	35,957
Total estimated Chinook salmon run size	83,198	98,498	95,251	70,504	78,825	72,524	82,635	73,104	65,533	99,639	81,971	87,725

[a] Numbers are from fish ticket data.

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

[c] Upriver sport harvest only: there is no delta Chinook salmon sport harvest. The 2007 Sport harvest data is unavailable at time of writing. The 2007 harvest estimate is average of previous 5 years Sport harvests.

[d] Upriver spawning escapement is calculated by taking the inriver abundance estimate and from that subtracting the subsistence, personal use and sport harvests. Prior to 1999 inriver abundance was calculated using aerial and foot surveys, from 1999-2007 inriver estimates were calculated using mark-recapture studies. Since 2003 the Alaska Board of Fisheries has directed that the SEG be 24,000 or more Chinook salmon. Prior to that from 1999-2002 the board directed that the spawning escapement range be 28,000-55,000 Chinook salmon. Prior to this, at the 1996 board meeting ADF&G was directed to reduce the harvest potential of Chinook salmon by 5%.

Appendix A4.–Total commercial salmon harvest by species in the Copper River District, 1976-2007.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
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	52,500	626,735	234,243	7,345	2,217	923,040
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
10-Year Average	44,277	1,449,657	275,369	14,633	10,680	1,794,615
2007	39,095	1,901,773	117,182	80,715	9,657	2,148,422

Appendix A5.–Copper River District commercial drift gillnet salmon harvest by period, 2007.

Period [a]	Date	Emergency Order Issued	Hours	Permits	Landings	Chinook Numbers	Chinook Pounds	Sockeye Numbers	Sockeye Pounds	Coho Numbers	Coho Pounds	Pink Numbers	Pink Pounds	Chum Numbers	Chum Pounds
1[b]	05/14-05/14	2-F-E-001-07	12	304	331	1,564	29,692	22,088	132,734	1	6	0	0	280	1,928
2	05/17-05/17	2-F-E-004-07	12	387	567	2,433	48,555	74,865	455,348	0	0	0	0	310	2,128
3[b]	05/21-05/21	2-F-E-005-07	12	430	622	3,562	69,242	109,188	662,714	0	0	0	0	26	214
4	05/28-05/28	2-F-E-009-07	12	458	793	6,796	144,244	256,559	1,553,435	0	0	0	0	82	494
5	05/31-05/31	2-F-E-010-07	12	392	516	3,310	73,083	107,195	655,163	53	425	0	0	1,222	7,274
6	06/02-06/02	2-F-E-011-07	12	453	682	4,530	98,493	109,665	671,896	2	11	0	0	257	1,623
7	06/04-06/04	2-F-E-012-07	12	382	453	1,769	38,657	73,925	453,523	1	6	0	0	40	255
8	06/06-06/06	2-F-E-015-07	12	421	481	1,715	36,318	66,585	409,640	1	6	0	0	1,090	6,655
9	06/08-06/08	2-F-E-017-07	12	204	220	960	23,153	21,723	133,258	0	0	0	0	2,662	15,083
10	06/11-06/12	2-F-E-018-07	36	391	905	3,755	87,179	140,909	863,364	81	429	0	0	363	2,263
11	06/14-06/16	2-F-E-026-07	60	370	999	3,365	79,099	118,370	721,415	70	473	3	9	368	2,335
12	06/18-06/20	2-F-E-031-07	48	311	792	2,401	61,078	124,379	765,190	46	323	22	74	231	1,492
13	06/21-06/23	2-F-E-035-07	48	288	642	1,309	31,397	114,026	697,197	229	1,290	341	1,293	467	2,959
14	06/25-06/26	2-F-E-040-07	24	265	432	531	13,547	58,025	354,220	160	1,007	99	424	623	3,722
15	06/28-06/29	2-F-E-047-07	24	202	298	362	9,635	38,727	233,894	221	1,437	588	2,246	476	2,762
16	07/02-07/04	2-F-E-051-07	48	194	479	300	8,241	65,466	404,535	714	4,415	874	3,671	174	1,043
17	07/05-07/07	2-F-E-057-07	60	154	438	172	4,361	69,112	423,489	212	1,358	1,319	4,710	173	1,207
18	07/09-07/11	2-F-E-062-07	48	141	210	48	1,221	23,121	140,929	206	1,352	608	2,105	125	776
19	07/12-07/14	2-F-E-068-07	60	162	422	84	1,925	59,139	368,166	757	5,160	2,247	9,176	233	1,601
20	07/16-07/18	2-F-E-075-07	48	178	356	41	903	44,930	274,306	1,256	8,508	4,381	16,609	102	739
21	07/19-07/21	2-F-E-081-07	60	164	325	30	640	41,895	253,073	1,172	7,483	7,665	31,116	182	1,112
22	07/23-07/25	2-F-E-089-07	48	98	167	15	267	26,191	160,500	1,176	7,648	2,124	7,776	8	55
23	07/26-07/28	2-F-E-095-07	60	114	270	21	336	47,729	284,160	1,305	9,005	5,028	19,345	49	326
24	07/30-08/01	2-F-E-098-07	48	133	272	7	141	39,186	233,092	1,115	7,619	9,892	39,133	55	367
25	08/02-08/04	2-F-E-103-07	60	115	201	7	73	22,416	133,066	1,360	9,225	16,179	58,240	37	284
26	08/06-08/08	2-F-E-107-07	48	86	129	2	38	9,256	56,116	1,711	12,556	17,399	62,342	18	143
27	08/09-08/11	2-F-E-111-07	60	51	82	2	15	5,760	34,312	1,558	10,802	6,463	26,953	0	0
28	08/13-08/14	2-F-E-113-07	24	60	72	1	11	3,953	24,274	1,357	9,973	2,555	9,891	1	7
29	08/16-08/17	2-F-E-118-07	24	44	51	2	24	3,258	19,287	2,074	15,095	2,368	9,275	0	0
30	08/20-08/21	2-F-E-120-07	24	141	163	0	0	2,607	15,913	8,909	66,997	549	2,048	1	6
31	08/27-08/28	2-F-E-125-07	24	212	318	0	0	819	5,176	21,534	184,660	6	18	2	13
32	09/03-09/04	2-F-E-132-07	24	203	274	1	10	613	3,767	22,700	198,196	5	20	0	0
33	09/10-09/11	2-F-E-137-07	24	130	202	0	0	51	343	23,215	205,981	0	0	0	0
34	09/17-09/18	2-F-E-140-07	24	147	213	0	0	41	354	17,360	154,634	0	0	0	0
35	09/20-09/21	2-F-E-144-07	24	56	70	0	0	1	6	4,517	39,495	0	0	0	0
36	09/24-09/25	2-F-E-147-07	24	26	36	0	0	0	0	2,024	18,809	0	0	0	0
37	09/27-09/29	2-F-E-153-07	60	1	1	0	0	0	0	85	770	0	0	0	0
38	10/01-10/03	2-F-E-154-07	60	0	0	0	0	0	0	0	0	0	0	0	0
39	10/04-10/07	2-F-E-155-07	84	0	0	0	0	0	0	0	0	0	0	0	0
40	10/08-10/10	2-F-E-156-07	60	0	0	0	0	0	0	0	0	0	0	0	0
41	10/11-10/14	2-F-E-157-07	84	0	0	0	0	0	0	0	0	0	0	0	0
Total			1,560	494	13,484	39,095	861,578	1,901,773	11,597,855	117,182	985,154	80,715	306,474	9,657	58,866
Average Weight							22.04		6.10		8.41		3.80		6.10

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

[b] Waters of the Copper River District outside of the inside closure area as described in 5 AAC 24.350(1)(B) were open to commercial fishing.

Appendix A6.–Daily salmon escapement estimates at Miles Lake sonar, 2007.

		Estimated Daily Escapement				Minimum Escapement Objective			
Date	Water Level (m)	North Bank	South Bank	Daily	Cumulative	Daily	Cumulative	0600 Count	Projected Daily
05/16	39.41	NA	NA	0	0	378	378		0
05/17	39.62	NA	NA	0	0	599	977		0
05/18	NA	NA	NA	0	0	1,798	2,776		0
05/19	39.58	NA	NA	0	0	3,157	5,933		0
05/20	39.49	NA	NA	0	0	4,599	10,532		0
05/21	39.51	48	75	123	123	5,192	15,725		0
05/22	39.58	72	204	276	399	7,989	23,713	24	96
05/23	NA	114	579	693	1,092	9,116	32,830	162	648
05/24	NA	162	1,062	1,224	2,316	10,063	42,892	174	696
05/25	39.78	112	1,788	1,900	4,216	11,484	54,376	432	1,728
05/26	40.04	112	4,800	4,912	9,128	14,167	68,543	1,092	4,368
05/27	40.32	595	6,774	7,369	16,497	13,409	81,952	828	3,312
05/28	40.51	1,336	13,896	15,232	31,729	14,261	96,212	2,832	11,328
05/29	40.36	496	22,512	23,008	54,737	14,316	110,528	4,746	18,984
05/30	40.17	1,376	30,378	31,754	86,491	15,627	126,155	6,924	27,696
05/31	40.13	1,616	28,764	30,380	116,871	13,707	139,862	8,802	35,208
06/01	40.12	1,080	32,022	33,102	149,973	15,725	155,587	6,036	24,144
06/02	40.16	2,016	34,188	36,204	186,177	14,218	169,805	7,998	31,992
06/03	40.25	1,352	34,020	35,372	221,549	14,088	183,893	8,034	32,136
06/04	40.46	1,520	21,690	23,210	244,759	12,992	196,886	5,658	22,632
06/05	40.93	1,360	18,318	19,678	264,437	14,123	211,009	6,030	24,120
06/06	41.42	2,656	13,677	16,333	280,770	11,998	223,006	3,369	13,476
06/07	41.74	3,824	11,034	14,858	295,628	13,160	236,166	3,216	12,864
06/08	41.70	1,904	14,382	16,286	311,914	13,782	249,949	3,114	12,456
06/09	41.39	1,752	11,352	13,104	325,018	11,870	261,819	3,414	13,656
06/10	41.14	1,384	11,880	13,264	338,282	10,636	272,455	3,390	13,560
06/11	41.26	2,856	11,022	13,878	352,160	9,710	282,166	3,198	12,792
06/12	41.53	2,368	12,620	14,988	367,148	8,588	290,753	2,466	9,864
06/13	41.73	1,944	16,860	18,804	385,952	7,489	298,242	4,294	17,176
06/14	41.80	1,432	11,592	13,024	398,976	7,313	305,554	3,714	14,856
06/15	41.79	2,368	12,620	14,988	413,964	7,738	313,292	1,854	7,416
06/16	41.73	1,376	9,264	10,640	424,604	7,544	320,837	4,294	17,176
06/17	42.06	1,160	8,778	9,938	434,542	7,470	328,306	3,102	12,408
06/18	42.23	456	6,720	7,176	441,718	7,234	335,541	1,926	7,704
06/19	42.28	656	5,502	6,158	447,876	7,468	343,008	1,638	6,552
06/20	42.45	1,088	7,428	8,516	456,392	7,101	350,109	1,878	7,512
06/21	42.67	1,504	8,226	9,730	466,122	6,915	357,024	2,196	8,784
06/22	42.78	608	5,340	5,948	472,070	6,628	363,652	1,686	6,744
06/23	42.73	1,440	7,092	8,532	480,602	6,194	369,846	2,028	8,112
06/24	42.65	2,680	9,300	11,980	492,582	6,148	375,995	2,994	11,976
06/25	42.62	1,600	9,510	11,110	503,692	6,058	382,053	2,502	10,008
06/26	42.50	1,864	11,340	13,204	516,896	6,758	388,811	2,076	8,304
06/27	42.41	1,888	16,176	18,064	534,960	6,789	395,600	2,856	11,424
06/28	42.40	1,248	18,762	20,010	554,970	6,627	402,226	4,536	18,144
06/29	42.47	1,280	17,010	18,290	573,260	6,487	408,713	5,706	22,824
06/30	42.57	1,120	13,116	14,236	587,496	5,983	414,696	3,672	14,688
07/01	42.66	832	14,478	15,310	602,806	5,651	420,347	4,020	16,080
07/02	42.81	1,664	11,574	13,238	616,044	5,221	425,568	4,008	16,032
07/03	42.71	2,656	12,420	15,076	631,120	5,337	430,906	3,174	12,696
07/04	42.52	1,424	24,414	25,838	656,958	5,416	436,322	5,172	20,688
07/05	42.59	2,520	25,596	28,116	685,074	5,500	441,822	9,708	38,832
07/06	42.73	3,728	17,010	20,738	705,812	5,550	447,372	6,330	25,320
07/07	42.69	1,536	12,948	14,484	720,296	5,243	452,616	2,520	10,080
07/08	42.58	1,800	12,306	14,106	734,402	5,302	457,917	3,474	13,896
07/09	42.63	1,176	9,582	10,758	745,160	5,370	463,287	2,298	9,192

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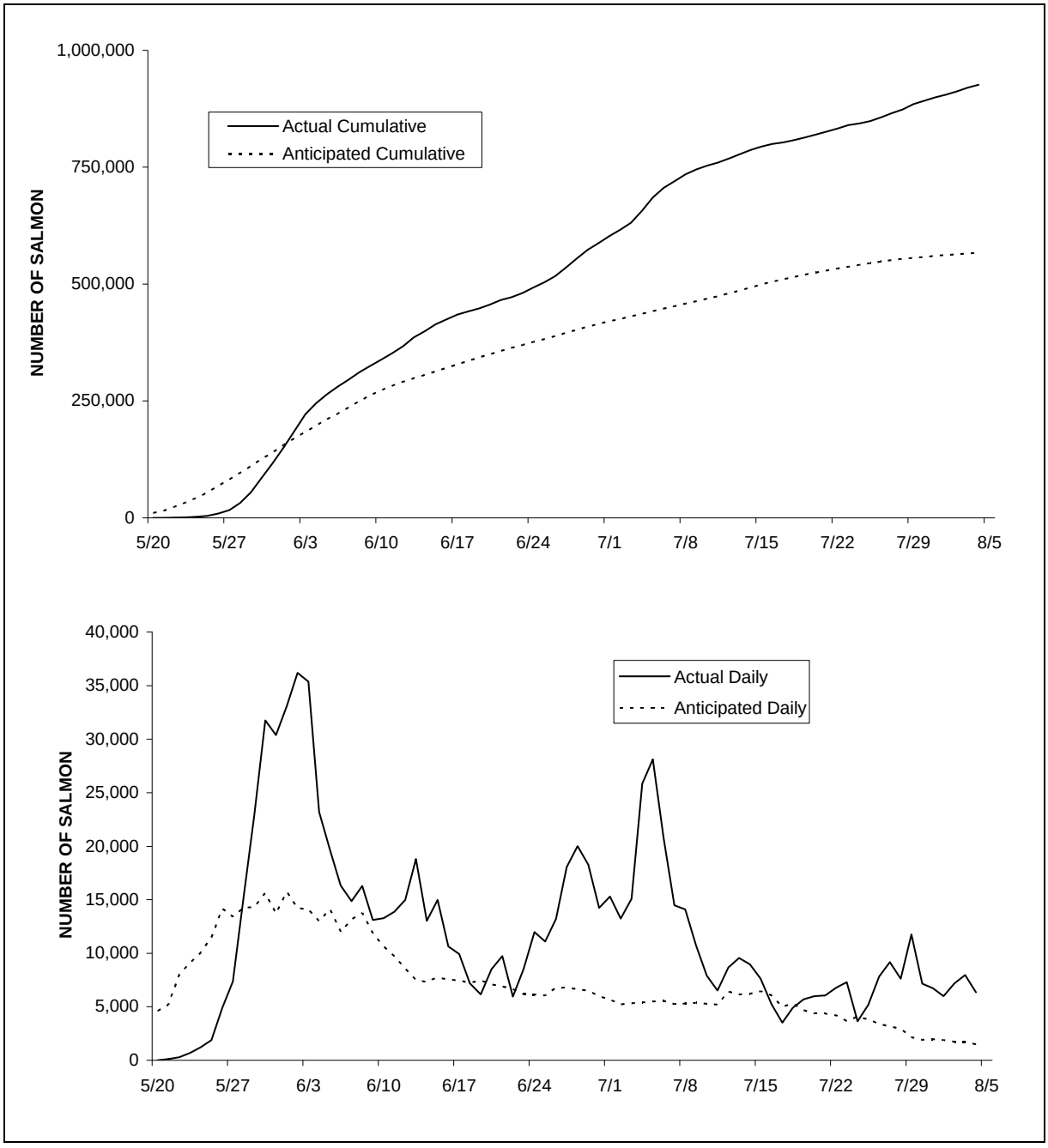
Appendix A6.–Page 2 of 2.

		Estimated Daily Escapement				Minimum Escapement Objective			
Date	Water Level (m)	North Bank	South Bank	Daily	Cumulative	Daily	Cumulative	0600 Count	Projected Daily
07/09	42.63	1,176	9,582	10,758	745,160	5,370	463,287	2,298	9,192
07/10	42.75	1,456	6,450	7,906	753,066	5,299	468,586	2,010	8,040
07/11	42.65	736	5,784	6,520	759,586	5,217	473,804	1,398	5,592
07/12	42.46	1,600	7,062	8,662	768,248	6,407	480,211	1,824	7,296
07/13	42.34	1,480	8,070	9,550	777,798	6,147	486,357	2,112	8,448
07/14	42.31	1,664	7,302	8,966	786,764	6,223	492,581	2,022	8,088
07/15	42.35	1,376	6,246	7,622	794,386	6,447	499,028	1,674	6,696
07/16	42.48	848	4,392	5,240	799,626	6,075	505,102	1,398	5,592
07/17	42.61	696	2,820	3,516	803,142	5,008	510,110	588	2,352
07/18	42.70	1,240	3,666	4,906	808,048	5,283	515,393	684	2,736
07/19	43.10	864	4,830	5,694	813,742	4,678	520,071	1,710	6,840
07/20	42.80	744	5,244	5,988	819,730	4,356	524,427	1,548	6,192
07/21	42.91	1,520	4,536	6,056	825,786	4,367	528,794	1,488	5,952
07/22	43.00	1,648	5,124	6,772	832,558	4,193	532,987	1,602	6,408
07/23	43.07	856	6,444	7,300	839,858	3,670	536,658	1,500	6,000
07/24	43.03	984	2,652	3,636	843,494	4,091	540,749	1,194	4,776
07/25	42.93	1,040	4,152	5,192	848,686	3,821	544,570	864	3,456
07/26	42.72	2,400	5,418	7,818	856,504	3,378	547,948	2,250	9,000
07/27	42.56	2,304	6,858	9,162	865,666	3,174	551,122	2,340	9,360
07/28	42.55	1,872	5,742	7,614	873,280	2,929	554,051	1,026	4,104
07/29	42.59	3,952	7,818	11,770	885,050	2,161	556,212	2,106	8,424
07/30	42.71	2,200	4,962	7,162	892,212	1,909	558,121	1,674	6,696
07/31	42.87	1,240	5,490	6,730	898,942	1,963	560,084	642	2,568
08/01	42.89	1,720	4,266	5,986	904,928	1,886	561,971	1,182	4,728
08/02	42.85	1,784	5,394	7,178	912,106	1,739	563,710	1,230	4,920
08/03	42.78	1,456	6,516	7,972	920,078	1,723	565,433	2,316	9,264
08/04	42.71	1,920	4,440	6,360	926,438	1,485	566,918	1,854	7,416



Appendix A7.–Anticipated versus actual daily and cumulative salmon escapement, Miles Lake sonar, 2007.

Appendix A8.–Salmon escapement at the Miles Lake Sonar, 1978-2007.

Year	Total	Rank
1978	107,011	30
1979	237,173	29
1980	276,538	28
1981	535,263	22
1982	467,306	26
1983	545,724	20
1984	536,806	21
1985	436,313	27
1986	508,600	23
1987	483,478	25
1988	488,398	24
1989	607,797	14
1990	581,859	18
1991	579,435	19
1992	601,952	15
1993	833,387	8
1994	713,491	11
1995	599,215	16
1996	906,867	4
1997	1,148,079	1
1998	866,957	5
1999	850,951	6
2000	587,497	17
2001	833,569	7
2002	819,790	10
2003	691,652	12
2004	665,660	13
2005	830,768	9
2006	959,706	2
10-Year Average	825,463	
2007	926,438	3

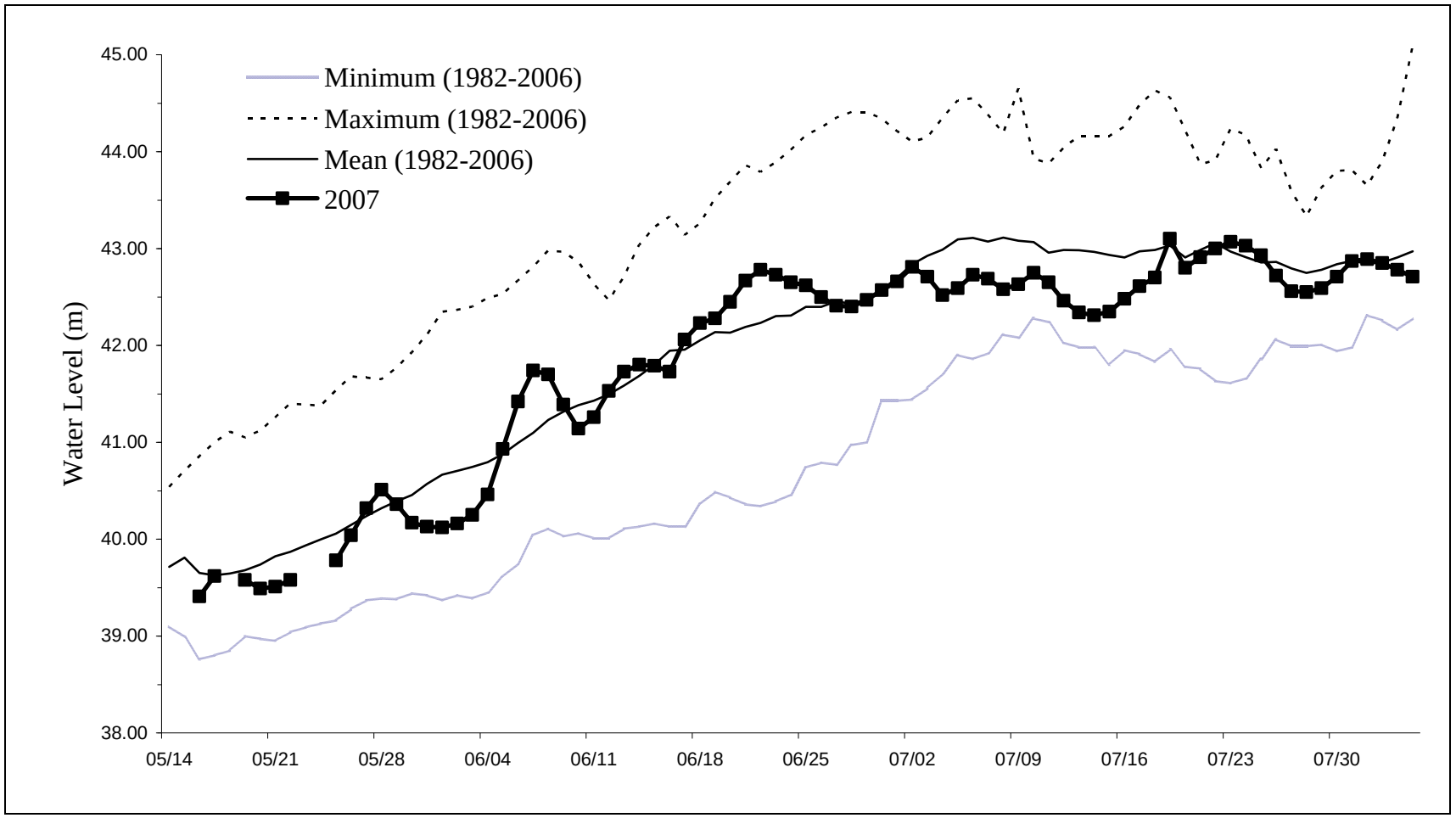
Appendix A9.–Anticipated and actual semi-weekly harvest and escapement of Chinook and sockeye salmon in the Copper River District drift gillnet fishery, 2007.

Semi-Weekly Date		Fishing Time (Hours)	Anticipated Sockeye salmon Harvest [a]	Actual Sockeye salmon Harvest	Anticipated Chinook salmon Harvest [a]	Actual Chinook salmon Harvest	Anticipated Salmon Cumulative Escapement [b]	Actual Salmon Cumulative Escapement [c]
05/12	Sat	0	0	na	0	na	NA	NA
05/16	Wed	12	21,497	22,088	4,121	1,564	977	NA
05/19	Sat	12	31,096	74,865	4,498	2,433	10,532	NA
05/23	Wed	12	100,330	109,188	8,095	3,562	42,892	2,316
05/26	Sat	0	94,325	na	4,945	na	81,952	16,497
05/30	Wed	12	90,618	256,559	4,715	6,796	139,862	116,871
06/02	Sat	24	75,395	216,860	3,969	7,840	183,893	221,549
06/06	Wed	24	102,490	73,925	4,710	1,769	236,166	295,628
06/09	Sat	36	43,733	88,308	2,226	2,675	272,455	338,282
06/13	Wed	36	42,610	140,909	2,280	3,755	305,554	398,976
06/16	Sat	60	40,078	118,370	1,420	3,365	328,306	434,542
06/20	Wed	48	44,841	124,379	1,203	2,401	357,024	466,122
06/23	Sat	48	32,685	114,026	450	1,309	375,995	492,582
06/27	Wed	24	61,081	58,025	693	531	402,226	554,970
06/30	Sat	24	41,279	38,727	241	362	420,347	602,806
07/04	Wed	48	57,342	65,466	277	300	441,822	685,074
07/07	Sat	60	47,387	69,112	167	172	457,917	734,402
07/11	Wed	48	63,012	23,121	106	48	480,211	768,248
07/14	Sat	60	40,462	59,139	49	84	499,028	794,386
07/18	Wed	48	43,395	44,930	43	41	520,071	813,742
07/21	Sat	60	23,458	41,895	22	30	532,987	832,558
07/25	Wed	48	19,654	26,191	20	15	547,948	856,504
07/28	Sat	60	8,474	47,729	4	21	556,212	885,050
08/01	Wed	48	10,807	39,186	5	7	563,710	912,106
08/04	Sat	60	5,166	22,416	2	7		
08/08	Wed	48	5,114	9,256	2	2		
08/11	Sat	60	3,394	5,760	3	2		
08/15	Wed	24	3,763	3,953	3	1		
08/18	Sat	0	1,335	3,258	3	2		
08/22	Wed	24	879	2,607	0	0		
08/25	Sat	0	775	na	1	na		
08/29	Wed	24	152	819	0	0		
09/01	Sat	0	237	na	0	na		
09/05	Wed	24	115	613	0	1		
09/08	Sat	0	80	na	0	na		
09/12	Wed	24	11	51	0	0		
09/15	Sat	0	17	na	0	na		
09/19	Wed	24	6	41	0	0		
09/22	Sat	24	0	1	0	0		
09/26	Wed	60	0	0	0	0		
09/29	Sat	60	0	0	0	0		
10/03	Wed	84	0	0	0	0		
10/06	Sat	60	0	0	0	0		
10/10	Wed	84	0	0	0	0		
Total		1,116	1,157,091	1,901,773	44,274	39,095	563,710	912,106

[a] Based on average historical harvests for comparable dates (1992-1999).

[b] Based on historical escapements at Miles Lake sonar, includes upriver "other" salmon escapement component and sockeye salmon broodstock for the Gulkana Hatchery. Does not include sockeye salmon escapements for the Copper/Bering delta streams.

[c] Escapement estimate from sonar counters at Miles Lake. Sonar counts ended August 4.



Appendix A10.–Measured water stage height at the Million Dollar Bridge, 2007.

Appendix A11.–Aerial escapement indices by statistical week and location for sockeye salmon returning to the Copper River Delta, 2007.

	Weekly Escapement Indices (Statistical Week Ending Date Listed)																					
Survey System [a]	6/16	6/23	6/30	7/7	7/14	7/21	7/28	8/4	8/11	8/18	8/25	9/1	9/8	9/15	9/22	9/29	10/6	10/16	10/20	10/27	Site [c]	System [d]	Anticipated (by drainage)
Eyak River																							
Eyak River	20	541	120	1,770		3,690*		65	1,150	230	50	2	0		0	0	0	0		0	3,690	30,650	9,972 – 23,571
West Shore Beaches	30	0	470	400		1,650*		70	1,150	2,150	760	320	672		0	0	10	0		0	1,650		
East Shore Beaches	40	50	4,460	4,510		12,100*		3,000	7,150	8,230	4,683	6,050	1,750		320	100	40	0		0	12,100		
Middle Arm Beaches [b]	150	570	1,530	2,020		2,320		150	3,740	9,200*	8,200	5,100	3,400		2,100	1,010	310	60		10	9,200		
North Shore Beaches	0	0	0	2,000*		1,030		50	1,460	0	320	210	510		230	20	0	0		0	2,000		
Hatchery Creek Delta	10	10	40	20		40		300	40	150	440	40	570*		240	290	0	0		0	570		
Hatchery Creek	0	20	0	20		110		50	0	20	0	410*	50		55	20	60	40		0	410		
Power Creek Delta	0	10	0	50		240		800*	31	10	170	440	250		100	20	0	0		0	800		
Power Creek	0	0	0	0		0		60	20	50	230*	120	150			30	10	0		0	230		
Ibeck Creek																							
Ibeck Creek	ns	ns	0	ns		10		ns	116	62	142*	130	80		60	50	11	2		0	142	142	
Alaganik Slough																							
Alaganik Slough	0	0	0	0		0		0	0	0	0	0	0		0	0	0	0		0	0	6,370	8,359 – 19,758
McKinley Lake	0	0	220	350		3,740*		2,730	1,913	1,420	2,030	2,510	1,591		1,600	900	300	130		50	3,740		
Salmon Cr West Fork	0	0	0	0		0		110	410	420	301	1,600*	490		0	0	0	0		0	1,600		
Salmon Cr East Fork	0	0	0	0		0		8	0	550	740	1,030*	220		190	190	50	0		0	1,030		
26/27 Mile Creek																							
26/27 Mile Creek	0	0	30	0		82		60	700*	91	50	60	410		0	20	0	0		0	700	700	2,182 – 5,157
39 Mile Creek																							
39 Mile Creek	0	0	0	0		10		0	ns	2,430	2,710*	2,370	1,080		320	0	ns	ns		ns	2,710	2,710	5,772 – 13,642
Goat Mountain																							
Goat Mountain Cr	0	0	0	0		40		363*	ns	20	90	110	140		0	0	0	ns		ns	363	363	549 – 1,298
Pleasant Creek																							
Pleasant Creek	210	300	2,240	4,860*		2,690		65	280	10	30	20	0		0	0	0	0		0	4,860	4,860	1,075 – 2,542
Martin River																							
Martin River - Lower	0	0	ns	3620*		1,100		50	230	0	250	ns	0		0	0	0	0		0	3,620	3,620	
Ragged Point River	0	50	700	0		10			670	1,500*	120	120	127		0	0	0	0		0	1,500	3,870	
Ragged Pt Lake Outlet	ns	ns	0	ns		0			30	70	110	310*	130		20	0	10	0		0	310		
Ragged Point Lake	ns	ns	0	ns		0			300	300	1,690	2,060*	1,460		1,220	430	140	140		40	2,060		
Martin R. - Upper [b]	10	41	2,350	1,230		5,650*		80	640	540	0	300	130		0	0	0	0		0	5,650	5,650	
Martin Lake Outlet	0	10	230*	0		0		10	0	0	0	0	0		0	0	0	0		0	230	4,200	17,598 – 41,596
Martin Lake	0	0	2,290*	1,420		1,000		500	780	540	0	100	70		150	0	0	31		170	2,290		
Martin Lake Feeders	ns	0	410	1,110		1,140		175	1,680*	300	30	60	30		0	0	0	0		0	1,680		
Pothole River	ns	ns	ns	260		40		20	610*	260	160	80	360		0	0	40	40		0	610	2,430	
Pothole Lake	ns	ns	0	10		100		0	10	40	800	580	872		600	770	980	1,660		1820*	1,820		
Little Martin River	0	130*	0	20		0		20	0	0	12	0	0		0	0	0	0		0	130	450	
Little Martin Lake	0	0	10	0		120		30	190	160	320*	210	270		170	80	40	20		0	320		
Tokun																							
Tokun Springs	0	0	0	0		50		25	150*	210	70	150	20		0	0	0	0		0	150	16,920	5,352 – 12,649
Tokun River	40	172	3,480	1,620		1,170*		354	271	140	160	110	570		30	40	0	0		0	1,170		
Tokun Lake Outlet	0	0	0	0		300*		30	0	0	0	0	0		0	0	0	0		0	300		
Tokun Lake	1,800	110	4,200	3,520		15,300*		110	2,110	2,160	4,970	3,520	5,150		9,260	7,170	3,780	2,742		740	15,300		

-continued-

	Weekly Escapement Indices (Statistical Week Ending Date Listed)																						
Survey System [a]	6-16	6/23	6/30	7/7	7/14	7/21	7/28	8/4	8/11	8/18	8/25	9/1	9/8	9/15	9/22	9/29	10/6	10/13	10/20	10/27	Site [c]	System[d]	Anticipated (by drainage)
Martin River Slough																							
Martin River Slough	0	50	5,350*	2,111		1,770		2,180	1,851	850	233	140	10		50	10	0	0		0	5,350	5,350	4,141 – 9,787
Total	2,310	2,064	28,130	30,921		55,502		11,465	27,682	32,113	29,871	28,262	20,562		16,715	11,150	5,781	4,865		2,830		88,285	
Lower SEG	7,270	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	10,561	6,776	4,373	2,611					55,000
Average SEG (average anticipated escapement)	11,157	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	16,206	10,398	6,711	4,006					84,400
Upper SEG	17,184	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	24,962	16,016	10,337	6,170					130,000

Note: The abbreviations used in the table have the following meaning: NS = no survey, NC = surveyed but no count due to poor conditions. The + sign after some counts indicates that the count is the minimum estimate seen in less than ideal conditions. The symbol * indicates that this survey count was used as the peak survey for the site without duplication of counts for survey sites along migratory corridors (see footnote c).

[a] The survey sites represent most of the known sockeye salmon spawning locations in the Copper River Delta drainage. Weather permitting, the sites are surveyed weekly. 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 for coastal stocks, but have been used for that purpose in the absence of any other escapement estimating method.

[b] The sites typically have very protracted run timing or two temporally segregated spawning populations at the same sites. Aerial counts from more then one day may be astricted and used in the escapement estimate if the surveyor indicates that these counts represented different fish.

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

Appendix A12.–Copper River and Bering River area sockeye salmon escapement indices, 1997-2007.

Stream/Lake [a,b]	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	10-yr Average	2007
Eyak Lake	[c]	16,300	18,100	20,500	7,400	13,375	12,900	14,300	9,130	26,290	15,366	28,640
Hatchery Creek	[c]	3,300	200	2,800	950	1,700	0	500	290	2,700	1,382	980
Power Creek	[c]	1,500	1,400	6,700	2,450	1,600	850	1,500	566	2,320	2,098	1,030
Ibek Creek	[c]	[c]	50	[c]	1,500	0	475	2,300	500	620	778	142
McKinley Lake	8,500	11,300	400	2,850	2,080	4,200	3,200	4,500	360	4,306	4,170	3,740
Salmon Creek	3,100	3,300	7,100	4,220	9,650	4,900	1,800	7,400	7,260	4,660	5,339	2,630
26/27 Mile Creek	1,700	1,800	3,800	3,300	4,000	850	475	1,125	3,000	3,200	2,325	700
39 Mile Creek	9,300	11,500	12,000	6,500	9,000	10,000	7,800	2,600	2,900	2,700	7,430	2,710
Goat Mountain	350	300	60	60	5	70	0	700	1,250	1,450	425	363
Pleasant Creek	5,000	1,000	7,615	2,300	8,100	2,425	6,850	3,525	50	6,600	4,347	4,860
Martin River	1,100	2,700	2,800	2,650	200	700	3,425	2,275	800	1,570	1,822	9,270
Ragged Pt. River/Lake	4,400	4,800	5,900	3,600	2,900	3,375	4,750	1,975	500	3,050	3,525	3,870
Martin Lake	13,100	13,600	19,150	22,900	7,100	10,600	18,900	17,300	23,300	23,300	16,925	4,200
Pothole Lake	300	1,500	2,100	3,050	1,910	8,400	1,500	1,350	1,200	5,600	2,691	2,430
L. Martin Lake	470	750	1,800	830	825	2,540	2,175	1,610	1,500	600	1,310	450
Tokun Lake/River	5,750	8,950	7,600	6,485	5,695	6,500	3,600	3,775	1,800	4,280	5,444	16,920
Martin River Slough	4,000	4,900	10,900	9,300	7,300	4,500	4,450	2,650	4,000	5,650	5,765	5,350
Copper River Delta Total	57,070	87,500	100,975	98,045	71,065	75,735	73,150	69,385	58,406	98,896	79,023	88,285
Upper Copper River [d]	749,683	510,585	466,124	302,404	504,654	586,530	463,745	454,055	518,287	606,514	516,258	653,300
Copper River District Total	806,753	598,085	567,099	400,449	575,719	662,265	536,895	523,440	576,693	705,410	595,281	741,585
Bering River/Lake	[c]	21,600	39,030	21,050	7,750	19,540	32,075	22,550	19,890	9,310	21,422	8,550
Shepherd Creek	1,400	[c]	1,215	950	60	60	205	195	1,220	60	596	0
Stillwater Creek	700	400	950	320	320	350	375	500	0	140	406	450
Kushtaka Lake	65	500	1,100	700	293	265	185	15	230	61	341	40
Katalla River	700	900	3,900	1,200	400	4,500	17,000	1,875	9,550	5,100	4,513	12,130
Bering River Area Total	2,865	23,400	46,195	24,220	8,823	24,715	49,840	25,135	30,890	14,671	25,075	21,170
Copper/Bering River Total	809,618	621,485	613,294	424,669	584,542	686,980	586,735	548,575	607,583	720,081	620,356	762,755

[a] The escapement figures in this table are based on peak aerial survey estimates and sonar counts from a majority of known salmon spawning areas in the Copper and Bering River Delta. These indices are not intended to provide a true estimate of total escapement for the coastal stocks, but a comparable index based upon the best data currently available. An effort has been made to standardize the estimates across years.

[b] The areas in this table represent combined survey sites corresponding to the "system" designations for the current year survey results presented elsewhere in this 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 A13.–Aerial survey indices of sockeye salmon escapement to the upper Copper River drainage, 1996–2007.

	Yearly Survey Indices												10-Year Average
Location [a]	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	1983-1992 [b]
Fish Lake	4,800		4,900	1,880	5,000	5,000	125	1,300	0	281	7,250	1,066	6,418
Bad Crossing 1 & 2	780		7,800	195	19	2,000	157	90	30	5,120	620	1,683	2,604
Suslota Lake	4,100		1,060	0	3,000	2,500	1,500	2,750	1,975	1,230	1,300	30	1,416
Dickey Lake	0		350	11	0	1	0	0	10	55	185	71	115
Keg Creek	850	420	160	125	0	1	30	38	0	7	190	0	725
Mahlo Creek	3,800	11,800	12,300	325	1,000	400	5,000	6,850	500	1,950	5,000	14,512	2,648
St. Anne Creek	3,500	4,800	4,100	1,300	1,100	300	3,500	3,750	970	1,692	6,560	11,970	4,888
Fish Creek-Mentasta	400		1,400	450	800	3,500	900		[c]	3,330	3,700	323	963
Swede Lake	20		770	270	135	500	150	325	225	7	2,570	731	531
Tana River								250	[c]	[c]	1,392	312	1,345
Mentasta Lake	2,800		6,100	715	1,200	13,000	5,400	4,800	6,000	7,090	7,790	8,507	3,277
Tanada Lake				350	3,200	200	950	0	3,950	683	30	563	3,849
Salmon Creek				0	500	1,500	1,400	300	[c]	217	790	750	825
Paxson Inlet-Mud Creek	16,800		15,200	5,700	2,200	7,000	4,800	2,800	2,200	363	2,470	9,317	6,560
Mud Creek and Lake	240			20	30	300	30	75	5	145	310	2	172
Mendeltna Creek	1,250	400		120	2,800	800	1,875	1,200	50	318	700	473	2,470
Paxson Lake Outlet			200	1,800	1,000	200	140		5	155	270	324	2,661
Mud Creek.- Summit Lake			700	820	140	450	2,800	3,900	40	[c]	1,800	2,705	7,445
Long Lake									[c]		1,400	505	1,577
Tonsina Lake									0		20	20	1,080
Totals	39,340	17,420	55,040	14,081	22,124	37,652	28,757	28,428	15,960	22,643	44,347	53,864	51,569

[a] These escapement numbers are based on peak aerial survey estimates and weir counts from a majority of the known spawning areas in the upper Copper River drainage. These indices are not intended to provide a true estimate of escapement for these stocks, but a comparable index based upon the best data currently available. An effort has been made to standardize the indices across years; however, counts were obtained only as environmental conditions allowed and may not necessarily correspond to periods of peak abundance. Missing counts are generally a result of bad weather, high water or other factors that prevented surveys for that given year.

[b] The 1983-1992 average used for anticipated estimate.

[c] No survey flown.

Appendix A14.–Upper Copper River Chinook salmon aerial escapement index counts, 1977-2007.

		Copper River Upstream of Gulkana [a]		Tazlina Drainage [a]		Klutina Drainage [a]		Tonsina Drainage [a]		
Year	Gulkana River [b]	East Fork Chistochina R.	Indian River	Mendeltna Creek	Kiana Creek	St. Anne Creek	Manker Creek	Little Tonsina River	Greyling Creek	Total
1977	729	132	[c]	73	91	10	15	[c]	[c]	1,050
1978	618[d]	137	9	52[e]	125[e]	24[e]	20[e]	285[e]	92[e]	1,362
1979	764	810	29	5[e]	279[e]	16[e]	16[e]	285[e]	153[e]	2,357
1980	712	575	24	3[e]	247	8[e]	35 [e]	70[e]	66[e]	1,740
1981	77	120	[c]	51	191	19	33	191	107	789
1982	879[e]	1260	179	70[e]	200[e]	35[e]	49[e]	440[e]	124[e]	3,236
1983	589	575	41	12[e]	166	87	141	330	287	2,228
1984	1,331	577	17	26[d,e]	382[d]	89[d]	264[d]	568	279	3,533
1985	224	360	14	26[e]	91[e]	15[e]	22[e]	203[e]	58[e]	1,013
1986	1,484	618	[c]	76	328	182	251	424	224	3,587
1987	1,098	764	33	10	80	192	141	247	112	2,677
1988	831	709	[c]	25[e]	249	64	119	78	167	2,242
1989	2,009	750	7	187	345	90	165	68[e]	78	3,699
1990	1,171[e]	645	15[e]	323[e]	414[e]	43[e]	43	57	52[e]	2,763
1991	1,223[e]	925	18	310[d]	522[d]	130	107	59	159	3,453
1992	540	88	1	83[e]	79[e]	12[e]	14[e]	107	17[e]	941
1993	693	[c]	[c]	[c]	[c]	[c]	[c]	[c]	[c]	693
1994	786	508	47	120	430	250	75	4[e]	2[e]	2,222
1995	285[d]	37[e]	2[e]	32[e]	111[e]	26[e]	8[e]	25[e]	26[e]	552
1996	1,364[d]	450[d]	11[d]	360[d]	723[d]	117[d]	164[d]	25[d]	143[d]	3,357
1997	2,270	2,245[d]	270[d]	311[d]	693[d]	900[d]	466[d]	55[d]	330[d]	7,540
1998	1,407	740[d]	48	280[d]	700 [d]	515[d]	843[d]	60	527[d]	5,120
1999	934 [e]	82[e]	2[e]	38[e]	216[e]	486[e]	69[e]	93[e]	88[e]	2,008
2000	1,174	580	62	125	155[e]	70	54[e]	26[e]	104[e]	2,350
2001	556[e]	0[f]	0[f]	80[e]	154[e]	75[e]	24[e]	7[e]	73[e]	969
2002	2,087	956	27	220	240	130	130	139	164	4,093
2003	2,113	160[e]	4[e]	[c]	200[e]	85[e]	[c]	[c]	[c]	2,562
2004	3,175	38[e]	[c]	73[e]	180[e]	13[e]	9[e]	37[e]	[c]	3,525
2005	824	195	[h]	[h]	[g]	[c]	[c]	[h]	[h]	[h]
2006	[c]	[c]	[c]	[c]	[c]	[c]	[c]	[c]	[c]	[c]
2007	81	[c]	[c]	69	307	[c]	[c]	[c]	[c]	[c]
1977-1986[g]	725	516	45	67	234	77	141	378	224	2,407
1987-1996[g]	951	605	20	197	392	141	116	96	132	2,650
1997-2003[g]	1,810	1,130	102	234	544	404	480	85	340	5,129

Note: Data in this table have been modified from previous year's reports. Past years table reporting accounted for estimates from outside of defined survey reaches and included extrapolated data.

[a] Some data published in Brady et al. 1991, but the remainder is unpublished.

[b] Gulkana River index counts are those upstream and including the West Fork.

[c] No aerial survey conducted or Chinook salmon counts not conducted.

[d] Counts determined by two surveyors. In years where more than one surveyor was used, counts from the most experienced surveyor are listed.

[e] Survey flown outside of July 17-31.

[f] Visibility poor due to high water conditions.

[g] Averages exclude years when surveys were flown outside July 17-31.

[h] Surveys of the Tazlina, Tonsina and Indian river drainages discontinued following 2004.

Appendix A15.–Estimated age and sex composition of sockeye salmon harvested in the Copper River District commercial common property drift gillnet fishery, 2007.

Strata Combined	05/14 - 09/27	Brood Year and Age Class [a]							
Sampling dates	05/15 - 08/01	2003		2002		2001		2000	
Sample size	4,831	0.3	1.2	1.3	2.2	1.4	2.3	2.4	Total
Sex Composition									
Female	Percentage of sample	1.1	1.9	37.6	0.3	0.1	3.4	0.1	44.4
	Number in harvest	21,008	35,778	715,761	4,806	1,935	64,245	1,438	844,971
Male	Percentage of sample	1.4	3.0	45.3	0.2	0.4	5.1	0.0	55.5
	Number in harvest	26,540	57,341	862,018	4,386	7,400	97,363	926	1,055,974
Total	Percentage of sample	2.5	4.9	83.0	0.5	0.5	8.5	0.1	100.0
	Number in harvest	47,549	93,118	1,578,207	9,193	9,335	162,007	2,364	1,901,773
	Standard error	4,402	6,030	10,243	1,997	1,996	7,278	982	

[a] Fish with resorbed scales have been removed. Strata #1 had 1, #2 - 1, #6 - 2, #7 - 16, #8 - 54, #9 - 145.

Appendix A16.–Temporally stratified age and sex composition of Chinook salmon harvested in the Copper River District commercial common property drift gillnet fishery, 2007.

Strata Combined	05/14 - 09/27	2003			2002		2001		2000	
Sampling dates	05/14 - 06/13	0.3	1.2	2.1	1.3	2.2	1.4	2.3	2.4	Total
Sample size	2290									
Sex Composition										
Female	Percentage of sample	0.1	3.5	0.1	31.2	0.4	11.2	0.4	0.2	47.0
	Number in harvest	24	1,375	32	12,181	173	4,364	154	64	18,366
Male	Percentage of sample	0.0	5.6	0.1	32.4	0.2	13.9	0.3	0.2	52.8
	Number in harvest	0	2,176	56	12,650	98	5,451	123	91	20,645
Total	Percentage of sample	0.1	9.1	0.2	63.6	0.7	25.2	0.7	0.4	100.0
	Number in harvest	24	3,551	87	24,881	270	9,849	276	155	39,095
	Standard error	24	266	51	442	78	399	68	54	

Appendix A17.–Estimated age and sex composition of coho salmon harvested in the Copper River District commercial common property drift gillnet fishery, 2007.

Strata Combined	05/14	-	09/27	Brood Year and Age Class			
Sampling dates	08/28	-	09/12	2004	2003	2002	
Sample size	817			1.1	2.1	3.1	Total
Sex Composition							
Female	Percentage of sample			28.8	18.8	0.2	47.8
	Number in harvest			33,707	22,036	288	56,031
Male	Percentage of sample			30.5	21.6	0.1	52.2
	Number in harvest			35,731	25,306	114	61,151
Total	Percentage of sample			59.3	40.4	0.3	100.0
	Number in harvest			69,438	47,342	402	117,182
	Standard error			2,057	2,054	237	

Appendix A18.–Total estimated coho salmon run to the Copper River by end user or destination with previous 10-year average, 1997-2007.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	10-year Average	2007
Commercial harvest[a]	18,656	108,232	153,061	304,944	251,473	504,223	363,489	467,859	263,465	318,285	275,369	117,182
Commercial, homepack[a]	0	14	36	0	24	187	0	2	119	137	52	340
Commercial, donated[a]	0	0	0	0	5,141	0	0	0	0	0	514	0
Educational drift gillnet permit[a]	0	0	0	0	0	0	0	0	0	0	0	0
Subsistence (Cordova, drift gillnet)[b]	1,777	680	682	44	70	28	36	46	15	1	338	15
Federal Subsistence (PWS/Chugach National Forest, dipnet, spear, rod and reel)									141	100	121	68
Subsistence (Batzulnetas, fish wheel, dip net or spear)[b]	0	0	0	0	0	na	na	0	0	0	0	0
Subsistence (Glennallen Subdistrict, dip net or fish wheel)[b]	177	507	1,053	511	1,067	524	450	541	97	210	514	231
Federal Subsistence (Glennallen subdistrict, dipnet or fish wheel)						81	152	152	70	28	97	34
Personal Use (Chitina Subdistrict, dipnet)[b]	157	2,100	1,979	3,540	2,306	1,712	1,775	2,304	1,562	1,886	1,932	1,492
Federal Subsistence (Chitna subdistrict, dipnet)						0	70	18	0	20	22	40
Copper River delta sport harvest[c]	2,729	3,941	6,954	4,155	12,052	6,525	14,166	14,512	10,168	5,745	8,095	10,223
Upriver sport harvest[c]	96	289	24	324	92	384	277	131	72	54	174	184
Upriver spawning escapement[d]	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown
Copper River delta spawning escapement[e]	115,120	79,700	92,450	86,260	82,192	179,630	144,360	199,960	202,164	178,540	136,038	107,640
Total estimated coho salmon run size	138,712	195,463	256,239	399,778	354,417	693,294	524,775	685,525	477,873	505,006	423,108	237,449

[a] Numbers are from fish ticket data.

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

[c] The 2007 delta and upriver Sport harvest estimates are unavailable at this time, harvest estimates shown are 5 year harvest averages.

[d] Numbers of upriver coho salmon spawners are unavailable at this time.

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

Appendix A19.–Anticipated and actual weekly harvest and escapement of coho salmon in the Copper River District drift gillnet fishery, 2007.

Week Ending Date	Stat. Week	Fishing Time Time (hours)	Actual Harvest	Anticipated Harvest [a]	Actual Aerial Index [b]	Anticipated Index [c]
05/12	19	0	0	0		
05/19	20	12 and 12	1	1		
05/26	21	12	0	10		
06/02	22	12, 12 and 12	55	18		
06/09	23	12, 12 and 12	2	28		
06/16	24	36 and 60	151	43		
06/23	25	48 and 48	275	102		
06/30	26	24 and 24	381	199		
07/07	27	48 and 60	926	418		
07/14	28	48 and 60	963	1,080		
07/21	29	48 and 60	2,428	1,647		
07/28	30	48 and 60	2,481	2,284	0	134
08/04	31	48 and 60	2,475	5,341	58	1,914
08/11	32	48 and 60	3,269	16,053	ns	3,164
08/18[d]	33	24 and 24	3,431	31,295	5,841	9,134
08/25	34	24	8,909	50,567	8,711	14,528
09/01	35	24	21,534	60,161	20,670	25,229
09/08	36	24	22,700	56,875	17,752	33,510
09/15	37	24	23,215	33,197	ns	28,571
09/22	38	24 and 24	21,877	13,157	37,056	26,418
09/29	39	24 and 60	2,109	4,763	27,752	24,284
10/06[e]	40	60 and 84	0	4,763	21,170	27,962
10/13[f]	41	60 and 84	0	0	18,223	13,241
10/20	42	0	0	0	ns	0
10/27	43	0	0	0	15,668	0
Season Totals		1,560	117,182	282,001		

[a] Based on average historical harvests for comparable dates (1973-2005).

[b] Coho salmon surveys were actively conducted weather permitting beginning July 28.

[c] Based on average historical aerial escapement surveys for comparable dates (1984-1992).

[d] Coho salmon directed management began on August 20.

[e] Actual period duration was 10/01-10/7, having a 19-hour period of overlap in the following statistical week.

[f] Actual period duration was 10/8-10/14, having a 19-hour period of overlap in the following statistical week.

Appendix A20.–Aerial escapement indices by statistical week and location for coho salmon returning to the Copper River Delta, 2007.

		Weekly Escapement Indices (Statistical Week Ending Date Listed)																
Drainage	Survey System	7/28	8/4	8/11	8/18	8/25	9/1	9/8	9/15	9/22	9/29	10/6	10/13	10/20	10/27	Site [c]	System[d]	Anticipated, (by drainage)
Eyak River	Eyak River		0		630	2,080	3,770*	3,040		730	680	790	1,072		60	3,770	7,320	6,916
	East Shore Beaches		0		0	0	0	0		0	0	240*	180		80	240		
	West Shore Beaches		0		0	0	0	0		1800*	1,000	650	1,000		610	1,800		
	Middle Arm Beaches		0		0	0	0	0		0	0	0	0		0	0		
	North Shore Beaches		0		0	0	0	0		0	0	0	0		0	0		
	Hatchery Creek Delta		0		0	0	0	0		400	220	100	0		430*	430		
	Hatchery Creek		0		0	0	0	0		55	40	280*	160		40	280		
	Power Creek Delta		0		0	0	0	0		30	30	300*	140		80	300		
	Power Creek		0		0	0	0	0		0	140	60	60		500*	500		
Ibeck Creek	Ibeck Creek		ns		620	2,511	2,460	2,880		13,200*	8,370	6,740	5,143		5,803	13,200	13,200	6,227
Scott River	Scott Lake		ns		0	0	0	0		0	0	0	10*		0	10	1,520	
	Scott River		ns		ns	0	0	0		100	0	0	41		910*	910		
	Elsner Lake [b]		ns		ns	0	0	0		0	600*	50	40		0	600		
Alaganik Slough	Alaganik Slough		0		0	10	280*	40		0	60	10	0		0	280	1,260	4,020
	18/20 Mile Creek		0		21	40	0	0		320	550*	270	40		10	550		
	McKinley Lake		0		0	0	0	0		280*	0	30	0		0	280		
	Salmon Cr West Fork		0		0	0	0	0		100	110*	100	100		10	110		
	Salmon Cr East Fork		0		0	0	0	0		0	0	0	0		40*	40		
26/27 Mile Creek	26/27 Mile Creek		13		0	0	0	0		330	260	250	280		480*	480	480	829
39 Mile Creek	39 Mile Creek		10		0	60	110	670		3,300*	2,410	ns	ns		ns	3,300	3,300	3,831
Goat Mountain Cr.	Goat Mountain Creek		0		0	10	30	10		1,400*	910	100	ns		ns	1,400	1,400	1,181
Pleasant Creek	Pleasant Creek		0		0	0	240	500*		30	30	0	80		41	500	500	
Martin River	Martin River - Lower		5		870*	580	550	710		191	170	320	30		24	870	870	
	Ragged Point River		5		0	60	130	20		160*	112	90	42		40	160	260	849
	Ragged Pt Lake Outlet		5		0	0	0	0		40*	20	0	2		0	40		
	Ragged Point Lake		0		0	0	0	0		60*	40	0	20		20	60		
	Martin River - Upper		10		610	330	2,210	1,882		7,960*	3,900	4,070	4,413		460	7,960	7,960	6,522
	Martin Lake Outlet		0		0	0	10	0		400*	20	0	0		0	400	5,450	1,936
	Martin Lake		10		10	0	60	0		30	50	0	350*		30	350		
	Martin Lake Feeders		0		0	600	4,700*	3,050		440	270	760	690		360	4,700		
	Pothole River		0		0	0	70	0		150	300	540	430		650*	650	870	1,370
	Pothole Lake		0		0	0	0	0		220*	40	30	130		0	220		
	Little Martin River		0		0	20	60	60		2,660*	1,880	2,430	1,130		2,380	2,660	2,700	5,413
	Little Martin Lake		0		0	0	0	0		40*	0	0	0		0	40		
	Tokun Springs		0		0	0	20	10		130*	70	60	60		50	130	960	1,376
	Tokun River		0		120	330	200	150		260	830*	350	190		100	830		
	Tokun Lake Outlet		0		0	0	0	0		0	0	0	0		0	0		
	Tokun Lake		0		0	0	0	0		0	0	0	0		0	0		
Martin R. Slough	Martin River Slough		0		2,960	2,080	5,770*	4,730		3,430	4,640	2,550	2,390		2,460	5,770	5,770	9,531

-continued-

	Weekly Escapement Indicies (Statistical Week Ending Date Listed)																
Total Drainage	7/28	8/4	8/11	8/18	8/25	9/1	9/8	9/15	9/22	9/29	10/6	10/13	10/20	10/27	Site [c]	System [d]	Anticipated, (by drainage)
Copper River Aerial Survey Daily Total	0	58	0	5,841	8,711	20,670	17,752	0	38,246	27,752	21,170	18,223	0	15,668		53,820	
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
Ave 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

Note: The abbreviations used in the following table have the following meaning: NS = no survey, NC = surveyed but no count due to poor conditions. The symbol * indicates that this survey count was used as the peak survey for the site.

[a] The survey sites represent most of the known coho salmon spawning locations in the Copper River Delta drainage. Weather permitting, the sites are surveyed weekly. 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 for coastal stocks but have been used for that purpose in the absence of any other escapement estimating method.

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

[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.

Appendix A21.–Copper River Delta and Bering River coho salmon escapement indices, 1997-2007.

Stream/Lake [a,b]	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	Previous 10-yr Average	2007
Eyak Lake	6,800	2,550	1,250	2,130	7,800	17,425	10,050	12,700	2,812	1,940	6,546	5,810
Hatchery Creek	1,400	1,200	300	1,900	450	1,400	0	1,450	0	160	826	710
Power Creek	2,700	4,900	2,700	1,450	480	2,000	1,500	500	40	360	1,663	800
Ibeck Creek	4,700	1,500	4,600	7,000	14,000	23,900	26,000	32,000	34,900	36,300	18,490	13,200
Scott and Elsner River [c]	2,200	750	2,500	300	600	2,400	125	475	1,400	200	1,095	1,520
18/20 Mile	3,300	1,300	610	420	420	1,450	205	1,560	610	740	1,062	550
McKinley Lake	1,100	400	50	120	800	2,200	0	275	140	1,400	649	280
Salmon Creek	2,500	2,100	3,080	2,600	200	1,100	725	6,100	2,250	200	2,086	150
26/27 Mile	2,300	700	2,610	1,000	400	240	275	850	820	60	926	480
39 Mile	6,100	2,100	3,650	5,000	1,800	4,500	1,250	3,120	9,900	4,400	4,182	3,300
Goat Mountain	1,400	800	650	430	330	160	125	450	4,500	3,100	1,195	1,400
Pleasant Creek [c]	620	450	1,220	45	210	0	2,000	3,950	3,790	7,030	1,932	500
Martin River	NC [d]	6,250	3,900	4,500	3,755	13,325	10,200	11,600	1,050	9,100	7,076	8,830
Ragged Point River/Lake	80	850	275	330	440	3,400	375	575	650	360	734	260
Martin Lake	NC [d]	300	600	1,350	311	1,850	6,300	4,475	24,100	2,900	4,687	4,775
Pothole Lake	60	1,500	600	245	390	3,400	4,000	500	140	120	1,096	870
Little Martin Lake	10,500	3,800	3,600	3,000	3,010	500	1,000	7,900	2,100	7,500	4,291	2,700
Tokun River/Lake	1,300	2,000	1,130	710	1,600	540	550	1,750	2,030	700	1,231	830
Martin River Slough	10,500	6,400	12,900	10,600	4,100	10,025	7,500	9,750	9,850	12,700	9,433	5,770
Copper River Delta Total	57,560	39,850	46,225	43,130	41,096	89,815	72,180	99,980	101,082	89,270	68,019	52,735
Katalla River	8,000	5,100	3,000	2,800	2,900	5,000	10,000	6,500	12,100	8,900	6,430	5,510
Bering Lake	14,800	14,300	13,800	10,370	21,040	15,375	13,750	10,125	15,040	13,052	14,165	4,910
Dick Creek	1,300	0	1,270	2,500	760	1,700	2,050	2,750	362	1,660	1,435	530
Shepherd Creek	NC [d]	NC [d]	200	450	300	675	700	1,125	100	60	451	130
Nichawak River	4,300	2,500	4,800	4,300	1,300	1,420	900	1,475	6,900	3,200	3,110	11,900
Gandil River	1,900	950	3,000	600	900	330	900	2,000	4,450	640	1,567	2,650
Controller Bay	12,100	6,900	5,220	5,360	2,807	9,700	4,175	6,210	5,590	5,680	6,374	7,332
Bering River Area Total	42,400	29,750	31,290	26,380	30,007	34,200	32,475	30,185	44,542	33,192	33,442	32,962
Copper/Bering Total	99,960	69,600	77,515	69,510	71,103	124,015	104,655	130,165	145,624	122,462	101,461	85,697

[a] The escapement figures in this table are based on peak aerial survey estimates counts from a majority of the known salmon spawning areas in the Copper and Bering River Deltas. These indices are not intended to provide a true estimate of total escapement for the coastal stocks, but a comparable index based upon the best data currently available. An effort has been made to standardize the indices across years, however counts were obtained only as environmental conditions allowed and may not necessarily correspond to periods of peak abundance. Missing counts are generally a result of bad weather, high water, turbulence or other factors that prevent surveys for that given year.

[b] The areas in this table represent combined survey sites corresponding to the "system" designations for the current year survey results presented elsewhere in this report.

[c] Not an indexed stream.

[d] Due poor stream or weather conditions these systems are listed as "NC" no count.

Appendix A22.–Total commercial salmon harvest by species in the Bering River District, 1974-2007.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1974	32	4,208	28,615	7	2	32,864
1975	162	21,637	24,162	0	0	45,961
1976	228	30,908	42,423	43	1	73,603
1977	127	14,445	47,218	192	221	62,203
1978	331	33,554	91,097	266	2,391	127,639
1979	385	139,015	114,046	6,895	23,094	283,435
1980 [a]	0	0	108,872	0	0	108,872
1981	200	55,585	82,626	9,882	8,307	156,600
1982	254	129,667	144,752	47	333	275,053
1983	610	179,273	117,669	851	4,615	303,018
1984	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
10-Year Average	98	18,451	44,462	963	17	63,991
2007	88	16,470	9,305	6	1	25,870

[a] In 1980 no fishing was allowed prior to August 11.

Appendix A23.–Aerial escapement indices by statistical week and location for sockeye salmon returning to the Bering River District, 2007.

	Weekly Escapement Indicies (Statistical Week Ending Date Listed)																					
System	6/16	6/23	6/30	7/7	7/14	7/21	7/28	8/4	8/11	8/18	8/25	9/1	9/8	9/15	9/22	9/29	10/6	10/13	10/20	10/27	Site [c]	System [d]	Anticipated, (by drainage)
Bering River																							
Bering River	0	20	1,050*	70		590		20	0	111	61	0	0		0	0	0	0		0	1,050	8,550	21,903
Bering Lake	0	230	1,540	940		5,000*		760	624	1,253	622	270	210		120	30	30	0		0	5,000		
Dick Creek	ns	ns	10	100		1,070		720	930	970	500	2,500*	1,470		140	140	60	24		0	2,500		
Shepherd Cr - Lagoon	ns	ns	0	ns		0		0	0	0	0	0	0		0	0	0	0		ns	0	201	4,375
Shepherd Creek	ns	ns	0	ns		2		15	1	0	100	100	101*		50	15	0	0		ns	101		
Carbon Creek	ns	ns	ns	ns		0		0	10	100*	80	40	21		20	0	0	0		ns	100		
Clear Creek	ns	ns	0	0		0		200	180	450*	210	30	50		30	10	0	0		ns	450	450	1,197
Kushtaka Lake	ns	ns	0	0		0		5	0	20	40*	40	21		0	0	0	0		ns	40		
Shockum Creek	ns	ns	0	0		0		0	30	30	30	20	100*		10	10	0	0		ns	100	140	1,226
Katalla River [b]																							
Katalla River	0	30	410	5,340		12,130*		400	675	764	193	252	40		20	10	0	3		0	12,130	12,130	
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 (average 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

[a] The survey sites represent most of the known sockeye salmon spawning locations in the Bering River drainage. Weather permitting, the sites are surveyed weekly. 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 for coastal stocks but have been used for that purpose in the absence of any other escapement estimating method. The abbreviations used in the following table have the following meaning: NS = no survey, NC = surveyed but no count due to poor conditions. The + sign after some counts indicates that the count is the minimum estimate seen in less than ideal conditions. The symbol * indicates that this survey count was used as the peak survey for the site without duplication of counts for survey sites along migratory corridors (see footnote c).

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

[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.

[*] Indicates peak count.

Appendix A24.–Bering River District commercial drift gillnet salmon harvest by period, 2007.

		Emergency order				Chinook		Sockeye		Coho		Pink		Chum	
Period	Date	Issued	Hours	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
01	06/04-06/04	2-F-E-012-07	12	0	0	0	0	0	0	0	0	0	0	0	0
02	06/06-06/06	2-F-E-015-07	12	0	0	0	0	0	0	0	0	0	0	0	0
03	06/08-06/08	2-F-E-017-07	12	0	0	0	0	0	0	0	0	0	0	0	0
04	06/11-06/12	2-F-E-018-07	36	2	2	2	36	278	1,786	0	0	0	0	0	0
05	06/14-06/16	2-F-E-026-07	60	0	0	0	0	0	0	0	0	0	0	0	0
06	06/18-06/20	2-F-E-031-07	48	4	4	6	151	822	4,967	0	0	0	0	0	0
07	06/21-06/23	2-F-E-035-07	48	40	64	80	1,754	15,174	89,999	0	0	0	0	1	7
08	06/25-06/26	2-F-E-040-07	24	0	0	0	0	0	0	0	0	0	0	0	0
09	08/20-08/21	2-F-E-120-07	24	0	0	0	0	0	0	0	0	0	0	0	0
10	08/27-08/28	2-F-E-125-07	24	2	4	0	0	12	66	553	4,560	6	20	0	0
11	09/03-09/04	2-F-E-132-07	24	15	24	0	0	150	926	2,553	22,442	0	0	0	0
12	09/10-09/11	2-F-E-137-07	24	15	27	0	0	11	84	2,636	24,036	0	0	0	0
13	09/17-09/18	2-F-E-140-07	24	14	21	0	0	20	104	2,609	23,534	0	0	0	0
14	09/20-09/21	2-F-E-144-07	24	8	10	0	0	3	21	954	8,432	0	0	0	0
15	09/24-09/25	2-F-E-147-07	24	0	0	0	0	0	0	0	0	0	0	0	0
16	09/27-09/29	2-F-E-153-07	60	0	0	0	0	0	0	0	0	0	0	0	0
17	10/01-10/03	2-F-E-154-07	60	0	0	0	0	0	0	0	0	0	0	0	0
18	10/04-10/07	2-F-E-155-07	84	0	0	0	0	0	0	0	0	0	0	0	0
19	10/08-10/10	2-F-E-156-07	60	0	0	0	0	0	0	0	0	0	0	0	0
20	10/11-10/14	2-F-E-157-07	84	0	0	0	0	0	0	0	0	0	0	0	0
Total			768	137	156	88	1,941	16,470	97,953	9,305	83,004	6	20	1	7
Average Weight							22.06		5.95		8.92		3.33		7.00

Appendix A25.–Aerial escapement indices by statistical week and location for coho salmon returning to the Bering River District, 2007.

Drainage [a]	System	Weekly Escapement Indices (Statistical Week Ending Date Listed) 7/28	8/4	8/11	8/18	8/25	9/1	9/8	9/15	9/22	9/29	10/5	10/13	10/20	10/27	Site [d]	System [e]	Anticipated, (by drainage)
Bering River	Bering River [b]		0		40	250	410	810		280	910*	850	880		172	910	5,540	7,720
	Bering Lake		0		0	0	0	540		2,232	4100*	2,540	880		20	4,100		
	Dick Creek		0		0	0	0	0		530*	140	110	230		110	530		
	Shepherd Creek - Lagoon		0		0	0	0	0		0	0	0	0		ns	0	130	
	Shepherd Creek		0		0	0	0	1		10	40	0	20		ns	100		
	Carbon Creek [c]		0		0	0	0	0		0	30*	0	0		ns	30		
Katalla River	Katalla River		0		20	500	5510*	3,730		1,840	2,650	1,730	940		220	5,510	5,510	4,993
Lower Bering River	Gandil River		ns		30	420	180	690		2,650*	1,250	810	840		460	2,650	14,550	2,910
	Nichawak River		ns		0	20	0	210		11,900*	6,290	5,490	2,810		1,830	11,900		
Controller Bay	Campbell River		ns		0	192	50	40		1,750*	0	0	1,040		0	1,750	7,332	7,378
	Edwardes River		ns		0	0	70	140		210	3,680	4410*	0		2,392	4,410		
	Okalee River		ns		0	60	100	1,172*		400	340	250	270		12	1,172		
	Other Clear Streams		ns		ns	ns	ns	ns		ns	ns	ns	ns		ns			
Bering River District Weekly Index		0	0	0	90	1,442	6,320	7,333	0	21,802	19,430	16,190	7,910	0	5,216		33,062	
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: The abbreviations used in the following table have the following meaning: NS = no survey, NC = surveyed but no count due to poor conditions. The symbol * indicates that this survey count was used as the peak survey for the site without duplication of counts for survey sites along migratory corridors (see footnote d).

[a] The survey sites represent most of the known coho salmon spawning locations in the Bering River drainage. Weather permitting, the sites are surveyed weekly. 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 for coastal stocks but have been used for that purpose in the absence of any other escapement estimating method.

[b] Bering River counts include coho observed in the Don Miller Hill tributaries.

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

[d] 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.

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

Appendix A26.–Anticipated and actual weekly harvest and escapement of coho salmon in the Bering River District drift gillnet fishery, 2007.

Week Ending Date	Statistical Week	Fishing Time (hours)	Actual Harvest	Anticipated Harvest [a]	Actual Aerial Index [b]	Anticipated Index [c]
06/09	23	12, 12 and 12	0	10		
06/16	24	36 and 60	0	10		
06/23	25	48 and 48	0	23		
06/30	26	24	0	36		
07/07	27	0	0	16		
07/14	28	0	0	12		
07/21	29	0	0	4		
07/28	30	0	0	48	0	768
08/04	31	0	0	48	0	861
08/11	32	0	0	1,648	0	4,482
08/18 [d]	33	0	0	8,052	90	7,080
08/25	34	24	0	13,453	1,442	15,448
09/01	35	24	553	14,133	6,320	15,574
09/08	36	24	2,553	8,276	7,333	12,330
09/15	37	24	2,636	2,110	ns	8,919
09/22	38	24 and 24	3,563	264	21,802	7,429
09/29	39	24 and 60	0	24	19,430	9,122
10/06[e]	40	60 and 84	0	0	16,190	1,844
10/13[f]	41	60 and 84	0	0	7,910	2,993
10/20	42	0	0	0	ns	0
10/27	43	0	0	0	5,216	0
Season totals		768	9,305	48,167		

[a] Based on the previous 10 year harvest average.

[b] Coho salmon surveys were actively conducted weather permitting beginning July 28.

[c] Based on average historical aerial escapement surveys for comparable dates (1984-1992).

[d] Coho salmon directed management began on August 20.

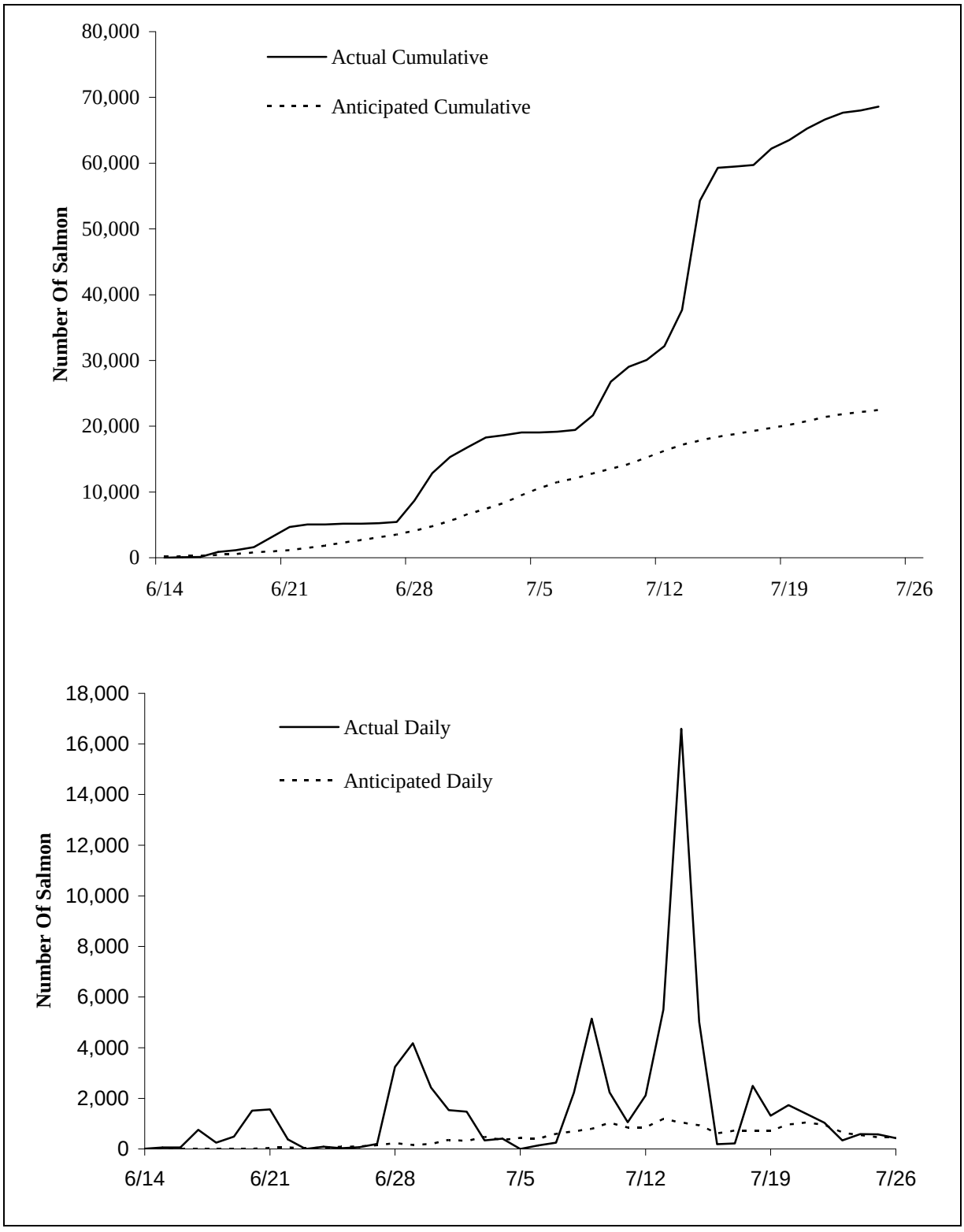
[e] Actual period duration was 10/01-10/7, having a 19-hour period of overlap in the following statistical week.

[f] Actual period duration was 10/8-10/14, having a 19-hour period of overlap in the following statistical week.

APPENDIX B

Appendix B1.–Anticipated daily and cumulative salmon escapement versus actual escapement through the Coghill River weir, 2007.

	Sockeye		Projected	Projected	Sockeye	Pink		
Date	Daily	Cumulative	Daily	Cumulative	Below Weir	Daily	Cumulative	Comments
06/05	NA	NA	1	1		NA	NA	
06/06	NA	NA	0	1		NA	NA	
06/07	NA	NA	2	3		NA	NA	
06/08	NA	NA	3	6		NA	NA	
06/09	NA	NA	2	8	NA	NA	NA	
06/10	NA	NA	7	15	NA	NA	NA	Weir established
06/11	NA	NA	8	23	NA	NA	NA	Weir pulled due to river ice
06/12	NA	NA	39	62	NA	NA	NA	Weir pulled due to river ice
06/13	NA	NA	55	117	NA	NA	NA	Weir pulled due to river ice
06/14	12	12	44	161	0	0	0	Weir fish tight
06/15	56	68	54	215	0	0	0	
06/16	62	130	94	309	10	0	0	
06/17	759	889	99	408	70	0	0	1 king
06/18	244	1,133	151	559	120	0	0	
06/19	486	1,619	232	791	80	0	0	
06/20	1,509	3,128	160	951	600	0	0	
06/21	1,556	4,684	196	1,147	600	0	0	
06/22	373	5,057	360	1,507	300	0	0	First ASL sample started
06/23	0	5,057	320	1,827	700	0	0	ASL sampling
06/24	90	5,147	477	2,304	800	0	0	ASL sampling
06/25	29	5,176	361	2,665	900	0	0	ASL sampling
06/26	73	5,249	433	3,098	700	0	0	ASL sampling
06/27	200	5,449	409	3,507	1,000	0	0	ASL sampling
06/28	3,241	8,690	593	4,100	1,400	0	0	ASL sampling finished
06/29	4,172	12,862	697	4,797	3,000	0	0	1 king
06/30	2,430	15,292	797	5,594	1,200	0	0	1 king
07/01	1,529	16,821	1,032	6,626	800	0	0	1 king
07/02	1,472	18,293	843	7,469	1,000	2	2	
07/03	336	18,629	842	8,311	300	0	2	
07/04	406	19,035	1,186	9,497	200	1	3	
07/05	0	19,035	1,046	10,543	600	0	3	ASL sampling started
07/06	141	19,176	933	11,476	2,500	0	3	ASL sampling
07/07	245	19,421	620	12,096	3,000	1	4	ASL sampling; 2 chum
07/08	2,228	21,649	729	12,825	5,000	21	25	ASL sampling; 3 chum
07/09	5,146	26,795	709	13,534	3,500	43	68	1 king; 5 chum
07/10	2,232	29,027	707	14,241	2,000	16	84	
07/11	1,051	30,078	960	15,201	500	28	112	1 chum
07/12	2,113	32,191	1,047	16,248	450	56	168	4 chum
07/13	5,505	37,696	949	17,197	4,000	206	374	2 king; 14 chum
07/14	16,594	54,290	643	17,840	5,000	336	710	6 king; 41 chum
07/15	5,017	59,307	545	18,385	8,000	626	1,336	2 king; 14 chum
07/16	190	59,497	456	18,841	3,000	21	1,357	ASL sampling started
07/17	219	59,716	460	19,301	4,500	57	1,414	ASL sampling; 1 chum
07/18	2,493	62,209	432	19,733	4,500	1,416	2,830	ASL sampling; 5 chum
07/19	1,315	63,524	454	20,187	1,500	1,158	3,988	ASL sampling complete
07/20	1,728	65,252	601	20,788	900	2,406	6,394	1 king; 8 chum
07/21	1,383	66,635	610	21,398	1,500	3,763	10,157	2 chum
07/22	1,037	67,672	436	21,834	500	8,886	19,043	1 king; 5 chum
07/23	334	68,006	324	22,158	300	6,906	25,949	15 chum
07/24	591	68,597	295	22,453	200	7,572	33,521	5 chum
07/25	574	69,171	302	22,755	700	10,350	43,871	19 chum
07/26	432	69,603	380	23,135	386	6,400	50,271	4 chum
07/27	398	70,001	198	23,333	750	2,420	52,691	2 coho; 1 king; 4 chum
07/28					NA			Weir pulled



Appendix B2.–Anticipated cumulative and daily sockeye salmon escapement versus actual escapement through the Coghill River weir, 2007.

Appendix B3.–Salmon escapement by species in the Coghill District 1971-2007.

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	57,090	25,670
1977	31,562	130,510	43,940
1978	42,284	85,450	18,160
1979	48,281	70,980	6,330
1980	142,253	214,930	23,340
1981	156,112	106,450	2,050
1982	180,314	368,380	22,130
1983	38,783	310,330	61,410
1984	63,622	429,450	19,690
1985	163,311	296,970	22,140
1986	71,095	101,600	13,140
1987	187,263	147,060	24,510
1988	72,052	37,070	39,240
1989	37,751	45,510	22,680
1990	8,949	49,110	26,020
1991	9,752	98,580	6,070
1992	29,642	23,611	10,003
1993	9,232	41,837	8,430
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
10-Year Average	37,887	182,058	12,484
2007	70,001	197,405	14,052

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

[b] Pink and chum escapements estimated for streams in district by aerial surveys. Historical data revised in 1990.

Appendix B4.–Total Coghill District commercial common property salmon harvest by period in the drift gillnet fisheries, 2007.

Period	Date	Emergency Orders Issued	Hours	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
						Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1[a]	05/28-05/29	2-F-E-013-07	24	0	0	0	0	0	0	0	0	0	0	0	0
2[a]	05/31-06/01	2-F-E-013-07	24	6	6	0	0	1	7	0	0	0	0	4,296	34,385
3[a]	06/04-06/05	2-F-E-014-07	24	29	40	0	0	10	70	0	0	0	0	25,130	176,768
4[b]	06/08-06/09	2-F-E-019-07	24	27	43	0	0	67	451	0	0	0	0	15,211	111,735
5[a]	06/11-06/12	2-F-E-020-07	36	60	230	11	180	741	5,206	0	0	0	0	100,021	722,140
6[a]	06/14-06/15	2-F-E-027-07	24	76	193	4	77	1,137	7,929	0	0	1	4	68,081	477,489
7[a]	06/18-06/19	2-F-E-032-07	24	106	226	7	140	4,233	29,676	1	7	21	114	61,933	421,190
8[b]	06/21-06/23	2-F-E-036-07	48	62	165	17	293	8,382	60,252	0	0	3	9	48,023	339,380
9[b]	06/25-06/27	2-F-E-041-07	48	128	413	25	286	12,149	87,391	1	6	47	325	159,429	1,199,279
10[c]	06/28-06/30	2-F-E-048-07	48	143	387	2	31	16,495	113,542	0	0	0	0	146,175	1,075,937
11[d, e]	07/02-07/04	2-F-E-052-07	48	140	391	11	216	30,623	204,981	1	5	0	0	142,728	1,023,216
12[f]	07/05-07/07	2-F-E-058-07	48	126	247	2	33	29,624	190,624	15	129	124	467	61,793	446,439
13[g]	07/09-07/11	2-F-E-063-07	48	142	256	2	27	18,254	116,322	78	595	1,907	7,711	78,925	550,858
14[h]	07/12-07/15	2-F-E-069-07	84	81	166	1	6	16,702	112,796	133	735	4,856	18,687	35,937	257,989
15[i]	07/16-07/18	2-F-E-076-07	48	96	207	4	62	19,494	129,677	300	2,314	14,933	61,050	33,538	238,633
16[j]	07/19-07/21	2-F-E-082-07 and 2-F-E-085-07	60	64	149	2	30	13,941	92,271	485	3,188	24,887	99,828	24,878	172,517
17[k]	07/22-07/22	2-F-E-088-07	14	9	11	0	0	754	5,001	16	116	2,809	10,238	1,594	10,029
18[l]	07/25-07/25	2-F-E-150-07	14	7	9	1	23	534	3,717	30	241	2,485	10,247	1,666	10,205
19[m]	07/28-07/28	2-F-E-094-07	14	0	0	0	0	0	0	0	0	0	0	0	0
20[n]	08/01-08/01	2-F-E-102-07	14	0	0	0	0	0	0	0	0	0	0	0	0
21[o]	08/05-08/05	2-F-E-160-07	14	0	0	0	0	0	0	0	0	0	0	0	0
22[o]	08/07-08/07	2-F-E-158-07	14	0	0	0	0	0	0	0	0	0	0	0	0
23[o]	08/09-08/09	2-F-E-110-07	14	0	0	0	0	0	0	0	0	0	0	0	0
24[p]	08/11-08/11	2-F-E-159-07	14	0	0	0	0	0	0	0	0	0	0	0	0
25[q]	08/13-08/13	2-F-E-115-07	14	0	0	0	0	0	0	0	0	0	0	0	0
26[p]	08/15-08/15	2-F-E-116-07	14	0	0	0	0	0	0	0	0	0	0	0	0
27[r]	08/17-08/17	2-F-E-117-07	14	1	1	0	0	0	0	31	280	117	410	0	0
28[r]	08/18-08/18	2-F-E-117-07	14	2	2	0	0	0	0	152	1,526	154	540	0	0
29[p]	08/19-08/21	2-F-E-122-07	60	6	9	0	0	27	100	1,904	18,757	109	424	0	0
30[o]	08/22-08/25	2-F-E-123-07	84	16	37	0	0	109	893	8,916	78,626	3,885	14,005	3	22
31[o]	08/26-08/29	2-F-E-127-07	84	60	140	0	0	93	713	14,988	139,407	4,124	14,900	7	52
32[r]	08/30-09/01	2-F-E-129-07 and 2-F-E-130-07	60	76	173	0	0	25	156	16,086	145,181	4,534	15,902	1	6
33[s]	09/02-09/05	2-F-E-133-07	84	53	153	0	0	30	201	11,472	109,361	411	1,395	6	45
34[s]	09/06-09/08	2-F-E-136-07	60	45	80	0	0	4	23	3,699	33,208	0	0	2	15
35[s]	09/09-09/12	2-F-E-138-07	84	21	39	0	0	1	6	2,674	23,926	0	0	0	0
36[s]	09/13-09/15	2-F-E-145-07	60	0	0	0	0	0	0	0	0	0	0	0	0
37[t]	09/16-09/19	2-F-E-141-07	84	0	0	0	0	0	0	0	0	0	0	0	0
38[t]	09/20-09/22	2-F-E-146-07	60	0	0	0	0	0	0	0	0	0	0	0	0
39[t]	09/23-09/26	2-F-E-148-07	84	0	0	0	0	0	0	0	0	0	0	0	0
Total				271	3,773	89	1,404	173,430	1,162,005	60,982	557,608	65,407	256,256	1,009,377	7,268,329
Average Weight							15.78		6.70		9.14		3.92		7.20

[a] Waters of the Coghill District, excluding the Esther Subdistrict west of Hodgkins Point (148º 02' W. Long.) were open.

[b] Waters of the Coghill District excluding the waters of the Esther subdistrict, were open.

[c] Waters of the Coghill District excluding the Esther Sub district, and waters south of a line from Pt. Pigot (60˚ 48.203' N. Lat., 148˚ 20.910' W. Long) to Pt Esther, (60˚ 47.835' N. Lat., 148˚ 08.738 W. Long.) and west of a line from Pt. Pigot to Pt. Pakenham, (61˚ 00.259' N. Lat., 148˚ 05.319' W. Long.) were open.

[d] Waters of the Coghill District and the Esther Subdistrict, excluding waters south of Esther Rock (60˚ 48.06' N. Lat.) and excluding waters west of a line from Pt. Pigot (60˚ 48.21' N. Lat., 148˚ 20.90' W. Long.) to Pt. Pakenham (61˚ 00.259' N. Lat., 148˚ 05.319' W. Long.) and excluding WNH THA and SHA were open.

[e] Waters of the Coghill District north of Esther Pass (60˚ 48.06' N. Lat.) were open beginning 8:00am Tuesday, July 3 to 8:00am Wednesday, July 4. Anadromous stream closures (5 AAC 39.290(a)) were not in effect during these periods. (7/2-7/4)

[f] Waters of the Coghill District, excluding waters west of a line from Pt. Pigot (60˚ 48.21' N. Lat., 148˚ 20.90' W. Long.) to Pt. Pakenham (61˚ 00.259' N. Lat., 148˚ 05.319' W. Long.) and excluding the WNH SHA and THA were open. Anadromous stream closures (5 AAC39.290(a)) were not in effect for Coghill Lagoon w/fishing permitted to river mouth.

[g] The Coghill district north of 60˚ 46.32' N. Lat. and east of a line from Pt. Pigot (60˚ 48.21' N. Lat., 148˚ 20.90' W. Long.) to Pt. Pakenham (61˚ 00.259' N. Lat., 148˚ 05.319' W. Long.) excluding WNH SHA and THA were open. Anadromous stream closures (5ACC 39.290(a)) were not in effect during this period w/fishing permitted to the Coghill River mouth.

[h] The Coghill District north of 60˚ 46.32' N. Lat. and east of a line from Pt. Pigot (60˚ 48.21' N. Lat., 148˚ 20.90' W. Long.) to Pt. Pakenham (61˚ 00.259' N. Lat., 148˚ 05.319' W. Long.), excluding the WNH SHA and THA, were open. The WNH SHA and THA up to a line of buoys in front of the barrier seine was open to drift gillnet gear for 12 hours on July 12. Anadromous stream closures (5 AAC 39.290 (a)) were not in effect during these periods for Coghill Lagoon, with fishing permitted to the Coghill River mouth.

[i] The Coghill district north or 60˚ 46.32' N. Lat. and east of a line from Pt. Pigot (60˚ 48.21' N. Lat., 148˚ 20.90' W. Long.) to Pt. Pakenham (61˚ 00.259' N. Lat., 148˚ 05.319' W. Long.) excluding the WNH THA and SHA, were open to drift gillnet gear. Anadromous stream closures (5 AAC 39.290(a)) were not in effect for Coghill Lagoon with fishing permitted up to the river mouth.

[j] The Coghill General District north of 60˚ 46.32' N. Lat. and east of a line from Pt. Pigot (60˚ 48.21' N. Lat., 148˚ 20.90' W. Long.) to Pt. Pakenham (61˚ 00.259' N. Lat., 148˚ 05.319' W. Long.) was open. On July 19th the Esther Subdistrict north of 60˚ 46.32' N. Lat. opened to drift gillnet gear until 8:00pm Saturday, July 21. Waters of the SHA and THA up to the line of buoys in front of the barrier seine were open to drift gillnet and purse seine gear until 8:00pm Saturday, July 21.

[k] The Coghill District including the WNH SHA and THA up to a line of buoys in front of the barrier seine were open from 6:00am until 8:00 pm Sunday, July 22. Waters south of 60˚ 46.50' N. Lat. and west of Esther Rocks (148˚ 10.65' W. Long.) were closed to protect wild pink and chum salmon stocks.

[l] The Coghill District excluding the WNH THA and SHA were open. Open area was limited to waters north of 60˚ 46.50' N. Lat. and waters east of Esther Rocks (148˚ 10.65' W. Long.).

[m] The Coghill District, excluding the Esther Subdistrict were open. The open area was limited to waters in the Coghill District north of 60˚ 48.06' N. Lat. and all waters east of Esther Rocks (148˚ 10.65' W. Long).

[n] Waters of Granite Bay Subdistrict excluding waters of Esther Passage east of 148˚ 03.80' Long., were open.

[o] The Esther Subdistrict, within 1 mile of Esther Island, was open. The WNH SHA and THA remained closed.

[p] The Esther Subdistrict, within 1 nautical mile of Esther Island, including the WNH THA was open. The WNH SHA was closed.

[q] The Esther Subdistrict, within 1 nautical mile of Esther Island, including the WNH THA and SHA, was open. Waters north of 60˚ 47.80 N. Lat. in Lake Bay were closed.

[r] The Esther Subdistrict, within 1 nautical mile of Esther Island up to a line of buoys in front of the barrier seine in the SHA was open. In accordance with 5 AAC 24.370, waters of the Coghill District were open to drift gillnet gear only effective at 8:00pm August 31.

[s] The Coghill District, within 1 nautical mile of Esther Island was open to drift gillnet gear only. The WNH THA and SHA was open up to a line of buoys in front of the barrier seine.

[t] The Coghill District, within 1 nautical mile of Esther Island was open to drift gillnet gear only.

Appendix B5.–Total Coghill District commercial common property salmon harvest by period in the purse seine fisheries, 2007.

Period	Date	Emergency Orders Issued	Hours	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
						Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
14[a, b]	07/13-07/15	2-F-E-069-07	60	16	29	0	0	0	0	0	0	35	103	295,791	2,071,297
15[c]	07/16-07/18	2-F-E-076-07	48	6	10	0	0	0	0	0	0	3	9	81,714	530,161
16[d]	07/19-07/21	2-F-E-082-07 and 2-F-E-085-07	60	20	25	5	102	3,055	18,670	165	1,256	82,970	288,587	74,421	440,275
17[e]	07/22-07/22	2-F-E-088-07	14	23	23	1	22	3,382	21,148	194	1,208	67,518	242,906	7,586	46,893
18[f]	07/25-07/25	2-F-E-150-07	14	15	15	0	0	3,318	20,240	270	1,918	93,264	311,563	3,412	24,976
19[g]	07/28-07/28	2-F-E-094-07	14	21	24	3	30	1,853	12,011	189	1,250	204,589	784,708	2,238	18,465
20[h]	08/01-08/01	2-F-E-102-07	14	0	0	0	0	0	0	0	0	0	0	0	0
21[i]	08/05-08/05	2-F-E-160-07	14	7	8	0	0	239	1,553	10	70	135,415	455,508	70	453
22[i]	08/07-08/07	2-F-E-158-07	14	7	8	0	0	247	1,637	65	530	147,727	498,363	47	317
23[i]	08/09-08/09	2-F-E-110-07	14	10	12	0	0	225	1,458	20	142	192,242	645,224	40	265
24[j]	08/11-08/11	2-F-E-159-07	14	11	18	0	0	82	531	118	1,330	289,222	972,898	38	287
25[k]	08/13-08/13	2-F-E-115-07	14	14	21	0	0	30	201	184	2,080	266,723	902,624	76	535
26[i]	08/15-08/15	2-F-E-116-07	14	10	17	0	0	19	114	1,098	9,357	160,846	535,107	3	21
27[l]	08/17-08/17	2-F-E-117-07	14	10	18	0	0	0	0	2,409	23,301	185,755	645,870	0	0
28[l]	08/18-08/18	2-F-E-117-07	14	9	23	0	0	6	40	2,647	25,593	163,190	553,079	9	63
29[i]	08/19-08/21	2-F-E-122-07	60	5	16	0	0	3	18	8,431	85,110	166,057	584,373	0	0
30[i]	08/22-08/25	2-F-E-123-07	84	7	19	0	0	13	80	6,224	62,113	133,459	459,133	3	23
31[i]	08/26-08/29	2-F-E-127-07	84	2	3	0	0	0	0	1,367	14,022	8,470	29,151	0	0
32[l]	08/30-08/31	2-F-E-129-07 and 2-F-E-130-07	36	3	3	0	0	0	0	1,211	8,475	37,105	126,159	0	0
Total				205	292	9	154	12,472	77,701	24,602	237,755	2,334,590	8,035,365	465,448	3,134,031
Average Weight							17.11		6.23		9.66		3.44		6.73

[a] The WNH SHA and THA up to a line of buoys in front of the barrier seine opened to purse seine gear for 12 hours on July 13.

[b] The purse seine period in the THA and SHA closed at 8:00pm Sunday, July 15.

[c] The WNH THA and SHA was open for purse seine gear.

[d] The Coghill General District north of 60˚ 46.32' N. Lat. and east of a line from Pt. Pigot (60˚ 48.21' N. Lat., 148˚ 20.90' W. Long.) to Pt. Pakenham (61˚ 00.259' N. Lat., 148˚ 05.319' W. Long.) was open. The WNH SHA and THA up to the line of buoys in front of the barrier seine were open to purse seine gear only from 8:00am Thursday, July 19 until 8:00pm Saturday, July 21. On July 19th the Esther Subdistrict north of 60˚ 46.32' N. Lat. opened to drift gillnet gear until 8:00pm Saturday, July 21. Waters of the SHA and THA up to the line of buoys in front of the barrier seine were open to drift gillnet and purse seine gear until 8:00pm Saturday, July 2. As per 5 AAC 24.370(e)(5)(B) purse seine gear could be used in areas of the Coghill District beginning 12:0l am on Saturday, July 21.

[e] The Coghill District including the WNH SHA and THA up to a line of buoys in front of the barrier seine were open from 6:00am until 8:00 pm Sunday, July 22. Waters south of 60˚ 46.50' N. Lat.and west of Esther Rocks (148˚ 10.65' W. Long.) were closed to protect wild pink and chum stocks.

[f] The Coghill District excluding the WNH THA and SHA were open. Open area was limited to waters north of 60˚ 46.50' N. Lat. and waters east of Esther Rocks (148˚ 10.65' W. Long.).

[g] The Coghill District, excluding the Esther Subdistrict were open. The open area was limited to waters in the Coghill District north of 60˚ 48.06' N. Lat. and all waters east of Esther Rocks (148˚ 10.65' W. Long).

[h] Waters of Granite Bay Subdistrict excluding waters of Esther Passage east of 148˚ 03.80' Long., were open.

[i] The Esther Subdistrict, within 1 mile of Esther Island, was open. The WNH SHA and THA remained closed.

[j] The Esther Subdistrict, within 1 nautical mile of Esther Island, including the WNH THA was open. The WNH SHA was closed.

[k] The Esther Subdistrict, within 1 nautical mile of Esther Island, including the WNH THA and SHA, was open. Waters north of 60˚ 47.80 N. Lat. in Lake Bay were closed.

[l] The Esther Subdistrict, within 1 nautical mile of Esther Island up to a line of buoys in front of the barrier seine in the SHA was open.

Appendix B6.–Total commercial common property harvest by species in the Coghill District, 1984-2007.

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
10-Year Average	298	128,568	26,601	113,564	858,179	1,127,211
2007	89	173,430	60,982	65,407	1,009,377	1,309,285
	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
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
10-Year Average	10	16,058	5,733	2,948,000	318,626	3,288,427
2007	9	12,472	24,602	2,334,590	465,448	2,837,121

-continued-

Appendix B6.–Page 2 of 2.

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
10-Year Average	308	144,626	32,334	3,061,565	1,176,804	4,415,637
2007	98	185,902	85,584	2,399,997	1,474,825	4,146,406

Appendix B7.–Temporally stratified age and sex composition of sockeye salmon harvested in the Coghill District commercial common property drift gillnet and purse seine fisheries, 2007.

Strata Combined:	05/28 - 09/26	Brood Year and Age Class[a]					
Sampling dates:	07/01 - 07/11	2003		2002		2001	
Sample size:	694	0.3	1.2	1.3	2.2	2.3	Total[b]
Sex Composition	Sample size	1	43	282	1	7	334
Female	Percentage of sample	0.1	6.2	40.6	0.1	1.0	48.1
	Number in harvest	268	11,527	75,548	268	1,872	89,484
	Sample size	0	59	287	3	8	357
Male	Percentage of sample	0.0	8.5	41.4	0.4	1.2	51.4
	Number in harvest	0	15,801	76,871	802	2,140	95,613
	Sample size	1	102	572	4	15	694
Total	Percentage of sample	0.1	14.7	82.4	0.6	2.2	100.0
	Number in harvest	268	27,327	153,224	1,071	4,012	185,902
	Standard error	268	2,500	2,690	534	1,016	

Note: All samples were taken from the commercial common property drift gillnet harvest.

[a] Fish with resorbed scales were removed. Strata #1 had 26 and strata #2 had 84.

[b] Total harvest includes fish harvested in the commercial common property drift gillnet and purse seine fisheries.

Appendix B8.–Estimated age and sex composition of the sockeye salmon escapement through the weir on the outlet stream of Coghill Lake, 2007.

Strata Combined:	06/14 - 07/28	2004	2003		2002		2001		
Sampling dates:	06/24 - 07/18	0.2	0.3	1.2	1.3	2.2	1.4	2.3	Total
Sample size:	1,204								
Sex Composition									
Female	Percentage of sample	0.1	0.1	6.4	39.4	0.2	0.1	1.2	47.4
	Number in escapement	42	42	4,465	27,558	133	42	868	33,151
Male	Percentage of sample	0.1	0.0	11.2	39.8	0.4	0.1	1.1	52.6
	Number in escapement	44	0	7,837	27,837	308	42	782	36,850
Total	Percentage of sample	0.1	0.1	17.6	79.1	0.6	0.1	2.4	100.0
	Number in escapement	86	42	12,302	55,395	441	84	1,650	70,001
	Standard error	61	42	822	870	177	60	299	

[a] Fish with resorbed scales were removed. Strata #1had 17, Strata #2 - 34, Strata #3 - 63.

Appendix B9.–Total commercial common property salmon harvest by period in the Unakwik District drift gillnet and purse seine fisheries, 2007.

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	06/11-06/12	2-F-E-022-07	36	0	0	0	0	0	0	0	0	0	0	0	0
02	06/14-06/15	2-F-E-029-07	24	0	0	0	0	0	0	0	0	0	0	0	0
03	06/18-06/19	2-F-E-034-07	24	1	1	0	0	116	815	0	0	0	0	0	0
04	06/21-06/23	2-F-E-038-07	48	4	15	1	21	2,940	22,710	0	0	0	0	71	469
05	06/25-06/27	2-F-E-043-07	48	10	16	0	0	1,670	10,266	0	0	0	0	90	745
06	06/28-06/30	2-F-E-050-07	48	6	19	0	0	2,692	16,167	0	0	0	0	29	232
07	07/02-07/04	2-F-E-054-07	48	8	12	0	0	1,807	13,298	0	0	0	0	18	157
08	07/05-07/07	2-F-E-060-07	48	4	10	0	0	1,896	13,214	0	0	0	0	0	0
09	07/09-07/11	2-F-E-065-07	48	7	20	0	0	3,304	22,819	0	0	0	0	14	94
10	07/12-07/14	2-F-E-071-07	48	3	3	0	0	184	1,185	0	0	0	0	0	0
11	07/16-07/18	2-F-E-078-07	48	2	2	0	0	300	1,795	0	0	0	0	0	0
12	07/19-07/21	2-F-E-084-07	48	1	1	0	0	237	1,709	0	0	0	0	0	0
13	07/23-07/25	2-F-E-091-07	48	0	0	0	0	0	0	0	0	0	0	0	0
Total				10	99	1	21	15,146	103,978	0	0	0	0	222	1,697
Average Weight							21.0		6.9		0.0		0.0		7.6
Purse Seine															
01	06/11-06/12	2-F-E-022-07	36	0	0	0	0	0	0	0	0	0	0	0	0
02	06/14-06/15	2-F-E-029-07	24	0	0	0	0	0	0	0	0	0	0	0	0
03	06/18-06/19	2-F-E-034-07	24	0	0	0	0	0	0	0	0	0	0	0	0
04	06/21-06/23	2-F-E-038-07	48	0	0	0	0	0	0	0	0	0	0	0	0
05	06/25-06/27	2-F-E-043-07	48	0	0	0	0	0	0	0	0	0	0	0	0
06	06/28-06/30	2-F-E-050-07	48	0	0	0	0	0	0	0	0	0	0	0	0
07	07/02-07/04	2-F-E-054-07	48	0	0	0	0	0	0	0	0	0	0	0	0
08	07/05-07/07	2-F-E-060-07	48	0	0	0	0	0	0	0	0	0	0	0	0
09	07/09-07/11	2-F-E-065-07	48	1	1	0	0	547	4,378	0	0	0	0	4	28
10	07/12-07/14	2-F-E-071-07	48	0	0	0	0	0	0	0	0	0	0	0	0
11	07/16-07/18	2-F-E-078-07	48	0	0	0	0	0	0	0	0	0	0	0	0
12	07/19-07/21	2-F-E-084-07	48	0	0	0	0	0	0	0	0	0	0	0	0
13	07/23-07/25	2-F-E-091-07	48	0	0	0	0	0	0	0	0	0	0	0	0
Total				10	1	0	0	547	4,378	0	0	0	0	4	28
Average Weight							0.0		8.0		0.0		0.0		7.0

Appendix B10.–Total commercial common property salmon harvest by species in the Unakwik District, 1983- 2007.

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
10- Year Average	4	7,217	11	351	308	7,891
2007	1	15,146	0	0	222	15,369
			Purse Seine			
1983	0	6	0	3,344	716	4,066
1984[a]	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[a]	0	0	0	0	0	0
1990[a]	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[a]	0	0	0	0	0	0
1996[a]	0	0	0	0	0	0
1997[a]	0	0	0	0	0	0
1998[a]	0	0	0	0	0	0
1999	1	386	0	0	2	389
2000	0	0	0	20,485	0	20,485
2001[a]	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[a]	0	0	0	0	0	0
2005	0	80	0	81,858	0	81,938
2006[a]	0	0	0	0	0	0
10- Year Average	0	262	2	10,474	15	10,753
2007	0	547	0	0	4	551

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Year	Chinook	Sockeye	Coho	Pink	Chum	Total
			Combined Gear			
1983	3	13,221	0	4,859	2,142	20,225
1984	2	18,522	0	27,742	7,125	53,391
1985	26	27,670	22	37,401	8,065	73,184
1986	5	25,835	1	6,691	7,138	39,670
1987	2	6,040	1	192,623	7,905	206,571
1988	15	9,256	7	58,125	25,364	92,767
1989	31	21,412	27	41,820	404	63,694
1990	3	247	127	9,986	23	10,386
1991	13	5,301	14	133,367	197	138,892
1992	3	2,266	15	17,236	213	19,733
1993	5	14,770	4	6,571	1,045	22,395
1994	0	774	102	389,201	73	390,150
1995	8	2,116	0	1	36	2,161
1996	3	6,063	0	17	694	6,777
1997	4	3,797	0	0	179	3,980
1998	10	14,668	55	4,193	606	19,532
1999	5	8,930	5	0	298	9,238
2000	0	1,119	0	20,485	20	21,624
2001	3	2,298	2	4	44	2,351
2002	8	10,966	30	133	884	12,021
2003	0	3,180	0	2,261	20	5,461
2004	5	7,438	1	0	168	7,612
2005	6	23,107	27	83,398	858	107,396
2006	1	698	1	36	171	907
10-Year Average	4	7,620	12	11,051	325	19,012
2007	1	15,693	0	0	226	15,920

[a] No harvest recorded.

APPENDIX C

Appendix C1.–Anticipated daily and cumulative salmon escapement versus actual escapement past the Eshamy River weir, 2007.

	Sockeye				Pink[a]		Chum		Coho	
	Actual		Projected							
Date	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative
07/06	0	0	59	695						
07/07	79	79	48	743	0	0	0	0	0	0
07/08	42	121	79	822	0	0	0	0	0	0
07/09	0	121	85	907	0	0	2	2	0	0
07/10	0	121	99	1,005	0	0	3	5	0	0
07/11	36	157	102	1,107	0	0	6	11	0	0
07/12	105	262	74	1,181	0	0	28	39	0	0
07/13	181	443	88	1,269	0	0	19	58	0	0
07/14	29	472	102	1,371	0	0	14	72	0	0
07/15	14	486	104	1,475	0	0	5	77	0	0
07/16	13	499	142	1,617	0	0	15	92	0	0
07/17	35	534	121	1,738	0	0	19	111	0	0
07/18	16	550	104	1,842	0	0	12	123	0	0
07/19	37	587	100	1,942	0	0	32	155	0	0
07/20	4	591	86	2,027	0	0	8	163	0	0
07/21	8	599	159	2,186	0	0	11	174	0	0
07/22	2	601	137	2,323	0	0	5	179	0	0
07/23	8	609	150	2,473	0	0	2	181	0	0
07/24	63	672	216	2,689	2	2	10	191	0	0
07/25	9	681	274	2,964	0	2	10	201	0	0
07/26	21	702	321	3,285	3	5	5	206	0	0
07/27	37	739	268	3,553	2	7	13	219	0	0
07/28	249	988	219	3,771	19	26	7	226	0	0
07/29	39	1,027	162	3,933	0	26	4	230	0	0
07/30	65	1,092	361	4,294	6	32	5	235	0	0
07/31	28	1,120	210	4,505	1	33	0	235	0	0
08/01	0	1,120	100	4,605	0	33	0	235	0	0
08/02	84	1,204	220	4,825	4	37	0	235	0	0
08/03	237	1,441	207	5,032	34	71	0	235	0	0
08/04	2	1,443	264	5,296	2	73	0	235	0	0
08/05	3	1,446	226	5,522	0	73	0	235	0	0
08/06	333	1,779	293	5,815	187	260	0	235	0	0
08/07	108	1,887	347	6,162	49	309	0	235	0	0
08/08	13	1,900	370	6,532	6	315	0	235	0	0
08/09	401	2,301	437	6,969	240	555	0	235	0	0
08/10	213	2,514	551	7,520	176	731	1	236	0	0
08/11	205	2,719	479	7,999	12	743	1	237	0	0
08/12	187	2,906	551	8,549	377	1,120	4	241	1	1
08/13	207	3,113	496	9,046	456	1,576	0	241	0	1
08/14	205	3,318	653	9,699	350	1,926	0	241	0	1
08/15	39	3,357	583	10,282	580	2,506	2	243	0	1
08/16	223	3,580	595	10,877	884	3,390	0	243	0	1
08/17	472	4,052	568	11,445	671	4,061	0	243	0	1
08/18	1,633	5,685	621	12,066	1,378	5,439	0	243	0	1
08/19	1,446	7,131	624	12,690	2,576	8,015	0	243	0	1
08/20	1,629	8,760	609	13,300	4,419	12,434	0	243	5	6
08/21	1,201	9,961	687	13,987	2,101	14,535	0	243	0	6
08/22	485	10,446	614	14,601	913	15,448	0	243	4	10
08/23	825	11,271	519	15,121	1,645	17,093	0	243	3	13
08/24	592	11,863	472	15,593	1,117	18,210	0	243	8	21
08/25	495	12,358	522	16,115	758	18,968	0	243	7	28
08/26	404	12,762	504	16,619	972	19,940	0	243	14	42
08/27	537	13,299	313	16,932	1,102	21,042	0	243	5	47
08/28	302	13,601	316	17,248	837	21,879	0	243	21	68
08/29	326	13,927	252	17,501	854	22,733	0	243	17	85

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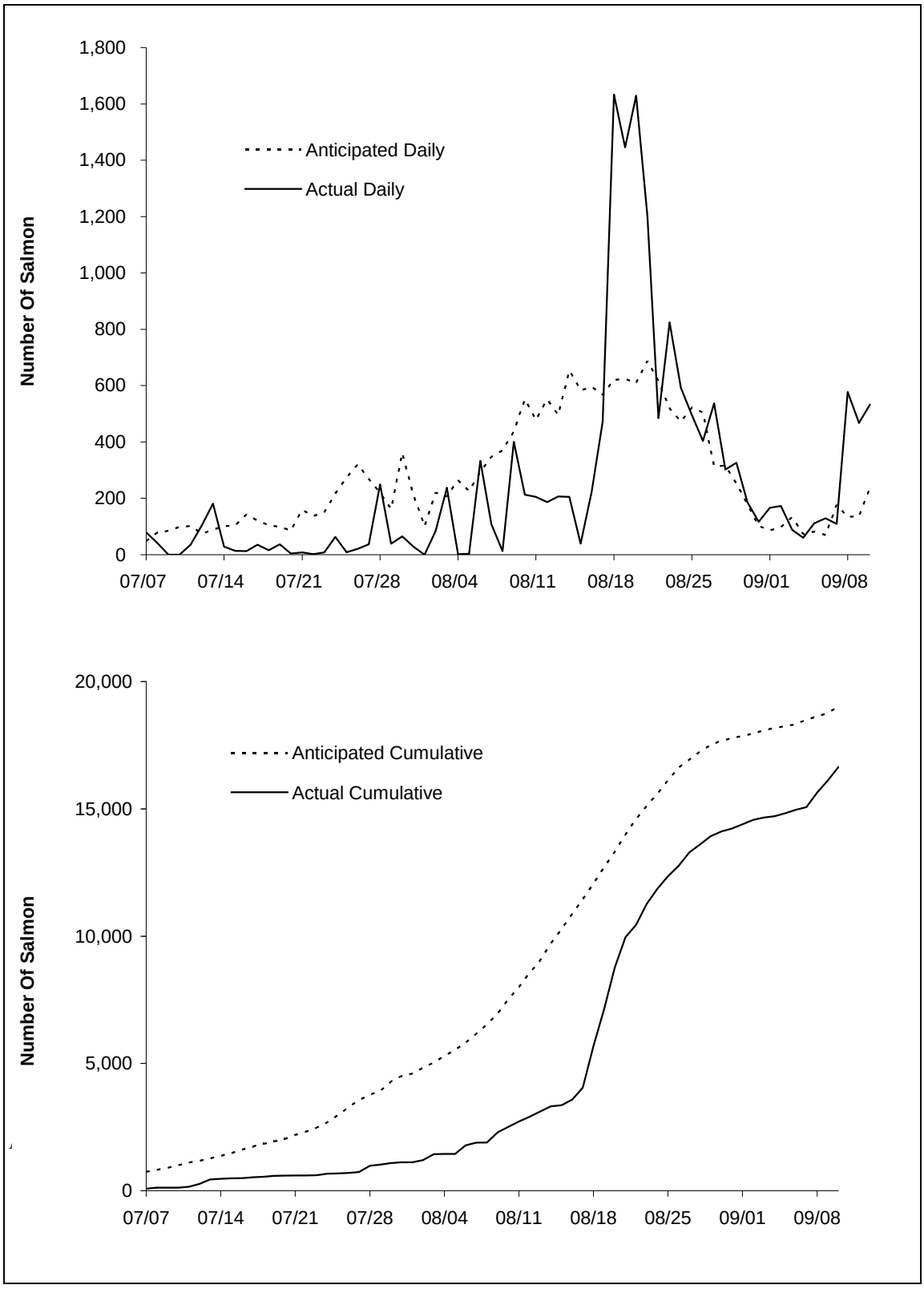
Appendix C1.–Page 2 of 2.

	Sockeye				Pink[a]		Chum		Coho	
	Actual		Projected							
Date	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative
08/30	186	14,113	178	17,678	571	23,304	0	243	8	93
08/31	117	14,230	101	17,779	791	24,095	0	243	2	95
09/01	167	14,397	87	17,866	1,103	25,198	0	243	1	96
09/02	173	14,570	98	17,964	1,220	26,418	0	243	12	108
09/03	88	14,658	133	18,097	793	27,211	0	243	26	134
09/04	60	14,718	73	18,169	525	27,736	0	243	31	165
09/05	111	14,829	83	18,252	542	28,278	0	243	24	189
09/06	129	14,958	70	18,322	309	28,587	0	243	8	197
09/07	109	15,067	177	18,499	216	28,803	0	243	4	201
09/08	578	15,645	134	18,632	375	29,178	0	243	290	491
09/09	468	16,113	136	18,768	141	29,319	0	243	180	671
09/10	533	16,646	236	19,005	90	29,409	0	243	160	831

[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, 2007.

Appendix C3.–Salmon escapement by species past the Eshamy River weir, 1967-2007.

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]		28,683				28,683
1973	0	10,202	205	1,698	0	12,105
1974 [b]		633				633
1975 [b]		1,724				1,724
1976 [b]		19,367				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]						
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]						
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
10-Year Average	1	33,669	117	12,539	347	46,673
2007	0	16,646	831	29,409	243	47,129

Note: For the break down of jacks versus adult sockeye salmon see specific year's daily escapement enumeration table.

[a] Escapement 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, 2007.

Period	Date	Emergency Orders	Hours	Permits	Landings	Chinook Number	Chinook Pounds	Sockeye Number	Sockeye Pounds	Coho Number	Coho Pounds	Pink Number	Pink Pounds	Chum Number	Chum Pounds
01[ab]	06/11-06/12	2-F-E-021-07	36	1	2	0	0	126	781	0	0	0	0	140	945
02[c]	06/14-06/15	2-F-E-028-07	24	0	0	0	0	0	0	0	0	0	0	0	0
03[c]	06/18-06/19	2-F-E-033-07	24	18	39	3	40	3,276	22,117	0	0	0	0	3,986	27,378
04[bd]	06/21-06/23	2-F-E-037-07	48	75	235	7	82	28,765	190,946	1	8	6	24	15,634	109,538
05[ce]	06/25-06/26	2-F-E-042-07	24	87	181	2	43	18,971	126,346	14	83	54	207	17,997	124,909
06[ce]	06/28-06/29	2-F-E-049-07	24	129	288	3	35	55,725	362,872	17	110	93	367	14,501	101,993
07[ef]	07/02-07/03	2-F-E-053-07	24	86	190	3	57	37,701	241,921	23	208	366	1,382	9,185	66,229
08[abe]	07/05-07/05	2-F-E-059-07	12	175	313	3	61	112,798	730,739	80	665	901	3,530	7,409	53,497
09[ae]	07/09-07/09	2-F-E-064-07	12	229	384	5	56	102,395	645,840	264	2,066	1,539	5,530	5,414	38,505
10[ae]	07/12-07/12	2-F-E-070-07	12	157	291	1	19	68,814	443,768	226	1,618	3,009	11,468	3,701	25,666
11[eg]	07/16-07/16	2-F-E-077-07	12	108	171	0	0	26,574	169,895	152	1,235	5,410	19,366	1,091	7,942
12[eh]	07/19-07/19	2-F-E-083-07	12	91	125	0	0	14,157	89,903	459	3,661	9,892	34,708	1,192	8,629
13[eh]	07/23-07/23	2-F-E-090-07	12	48	66	0	0	9,039	56,489	964	7,873	12,117	44,004	834	6,091
14[bei]	07/28-07/29	2-F-E-096-07	36	55	91	0	0	22,240	144,768	201	1,522	2,851	11,024	165	1,098
15[bej]	07/30-08/01	2-F-E-099-07	48	13	38	0	0	14,394	93,727	71	568	2,913	11,101	118	849
16[bek]	08/02-08/04	2-F-E-104-07	60	7	13	0	0	9,835	58,708	75	576	740	2,749	43	330
17[bej]	08/06-08/08	2-F-E-108-07	48	5	12	0	0	13,373	80,225	9	74	2,931	10,257	0	0
18[el]	08/09-08/11	2-F-E-112-07	60	0	0	0	0	0	0	0	0	0	0	0	0
19[bej]	08/13-08/15	2-F-E-114-07	48	0	0	0	0	0	0	0	0	0	0	0	0
20[el]	08/16-08/18	2-F-E-119-07	60	0	0	0	0	0	0	0	0	0	0	0	0
21[ej]	08/20-08/22	2-F-E-121-07	48	0	0	0	0	0	0	0	0	0	0	0	0
22[el]	08/23-08/25	2-F-E-124-07	60	0	0	0	0	0	0	0	0	0	0	0	0
23[ej]	08/27-08/29	2-F-E-126-07	48	0	0	0	0	0	0	0	0	0	0	0	0
24[el]	08/30-09/01	2-F-E-128-07	60	0	0	0	0	0	0	0	0	0	0	0	0
Total				266	2,439	27	393	538,183	3,459,045	2,556	20,267	42,822	155,717	81,410	573,599
Average Weight							14.56		6.43		7.93		3.64		7.05

[a] Waters of the Eshamy District, excluding the Main Bay THA,SHA, and AGZ, were open.
[b] Anadromous stream closures were not in effect within the Main Bay Subdistrict.
[c] Waters of the Eshamy District, excluding the Main Bay Subdistrict, were open.
[d] Waters of the Eshamy District, excluding the Main Bay Subdistrict, were open for 48 hours. Waters of the Main Bay Subdistrict, excluding the TAH, SHA, and AGZ, were open for 24 hours.
[e] Gillnets greater than 60 meshes in depth were allowed.
[f] Waters of the Eshamy District south of 60° 31.070' N. Lat., excluding Falls Bay, were open.
[g] Waters of the Eshamy District north of Loomis Creek (60° 29.442' N. Lat), excluding the Main Bay Hatchery SHA, THA, AGZ, were open.
[h] Waters of the Eshamy District north of Loomis Creek (60° 29.442' N. Lat), excluding the Main Bay Subdistrict, were open.
[i] Waters of the Main Bay Subdistrict were open. The MBH AGZ was open only during the last 12 hours of the period.
[j] Waters of the Main Bay Subdistrict up to a line of buoys in front of the barrier seine were open.
[k] Waters of the Eshamy District north of Loomis Creek (60° 29.442' N. Lat), excluding the AGZ, were open during the first 14 hours of the period; and the Main Bay Subdistrict up to a line of buoys in front of the barrier seine was open for the last 46 hours of the period.
[l] Waters of the Main Bay Subdistrict were open. The MBH AGZ was open only during the last 48 hours of the period.

Appendix C5.–Total set gillnet common property salmon harvest by period in the Eshamy District, 2007.

Period	Date	Emergency Orders	Hours	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
						Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
01[ab]	06/11-06/12	2-F-E-021-07	36	17	40	7	174	2,317	15,438	0	0	0	0	2,746	17,111
02[c]	06/14-06/15	2-F-E-028-07	24	17	33	2	54	2,302	15,230	0	0	0	0	1,674	10,780
03[c]	06/18-06/19	2-F-E-033-07	24	19	37	4	114	4,639	30,693	0	0	1	4	2,297	15,357
04[bd]	06/21-06/23	2-F-E-037-07	48	21	97	1	27	17,799	117,051	1	5	53	221	5,229	32,359
05[ce]	06/25-06/26	2-F-E-042-07	24	21	69	3	67	9,423	65,272	3	20	74	309	5,816	38,281
06[ce]	06/28-06/29	2-F-E-049-07	24	23	77	0	0	22,365	145,897	0	0	93	446	1,738	11,670
07[ef]	07/02-07/03	2-F-E-053-07	24	21	78	0	0	15,004	95,380	11	90	332	1,144	1,696	12,576
08[abe]	07/05-07/05	2-F-E-059-07	12	21	69	0	0	28,463	180,190	5	40	908	3,300	1,131	8,424
09[ae]	07/09-07/09	2-F-E-064-07	12	23	71	1	33	25,836	168,231	20	159	1,088	3,968	515	3,830
10[ae]	07/12-07/12	2-F-E-070-07	12	23	60	0	0	20,003	127,808	24	180	1,372	5,062	798	5,833
11[eg]	07/16-07/16	2-F-E-077-07	12	17	38	0	0	9,662	62,468	29	236	1,106	4,180	331	2,139
12[eh]	07/19-07/19	2-F-E-083-07	12	16	30	0	0	7,630	49,082	65	455	2,092	8,096	243	1,453
13[eh]	07/23-07/23	2-F-E-090-07	12	15	34	0	0	7,388	46,066	159	1,318	4,977	18,019	341	2,487
14[bei]	07/28-07/29	2-F-E-096-07	24	15	43	0	0	11,787	69,771	18	139	494	1,929	19	144
15[bej]	07/30-07/30	2-F-E-099-07	14	7	27	0	0	6,179	39,455	7	54	400	1,481	66	474
16[bek]	08/02-08/02	2-F-E-104-07	14	4	4	0	0	4,025	24,144	21	189	645	2,258	11	78
17[bej]	08/06-08/07	2-F-E-108-07	24	1	1	0	0	1,715	10,291	2	16	161	563	0	0
18[ei]	08/09-08/09	2-F-E-112-07	12	0	0	0	0	0	0	0	0	0	0	0	0
19[bej]	08/13-08/14	2-F-E-114-07	24	0	0	0	0	0	0	0	0	0	0	0	0
20[ei]	08/16-08/16	2-F-E-119-07	12	0	0	0	0	0	0	0	0	0	0	0	0
21[ej]	08/20-08/21	2-F-E-121-07	24	0	0	0	0	0	0	0	0	0	0	0	0
22[ei]	08/23-08/23	2-F-E-124-07	12	0	0	0	0	0	0	0	0	0	0	0	0
23[ej]	08/27-08/28	2-F-E-126-07	24	0	0	0	0	0	0	0	0	0	0	0	0
24[ei]	08/30-08/30	2-F-E-128-07	12	0	0	0	0	0	0	0	0	0	0	0	0
Total				26	808	18	469	196,537	1,262,467	365	2,901	13,796	50,980	24,651	162,996
Average Weight							0.00		6.42		7.95		3.70		6.61

[a] Waters of the Eshamy District, excluding the Main Bay THA,SHA, and AGZ, were open.

[b] Anadromous stream closures were not in effect within the Main Bay Subdistrict.

[c] Waters of the Eshamy District, excluding the Main Bay Subdistrict, were open.

[d] Waters of the Eshamy District, excluding the Main Bay Subdistrict, were open for 48 hours. Waters of the Main Bay Subdistrict, excluding the TAH, SHA, and AGZ, were open for 24 hours.

[e] Gillnets greater than 60 meshes in depth were allowed.

[f] Waters of the Eshamy District south of 60° 31.070’ N. Lat., excluding Falls Bay, were open.

[g] Waters of the Eshamy District north of Loomis Creek (60° 29.442’ N. Lat), excluding the Main Bay Hatchery SHA, THA, AGZ, were open.

[h] Waters of the Eshamy District north of Loomis Creek (60° 29.442’ N. Lat), excluding the Main Bay Subdistrict, were open.

[i] Waters of the Main Bay Subdistrict up to a line of buoys in front of the barrier seine were open.

[j] Waters of the Main Bay Subdistrict, excluding the AGZ, were open.

[k] Waters of the Eshamy District north of Loomis Creek (60° 29.442’ N. Lat), including the MBH Hatchery THA, SHA, and AGZ, were open.

Appendix C6.–Total commercial common property salmon harvest by species in the Eshamy District, 1988 – 2007.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
			Drift Gillnet			
1988	94	50,868	794	348,873	206,060	606,689
1989 [a]						
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
10-Year Average	123	323,599	3,236	155,733	29,496	512,187
2007	27	538,183	2,556	42,822	81,410	664,998
			Set Gillnet			
1988	100	18,321	283	180,456	93,577	292,737
1989 [a]						
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
10-Year Average	26	135,551	626	71,233	9,213	216,649
2007	18	196,537	365	13,796	24,651	235,367

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Year	Chinook	Sockeye	Coho	Pink	Chum	Total
			Combined Gear			
1988	194	69,189	1,077	529,329	299,637	899,426
1989 [a]						
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
10-Year Average	149	459,150	3,862	226,965	38,710	728,836
2007	45	734,720	2,921	56,618	106,061	900,365

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

Appendix C7.–Estimated age and sex composition of sockeye salmon harvested in the Eshamy District commercial common property gillnet fishery, 2007.

Strata Combined:	06/11 - 08/07	Brood Year and Age Class [a]							
Sampling dates:	06/13 - 07/20	2004	2003		2002		2001		
Sample size:	2,337	0.2	0.3	1.2	1.3	2.2	1.4	2.3	Total
Sex Composition									
Female	Percentage of sample	0.1	0.0	11.3	36.2	0.0	0.0	0.0	47.6
	Number in harvest	381	0	82,772	265,374	295	0	262	349,084
Male	Percentage of sample	0.0	0.1	11.2	40.5	0.1	0.0	0.2	52.1
	Number in harvest	0	763	81,843	297,063	654	131	1,747	382,201
Total	Percentage of sample	0.1	0.1	22.5	76.9	0.1	0.0	0.3	100.0
	Number in harvest	381	763	165,138	564,062	949	131	2,009	733,433
	Standard error	381	539	7,431	7,494	615	131	838	

[a] Fish with resorbed scales were removed. Strata 2 had 5, Strata 3 - 58, Strata 4 - 68.

Appendix C8.–Estimated age and sex composition of the sockeye salmon escapement through the Eshamy River weir, 2007.

Strata Combined:	07/07 - 09/11	Brood Year and Age Class [a]						
Sampling dates:	07/29 - 09/09	2004	2003		2002		2001	
Sample size:	952	1.1	1.2	2.1	1.3	2.2	2.3	Total
Sex Composition								
Female	Sample size	0	262	0	110	106	48	526
	Percentage of sample	0.0	27.5	0.0	11.8	10.9	5.1	55.3
	Number in escapement	0	4,582	0	1,972	1,810	843	9,206
Male	Sample size	4	179	3	136	59	45	426
	Number in escapement	68	3,103	49	2,441	990	789	7,440
Total	Sample size	4	441	3	246	165	93	952
	Number in escapement	68	7,685	49	4,413	2,800	1,632	16,646
	Standard error	34	270	28	235	196	161	

[a] Ages based on length frequency data.

APPENDIX D

Appendix D1.–Prince William Sound commercial common property purse seine harvest by day, 2007.

			Chinook		Sockeye		Coho		Pink		Chum	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
05/29	1	1	0	0	0	0	0	0	0	0	110	912
05/30	1	1	0	0	0	0	0	0	0	0	3,474	28,491
06/01	2	2	0	0	0	0	0	0	0	0	4,996	41,342
06/03	7	8	3	52	0	0	0	0	0	0	18,919	136,159
06/04	2	2	0	0	0	0	0	0	0	0	2,615	19,604
06/05	1	1	0	0	0	0	0	0	0	0	706	5,294
06/06	8	9	1	17	0	0	0	0	0	0	12,868	92,279
06/07	4	4	0	0	0	0	0	0	0	0	7,471	56,018
06/08	4	4	0	0	0	0	0	0	0	0	5,646	39,529
06/09	7	7	0	0	0	0	0	0	0	0	15,793	126,269
06/10	18	18	4	79	1	8	0	0	0	0	40,131	307,366
06/11	8	8	0	0	0	0	0	0	0	0	12,527	100,466
06/12	26	27	50	580	7	75	0	0	0	0	60,883	445,541
06/13	17	18	6	140	6	42	1	3	96	307	19,041	135,282
06/14	29	29	113	1,254	9	70	0	0	24	70	32,498	230,786
06/15	25	25	42	420	20	134	0	0	10	30	22,395	163,008
06/16	29	29	59	775	6	75	0	0	71	277	26,961	176,925
06/17	17	17	6	75	0	0	0	0	0	0	9,676	66,841
06/18	42	42	109	1,427	19	128	0	0	353	1,143	51,278	366,894
06/19	11	11	8	102	0	0	0	0	0	0	10,666	75,075
06/20	35	36	110	1,471	27	166	0	0	1,094	4,135	62,103	442,563
06/21	35	35	46	664	23	139	0	0	570	1,718	46,737	340,484
06/22	14	14	39	473	0	0	0	0	0	0	14,434	94,809
06/23	39	40	35	518	520	3,168	2	10	1,365	4,128	44,597	315,097
06/24	16	16	8	124	71	468	0	0	950	2,581	12,182	73,940
06/25	37	38	18	278	100	725	0	0	4,323	15,165	31,058	221,719
06/26	14	14	1	18	32	227	0	0	13,718	51,396	9,127	60,577
06/27	85	122	5	90	474	3,328	2	11	940,158	3,128,651	15,037	100,772
06/28	10	15	3	65	905	6,486	0	0	47,892	176,460	34,701	235,795
06/29	2	2	2	41	80	565	0	0	5,068	15,467	4,912	35,923
06/30	98	180	6	135	284	2,144	0	0	1,518,928	5,201,438	11,276	79,096

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			Chinook		Sockeye		Coho		Pink		Chum	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
07/01	12	13	0	0	3,417	21,783	0	0	71,275	241,455	9,938	65,922
07/02	17	17	2	22	1,130	6,731	0	0	27,224	90,293	12,302	88,948
07/03	95	167	1	30	95	550	0	0	1,753,410	5,778,931	81	639
07/04	6	6	0	0	0	0	0	0	50	150	19,777	138,309
07/05	92	120	0	0	27	140	0	0	1,459,213	4,854,948	12,063	88,733
07/06	87	123	0	0	1,922	9,666	0	0	1,067,861	3,562,637	14,293	100,156
07/07	84	124	0	0	118	803	0	0	1,166,214	3,914,247	0	0
07/08	90	131	0	0	1,906	11,460	1	8	1,287,211	4,360,361	7,079	46,988
07/09	3	3	0	0	586	3,517	0	0	194	661	11,162	72,934
07/10	88	115	0	0	564	4,511	0	0	1,351,064	4,478,663	12	92
07/11	93	173	1	13	163	996	13	84	1,683,616	5,756,593	10,087	70,619
07/12	2	2	0	0	0	0	0	0	0	0	1,855	12,949
07/13	103	194	0	0	178	1,141	21	152	1,680,582	5,635,320	189,083	1,383,143
07/14	3	3	0	0	0	0	0	0	0	0	40,046	259,910
07/15	100	210	5	101	2,652	16,081	384	1,879	2,175,658	7,279,285	82,743	547,721
07/16	6	6	0	0	0	0	0	0	1,257	4,400	57,527	380,973
07/17	96	188	7	169	1,064	6,628	176	1,274	1,437,882	4,786,462	40,751	257,121
07/18	91	135	3	60	2,314	15,215	229	1,675	1,417,666	4,692,725	7,674	54,735
07/19	86	95	5	45	1,918	12,238	489	3,667	689,628	2,340,743	6,010	42,387
07/20	86	100	0	0	1,082	6,887	649	4,828	614,630	2,096,962	38,978	271,179
07/21	19	23	5	102	3,120	18,876	168	1,286	89,998	312,612	55,805	311,137
07/22	81	90	2	54	4,305	27,103	327	2,171	494,294	1,709,273	15,685	105,309
07/25	72	86	2	59	4,266	26,500	592	4,416	495,680	1,700,275	12,543	93,182
07/28	88	107	1	18	2,679	17,449	466	3,462	834,171	3,005,452	8,557	72,142
07/30	99	152	0	0	9,229	58,140	1,768	12,921	1,545,229	5,274,258	8,287	62,161
08/01	96	155	2	38	6,224	37,367	882	6,081	1,666,713	5,714,006	5,780	41,228
08/03	103	172	0	0	5,255	33,000	1,237	9,076	1,982,220	6,763,313	4225	34146
08/05	100	200	0	0	1,740	10,818	234	1,708	2,296,529	7,798,958	1591	12013
08/07	98	201	1	36	1,220	7,699	513	3,864	2,280,374	7,641,906	1123	8400
08/09	104	211	0	0	1,535	9,686	696	5,257	2,312,137	7,863,930	829	6142
08/11	100	211	1	22	726	4,612	3,548	32,196	2,050,348	6,900,213	425	3276
08/13	103	202	0	0	577	3,542	1,014	8,461	2,130,625	7,166,115	7947	54956

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			Chinook		Sockeye		Coho		Pink		Chum	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
08/15	104	217	0	0	614	3,773	2,089	16,797	2,368,351	7,989,479	353	2765
08/17	89	154	0	0	295	1,804	3,105	28,622	1,523,509	5,215,398	465	3992
08/18	91	151	0	0	31	192	3,807	35,248	1,283,249	4,369,901	229	2039
08/19	85	129	0	0	117	712	2,684	25,161	1,196,033	4,077,555	190	1704
08/20	83	120	0	0	385	2,292	4,643	42,424	1,278,996	4,413,267	801	6607
08/21	81	105	1	28	321	1,921	10,306	96,667	1,085,958	3,656,793	713	6022
08/22	77	95	0	0	206	1,203	5,990	53,498	967,781	3,296,343	233	1715
08/23	63	71	0	0	285	1,708	5,686	48,646	610,275	2,091,567	11322	71941
08/24	59	70	0	0	194	1,203	3,635	32,796	560,648	1,896,036	880	7509
08/25	49	52	0	0	132	786	2,370	18,918	429,487	1,466,806	906	7904
08/26	33	37	0	0	130	777	2,615	24,000	277,887	949,311	434	3621
08/27	29	29	0	0	91	552	3,894	30,475	283,244	969,834	1252	11102
08/28	18	22	0	0	169	1,015	892	6,734	179,485	624,256	1005	8311
08/29	19	19	0	0	157	950	1,291	9,725	171,565	571,540	251	1973
08/30	21	24	0	0	78	495	2,117	15,598	178,510	602,637	737	5,262
08/31	10	11	0	0	144	877	640	5,334	156,538	514,601	49	363
09/01	2	2	0	0	11	67	38	264	13,950	54,067	0	0
09/02	6	6	0	0	34	199	550	4,645	80,159	265,105	74	665
09/03	1	1	0	0	10	60	33	271	26,603	87,791	0	0
09/04	44	44	0	0	3	20	14,705	138,653	157	571	2,285	15,250
09/05	31	31	0	0	1	6	17,151	137,608	205	802	1,795	15,523
09/06	4	4	0	0	0	0	643	5,539	0	0	28	114
09/07	5	5	0	0	0	0	3,939	31,514	0	0	684	2,737
09/09	5	6	0	0	0	0	2358	18862	44	175	130	1172
Total	120	5,915	713	9,595	66,004	411,699	108,593	932,489	51,270,207	173,441,948	1,353,892	9,480,697
Average Weight				13.46		6.24		8.59		3.38		7.00

Appendix D2.–Total commercial salmon harvest by species, excluding Copper River and Bering River Districts, 1971-2007.

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
1997-2006 Average	1,066	831,814	162,513	34,957,799	3,100,249	39,053,441

[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.–PWS commercial common property pink salmon harvest for all gear types, by district, 1975-2006.

Year	Eastern	Northern	Coghill	Northwestern	Eshamy	Southwestern	Montague	Southeastern	Total
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	[a]	[a]	[a]	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 [b]	4,534,365	3,162,822	2,030,586		222,934	5,929,544	65,107	28,040	15,973,398
1998 [b]	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
1996-2005 Average	9,598,470	3,573,493	3,057,121	17,223	226,965	6,402,277	276,449	394,622	23,531,120

Note: 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.

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

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

Appendix D4.–Aerial escapement indices for pink and chum salmon by district, Prince William Sound, 2007. (Odd Years).

Pink Salmon

District	Escapement Midpoint	Odd Cycle Escapement Goal Range			1977-2005 Mean Index	Observed Escapement Index [a]	Deviation From Midpoint
Eastern	567,500	355,000	-	780,000	560,310	374,723	-34.0%
Northern/Unakwik	172,500	110,000	-	235,000	177,301	158,345	-8.2%
Coghill	200,000	125,000	-	275,000	178,164	197,405	-1.3%
Northwestern	105,000	65,000	-	145,000	115,338	68,667	-34.6%
Eshamy	7,500	5,000	-	10,000	7,273	9,461	26.2%
Southwestern	162,500	100,000	-	225,000	160,839	116,130	-28.5%
Montague	250,000	155,000	-	345,000	278,746	142,769	-42.9%
Southeastern	535,000	335,000	-	735,000	588,978	443,914	-17.0%
Total	2,000,000					1,511,416	-24.4%

Chum Salmon

District	Sustainable Escapement Goal[b]	1976-2006 Mean Index	Observed Escapement Index[a]	Deviation From SEG
Eastern	50,000	111,064	123,814	147.6%
Northern/Unakwik	20,000	40,995	49,740	148.7%
Coghill	8,000	19,044	14,052	75.7%
Northwestern	5,000	13,824	10,778	115.6%
Eshamy		107	69	-
Southwestern		2,932	4,095	-
Montague		4,654	16,648	-
Southeastern	8,000	25,385	60,464	655.8%
Total	91,000		258,848	184.4%

[a] The spawning escapements are indexed using area-under-the-curve of weekly aerial survey counts divided by an estimated stream life. Approximately 215 index streams are surveyed, and they represent approximately 75-85% of the total escapement to Prince William Sound.

[b] The escapement goals were changed in the 2005 Board of Fisheries cycle to be lower thresholds because chum salmon are generally caught incidentally in pink salmon fisheries.

Appendix D5.–Pink salmon escapement indices by district, 1971-2007.

Year	Eastern	Northern	Coghill	Northwestern	Eshamy	Southwestern	Montague	Southeastern	Total
	Escapement Indicies								
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 Indicies								
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	158,345	197,405	68,667	9,461	116,130	142,769	443,914	1,511,416
	Even Cycle Average (1966-2006)								
	442,110	168,688	111,949	100,759	4,744	118,062	88,101	250,458	1,284,869
	Odd Cycle Average (1971-2005)								
	486,227	158,718	187,856	96,482	5,793	131,114	219,260	470,179	1,742,342

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

Appendix D6.–Weekly aerial survey indices of pink salmon escapement by statistical area, 2007.

Survey Location	Statistical Area	Week Ending Dates 6/23	6/30	7/07	7/14	7/21	7/28	8/04	8/11	8/18	8/25	9/01	9/08	9/15	Adjusted Total
Orca Inlet	221-10	0	0	0	1,300	4,000	1,900	10,550	23,000	3,000	7,650	15,900	3,100	2,500	56,588
Simpson & Sheep Bay	221-20	0	0	0	15	3,000	9,800	24,750	27,900	20,100	32,300	NS	35,250	NS	55,788
Port Gravina	221-30	0	0	0	6,500	19,550	39,600	69,400	50,500	67,900	113,900	NS	63,800	NS	140,326
Port Fidalgo	221-40	0	0	0	3,900	580	7,212	21,700	21,100	28,500	68,800	NS	36,980	NS	62,560
Valdez Arm	221-50	0	0	0	2,700	3,720	5,250	24,800	18,000	27,140	44,150	NS	33,200	NS	59,279
Port Valdez	221-61	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Eastern District		0	0	0	14,415	30,850	63,762	151,200	140,500	146,640	266,800	15,900	172,330	2,500	374,541
Columbia & Long Bay	222-10	NS	NS	0	0	2,000	4,100	NS	12,850	8,700	21,900	NS	14,100	NS	27,408
Wells Bay & Unakwik Inlet	222-20	0	0	0	1,500	163	22,700	NS	31,100	21,150	20,000	25,000	28,225	NS	91,193
Eaglek Bay	222-30	NS	NS	NS	0	1,640	4,950	NS	9,650	7,570	NS	13,300	21,500	NS	35,057
Northern District		0	0	0	1,500	3,803	31,750	NS	53,600	37,420	41,900	38,300	63,825	NS	153,658
Upper Unakwik Inlet	229-10	NS	NS	NS	0	0	NS	NS	800	300	NS	NS	3,500	NS	2,283
Unakwik District		NS	NS	NS	0	0	NS	NS	800	300	NS	NS	3,500	NS	2,283
West Side Port Wells	223-10	NS	NS	NS	0	0	3,750	NS	11,700	18,100	NS	29,900	26,200	NS	40,558
Esther Passage	223-20	NS	NS	NS	0	0	30	NS	600	2,450	NS	2,300	5,160	NS	6,515
College Fiord	223-30	NS	NS	NS	0	2,000	25,100	NS	55,050	125,300	NS	125,500	30,620	NS	150,332
Coghill District		NS	NS	NS	0	2,000	28,880	NS	67,350	145,850	NS	157,700	61,980	NS	197,405
Passage Canal & Cochrane	224-10	NS	NS	NS	0	300	5,250	NS	11,695	14,950	NS	12,700	12,200	NS	31,758
Culross Passage	224-30	NS	NS	NS	0	0	500	NS	350	1,650	NS	7,000	9,500	NS	11,461
Port Nellie Juan	224-40	NS	NS	NS	0	300	4,300	NS	2,100	5,800	NS	10,800	11,300	NS	25,447
Northwestern District		NS	NS	NS	0	600	10,050	NS	14,145	22,400	NS	30,500	33,000	NS	68,667
Main Bay	225-20	NS	NS	NS	0	0	0	NS	NS	500	NS	250	700	NS	939
Eshamy Bay	225-30	NS	NS	NS	0	6	0	NS	NS	1,700	NS	3,850	7,100	NS	8,523
Eshamy District		NS	NS	NS	0	6	0	NS	NS	2,200	NS	4,100	7,800	NS	9,461
Herring Bay	226-10	NS	NS	NS	0	0	NS	NS	NS	50	NS	300	1,100	NS	892
Chenega Is. & Dangerous Pass.	226-20	NS	NS	NS	NS	NS	2,000	19,585	24,050	40,225	NS	51,250	17,300	NS	71,416
East Knight Is.	226-30	NS	NS	NS	NS	NS	210	1,050	600	4,800	NS	3,800	2,600	NS	10,589
Bainbridge & Latouche	226-40	NS	NS	NS	NS	NS	50	865	2,150	11,900	NS	18,500	13,175	NS	29,608
Port Bainbridge	226-50	NS	NS	NS	NS	NS	500	1,200	1,200	1,150	NS	1,200	700	NS	3,626
Southwestern District		NS	NS	NS	0	0	2,760	22,700	28,000	58,125	NS	75,050	34,875	NS	116,130
Montague Strait	227-10	NS	NS	NS	NS	NS	1,250	17,250	33,050	69,920	NS	53,850	40,775	NS	49,772
Green Is.	227-20	NS	NS	NS	NS	NS	1,595	5,000	3,675	41,700	NS	38,700	20,200	NS	92,997
Montague District		NS	NS	NS	NS	NS	2,845	22,250	36,725	111,620	NS	92,550	60,975	NS	142,769
Orca Is. & East Hawkins	228-10	NS	NS	NS	75	1,300	NS	1,500	4,500	NS	1,000	3,500	NS	2,500	8,797
Hawkins Cutoff	228-20	NS	NS	NS	13,170	22,200	NS	28,550	95,400	NS	75,000	25,350	NS	5,450	131,183
North Hawkins & Canoe Pass.	228-30	NS	NS	NS	400	5,100	NS	12,800	29,100	NS	9,400	14,300	NS	12,700	41,485
Double Bay	228-40	NS	NS	NS	1,200	4,000	NS	15,700	37,600	NS	32,100	18,650	NS	5,400	53,069

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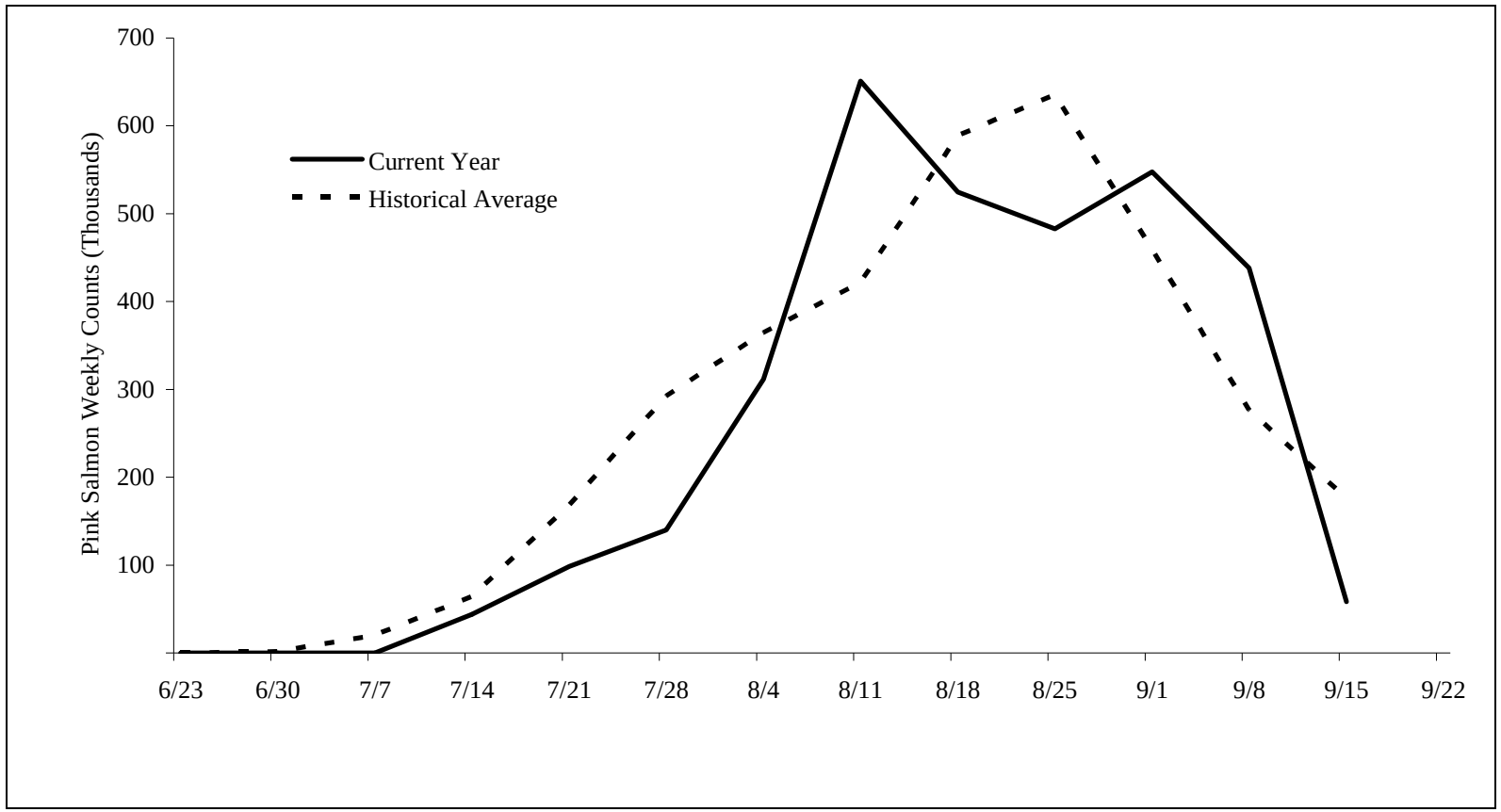
Survey Location	Statistical Area	Week Ending Dates 6/23	6/30	7/07	7/14	7/21	7/28	8/04	8/11	8/18	8/25	9/01	9/08	9/15	Adjusted Total
Johnstone Point	228-50	NS	NS	NS	3,050	4,600	NS	18,000	23,300	NS	21,500	12,500	NS	5,000	44,170
Port Etches	228-60	NS	NS	NS	10,000	23,860	NS	38,700	120,000	NS	35,100	59,250	NS	24,700	165,210
Southeastern District		NS	NS	NS	27,895	61,060	NS	115,250	309,900	NS	174,100	133,550	NS	55,750	443,914
TOTAL OF 9 DISTRICTS		0	0	0	43,810	98,319	140,047	311,400	651,020	524,555	482,800	547,650	438,285	58,250	1,508,829

Note: NS = No Survey.

[a] There are a total of 208 streams included in the systematic aerial survey program. The survey program commences in the Eastern District where the earliest escapements in the sound occur. Weather and conditions permitting, each stream is flown weekly. Failure to fly a survey due to run timing or bad survey conditions is denoted by NS (no survey). A notation of NC (no count) occurs when a stream is flown but no count is possible because of survey conditions (i.e., water clarity). During the peak of the pink salmon run many streams are flown twice weekly to provide fisheries managers with more timely escapement data. In cases where more than one survey per week was flown the weekly observation shown in this table 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 adjusted total is an escapement estimate based a geometric method used since the inception of the systematic survey program in the early 1960's. 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 1960's. Because observer bias does occur and because both observer bias and stream life are stream specific, adjusted totals 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, 2007.

Appendix D8.–Total chum salmon harvests and escapement indices, including hatchery sales harvests and broodstock, 1965-2007.

	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
Avg.	100,037	38,700	18,758	12,335	69	2,630	5,175	25,260	202,964	512,031	136,339	1,097,303	1,716,121

[a] Coghill and Northwestern District escapement numbers correspond to current district boundaries. The Northern District column 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 non-index streams.

Appendix D9.–Weekly aerial survey indices of chum salmon escapement by statistical area, 2007.

Survey Location	Statistical Area	Week Ending Dates 6/23	6/30	7/07	7/14	7/21	7/28	8/04	8/11	8/18	8/25	9/01	9/08	9/15	Adjusted Total
Orca Inlet	221-10	0	0	0	1,005	2,000	0	1,520	2,513	0	1,543	3,030	120	25	13,143
Simpson & Sheep Bay	221-20	0	1	10	0	4,500	2,070	1,780	9,000	5,200	4,930	NS	3,200	NS	14,235
Port Gravina	221-30	0	5	50	5,510	11,400	8,750	13,520	22,600	20,300	19,510	NS	5,495	NS	48,182
Port Fidalgo	221-40	0	0	0	500	2,100	5,312	5,570	14,230	10,660	8,490	NS	3,340	NS	22,856
Valdez Arm	221-50	0	0	40	1,580	4,405	4,550	4,620	14,950	16,630	3,735	NS	2,765	NS	25,398
Port Valdez	221-61	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Eastern District		0	6	100	8,595	24,405	20,682	27,010	63,293	52,790	38,208	3,030	14,920	25	123,814
Columbia & Long Bay	222-10	NS	NS	0	650	600	1,250	NS	2,455	4,250	3,865	NS	1,485	NS	6,951
Wells Bay & Unakwik Inlet	222-20	10	20	25	2,525	300	9,300	NS	8,773	5,130	4,210	11,050	5,168	NS	37,233
Eaglek Bay	222-30	NS	NS	NS	140	70	1,210	NS	270	430	NS	1,870	4,270	NS	4,115
Northern District		10	20	25	3,315	970	11,760	NS	11,498	9,810	8,075	12,920	10,923	NS	48,299
Upper Unakwik Inlet	229-10	NS	NS	NS	0	0	NS	NS	0	0	NS	NS	100	NS	70
Unakwik District		NS	NS	NS	0	0	NS	NS	0	0	NS	NS	100	NS	70
West Side Port Wells	223-10	NS	NS	NS	0	50	525	NS	1,050	3,120	NS	4,950	4,600	NS	8,615
Esther Passage	223-20	NS	NS	NS	0	0	0	NS	0	50	NS	0	0	NS	34
College Fiord	223-30	NS	NS	NS	0	301	0	NS	200	1,000	NS	5,000	3,100	NS	5,404
Coghill District		NS	NS	NS	0	351	525	NS	1,250	4,170	NS	9,950	7,700	NS	14,052
Passage Canal & Cochrane	224-10	NS	NS	NS	0	455	1,790	NS	430	2,520	NS	2,250	1,255	NS	5,475
Culross Passage	224-30	NS	NS	NS	0	0	0	NS	0	110	NS	1,600	1,150	NS	1,879
Port Nellie Juan	224-40	NS	NS	NS	0	160	2,350	NS	30	755	NS	900	500	NS	3,424
Northwestern District		NS	NS	NS	0	615	4,140	NS	460	3,385	NS	4,750	2,905	NS	10,778
Eshamy Bay	225-30	NS	NS	NS	0	0	50	NS	NS	25	NS	0	0	NS	69
Eshamy District		NS	NS	NS	0	0	50	NS	NS	25	NS	0	0	NS	69
Chenega Is. & Dangerous Pass.	226-20	NS	NS	NS	NS	NS	0	645	200	1,755	NS	2,075	255	NS	2,450
East Knight Is.	226-30	NS	NS	NS	NS	NS	0	10	50	80	NS	50	30	NS	116
Bainbridge & Latouche Pass	226-40	NS	NS	NS	NS	NS	155	1,015	100	495	NS	810	185	NS	1,377
Port Bainbridge	226-50	NS	NS	NS	NS	NS	0	150	0	50	NS	100	10	NS	153
Southwestern District		NS	NS	NS	0	0	155	1,820	350	2,380	NS	3,035	480	NS	4,095
Montague Strait	227-10	NS	NS	NS	NS	NS	300	3,505	3,150	9,320	NS	5,735	1,425	NS	7,558
Green Is.	227-20	NS	NS	NS	NS	NS	150	1,180	1,500	1,396	NS	1,030	335	NS	9,091
Montague District		NS	NS	NS	NS	NS	450	4,685	4,650	10,716	NS	6,765	1,760	NS	16,648
Orca Is. & East Hawkins	228-10	NS	NS	NS	0	0	NS	15	10	NS	0	40	NS	30	46
Hawkins Cutoff	228-20	NS	NS	NS	1,155	3,220	NS	1,900	3,730	NS	11,500	1,650	NS	122	15,903
North Hawkins & Canoe Pass	228-30	NS	NS	NS	200	600	NS	1,950	703	NS	950	635	NS	210	3,515
Double Bay	228-40	NS	NS	NS	60	110	NS	720	636	NS	4,900	825	NS	75	4,960
Johnstone Point	228-50	NS	NS	NS	420	1,110	NS	1,000	1,200	NS	1,500	850	NS	50	4,069
Port Etches	228-60	NS	NS	NS	2,300	4,515	NS	5,830	15,240	NS	5,450	7,035	NS	887	31,970
Southeastern District		NS	NS	NS	4,135	9,555	NS	11,415	21,519	NS	24,300	11,035	NS	1,374	60,464
TOTAL OF 9 DISTRICTS		10	26	125	16,045	35,896	37,762	44,930	103,019	83,276	70,583	51,485	38,788	1,399	278,290

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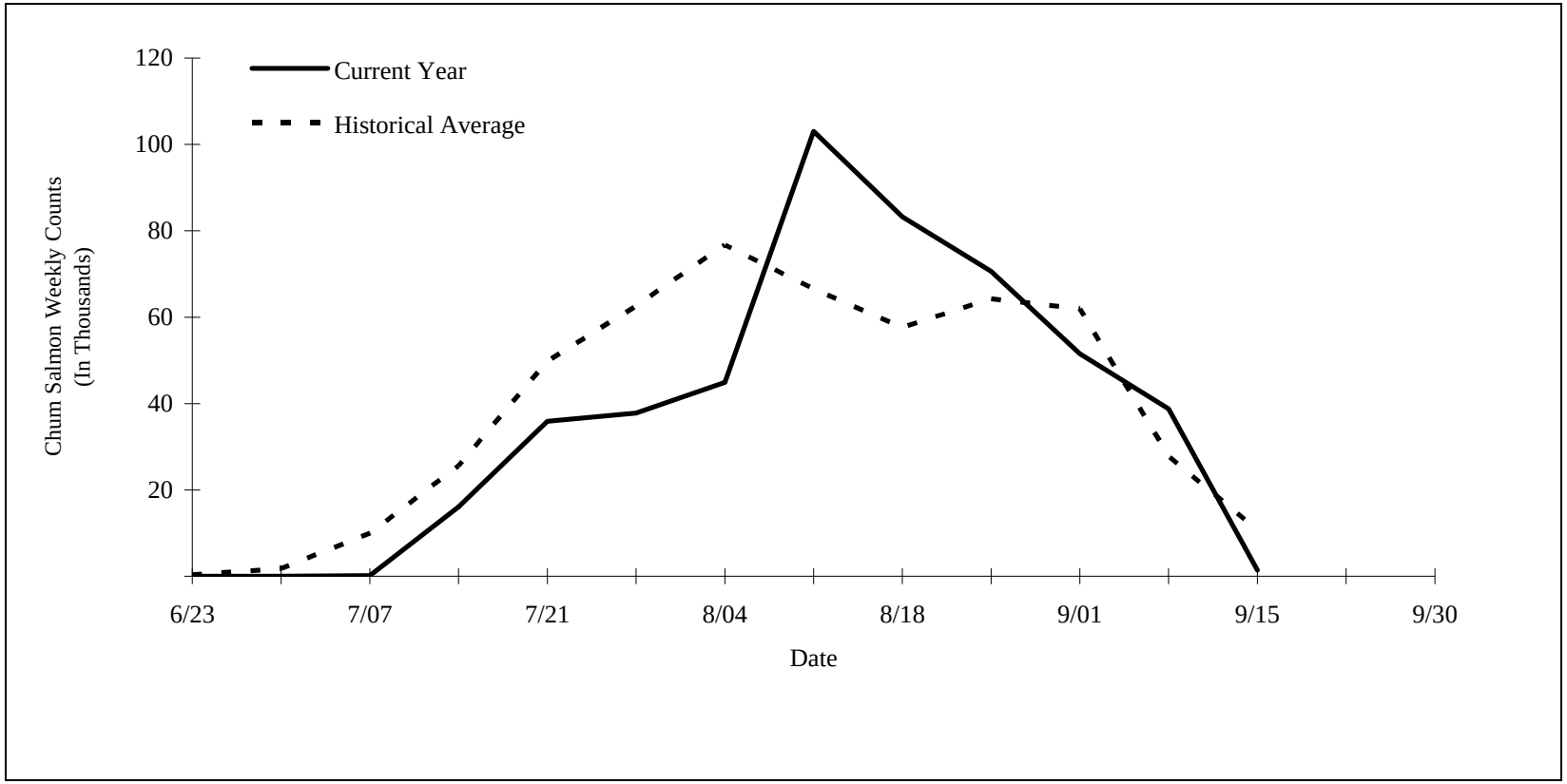
[a] There are a total of 208 streams included in the systematic aerial survey program. The survey program commences in the Eastern District where the earliest escapements in the sound occur. Weather and conditions permitting, each stream is flown weekly. Failure to fly a survey due to run timing or bad survey conditions is denoted by NS (no survey). a notation of NC (no count) occurs when a stream is flown but no count is possible because of survey conditions (i.e., water clarity). During the peak of the pink salmon run many streams are flown twice weekly to provide fisheries managers with more timely escapement data. In cases where more than one survey per week was flown the weekly observation shown in this table 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 adjusted total is an escapement estimate based a geometric method used since the inception of the systematic survey program in the early 1960's. 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 1960's. Because observer bias does occur and because both observer bias and stream life are stream specific, adjusted totals 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, 2007.

Appendix D11.–Aerial survey escapement indices of sockeye salmon from selected systems, 2007.

System Name	Stream Number	Week Ending Date [a] 7/7	7/14	7/21	7/28	8/4	8/11	8/18	8/25	9/1	9/8	9/15
Billy's Cr.	218	20	100	500	600	NS	500	200	150	NS	10	NS
Cowpen Cr.	242	NS	NS	40	NS	NS	NS	0	NS	NS	NS	NS
Miners River	244	NS	8	NS	NS	NS	120	300	NS	NS	1,200	NS
Red Cr.	300	NS	NS	NS	NS	NS	30	20	NS	NS	NS	NS
Hobo Cr.	417	NS	NS	NS	NS	NS	NS	NS	NS	20	30	NS
Old Creek	424	NS	NS	NS	NS	NS	NS	NS	NS	NS	10	NS
Wickett Ceek	469	NS	NS	NS	NS	NS	NS	NS	NS	50	NS	NS
Jackpot Rvr	608	NS	NS	NS	NS	500	NS	500	NS	500	30	NS
Brizgaloff Cr	623	NS	NS	NS	NS	NS	NS	NS	NS	20	10	NS
Bainbridge	630	NS	NS	NS	NS	400	200	200	NS	35	50	NS
Cabin Creek	747	NS	NS	NS	NS	100	NS	20	NS	40	NS	NS
Total		20	108	540	600	1,000	850	1,240	150	665	1,340	0

NS = No Survey

[a] Counts contained in this table are obtained in conjunction with the regular pink and chum salmon aerial survey program. Many of these sockeye salmon systems are difficult to survey by air and thus the counts do not necessarily 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, 2007.

				Brood Year and Age Class				
				2004	2003	2002	2001	
				0.2	0.3	0.4	0.5	Total [b]
Coghill District[a]								
Stratum dates:	07/01	-	09/12					
Sampling date:	07/03	-	07/03					
Sample size:	394							
	Sample size			4	218	5	1	228
Female	Percentage of sample			1.0	55.3	1.3	0.3	57.9
	Number in harvest			4,725	257,532	5,907	1,181	269,346
	Sample size			5	152	5	3	165
Male	Percentage of sample			1.3	38.6	1.3	0.8	41.9
	Number in harvest			5,907	179,564	5,907	3,544	194,921
	Sample size			9	371	10	4	394
Total	Percentage of sample			2.3	94.2	2.5	1.0	100.0
	Number in harvest			10,632	438,277	11,813	4,725	465,448
	Standard error			3,508	5,505	3,693	2,354	
Montague District								
Strata Combined:	05/29	-	08/25					
Sampling dates:	06/11	-	06/19					
Sample size:	769							
	Sample size			19	287	45	1	352
Female	Percentage of sample			2.8	37.8	5.5	0.1	46.2
	Number in harvest			20,840	280,080	40,735	729	342,384
	Sample size			19	312	85	0	416
Male	Percentage of sample			2.9	41.1	9.7	0.0	53.7
	Number in harvest			21,305	304,365	72,237	0	397,907
	Sample size			38	600	130	1	769
Total	Percentage of sample			5.7	79.0	15.2	0.1	100.0
	Number in harvest			42,145	585,174	112,971	729	741,020
	Standard error			6,669	11,009	9,337	729	
Eastern District								
Stratum dates:	06/27	-	09/09					
Sampling date:	07/12	-	07/12					
Sample size:	388							
	Sample size			0	120	55	13	188
Female	Percentage of sample			0.0	30.9	14.2	3.4	48.5
	Number in harvest			0	25,075	11,493	2,716	39,285
	Sample size			2	125	60	13	200
Male	Percentage of sample			0.5	32.2	15.5	3.4	51.5
	Number in harvest			418	26,120	12,538	2,716	41,792
	Sample size			2	245	115	26	388
Total	Percentage of sample			0.5	63.1	29.6	6.7	100.0
	Number in harvest			418	51,196	24,031	5,433	81,077
	Standard error			295	1,988	1,882	1,031	
All Districts Combined								
Strata Combined:	05/29	-	07/21					
Sampling dates:	06/21	-	06/28					
Sample size:	769							
Female	Sample size			23	625	105	15	768
	Percentage of sample			2.0	43.7	4.5	0.4	50.6
	Number in harvest			25,565	562,687	58,134	4,627	651,014
Male	Sample size			24	464	90	3	581
	Percentage of sample			2.1	39.6	7.0	0.5	49.3
	Number in harvest			27,630	510,049	90,681	6,261	634,621
Total	Sample size			47	971	140	5	1,163
	Percentage of sample			4.1	83.5	11.6	0.8	100.0
	Number in harvest			53,195	1,074,647	148,815	10,888	1,287,545
	Standard error			7,541	12,468	10,215	2,671	

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

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

Appendix D13.–Summary of commercial purse seine salmon fishery periods, dates, duration, and emergency orders issued by district, 2007.

Eastern (221)		Northern (222)		Coghill (223)		Southwestern (226)		Montague (227)		Southeastern (228)		Unakwik (229)[a]		Emergency
Date	Hours	Date	Hours	Dates	Hours	Date	Hours	Dates	Hours	Date	Hours	Date	Hours	Orders
						5/28-06/03	156 [a]	5/28-7/22	1,248 [a]					2-F-E-002-07, 2-F-E-008-07
						6/11-07/22	936 [b]					06/11	36	2-F-E-022-07, 2-F-E-024-07
												06/14	24	2-F-E-029-07
												06/18	24	2-F-E-034-07
												06/21	48	2-F-E-038-07
												06/25	48	2-F-E-043-07
06/27	14 [a]													2-F-E-045-07
												06/28	48	2-F-E-050-07
06/30	12 [b,c]													2-F-E-055-07
												07/02	48	2-F-E-054-07
07/03	14 [b,c]													2-F-E-056-07
07/05	14 [b,c]											07/05	48	2-F-E-056-07, 2-F-E-060-07
07/06	14 [b,c]													2-F-E-080-07
07/07	14 [c,d,e]													2-F-E-080-07
07/08	14 [c,d,e]													2-F-E-066-07
07/10	14 [c,d,e]													2-F-E-067-07
07/11	14 [c,d,e]													2-F-E-067-07
												07/12	48	2-F-E-071-07
07/13	14 [b,c,f]			07/13	60 [g,h]									2-F-E-069-07, 2-F-E-072-07
07/15	14 [b,c,f,i]									07/15	14 [a]			2-F-E-074-07
				07/16	48 [j,k]							07/16	48	2-F-E-076-07, 2-F-E-078-07
07/17	14 [b,c,l,g,h]									07/17	14 [a,b]			2-F-E-079-07
07/18	14 [b,c,l,g,h,j]									07/18	14 [a,b]			2-F-E-079-07
07/19	14 [b,c,k,m]			07/19	60 [m]	07/19	36 [c]			07/19	14 [a]	07/19	48	2-F-E-082-07, 2-F-E-084-07,
07/20	14 [b,c,k,m]													2-F-E-087-07
						07/21	30 [c]							2-F-E-088-07
07/22	14 [m,n]			07/22	14 [n]					07/22	14 [a]			2-F-E-088-07
												07/23	48	2-F-E-091-07
07/25	14 [i,m,n,o]			07/25	14 [o]					07/25	14 [a]			2-F-E-088-07, 2-F-E-150-07
07/28	14 [m,n]			07/28	14 [p]					07/28	14 [a]			2-F-E-094-07
07/30	14 [m,p]	07/30	14 [a,b]			07/30	14 [d]	07/30	14 [b]	07/30	14 [a]			2-F-E-101-07
08/01	14 [m,q]	08/01	14 [a,b]	08/01	14 [q]	08/01	14 [d]	08/01	14 [b]	08/01	14 [a]			2-F-E-102-07
08/03	14 [m,q]	08/03	14 [b,c]			08/03	14 [d,e]	08/03	14 [b]	08/03	14 [a]			2-F-E-105-07
08/05	14 [m,q]	08/05	14 [b,d]	08/05	14 [r]	08/05	14 [d,f]	08/05	14 [b]	08/05	14 [a]			2-F-E-106-07
08/07	14 [m,q]	08/07	14 [b,e]	08/07	14 [r]	08/07	14 [d,i]	08/07	14 [b]	08/07	14 [a]			2-F-E-158-07
08/09	14 [m,q]	08/09	14 [b,e]	08/09	14 [r]	08/09	14 [d,f]	08/09	14 [b]	08/09	14 [a]			2-F-E-110-07
08/11	14 [m,q]	08/11	14 [b,e]	08/11	14 [s]	08/11	14 [d,f]	08/11	14 [b]	08/11	14 [a]			2-F-E-159-07
08/13	14 [m,q]	08/13	14 [b,e,f]	08/13	14 [t]	08/13	14 [d,f,l]	08/13	14 [b]	08/13	14 [a]			2-F-E-115-07
08/15	14 [q]	08/15	14 [b,e]	08/15	14 [s]	08/15	14 [d,f]	08/15	14 [b]	08/15	14 [a]			2-F-E-116-07
08/17	14 [q]	08/17	14 [b,d]	08/17	14 [u]	08/17	14 [d,f,l]	08/17	14 [b]	08/17	14 [a]			2-F-E-117-07
08/18	14 [q]	08/18	14 [b,d]	08/18	14 [u]	08/18	14 [d,f,l]	08/18	14 [b]	08/18	14 [a]			2-F-E-117-07
08/19	60 [q]	08/19	60 [e,i]	08/19	60 [s]	08/19	60 [d,g]	08/19	60 [b]	08/19	60 [a]			2-F-E-122-07
08/22	84 [q]	08/22	84 [e,f,i]	08/22	84 [r]	08/22	84 [d,h,j,k]	08/22	84 [b]	08/22	84 [a]			2-F-E-123-07

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Eastern (221)		Northern (222)		Coghill (223)		Southwestern (226)		Montague (227)		Southeastern (228)		Unakwik (229)		Emergency
Date	Hours	Date	Hours	Dates	Hours	Date	Hours	Dates	Hours	Date	Hours	Date	Hours	Orders
08/26	84 [q]	08/26	84 [e,f,i]	08/26	84 [r]	08/26	84 [d,h,j]	08/26	84 [b]	08/26	84 [a]			2-F-E-127-07
									[b]					2-F-E-129-07, 2-F-E-130-07,
08/30	60 [m,q]	08/30	60 [b,e,f]	08/30	36 [u]	08/30	60 [d,h,j]	08/30	60	08/30	60 [a]			2-F-E-134-07
09/02	84 [d,e,f,m,q,r]	09/02	84 [b,e,f]			09/02	84 [d,h,j]	09/02	84 [b]	09/02	84 [a]			2-F-E-131-07
09/06	60 [b,e,m,r]	09/06	60 [b,e,f]			09/06	60 [d,h,j]	09/06	60 [b]	09/06	60 [a]			2-F-E-135-07
09/09	84 [b,e,m,r]	09/09	84 [b,l]			09/09	84 [d,f,j]	09/09	84 [b]	09/09	84 [a]			2-F-E-139-07
09/13	60 [b,e,m,r]	09/13	60 [b,l]			09/13	60 [d,f,j]	09/13	60 [b]	09/13	60 [a]			2-F-E-142-07
09/16	84 [b,e,m,r]	09/16	84 [g]			09/16	84 [m]	09/16	84 [b]	09/16	84 [a]			2-F-E-143-07
09/20	132 [b,e,r]													2-F-E-149-07

Eastern District

[a] Waters of the Eastern District north of a line at the latitude of Point Freemantle (60 55.755 N Lat.) were open.

[b] Waters of the Eastern District were open.

[c] Anadromous stream closures north of a line from Potato Point to Entrance Point were not in effect.

[d] Waters of the Eastern District north of a line from Entrance Point to Potato Point were open.

[e] Waters inside 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 will remain closed.

[f] Waters in Port Valdez east of the security zone and south of 61° 05.35 N Lat. (61° 05.45 N Lat. from 9/4) remained closed.

[g] Waters behind the SHTF markers in Jack, Galena, and Sawmill bays were closed.

[h] Regulatory closed waters of Simpson and Nelson bays were open north of a line from Salmo Point to Shepard Point.

[i] Regulatory closed waters in Simpson and Nelson Bay were not in effect starting at 6am on 07/25.

[j] The closed area in Port Valdez was expanded (effective 3 p.m. on 7/18) to include all waters east of 146° 23.00 W. Long.

[k] In Port Valdez, all waters east 146° 30.00 W. Long. were closed.

[l] The closed area in Port Valdez was expanded to include waters east of the security zone and south of a new line at 61° 05.45 N. Lat.

[m] Waters behind the SHTF markers in all of the Eastern District were closed.

[n] Waters of the Eastern District south of the light at Bligh Reef (60° 50.25' N. Lat.) were open.

[o] Waters in Port Gravina north of a line from the light at Red Head to the light at Gravina Point were closed (effective at 6am on 07/25).

[p] Waters of the Eastern District south of Rocky Point were open.

[q] Waters of the Eastern District south of a line from Entrance Point to Potato Point were open.

[r] Regulatory closed waters in Port Valdez, as described in 5 AAC 24.350 Closed Waters. (3) (N) (O), were suspended effective 9/5.

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Northern District

[a] Waters of the Northern District, excluding waters of Unakwik Inlet north of Unakwik Point, were open.

[b] Waters behind all SHTF markers were closed.

[c] Waters of the Northern District, excluding Unakwik Inlet north of 60° 54.0' N. Lat. and the Perry Island Subdistrict, were open.

[d] Waters of the Northern District, excluding the Perry Island Subdistrict and the CCH SHA, were open.

[e] Waters of the Northern District, excluding the Perry Island Subdistrict and the CCH SHA and THA, were open.

[f] Within the Perry Island Subdistrict, Hidden Bay, west of 148° 06.00 W. Long., was open.

[g] Waters of the Northern District were open.

[i] Waters behind the SHTF markers in Eaglek, Siwash, and Jonah bays were closed.

[l] Waters of the Northern District, excluding the Perry Island Subdistrict, was open.

Coghill District

[g] The WNH SHA and THA up to a line of buoys in front of the barrier seine opened to purse seine gear until further notice.

[h] The purse seine period in the THA and SHA closed at 8:00pm Sunday, July 15.

[j] The WNH THA and SHA was open for purse seine gear.

[k] The Coghill district north or 60˚ 46.32' N. Lat. and east of a line from Pt. Pigot (60˚ 48.21' N. Lat., 148˚ 20.90' W. Long.) to Pt. Pakenham (61˚ 00.259' N. Lat., 148˚ 05.319' W. Long.), excluding the WNH THA and SHA, were open to drift gillnet gear . Anadromous stream closures (5 AAC 39.290(a)) were not in effect for Coghill Lagoon with fishing permitted up to the river mouth.

[m] The Coghill General District north of 60˚ 46.32' N. Lat. and east of a line from Pt. Pigot (60˚ 48.21' N. Lat., 148˚ 20.90' W. Long.) to Pt. Pakenham (61˚ 00.259' N. Lat., 148˚ 05.319' W. Long.) was open. The WNH SHA and THA up to the line of buoys in front of the barrier seine were open to purse seine gear only from 8:00am Thursday, July 19 until 8:00pm Saturday, July 21. On July 19th the Esther Subdistrict north of 60˚ 46.32' N. Lat. opened to drift gillnet gear until 8:00pm Saturday, July 21. Waters of the SHA and THA up to the line of buoys in front of the barrier seine were open to drift gillnet and purse seine gear until 8:00pm Saturday, July 21 as per 5 AAC 24.370(e)(5)(B) purse seine gear could be used in areas of the Coghill District beginning 12:0l am on Saturday, July 21

[n] The Coghill District including the WNH SHA and THA up to a line of buoys in front of the barrier seine were open from 6:00am until 8:00 pm Sunday, July 22. Waters south of 60˚ 46.50' N. Lat.and west of Esther Rocks (148˚ 10.65' W. Long.) were closed to protect wild pink and chum stocks.

[o] The Coghill District excluding the WNH THA and SHA were open. Open area was limited to waters north of 60˚ 46.50' N. Lat. and waters east of Esther Rocks (148˚ 10.65' W. Long.).

[p] The Coghill District, excluding the Esther Subdistrict were open. The open area was limited to waters in the Coghill District north of 60˚ 48.06' N. Lat. and all waters east of Esther Rocks (148˚ 10.65' W. Long).

[q] Waters of Granite Bay Subdistrict excluding waters of Esther Passage east of 148˚ 03.80' Long., were open.

[r] The Esther Subdistrict, within 1 mile of Esther Island, was open. The WNH SHA and THA remained closed.

[s] The Esther Subdistrict, within 1 nautical mile of Esther Island, including the WNH THA was open. The WNH SHA was closed.

[t] The Esther Subdistrict, within 1 nautical mile of Esther Island, including the WNH THA and SHA, was open. Waters north of 60˚ 47.80 N. Lat. in Lake Bay were closed.

[u] The Esther Subdistrict, within 1 nautical mile of Esther Island up to a line of buoys in front of the barrier seine in the SHA was open.

Southwestern District

[a] The AFK Hatchery THA, excluding waters south of a line from 60° 03.544’ N. Lat., 148° 03.580’ W. Long. to 60° 02.938’ N. Lat., 148° 02.640’ W. Long., was open.

[b] Waters of Marsha Bay, west of 147° 39.75’ W. Longitude, including regulatory closed waters and anadromous stream closures, were open.

[c] Waters of the AFK Hatchery SHA and THA were open from 8:00 am Thursday, July 19 until 8:00 pm Friday, July 20 and from 2:00 pm Saturday, July 21 until 8:00 pm Sunday, July 22.

[d] Waters in the Southwestern District east of the Point Helen light were open.

[e] Waters of the Elrington Subdistrict, including anadromous stream closures, were open.

[f] Waters of the Elrington and Port San Juan subdistricts, including the AFK THA and SHA up to a line of buoys in front of the barrier seine, were open.

[g] Waters of the Elrington and Port San Juan subdistricts, including the AFK THA and SHA, excluding waters of the SHA west of a line from 60° 03.244’ N. Lat., 148° 03.580’ W. Long. to 60° 02.877’ N. Lat., 148° 03.642’ W. Long., were open.

[h] Waters of the Elrington and Port San Juan subdistricts, including the AFK THA and SHA, excluding waters of the SHA west of a line from 60° 03.244’ N. Lat., 148° 03.580’ W. Long. to 60° 02.947’ N. Lat., 148° 02.617’ W. Long., were open.

[i] Waters of the Elrington and Port San Juan subdistricts, excluding the AFK SHA and THA, were open.

[j] Waters south of the latitude of Bainbridge Point were open.

[k] Anadromous stream closures were not in effect in Prince of Wales Passage.

[l] Prince of Whales Passage, south of a line from 60° 11.295' N. Lat., 148° 02.403' W. Long. to 60° 09.560' N. Lat., 147° 58.619' W. Long. was open.

[m] Waters of the Southwestern District, including the AFK SHA and THA, were open.

Montague District

[a] Waters of the Port Chalmers Subdistrict were open. Anadromous stream closures and regulatory closed waters in the Port Chambers Subdistrict were not in effect.

[b] Waters of the Motague District were open.

Southeastern District

[a] Waters of the Southeastern District were open.

[b] Waters of Nelson Bay, including regulatory closed waters, were open north of a line from Salmo Point to Shepard Point.

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, 2007.

Sockeye salmon runs to Prince William Sound hatcheries. [a,b]

Hatchery	BY 2002 Release	BY 2003 Release	2007 Forecast Run [c]	Estimated Total Run	Estimated CPF Contribution	Estimated Sales Harvest Contribution [d]	Broodstock Escapement [e]	Eggs Collected
Gulkana Hatchery I	24,969,782	26,019,038	285,600	121,834	94,232	0		28,700,000
Gulkana Hatchery II	1,275,033	1,323,551	12,800			0	27,602	1,750,000
Main Bay	8,119,423	10,030,580	1,131,000	1,160,859	819,244	321,330	20,285	13,100,000
Total Sockeye Salmon	34,364,238	37,373,169	1,429,400	1,282,693	913,476	321,330	47,887	43,550,000

Coho salmon runs to Prince William Sound hatcheries. [a,f]

Hatchery or release site	BY 2004 Release	2007 Forecast Run [c]	Estimated Total Run	Estimated CPF Contribution	Estimated Sales Harvest Contribution [d]	Broodstock Escapement [e]	Eggs Collected
Wally Noerenberg[e]	1,052,897	67,700	97,667	85,584	11,954	129	255,000
Solomon Gulch	1,511,592	161,740	79,553	58,299	17,690	3,564	2,265,576
Total Coho Salmon	2,564,489	229,440	177,220	143,883	29,644	3,693	2,520,576

Pink salmon runs to Prince William Sound hatcheries. [a]

Hatchery	BY 2005 Release	2007 Forecast Run [c]	Estimated Total Run	Estimated CPF Contribution	Estimated Sales Harvest Contribution [d]	Broodstock Escapement [e]	Eggs Collected
Solomon Gulch	216,921,213	12,169,280	23,847,942	19,586,090	3,967,798	294,054	230,033,709
Armin F. Koernig	159,616,613	7,217,000	15,760,177	12,449,638	3,045,323	265,216	160,000,000
Wally Noerenberg	84,795,328	4,211,000	7,524,098	3,831,328	3,456,332	236,438	148,000,000
Cannery Creek	138,157,160	6,143,000	7,430,043	5,638,233	1,443,191	348,619	152,000,000
Total Pink Salmon	599,490,314	29,740,280	54,562,260	41,505,289	11,912,644	1,144,327	690,033,709

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Chum salmon runs to Prince William Sound hatcheries. [a]

Hatchery or release site	BY 2001 Release	BY 2002 Release	BY 2003 Release	BY 2004 Release	2007 Forecast Run [c]	Estimated Total Run	Estimated CPF Contribution	Estimated Sales Harvest Contribution [d]	Broodstock Escapement [e]	Eggs Collected
Sawmill Bay	0	15,661,413	16,198,524	15,163,742	404,200			177,201	0	0
Wally Noerenberg	75,341,899	59,466,039	73,883,852	71,343,434	1,892,000	3,618,359	2,358,036	906,670	176,452	148,000,000
Port Chalmers	25,913,467	23,522,253	41,090,505	40,478,815	625,000				0	0
Total Chum Salmon	101,255,366	98,649,705	131,172,881	126,985,991	2,921,200	3,618,359	2,358,036	1,083,871	176,452	148,000,000
Total-All Salmon						59,640,532	44,920,684	13,347,489	1,372,359	884,104,285

[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 I and II total run estimates were completed by Prince William Sound Aquaculture Association.

[c] The 2007 forecasts of hatchery runs were completed by Prince William Sound Aquaculture and Valdez Development Association, except the Gulkana Hatchery forecast (ADF&G).

[d] Does not include carcass sales because they are part of the broodstock.

[e] Includes broodstock, over mature/green fish, holding mortalities, excess fish and fish processed for roe extraction. Also includes watershed spawners, and fish remaining in the bays after all other harvests were complete.

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

Appendix E2.–Sales harvests of salmon by species from private nonprofit hatcheries as reported on fish tickets, 1977–2007.

		Harvest by Species [a]				
Year	Hatchery [b]	Sockeye	Coho	Pink	Chum	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 [c]	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 [d]	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 [e]	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	28,777	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 [f]	AFK, SG, WNH, CC, MB	366,770	0	12,426,375	1,540,227	14,333,372
2004	AFK, SG, WNH, CC, MB	279,902	0	11,825,224	528,676	12,633,802
2005[g]	AFK, SG, WNH, CC, MB	207,605	27,417	12,529,283	535,783	13,300,088
2006 [h, i]	AFK, SG, WNH, CC, MB	348,276	17,198	9,727,499	824,558	10,917,531
10-Year Average		169,989	11,680	11,039,780	1,077,303	12,298,752
2007	AFK, SG, WNH, CC, MB	321,330	29,723	11,912,644	1,083,871	13,347,568

[a] Includes salmon harvested by private nonprofit hatcheries in Prince William Sound to generate revenues to offset operating costs. Does not include carcass sales or fish processed only for roe extraction after egg takes.

[b] Hatcheries: AFK = Armin F. Koernig (PWSAC) (formerly Port San Juan Hatchery)
E = Esther Hatchery (PWSAC), renamed WNH in 1989
SG = Solomon Gulch Hatchery (VFDA)
N = NERKA Inc.
CC = Cannery Creek (PWSAC) (formerly operated by ADF&G)
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)

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

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

[e] 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.

[f] Does not include 730,599 pink, 22,792 chum, and 19,782 coho salmon processed for roe extraction.

[g] Does not include 1,246,992 pink, 98,695 chum, and 30,676 coho salmon processed for roe extraction.

[h] Does not include 239,905 pink, 22,105 chum, and 5,090 coho salmon processed for roe extraction.

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

Appendix E3.–Historical harvest contributions, thermally marked otolith releases, and total returns of pink salmon to Prince William Sound hatcheries, return years 1998–2007.

Brood Year	Return Year	Fry Release	Hatchery Contribution to Broodstock Esc. [a]	Total Cost Recovery Harvest	Hatchery Contribution to CR 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%
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%

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Brood Year	Return Year	Fry Release	Hatchery Contribution to Broodstock Esc. [a]	Total Cost Recovery Harvest	Hatchery Contribution to CR 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%
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%

[a] Broodstock escapements include all fish remaining after commercial harvests, i.e., fish used for brood, watershed spawners, and fish remaining in front of the hatchery.

[b] Commercial common property fisheries(CCPF).

Appendix E4.–Historical harvest contributions, coded wire tag (CWT) and thermally marked otolith releases, and total returns of pink salmon to all hatcheries combined, 1977–2007.

Brood Year (BY)	Return Year	Fry Release [a]	CWT/Otolith Applied to Fry Release [b]	Total Cost Recovery Harvest [c]	Hatchery Contributions [h]					Estimated Marine Survival
					Hatchery Cost Recovery Harvests [b]	Commercial Common Property Harvests [a]	Other Harvests [d]	Broodstock Escapements [a, g]	Total Return	
1975	1977	1,000,000	0	15,545	7,745	4,000	0	16,112	27,857	2.79%
1976	1978	11,010,577	0	114,188	114,188	0	0	40,432	154,620	1.40%
1977	1979	16,950,784	0	223,748	223,748	275,000	0	54,207	552,955	3.26%
1978	1980	25,600,739	0	346,728	346,728	1,092,048	0	145,061	1,583,837	6.19%
1979	1981	24,194,000	0	707,037	707,037	1,430,747	0	268,501	2,406,285	9.95%
1980	1982	91,076,000	0	1,354,732	1,354,732	4,303,900	0	239,945	5,898,577	6.48%
1981	1983	91,951,000	0	686,963	686,963	3,338,366	0	258,062	4,283,391	4.66%
1982	1984	115,107,533	0	415,393	415,393	3,313,423	0	341,259	4,070,075	3.54%
1983	1985	116,336,000	0	1,209,960	1,209,960	6,259,923	0	640,340	8,110,223	6.97%
1984	1986	191,306,265	0	905,464	905,464	5,662,315	0	466,471	7,034,250	3.68%
1985	1987	231,538,713	646,561	2,691,190	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	1,632,701	8,748,000	0	824,302	11,205,003	5.12%
1987	1989	532,045,966	939,498	7,853,419	5,767,911	10,561,099	0	856,927	19,052,529 [e]	3.58%
1988	1990	507,688,297	1,074,099	8,732,658	6,691,160	24,379,475	0	749,910	33,315,579 [e]	6.56%
1989	1991	615,139,948	1,128,899	6,119,141	5,201,860	20,900,355	3,573,805	1,324,255	32,750,955 [e]	5.32%
1990	1992	603,519,636	1,091,403	3,049,394	2,626,248	4,345,805	30,290	789,880	8,579,332 [e]	1.42%
1991	1993	495,700,200	823,128	2,639,982	1,544,727	2,392,162	14,648	921,073	6,177,575 [e]	1.25%
1992	1994	567,320,470	950,976	10,308,169	7,613,582	21,173,273	56,396	1,422,306	35,100,601 [e]	6.19%
1993	1995	488,575,978	941,811	5,057,418	4,703,457	9,072,469	78,020	1,154,635	14,475,842 [e]	2.96%
1994	1996	613,158,229	1,017,782	8,285,166	5,363,551	14,502,198	0	544,531	24,284,522 [e]	3.96%
1995	1997	651,675,427 [f]	1,079,354	9,854,675	9,780,451	14,893,055	226	1,974,521	26,648,253	4.09%
1996	1998	484,525,934 [f]	484,525,934	8,825,226	8,666,960	16,145,999	6,931	3,008,251	27,828,141	5.74%
1997	1999	542,356,070 [f]	542,356,934	13,130,211	12,988,616	24,838,848	237,318	4,529,055	42,593,837	7.85%
1998	2000	602,128,903 [f]	602,128,903	11,125,819	11,055,419	22,099,196	728	1,293,409	34,448,752	5.72%
1999	2001	586,607,038 [f]	586,607,038	12,914,314	12,765,960	15,625,341	1,204	1,647,425	30,039,930	5.12%
2000	2002	621,063,728 [f]	621,063,728	10,787,752	10,703,126	7,926,335	992	1,497,115	20,127,568	3.24%
2001	2003	603,412,393 [f]	603,412,393	12,426,990	12,422,544	34,177,600	606	4,306,418	50,907,168	8.44%
2002	2004	607,943,252 [f]	607,943,252	11,825,224	11,825,224	8,835,385	652	1,951,671	22,612,932	3.72%
2003	2005	638,600,000 [f]	638,600,000	12,529,283	12,529,283	35,111,009	272	5,013,716	52,654,280	8.25%
2004	2006	564,053,077 [f]	564,053,077	9,726,272	9,726,272	10,010,169	384	1,694,390	21,431,215	3.80%
2005	2007	599,490,314	599,490,314	11,961,596	11,888,945	41,505,289	653	1,144,327	54,539,214	9.10%

continued

[a] 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. Beginning in 1994, broodstock numbers include fish processed for roe and reported by PWSAC. The hatchery contribution to broodstock escapements includes all fish not harvested in CPF or sales harvests.

[b] Data for brood years 1985–1995 provided by the ADF&G CWT project; succeeding years data from thermally marked otoliths. Sales numbers include inter-hatchery contributions.

[c] Data for all years from ADF&G fish ticket information.

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

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

[f] All hatchery pink salmon fry released after brood year 1995 had thermal otolith marks.

[g] Broodstock escapements prior to 1997 may not include fish remaining in the bay and watershed spawners and therefore may underestimate the broodstock escapements.

[h] 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 don't include harvest from the Bering and Copper River Districts.

Appendix E5.–Historical harvest contributions, thermally marked otolith releases, and total returns of coho salmon to Prince William Sound hatcheries, brood years 1988–2007.

Brood Year	Return Year	Fry Release	Hatchery Contribution to the CCPF [a]	Hatchery Contribution to Subsistence/ Personal Use Harvest	Hatchery Contribution to Sport Harvest	Hatchery Contribution to Broodstock Esc.	Hatchery Contribution to Cost Recovery. [b]	Total Hatchery Return	Estimated Marine Survival
1988	1991	807,153	4,157	0	10,000	1,461	39,176	54,794	6.79%
1989	1992	993,633	5,000	0	11,010	2,651	26,776	45,437	4.57%
1990	1993	1,226,044	102	0	500	1,658	2,343	4,603	0.38%
1991	1994	461,388	0	1,000	10,000	11,376	22,091	44,467	9.64%
1992	1995	915,087	78,006	1,000	25,000	16,045	21,592	141,643	15.48%
1993	1996	1,325,316	87,360	0	25,000	21,772	13,713	147,845	11.16%
1994	1997	1,875,823	47,500	0	25,000	13,605	9,818	95,923	5.11%
1995	1998	1,315,183	23,717	1,627	50,000	3,880	19,068	98,292	7.47%
1996	1999	1,748,486	67,232	0	50,000	2,541	12,679	132,452	7.58%
1997	2000	1,863,528	342,490	3,800	100,000	1,625	24,887	472,802	25.37%
1998	2001	1,625,599	147,000	3,854	135,000	1,778	25,595	313,227	19.27%
1999	2002	1,519,328	25,017	0	44,160	21,323	8,000	98,500	6.48%
2000	2003	1,821,889	63,132	0	118,800	17,379	4,087	203,398	11.16%
2001	2004	1,275,145	26,711	0	105,000	2,585	9,897	144,193	11.31%
2002	2005	1,442,274	129,966	0	66,000	2,102	30,686	228,754	15.86%
2003	2006	1,968,366	210,382	0	66,000	2,455	16,172	295,009	14.99%
2004	2007	1,511,592	58,299	0	70,917	3,564	17,748	150,528	9.96%
2005	2008	1,973,604							
Wally Noerenburg Hatchery									
1988	1991	2,397,419	71,947	0	3,610	6,469	13,990	96,016	4.00%
1989	1992	2,223,282	114,165	0	0	0	46,121	160,286	7.21%
1990	1993	1,831,198	39,658	0	100	4,857	1,532	46,147	2.52%
1991	1994	1,303,077	81,396	0	0	5,439	13,258	100,093	7.68%
1992	1995	1,483,936	34,680	0	0	4,964	5,152	44,796	3.02%
1993	1996	2,063,934	26,245	0	13,074	4,081	39,506	82,906	4.02%
1994	1997	275,406	5,626	0	8,315	5,674	0	19,615	7.12%
1995	1998	203,651	2,800	0	4,951	1,541	0	9,292	4.56%
1996	1999	407,715	338	0	4,100	2,533	0	6,971	1.71%

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Appendix E5.–Page 2 of 2.

Brood Year	Return Year	Fry Release	Hatchery Contribution to the CCPF [a]	Hatchery Contribution to Subsistence/ Personal Use Harvest	Hatchery Contribution to Sport Harvest	Hatchery Contribution to Broodstock Esc.	Hatchery Contribution to Cost Recovery. [b]	Total Hatchery Return	Estimated Marine Survival
1997	2000	1,068,338	111,256	0	39,071	2,551	0	152,878	14.31%
1998	2001	375,670	2,488	0	6,800	3,277	0	12,565	3.34%
1999	2002	219,967	3,215	0	22,698	2,389	0	28,302	12.87%
2000	2003	485,834	9,624	0	13,067	1,314	0	24,005	4.94%
2001	2004	920,858	9,333	0	4,543	150	637	14,663	1.59%
2002	2005	989,383	53,257	0	22,673	11,450	19	87,399	8.83%
2003	2006	1,057,922	113,997	0	46,425	17,079	0	177,501	16.78%
2004	2007	1,052,897	61,621	0	19,182	2,129	11,975	94,907	9.01%
2005	2008	1,850,000							

[a] 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.

[b] Commercial common property fisheries.

Appendix E6.–Sockeye salmon hatchery and wild stock contributions to the Copper River drift gillnet commercial common property fishery by period, 2007.

			Origin [a]							
			Gulkana		Main Bay		Hatchery	Wild		
Dates	Period	Hours	No.	Percent	No.	Percent	Total	No.	Percent	Total
05/14 - 05/14	1 [b,c]	12	502	2.3	0	0.0	502	21,586	97.7	22,088
05/17 - 05/17	2 [b,c]	12	1,701	2.3	0	0.0	1,701	73,164	97.7	74,865
05/21 - 05/21	3 [b,c]	12	2,482	2.3	0	0.0	2,482	106,706	97.7	109,188
05/28 - 05/28	4 [b,c]	12	5,831	2.3	0	0.0	5,831	250,728	97.7	256,559
05/31 - 05/31	5 [b,c]	12	2,436	2.3	0	0.0	2,436	104,759	97.7	107,195
06/02 - 06/02	6 [b,c]	12	2,492	2.3	0	0.0	2,492	107,173	97.7	109,665
06/04 - 06/04	7 [b,c]	12	1,680	2.3	0	0.0	1,680	72,245	97.7	73,925
06/06 - 06/06	8 [b,c]	12	1,513	2.3	0	0.0	1,513	65,072	97.7	66,585
06/08 - 06/08	9 [b,c]	12	494	2.3	0	0.0	494	21,229	97.7	21,723
06/11 - 06/12	10	36	3,202	2.3	0	0.0	3,202	137,707	97.7	140,909
06/14 - 06/16	11	60	1,480	1.3	0	0.0	1,480	116,890	98.8	118,370
06/18 - 06/20	12	48	2,893	2.3	0	0.0	2,893	121,486	97.7	124,379
06/21 - 06/23	13	48	3,639	3.2	2,426	2.1	6,065	107,961	94.7	114,026
06/25 - 06/26	14	24	3,956	6.8	1,209	2.1	5,165	52,860	91.1	58,025
06/28 - 06/29	15	24	2,152	5.6	824	2.1	2,975	35,752	92.3	38,727
07/02 - 07/04	16	48	7,743	11.8	0	0.0	7,743	57,723	88.2	65,466
07/05 - 07/07	17 [d]	60	11,640	16.8	0	0.0	11,640	57,472	83.2	69,112
07/09 - 07/11	18	48	5,026	21.7	0	0.0	5,026	18,095	78.3	23,121
07/12 - 07/14	19	60	7,550	12.8	0	0.0	7,550	51,589	87.2	59,139
07/16 - 07/18	20	48	3,382	7.5	584	1.3	3,965	40,965	91.2	44,930
07/19 - 07/21	21	60	5,406	12.9	2,265	5.4	7,670	34,225	81.7	41,895
07/23 - 07/25	22	48	3,901	14.9	0	0.0	3,901	22,290	85.1	26,191
07/26 - 07/28	23	60	4,619	9.7	0	0.0	4,619	43,110	90.3	47,729
07/30 - 08/01	24 [e]	48	3,792	9.7	0	0.0	3,792	35,394	90.3	39,186
08/02 - 08/04	25 [e,f]	60	2,169	9.7	0	0.0	2,169	20,247	90.3	22,416
08/06 - 08/08	26 [e,f]	48	896	9.7	0	0.0	896	8,360	90.3	9,256
08/09 - 08/11	27 [e,f]	60	557	9.7	0	0.0	557	5,203	90.3	5,760
08/13 - 08/14	28 [e,f]	24	383	9.7	0	0.0	383	3,570	90.3	3,953
08/16 - 08/17	29 [e,f]	24	315	9.7	0	0.0	315	2,943	90.3	3,258
08/20 - 08/21	30 [e,f]	24	252	9.7	0	0.0	252	2,355	90.3	2,607
08/27 - 08/28	31 [e,f]	24	79	9.7	0	0.0	79	740	90.3	819
09/03 - 09/04	32 [e,f]	24	59	9.7	0	0.0	59	554	90.3	613
09/10 - 09/11	33 [e,f]	24	5	9.7	0	0.0	5	46	90.3	51
09/17 - 09/18	34 [e,f]	24	4	9.7	0	0.0	4	37	90.3	41
09/20 - 09/21	35 [g]	24	0	0.0	0	0.0	0	1	100.0	1
09/24 - 09/25	36 [h]	24					0	0		0
09/27 - 09/29	37 [h]	60					0	0		0
10/01 - 10/03	38 [h]	60					0	0		0
10/04 - 10/07	39 [h]	84					0	0		0
10/08 - 10/10	40 [h]	60					0	0		0
10/11 - 10/14	41 [h]	84					0	0		0
Total			94,232	5.0	7,307	0.4	101,539	1,800,234	94.7	1,901,773

[a] Gulkana Hatchery contributions were based on recoveries of strontium chloride marked otoliths and Main Bay Hatchery contributions were based on recoveries of thermal marked otoliths.

[b] Proportions from period 10 were used to allocate Gulkana Hatchery contribution.

[c] Proportions from period 10 were used to allocate Main Bay Hatchery contribution.

[d] Proportions from period 16 were used to allocate Main Bay Hatchery contribution.

[e] Proportions from period 23 were used to allocate Gulkana Hatchery contribution.

[f] Proportions from period 24 were used to allocate Main Bay Hatchery contribution.

[g] Allocated to wild stocks.

[h] No sockeye salmon were harvested.

Appendix E7.–Gulkana sockeye salmon harvests and total contribution, 1977–2007.

Year	Hatchery Contributions			Brood Stock/ Escapement	Total Hatchery Run
	Commercial	Subsistence/ Personal Use	Sport		
1977	183	12	1	122	318
1978	720	74	5	1,300	2,099
1979	900	393	19	3,425	4,737
1980	350	589	40	4,250	5,229
1981	3,600	478	40	4,650	8,768
1982	3,600	322	10	5,740	9,673
1983	6,600	1,167	28	6,502	14,296
1984	5,318	450	19	14,650	20,437
1985	31,955	2,121	164	20,680	54,920
1986	30,404	2,667	161	20,975	54,208
1987	47,347	3,071	196	28,200	78,814
1988	92,552	9,351	487	30,125	132,516
1989	175,643	13,734	772	47,075	237,224
1990	64,917	7,203	274	19,100	91,494
1991	102,009	9,449	466	40,659	152,583
1992	87,120	11,455	405	32,396	131,376
1993	149,844	14,812	547	97,249	262,452
1994	94,656	9,157	359	69,750	173,923
1995	147,844	15,289	705	65,640	229,478 [a]
1996	314,916	16,144	1,045	145,903	478,008 [a]
1997	266,724	8,857	1,084	129,017	405,682 [a]
1998	524,985	31,824	986	119,130	676,925 [a]
1999	945,287	42,281	979	130,735	1,119,282 [a]
2000	366,372	34,113	1,090	73,115	474,690 [a]
2001	196,326	35,699	720	80,485	313,230 [a]
2002	335,451	28,305	684	60,254	424,694 [a]
2003	138,056	19,513	627	44,961	203,156 [a]
2004	59,540	27,117	570	6,695	93,922 [b]
2005	95,897	28,031	738	91,058	215,724 [c]
2006	163,691	34,818	645	96,552	287,793
10-Year Average	309,233	29,056	812	83,200	440,531
2007	94,232	27,557[d]	653[d]	27,602	150,044

[a] Commercial, subsistence, and personal use fishery contributions from coded wire tag (CWT) estimates.

[b] Commercial from Sr marks, Subsistence/Personal Use from historical CWT average, Sport from average proportion of previous estimates, broodstock from Gulkana Hatchery surveys.

[c] Commercial and Subsistence/Personal Use from Sr marks, Sport from average proportion of previous estimates, broodstock from Gulkana Hatchery surveys.

[d] Sport, Personal Use and Subsistence contributions for 2007 are averages of previous 5-years harvest data.

Appendix E8.–Gulkana sockeye salmon fry releases, 1974–2007.

Release Year	Major Return Years			Gulkana I&II (Paxson Lake)	Summit Lake	Crosswind Lake	Total
1974	1978	-	1979	79,691			79,691
1975	1979	-	1980	785,110			785,110
1976	1980	-	1981	627,080			627,080
1977	1981	-	1982	514,922			514,922
1978	1982	-	1983	477,219			477,219
1979	1983	-	1984	940,974			940,974
1980	1984	-	1985	1,105,397			1,105,397
1981	1985	-	1986	3,368,642	1,340,660		4,709,302
1982	1986	-	1987	5,985,270	1,860,491		7,845,761
1983	1987	-	1988	5,470,056	2,047,947		7,518,003
1984	1988	-	1989	6,162,450	4,312,628		10,475,078
1985	1989	-	1990	9,261,785	4,741,759		14,003,544
1986	1990	-	1991	8,586,509	8,451,782	1,287,042	18,325,333
1987	1991	-	1992	9,905,907	14,999,085		24,904,992
1988	1992	-	1993	6,204,332	12,491,926	2,487,396	21,183,654
1989	1993	-	1994	10,105,238	12,026,642	3,130,373	25,262,253
1990	1994	-	1995	13,288,695	12,004,491	4,906,005	30,199,191
1991	1995	-	1996	10,522,819	6,455,011	5,469,759	22,447,589
1992	1996	-	1997	10,553,621	7,048,536	5,420,351	23,022,508
1993	1997	-	1998	5,295,017	2,651,542	4,495,966	12,442,525
1994	1998	-	1999	9,405,449	7,637,009	9,144,382	26,186,840
1995	1999	-	2000	10,317,116	7,418,311	9,973,600	27,709,027
1996	2000	-	2001	13,900,000	8,400,148	9,732,911	28,850,917
1997	2001	-	2002	11,589,845	10,162,655	10,512,299	32,264,799
1998	2002	-	2003	12,286,366	8,987,213	10,516,107	31,789,686
1999	2003	-	2004	10,198,541	9,191,217	9,984,392	29,374,150
2000	2004	-	2005	10,705,795	3,300,504	8,331,080	22,337,379
2001	2005	-	2006	7,870,334	493,516	5,585,665	13,949,515
2002	2006	-	2007	11,922,685	5,805,231	8,174,754	25,902,670
2003	2007	-	2008	11,284,330	6,599,519	8,360,966	26,244,815
2004	2008	-	2009	12,408,512	6,574,962	8,359,115	27,342,589
2005	2009	-	2010	3,308,065	NA	3,703,295	7,011,360
2006	2010	-	2011	5,523,920	4681325	10,017,211	20,222,456
10-Year Average				9,709,839	6,199,571	8,354,488	24,506,788
2007	2011	-	2012	4,873,000	6,000,000	10,000,000	20,873,000

Appendix E9.–Sockeye salmon hatchery and wild stock contributions to the Coghill District commercial common property fishery by period, 2007.

			Origin							
			Gulkana [a]		Main Bay		Hatchery	Wild		
Dates	Period	Hours	No.	Percent	No.	Percent	Total	No.	Percent	Total
05/28 - 05/29	1 [b]	24					0	0		0
05/31 - 06/01	2 [c]	24	ND		0	0.0	0	1	100.0	1
06/04 - 06/05	3 [d]	24	ND		3	30.4	3	7	69.6	10
06/08 - 06/09	4 [d]	24	ND		20	30.4	20	47	69.6	67
06/11 - 06/12	5 [d]	36	ND		226	30.4	226	515	69.6	741
06/14 - 06/15	6 [d]	24	ND		346	30.4	346	791	69.6	1,137
06/18 - 06/19	7	24	ND		1,288	30.4	1,288	2,945	69.6	4,233
06/21 - 06/23	8	48	ND		4,862	58.0	4,862	3,520	42.0	8,382
06/25 - 06/27	9	48	ND		6,581	54.2	6,581	5,568	45.8	12,149
06/28 - 06/30	10	48	ND		5,903	35.8	5,903	10,592	64.2	16,495
07/02 - 07/04	11	48	ND		22,859	74.6	22,859	7,764	25.4	30,623
07/05 - 07/07	12 [e]	48	ND		18,415	62.2	18,415	11,209	37.8	29,624
07/09 - 07/11	13	48	ND		11,347	62.2	11,347	6,907	37.8	18,254
07/12 - 07/15	14	84	ND		0	0.0	0	16,702	100.0	16,702
07/16 - 07/18	15	48	ND		11,286	57.9	11,286	8,208	42.1	19,494
07/19 - 07/21	16	60	ND		7,931	46.7	7,931	9,065	53.3	16,996
07/22 - 07/22	17	14	ND		2,426	58.7	2,426	1,710	41.3	4,136
07/25 - 07/25	18	14	ND		2,996	77.8	2,996	856	22.2	3,852
07/28 - 07/28	19 [f]	14	ND		1,441	77.8	1,441	412	22.2	1,853
08/01 - 08/01	20 [b]	14					0	0		0
08/05 - 08/05	21 [f]	14	ND		186	77.8	186	53	22.2	239
08/07 - 08/07	22 [f]	14	ND		192	77.8	192	55	22.2	247
08/09 - 08/09	23 [f]	14	ND		175	77.8	175	50	22.2	225
08/11 - 08/11	24 [f]	14	ND		64	77.8	64	18	22.2	82
08/13 - 08/13	25 [f]	14	ND		23	77.8	23	7	22.2	30
08/15 - 08/15	26 [f]	14	ND		15	77.8	15	4	22.2	19
08/17 - 08/17	27 [b]	14					0	0		0
08/18 - 08/18	28 [f]	14	ND		5	77.8	5	1	22.2	6
08/19 - 08/21	29 [f]	60	ND		23	77.8	23	7	22.2	30
08/22 - 08/25	30 [f]	84	ND		95	77.8	95	27	22.2	122
08/26 - 08/29	31 [f]	84	ND		72	77.8	72	21	22.2	93
08/30 - 09/01	32 [f]	60	ND		19	77.8	19	6	22.2	25
09/02 - 09/05	33 [f]	84	ND		23	77.8	23	7	22.2	30
09/06 - 09/08	34 [f]	60	ND		3	77.8	3	1	22.2	4
09/09 - 09/12	35 [g]	84	ND		1	100.0	1	0	0.0	1
09/13 - 09/15	36 [b]	60					0	0		0
09/16 - 09/19	37 [b]	84					0	0		0
09/20 - 09/22	38 [b]	60					0	0		0
09/23 - 09/26	39 [b]	72					0	0		0
Total			ND		98,828	53.2	98,828	87,073	46.8	185,901

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

[b] No sockeye salmon were harvested.

[c] Allocated to wild stocks.

[d] Proportions from period 7 were used to allocate harvest.

[e] Proportions from period 13 were used to allocate harvest.

[f] Proportions from period 18 were used to allocate harvest.

[g] Allocated to Main Bay Hatchery.

Appendix E10.–Pink salmon hatchery and wild stock contributions to the Coghill District commercial common property fishery by period, 2007.

			Origin											
			Solomon Gulch		Cannery Creek		W. Noerenberg		A.F. Koernig		Hatchery	Wild		
Dates	Period	Hours	No.	Percent	No.	Percent	No.	Percent	No.	Percent	Total	No.	Percent	Total
05/28 - 05/29	1 [a]	24									0	0		0
05/31 - 06/01	2 [a]	24									0	0		0
06/04 - 06/05	3 [a]	24									0	0		0
06/08 - 06/09	4 [a]	24									0	0		0
06/11 - 06/12	5 [a]	36									0	0		0
06/14 - 06/15	6 [b]	24	0	0.0	0	0.0	0	0.0	0	0.0	0	1	100.0	1
06/18 - 06/19	7 [c]	24	7	32.9	1	5.7	0	0.0	0	0.0	8	13	61.4	21
06/21 - 06/23	8 [b]	48	0	0.0	0	0.0	0	0.0	0	0.0	0	3	100.0	3
06/25 - 06/27	9 [c]	48	15	32.9	3	5.7	0	0.0	0	0.0	18	29	61.4	47
06/28 - 06/30	10 [a]	48									0	0		0
07/02 - 07/04	11 [a]	48									0	0		0
07/05 - 07/07	12 [c]	48	41	32.9	7	5.7	0	0.0	0	0.0	48	76	61.4	124
07/09 - 07/11	13 [c]	48	627	32.9	109	5.7	0	0.0	0	0.0	736	1,171	61.4	1,907
07/12 - 07/15	14 [c]	84	1,607	32.9	279	5.7	0	0.0	0	0.0	1,887	3,004	61.4	4,891
07/16 - 07/18	15	48	4,908	32.9	853	5.7	0	0.0	0	0.0	5,761	9,175	61.4	14,936
07/19 - 07/21	16	60	11,235	10.4	0	0.0	19,100	17.7	0	0.0	30,335	77,522	71.9	107,857
07/22 - 07/22	17	14	4,637	6.6	2,318	3.3	10,820	15.4	0	0.0	17,775	52,552	74.7	70,327
07/25 - 07/25	18	14	10,971	11.5	1,995	2.1	38,898	40.6	997	1.0	52,861	42,888	44.8	95,749
07/28 - 07/28	19	14	2,882	1.4	11,526	5.6	97,972	47.9	0	0.0	112,380	92,209	45.1	204,589
08/01 - 08/01	20 [a]	14									0	0		0
08/05 - 08/05	21 [d]	14	1,907	1.4	7,629	5.6	64,847	47.9	0	0.0	74,383	61,032	45.1	135,415
08/07 - 08/07	22 [d]	14	2,081	1.4	8,323	5.6	70,743	47.9	0	0.0	81,146	66,581	45.1	147,727
08/09 - 08/09	23 [d]	14	2,708	1.4	10,831	5.6	92,060	47.9	0	0.0	105,598	86,644	45.1	192,242
08/11 - 08/11	24 [d]	14	4,074	1.4	16,294	5.6	138,501	47.9	0	0.0	158,868	130,354	45.1	289,222
08/13 - 08/13	25	14	0	0.0	0	0.0	247,070	92.6	0	0.0	247,070	19,653	7.4	266,723
08/15 - 08/15	26 [e]	14	0	0.0	0	0.0	148,994	92.6	0	0.0	148,994	11,852	7.4	160,846
08/17 - 08/17	27 [e]	14	0	0.0	0	0.0	172,176	92.6	0	0.0	172,176	13,696	7.4	185,872
08/18 - 08/18	28 [f]	14	0	0.0	33,795	20.7	107,018	65.5	2,816	1.7	143,630	19,714	12.1	163,344

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Dates	Period	Hours	Origin: Solomon Gulch No.	Solomon Gulch Percent	Cannery Creek No.	Cannery Creek Percent	W. Noerenberg No.	W. Noerenberg Percent	A.F. Koernig No.	A.F. Koernig Percent	Hatchery Total	Wild No.	Wild Percent	Total
08/19 - 08/21	29	60	0	0.0	34,379	20.7	108,867	65.5	2,865	1.7	146,111	20,055	12.1	166,166
08/22 - 08/25	30	84	0	0.0	24,972	18.2	87,401	63.6	12,486	9.1	124,858	12,486	9.1	137,344
08/26 - 08/29	31	84	0	0.0	5,167	41.0	4,521	35.9	1,292	10.3	10,979	1,615	12.8	12,594
08/30 - 09/01	32	60	0	0.0	1,837	4.4	39,190	94.1	0	0.0	41,027	612	1.5	41,639
09/02 - 09/05	33 [g]	84	0	0.0	18	4.4	387	94.1	0	0.0	405	6	1.5	411
09/06 - 09/08	34 [a]	60									0	0		0
09/09 - 09/12	35 [a]	84									0	0		0
09/13 - 09/15	36 [a]	60									0	0		0
09/16 - 09/19	37 [a]	84									0	0		0
09/20 - 09/22	38 [a]	60									0	0		0
09/23 - 09/26	39 [a]	72									0	0		0
Total			47,698	2.0	160,337	6.7	1,448,563	60.4	20,456	0.9	1,677,054	722,943	30.1	2,399,997

[a] No pink salmon were harvested.

[b] Allocated to wild stocks.

[c] Proportions from period 15 were used to allocate harvest.

[d] Proportions from period 19 were used to allocate harvest.

[e] Proportions from period 25 were used to allocate harvest.

[f] Proportions from period 29 were used to allocate harvest.

[g] Proportions from period 32 were used to allocate harvest.

Appendix E11.–Chum salmon hatchery and wild stock contributions to the Coghill District commercial common property fishery by period, 2007.

			Wally Noerenburg		Port Chalmers		Hatchery	Wild		
Dates	Period	Hours	No.	%	No.	%	Total	No.	%	Total
05/28 - 05/29	1 [b]	24	0		0		0	0		0
05/31 - 06/01	2 [c]	24	4,162	96.9	45	1.0	4,207	90	2.1	4,296
06/04 - 06/05	3	24	24,345	96.9	262	1.0	24,606	524	2.1	25,130
06/08 - 06/09	4	24	15,047	98.9	164	1.1	15,211	0	0.0	15,211
06/11 - 06/12	5	36	97,893	97.9	1,064	1.1	98,957	1,064	1.1	100,021
06/14 - 06/15	6	24	67,364	98.9	717	1.1	68,081	0	0.0	68,081
06/18 - 06/19	7	24	61,288	99.0	0	0.0	61,288	645	1.0	61,933
06/21 - 06/23	8	48	47,012	97.9	506	1.1	47,517	506	1.1	48,023
06/25 - 06/27	9	48	156,073	97.9	1,678	1.1	157,751	1,678	1.1	159,429
06/28 - 06/30	10	48	144,652	99.0	0	0.0	144,652	1,523	1.0	146,175
07/02 - 07/04	11	48	142,728	100.0	0	0.0	142,728	0	0.0	142,728
07/05 - 07/07	12	48	59,218	95.8	1,931	3.1	61,149	644	1.0	61,793
07/09 - 07/11	13 [d]	48	75,636	95.8	2,466	3.1	78,103	822	1.0	78,925
07/12 - 07/15	14	84	331,728	100.0	0	0.0	331,728	0	0.0	331,728
07/16 - 07/18	15	48	110,450	95.8	0	0.0	110,450	4,802	4.2	115,252
07/19 - 07/21	16	60	97,230	97.9	0	0.0	97,230	2,069	2.1	99,299
07/22 - 07/22	17	14	8,336	90.8	0	0.0	8,336	844	9.2	9,180
07/25 - 07/25	18	14	4,836	95.2	0	0.0	4,836	242	4.8	5,078
07/28 - 07/28	19 [e]	14	2,131	95.2	0	0.0	2,131	107	4.8	2,238
08/01 - 08/01	20 [b]	14	0		0		0	0		0
08/05 - 08/05	21 [e]	14	67	95.2	0	0.0	67	3	4.8	70
08/07 - 08/07	22 [e]	14	45	95.2	0	0.0	45	2	4.8	47
08/09 - 08/09	23 [e]	14	38	95.2	0	0.0	38	2	4.8	40
08/11 - 08/11	24 [e]	14	36	95.2	0	0.0	36	2	4.8	38
08/13 - 08/13	25 [e]	14	72	95.2	0	0.0	72	4	4.8	76
08/15 - 08/15	26 [e]	14	3	95.2	0	0.0	3	0	4.8	3
08/17 - 08/17	27 [b]	14	0		0		0	0		0
08/18 - 08/18	28 [e]	14	9	95.2	0	0.0	9	0	4.8	9
08/19 - 08/21	29 [b]	60	0		0		0	0		0
08/22 - 08/25	30 [e]	84	6	95.2	0	0.0	6	0	4.8	6
08/26 - 08/29	31 [e]	84	7	95.2	0	0.0	7	0	4.8	7
08/30 - 09/01	32 [e]	60	1	95.2	0	0.0	1	0	4.8	1
09/02 - 09/05	33 [e]	84	6	95.2	0	0.0	6	0	4.8	6
09/06 - 09/08	34 [e]	60	2	95.2	0	0.0	2	0	4.8	2
09/09 - 09/12	35 [b]	84	0		0		0	0		0
09/13 - 09/15	36 [b]	60	0		0		0	0		0
09/16 - 09/19	37 [b]	84	0		0		0	0		0
09/20 - 09/22	38 [b]	60	0		0		0	0		0
09/23 - 09/26	39 [b]	72	0		0		0	0		0
Total			1,450,421	98.3	8,832	0.6	1,459,253	15,572	1.1	1,474,825

[a] Contributions were calculated by thermal mark ID as release locations are not certain or there were multiple release locations, times and/or brood years for the same mark.

[b] No chum salmon were harvested.

[c] Proportions from period 3 were used to allocate harvest.

[d] Proportions from period 12 were used to allocate harvest.

[e] Proportions from period 18 were used to allocate harvest.

Appendix E12.–Wally Norenberg Hatchery salmon cost recovery harvest by day, 2007.

Catch [a]		Chinook		Sockeye		Coho		Pink		Chum	
Date	Landings	No.	Pounds	No.	Pounds	No.	Pounds	No.	Pounds	No.	Pounds
06/02	1	0	0	0	0	0	0	0	0	9,091	68,185
06/04	1	0	0	0	0	0	0	0	0	8,390	61,246
06/06	1	0	0	0	0	0	0	0	0	951	6,565
06/07	1	0	0	0	0	0	0	0	0	5,471	39,941
06/08	1	0	0	0	0	0	0	0	0	8,972	63,703
06/09	1	0	0	0	0	0	0	0	0	6,662	57,961
06/10	1	0	0	0	0	0	0	0	0	19,718	134,083
06/11	1	0	0	0	0	0	0	0	0	17,327	121,291
06/12	1	0	0	0	0	0	0	0	0	9,928	84,391
06/13	1	0	0	0	0	0	0	0	0	14,818	102,247
06/14	1	0	0	0	0	0	0	0	0	24,922	176,946
06/15	1	0	0	0	0	0	0	0	0	16,798	114,233
06/17	2	0	0	0	0	0	0	0	0	37,916	258,989
06/18	1	0	0	0	0	0	0	0	0	14,691	99,902
06/19	2	0	0	0	0	0	0	0	0	33,323	229,282
06/20	1	0	0	0	0	0	0	0	0	12,646	85,994
06/21	1	0	0	0	0	0	0	0	0	6,491	42,838
06/22	1	0	0	0	0	0	0	0	0	7,370	49,380
06/23	1	0	0	0	0	0	0	0	0	14,631	98,030
06/24	1	0	0	0	0	0	0	0	0	58,815	411,703
06/25	1	0	0	0	0	0	0	0	0	17,477	115,350
06/26	2	0	0	0	0	0	0	0	0	29,708	193,099
06/27	1	0	0	0	0	0	0	0	0	19,301	123,528
06/28	1	0	0	0	0	0	0	0	0	45,367	299,419
06/29	2	0	0	0	0	0	0	0	0	52,251	333,689
06/30	1	0	0	0	0	0	0	0	0	14,906	107,465
07/01	2	0	0	0	0	0	0	0	0	32,869	216,938
07/02	1	0	0	0	0	0	0	0	0	13,065	96,682
07/03	2	0	0	0	0	0	0	0	0	45,135	290,434
07/04	2	0	0	0	0	0	0	0	0	39,122	305,150
07/05	1	0	0	0	0	0	0	0	0	19,816	124,838
07/07	3	0	0	0	0	0	0	0	0	55,896	342,425
07/08	1	0	0	0	0	0	0	0	0	24,217	150,147
07/09	2	0	0	0	0	0	0	0	0	33,814	206,086
07/10	2	0	0	0	0	0	0	0	0	31,891	191,974
07/11	2	0	0	0	0	0	0	0	0	39,044	234,743
07/21	1	0	0	0	0	0	0	0	0	7,083	42,498
07/22	1	0	0	0	0	0	0	0	0	10,112	60,672
07/23	1	0	0	0	0	0	0	0	0	15,214	91,284
07/24	1	0	0	0	0	0	0	16,934	50,802	11,136	70,156
07/25	1	0	0	0	0	0	0	0	0	5,249	31,494
07/26	2	0	0	0	0	0	0	26,738	90,911	4,842	32,442
07/27	1	0	0	0	0	0	0	21,089	67,485	1,560	9,203
07/29	6	0	0	0	0	0	0	266,519	881,455	8,209	53,536
07/31	7	0	0	0	0	0	0	270,936	894,894	5,589	37,096

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Catch [a]		Chinook		Sockeye		Coho		Pink		Chum	
Date	Landings	No.	Pounds	No.	Pounds	No.	Pounds	No.	Pounds	No.	Pounds
08/02	7	0	0	0	0	0	0	329,450	1,056,264	0	0
08/04	4	0	0	0	0	0	0	120,783	403,160	0	0
08/06	8	0	0	0	0	0	0	355,070	1,162,176	0	0
08/08	3	0	0	0	0	0	0	187,630	619,181	0	0
08/10	6	0	0	0	0	0	0	308,972	1,013,446	0	0
08/12	8	0	0	0	0	0	0	492,801	1,587,611	0	0
08/14	5	0	0	0	0	0	0	289,678	910,815	0	0
08/16	7	0	0	0	0	1,042	9,067	325,855	1,037,016	8,394	57,920
08/22	1	0	0	0	0	808	6,790	39,092	129,005	0	0
08/23	3	0	0	0	0	871	8,029	116,705	393,393	0	0
08/26	2	0	0	0	0	2,190	16,862	48,974	156,302	0	0
08/27	1	0	0	0	0	7,043	59,160	43,650	139,679	0	0
08/28	1	0	0	0	0	0	0	19,220	61,504	0	0
08/29	1	0	0	0	0	0	0	21,592	69,094	0	0
08/31	1	0	0	0	0	0	0	14,996	47,987	0	0
09/01	1	0	0	0	0	0	0	24,148	77,274	0	0
09/02	1	0	0	0	0	0	0	17,303	55,370	0	0
09/03	1	0	0	0	0	0	0	19,348	61,914	0	0
09/04	1	0	0	0	0	0	0	20,992	67,174	0	0
09/05	1	0	0	0	0	0	0	19,120	61,184	0	0
09/06	1	0	0	0	0	0	0	18,660	59,712	0	0
09/07	1	0	0	0	0	0	0	29,466	94,291	0	0
Total	134	0	0	0	0	11,954	99,908	3,465,721	11,249,099	920,198	6,125,178
Average Weight			0.00		0.00		8.36		3.25		6.66

[a] These numbers do not include a broodstock escapement of 173,452 chum and 231,438 pink salmon.

Appendix E13.–Daily salmon sales and sex ratios, sales summary, and broodstock summary at the Wally Noerenberg Hatchery, 2007.

	Pink Salmon					Chum Salmon					Coho Salmon	
Date	% Female	Sales Harvest	Sales Harvest Cumulative	Brood Stock[a]	Brood Stock Cumulative[a]	% Female	Sales Harvest	Sales Harvest Cumulative	Brood Stock[a]	Brood Stock Cumulative[a]	Sales Harvest	Sales Harvest Cumulative
06/02	-----	0	0	0	0	8.5%	9,091	9,091	0	0	0	0
06/03	-----	0	0	0	0	8.0%	0	9,091	0	0	0	0
06/04	-----	0	0	0	0	NR	8,390	17,481	0	0	0	0
06/05	-----	0	0	0	0	-----	0	17,481	0	0	0	0
06/06	-----	0	0	0	0	10.7%	951	18,432	0	0	0	0
06/07	-----	0	0	0	0	14.2%	5,471	23,903	0	0	0	0
06/08	-----	0	0	0	0	16.0%	8,972	32,875	0	0	0	0
06/09	-----	0	0	0	0	13.1%	6,662	39,537	0	0	0	0
06/10	-----	0	0	0	0	22.1%	19,718	59,255	0	0	0	0
06/11	-----	0	0	0	0	13.8%	17,327	76,582	0	0	0	0
06/12	-----	0	0	0	0	13.0%	9,928	86,510	0	0	0	0
06/13	-----	0	0	0	0	19.0%	14,818	101,328	0	0	0	0
06/14	-----	0	0	0	0	17.3%	24,922	126,250	0	0	0	0
06/15	-----	0	0	0	0	28.5%	16,798	143,048	0	0	0	0
06/16	-----	0	0	0	0	30.7%	0	143,048	0	0	0	0
06/17	-----	0	0	0	0	27.8%	37,916	180,964	0	0	0	0
06/18	-----	0	0	0	0	28.9%	14,691	195,655	0	0	0	0
06/19	-----	0	0	0	0	29.3%	33,323	228,978	0	0	0	0
06/20	-----	0	0	0	0	31.8%	12,646	241,624	0	0	0	0
06/21	-----	0	0	0	0	29.0%	6,491	248,115	0	0	0	0
06/22	-----	0	0	0	0	24.0%	7,370	255,485	0	0	0	0
06/23	-----	0	0	0	0	29.6%	14,631	270,116	0	0	0	0
06/24	-----	0	0	0	0	33.7%	58,815	328,931	0	0	0	0
06/25	-----	0	0	0	0	38.8%	17,477	346,408	0	0	0	0
06/26	-----	0	0	0	0	42.0%	29,708	376,116	0	0	0	0
06/27	-----	0	0	0	0	51.0%	19,301	395,417	0	0	0	0
06/28	-----	0	0	0	0	49.0%	45,367	440,784	0	0	0	0
06/29	-----	0	0	0	0	47.7%	52,251	493,035	0	0	0	0

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	Pink Salmon					Chum Salmon					Coho Salmon	
Date	% Female	Sales Harvest	Sales Harvest Cumulative	Brood Stock[a]	Brood Stock Cumulative[a]	% Female	Sales Harvest	Sales Harvest Cumulative	Brood Stock[a]	Brood Stock Cumulative[a]	Sales Harvest	Sales Harvest Cumulative
06/30	-----	0	0	0	0	57.7%	14,906	507,941	0	0	0	0
07/01	-----	0	0	0	0	54.0%	32,869	540,810	0	0	0	0
07/02	-----	0	0	0	0	62.0%	13,065	553,875	0	0	0	0
07/03	-----	0	0	0	0	62.0%	45,135	599,010	16,000	16,000	0	0
07/04	-----	0	0	0	0	48.0%	39,122	638,132	0	16,000	0	0
07/05	-----	0	0	0	0	60.0%	19,816	657,948	0	16,000	0	0
07/06	-----	0	0	0	0	60.0%	0	657,948	0	16,000	0	0
07/07	-----	0	0	0	0	61.0%	55,896	713,844	2,200	18,200	0	0
07/08	-----	0	0	0	0	NR	24,217	738,061	10,940	29,140	0	0
07/09	-----	0	0	0	0	55.5%	33,814	771,875	12,860	42,000	0	0
07/10	-----	0	0	0	0	66.0%	31,891	803,766	9,000	51,000	0	0
07/11	-----	0	0	0	0	67.0%	39,044	842,810	11,000	62,000	0	0
07/12	-----	0	0	0	0	-----	0	842,810	14,000	76,000	0	0
07/13	-----	0	0	0	0	67.0%	0	842,810	11,000	87,000	0	0
07/14	-----	0	0	0	0	-----	0	842,810	400	87,400	0	0
07/15	-----	0	0	0	0	-----	0	842,810	13,600	101,000	0	0
07/16	-----	0	0	0	0	-----	0	842,810	13,000	114,000	0	0
07/17	-----	0	0	0	0	-----	0	842,810	12,000	126,000	0	0
07/18	-----	0	0	0	0	-----	0	842,810	12,000	138,000	0	0
07/19	-----	0	0	0	0	-----	0	842,810	10,000	148,000	0	0
07/20	-----	0	0	0	0	-----	0	842,810	12,000	160,000	0	0
07/21	-----	0	0	0	0	NR	7,083	849,893	13,000	173,000	0	0
07/22	-----	0	0	0	0	NR	10,112	860,005	5,000	178,000	0	0
07/23	-----	0	0	0	0	NR	15,214	875,219	1,000	179,000	0	0

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	Pink Salmon					Chum Salmon					Coho Salmon	
Date	% Female	Sales Harvest	Sales Harvest Cumulative	Brood Stock[a]	Brood Stock Cumulative[a]	% Female	Sales Harvest	Sales Harvest Cumulative	Brood Stock[a]	Brood Stock Cumulative[a]	Sales Harvest	Sales Harvest Cumulative
07/24	7.1%	16,934	16,934	0	0	85.0%	11,136	886,355	0	179,000	0	0
07/25	NR	NR	16,934	0	0	NR	5,249	891,604	0	179,000	0	0
07/26	7.1%	26,738	43,672	0	0	NR	4,842	896,446	0	179,000	0	0
07/27	10.7%	21,089	64,761	0	0	NR	1,560	898,006	0	179,000	0	0
07/28	-----	0	64,761	0	0	-----	0	898,006	0	179,000	0	0
07/29	13.5%	266,519	331,280	0	0	NR	8,209	906,215	0	179,000	0	0
07/30	NR	NR	331,280	NR	0	-----	0	906,215	0	179,000	0	0
07/31	24.0%	270,936	602,216	0	0	NR	5,589	911,804	0	179,000	0	0
08/01	-----	0	602,216	0	0	-----	0	911,804	0	179,000	0	0
08/02	29.0%	329,450	931,666	0	0	-----	0	911,804	0	179,000	0	0
08/03	-----	0	931,666	0	0	-----	0	911,804	0	179,000	0	0
08/04	35.6%	120,783	1,052,449	0	0	-----	0	911,804	0	179,000	0	0
08/05	-----	0	1,052,449	0	0	-----	0	911,804	0	179,000	0	0
08/06	47.0%	321,982	1,374,431	0	0	-----	0	911,804	0	179,000	0	0
08/07	-----	0	1,374,431	0	0	-----	0	911,804	0	179,000	0	0
08/08	43.0%	187,630	1,562,061	0	0	-----	0	911,804	0	179,000	0	0
08/09	-----	0	1,562,061	0	0	-----	0	911,804	0	179,000	0	0
08/10	58.0%	308,972	1,871,033	0	0	-----	0	911,804	0	179,000	0	0
08/11	-----	0	1,871,033	0	0	-----	0	911,804	0	179,000	0	0
08/12	64.0%	492,801	2,363,834	0	0	-----	0	911,804	0	179,000	0	0
08/13	-----	0	2,363,834	0	0	-----	0	911,804	0	179,000	0	0
08/14	59.0%	289,678	2,653,512	0	0	-----	0	911,804	0	179,000	0	0
08/15	NR	NR	2,653,512	0	0	-----	0	911,804	0	179,000	0	0
08/16	64.0%	325,855	2,979,367	0	0	NR	8,394	920,198	0	179,000	0	0
08/17	-----	0	2,979,367	0	0	-----	0	920,198	0	179,000	0	0
08/18	-----	0	2,979,367	0	0	-----	0	920,198	0	179,000	0	0
08/19	-----	0	2,979,367	0	0	-----	0	920,198	0	179,000	0	0
08/20	-----	0	2,979,367	0	0	-----	0	920,198	0	179,000	0	0
08/21	-----	0	2,979,367	0	0	-----	0	920,198	0	179,000	0	0

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	Pink Salmon					Chum Salmon					Coho Salmon	
Date	% Female	Sales Harvest	Sales Harvest Cumulative	Brood Stock[a]	Brood Stock Cumulative[a]	% Female	Sales Harvest	Sales Harvest Cumulative	Brood Stock[a]	Brood Stock Cumulative[a]	Sales Harvest	Sales Harvest Cumulative
08/22	73.0%	39,092	3,018,459	0	0	-----	0	920,198	0	179,000	1,042	1,042
08/23	62.0%	116,705	3,135,164	0	0	-----	0	920,198	0	179,000	808	1,850
08/24	-----	0	3,135,164	18,000	18,000	-----	0	920,198	0	179,000	871	2,721
08/25	-----	0	3,135,164	7,000	25,000	-----	0	920,198	0	179,000	2,190	4,911
08/26	-----	48,974	3,184,138	22,000	47,000	-----	0	920,198	0	179,000	7,043	11,954
08/27	65.8%	43,650	3,227,788	18,000	65,000	-----	0	920,198	0	179,000	0	11,954
08/28	NR	19,220	3,247,008	21,000	86,000	-----	0	920,198	0	179,000	0	11,954
08/29	NR	21,592	3,268,600	23,000	109,000	-----	0	920,198	0	179,000	0	11,954
08/30	-----	0	3,268,600	20,000	129,000	-----	0	920,198	0	179,000	0	11,954
08/31	NR	14,996	3,283,596	22,000	151,000	-----	0	920,198	0	179,000	0	11,954
09/01	NR	24,148	3,307,744	25,000	176,000	-----	0	920,198	0	179,000	0	11,954
09/02	NR	17,303	3,325,047	29,000	205,000	-----	0	920,198	0	179,000	0	11,954
09/03	NR	19,348	3,344,395	20,000	225,000	-----	0	920,198	0	179,000	0	11,954
09/04	NR	20,992	3,365,387	26,000	251,000	-----	0	920,198	0	179,000	0	11,954
09/05	NR	19,120	3,384,507	24,000	275,000	-----	0	920,198	0	179,000	0	11,954
09/06	NR	18,660	3,403,167	19,000	294,000	-----	0	920,198	0	179,000	0	11,954
09/07	NR	29,466	3,432,633	0	294,000	-----	0	920,198	0	179,000	0	11,954
09/08	-----	0	3,432,633	21,000	315,000	-----	0	920,198	0	179,000	0	11,954
09/09	-----	0	3,432,633	7,000	322,000	-----	0	920,198	0	179,000	0	11,954

Cost Recovery Sales Summary	Pink Salmon	Chum Salmon	Coho Salmon
Pounds Sold	11,156,057	6,128,519	99,935
Average Weights	3.25	6.66	8.36

Broodstock Summary[a] (Including Roe Sales)	Pink Salmon	Chum Salmon	Coho Salmon

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Viable broodstock (spawned, eggs in incubators)	220,207	148,568	129[b]
Inviable broodstock (green/over-ripe/bad)	NR	5,890	NR
Unspawned fish (roe recovery, excess males)	NR	16,168	NR
Holding mortalities (raceway, pen mortalities)	11,231	2,826	NR
Total adults captured for broodstock[a]	231,438	173,452	129
Estimated unharvested return[c]	5,000	3,000	NR
Estimated total return to hatchery	236,438	176,452	129

[a] Broodstock summary numbers are from WNH 2007 Annual Report, broodstock daily harvest numbers are from PWSAC inseason daily updates. NR- not reported.

[b] Broodstock harvested from Cordova (Fleming Spit) return, 10/22-11/23.

[c] Fish remaining in saltwater, sea lion predation, etc.

Appendix E14.–Sockeye salmon hatchery and wild stock contributions to the Eshamy District commercial common property fishery by period, 2007.

			Origin							
			Gulkana [a]		Main Bay		Hatchery	Wild		
Dates	Period	Hours	No.	Percent	No.	Percent	Total	No.	Percent	Total
06/11 - 06/12	1	36	ND		2,106	86.2	2,106	337	13.8	2,443
06/14 - 06/15	2	24	ND		2,093	90.9	2,093	209	9.1	2,302
06/18 - 06/19	3	24	ND		7,618	96.3	7,618	297	3.8	7,915
06/21 - 06/23	4	48	ND		44,583	95.7	44,583	1,981	4.3	46,564
06/25 - 06/26	5	24	ND		24,135	85.0	24,135	4,259	15.0	28,394
06/28 - 06/29	6	24	ND		77,268	98.9	77,268	822	1.1	78,090
07/02 - 07/03	7	24	ND		47,098	89.4	47,098	5,607	10.6	52,705
07/05 - 07/05	8	12	ND		133,747	94.7	133,747	7,514	5.3	141,261
07/09 - 07/09	9	12	ND		122,888	95.8	122,888	5,343	4.2	128,231
07/12 - 07/12	10	12	ND		86,012	96.8	86,012	2,805	3.2	88,817
07/16 - 07/16	11	12	ND		34,705	95.8	34,705	1,531	4.2	36,236
07/19 - 07/19	12	12	ND		18,774	86.2	18,774	3,013	13.8	21,787
07/23 - 07/23	13	12	ND		14,484	88.2	14,484	1,943	11.8	16,427
07/28 - 07/29	14	36	ND		32,579	95.7	32,579	1,448	4.3	34,027
07/30 - 08/01	15	48	ND		19,679	95.7	19,679	894	4.3	20,573
08/02 - 08/04	16 [b]	60	ND		13,257	95.7	13,257	603	4.3	13,860
08/06 - 08/08	17 [b]	48	ND		14,432	95.7	14,432	656	4.3	15,088
08/09 - 08/11	18 [c]	60					0	0		0
08/13 - 08/15	19 [c]	48					0	0		0
08/16 - 08/18	20 [c]	60					0	0		0
08/20 - 08/22	21 [c]	48					0	0		0
08/23 - 08/25	22 [c]	60					0	0		0
08/27 - 08/29	23 [c]	48					0	0		0
08/30 - 09/01	24 [c]	60					0	0		0
Total			ND		695,458	94.7	695,458	39,262	5.3	734,720

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

[b] Proportions from period 15 were used to allocate harvest.

[c] No sockeye salmon were harvested.

Appendix E15.–Pink salmon hatchery and wild stock contributions to the Eshamy District commercial common property fishery by period, 2007.

Dates	Period	Hours	Origin											
			Solomon Gulch		Cannery Creek		W. Noerenberg		A.F. Koernig		Hatchery	Wild		
			No.	Percent	No.	Percent	No.	Percent	No.	Percent	Total	No.	Percent	Total
06/11 - 06/12	1 [a]	36									0	0		0
06/14 - 06/15	2 [a]	24									0	0		0
06/18 - 06/19	3 [b]	24	0	0.0	0	0.0	0	0.0	0	0.0	0	1	100.0	1
06/21 - 06/23	4 [c]	48	11	19.4	0	0.0	0	0.0	0	0.0	11	48	80.6	59
06/25 - 06/26	5 [c]	24	25	19.4	0	0.0	0	0.0	0	0.0	25	103	80.6	128
06/28 - 06/29	6 [c]	24	36	19.4	0	0.0	0	0.0	0	0.0	36	150	80.6	186
07/02 - 07/03	7 [c]	24	135	19.4	0	0.0	0	0.0	0	0.0	135	563	80.6	698
07/05 - 07/05	8 [c]	12	350	19.4	0	0.0	0	0.0	0	0.0	350	1,459	80.6	1,809
07/09 - 07/09	9 [c]	12	508	19.4	0	0.0	0	0.0	0	0.0	508	2,119	80.6	2,627
07/12 - 07/12	10	12	848	19.4	0	0.0	0	0.0	0	0.0	848	3,533	80.6	4,381
07/16 - 07/16	11 [c]	12	1,261	19.4	0	0.0	0	0.0	0	0.0	1,261	5,255	80.6	6,516
07/19 - 07/19	12	12	841	7.0	0	0.0	1,051	8.8	0	0.0	1,892	10,092	84.2	11,984
07/23 - 07/23	13	12	1,166	6.8	194	1.1	2,525	14.8	0	0.0	3,885	13,209	77.3	17,094
07/28 - 07/29	14	36	0	0.0	0	0.0	167	5.0	335	10.0	502	2,843	85.0	3,345
07/30 - 08/01	15 [d]	48	0	0.0	0	0.0	166	5.0	331	10.0	497	2,816	85.0	3,313
08/02 - 08/04	16 [d]	60	0	0.0	0	0.0	69	5.0	139	10.0	208	1,177	85.0	1,385
08/06 - 08/08	17 [d]	48	0	0.0	0	0.0	155	5.0	309	10.0	464	2,628	85.0	3,092
08/09 - 08/11	18 [a]	60									0	0		0
08/13 - 08/15	19 [a]	48									0	0		0
08/16 - 08/18	20 [a]	60									0	0		0
08/20 - 08/22	21 [a]	48									0	0		0
08/23 - 08/25	22 [a]	60									0	0		0
08/27 - 08/29	23 [a]	48									0	0		0
08/30 - 09/01	24 [a]	60									0	0		0
Total			5,181	9.2	194	0.3	4,133	7.3	1,114	2.0	10,622	45,995	81.2	56,618

[a] No pink salmon were harvested.

[b] Allocated to wild stocks.

[c] Proportions from period 10 were used to allocate harvest.

[d] Proportions from period 14 were used to allocate harvest.

Appendix E16.–Daily salmon sales and sex ratios, sales summary, and broodstock summary at the Main Bay Hatchery, 2007.

	Sockeye Salmon					Chum Salmon	
Date	% Female	Sales Harvest	Sales Harvest cumulative	Brood Stock[a]	Brood Stock cumulative	Sales Harvest	Sales Harvest cumulative
06/19	37.9%	9,437	9,437	0	0	0	0
06/20	-----	1,592	11,029	0	0	0	0
06/21	47.1%	9,820	20,849	0	0	0	0
06/22	51.9%	1,275	22,124	0	0	0	0
06/23	45.6%	1,743	23,867	0	0	0	0
06/24	-----	0	23,867	0	0	0	0
06/25	45.4%	2,242	26,109	0	0	0	0
06/26	-----	0	26,109	0	0	0	0
06/27	50.0%	9,421	35,530	0	0	0	0
06/28	-----	0	35,530	0	0	0	0
06/29	44.0%	13,027	48,557	0	0	0	0
06/30	-----	0	48,557	0	0	0	0
07/01	46.7%	17,463	66,020	0	0	0	0
07/02	-----	0	66,020	0	0	0	0
07/03	41.2%	15,362	81,382	0	0	0	0
07/04	57.5%	11,517	92,899	47	47	0	0
07/05	46.1%	18,435	111,334	68	115	0	0
07/06	-----	0	111,334	0	115	0	0
07/07	48.1%	15,491	126,825	153	268	0	0
07/08	NR	14,188	141,013	NR	268	0	0
07/09	53.6%	15,529	156,542	338	606	0	0
07/10	56.4%	8,776	165,318	259	865	0	0
07/11	60.9%	14,812	180,130	422	1,287	0	0
07/12	55.0%	19,999	200,129	362	1,649	0	0
07/13	61.0%	16,639	216,768	552	2,201	0	0
07/14	64.4%	15,694	232,462	797	2,998	0	0
07/15	65.2%	12,507	244,969	693	3,691	0	0
07/16	60.7%	15,502	260,471	1,440	5,131	0	0
07/17	-----	0	260,471	725	5,856	0	0
07/18	57.0%	13,039	273,510	485	6,341	0	0
07/19	57.0%	10,558	284,068	608	6,949	0	0
07/20	70.2%	5,862	289,930	783	7,732	0	0
07/21	65.2%	5,749	295,679	979	8,711	0	0
07/22	61.0%	8,047	303,726	0	8,711	0	0
07/23	53.0%	5,141	308,867	0	8,711	0	0
07/24	NR	1,739	310,606	NR	8,711	0	0
07/25	68.0%	4,216	314,822	0	8,711	0	0
07/26	63.0%	6,025	320,847	0	8,711	5,269	5,269
07/27	NR	483	321,330	NR	8,711	0	5,269

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Cost Recovery Sales Summary	Sockeye salmon	Chum salmon
Pounds Sold	2,130,418	36,883
Average Weight	6.63	7.00
Broodstock Summary (Including Roe Sales)	**Sockeye salmon**	
Viable broodstock (spawned, eggs in incubators)	5,793	
Inviable broodstock (green/over-ripe/bad)	63	
Unspawned fish (roe recovery, excess males)	2,250	
Holding mortalities (raceway, pen mortalities)	179	
Total adults captured for broodstock[a]	8,285	
Estimated unharvested return[b]	12,000	
Estimated total return to hatchery	20,285	

[a] Broodstock summary numbers are from MBH 2007 Annual Report, broodstock daily harvest numbers are from PWSAC inseason daily updates.

[b] Fish remaining in saltwater, sea lion predation, etc. NR- not reported.

Appendix E17.–Sockeye salmon hatchery and wild stock contributions to Main Bay Hatchery cost recovery by statistical week, 2007.

Dates	Stat. Week		Origin: Gulkana [a] No.	Gulkana [a] Percent	Main Bay No.	Main Bay Percent	Wild No.	Wild Percent	Total
06/17 - 06/23	25	[b]	ND		23,867	100.0	0	0.0	23,867
06/24 - 06/30	26	[b]	ND		24,690	100.0	0	0.0	24,690
07/01 - 07/07	27	[b]	ND		78,268	100.0	0	0.0	78,268
07/08 - 07/14	28	[b]	ND		105,637	100.0	0	0.0	105,637
07/15 - 07/21	29	[b]	ND		63,217	100.0	0	0.0	63,217
07/22 - 07/28	30	[b]	ND		25,651	100.0	0	0.0	25,651
Total			ND		321,330	100.0	0	0.0	321,330

[a] Samples were not tested for presence of the Gulkana Hatchery mark.

[b] No cost recovery samples were taken. Contributions based on historical information.

Appendix E18.–Main Bay sockeye salmon harvests and total contribution, 1990–2007.

	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
10-Year Average	537,963	357	3,020	14,216	167,686	723,242
2007	819,244	0	500	20,285	321,330	1,161,359

[a] Commercial proportion from otolith marks, sport and subsistence/personal use from average proportion of previous estimates.

Appendix E19.–Main Bay Hatchery sockeye salmon fry releases, 1986–2007.

Release Year	Primary Return Years	Coghill Lake Stock	Eshamy Lake Stock	Eyak Lake Stock	Total
1986	1990/91	330,025			330,025
1987	1991/92	3,923,829			3,923,829
1988	1992/93	2,616,498			2,616,498
1989	1993/94	1,960,774	1,843,176		3,803,950
1990	1994/95	1,546,929	2,475,390	47,609	4,069,928
1991	1995/96	3,288,689	966,750	63,822	4,319,261
1992	1996/97	3,289,824	691,633		3,981,457
1993	1997/98	4,049,763	1,546,011	90,348	5,686,122
1994	1998/99	4,194,174	114,475	82,514	4,391,163
1995	1999/00	239,023	845,190	131,503	1,215,716
1996	2000/01		2,485,000	181,000	2,666,000
1997	2001/02		4,165,786	3,094,460	7,260,246
1998	2002/03	8,284,644			8,284,644
1999	2003/04	7,496,206			7,496,206
2000	2004/05	7,974,334			7,974,334
2001	2005/06		6,320,515		6,320,515
2002	2006/07	7,863,403			7,863,403
2003	2007/08	8,836,154			8,836,154
2004	2008/09	680,307			680,307
2005	2009/10	10,868,642			10,868,642
2006	2010/11	10,103,239			10,103,239
10-Year Average					7,568,769
2007	2011/12	9,276,000			9,276,000

Appendix E20.–Pink salmon hatchery and wild stock contributions to the Eastern District commercial common property fishery by period, 2007.

			Origin											
			Solomon Gulch		Cannery Creek		W. Noerenberg		A.F. Koernig		Hatchery	Wild		
Dates	Period	Hours	No.	Percent	No.	Percent	No.	Percent	No.	Percent	Total	No.	Percent	Total
06/27 - 06/27	1	14	927,521	99.0	0	0.0	0	0.0	0	0.0	927,521	9,763	1.0	937,284
06/30 - 06/30	2	14	1,506,503	100.0	0	0.0	0	0.0	0	0.0	1,506,503	0	0.0	1,506,503
07/03 - 07/03	3	14	1,735,145	99.0	0	0.0	0	0.0	0	0.0	1,735,145	18,265	1.0	1,753,410
07/05 - 07/05	4	14	1,443,906	99.0	0	0.0	0	0.0	0	0.0	1,443,906	15,199	1.0	1,459,105
07/06 - 07/06	5	14	1,034,210	96.9	0	0.0	0	0.0	0	0.0	1,034,210	33,362	3.1	1,067,572
07/07 - 07/07	6	14	1,141,918	97.9	0	0.0	0	0.0	0	0.0	1,141,918	24,296	2.1	1,166,214
07/08 - 07/08	7	14	1,273,519	99.0	0	0.0	0	0.0	0	0.0	1,273,519	13,405	1.0	1,286,924
07/10 - 07/10	8	14	1,351,064	100.0	0	0.0	0	0.0	0	0.0	1,351,064	0	0.0	1,351,064
07/11 - 07/11	9	14	1,630,449	96.8	0	0.0	0	0.0	0	0.0	1,630,449	53,167	3.2	1,683,616
07/15 - 07/15	10	14	1,628,605	96.9	0	0.0	0	0.0	0	0.0	1,628,605	51,977	3.1	1,680,582
07/16 - 07/16	11	14	1,940,145	89.6	0	0.0	0	0.0	0	0.0	1,940,145	225,598	10.4	2,165,743
07/17 - 07/17	12 [a]	14	1,303,971	91.7	0	0.0	0	0.0	0	0.0	1,303,971	118,543	8.3	1,422,514
07/18 - 07/18	13	14	1,238,952	91.7	0	0.0	0	0.0	0	0.0	1,238,952	112,632	8.3	1,351,584
07/19 - 07/19	14	14	474,140	78.9	0	0.0	0	0.0	0	0.0	474,140	126,437	21.1	600,577
07/20 - 07/20	15	14	192,363	43.8	0	0.0	0	0.0	0	0.0	192,363	247,323	56.3	439,686
07/22 - 07/22	16	14	21,417	12.5	0	0.0	0	0.0	0	0.0	21,417	149,920	87.5	171,337
07/25 - 07/25	17	14	17,506	9.2	2,188	1.1	0	0.0	0	0.0	19,694	170,684	89.7	190,378
07/28 - 07/28	18	14	26,825	6.5	0	0.0	0	0.0	0	0.0	26,825	386,277	93.5	413,102
07/30 - 07/30	19	14	8,392	3.2	0	0.0	0	0.0	0	0.0	8,392	254,554	96.8	262,946
08/01 - 08/01	20	14	4,874	1.6	0	0.0	9,748	3.1	0	0.0	14,622	297,312	95.3	311,934
08/03 - 08/03	21	14	14,869	5.4	11,152	4.1	3,717	1.4	7,435	2.7	37,173	237,905	86.5	275,078
08/05 - 08/05	22	14	1,326	1.0	3,978	3.1	0	0.0	0	0.0	5,304	121,994	95.8	127,298
08/07 - 08/07	23	14	2,491	2.6	2,491	2.6	3,737	3.9	2,491	2.6	11,211	83,459	88.2	94,670
08/09 - 08/09	24	14	0	0.0	0	0.0	5,089	4.8	0	0.0	5,089	101,770	95.2	106,859
08/11 - 08/11	25 [b]	14									0	0		0
08/13 - 08/13	26 [c]	14	0	0.0	0	0.0	951	4.8	0	0.0	951	19,019	95.2	19,970
08/15 - 08/15	27 [b]	14									0	0		0
08/17 - 08/17	28 [d]	14	216	2.4	1,187	13.3	108	1.2	108	1.2	1,619	7,339	81.9	8,958
08/18 - 08/18	29 [d]	14	141	2.4	777	13.3	71	1.2	71	1.2	1,060	4,803	81.9	5,863

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			Origin											
			Solomon Gulch		Cannery Creek		W. Noerenberg		A.F. Koernig		Hatchery	Wild		
Dates	Period	Hours	No.	Percent	No.	Percent	No.	Percent	No.	Percent	Total	No.	Percent	Total
08/19 - 08/21	30	60	2,290	2.4	12,597	13.3	1,145	1.2	1,145	1.2	17,177	77,871	81.9	95,048
08/22 - 08/25	31	84	1,156	2.1	5,204	9.5	0	0.0	2,313	4.2	8,673	46,259	84.2	54,932
08/26 - 08/29	32	84	0	0.0	3,404	8.5	1,277	3.2	0	0.0	4,681	35,321	88.3	40,002
08/30 - 09/01	33 [e]	60	0	0.0	609	8.5	228	3.2	0	0.0	838	6,319	88.3	7,157
09/02 - 09/05	34 [e]	84	0	0.0	101	8.5	38	3.2	0	0.0	139	1,045	88.3	1,184
09/06 - 09/08	35 [b]	60									0	0		0
09/09 - 09/12	36 [e]	84	0	0.0	4	8.5	1	3.2	0	0.0	5	39	88.3	44
09/13 - 09/15	37 [b]	60									0	0		0
09/16 - 09/19	38 [b]	84									0	0		0
Total			18,923,915	85.8	43,693	0.2	26,110	0.1	13,563	0.1	19,007,279	3,051,859	13.8	22,059,138

[a] Proportions from period 13 were used to allocate harvest.

[b] No pink salmon were harvested.

[c] Proportions from period 24 were used to allocate harvest.

[d] Proportions from period 30 were used to allocate harvest.

[e] Proportions from period 32 were used to allocate harvest.

Appendix E21.–Daily salmon sales and sex ratios, sales summary, and broodstock summary at the Solomon Gulch Hatchery, 2007.

	Pink Salmon					Coho Salmon	
Date	% Female	Sales Harvest	Sales Harvest cumulative	Brood Stock[a]	Brood Stock cumulative	Sales Harvest	Sales Harvest cumulative
06/20	-----	19,145	0	0	0	0	0
06/22	-----	69,528	69,528	0	0	0	0
06/23	-----	99,547	169,075	0	0	0	0
06/24	-----	167,204	336,279	0	0	0	0
06/25	-----	133,703	469,982	0	0	0	0
06/26	-----	256,336	726,318	0	0	0	0
06/28	-----	260,897	987,215	0	0	0	0
06/29	-----	407,722	1,394,937	0	0	0	0
07/01	-----	340,664	1,735,601	0	0	0	0
07/02	-----	330,823	2,066,424	0	0	0	0
07/04	-----	283,819	2,350,243	0	0	0	0
07/08	-----	5,420	2,355,663	0	0	0	0
07/09	-----	333,626	2,689,289	0	0	0	0
07/11	-----	5,554	2,694,843	0	0	0	0
07/12	-----	384,985	3,079,828	0	0	0	0
07/14	-----	339,196	3,419,024	0	0	0	0
07/16	-----	319,033	3,738,057	0	0	0	0
07/21	-----	13,768	3,751,825	0	0	0	0
07/23	29.2%	0	3,751,825	1,691	1,691	0	0
07/24	43.3%	0	3,751,825	2,582	4,273	0	0
07/27	50.9%	0	3,751,825	3,484	7,757	0	0
07/30	65.3%	0	3,751,825	9,199	16,956	0	0
07/31	64.3%	59,136	3,810,961	8,389	25,345	0	0
08/01	65.4%	0	3,810,961	8,551	33,896	0	0
08/02	71.4%	63,230	3,874,191	8,491	42,387	0	0
08/03	71.1%	0	3,874,191	8,305	50,692	0	0
08/06	69.9%	0	3,874,191	7,630	58,322	0	0
08/07	74.5%	0	3,874,191	10,187	68,509	0	0
08/08	75.6%	0	3,874,191	10,801	79,310	0	0
08/09	75.0%	0	3,874,191	80,601	159,911	0	0
08/10	68.8%	0	3,874,191	8,021	167,932	0	0
08/13	75.5%	0	3,874,191	10,555	178,487	0	0
08/14	72.3%	0	3,874,191	8,416	186,903	0	0
08/15	68.0%	0	3,874,191	7,770	194,673	0	0
08/16	73.2%	0	3,874,191	8,184	202,857	0	0
08/17	73.2%	0	3,874,191	8,050	210,907	0	0
08/20	62.9%	0	3,874,191	5,759	216,666	0	0
08/21	-----	14,818	3,889,009	0	216,666	0	0
08/22	-----	10,436	3,899,445	0	216,666	0	0
08/23	-----	10,397	3,909,842	0	216,666	0	0
08/24	-----	12,981	3,922,823	0	216,666	0	0
08/27	-----	23,431	3,946,254	0	216,666	0	0

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	Pink Salmon					Coho Salmon	
Date	% Female	Sales Harvest	Sales Harvest cumulative	Brood Stock[a]	Brood Stock cumulative	Sales Harvest	Sales Harvest cumulative
08/28	-----	17,061	3,963,315	0	216,666	0	0
08/29	-----	25,835	3,989,150	0	216,666	0	0
08/30	-----	17,065	4,006,215	0	216,666	0	0
08/31	-----	16,329	4,022,544	0	216,666	0	0
09/05	-----	0	4,022,544	0	216,666	1,501	1,501
09/06	-----	0	4,022,544	0	216,666	1,468	2,969
09/07	-----	0	4,022,544	0	216,666	1,531	4,500
09/08	-----	0	4,022,544	0	216,666	1,028	5,528
09/10	-----	0	4,022,544	0	216,666	2,518	8,046
09/11	-----	0	4,022,544	0	216,666	1,026	9,072
09/12	-----	0	4,022,544	0	216,666	2,015	11,087
09/13	-----	0	4,022,544	0	216,666	1,013	12,100
09/14	-----	0	4,022,544	0	216,666	1,516	13,616
09/17	-----	0	4,022,544	0	216,666	1,513	15,129
09/18	-----	0	4,022,544	0	216,666	2,046	17,175
09/21	-----	0	4,022,544	0	216,666	515	17,690

Sales Summary	Pink salmon	Coho salmon
Pounds Sold	13,113,493	108,626
Average Weight	3.26	7.18

Broodstock Summary (Including Roe Sales)	Pink salmon	Coho salmon
Viable broodstock (spawned, eggs in incubators)	189,361	1,022
Inviable broodstock (green/over-ripe/bad)	13,647	248
Unspawned fish (roe recovery, excess males)	210,848	582
Holding mortalities (raceway, pen mortalities)	NR	1,512
Total adults captured for broodstock	413,856	3,364
Estimated unharvested return[b]	80,000	200
Estimated total return to hatchery[a]	493,856	3,564

[a] Broodstock summary numbers are from SGH 2007 Annual Report, broodstock daily harvest numbers are from VFDA inseason daily updates.

[b] Fish remaining in saltwater, sea lion predation, etc. NR- not reported.

Appendix E22.–Chum salmon hatchery and wild stock contributions to the Montague District commercial common property fishery by period, 2007.

Dates	Period	Hours	Origin							
			W. Noerenberg [a]		Port Chalmers		Hatchery	Wild		
			No.	Percent	No.	Percent	Total	No.	Percent	Total
05/28 - 06/03	1 [b]	156	574	6.1	8,836	93.9	9,410	0	0.0	9,410
06/04 - 06/10	2	156	5,197	6.1	80,033	93.9	85,230	0	0.0	85,230
06/11 - 06/17	3	156	38,329	20.8	145,652	79.2	183,981	0	0.0	183,981
06/18 - 06/24	4	156	22,926	9.5	219,071	90.5	241,997	0	0.0	241,997
06/25 - 07/01	5	156	15,705	14.6	90,862	84.4	106,566	1,122	1.0	107,688
07/02 - 07/08	6	156	0	0.0	61,113	100.0	61,113	0	0.0	61,113
07/09 - 07/15	7	156	967	4.7	19,090	91.9	20,057	725	3.5	20,782
07/16 - 07/22	8	156	1,482	5.0	28,153	95.0	29,635	0	0.0	29,635
07/30 - 07/30	9 [c]	14	35	5.0	659	95.0	694	0	0.0	694
08/01 - 08/01	10 [c]	14	11	5.0	213	95.0	224	0	0.0	224
08/03 - 08/03	11 [c]	14	7	5.0	132	95.0	139	0	0.0	139
08/05 - 08/05	12 [d]	14	0		0		0	0		0
08/07 - 08/07	13 [c]	14	3	5.0	61	95.0	64	0	0.0	64
08/09 - 08/09	14 [d]	14	0		0		0	0		0
08/11 - 08/11	15 [d]	14	0		0		0	0		0
08/13 - 08/13	16 [d]	14	0		0		0	0		0
08/15 - 08/15	17 [d]	14	0		0		0	0		0
08/17 - 08/17	18 [d]	14	0		0		0	0		0
08/18 - 08/18	19 [d]	14	0		0		0	0		0
08/19 - 08/21	20 [d]	60	0		0		0	0		0
08/22 - 08/25	21 [c]	84	3	5.0	60	95.0	63	0	0.0	63
08/26 - 08/29	22 [d]	84	0		0		0	0		0
08/30 - 09/01	23 [d]	60	0		0		0	0		0
09/02 - 09/05	24 [d]	84	0		0		0	0		0
09/06 - 09/08	25 [d]	60	0		0		0	0		0
09/09 - 09/12	26 [d]	86	0		0		0	0		0
09/13 - 09/15	27 [d]	60	0		0		0	0		0
09/16 - 09/19	28 [d]	84	0		0		0	0		0
Total			85,238	11.5	653,935	88.2	739,173	1,847	0.2	741,020

[a] Contributions were calculated by thermal mark ID as release locations are not certain or there were multiple releases locations, times and/or brood years for the same mark.

[b] Proportions from period 2 were used to allocate harvest.

[c] Proportions from period 8 were used to allocate harvest.

[d] No chum salmon were harvested.

Appendix E23.–Pink salmon hatchery and wild stock contributions to the Montague District commercial common property fishery by period, 2007.

			Origin											
			Solomon Gulch		Cannery Creek		W. Noerenberg		A.F. Koernig		Hatchery	Wild		
Dates	Period	Hours	No.	Percent	No.	Percent	No.	Percent	No.	Percent	Total	No.	Percent	Total
05/28 - 06/03	1 [a]	156									0	0		0
06/04 - 06/10	2 [a]	156									0	0		0
06/11 - 06/17	3 [b]	156	172	85.4	0	0.0	0	0.0	0	0.0	172	29	14.6	201
06/18 - 06/24	4 [b]	156	3,700	85.4	0	0.0	0	0.0	0	0.0	3,700	632	14.6	4,332
06/25 - 07/01	5	156	134,595	85.4	0	0.0	0	0.0	0	0.0	134,595	22,980	14.6	157,575
07/02 - 07/08	6 [b]	156	23,881	85.4	0	0.0	0	0.0	0	0.0	23,881	4,077	14.6	27,958
07/09 - 07/15	7 [b]	156	166	85.4	0	0.0	0	0.0	0	0.0	166	28	14.6	194
07/16 - 07/22	8 [c]	156	747	7.4	747	7.4	854	8.4	1,388	13.7	3,737	6,406	63.2	10,143
07/30 - 07/30	9	14	25,057	7.4	25,057	7.4	28,637	8.4	46,535	13.7	125,286	214,777	63.2	340,063
08/01 - 08/01	10	14	0	0.0	4,461	3.1	8,923	6.3	41,640	29.2	55,024	87,740	61.5	142,764
08/03 - 08/03	11	14	4,788	3.2	15,960	10.5	9,576	6.3	27,131	17.9	57,455	94,162	62.1	151,617
08/05 - 08/05	12 [a]	14									0	0		0
08/07 - 08/07	13 [d]	14	578	3.2	1,927	10.5	1,156	6.3	3,275	17.9	6,935	11,367	62.1	18,302
08/09 - 08/09	14 [a]	14									0	0		0
08/11 - 08/11	15 [a]	14									0	0		0
08/13 - 08/13	16 [a]	14									0	0		0
08/15 - 08/15	17 [a]	14									0	0		0
08/17 - 08/17	18 [a]	14									0	0		0
08/18 - 08/18	19 [a]	14									0	0		0
08/19 - 08/21	20 [a]	60									0	0		0
08/22 - 08/25	21 [d]	84	796		2,655		1,593		4,513		9,558	15,664		25,222
08/26 - 08/29	22 [a]	84									0	0		0
08/30 - 09/01	23 [a]	60									0	0		0
09/02 - 09/05	24 [a]	84									0	0		0
09/06 - 09/08	25 [a]	60									0	0		0
09/09 - 09/12	26 [a]	86									0	0		0
09/13 - 09/15	27 [a]	60									0	0		0
09/16 - 09/19	28 [a]	84									0	0		0
Total			194,481	22.1	50,807	5.8	50,738	5.8	124,482	14.2	420,509	457,862	52.1	878,371

[a] No pink salmon were harvested.

[b] Proportions from period 5 were used to allocate harvest.

[c] Proportions from period 8 were used to allocate harvest.

[d] Proportions from period 11 were used to allocate harvest.

Appendix E24.–Pink salmon hatchery and wild stock contributions to the Northern District commercial common property fishery by period, 2007.

			Origin											
			Solomon Gulch		Cannery Creek		W. Noerenberg		A.F. Koernig		Hatchery	Wild		
Dates	Period	Hours	Nr.	Percent	Nr.	Percent	Nr.	Percent	Nr.	Percent	Total	Nr.	Percent	Total
07/30 - 07/30	1	14	13,174	3.1	114,173	27.1	52,695	12.5	0	0.0	180,041	241,519	57.3	421,560
08/01 - 08/01	2	14	45,555	6.3	189,812	26.3	220,182	30.5	22,777	3.2	478,327	242,959	33.7	721,286
08/03 - 08/03	3	14	0	0.0	321,733	74.7	14,849	3.4	0	0.0	336,582	94,045	21.8	430,627
08/05 - 08/05	4	14	0	0.0	311,488	82.3	3,943	1.0	3,943	1.0	319,374	59,143	15.6	378,517
08/07 - 08/07	5	14	4,390	1.0	285,344	67.7	57,069	13.5	8,780	2.1	355,582	65,849	15.6	421,431
08/09 - 08/09	6 [a]	14	4,256	1.0	276,612	67.7	55,322	13.5	8,511	2.1	344,701	63,834	15.6	408,535
08/11 - 08/11	7	14	0	0.0	426,871	82.3	37,824	7.3	5,403	1.0	470,098	48,631	9.4	518,729
08/13 - 08/13	8	14	4,870	1.0	370,128	79.2	48,701	10.4	0	0.0	423,699	43,831	9.4	467,530
08/15 - 08/15	9	14	0	0.0	431,163	74.0	54,654	9.4	0	0.0	485,818	97,164	16.7	582,981
08/17 - 08/17	10	14	0	0.0	273,462	74.0	34,664	9.4	0	0.0	308,127	61,625	16.7	369,752
08/18 - 08/18	11	14	0	0.0	334,040	89.5	19,649	5.3	0	0.0	353,690	19,649	5.3	373,339
08/19 - 08/21	12	60	0	0.0	592,422	79.2	31,180	4.2	0	0.0	623,602	124,720	16.7	748,322
08/22 - 08/25	13	84	0	0.0	262,707	78.1	24,519	7.3	0	0.0	287,226	49,039	14.6	336,265
08/26 - 08/29	14 [b]	84	0	0.0	32,923	78.1	3,073	7.3	0	0.0	35,996	6,146	14.6	42,142
08/30 - 09/01	15 [c]	60									0	0		0
09/02 - 09/05	16 [c]	84									0	0		0
09/06 - 09/08	17 [c]	60									0	0		0
09/09 - 09/12	18 [c]	84									0	0		0
09/13 - 09/15	19 [c]	60									0	0		0
09/16 - 09/19	20 [c]	84									0	0		0
Total			72,244	1.2	4,222,878	67.9	658,326	10.6	49,415	0.8	5,002,863	1,218,153	19.6	6,221,016

[a] Proportions from period 5 were used to allocate harvest.

[b] Proportions from period 13 were used to allocate harvest.

[c] No pink salmon were harvested.

Appendix E25.–Daily salmon sales and sex ratios, sales summary, and broodstock summary at the Cannery Creek Hatchery, 2007.

	Pink Salmon				
Date	% Female	Sales Harvest	Sales Harvest cumulative	Brood Stock[a]	Brood Stock cumulative
07/26	12.5%	3,278	3,278	0	0
07/31	10.7%	67,018	70,296	0	0
08/02	20.9%	71,625	141,921	0	0
08/04	23.5%	29,102	171,023	0	0
08/06	27.6%	109,213	280,236	0	0
08/08	39.0%	226,433	506,669	0	0
08/10	44.7%	169,724	676,393	0	0
08/12	43.1%	111,666	788,059	0	0
08/14	53.7%	238,926	1,026,985	0	0
08/16	53.9%	250,661	1,277,646	0	0
08/19	54.3%	40,664	1,318,310	0	0
08/26	-----	0	1,318,310	4,000	4,000
08/27	-----	0	1,318,310	2,000	6,000
08/29	NR	25,500	1,343,810	30,000	36,000
08/30	-----	0	1,318,310	25,000	61,000
08/31	NR	24,352	1,368,162	31,000	92,000
09/01	NR	19,226	1,387,388	37,000	129,000
09/02	NR	5,277	1,392,665	8,000	137,000
09/03	NR	7,340	1,400,005	24,000	161,000
09/04	NR	0	1,400,005	37,000	198,000
09/06	NR	13,255	1,413,260	39,000	237,000
09/07	NR	29,931	1,443,191	32,000	269,000
09/08	NR	0	1,443,191	24,000	293,000
09/09	NR	0	1,443,191	24,000	317,000

Sales Summary	Pink salmon
Pounds Sold	1,443,191
Average Weight	3.43

Broodstock Summary (Including Roe Sales)	Pink salmon
Viable broodstock (spawned, eggs in incubators)	206,832
Inviable broodstock (green/over-ripe/bad)	NR
Unspawned fish (roe recovery, excess males)	61,541
Holding mortalities (raceway, pen mortalities)	10,246
Total adults captured for broodstock[a]	278,619
Estimated unharvested return[b]	70,000
Estimated total return to hatchery	348,619

[a] Broodstock summary numbers are from CCH 2007 Annual Report, broodstock daily harvest numbers are from PWSAC inseason daily updates.

[b] Fish remaining in saltwater, sea lion predation, etc. NR- not reported.

Appendix E26.–Pink salmon hatchery and wild stock contributions to the Southeastern District commercial common property fishery by period, 2007.

Dates	Period		Hours	Origin											
				Solomon Gulch		Cannery Creek		W. Noerenberg		A.F. Koernig		Hatchery	Wild		
				No.	Percent	No.	Percent	No.	Percent	No.	Percent	Total	No.	Percent	Total
07/15 - 07/15	1		14	130	1.3	0	0.0	0	0.0	130	1.3	260	9,620	97.4	9,880
07/17 - 07/17	2		14	0	0.0	0	0.0	0	0.0	0	0.0	0	15,365	100.0	15,365
07/18 - 07/18	3	[a]	14	0	0.0	0	0.0	0	0.0	0	0.0	0	65,332	100.0	65,332
07/19 - 07/19	4	[b]	14	2,721	3.1	0	0.0	0	0.0	0	0.0	2,721	84,348	96.9	87,069
07/20 - 07/20	5	[b]	14	4,501	3.1	0	0.0	0	0.0	0	0.0	4,501	139,542	96.9	144,043
07/22 - 07/22	6		14	7,053	3.1	0	0.0	0	0.0	0	0.0	7,053	218,656	96.9	225,709
07/25 - 07/25	7		14	13,252	6.3	0	0.0	0	0.0	0	0.0	13,252	198,786	93.8	212,038
07/28 - 07/28	8		14	0	0.0	0	0.0	0	0.0	0	0.0	0	216,480	100.0	216,480
07/30 - 07/30	9		14	2,544	1.1	0	0.0	0	0.0	0	0.0	2,544	221,332	98.9	223,876
08/01 - 08/01	10		14	0	0.0	0	0.0	0	0.0	1,903	1.1	1,903	169,365	98.9	171,268
08/03 - 08/03	11		14	3,203	1.9	0	0.0	0	0.0	0	0.0	3,203	166,574	98.1	169,777
08/05 - 08/05	12	[c]	14	728	1.5	0	0.0	728	1.5	0	0.0	1,456	46,598	97.0	48,054
08/07 - 08/07	13		14	1,265	1.5	0	0.0	1,265	1.5	0	0.0	2,529	80,928	97.0	83,457
08/09 - 08/09	14		14	966	1.0	966	1.0	0	0.0	0	0.0	1,931	90,767	97.9	92,698
08/11 - 08/11	15		14	0	0.0	383	1.4	0	0.0	1,533	5.4	1,916	26,437	93.2	28,353
08/13 - 08/13	16	[d]	14	0	0.0	226	1.4	0	0.0	905	5.4	1,131	15,606	93.2	16,737
08/15 - 08/15	17		14	0	0.0	0	0.0	712	3.5	1,068	5.3	1,781	18,518	91.2	20,299
08/17 - 08/17	18	[e]	12									0	0		0
08/18 - 08/18	19	[e]	14									0	0		0
08/19 - 08/21	20	[f]	60	0	0.0	0	0.0	1,362	3.5	2,043	5.3	3,404	35,406	91.2	38,810
08/22 - 08/25	21	[e]	84									0	0		0
08/26 - 08/29	22	[e]	84									0	0		0
08/30 - 09/01	23	[e]	60									0	0		0
09/02 - 09/05	24	[e]	84									0	0		0
09/06 - 09/08	25	[e]	60									0	0		0
09/09 - 09/12	26	[e]	84									0	0		0
09/13 - 09/15	27	[e]	60									0	0		0
09/16 - 09/19	28	[e]	84									0	0		0
Total				36,364	1.9	1,575	0.1	4,067	0.2	7,581	0.4	49,586	1,819,659	97.3	1,869,245

[a] Proportions from period 2 were used to allocate harvest.

[b] Proportions from period 6 were used to allocate harvest.

[c] Proportions from period 13 were used to allocate harvest.

[d] Proportions from period 15 were used to allocate harvest.

[e] No pink salmon were harvested.

[f] Proportions from period 17 were used to allocate harvest.

Appendix E27.–Sockeye salmon hatchery and wild stock contributions to the Southwestern District commercial common property fishery by period, 2007.

			Origin							
			Gulkana [a]		Main Bay		Hatchery	Wild		
Dates	Period	Hours	No.	Percent	No.	Percent	Total	No.	Percent	Total
05/28 - 06/03	1 [b]	156					0	0		0
06/11 - 06/17	2 [b]	156					0	0		0
06/18 - 06/24	3 [c]	156	ND		431	95.7	431	19	4.3	450
06/25 - 07/01	4 [d]	156	ND		1,227	85.0	1,227	216	15.0	1,443
07/02 - 07/08	5 [e]	156	ND		3,625	89.4	3,625	431	10.6	4,056
07/09 - 07/15	6 [f]	156	ND		2,177	95.8	2,177	96	4.2	2,273
07/16 - 07/22	7 [g]	156	ND		1,329	95.8	1,329	59	4.2	1,388
07/30 - 07/30	8 [h]	14	ND		2,220	95.7	2,220	101	4.3	2,321
08/01 - 08/01	9 [h]	14	ND		1,358	95.7	1,358	62	4.3	1,420
08/03 - 08/03	10 [h]	14	ND		3,513	95.7	3,513	160	4.3	3,673
08/05 - 08/05	11 [h]	14	ND		1,229	95.7	1,229	56	4.3	1,285
08/07 - 08/07	12 [h]	14	ND		553	95.7	553	25	4.3	578
08/09 - 08/09	13 [i]	14	ND		430	45.8	430	509	54.2	939
08/11 - 08/11	14 [i]	14	ND		237	45.8	237	281	54.2	518
08/13 - 08/13	15	14	ND		241	45.8	241	285	54.2	526
08/15 - 08/15	16	14	ND		174	34.4	174	332	65.6	506
08/17 - 08/17	17	14	ND		76	30.0	76	178	70.0	254
08/18 - 08/18	18 [j]	14	ND		4	30.0	4	10	70.0	14
08/19 - 08/21	19	60	ND		58	9.1	58	582	90.9	640
08/22 - 08/25	20	84	ND		37	5.6	37	623	94.4	660
08/26 - 08/29	21	84	ND		0	0.0	0	518	100.0	518
08/30 - 09/01	22 [k]	60	ND		0	0.0	0	206	100.0	206
09/02 - 09/05	23 [k]	84	ND		0	0.0	0	34	100.0	34
09/06 - 09/08	24 [b]	60			0		0	0		0
09/09 - 09/12	25 [b]	84			0		0	0		0
09/13 - 09/15	26 [b]	60			0		0	0		0
09/16 - 09/19	27 [b]	84			0		0	0		0
Total			ND		18,920	79.8	18,920	4,782	20.2	23,702

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

[b] No sockeye salmon were harvested.

[c] Proportions from Eshamy District period 4 were used to allocate harvest.

[d] Proportions from Eshamy District period 5 were used to allocate harvest.

[e] Proportions from Eshamy District period 7 were used to allocate harvest.

[f] Proportions from Eshamy District period 9 were used to allocate harvest.

[g] Proportions from Eshamy District period 11 were used to allocate harvest.

[h] Proportions from Eshamy District period 15 were used to allocate harvest.

[i] Proportions from Southwestern District period 15 were used to allocate harvest.

[j] Proportions from Southwestern District period 17 were used to allocate harvest.

[k] Proportions from Southwestern District period 21 were used to allocate harvest.

Appendix E28.–Pink salmon hatchery and wild stock contributions to the Southwestern District commercial common property fishery by period, 2007.

			Origin											
			Solomon Gulch		Cannery Creek		W. Noerenberg		A.F. Koernig		Hatchery	Wild		
Dates	Period	Hours	No.	Percent	No.	Percent	No.	Percent	No.	Percent	Total	No.	Percent	Total
05/28 - 06/03	1 [a]	156									0	0		0
06/11 - 06/17	2 [a]	156									0	0		0
06/18 - 06/24	3 [a]	156									0	0		0
06/25 - 07/01	4 [a]	156									0	0		0
07/02 - 07/08	5 [a]	156									0	0		0
07/09 - 07/15	6 [a]	156									0	0		0
07/16 - 07/22	7	156	647	1.1	0	0.0	1,942	3.2	47,262	76.8	49,851	11,654	18.9	61,505
07/30 - 07/30	8	14	6,183	2.1	40,190	13.5	52,556	17.7	123,660	41.7	222,588	74,196	25.0	296,784
08/01 - 08/01	9	14	9,983	3.1	19,966	6.3	53,244	16.7	123,126	38.5	206,319	113,142	35.4	319,461
08/03 - 08/03	10	14	9,949	1.0	109,441	11.5	218,882	22.9	417,865	43.8	756,137	198,984	20.8	955,121
08/05 - 08/05	11	14	33,484	2.1	66,969	4.2	167,421	10.4	1,188,692	74.0	1,456,566	150,679	9.4	1,607,245
08/07 - 08/07	12	14	15,945	1.1	95,671	6.3	175,396	11.6	972,653	64.2	1,259,665	255,122	16.8	1,514,787
08/09 - 08/09	13	14	62,992	4.2	141,732	9.4	47,244	3.1	1,007,869	66.7	1,259,836	251,967	16.7	1,511,803
08/11 - 08/11	14	14	12,646	1.0	50,585	4.2	177,048	14.6	822,009	67.7	1,062,289	151,756	12.5	1,214,044
08/13 - 08/13	15	14	57,249	4.2	14,312	1.1	57,249	4.2	1,044,795	76.8	1,173,606	186,059	13.7	1,359,665
08/15 - 08/15	16	14	0	0.0	66,843	4.2	83,553	5.2	1,253,301	78.1	1,403,697	200,528	12.5	1,604,225
08/17 - 08/17	17	14	19,980	2.1	49,950	5.2	59,940	6.3	699,303	72.9	829,173	129,871	13.5	959,044
08/18 - 08/18	18	14	7,742	1.0	0	0.0	7,742	1.0	712,279	95.8	727,764	15,484	2.1	743,248
08/19 - 08/21	19	60	52,299	2.1	209,197	8.3	209,197	8.3	1,647,423	65.6	2,118,115	392,244	15.6	2,510,359
08/22 - 08/25	20	84	0	0.0	191,209	9.5	212,454	10.5	1,338,460	66.3	1,742,123	276,190	13.7	2,018,313
08/26 - 08/29	21	84	8,558	1.0	68,464	8.3	77,022	9.4	556,269	67.7	710,313	111,254	13.5	821,567
08/30 - 09/01	22 [b]	60	3,174	1.0	25,395	8.3	28,569	9.4	206,332	67.7	263,470	41,266	13.5	304,736
09/02 - 09/05	23 [b]	84	1,104	1.0	8,828	8.3	9,932	9.4	71,730	67.7	91,594	14,346	13.5	105,940
09/06 - 09/08	24 [a]	60									0	0		0
09/09 - 09/12	25 [a]	84									0	0		0
09/13 - 09/15	26 [a]	60									0	0		0
09/16 - 09/19	27 [a]	84									0	0		0
Total			301,937	1.7	1,158,750	6.5	1,639,391	9.2	12,233,027	68.3	15,333,105	2,574,742	14.4	17,907,847

[a] No pink salmon were harvested.

[b] Proportions from period 21 were used to allocate harvest.

Appendix E29.–Daily salmon sales and sex ratios, sales summary, and broodstock summary at the Armin F. Koerning Hatchery, 2007.

	Pink Salmon					Chum Salmon		
Date	% Female	Sales Harvest	Sales Harvest cumulative	Brood Stock[a]	Brood Stock cumulative	% Female	Sales Harvest	Sales Harvest cumulative
06/05	-----	0	0	0	0	28.0%	2,788	2,788
06/06	-----	0	0	0	0	24.0%	7,522	10,310
06/08	-----	0	0	0	0	31.0%	9,981	20,291
06/09	-----	0	0	0	0	26.0%	5,950	26,241
06/10	-----	0	0	0	0	33.0%	8,791	35,032
06/11	-----	0	0	0	0	35.0%	9,753	44,785
06/12	-----	0	0	0	0	34.0%	3,189	47,974
06/16	-----	0	0	0	0	42.7%	14,977	62,951
06/17	-----	0	0	0	0	50.0%	12,258	75,209
06/21	-----	0	0	0	0	53.0%	23,008	98,217
06/26	-----	0	0	0	0	47.0%	25,384	123,601
07/01	-----	0	0	0	0	46.7%	37,638	161,239
07/12	-----	0	0	0	0	79.0%	5,517	166,756
07/13	-----	0	0	0	0	75.0%	1,961	168,717
07/26	9.2%	87,603	87,603	0	0	NR	5,546	174,263
07/27	11.3%	320,813	408,416	0	0	-----	0	174,263
07/28	13.0%	367,441	775,857	0	0	-----	0	174,263
07/29	17.0%	218,699	994,556	0	0	-----	0	174,263
07/31	21.0%	221,359	1,215,915	0	0	-----	0	174,263
08/02	29.0%	254,296	1,470,211	0	0	-----	0	174,263
08/04	29.0%	598,963	2,069,174	0	0	-----	0	174,263
08/06	26.0%	251,365	2,320,539	0	0	-----	0	174,263
08/08	34.0%	377,209	2,697,748	0	0	-----	0	174,263
08/10	48.0%	142,934	2,840,682	0	0	-----	0	174,263
08/12	52.0%	29,616	2,870,298	0	0	-----	0	174,263
08/26	-----	0	2,870,298	8,000	8,000	-----	0	174,263
08/27	-----	0	2,870,298	2,000	10,000	-----	0	174,263
08/28	-----	0	2,870,298	15,000	25,000	-----	0	174,263
08/29	-----	0	2,870,298	15,000	40,000	-----	0	174,263
08/30	NR	14,356	2,884,654	15,000	15,000	-----	0	174,263
08/31	NR	17,054	2,901,708	17,000	32,000	-----	0	174,263
09/01	NR	14,804	2,916,512	15,000	47,000	-----	0	174,263
09/02	NR	15,217	2,931,729	19,000	66,000	-----	0	174,263
09/03	NR	16,690	2,948,419	17,000	83,000	-----	0	174,263
09/04	NR	25,280	2,973,699	30,000	113,000	-----	0	174,263
09/05	NR	22,998	2,996,697	NR	113,000	-----	0	174,263
09/06	NR	28,582	3,025,279	29,000	142,000	-----	0	174,263
09/07	NR	20,044	3,045,323	21,000	163,000	-----	0	174,263

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	Pink Salmon					Chum Salmon		
Date	% Female	Sales Harvest	Sales Harvest cumulative	Brood Stock[a]	Brood Stock cumulative	% Female	Sales Harvest	Sales Harvest cumulative
09/08	-----	0	3,045,323	26,000	189,000	-----	0	174,263
09/09	-----	0	3,045,323	10,000	199,000	-----	0	174,263

Sales Summary	Pink salmon	Chum salmon
Pounds Sold	937,022	1,089,144
Average Weight	3.25	6.25

Broodstock Summary (Including Roe Sales)	Pink salmon
Viable broodstock (spawned, eggs in incubators)	198,123
Inviable broodstock (green/over-ripe/bad)	NR
Unspawned fish (roe recovery, excess males)	NR
Holding mortalities (raceway, pen mortalities)	2,593
Total adults captured for broodstock	200,716
Estimated unharvested return[b]	64,500
Estimated total return to hatchery[a]	265,216

[a] Broodstock summary numbers are from AFKH 2007 Annual Report, broodstock daily harvest numbers are from PWSAC inseason daily updates.

[b] Fish remaining in saltwater, sea lion predation, etc.

NR- not reported

APPENDIX F

Appendix F1.–Salmon harvest and effort in the Copper River District subsistence drift gillnet fishery, 1965–2007.

	Permits				Reported Harvest[b]			
Year	Issued	Returned	Fished	Not Fished[a]	Chinook	Sockeye	Coho	Total
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
2006	421	399	300	121	779	4,355	1	5,135
10-Year Average	360	339	223	118	577	2,229	338	3,144
2007	469	440	295	145	1,145	6,148	15	7,308

[a] As reported 'Not Fished' on returned permits.

[b] Reported harvest only.

Appendix F2.–Salmon harvest and effort in the Prince William Sound subsistence fishery, 1965–2007.

	Permits				Reported Harvest [b]						
Year	Issued	Returned	Fished	Not Fished[a]	Chinook	Sockeye	Coho	Pink	Chum	Unk.	Total
1965	22	16			0	0		179	25	0	204
1966	3	3			0	3	19	20	50	0	92
1967	4	3			0	0	4	4	0	0	8
1968	4	3			0	0	20	156	0	22	198
1969	7	3			0	0	16	0	0	0	16
1970	1	1			0	0	0	0	0	0	0
1971	3	2			0	0	0	46	0	0	46
1972	0	0			0	0	0	0	0	0	0
1973	19	16			0	0	289	0	0	0	289
1974	3	1			0	0	0	0	0	0	0
1975	2	0			0	0	0	0	0	0	0
1976	0	0			0	0	0	0	0	0	0
1977	4	4			0	0	0	0	0	0	0
1978	3	2			0	0	0	0	0	0	0
1979	15	2			0	0	0	0	0	0	0
1980	26	15			0	7	6	0	0	0	13
1981	12	8			0	3	29	0	2	0	34
1982	35	27			0	84	4	31	24	0	143
1983	26	21			0	22	36	9	79	0	146
1984	8	8			0	10	0	11	2	0	23
1985	22	16			1	27	16	14	26	0	84
1986	25	14			0	5	15	0	0	0	20
1987	18	17			5	31	6	0	16	0	58
1988	7	7			2	51	7	10	9	0	79
1989	11	7			0	0	0	0	3	0	3
1990	8	7			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
10-Year Average	7	6	1	5	0	11	0	4	1	0	17
2007	3	3	1	2	0	30	0	0	0	0	30

[a] As reported 'Not Fished' on returned permits.

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

Appendix F3.–"Home Pack" salmon harvest by district, species, and gear type, in the Prince William Sound Management Area, 2006.

District	Permits	Landings	Gear Type	Chinook [a]	Sockeye	Coho	Pink	Chum
Copper River	280	691	Drift gillnet	1,019	2,023	340	36	101
Bering River	2	2	Drift gillnet	2	0	10	0	0
PWS [b]	18	19	Drift and set gillnet, purse seine	8	64	13	7	1
Total	300	712		1,029	2,087	363	43	102

[a] In 1994 the BOF passed regulation 5 AAC 24.356 requiring all Chinook salmon taken in the Copper River and Bering River Districts, but not sold be reported on fish tickets.

[b] Coghill, Eshamy, and Southwestern Districts.

Appendix F4.–Salmon harvest and effort in the PWS and upper Copper River Federal subsistence harvests, 2002–2007.

	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	120	82	NA	NA	18	717	70	805
2004	109	81	NA	NA	9	1,550	18	1,577
2005	75	51	NA	NA	10	746	0	756
2006	76	49	NA	NA	13	1,379	20	1,412
2007	97	86	74	12	26	929	40	995
				Glennallen Subdistrict				
2002	201	162	NA	NA	564	7,950	81	8,595
2003	221	182	NA	NA	554	13,616	152	14,322
2004	262	205	NA	NA	634	17,609	152	18,395
2005	249	140	NA	NA	265	14,446	70	14,781
2006	254	171	NA	NA	430	16,711	28	17,169
2007	292	235	221	14	569	15,225	34	15,828
				PWS/Chugach Subdistrict[c]				
2005	46	45	22	23	0	109[d]	141[d]	0
2006	49	48	23	25	0	150	100	250
2007	33	33	17	16	0	36	68	104
				Total Federal Subsistence Harvests				
2002	323	251	NA	NA	597	8,525	81	9,203
2003	341	264	NA	NA	572	14,333	222	15,127
2004	371	286	NA	NA	643	19,159	170	19,972
2005	370	236	NA	NA	275	15,192	70	15,537
2006	379	268	NA	NA	443	18,240	148	18,831
2007	422	354	312	42	595	16,190	142	16,927

[a] Reported harvest only.

[b] As reported 'Not Fished' on returned permits.

[c] All harvests were from Copper River delta unless otherwise noted.

[d] 15 coho and 6 sockeye salmon harvested in PWS.

Appendix F5.–Salmon harvest and effort in the Tatitlek and Chenega subsistence fisheries, 1988–2007.

	Permits				Reported Harvest [a]						
Year	Issued	Returned	Fished	Not Fished[b]	Chinook	Sockeye	Coho	Pink	Chum	Unk.	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							
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[f]	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
10-Year Avg.	14	6	5	1	0	159	255	46	28	0	488
2007	14	0	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown
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
10-Year Avg.	11	7	5	1	17	254	84	109	136	0	599
2007	4	3	2	1	2	293	27	4	55	0	381

[a] Reported harvest only.

[b] As reported 'Not Fished' on returned permits.

Appendix F6.–Personal use and subsistence salmon harvests by year, district and gear types for the Upper Copper River subsistence and personal use fisheries, 1997–2007.

					Reported Harvest [a]				Expanded Harvest					
			Permits		Salmon				Salmon				Other Species	
Year	District	Gear	Issued	Returned	Chinook	Sockeye	Coho	Total	Chinook	Sockeye	Coho	Total	Steelhead	Other
1997	Glennallen	Dipnet	286	259	276	8,142	0	8,418						
	Glennallen	Fishwheel	847	795	2,163	70,158	177	72,498	2,583	82,807	187	85,577	105	61
	Chitina	Dipnet	9,086	8,913	5,359	146,311	157	151,827	5,447	148,727	160	154,334	3	12
	total		10,219	9,967	7,798	224,611	334	232,743	8,030	231,534	347	239,911	108	73
1998	Glennallen	Dipnet	272	244	232	7,616	96	7,944						
	Glennallen	Fishwheel	738	703	1,519	53,652	411	55,582	1,842	64,463	533	66,838	35	78
	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	8,334	195,567	2,607	206,508	8,565	201,624	2,678	212,867	35	124
1999	Glennallen	Dipnet	336	295	306	8,928	131	9,365						
	Glennallen	Fishwheel	765	712	2,616	61,971	922	65,509	3,278	77,369	1,121	81,768	31	320
	Chitina	Dipnet	9,944	8,966	5,625	134,168	1,979	141,772	6,047	144,241	2,128	152,415	0	29
	total		11,045	9,973	8,547	205,067	3,032	216,646	9,325	221,610	3,249	234,183	31	349
2000 [b]	Glennallen	Dipnet	464	422	537	8,368	78	8,983						
	Glennallen	Fishwheel	787	757	4,245	49,873	433	54,551	4,856	59,497	532	64,885	52	169
	Chitina	Dipnet	8,151	7,617	3,007	103,269	3,540	109,816	3,168	107,856	3,657	114,681	0	203
	total		9,402	8,796	7,789	161,510	4,051	173,350	8,024	167,353	4,189	179,566	52	372
2001	Glennallen	Dipnet	407	367	296	8,454	24	8,774						
	Glennallen	Fishwheel	832	809	3,045	69,936	1,043	74,024	3,553	83,787	1,154	88,494	64	19
	Chitina	Dipnet	9,467	9,311	2,761	120,030	2,306	125,097	3,113	132,108	2,720	137,941	0	484
	total		10,706	10,487	6,102	198,420	3,373	207,895	6,666	215,895	3,874	226,435	64	503
2002	Glennallen	Dipnet	469	384	409	6,855	142	7,406	470	7,641	148	8,259		
	Glennallen	Fishwheel	652	626	3,015	41,037	382	44,434	3,183	43,209	382	46,774	87	1
	Chitina	Dipnet	6,851	6,748	1,746	75,827	1,712	79,285	2,023	85,968	1,934	89,925	0	317
	total		7,972	7,758	5,170	123,719	2,236	131,125	5,676	136,818	2,464	144,958	87	318
2003 [c]	Glennallen	Dipnet	399	343	318	6,132	58	6,508	345	6,934	58	7,337		
	Glennallen	Fishwheel	613	580	2,077	38,077	392	40,546	2,193	40,073	409	42,675	48	0
	Chitina	Dipnet	6,526	6,418	1,642	71,459	1,775	74,876	1,903	80,796	2,533	85,232	0	264
	total		7,538	7,341	4,037	115,668	2,225	121,930	4,441	127,803	3,000	135,244	48	264

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			Permits		Reported Harvest Salmon				Expanded Harvest Salmon				Other Species	
Year	District	Gear	Issued	Returned	Chinook	Sockeye	Coho	Total	Chinook	Sockeye	Coho	Total	Steelhead	Other
2004	Glennallen	Dipnet	330	262	273	4,851	76	5,200	310	5,315	112	5,737		
	Glennallen	Fishwheel	626	594	2,893	47,279	465	50,637	3,036	50,195	465	53,696	76	0
	Chitina	Dipnet	8,386	6,285	2,108	93,182	2,304	97,594	2,495	107,312	2,860	112,667	0	509
	total		9,342	7,141	5,274	145,312	2,845	153,431	5,841	162,822	3,437	172,100	76	509
2005	Glennallen	Dipnet	363	303	264	6,305	0	6,569	310	7,486	0	7,796		
	Glennallen	Fishwheel	598	557	1,816	54,661	97	56,574	1,919	56,727	154	58,800	19	41
	Chitina	Dipnet	8,230	8,131	1,776	106,868	1,562	110,206	2,043	120,013	1,869	123,925	0	478
	total		9,191	8,991	3,856	167,834	1,659	173,349	4,272	184,226	2,023	190,521	19	519
2006	Glennallen	Dipnet	338	273	266	6,520	10	6,796	335	7,170	10	7,515		
	Glennallen	Fishwheel	646	605	2,178	48,972	200	51,350	2,434	50,540	202	53,176	37	83
	Chitina	Dipnet	8,566	6,831	2,071	102,443	1,886	106,400	2,663	123,261	2,715	128,639	0	464
	total		9,550	7,709	4,515	157,935	2,096	164,546	5,432	180,971	2,927	189,330	37	547
	Glennallen	Dipnet	366	315	318	7,217	62	7,596						
1997-2006	Glennallen	Fishwheel	710	674	2,557	53,562	452	56,571	3,065	64,321	547	67,933	55	77
10-year	Chitina	Dipnet	8,521	7,897	3,268	108,786	1,932	113,986	3,821	127,025	2,291	133,137	11	287
Average	total		9,598	8,886	6,142	169,564	2,446	178,152	6,886	191,346	2,837	201,069	66	364
2007	Glennallen	Dipnet	467	383	432	8,155	28	8,615	496	9,416	28	9,940	0	1
	Glennallen	Fishwheel	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

[a] Includes all reported species.

[b] State personal use in the Chitina Subdistrict was changed to subsistence in 2000.

[c] State subsistence in the Chitina Subdistrict was changed to personal use in 2003.

Appendix F7.–Subsistence and personal use salmon harvest by species and gear type, Prince William Sound and Upper Copper River, 2007.

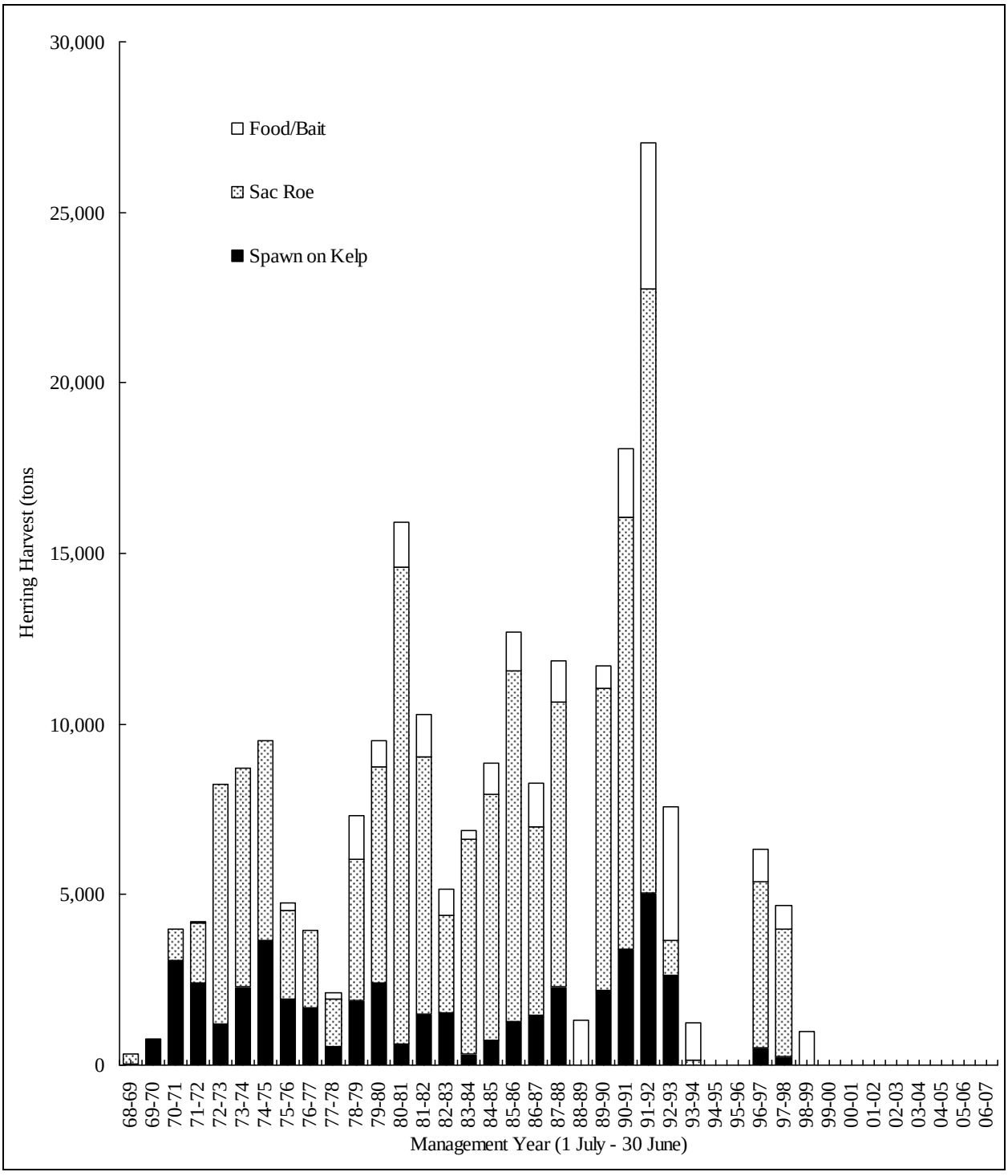
	Permits					Reported Harvest						
Area	Issued	Returned	Fished	Not Fished[a]	Gear Type	Chinook[b]	Sockeye[b]	Coho[b]	Pink[b]	Chum[b]	Other[c]	Total
Prince William Sound	3	3	1	2	Drift gillnet	0	30	0	0	0	0	30
Copper River District	469	440	295	145	Drift gillnet	1,145	6,151	15	6	2	10	7,329
Upper Copper River	9,664	8,224	6,544	1,680	Dip net Fish wheel	5,494	174,230	1,723	0	0	660	182,107
Eastern/Northern Districts	14	0	Unknown	Unknown	Drift gillnet Purse seine Dip net	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Southwestern District	4	3	2	1	Drift gillnet Purse seine Dip net	2	293	27	4	55	0	381
Batzulnetas	0	0	0	0	Dip net Fish wheel Spear	0	0	0	0	0	0	0
Federal subsistence harvests (Chitina, Glennallen, PWS/Chugach)	422	354	312	42	Dip net Spear Fish wheel	595	16,190	142	0	0	0	16,927
Total	10,576	9,024	7,154	1,870		7,236	196,894	1,907	10	57	670	206,774

[a] As reported 'Not Fished' on returned permits.

[b] Reported harvest only.

[c] Includes steelhead, whitefish, flounder, and Dolly Varden.

APPENDIX G



Appendix G1.–Prince William Sound commercial Pacific herring harvest by management year and fishery, 1968-2007.

Appendix G2.–Pacific herring sac roe purse seine and drift gillnet fishery effort, anticipated harvest, and actual harvest, 1969–2007.

	Purse Seine Fishery							Drift Gillnet Fishery							Total
Calendar Year	Opening Dates	Hours	Effort (Boats)	Guideline Harvest [a]	Harvest (tons)	CPUE (tons/Boat hr)	Est. Roe %	Opening Dates	Hours	Effort (Boats)	Guideline Harvest [a]	Harvest (tons)	CPUE (tons/Boat Hr)	Est. 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

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

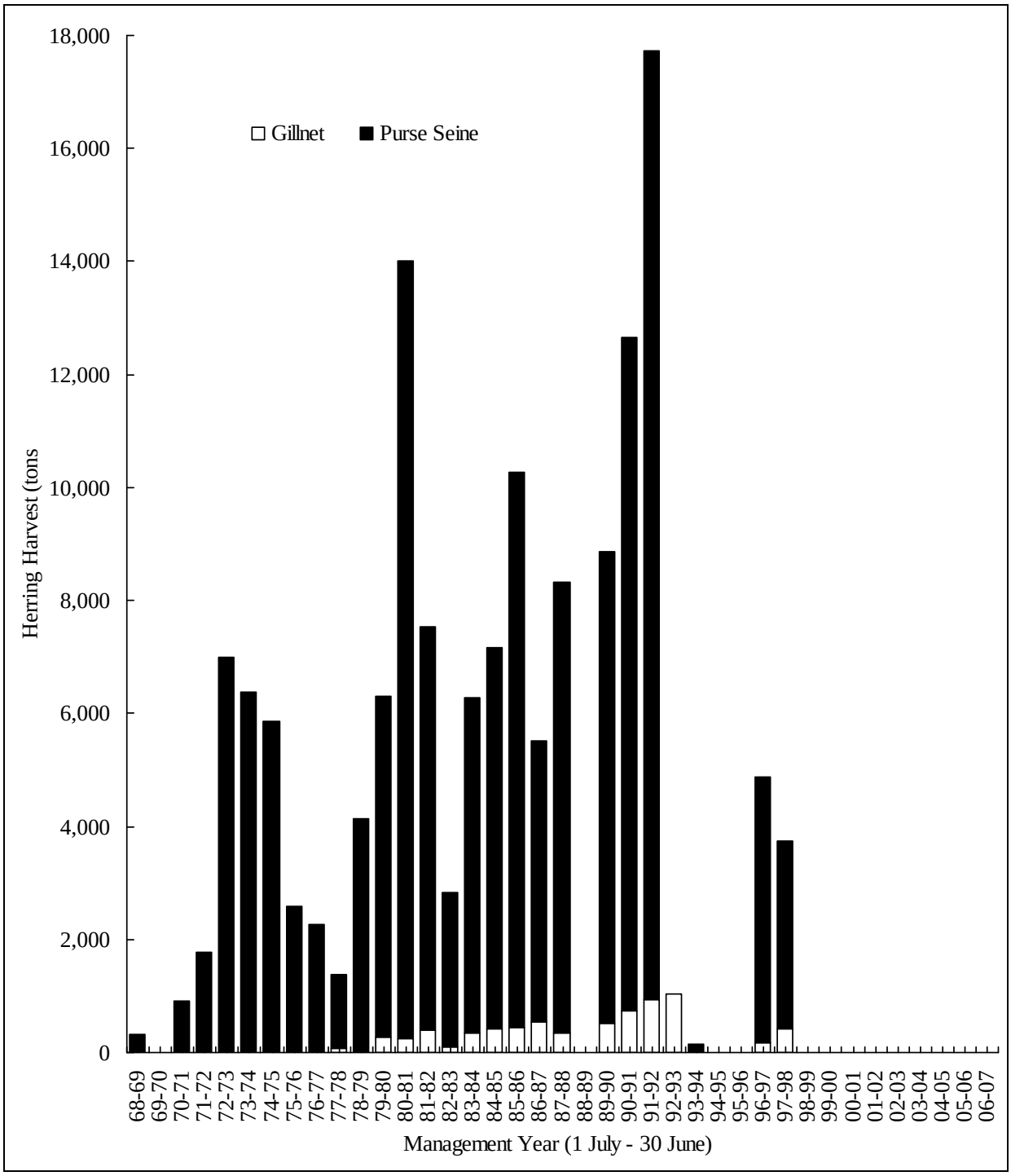
[g] All herring commercial fisheries in PWS were closed during spring 1989 because of the potential for contamination from the T/V Exxon Valdez oil spill.

[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, 1968-2007.

Appendix G4.–Pacific herring spawn-on-kelp harvest produced in pounds, 1979–2007.

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]											

-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 4/25/1999.

Appendix G5.–Natural spawning Pacific herring spawn-on-kelp harvests, 1969–2007.

Calendar Year	Fishery Dates	Effort Hours	Effort (No. Divers)	Guideline Harvest (Tons)	Harvest by Kelp Species and Grounds Price ($/lb) Ribbon %	Ribbon Price	Sieve %	Sieve Price	Fucus %	Fucus Price	Other %	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
1998	04/22 - 04/27	62	35	464	16%	$0.80			84%	$0.50			34,695	17.3	138.8

-continued-

Calendar Year	Fishery Dates	Hours	Effort (No. Divers)	Guideline Harvest (Tons)	Harvest by Kelp Species and Grounds Price ($/lb) Ribbon %	Ribbon Price	Sieve %	Sieve Price	Fucus %	Fucus Price	Other %	Other Price	Spawn-on-Kelp Harvest Lbs.	Spawn-on-Kelp Harvest Tons	Herring Utilized [a] Tons
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]														

[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.

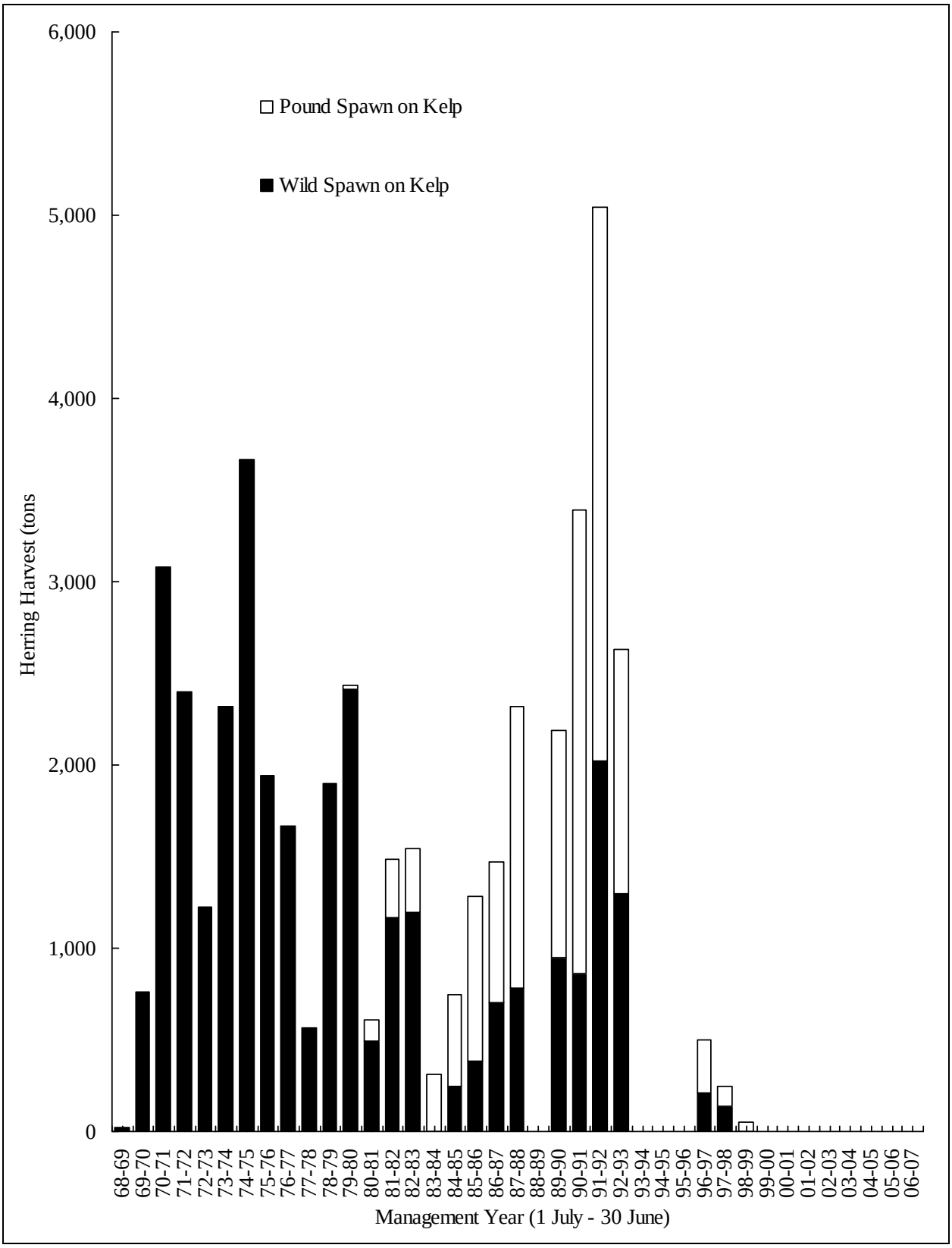
[c] Mostly Macrocystis, some hair kelp.

[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, 1968-2007.

Appendix G7.–Prince William Sound commercial Pacific herring food/bait fishery effort and harvests, management years 1969–2007.

Harvest	Fishing			Purse Seine		Pair Trawl		Mid-Water Trawl		Otter Trawl		Total
Management	Dates	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

-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)
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
1999-2000	Season Closed [j]											0
2000-2001	Season Closed [j]											0
2001-2002	Season Closed [j]											0
2002-2003	Season Closed [j]											0
2003-2004	Season Closed [j]											0
2004-2005	Season Closed [j]											0
2005-2006	Season Closed [j]											0
2006-2007	Season Closed [j]											0

[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 occured 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 5 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.

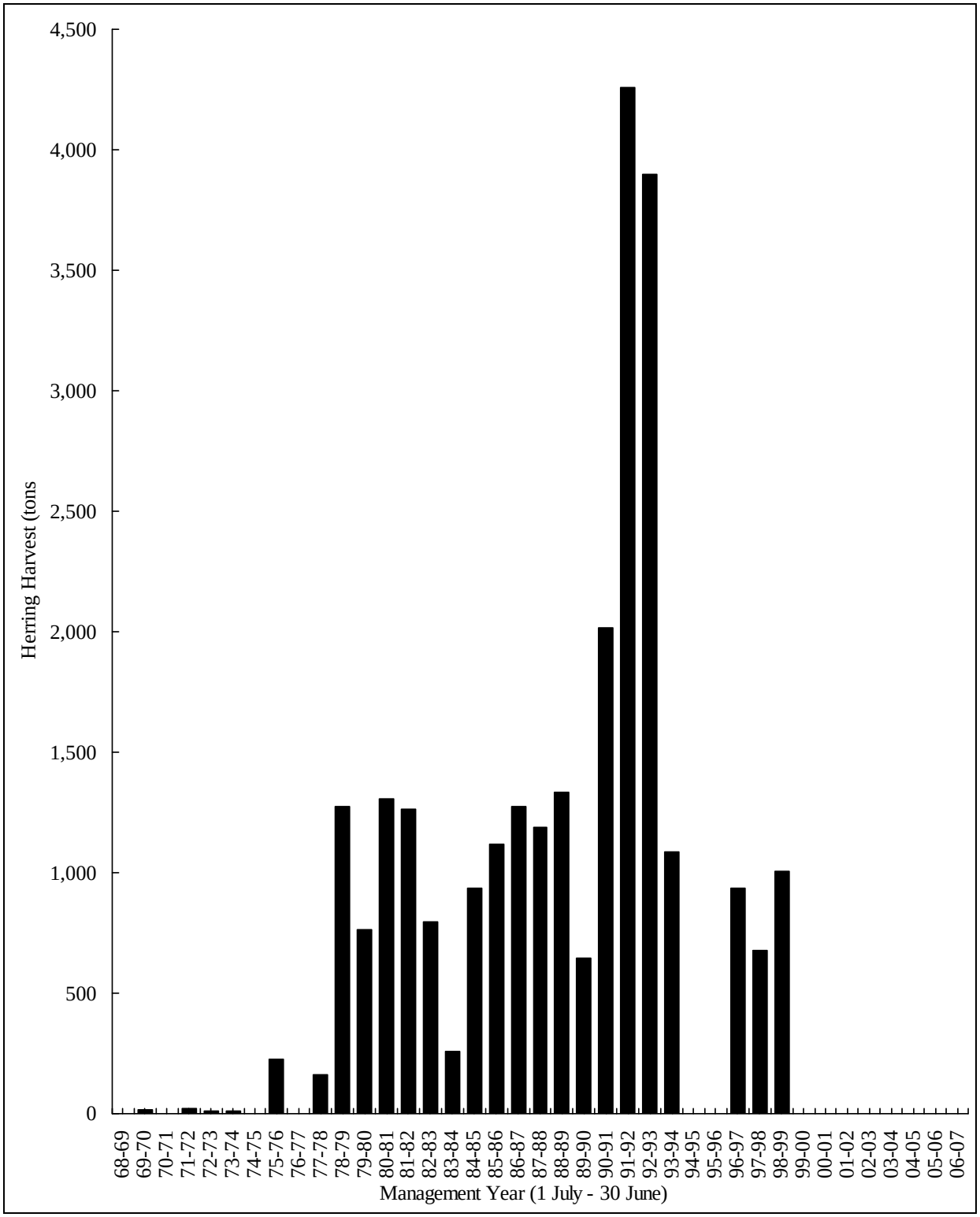
[h] Preseason guideline harvest level based on spawn deposition biomass estimate. Final quideline harvest based on age-structured analysis was issued in January 1993 and was 4,373 tons.

[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 modeling. 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 1968–2007.

Appendix G9.–Mean price and estimated exvessel value of the commercial Pacific herring harvest by gear type based on verbal post season estimates from processors and permit holders, 1978–2007.

	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	265,460	5,096,139
1985	760	5,380,800	900	371,700	0.48	19,200	7.09	569,058	250	279,500	6,620,258
1986	820	8,058,960	920	412,160	1.70	159,800	8.00	1,155,200	180	229,680	10,015,800
1987	1,100	5,480,200	960	511,680	1.70	299,200	15.00	1,836,000	300	356,700	8,483,780
1988	840	6,600,000	1,400	537,000	1.20	232,000	18.00	4,500,000	300	400,590	12,236,500
1989				SEASON 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		

[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 1973–2007.

Harvest Management Year	Total Spring Use and Harvest Mortality [a] (tons)	Aerial Survey Estimates: Peak Biomass Estimate [b] (tons)	Maximum Possible Observed Biomass [c]	Miles of Spawn [d]	Mile Days of Spawn [e]	Unexploitated Esc. Biomass Age Structured Analysis [f] (tons)	Pre-Fishery Run Biomass Age Structured Analysis [f] (tons)	Observed Peak Acoustic Biomass Estimates: Fall (tons)	Spring (tons)	Prior Year Forecast (tons)
1973-1974	6,375	41,080	107,290	38.5	96.0					
1974-1975	5,854			34.2	54.0					
1975-1976	2,584	7,330	25,247	32.8	41.2					
1976-1977	2,267	16,830	17,460	39.3	78.2					
1977-1978	1,391	13,410	36,540	28.7	50.8					
1978-1979	4,138	42,100	107,390	54.5	89.0					
1979-1980	6,323	62,110	122,050	50.5	95.5	55,695	60,569			
1980-1981	14,124	77,810	161,690	85.4	144.0	59,836	73,091			
1981-1982	7,861	68,790	97,620	49.0	85.5	56,521	64,005			
1982-1983	3,181	41,850	107,710	67.4	93.5 [g]	68,816	71,600			
1983-1984	6,604	58,870	158,760	60.1	104.8	78,490	84,370			
1984-1985	7,679	20,830	60,954	101.2	156.7	95,849	102,985			
1985-1986	11,180	15,180	54,820	72.4	146.8	77,488	88,074			
1986-1987	6,281	26,530	52,192	65.3	186.8	82,229	87,522			
1987-1988	9,871	34,270	67,175	166.3	269.8	105,355	114,051			43,992
1988-1989	[h]	56,915	186,708	98.4	228.1	116,262	116,262			54,899
1989-1990	10,103	57,900	145,013	94.1	164.4	90,140	100,243			51,692
1990-1991	15,196	42,765	141,375	58.0	71.5	73,088	87,215			96,666
1991-1992	20,752	53,835	130,569	74.7	119.8	76,975	95,024			121,342
1992-1993	2,360	20,725	109,865	20.4	50.3	31,231	33,368			134,133
1993-1994	151	19,640	154,008	14.6	23.1	16,987	16,987	20,998		29,787
1994-1995	0	7,113	20,868	20.4	28.2	18,864	18,864	13,840	14,639	19,009

-continued-

Harvest Management Year	Total Spring Use and Harvest Mortality [a] (tons)	Aerial Survey Estimates: Peak Biomass Estimate [b] (tons)	Aerial Survey Estimates: Maximum Possible Observed Biomass [c]	Aerial Survey Estimates: Miles of Spawn [d]	Aerial Survey Estimates: Mile Days of Spawn [e]	Unexploitated Esc. Biomass Age Structured Analysis [f] (tons)	Pre-Fishery Run Biomass Age Structured Analysis [f] (tons)	Observed Peak Acoustic Biomass Estimates: Fall (tons)	Observed Peak Acoustic Biomass Estimates: Spring (tons)	Prior Year Forecast (tons)
1995-1996	0	10,691	37,771	27.2	37.3	24,633	24,633	26,776	25,346	24,332
1996-1997	5,170	10,858	57,114	42.7	64.3	29,274	33,798	3,086	44,082	37,599
1997-1998	3,849	13,817	50,124	38.7	62.0	22,677	26,192		19,456	38,640
1998-1999	49	6,366	10,872	25.4	40.7	19,954	20,005		22,397	39,557
1999-2000	0	1,610	2,889	19.5	31.7	16,521	16,521		8,024	23,987
2000-2001	0	587	1,075	16.0	14.8	12,091	12,091		7,035	NA
2001-2002	0	646	1,433	21.5	23.6	15,857	15,857		11,791	NA
2002-2003	0	5,600	8,951	25.2	26.1	21,751	21,751		29,864	NA
2003-2004	0	12,305	17,650	29.7	30.4	24,981	24,981		21,046	NA
2004-2005	0	4,773	5,230	29.9	31.7	17,322	17,322		12,480 [i]	21,064
2005-2006	0	540	609	19.9	21.7	13,559	13,559		7,551 [i]	17,554
2006-2007	0	770	1,615	NA[j]	18.3	NA	NA		10,635 [i]	15,830

[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.

[c] The sum of all daily aerial biomass estimates for a given year.

[d] Total linear miles of spawn.

[e] The sum of the daily observed linear miles of herring spawn is computer generated and derived from hand-annotated paper maps.

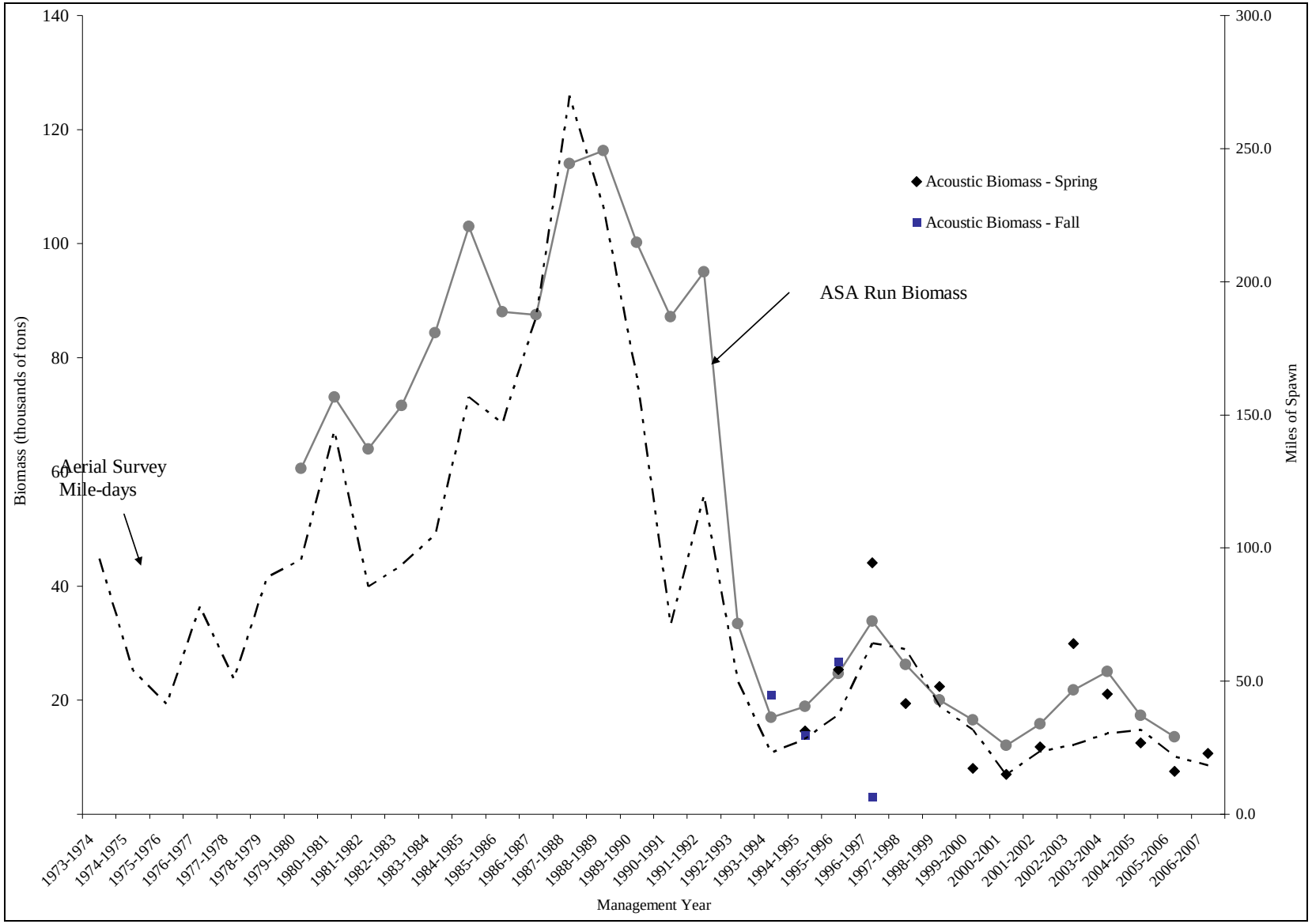
[f] Unexploited escapement and run biomass estimates from age structured analysis, September 2006. The 2007 numbers are projections from the 2006 run of the model.

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

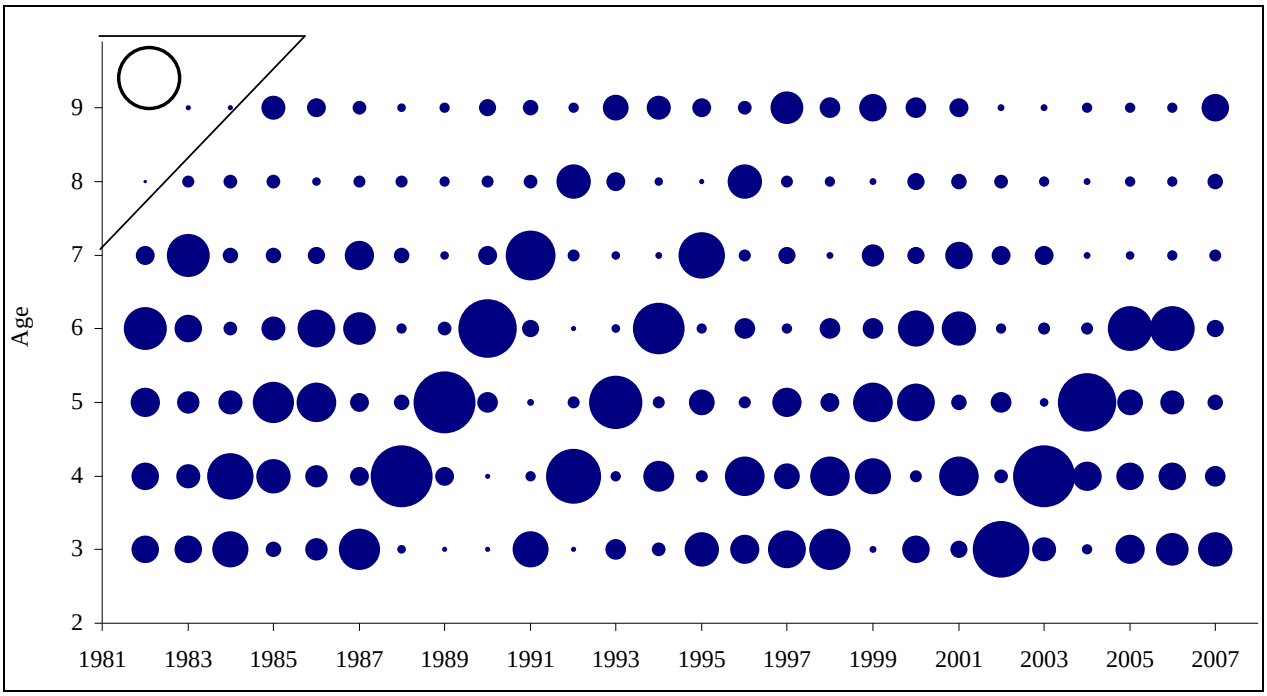
[h] All herring commercial fisheries in PWS were closed spring 1989 because of the potential for the contamination of catches from the T/V Exxon Valdez oil spill.

[i] The acoustics estimates for 2005 and 2006 are from ADF&G surveys only. Estimates from the Prince William Sound Science Center surveys were not available. Additionally, these estimates are not adjusted for maturity or subsequent harvest.

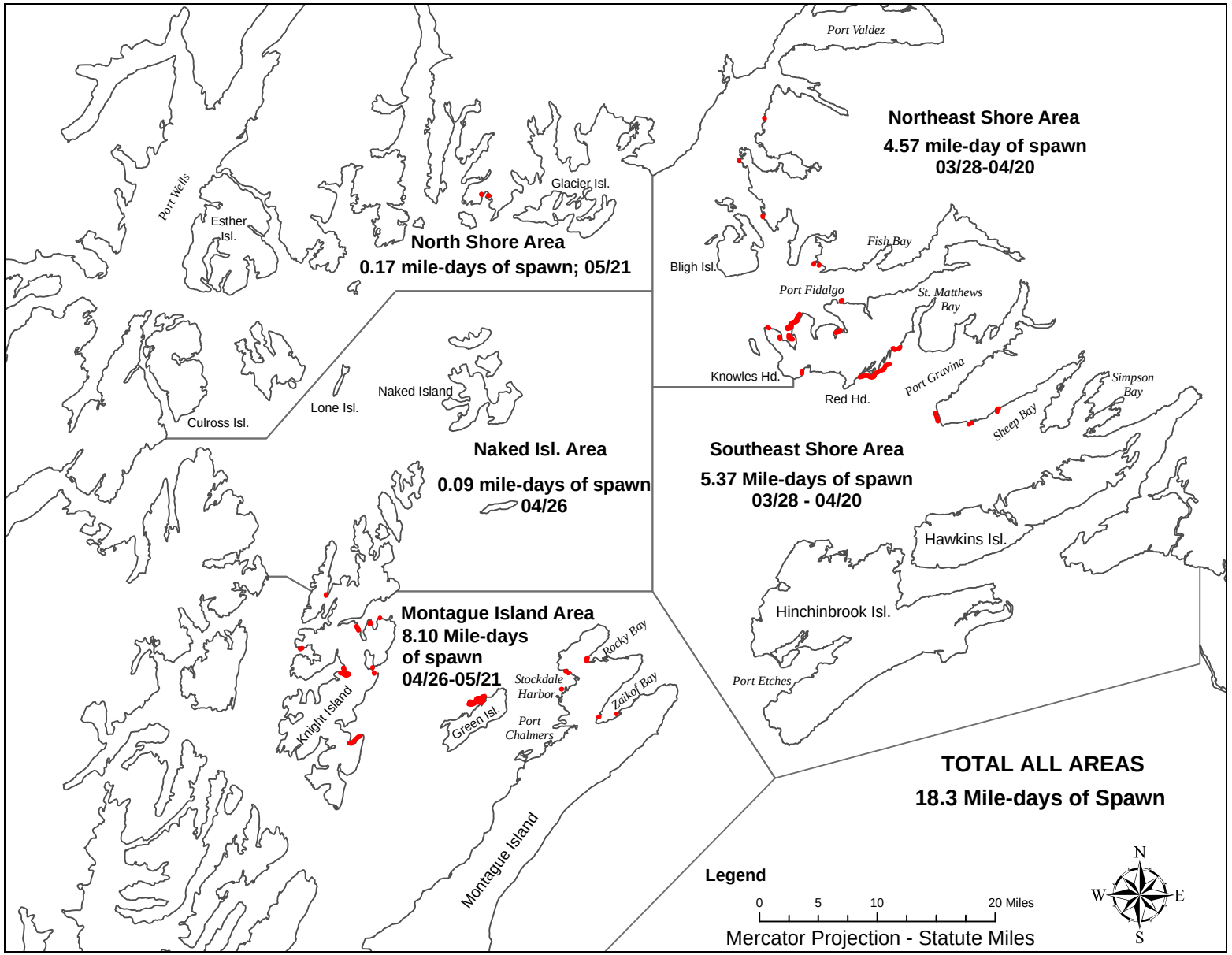
[j] Miles of spawn estimate for 2007 not available.



Appendix G11.–Prince William Sound annual Pacific herring biomass indices by management year, 1973-2007, and forecast run biomass from 2006 run of the ASA model.



Appendix G12.–Pacific herring percentage contribution by weight of each age group to the spring run biomass, 1982–2007.



Appendix G13.–Location of spawning herring and miles of spawn observed during aerial surveys in Prince William Sound, 2006.

APPENDIX H

ALASKA DEPARTMENT OF FISH AND GAME

DIVISION OF COMMERCIAL FISHERIES

NEWS RELEASE

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PWS 2007 Outlook
Date Issued: April 23, 2007
Time: 9:00 a.m.

2007 PRINCE WILLIAM SOUND SALMON FISHERY INFORMATION

General Information

This outlook is provided to assist the commercial salmon industry in planning for the 2007 season in the Prince William Sound Management Area. Preseason forecasts are the basis for the information provided. Area E forecasts can be found on ADF&G's web site:

http://www.cf.adfg.state.ak.us/region2/finfish/salmon/pws/pwsfor07.pdf

PWSAC hatchery forecasts can be found on the PWSAC web site:

http://www.pwsac.com/2007fcast.htm

Inseason modifications to harvest projections, season opening dates, and strategies for weekly fishing periods will likely occur as the fisheries develop. Hatchery Annual Management Plans (AMP) are used to provide guidelines to ADF&G when managing fisheries to achieve cost recovery and broodstock objectives. Valdez Fisheries Development Association (VFDA) and Prince William Sound Aquaculture Corporation's (PWSAC) AMPs will undergo Regional Planning Team (RPT) review on May 7, and will be submitted for the Commissioner's signature.

The forecast commercial common property fishery (CCPF) harvests by species are summarized in Table 1. ADF&G continues to forecast wild fish runs, but the department no longer forecasts any hatchery runs. Hatchery run projections are provided by either PWSAC or VFDA. Run projections for species and districts without formal forecasts are based on average historical production. These projections will provide the basis for early inseason management for all districts. Harvest projections for enhanced runs may change depending upon the success of hatchery cost recovery harvests.

Management of Prince William Sound (PWS) commercial salmon fisheries occurs through the Cordova area office. All emergency order announcements of fishery openings and closures are broadcast on VHF FM-07 and SSB 2509. As was done last year, fishery announcements from the

Cordova ADF&G office will routinely occur at 2:00 p.m. and will normally provide between 17 and 24 hours advanced notice. Emergency order announcement information is also transmitted by FAX to all registered processors, local radio stations, and news media in Cordova and Valdez. The status of fishery openings and harvest levels also can be obtained at (907) 424-7535, a 24-hour telephone recording in Cordova. In Anchorage, recorded updates may also be obtained Monday through Friday at 267-2843. Daily announcements are also compiled and may be found by following links on the ADF&G Web site at:

http://www.cf.adfg.state.ak.us/region2/pwshome.php

The first announcement will be released at 2:00 p.m. Monday, April 30 concerning the Copper River District.

On March 12, 2007, the PWSAC Board of Directors approved the annual corporate budget for Fiscal Year 2008. The pink, AFK chum, WNH chum, and sockeye salmon revenue goals are $4,512,998, $836,386, $2,225,341 and $2,693,767, respectively.

The PWSAC pink salmon revenue goal is $4.5 million requiring a cost recovery and brood stock harvest of 7.3 million fish (36%). PWSAC plans to use 45% of the 1.89 million chum salmon returning to WNH and 60% of the 404,000 chum salmon returning to AFK for a cost recovery goal of $3.1 million. The hatchery chum salmon harvest is anticipated to be 1.1 million fish (901,000 cost recovery and 196,000 broodstock). PWSAC plans to use 32% of the total sockeye salmon returning to Main Bay Hatchery (MBH) for cost recovery ($2.7 million) and broodstock with a combined harvest of 370,930 fish (363,000 cost recovery and 7,930 broodstock).

The VFDA 2007 AMP identifies a revenue goal of $2.86 million. Based on VFDA's 12.2 million pink salmon forecast for the Solomon Gulch Hatchery (SGH) and a sales price estimated at $0.18/pound, VFDA will require approximately 5.02 million pink salmon with an average weight of 3.3 lbs. to meet their 2007 revenue goal. A minimum of 323,000 additional pink salmon will be needed for broodstock. VFDA's corporate cost recovery and broodstock needs are approximately 41% of the VFDA forecast for SGH pink salmon.

Copper River District

The 2007 commercial common property harvest projections for the Copper River District are 1,157,093 sockeye, 275,369 coho, and 44,277 Chinook salmon. The 2007 inriver goal past the Miles Lake sonar is 576,600 to 776,600 salmon. During the 2003 Board of Fisheries (BOF) meeting the board adopted a Sustainable Escapement Goal (SEG) for the Copper River that recognizes the historical escapements that provided a sustainable fishery. The Copper River SEG is 300,000–500,000 natural sockeye salmon. Over the long-term, the department's goal is to maintain the long-term average of 361,000 sockeye salmon in the spawning escapement.

The components of the inriver goal are as follows:

Spawning escapement	300,000 to 500,000 sockeye
Other salmon	17,500 salmon
Subsistence/P.U. harvest	180,000 salmon
Sport fishery	15,000 salmon
Gulkana broodstock	20,000 sockeye
Gulkana Hatchery surplus	44,100 sockeye
Total	576,600 to 776,600 salmon

The initial management strategy will be based on anticipated weekly sockeye and Chinook salmon harvests for the entire Copper River District and an assessment of river conditions, fishing effort, harvest location, and consistency of harvest. When river conditions allow the deployment of the Miles Lake sonar, the attainment of the desired inriver escapement range for the upper Copper River become the main factor in deciding management strategy. Two evenly spaced commercial fishing periods per week will be the preferred management approach; however, the fishing schedule may be adjusted inseason as situations dictate. By mid-June, aerial estimates of sockeye salmon escapement trends on the Copper River Delta are also considered when scheduling periods.

During the 2003 BOF meeting, the board modified 5 AAC 24.361 Copper River District Chinook Salmon Fishery Management Plan by eliminating the language in the plan that calls for a 5% reduction in harvest potential. At this meeting the BOF also modified the Copper River District Chinook Salmon Fishery Management Plan to direct the department to achieve a Chinook salmon spawning escapement goal of 24,000 or greater. During the 2005 BOF meeting the board amended the Copper River King Salmon Management Plan to limit fishing in most waters inside of the barrier islands to one fishing period per week during statistical weeks 20 and 21. The closed area is defined in 5 AAC 24.350(1)(B) and extends from the Steamboat anchorage, to the west side of Big Softuk Channel at Coffee Creek. Scheduled fishing periods will continue if environmental conditions favor upriver salmon migration and Miles Lake sonar is meeting anticipated daily and cumulative counts. While a schedule of two periods per week is the recommended management approach, this schedule could be adjusted to provide for escapement needs. The department will consider using shorter periods, additional inside closures, period closures, or other measures to achieve the required Chinook and sockeye salmon escapements.

The maximum mesh size in the Copper River District is 6 inches until July 15 when larger mesh gear will be allowed. Whenever possible, the first period each week will begin Monday at 7:00 a.m. Depending upon fishing effort, harvest, and escapement trends on the Delta and at Miles Lake sonar station, a decision regarding a possible second fishing period for the week will be made by Wednesday at 2:00 p.m. Depending upon the duration and surplus, fishing periods may begin at either 7:00 a.m. or 7:00 p.m. If there is an exceptionally strong run to the Copper River, the department may desire greater flexibility in deciding when weekly periods should begin.

As a reminder, Chinook salmon that are harvested for home use by commercial permit holders in the Copper and Bering River Districts must be reported on a fish ticket at the time of landing (5 AAC 24.356). Fish tickets have a “not sold/personal use” block to report these Chinook salmon.

Beginning in early August when coho salmon harvest become predominant by number, the Copper and Bering River Districts will be managed for coho salmon. Initially fishing periods will begin at 7:00 a.m. The management strategy for coho salmon will be a single 24-hour period per week; adjustments to period lengths will be based on inseason assessments of run strength. Given satisfactory indications from coho salmon escapement and harvest data, the department will initially consider lengthening the 24-hour weekly period to a 36-hour period. Continued positive trends in escapement would result in a second weekly fishing period being added. Weekly anticipated harvest and escapement data will be compared to the actual harvest and escapement data to determine the frequency and duration of commercial openings.

Individuals planning to participate in subsistence fishing activities in the Copper River District are required to obtain a subsistence permit through the Cordova ADF&G office. **Permits will be available during normal business hours Monday through Friday from 8:00 a.m. until noon and from 1:00 p.m. to 5:00 p.m.** ADF&G staff will not be available to issue permits before hours, after hours, on state holidays, or on weekends.

Bering River District

The Bering River District is expected to open for the 2007 season on June 4. The 10-year average harvest from the Bering River District is 18,451 sockeye salmon. Openings have traditionally been managed concurrently with the Copper River District, and this management strategy will continue. The department will only consider an independent opening of the Bering River District if wild stock escapement goals are assured and the Copper River District's escapement is not. Beginning in early August, the Bering River District will be managed for coho salmon and management strategies will be similar to those used for the Copper River District. The season's projected harvest is 44,462 coho salmon based on the recent 10-year harvest average.

Eshamy District

PWSAC's Main Bay Hatchery forecast is 1.13 million sockeye salmon. In 2007 PWSAC plans to use 7,930 enhanced Coghill sockeye salmon for broodstock and harvest 32% or 363,000 of the returning sockeye salmon for cost recovery. Approximately 760,070 MBH sockeye salmon are expected to be available for common property harvest. Management of the enhanced Coghill stock in the Crafton Island subdistricts will begin during the week of June 10-16 and will be based upon PWSAC's progress towards revenue goals.

The 2001-2005 Commercial Operators Annual Report (COAR) exvessel value calculated the set gillnet fleet harvest at greater than 5% of the previous 5-year average exvessel value of the total common property fishery for enhanced salmon. Because the 5% allocation was exceeded, the set gillnet fleet will be restricted to no more than 36-hours of fishing time per week after July 10 in accordance with 5 AAC 24.370(f). The management strategy during this period will be to provide two openings per week with set gillnet opening 24-hrs on Monday at 8 am and 12-hrs on Thursday at 8 am.

The wild stock sockeye salmon run to Eshamy Lake is forecast at 36,000 fish, 30,000 of which will be needed to meet the mid-point of the 20,000–40,000 biological escapement goal range. The Eshamy River weir is funded for 2007. Beginning in mid-July, the Eshamy District, including waters south of Falls Bay, will open during scheduled periods if the escapement past the weir is close to the anticipated number. If escapement is below the anticipated curve, area and/or time restrictions will probably be imposed to improve wild stock escapement. In mid to late July, fishing time and area in the Crafton Island Subdistrict will be linked to the escapement of wild pink and sockeye salmon in the Eshamy District, and the strength of wild pink and chum salmon stocks returning to the Northwestern and Coghill Districts. When waters of the Crafton Island Subdistrict are closed for the protection of pink and sockeye salmon escapement, there will be concurrent closures of the eastern shore of Chenega Island to purse seine gear to further minimize the interception of wild stocks.

Coghill District

The 2007 wild stock sockeye salmon run to Coghill Lake is forecast at 140,000 fish. Meeting the Coghill Lake midpoint sustainable escapement goal of 30,000 sockeye salmon will leave approximately 110,000 fish for the common property harvest. The early run of chum salmon to WNH is forecast by PWSAC to be 1.89 million fish. PWSAC requires 851,000 million chum salmon for cost recovery and broodstock at this facility leaving 1.04 million or 54% of the chum salmon for the CPF.

The 2001–2005 Commercial Operators Annual Report (COAR) exvessel value calculated the seine fleet harvest at 45.4%. Because the 45% allocation was met, the seine fleet will not be allowed exclusive access to the Esther Subdistrict from June 1 to July 21 as was the case in 2006. Additionally, the Granite Bay Subdistrict will be opened to common property harvest in 2007.

The BOF supported the use of a reduced Esther Subdistrict boundary if the Coghill Lake sockeye salmon escapement goal is not being met. During escapement shortfalls, the department has confined fishing to within one nautical mile off the southern portion of Esther Island. The one nautical mile boundary may be implemented by emergency order for the conservation of Coghill Lake sockeye salmon and Port Wells wild stock chum and pink salmon. If escapement to Coghill Lake is less than anticipated, the department may elect to further confine the seine fleet to the WNH Terminal Harvest Area (THA). If sockeye salmon escapement is within the anticipated range and sockeye salmon harvest rates in the Coghill District indicate a strong return, the Port Wells area will be regularly opened to 61° N. Latitude. As the season progresses and if Coghill weir escapement counts are on track, the area will be expanded to the markers near Coghill Lagoon.

WNH coho salmon are present in the fishery from early August through mid-September. The 2007 run is expected to be 67,700 coho salmon. PWSAC will require zero fish for broodstock with all returning fish available to the common property fisheries. Broodstock will be taken from Mile 18 remote release stock returning to Fleming Spit. Although some WNH fish are intercepted in the southern areas of Prince William Sound, most of the coho salmon run will be harvested by the drift gillnet fleet in the Esther Subdistrict

Unakwik District

The 2007 wild stock sockeye salmon commercial harvest in Unakwik Inlet is forecast at 7,620 fish. Both drift gillnets and purse seines are legal gear during all periods in the Unakwik District. The district encompasses only those waters above the reef in Unakwik Inlet. During the sockeye salmon run to Miners and Cowpen Lakes, the management strategy will be to provide two periods per week. This schedule is expected to begin in early June, and run concurrently with openings in the Coghill District. Commercial harvest information will be evaluated inseason and adjustments to fishing schedules will be made if necessary.

Purse Seine Districts

The 2007 pink salmon harvest forecast for PWS is 40.6 million fish. This estimate includes 12.9 million wild stock fish, 12.2 million VFDA fish, and 17.6 million PWSAC hatchery fish. Approximately 7.2 million pink salmon (41%) of the projected 17.6 million pink salmon returning to the PWSAC hatcheries will be needed for cost recovery and broodstock. The remaining 10.4 million PWSAC fish will be available for commercial common property harvest. Approximately 3.8 million pink salmon (31%) of the projected 12.2 million pink salmon returning to the VFDA hatchery will be needed for cost recovery and broodstock. The remaining 8.4 million VFDA fish will be available for commercial common property harvest. A total of 10.9 million wild stock pink salmon are projected to be available for harvest leaving 2.0 million fish for escapement.

The 2007 chum salmon forecast total return in Prince William Sound is 3.4 million fish. The majority, 2.9 million (84%), are PWSAC hatchery production. PWSAC forecasts a run of 1.9 million chum salmon to WNH, 625,000 fish to Port Chalmers, and 404,000 fish to AFK. Approximately 246,000 chum salmon (60%) will be harvested out of the 404,000 AFK return for cost recovery. All Port Chalmers and 158,000 of the AFK chum salmon are for harvest in the purse seine CPF. Based on the department's wild chum salmon forecast of 454,000 fish, there is a potential common property harvest of 254,000 wild chum salmon.

The purse seine season will begin Monday, May 28 with a directed fishery targeting the enhanced chum salmon run to Port Chalmers. Fishing periods will be 156 hours from 8:00 a.m. Monday to 8:00 p.m. Sunday. Anadromous stream closures within Port Chalmers will be suspended during May and June to facilitate the harvest of the enhanced run. At the spring Salmon Harvest Task Force meeting it was agreed that AFK remain closed until the chum salmon cost recovery reaches close to 100% of the 246,000 fish goal. The Port Chalmers and AFK chum salmon fishery will close in mid-July as management begins to focus on pink salmon returns. The AFK SHA will remain open until pink salmon dominate the harvest and are in concentrations sufficient to sustain sizable cost recovery harvests.

The general waters of the 8 purse seine districts will be managed based on the strength of wild stocks. Hatchery subdistricts will be managed based on the strength of both wild and enhanced stocks. Aerial survey pink and chum salmon escapement trends, compared to average historical performance, will determine the duration of openings in these districts. Aerial surveys of the index streams occur on a weekly basis, weather permitting. The department anticipates a strong pink salmon return based the record return in the 2005 parent year, favorable 2005 environmental conditions, and the pattern of strong odd year pink salmon returns. If wild stocks perform as expected the department anticipates liberal openings (time and area) through out PWS similar to 2005.

The AFK, CCH, and WNH pink salmon return will be managed collectively to achieve PWSAC's cost recovery and broodstock goals through openings and closures of nearby sub-districts or hatchery management areas. PWSAC expects to complete 30-60% of cost recovery before opening to CPF. Managing the enhanced pink salmon run in aggregate may result in site-specific CPF contribution rates being above or below the approximate target of a 36% CPF pink salmon harvest. PWSAC will work closely with ADF&G management biologists to achieve the seine fisheries revenue goal as rapidly as possible to allow for an orderly and consistent CPF.

Evaluation of the late pink salmon run occurs daily as the department tracks hatchery sales harvests, broodstock collections, commercial fishery harvests, hatchery sex ratios, stock composition estimates, and wild stock escapement data. To further assess run strength and timing of late enhanced pink salmon, a Southwestern District test fishery, using the R/V *Solstice,* will be conducted in late July. Otolith collections from daily test sets made at key migration corridors will provide stock composition estimates. Stock composition and sex ratios will provide early run entry information and allow for informed management decisions in setting the time and area in the Southwestern District. Additionally, harvest rate may provide a qualitative gage of run strength, timing, and quality. PWSAC forecasts a pink salmon return of 7.2 million fish to the AFK Hatchery and plans to collect 41% of the total AFK return for cost recovery and broodstock in late July. Until the daily run entry is sufficient to sustain sizable sales harvests, the department may open the AFK Hatchery THA and SHA to a common property harvest to keep pink salmon quality high and harvest the remaining remote release chum salmon.

Valdez Port, Narrows, and Arm will be managed for VFDA's cost recovery and broodstock needs. In the remainder of the Eastern District, the management strategy will be to open the district concurrent with openings targeting the VFDA pink salmon run. The department will be monitoring signs of a large pink salmon return including pink salmon harvests in Port Chalmers, early cost recovery harvests at Entrance Point, and aerial survey counts. If the run appears to be large the department will adapt with early season fishing. Jack Bay may be closed inside a line from Tongue Point to Entrance Point or at the Salmon Harvest Task Force (SHTF) markers to protect early timed wild stocks. If the Galena Bay or Sawmill Bay wild stocks experience shortfalls during the VFDA return, additional area closures may result. The Port of Valdez will be closed to CPF north of a line from Tongue or Entrance points to Potato Point beginning on August 24. The Valdez Narrows Subdistrict will open on September 4 to target surplus SGH produced coho salmon. The VFDA enhanced coho salmon forecast is 162,000 fish.

Table 1. ADF&G commercial common property harvest projections for the 2007 salmon fishery in the Prince William Sound and Copper/Bering River areas.

PINK SALMON - HARVEST ESTIMATE (Millions)

Natural Stocks	10.90
Hatchery Stocks [a]	
Solomon Gulch	7.15
Armin F. Koernig	4.27
Wally Noerenberg	2.47
Cannery Creek	3.64
Natural & Hatchery	28.43

CHUM SALMON - HARVEST ESTIMATE (Thousands)

Natural Stocks	254
Hatchery Stocks	
Wally Noerenberg	1,041
Armin F. Koernig	158
Port Chalmers	625
Natural & Hatchery	2,078

COHO SALMON - HARVEST ESTIMATE (Thousands)

Natural Stocks (PWS)	No Forecast
Copper River	278
Bering River	42
Hatchery Stocks	
Solomon Gulch	149
Wally Noerenberg	68
Natural & Hatchery	537

SOCKEYE SALMON - HARVEST ESTIMATE (Thousands)

Copper plus Bering River	1,175
Coghill Lake	110
Eshamy Lake	6
Hatchery Stocks	
Main Bay	760
Natural & Hatchery	2,052

CHINOOK SALMON - HARVEST ESTIMATE (Thousands)

Natural Stock	
Copper River	44

[a] Potential hatchery contributions to the common property harvest are based on the forecast of total hatchery runs minus preseason estimates of corporate escapement that will be required by hatchery operators. The forecast used 40% (31% for VFD) of the total return in estimating the percentage of forecasted runs that will be needed for corporate escapement. The actual corporate escapement will depend upon the percentage of total return needed for cost recovery.