Fishery Management Report No. 10-45

2008 Prince William Sound Area Finfish Management Report

by

Jenefer Bell,

Jeremy Botz,

Rich Brenner,

Glenn Hollowell,

and

Steve Moffitt

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

Symbols and Abbreviations

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

Weights and measures (metric)

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

Weights and measures (English)

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

Time and temperature

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

Physics and chemistry

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

General

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

Mathematics, statistics

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

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2008 PRINCE WILLIAM SOUND AREA FINFISH MANAGEMENT REPORT

by

Jenefer Bell, Jeremy Botz, Rich Brenner, Glenn Hollowell, and Steve Moffitt

Alaska Department of Fish and Game, Division of Commercial Fisheries, Cordova

Alaska Department of Fish and Game
Division of Sport Fish, Research and Technical Services
333 Raspberry Road, Anchorage, Alaska, 99518-1565

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Jenefer Bell, Jeremy Botz, Rich Brenner, Glenn Hollowell, and Steve Moffitt
Alaska Department of Fish and Game, Division of Commercial Fisheries
PO Box 669, Cordova, Alaska 99574 USA

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ABSTRACT

The 2008 Prince William Sound (PWS) management area (all coastal waters and inland drainages entering the north central Gulf of Alaska between Cape Suckling and Cape Fairfield) commercial salmon harvest was 49.3 million fish. The harvest was comprised of 42.4 million pink *Oncorhynchus gorbuscha*, 1.3 million sockeye *O. nerka*, 5.1 million chum *O. keta*, 551,232 coho *O. kisutch*, and 13,120 Chinook salmon *O. tshawytscha*. Approximately 83% of the harvest, 41.0 million fish, was common property harvest and 8.3 million fish were sold for hatchery cost recovery. Homepack, educational permits, and donated fish accounted for less than one percent. Based on an informal survey of salmon processors in the PWS and Copper River area, the preliminary estimated value of the combined commercial salmon harvest was $90.3 million, including hatchery sales. During the 2008 season, 507 drift gillnet, 25 set gillnet, and 141 purse seine permit holders fished. Drift gillnet exvessel harvest value was an estimated $29.0 million, setting average permit earnings at $57,262; set gillnet exvessel harvest value was an estimated $1.5 million, setting average permit earnings at $59,737; seine fishery exvessel harvest value was an estimated $49.7 million, setting average permit earnings at $352,212. Revenue generated for hatchery operations (exclusive of roe/meal sales) was approximately $10.1 million. The management area personal use and subsistence fisheries harvested a total of 209,000 fish. For these fisheries, approximately 10,200 subsistence and personal use permits were issued to Alaska residents. Sport fish permit holders landed an estimated 150,000 salmon in the PWS management area. The commercial Pacific herring *Clupea pallasi* fishery in the PWS management area was closed in 2008 for the tenth consecutive year because the spawning biomass remained below the 22,000 tons regulatory threshold.

Key words: Prince William Sound, Copper River, salmon, harvest, drift gillnet, set gillnet, purse seine, commercial salmon harvest, salmon enhancement, PWSAC, VFDA, hatchery, cost recovery, sport fishery, subsistence fishery, personal use fishery, escapement, sockeye salmon, *Oncorhynchus nerka*, pink salmon, *Oncorhynchus gorbuscha*, chum salmon, *Oncorhynchus keta*, Chinook salmon, *Oncorhynchus tshawytscha*, coho salmon, *Oncorhynchus kisutch*, Pacific herring, *Clupea pallasi*.

PRINCE WILLIAM SOUND MANAGEMENT AREA COMMERCIAL SALMON AND HERRING FISHERIES

OVERVIEW OF MANAGEMENT AREA

The Prince William Sound (PWS) management area, also known as Area E, encompasses all coastal waters and inland drainages entering the north central Gulf of Alaska between Cape Suckling and Cape Fairfield (Figure 1 and Figure 4). In addition to Prince William Sound, the management area includes Bering River and Copper River and has a total adjacent land area of approximately 38,000 square miles.

The salmon management area is divided into 11 districts that correspond to local geography and distribution of the 5 species of salmon harvested by the commercial fishery. The management objective for all districts is the achievement of spawning escapement goals for the major stocks while allowing for the orderly harvest of all fish surplus to spawning requirements. In addition, Alaska Department of Fish and Game (ADF&G) follows regulatory plans to manage fisheries and allow private non-profit (PNP) hatcheries to achieve cost recovery and broodstock objectives. As an avenue for the commercial fishing industry to formally provide management recommendations to the ADF&G, representatives from PWS area processors, gear groups, and aquaculture associations sit on an advisory body known as the PWS Salmon Harvest Task Force (SHTF).

There are 6 hatcheries that contribute to the area's salmon fisheries. Prince William Sound Aquaculture Corporation (PWSAC) operates 5 of the hatcheries. Gulkana Hatchery (GH) in Paxson augments production of sockeye salmon *Onchorhynchus nerka* in the Copper River.

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

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

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 occurring in the spring, and herring food/bait fishery occurring in the fall. The guideline harvest level (GHL) established by the Prince William Sound Herring Management Plan, 5AAC 27.365, governs all herring fisheries. The management objective for herring is to target fisheries on a high quality segment of the biomass while maintaining a minimum spawning biomass.

OVERVIEW OF AREA WIDE SALMON AND HERRING FISHERIES

The 2008 Prince William Sound management area commercial salmon harvest was 49.3 million fish. The harvest was composed of 42.4 million pink, 1.3 million sockeye, 5.1 million chum, 551,000 coho, and 12,000 Chinook salmon (Table 1, Figure 3). Hatchery runs of pink, chum, and coho salmon were above forecast overall, while hatchery runs of sockeye salmon were below forecast. Harvest of coho, pink and chum salmon were above the 10-year (1998–2007) commercial harvest average while harvest of sockeye and Chinook salmon were below the 10-year (1998–2007) average (Table 2). Approximately 83% of the harvest, 41.0 million fish, was attributed to the common property fishery and 8.3 million fish were attributed to the hatchery cost recovery fishery. Personal use, educational permit, and donated harvest accounted for less than one percent of Area E harvest (Table 1). The 2008 preliminary exvessel value estimates by gear group from the common property fishery, both wild and enhanced salmon, are $49,661,828 (61.9%) for purse seine, $29,031,674 (36.2%) for drift gillnet, and $1,493,437 (1.9%) for set gillnet (Table 3, Figure 4). The average price per pound paid to fishermen was significantly above the 10-year (1998–2007) average (Table 4). The purse seine harvest value was the highest on record and the drift gillnet harvest value was the second highest (Table 5).

No commercial fisheries for herring occurred in 2008 because the spawning biomass was below the regulatory threshold of 22,000 tons of herring.

As the result of amendments made to the Prince William Sound Management and Salmon Enhancement Allocation Plan (5AAC 24.370) at the December 2005 Alaska Board of Fisheries meeting, and the 5-year average enhanced exvessel value for the set gillnet gear group exceeding 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 (APPENDICES A1–A19, APPENDIX E)

The Alaska Department of Fish and Game with direction from the Alaska Board of Fisheries, 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 5AAC 24.360 *Copper River District Salmon Management Plan*. At the December 1999 Alaska Board of Fisheries meeting in Valdez, 5AAC 24.361 *Copper River King Salmon Management Plan* was amended to provide the 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 Alaska Board of Fisheries 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 for harvest to users in the uppermost reaches of the Copper River.

Management tools, such as inriver sonar, aerial survey observations, and harvest data provide ADF&G fishery managers with indices of abundance that are used to regulate Copper River fisheries. ADF&G relies on the escapement index provided by the sonar at Miles Lake to aid in managing commercial harvests and provide for upriver escapement and allocations. Additionally, aerial escapement indices, thermal and strontium marked otolith data, and weir data have provided supporting information on the relative success of ADF&G in meeting provisions of the *Copper River District Salmon Management Plan*. From 1998 to 2007, the combined reported upriver subsistence and personal use harvest (federal and state) has ranged from 133,000 sockeye salmon (in 2002) to 211,000 (in 1999), with a 10-year average of 175,000 salmon. A general increasing trend in subsistence harvest is reflected annually through additions to the inriver goal. Achieving escapement goals and satisfying management plan provisions remains the primary management objectives of ADF&G.

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

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

Copper River District Salmon Management Plan outlines biological and allocation categories that comprise the inriver goal for 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 2008 inriver goal were as follows:

Spawning escapement	300,000 to 500,000 sockeye salmon
Other salmon	17,500 salmon
Subsistence harvest	75,710 salmon
Personal Use harvest	122,825 salmon
Sport fishery	15,000 salmon
Gulkana broodstock	20,000 sockeye
Gulkana Hatchery surplus	63,570 sockeye
Total	614,605 to 814,605 salmon

Of the 7 categories contained within the inriver goal, the most significant increases over time have been in hatchery surplus, subsistence, and personal use categories. In the early 1980s, the Miles Lake sonar minimum inriver goal stood at 350,000 salmon. Since that time, the minimum inriver goal has been set as high as 768,000, primarily in response to large forecasts of enhanced sockeye salmon and increasing subsistence and personal use harvests.

The numbers of subsistence and personal use salmon within the inriver goal are calculated annually using the average subsistence and personal use harvest from the previous 5-years. The number of hatchery surplus sockeye salmon within the inriver goal is determined annually using the Gulkana Hatchery run forecast to determine the surplus escapement of hatchery fish required to not exceed the average wild stock exploitation rate of 67% during the late June and July mixed stock fishery in Copper River District. It is important to note surplus hatchery sockeye salmon do not fulfill any wild stock escapement needs, nor are they linked to any upriver subsistence 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 2008 commercial harvest forecast for the Copper River District was 47,000 Chinook, 742,000 sockeye, and 288,000 coho salmon, (Table 6 and Appendix H). The enhanced sockeye salmon run to Gulkana Hatchery was forecast to be 252,000 fish. PWSAC required approximately 20,000 fish for broodstock leaving 232,000 hatchery sockeye salmon available for commercial, subsistence, and sport harvests. The 2008 inriver goal for salmon passing Miles Lake was 614,605 to 814,605 fish. This number equated to a preseason sonar goal of 601,125 to 796,612 salmon by August 2, the season ending date for sonar counting at Miles Lake in 2008.

The traditional fishing schedule for the Copper River District is 2 evenly spaced fishing periods per week, with periods generally occurring on Mondays and Thursdays with duration of periods announced by emergency order. It was agreed upon at the Salmon Harvest Task Force meeting on May 5 that the second gillnet fishing period in each week would begin Thursday morning rather than Thursday evening as had been the standard for over 15 years prior to 2006. This change was requested in 2006 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 sustainable escapement goal (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 24-hour opening per week; as harvest or aerial survey numbers warrant, the duration of this fishing period may be increased to 48 hours, or a second fishing period may be added during the week. Aerial escapement estimates for the early portion of the coho salmon run are frequently not immediately available as other species of salmon remain in tributaries and accurate aerial identification is problematic. Additionally, fall weather makes weekly survey flights difficult. The SEG for the Copper River Delta is 32,000 to 67,000 coho salmon.

Sockeye and Chinook Salmon Fishery Season Summary

The total 2008 Copper River sockeye salmon run was 1,141,936 fish with 320,815 (28.1%) commercially harvested, 123,236 (10.8%) harvested by upriver subsistence and personal use users, and an estimated 11,806 (1.0%) by upriver sport fishermen. Commercial permit holders retained 2,172 for "homepack" (0.2%). Sport fishermen on the Copper River Delta harvested an estimated 811 (<0.1%) sockeye salmon. Educational permit and subsistence harvest in the Copper River District totaled an estimated 3,998 (0.4%). The remaining 495,419 (55.3%) comprised the upriver and delta wild sockeye salmon escapement with an additional 47,667 (4.2%) returning to the Gulkana Hatchery area (Appendix A1). Overall, 850,484 (74.5%) of the sockeye salmon entering the Copper River District originated from upriver wild stock systems, 202,289 (17.7%) from delta wild stock systems and 89,164 (7.8%) came from the Gulkana Hatchery (Appendix A2).

The 2008 total Chinook salmon run was 51,652 fish with 11,437 (22.1%) commercially harvested, 517 (1.0%) harvested through educational and subsistence permits in the Copper River District and 537 (1.0%) retained by commercial permit holders as "homepack". A total of 4,655 (9.0%) were harvested by upriver personal use and subsistence users, an estimated 4,359 (8.4%) were harvested by sport fishermen, and the remaining 58.4%, (30,143) represent escapement (Appendix A3). This is above the SEG minimum of 24,000 for Copper River Chinook salmon as defined by the Alaska Board of Fisheries in 5 AAC 24.361(a). The entire Chinook salmon run originated from wild upriver stocks.

The Copper River commercial sockeye salmon harvest was 320,815, less than half of the projected 742,166 and less than one quarter of the previous 10-year average of 1,344,291 sockeye salmon. The harvest of 11,437 Chinook salmon was one quarter of the previous 10-year average of 43,059 fish (Appendices A4 and A5). The final Miles Lake sonar count on August 2nd was 718,344 salmon and was slightly above the midpoint of the inriver escapement goal range of 601,125 to 796,612 salmon for that date (Appendices A6 through A8). A total of 492 drift gillnet

permits were active in the Copper River District in 2008 out of a total 532, with peak participation occurring in the second fishing period of the season on May 19 with 466 permit holders fishing. River height was within the expected range (Appendix A10). The escapement index count for the Copper River Delta systems was 67,950 sockeye salmon; within the SEG range of 55,000–130,000 fish and comparable to historical escapement (Appendices A11 and A12). Four aerial surveys of upper Copper River index streams were conducted by the gillnet manager, and peak counts for these surveys are in Appendix A13.

Based on strontium chloride (Sr) otolith mark analysis, 21,699 Gulkana Hatchery sockeye salmon were harvested in the Copper River commercial fishery in 2008 accounting for 6.8% of the total sockeye salmon commercial harvest (Appendix E6). This is less than the previous 10-year contribution average of 291,984 hatchery sockeye salmon (Appendix E7). The majority were 5-year-old fish from the 2003 Gulkana Hatchery release of 26.2 million fry (Appendix E8). Additionally in 2008, there were an estimated 74 Main Bay Hatchery sockeye salmon harvested in the Copper River District (Appendix E6).

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

The Miles Lake south bank sonar became operational on May 15 and counted 6 salmon on the first day of operation. The north bank sonar came online 3 days later, May 18, with 90 fish counted on that day.

The first Copper River District commercial fishing period on Thursday, May 15 was for 12 hours and had 170 commercial drift gillnet permits fishing. The harvest from this period was 2,469 sockeye and 765 Chinook salmon. The anticipated harvest was 17,105 sockeye and 5,673 Chinook salmon. High winds and rough seas were significant contributing factors to the low harvest and participation. The second 12-hour period occurred on Monday, May 19 with 466 commercial permits reporting deliveries. Harvest from this period was 31,025 sockeye and 2,068 Chinook salmon reported and remained below the anticipated harvest of 44,823 sockeye and 6,729 Chinook salmon.

In accordance with 5 AAC 24.361(b) the inside waters, as described in 5 AAC 24.350(1)(B), were closed for the duration of the 12-hour period occurring on Thursday, May 22. Harvest from this period was 38,853 sockeye and 1,915 Chinook salmon with 444 permit holders reporting deliveries. The anticipated harvest for this period was 56,013 sockeye and 6,927 Chinook salmon.

In addition to stormy conditions, harvest may have been low due to tidal cycles. The largest series of spring tides (greater than 15 feet) occurred in early May prior to the beginning of the commercial fishing season. Large tidal cycles are linked to salmon movement and passage and are frequently correlated to above anticipated commercial harvests and salmon passage by the Miles Lake sonar station. Sonar passage during statistical week 21 (May 18–24) was steady, but lackluster with 29,900 salmon counted compared to an inriver goal of 44,146 for the week. The overall run appeared to be 2–3 days late as evidenced by sonar counts that matched anticipated counts for 2–3 days prior and by processor reports of immature gonads in harvested salmon.

Harvest from the fourth period that occurred on Monday, May 26 was 49,952 sockeye and 1,584 Chinook salmon with 457 permit holders reporting deliveries. This harvest was approximately

10% below the anticipated sockeye salmon harvest and just over one-third of the anticipated Chinook salmon harvest of 4,379 for that period. Sonar estimates during the first half of this week continued to lag with cumulative passage on Tuesday, May 27 at approximately 58% (49,753) of the 86,330 salmon minimum inriver goal. A commercial period was not announced for Thursday, May 29.

Sonar counts increased and surpassed the daily anticipated inriver goal on Saturday, May 31 but with 95,406 salmon counted remained below the cumulative inriver goal for this date of 147,339 salmon. A 12-hour period was announced for Monday, June 2 during statistical week 23 (June 1–7). Fishing was limited to waters of the Copper River District north of a line from Pt. Steele to the southern end of Wingham Island. This reduced the size of the district by more than half and minimized targeting of fish in offshore waters that would not enter the Copper River for several days. This limited opening provided additional information regarding salmon entry in the area inside of and near the barrier islands.

In the 2 previous years the Copper River salmon runs had been compressed and late. In 2006, 2 consecutive closures resulted in the passage of over 270,000 salmon in 6 days. The pattern in 2007 was similar with sonar estimates waning in the early portion of the season and then surging as hundreds of thousands of salmon entered the district and river following a closure of the commercial fishery.

The harvest from the Monday, June 2 period was 43,887 sockeye and 1,503 Chinook salmon with 372 permit holders making deliveries. The anticipated harvest was 74,724 sockeye and 6,072 Chinook salmon. Salmon passage at the Miles Lake sonar remained above the daily inriver goal through Wednesday, June 4. The cumulative minimum inriver escapement deficit on Wednesday, June 4 was 17,925; up from a deficit of 40,822 salmon one week earlier. A 12-hour period was held on Thursday, June 5 during which 43,480 sockeye and 1,763 Chinook salmon were harvested by 341 permit holders. This compares to an anticipated harvest of 44,650 sockeye and 3,607 Chinook salmon for this period. A 12-hour period was announced for Monday, June 9. A total of 339 permit holders reported deliveries of 47,073 sockeye and 975 Chinook salmon. The anticipated harvest for this period was 27,804 sockeye and 2,505 Chinook salmon.

Daily sonar passage during the week from Wednesday, June 4 through Wednesday, June 11 was erratic with daily sonar counts both above and below the daily inriver goal. Due to the continued shortfall in cumulative minimum inriver escapement, a Thursday, June 12 commercial fishing period did not occur. Sonar estimates over the next week showed a slightly increasing trend, with counts generally over the minimum inriver goal. The lingering cumulative deficit, which on Friday, June 13 was 18,356 salmon, prompted a continuation of the shortened periods with a 12-hour opening announced for Monday, June 16. Harvest from this period was 26,564 sockeye and 814 Chinook salmon by 220 permit holders and was below the anticipated harvest for this date of 34,289 sockeye and 2,111 Chinook salmon. On Wednesday, June 18 the cumulative sonar deficit increased to 19,219 fish, and consequently there was no second period during this week. Sonar estimates continued to weaken over the next several days with a cumulative deficit of 24,324 on Friday, June 20. In response to this trend, there were no openings during statistical week 26 (June 22–28) as passage continued to be erratic with estimates falling above and below the daily minimum inriver goal.

With a tidal cycle that brought weak minus tides from June 16–24, a moderate increase in fish passage was anticipated from approximately June 25–30, 5–7 days later. This would coincide

with the historical peak of the enhanced Gulkana Hatchery run. Beginning on Wednesday, June 25, Miles Lake sonar exhibited an increasing escapement trend with 7,827 salmon past the sonar compared to an inriver goal for that day of 6,436. This trend continued and a Monday fishery opening was anticipated until on Saturday, June 28, the daily sonar counts dropped slightly above the daily inriver goal. As of June 28, the overall sonar count was 22,995 below the cumulative minimum inriver goal. Daily passage for the first half of statistical week 27 (June 29–July 5) remained approximately 1,000 fish above the daily inriver goal. On Wednesday, July 2 with a sonar deficit of 15,801 and erratic passage, a commercial opening was not announced. On the following day, 11,400 salmon passed the sonar and the midnight to 6:00 am count of 7,056 projected Friday's count could reach 28,000 fish. An announcement was immediately made for a 12-hour period on Saturday, July 5. Harvest from this period was 9,626 sockeye and 11 Chinook salmon with 125 permit holders reporting deliveries.

Large daily sonar counts, between 11,000 and 33,000 per day, continued from July 3–8 with a total of 131,000 salmon counted during this period (Figure 2). This compares to a minimum inriver goal of 35,000 salmon for this period. A 24-hour commercial opening was announced for Monday, July 7. Harvest from this period was 6,328 sockeye and 30 Chinook salmon with 69 permit holders reporting deliveries. Two 24-hour periods per week continued until the start of coho salmon management on August 18. Fleet participation in the Copper River District was low with less than 60 boats participating in any given period. This was the result of permit holders harvesting the strong sockeye and chum salmon runs to Main Bay and Wally Noerenberg hatcheries.

Daily sonar passage at Miles Lake for the remainder of July was above the minimum more often than in the early portion of the summer. The cumulative sonar estimate was 718,344 salmon. This was above the midpoint value of 694,275 for the inriver goal range of 597,174 to 791,377 salmon.

The final escapement index value for Copper River Delta sockeye salmon stocks based on aerial surveys was 67,950, and was within the SEG range of 55,000 to 130,000 fish. 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 82,144 (Appendices A11 and A12).

Fishing effort in 2008 peaked during the second period on May 19 where 466 permit holders harvested 31,025 sockeye and 2,068 Chinook salmon during the 12-hour opening. This was also the peak Chinook salmon harvest. The sockeye salmon harvest peak occurred on Monday, May 26 when 457 permit holders harvested 49,952 sockeye salmon. The total 2008 Copper River District commercial harvest was below the anticipated harvest of 742,166 sockeye and 46,908 Chinook salmon. The harvest for both species was approximately one quarter of the previous 10-year average for sockeye (1,344,291) and Chinook salmon (43,059) and was the lowest commercial harvest since the late 1970s. Poor sockeye and Chinook salmon runs to the upper Copper River in 2008 may be, in part, attributed to extremely hot and dry weather in 2004. These conditions may have impacted freshwater fry and smolt survival of both species from the 2003 brood year. Typically 5-yr old sockeye salmon make up 70–85% of the Copper River run and 5-yr old Chinook salmon make up 50–80% of the run. The majority of the sockeye salmon harvested commercially, 78.5%, were 5-year-old fish from brood year 2003, with 4-year-old fish and 6-year-old fish making up 11.9% and 9.3%, respectively. Less than 0.1% of the run was 7-year-old fish from brood year 2001. Over half of the sockeye salmon harvested, 52.0%, were males. (Appendix A14). The majority of the Chinook salmon harvested commercially, 57.3%,

were 5-year-old fish from brood year 2003, with 6-year-old and 4-year-old fish making up 30.3% and 11.8%, respectively. Approximately 0.4% of the run was 7-year-old fish from brood year 2001. Over half of the Chinook salmon harvested, 52.6%, were males (Appendix A15). The 2008 Copper River District gillnet fishery shortfall was ameliorated by the successful harvest of sockeye and chum salmon returning to Main Bay and Wally Noerenberg hatcheries.

Coho Salmon Fishery Season Summary

The 2008 total run was estimated to be 370,435 coho salmon. A total of 202,621 (54.7%) coho salmon were harvested commercially, of these 423 were reported retained as "homepack", 53 coho salmon were harvested from the Copper River District in the subsistence gillnet fishery; 2,346 coho salmon were harvested by personal use dipnetters in the Chitina Subdistrict; 472 coho salmon were harvested in the Glennallen Subdistrict dipnet and fishwheel subsistence fisheries; an estimated 10,126 coho salmon were harvested by sport fisherman on the Copper River delta near Cordova; and an estimated 107 coho salmon were harvested by upriver sport fisherman (Appendix A17). Finally, 349 coho salmon were harvested in federally managed subsistence fisheries (Appendices F5 and F6). The Copper River Delta spawning escapement was 153,784 coho salmon (Appendix A17). The aerial survey index for this season was 76,892 fish and exceeded the SEG index range of 32,000 to 67,000 (Appendix A18). The 2008 index value is at least 20,000 fish below the 2002 to 2006 index values, but above the index values from 1999 to 2001 when delta coho salmon runs were depressed (Appendix A19). The 2008 total run size for coho salmon in the Copper River is unknown because the number of coho salmon migrating upriver is undetermined.

The coho salmon commercial harvest of 202,412 was 30% below the projected harvest of 288,013. Escapement estimates of coho salmon were hampered by frequent storms and high silt levels in major index streams. Rough seas and inclement weather likely had a negative impact on harvest levels of coho salmon.

ADF&G met with the PWS SHTF and the public in early May, where discussions included Copper River District coho salmon management. It was decided that a single 24-hour period per week schedule would be maintained until escapement warranted extending 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 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.

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 runs. 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 fisherman. In 1998, fall weather 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.

Coho salmon season officially began at 7:00 a.m. on Monday, August 18 during statistical week 34 with a single 24-hour period. An aerial survey flown on August 11 counted 7,922 coho salmon in index streams and was within the SEG range for statistical week 33 of 5,846–12,239 fish. The harvest from the first coho salmon period was 20,163 fish with 144 permit holders reporting deliveries. The second period on August 25 had 53,794 coho salmon delivered by 202 permit holders. Given the increase in harvest and catch per unit effort a third fishing period was announced for 12 hours on Thursday, August 28. An aerial survey flown under poor observational conditions on Wednesday, August 27 documented 27,881 coho salmon in index streams. This was above the average SEG anticipated for this date. Consequently, the Thursday period was extended to 24 hours. Harvest from this period was 39,910 fish with 195 permit holders reporting deliveries. An additional aerial survey was flown during this statistical week on Saturday, August 30 under excellent observational conditions. Index stream counts in the Copper River District increased to 29,155. Counts in the neighboring Bering River District increased from 5,903 to 11,911, compared to an SEG range of 8,803–22,345. Consequently an unscheduled announcement was made for a fishing period in the Bering River District to coincide with a previously announced 24-hour period in the Copper River District on the following Monday, September 1. Harvest from this period was 19,588 coho salmon with 124 permit holders reporting deliveries from the Copper River District. A second period during this week yielded 19,339 coho salmon harvested by 129 permit holders. Stormy conditions persisted in the Cordova area for the next several weeks, likely having a negative impact on harvest and participation for the remainder of the season. The following week, September 7–13 had 2 periods with a total of 30,924 coho salmon harvested by 115 permit holders. Harvest from the following week was 10,824 coho salmon with 88 permit holders reporting deliveries from the first period and 22 permit holders reporting deliveries from the second period. This was also the last week of processing for the principal salmon processor in Cordova. There were 461 coho salmon delivered by 11 permit holders during the Monday, September 22 period. There were no further deliveries in the remaining 3 weeks of the season. Aerial surveys flown on September 24 and October 3 documented levels of coho salmon in index streams above the SEG ranges.

Peak fishing effort and harvest was during the 24-hour period that occurred on Monday, August 25 where 202 permit holders delivered 53,794 coho salmon. The total harvest of 202,621 coho salmon for the 2008 season was below the harvest projection of 288,013 fish (Appendix A5). The final 2008 aerial escapement index value for Copper River Delta coho salmon stocks was 76,892 fish and was above the SEG range of 32,000–67,000 coho salmon for the Copper River District. The majority of the coho salmon harvested commercially, 59.2%, were 3-year-olds from brood year 2005, with 4-year-old and 5-year-old fish making up 40.4% and 0.4%, respectively. Just over half, 60.4%, of the coho salmon harvest were males (Appendix A14, A15, and A16).

BERING RIVER DISTRICT, (APPENDICES A19–A23)

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 2008 harvest of 1,175 sockeye salmon from the Bering River District was below the 10-year harvest average of 19,133 fish (Appendix A20). The sockeye salmon aerial escapement index

count in the Bering River District index streams was 18,396 salmon. This was below the SEG range of 23,000 to 35,000 fish. The Bering River drainage, the largest sockeye salmon spawning system in the district, had a peak index count of 14,550 sockeye salmon on July 12. (Appendix A21).

The first period for the 2008 season began on Thursday, June 5 and was for 12 hours (Appendix A22). During this period 2 Chinook and 132 sockeye salmon were harvested. The second 12-hour period occurred on Monday, June 9 during which 11 permit holders harvested 19 Chinook and 664 sockeye salmon. The lack of an aerial survey of the Bering River District in conjunction with below expected harvest from the Copper River District and low sonar passage, resulted in no fishing period announced for the following Friday in either the Copper River or the Bering River districts. A 12-hour period, concurrent with the Copper River District, occurred on Monday, June 16 with 4 permit holders reporting a harvest of 21 Chinook and 378 sockeye salmon. An aerial survey of Bering River index streams was conducted on Saturday, June 21 under fair conditions that documented 480 sockeye salmon in the district versus an anticipated SEG index range of 4,985 to 7,586 salmon. This was the first of several aerial surveys that showed below anticipated escapement in Bering River District index streams resulting in no fishing periods for the remainder of June and all of July. A 24-hour fishing period occurred on August 11 with no reported harvest. An aerial survey flown on August 11 under excellent conditions documented 1,691 sockeye and 1,170 coho salmon in index streams. While this was below the SEG range for sockeye (6,595–10,036) and coho salmon (4,002–10,158) the district was opened to commercial fishing given that all returning sockeye salmon would be in fresh water at this time and the coho salmon run was just developing. A 24-hour fishing period occurred the following Monday (August 14) during which 19 permit holders delivered 10,034 coho and no sockeye salmon.

Peak sockeye salmon harvest was during the second 12-hour period on Monday, June 9 when 11 permit holders harvested 664 sockeye and 19 Chinook salmon. Peak Chinook salmon harvest occurred during the following 12-hour period on Monday, June 16 when 4 permit holders landed 21 Chinook and 378 sockeye salmon (Appendix A22).

Coho Salmon Season Summary

Observational conditions allowed for sporadic aerial surveys of coho salmon index streams (Appendix A23). Overall the Bering River District coho salmon run was late and above average in abundance. This is similar to the 2007 run that was also late and had a final escapement above the upper end of the SEG range.

In 2008 the Bering River District coho salmon fishery began on September 1 with a 24-hour fishing period. Two of the three coho salmon aerial surveys conducted prior to September 1 documented escapements below anticipated for those dates. An aerial survey flown on Saturday, August 30 documented 2,834 coho salmon (within the SEG range of 2,271–3,456 salmon) and prompted an announcement that evening opening the Bering River District for 24 hours the following Monday (September 1). The reported harvest from the 34 permit holders from this period was 9,932 coho salmon. As the result of poor weather conditions, an aerial survey was not flown the following week (August 31–September 6). A second 24-hour fishing period occurred on Thursday (September 4) with 22 permit holders reported a harvest of 7,094 coho salmon. Two periods occurred the following week with 32 permit holders delivering 9,679 coho salmon during the 24-hour Monday (September 8) opening and 23 permit holders delivering 3,641 coho salmon

during the 48-hour Thursday (September 11) opening. Two fishing periods were announced the following week (September 14–20) with no deliveries reported as the result of Cordova processors closing for the 2008 season. Two 60-hour fishing periods per week occurred from September 21–October 4 with no deliveries reported. An aerial survey of Bering River District coho salmon index streams was flown on September 24 with 20,887 fish counted. This was above the upper end of the SEG range (5,156–13,089) for statistical week 39 (September 21–27). An aerial survey was flown the following week on October 3 that documented 14,892 coho salmon and was also above the upper end of the SEG range of 1,042–2,645 fish for that statistical week. The 2008 coho salmon season was closed after the 132-hour October 6–11 fishing period from which no harvests were reported.

Peak fishing effort was during the first period in stat week 36 (August 31–September 6) when 34 boats harvested 9,932 coho salmon (Appendix A22). The total harvest of 40,380 coho salmon for the 2008 season was below the anticipated previous 10-year harvest average of 45,383 fish. The coho salmon escapement goal was achieved with a peak escapement index of 28,932 fish, within the SEG range of 13,000 to 33,000 fish for the Bering River District (Appendix A23).

COGHILL DISTRICT (APPENDICES B1–B7)

Preseason Outlook and Harvest Strategy

The 2008 forecast of sockeye salmon returning to Coghill Lake was 110,000 fish. Meeting the lower end of the SEG range of 20,000–40,000 sockeye salmon would leave 90,000 fish for the common property fishery (Table 6). Enhanced chum salmon runs to the Wally Noerenberg Hatchery were forecast to be nearly 2.3 million fish (Table 6). PWSAC's projection for cost recovery and broodstock requirements was approximately 844,000 fish, leaving 1.4 million chum salmon for the CPF. The projected run of pink salmon to the WNH facility was 3.7 million fish (Table 6). Of those, PWSAC's projection for cost recovery and broodstock requirements was approximately 1.8 million fish, leaving 2.4 million pink salmon available to the CPF. An estimated run of 128,000 coho salmon were projected for WNH (Table 6). A total of 2,700 were anticipated to be harvested for broodstock with the remaining fish available to the CPF.

SEASON SUMMARY

The Coghill River weir was fully deployed and fish tight on June 8. Final sockeye salmon escapement was 29,298 on July 24 when the weir was dismantled. This was above the midpoint SEG of 22,524 fish for that date (Appendices B1, B2, and B3).

The total CPF purse seine and drift gillnet combined sockeye salmon harvest for the Coghill District was 178,525 fish; the total CPF harvests for chum, pink, and coho salmon were 2,317,589, 7,439,560, and 117,358, respectively (Appendix B4 and B5). Harvest of all four species was above previous 10-year averages (Appendix B6). In the 2008 WNH Annual Report, PWSAC reported a chum salmon cost recovery harvest of 508,365 fish and a broodstock harvest of 144,747 fish, as well as a pink salmon cost recovery harvest of 1.1 million fish and a broodstock harvest of 198,568 fish. PWSAC also reported harvesting 2,409 coho salmon for broodstock. (Appendix E13).

There were 126,725 MBH sockeye harvested in the Coghill District commercial fishery, accounting for 71.0% of the 178,525 total sockeye salmon harvested (Appendix E9). There were 2,317,589 chum salmon harvested in this district by the CPF, with 2,121,949 (91.6%) having been released at the WNH, 112,729 (4.9%) from Port Chalmers remote release in the Montague

District, and 81,971 (3.6%) originating from wild stocks (Appendix E11). A total of 177,974 sockeye and 2,308,231 chum salmon were harvested by the drift gillnet fleet and the remainder by the purse seine fleet (Appendices B4, B5 and B6).

The common property gillnet fishery began in the Coghill District on June 2. A regular schedule of Monday and Thursday openings, 48 to 72 hours in length, was established. The exception to this was a 36-hour period that began on Thursday, June 23 in response to low sockeye salmon passage at the Coghill River weir. This schedule was maintained through July 21 with management for the common property pink salmon fishery beginning at that time. During the first opening of the season in statistical week 23 (June 1–7) 96 permit holders reported harvesting 146,712 chum and 113 sockeye salmon during the 48-hour and 72-hour openings. Typically the gillnet fleet targets returning Wally Noerenberg Hatchery chum salmon in the early season and broadens their focus in late-June to include harvest of returning Main Bay Hatchery sockeye salmon and wild sockeye salmon returning to Coghill Lake.

During statistical week 24 (June 8–14) 308 permit holders harvested a total of 2,005 sockeye and 390,256 chum salmon. On June 14, PWSAC began cost recovery harvesting 26,942 chum salmon. Fleet participation remained high during the following week (June 15–21) with 316 permit holders reporting 373,442 chum and 11,587 sockeye salmon harvested. As of June 21 PWSAC had harvested 278,027 chum salmon for cost recovery versus a projected harvest of 141,458 fish. During statistical week 26 (June 22–28) 272 permit holders harvested 68,355 sockeye salmon and 405,621 chum salmon. PWSAC announced completion of cost recovery on Friday, June 27 with a total of 478,777 chum salmon harvested. With cost recovery completed and the Copper River District closed due to low passage at the sonar, participation remained high with 289 permits reporting deliveries during statistical week 27 (June 29–July 5). Harvest from this week was 499,964 chum and 34,050 sockeye salmon harvested by the drift gillnet fleet. Harvest remained robust during statistical week 28 (July 6–12) with 291 permit holders reporting 373,270 chum and 44,395 sockeye salmon delivered. Participation the following week (July 13–19) declined to 215 permits reporting a harvest of 105,850 chum and 15,095 sockeye salmon. Management for pink salmon harvest began in statistical week 30 with purse seiners permitted to harvest beginning on Monday, July 21. Gillnet participation continued declining with 44 permits fished during this week and 11,529 chum and 1,128 sockeye salmon delivered. In addition, 6,005 pink salmon were delivered by drift gillnet permit holders during this week, continuing the steady harvest trend from the previous weeks (Appendix B4). Pink salmon prices ranging close to 0.34¢ per pound likely promoted steady fishing effort (Table 3). Gillnet participation and harvest during management for pink salmon in the Coghill District during statistical weeks 31 and 32 was low with 8 permits reporting a harvest of 60 sockeye, 528 chum and 2,266 pink salmon during the first week and 10 permits reporting a harvest of 41 sockeye, 139 chum and 9,989 pink salmon during the second week. Participation during statistical week 33 (August 10–16) increased with 45 permit holders reporting a harvest of 174,714 pink, 1,555 coho, 534 chum and 362 sockeye salmon. Participation nearly doubled in statistical week 34 with 85 drift gillnet permit holders reporting a harvest of 351,666 pink and 7,221 coho salmon. Participation continued to increase with 99 permit holders reporting a harvest of 236,304 pink and 24,829 coho salmon during statistical week 35 (August 24–30). Pink salmon management and seine permit holder access to the Coghill District ended on Wednesday, September 4 as the harvestable surplus in this district became predominantly coho salmon. A total of 115 gillnet permit holders reported harvesting 42,710 coho and 35,549 pink salmon during statistical week 36 (August 31–September 6). Harvest and participation decreased during the next 2 weeks with 67 permit

holders reporting a harvest of 3,560 coho and 126 pink salmon in statistical week 37, and only 3 permit holders reported delivering 156 coho salmon in statistical week 38. The Coghill District closed for the 2008 commercial salmon season on October 11.

Peak drift gillnet fishing effort occurred during the 48-hour period on June 12–14 when 298 permit holders harvested 1,702 sockeye and 189,289 chum salmon. Peak sockeye salmon harvest occurred during the 72-hour period on June 26–29 when 41,336 fish were landed by 241 permit holders. Peak chum salmon harvest occurred during the July 3–6 fishing period (72 hours) when 243 permit holders harvested 277,627 fish. Overall, 177,974 sockeye salmon were harvested by 413 permit holders during the 2008 season. This is above the previous drift gillnet 10-year harvest average of 123,188 sockeye salmon. The majority of the 178,525 sockeye salmon harvested by the drift gillnet and purse seine fleets combined were returning Main Bay Hatchery fish (126,725) in addition to 300 sockeye salmon from the Solf Lake remote release site, and the remaining 51,470 sockeye salmon were wild stocks. The 2008 harvest of 2,308,231 chum salmon by drift gillnet permit holders was also above the previous 10-year average of 874,999 chum salmon. The majority of the chum salmon harvested were hatchery fish with 112,729 (4.9%) from the Port Chalmers remote release site and 2,121,949 (91.6%) from WNH. The remaining 82,911 (3.6%) were wild stock chum salmon. The 2008 harvest of 80,527 coho salmon by the drift gillnet fleet was above the previous 10-year average harvest of 32,138 fish.

The estimated age and sex compositions of sockeye salmon harvested at the Coghill River weir can be found in Appendix B7.

UNAKWIK DISTRICT (APPENDICES B8 AND B9)

Preseason Outlook and Harvest Strategy

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. A major pink salmon hatchery, Cannery Creek Hatchery, borders the southern boundary of the district.

Season Summary

The total 2008 Unakwik District harvest was 389 sockeye, 878 pink and 58 chum salmon (Appendix B8 and B9). There were no reported landings by purse seine permit holders during the 2008 season. The 2008 sockeye salmon harvest was below the 10-year average of 8,708 fish for both gear types combined (Appendix B9). The Unakwik District opened on June 16 for a 48-hour period, initiating a schedule of 2 evenly spaced periods per week, with openings concurrent with the Copper River District, until the district was closed for the season 6 weeks later on August 2.

ESHAMY DISTRICT, (APPENDICES C1–C8)

Preseason Outlook and Harvest Strategy

The 2008 forecast for sockeye salmon returning to Eshamy Lake was 84,000. Meeting the minimum of the BEG range of 20,000–40,000 fish would leave approximately 64,000 fish for the common property set and drift gillnet fisheries. The total onsite run to the Main Bay Hatchery was projected by PWSAC to be 957,000 sockeye salmon. The entire projected run was

stock of Coghill Lake origin, of which 7,930 fish were for broodstock and the remaining 949,000 fish would be available for harvest in the common property fisheries. At the April SHTF meeting it was decided the first gillnet opening in the Crafton Island Subdistrict would occur during the first week of June. Additionally, it was agreed that the fishing periods starting on Thursday would continue to begin in the mornings, rather than the evenings as had been the standard prior to 2007. Similar to previous years, fishing periods would be reduced to less than 12 hours, as an alternative to omitting fishing periods. Under the *Prince William Sound Management and Salmon Enhancement Allocation Plan* (5AAC 24.370), when the set gillnet gear group catches 5% or more of the 5-year average value of PWSAC enhanced stocks, beginning July 10 of the following year, they will be limited to no more than 36 hours of fishing time per week. In 2007, set gillnet gear group exceeded 5% of the 5-year average value of PWSAC enhanced stocks, consequently weekly time limits after July 10 were imposed on 2008. The final set gillnet gear group allocation for 2008 was 4% of the 5-year average value of PWSAC enhanced salmon stocks.

Season Summary

The Eshamy River weir was fully deployed and fish tight on July 10. The weir was maintained and fish were counted until August 27 (Appendix C1 and C2). Total escapement through the weir consisted of 18,495 sockeye, 2,060 pink, 20 chum, and 27 coho salmon. Sockeye salmon escapement through August 27 was above the projected minimum BEG goal for that date of 16,932 sockeye salmon and likely met the final BEG of 20,000 sockeye salmon. The 2008 sockeye salmon escapement was below the 10-year average of 28,066 fish (Appendix C3). In 2008, there was no cost recovery at the Main Bay Hatchery; only broodstock was collected. The run timing of Coghill Lake sockeye salmon stock returning to the MBH was expected to be from mid-June to late-July with the peak anticipated on July 4. PWSAC typically installs the barrier seine in mid-June to begin broodstock collection. The initial commercial opening of the 2008 season was a 48-hour period occurring in statistical week 23 (June 1–7) on Monday, June 2. This was followed by a 72-hour period on Thursday, June 5 (Appendix C4 and C5). Commercial harvest from these 2 periods combined was 42 sockeye and 1,652 chum salmon landed by 10 set gillnet permit holders. There were no deliveries reported by drift gillnet permit holders during this week. The following week a total harvest of 5,504 sockeye and 19,073 chum salmon were harvested by 18 set and 23 drift gillnet permits. There was a significant increase in participation during statistical week 25 (June 15–21) with 22 set and 245 drift gillnet permit holders harvesting a total of 95,232 sockeye and 85,637 chum salmon during 2 periods. Both harvest and participation peaked in the following week with a record 270 drift gillnet permit holders delivering 243,256 sockeye and 96,647 chum salmon, and 25 set gillnet permit holders delivering 46,502 sockeye and 10,891 chum salmon during 2 periods. Record high drift gillnet participation was driven by an extended commercial fishing closure in the Copper River District from June 17–July 4 due to decreased escapement past the sonar at Miles Lake. Harvest and participation declined in statistical week 27 (June 29–July 5) with a total of 212 permits delivering 181,637 sockeye and 46,363 chum salmon during 2 periods. This decline may be related to the peak of the chum salmon harvest in the nearby Coghill District. The Eshamy River weir was fish tight on July 10. No salmon were counted until July 15 when 1 sockeye salmon was passed. Both sockeye and chum salmon harvest continued to decline in weeks 28 and 29, (July 6–12, July 13–19) with 88,646 sockeye and 26,315 chum salmon harvested in week 28, and 31,647 sockeye and 10,529 chum salmon harvested in week 29. Pink salmon harvest numbers remained somewhat steady with a harvest of 16,924 fish during the 2 fishing periods in week 28 and 17,926 the following week with 152 and 110 permit holders reporting deliveries

respectively. Sockeye salmon passage at the Eshamy River weir during the first 10 days of monitoring was below expectation with 3 sockeye salmon passed versus a minimum cumulative BEG for July 20 of 1,942 fish. In light of below expected fish passage commercial fishing was restricted to the Main Bay Subdistrict. Harvest and participation in weeks 30 and 31, (July 20–26, July 27–August 2) continued a decline with 66 permits reporting 13,908 sockeye and 4,113 chum salmon harvested during the 2 periods in week 30, and 39 permits reporting a harvest of 10,152 sockeye and 2,555 chum salmon the following week. Sockeye salmon passage at the Eshamy River weir increased from July 21–31 with a cumulative passage of 3,435 fish on July 31. While this was below the minimum cumulative BEG for that date, daily passage rates were significantly above anticipated levels. As a result, fishing area was increased during the opening on July 31 to include waters north of Loomis Creek. Pink salmon harvest increased between these 2 weeks from 10,153 to 12,389 in spite of declining participation. Decreased harvest, combined with below expected escapement of pink salmon in this district resulted in restricting harvest to the Main Bay Subdistrict during the openings in week 32 (August 3–9). In the 2 periods, 30 drift and set gillnet permit holders delivered 3,781 sockeye, 673 chum and 11,586 pink salmon. Improving sockeye salmon escapement at the Eshamy River weir and lagging pink salmon escapement allowed only the waters in outer Eshamy Bay to open for 2 fishing periods during week 33 (August 10–16) to focus harvest on returning wild sockeye salmon. In addition, the Main Bay Subdistrict was opened during these periods to facilitate a cleanup of remaining hatchery sockeye salmon. There were a total of 2,203 sockeye, 21,792 pink, 228 coho and 627 chum salmon harvested by 31 permit holders during these 2 periods. Two openings occurred the following week (August 17–23) with both the Main Bay Subdistrict and outer Eshamy Bay open to commercial harvest. Harvest of pink salmon increased significantly to 26,345 by 17 permit holders in spite of these area restrictions. In addition a total of 744 sockeye, 170 coho and 45 chum salmon were harvested during this stat week. There was a single delivery the following week (August 24–30) with no further harvests reported after that week.

Overall 560,869 sockeye and 251,493 chum salmon were harvested by 366 drift gillnet permit holders during the 2008 season. This is higher than the previous 10-year average of 329,868 sockeye and 34,160 chum salmon for this gear group. A total of 25 set gillnet permit holders harvested 162,403 sockeye and 53,627 chum salmon. This is also slightly higher than the previous 10-year averages of 135,604 sockeye and 10,831 chum salmon harvested by this gear group. Of the 723,272 sockeye salmon harvested in the Eshamy District 651,885 (90.1%) were Main Bay Hatchery sockeye salmon. In addition, 1,986 sockeye salmon were from the Solf Lake remote release site. The majority of the chum salmon harvested were returning hatchery fish with 143,884 (47.2%) from the Port Chalmers release site and 119,057 (39.0%) from Wally Noerenberg Hatchery. The remaining 42,179 (13.8%) were wild stock chum salmon.

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

GENERAL PURSE SEINE DISTRICTS, (APPENDICES D1–D12)

Preseason Outlook and Harvest Strategy

The general purse seine districts include the Eastern, Northern, Unakwik, Coghill, Northwestern, Southwestern, Montague, and Southeastern districts. The *Prince William Sound Management and Salmon Enhancement Allocation Plan* (5 AAC 24.370(d)) closes Southwestern District to purse seine gear prior to July 18. The plan also closes Coghill District to purse seine gear prior to

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

The general purse seine districts are managed to achieve wild pink and chum salmon escapement goals by district and allow for the orderly harvest of surplus wild and hatchery stocks. Aerial survey pink and chum salmon escapement trends, compared to average historical performance, determine the duration and area of openings in these districts. Escapement of pink and chum salmon is monitored through the season by weekly aerial surveys of 215 index streams. The escapement index is based on a geometric method used since the inception of the systematic survey program in the early 1960s. In this method, aerial observers are assumed to count without error or bias. Linear interpolations between observations are used to estimate numbers of fish in the stream on days when no surveys are flown. All daily observations and interpolations are summed across the season. Because fish seen on day i+1 may include fish seen on day i, the sum of all daily observations and interpolations must be divided by some residence time for fish in the streams to account for duplicate observations. The residence time of 17.5 days has historically been used in this calculation and is from tagging studies completed by National Marine Fisheries Service on Olsen Creek in the early 1960s (Bue et al. 1998). To achieve hatchery broodstock and cost recovery goals, subdistricts near the hatcheries are opened and closed. Additionally, when wild salmon escapements are weak, subdistrict openings are utilized to target the fleet on hatchery stocks. ADF&G may also use the yellow Salmon Harvest Task Force markers as a management tool for closing wild stock terminal areas when escapements are lower than expected and as an intermediate step before area wide closures are used.

Inseason modifications to harvest projections, season opening dates, and strategies for weekly fishing periods occur as fisheries develop. Hatchery Annual Management Plans (AMP) from VFDA and PWSAC underwent Regional Planning Team (RPT) review on April 14, and were signed by the Commissioner. These plans provided guidelines to ADF&G for managing fisheries to achieve cost recovery and broodstock objectives. The forecast CPF harvests by species are summarized in Table 6. ADF&G forecasted wild fish runs, while hatchery run projections were provided by PWSAC and VFDA. Run projections for species and districts without formal forecasts were based on average historical production. These projections provided the basis for early inseason management of all districts. Harvest projections for enhanced runs may change depending upon the price per pound that VFDA and PWSAC receive for their cost recovery harvest.

On March 14, 2008, the PWSAC Board of Directors approved the annual corporate budget for Fiscal Year 2008. The overall pink salmon and Wally Noerenberg Hatchery chum salmon revenue goals are $3,319,321 and $2,414,181, respectively.

Chum Salmon

The 2008 forecast for the chum salmon run to PWS was 3.81 million fish. The majority (88%) of the run was anticipated to be from PWSAC hatchery production. PWSAC forecasted a run of 2.27 million chum salmon to WNH of which 640,000 would be needed for cost recovery and broodstock. The remaining 1.63 million chum salmon were anticipated to be available for the CPF. PWSAC also forecasted a 787,000 enhanced chum salmon run to Port Chalmers and 309,000 chum salmon to AFK. All Port Chalmers and AFK chum salmon were intended for harvest by the purse seine CPF. Based on the wild chum salmon forecast of 446,000 fish, there was a potential CPF of 246,000 wild chum salmon in 2008.

Pink Salmon

The 2008 pink salmon run forecast for PWS was 29.53 million fish. This estimate includes 3.51 million wild stock pink salmon, 9.82 million VFDA pink salmon, and 16.20 million PWSAC pink salmon. The hatchery forecast was based on the release of approximately 614 million pink salmon fry in 2006. Approximately 5.02 million pink salmon (51%) of the projected VFDA pink salmon run are needed for cost recovery and broodstock. The remaining 4.80 million VFDA fish were intended for the CPF. Approximately 3.48 million pink salmon (22%) of the projected PWSAC pink salmon run are needed for cost recovery and broodstock. The remaining 12.72 million PWSAC fish were intended for the CPF. After an escapement of 2.0 million wild pink salmon, 1.51 million wild pink salmon were projected for commercial harvest.

At the May 2008 SHTF meeting, the department described the potential for a poor 2008 wild pink salmon run based on poor 2006 spawning escapements, and environmental factors such as severe flooding in August and October and extended cold, dry periods during the winter that may have killed eggs and fry in streams. The SHTF discussed the pink salmon harvest strategy in anticipation of a poor pink salmon run. The strategy was to focus fishing effort in hatchery terminal areas to allow for a CPF while limiting wild stock harvest. The department 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 forecasted moderate runs of coho salmon in 2008. PWSAC's expected run of coho salmon was 148,000 fish (128,000 fish to WNH and 20,000 fish to remote release sites). Approximately 2,700 fish were required for broodstock leaving 145,000 fish for the CPF. Coghill District is managed for pink salmon after July 21 until the harvestable surplus is predominantly coho salmon.

The 2008 run of coho salmon to the VFDA hatchery was forecast to be 211,000 fish with 2,000 salmon needed for VFDA broodstock. Port Valdez was anticipated to be closed to CPF purse seine fishing north of a line from Entrance Point to Potato Point beginning on August 15. Purse seine fishing in Port Valdez was expected to start the day after Labor Day, September 2nd, to target surplus VFDA produced coho salmon.

Chum Salmon Season Summary

The PWS 2008 chum salmon purse seine CPF harvest of 1.82 million fish was composed of approximately 4% wild fish and 96% hatchery fish. PWSAC met their 2008 chum salmon cost recovery and broodstock needs harvesting approximately 650,000 enhanced chum salmon.

Aerial surveys to assess wild chum salmon escapements in the Eastern and Northern districts began in mid-June. Surveys in all other PWS districts started in early July. As in previous years, high pink salmon densities during aerial surveys made accurate chum salmon counting difficult. Aerial estimates of chum salmon escapement often differed from foot survey counts in situations where chum salmon mixed in with large numbers of pink salmon. Inseason, the wild chum salmon escapement estimates from aerial surveys were below cumulative anticipated levels in all but the Coghill and Northwestern districts. The 2008 PWS wild stock chum salmon escapement index of 203,000 in districts with SEGs (211,000 in all districts) was more than double the PWS SEG lower threshold of 91,000.

Pink and chum salmon travel and spawn in the same areas creating a mixed stock fishery. In mixed stock fisheries, if one component requires protection from fishing effort because of low abundance, fishing opportunity on stocks with a harvestable surplus may be limited. This was the case for wild chum salmon in 2008; CPF harvest of wild chum was limited by low pink salmon escapement estimates that resulted in few openings outside hatchery subdistricts. Purse seine fishing effort was focused on large hatchery pink salmon runs, minimizing the effort on wild pink and chum salmon during openings outside hatchery subdistricts.

Pink Salmon Season Summary

The 2008 harvest of 42.40 million pink salmon, composed of approximately 3% wild fish and 97% hatchery fish, was the second largest even year PWS pink salmon harvest on record. The overall harvest by gear type was 33.73 million by purse seine, 20,000 by set gillnet, 960,000 by drift gillnet, and 7.99 million for hatchery cost recovery and broodstock (4.53 million VFDA and 3.46 million PWSAC). VFDA and PWSAC contributed 36% and 60% of the pink salmon to the overall PWS harvest, respectively. VFDA cost recovery and broodstock harvest was approximately 29% of the total pink salmon run to SGH. PWSAC cost recovery and broodstock harvest was approximately 13% of the total pink salmon run to PWSAC hatcheries.

Aerial surveys to assess early chum and pink salmon escapements in the Eastern and Northern districts began in mid-June. Surveys began in all other PWS districts in July. Despite limited fishing opportunities, inseason wild pink salmon aerial survey escapement estimates were below cumulative anticipated levels in all but Coghill and Northwestern districts. The 2008 PWS wild stock pink salmon escapement index of 862,000 was below the even year SEG lower bound of 1.25 million and was the lowest escapement since 1992. The PWS wild stock pink salmon harvest of 1.37 million fish was below the 2008 commercial harvest forecast midpoint estimate and was the third lowest wild stock harvest (second lowest by percent of total harvest) in the last 30 years. The ratio of enhanced pink salmon to wild pink salmon in the 2008 commercial common property harvest was 32:1.

Eastern District Summary

Aerial surveys throughout the season indicated cumulative wild pink and chum salmon escapement estimates below anticipated counts. The 2008 pink salmon escapement index for the Eastern District was 194,000 fish, well below the even year SEG lower bound of 425,000 fish.

The 2008 chum salmon escapement index of 75,000 fish was above the SEG of 50,000 chum salmon. Aerial surveys of the Eastern District were flown until October 1 in 2008 to ensure late-timed stocks were represented in the escapement index. Escapement indices may underestimate wild escapement due to frequent weather delays throughout the season.

The 2008 VFDA Solomon Gulch Hatchery pink salmon forecast was 9.82 million fish, based on a 4.46% marine survival of the 2007 fry release of 220.41 million. A total of 323,000 salmon were needed to meet egg take objectives. The 2008 cost recovery goal was approximately $3.03 million and approximately 5.02 million pink salmon were required for cost recovery and brood stock. Approximately 4.80 million pink salmon were forecast for CPF.

The Eastern District commercial harvest was 15.10 million pink salmon, 21,000 chum salmon, 800 sockeye salmon, 180,000 coho salmon, and 1 Chinook salmon. In 2008, 27 CPF fishing periods occurred with 129 permit holders recording 1,367 landings. The Eastern District CPF harvest of 10.83 million pink salmon was composed of 10.73 million VFDA fish, 16,300 AFK fish, and 81,700 wild fish. The PWS total VFDA enhanced pink salmon harvest of 15.46 million was 50% above the preseason forecast and was composed of 10.95 million CPF harvest and 4.51 million hatchery harvest (cost recovery and broodstock). The VFDA cost recovery harvest was composed of 4.22 million VFDA pink salmon and 22,700 wild pink salmon. Additionally, contribution estimates indicated 215,000 VFDA pink salmon were harvested in the CPF outside the Eastern District, including 199,000 fish harvested in the Montague District, 7,000 fish harvested in the Southwestern District, and 5,000 fish harvested in the Coghill District.

ADF&G began receiving reports of pink and chum salmon in the Eastern District in mid-June. Three Eastern District CPF periods were scheduled concurrently with Southeastern and Northern district openings to provide harvest opportunity on wild chum salmon stocks during early run entry. The early openings were scheduled from June 16 to June 23 as wild stock run entry indices and fishing effort allowed. Approximately 35,000 pink salmon were harvested in Valdez Arm and Port Fidalgo during the June 23 period. This CPF harvest information provided ADF&G an early indication of pink salmon run strength and timing.

VDFA cost recovery started on June 23. Cost recovery fishing was conducted throughout Port Valdez and in a small portion of Valdez Arm adjacent to the narrows. In 2006, 103,000 wild stock pink salmon were harvested in cost recovery, so wild stock harvest in the VFDA cost recovery continues to be a management concern. In 2008 the department expanded the SHA to the mouth of Port Valdez at the beginning of cost recovery operations. The expanded cost recovery area was maintained throughout the season and VFDA was required to complete stock composition sampling to insure wild stock harvest was minimal. The harvest of 22,700 wild stock fish was substantially lower than the 2006 harvest. The department and VFDA will continue to work together to limit wild stock harvest. Due to lower than expected daily cost recovery harvest, VFDA completed more than their usual 30% cost recovery goal prior to recommending a CPF.

Cost recovery was 30% complete by June 28, but the CPF in Port Valdez and a portion of Valdez Arm opened on July 1 when cost recovery was 45% complete. A daily average of 1.48 million pink salmon were harvested during the 6 CPF fishing periods between July 1 and July 13. The Eastern District was open every third day for the first 3 CPF periods and then shifted to every other day between July 9 and July 21 with a total harvest for July 1–21 of over 10.79 million pink salmon. The CPF wild pink salmon harvest estimate for July was 82,000 fish.

Record runs in 2003 and 2005 resulted in roe stripping in Port Valdez. The department and industry (processors, seine fleet, and VFDA) adapted management strategies to better facilitate large runs and prevent roe stripping. These adaptations proved effective in 2008 as the second largest even year pink salmon harvest on record occurred without roe stripping. Early season cost recovery harvests at Entrance Point did not indicate a large enhanced pink salmon run. Additionally, aerial survey counts were behind anticipated levels in many areas of the Eastern District, foreshadowing weak wild stock pink and chum salmon runs. As indications of a large run became apparent in the CPF, the department coordinated with industry to prosecute an aggressive fishing schedule with CPF periods 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 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 out of the closed area contaminating the catch by mixing with high quality fish.

Of the 27,000 chum salmon harvested in the Eastern District, 77% were of wild stock origin and 23% were of hatchery origin. The peak harvest of 6,500 chum salmon occurred on August 11 during a 14-hour period restricted to portions of Port Fidalgo and Port Gravina.

Port Valdez was closed to the CPF north of a line from Entrance Point to Potato Point beginning July 22. Port Valdez and a portion of Valdez Arm opened September 2 to target surplus VFDA produced coho salmon. The purse seine fleet harvested approximately 158,000 coho salmon, the majority of which were assumed to be VFDA enhanced coho salmon. VFDA expressed concern about jeopardizing coho salmon broodstock collection by allowing the fleet into Port Valdez near the hatchery. Accordingly, ADF&G provided a closed area buffer around the hatchery to protect coho salmon broodstock. A total of 1,700 coho salmon were utilized by VFDA for broodstock, 22,400 coho salmon were harvested for cost recovery, 400 jack coho salmon were given away, and 1,000 coho salmon were unharvested.

Northern District Summary

Northern District wild stock pink salmon escapement indices remained below anticipated levels for the entire season. The Northern District did not meet the pink salmon escapement goal target in 2008. The wild stock pink salmon escapement index of 141,000 fish was 80% of the 175,000 fish escapement lower bound and approximately half of the escapement midpoint. The Northern District chum salmon escapement index of 39,000 fish was almost double the SEG lower threshold of 20,000 fish.

The 2008 PWSAC forecast for pink salmon returning to CCH was 4.50 million fish. The total harvest of 11.01 million enhanced pink salmon returning to CCH was 2.4 times the forecast resulting in an aggressive daily fishery to keep up with run entry. However, lagging wild pink salmon escapement required a conservative management approach that resulted in broad area restrictions. The management strategy in the Northern District consisted of keeping the CPF and cost recovery fishery restricted to portions of the CCH SHA and THA, and to portions of the CCH Subdistrict along the eastern shore of Unakwik Inlet, excluding Payday Point, from late July to mid-September. This strategy allowed for an efficient and timely harvest, while protecting wild chum and pink salmon heading for Siwash and Jonah bays and minimizing harvest of wild stock salmon migrating to streams outside Unakwik Inlet waters.

PWSAC harvested 1.28 million pink salmon for cost recovery and broodstock in the Northern District. ADF&G expanded the CCH SHA for the duration of cost recovery harvest, upon PWSAC's request, to expedite cost recovery in an effort to maintain fish quality and allow for a timely CPF during early run entry. Due to weak wild stock pink and chum salmon aerial escapement indices, the SHA expansion was restricted to waters 1 nautical mile offshore on the east side of Unakwik Inlet north of a line at 60^{o} 58.00 N. lat. PWSAC harvested approximately 1.1 million pink salmon for cost recovery and exceeded their CCH cost recovery goal of 736,000 fish to make up for a cost recovery short fall at AFK. The CCH cost recovery harvest contribution estimate for the purse seine portion of the cost recovery harvest was 98% enhanced stock and 2% wild stock. The broodstock harvest of approximately 207,000 fish was 26% below the broodstock goal of 281,000 fish.

The 2008 Northern District CPF harvest was composed of 8.55 million pink salmon, 39,000 chum salmon, 1,500 sockeye salmon, 700 coho salmon, and 1 Chinook salmon. The Northern District was open for 40 CPF periods with a total of 91 permits recording 1,027 landings. The Northern District season started with 3 CPF periods in mid-June scheduled concurrently with Eastern and Southeastern district openings in an effort to provide early harvest opportunity on a forecasted strong run of early-timed wild chum salmon stocks. Approximately 38,000 chum salmon were harvested on the west side of the district in this early season effort, of which 97% were hatchery origin (75% WNH releases and 25% Port Chalmers and AFK remote releases). The early CPF ceased as fishing effort shifted to more productive areas and there was increasing run timing overlap with wild pink salmon stocks. Northern District waters were open for eighteen 14-hour CPF periods between August 9 and August 27, during which 89% of the 8.34 million CPF pink salmon harvest occurred. This fishery had a maximum single-period harvest of 833,000 fish and an average of 415,000 pink salmon harvested per 14-hour period. The pink salmon CPF harvest was composed of 2% wild stock pink salmon and 94% CCH, 2% WNH, 2% AFK, and 0% VFDA fish.

Coghill District Summary

Coghill District wild stock pink and chum salmon aerial escapement indices remained above cumulative anticipated levels starting in mid-August. The wild stock pink salmon spawning escapement of 145,000 fish was between the even-year district escapement lower bound of 115,000 and escapement midpoint of 182,500. The Coghill District spawning escapement estimate of 40,000 wild chum salmon was five times the SEG lower threshold.

PWSAC's 2008 forecast for pink salmon returning to WNH was 3.7 million fish. PWSAC set a broodstock goal of 264,000 pink salmon and a cost recovery goal of 605,000 pink salmon. The preseason forecast for common property harvest of pink salmon returning to WNH was 2.83 million fish. By regulation, management for pink salmon returning to WNH began on July 21. The management strategy in Coghill District initially focused effort on hatchery fish with the possibility of expanding area as wild stock escapement in Port Wells and Northwestern District streams allowed. This was accomplished by expanding and contracting ("windowing") available open area by period to allow for the migration of wild stocks through Wells Passage and Esther Passage. Daily fishing in the northern portion of the Esther Subdistrict, excluding the southern portion of Esther Passage, constituted the contracted area and provided an effective means for harvesting enhanced pink salmon in close proximity to WNH while minimizing harvest of wild stocks. The intent of this strategy was to allow wild stocks to pass through the southern and eastern portions of the Esther Subdistrict into the Northwestern District and the Port Wells area

of the Coghill District. Expanded area varied, ranging from additional area in the Esther Subdistrict to additional portions of Esther Passage and Port Wells. Expanded areas allowed for timely fishing opportunity on harvestable surpluses of wild stocks. SHTF markers were employed on the western side of Port Wells to ensure adequate pink and chum salmon escapement in Pigot, Hummer, and Bettles bays.

In 2008, the WNH enhanced pink salmon run was significantly greater than PWSAC's preseason projections. Run timing was early and harvest rates were greater than anticipated. Pink salmon cost recovery harvest began on July 29 and continued through August 8. PWSAC harvested 1.28 million pink salmon for cost recovery and broodstock at WNH. The cost recovery harvest of 1.07 million exceeded the goal of 605,000 pink salmon at WNH to make up for a cost recovery shortfall at AFK. The WNH cost recovery harvest contribution estimate was 100% enhanced pink salmon. The broodstock harvest of 203,000 pink salmon was 23% below the broodstock goal of 264,000 fish.

The Coghill District opened to purse seine gear on July 21 and remained open until September 4. There were 33 CPF periods with a total of 75 permit holders recording 939 landings. The 2008 Coghill District CPF purse seine harvest was composed of 9,400 chum salmon, 6.59 million pink salmon, 600 sockeye salmon, 37,000 coho salmon, and 14 Chinook salmon (Appendix D). The pink salmon CPF harvest was composed of 8% wild stock pink salmon and 83% WNH, 8% CCH, 2% AFK, and <1% VFDA enhanced pink salmon. Additional information, including the preseason outlook, harvest strategy, and results, is detailed in the Coghill District section of this report.

Northwestern District Summary

Northwestern District wild stock pink and chum salmon aerial survey escapement indices remained above the cumulative anticipated escapement in late August and early September. Wild stock pink salmon spawning escapement of 142,000 fish was between the even-year escapement lower bound of 110,000 fish and the even-year escapement midpoint of 175,000 fish. Northwestern District escapement of 28,000 wild stock chum salmon was more than five times the SEG threshold of 5,000 fish.

The Northwestern District was opened for the first time since 2000. A total of six CPF periods were scheduled from late August to early September as escapement indices and fishing effort allowed. Northwestern District CPF periods were scheduled concurrently with Northern, Coghill, and Southwestern district openings to spread effort and provide harvest opportunity on specific wild chum and pink salmon stocks. There was no fishing effort in this district during the 2008 season.

Southwestern District Summary

The Southwestern District aerial escapement index did not meet the pink salmon district escapement in 2008. The wild stock pink salmon escapement index of 70,000 fish was below the lower bound of the even year escapement of 130,000 fish. The Southwestern District had an aerial survey escapement index of 3,000 chum salmon. Pink salmon harvest management was based on aerial survey escapement data, test fishing in the Southwestern District, harvest rates, and terminal area run entry. Test fishing conducted by the *R/V Solstice* in late July provided pink salmon harvest rate, stock composition, and sex ratio data. Fishing area was limited to waters of the Port San Juan Subdistrict and AFK hatchery SHA and THA to provide migration corridors

around Latouche Island and within Knight Island Passage for wild stock salmon bound for northern systems (e.g., Eshamy Lake sockeye and northern/western PWS chum and pink salmon). Fishing area within the Port San Juan Subdistrict and AFK SHA and THA was adjusted to conduct an active fishery targeting AFK pink salmon, remote release chum salmon, and other migrating hatchery stocks while maintaining an acceptable level of wild stock harvest.

The 2008 Southwestern District CPF harvest was composed of 7.55 million pink salmon, 517,000 chum salmon, 62,000 sockeye salmon, 7,000 coho salmon, and 21 Chinook salmon. There were 45 CPF periods in the Southwestern District. Fishing to target remote release chum salmon at the AFK THA and SHA started with a 156-hour period on May 26, followed by a directed fishery targeting the enhanced sockeye salmon run to Marsha Bay on June 9. A regular schedule of consecutive 156-hour periods continued in the AFK THA and SHA until July 27 and in Marsha Bay until August 10. PWSAC did not harvest any portion of the AFK enhanced chum salmon run for cost recovery, instead conducting chum salmon cost recovery at WNH. Of the 517,000 chum salmon harvested in the AFK THA and SHA, 19% were WNH thermal marked fish, 80% were Port Chalmers thermal marked fish, and 1% were of wild stock origin. The Marsha Bay sockeye salmon remote release returned a harvest of 24,000, slightly exceeding the 23,000 fish forecast. There were 37,000 sockeye salmon harvested in the AKF THA and SHA. Of those sockeye salmon, 29,000 were harvested during the 156-hour CPF periods in June and 8,000 were harvested through the rest of the season.

ADF&G was concerned about the harvest of sockeye salmon during early-season fishing in the Southwestern District. Otolith sampling revealed that 11% of the sockeye salmon harvested were of wild stock origin and the remainder was of Main Bay Hatchery enhanced stock origin. ADF&G adjusted the open fishing area in the AFK THA in an attempt to reduce the harvest of sockeye salmon. The sockeye salmon harvest in the AFK SHA may be the result of fishing on the edge of a migratory corridor and overlapping run timing with AFK enhanced chum salmon run. ADF&G working with Icicle Seafoods and Trident Seafoods (predominant chum salmon buyers by volume in the Southwestern District) arranged for preliminary reporting of sockeye salmon harvest in this fishery. These processors also provided an opportunity to sample the harvest to determine stock composition. This is an important arrangement because harvest reporting by regulation is only required on the day following the close of a fishing period. Voluntary reporting by processors and the fishing fleet allows the department to effectively manage sockeye salmon in the migratory corridors.

The 2008 AFK enhanced pink salmon run of 6.11 million fish was 76% of PWSAC's preseason 8.00 million fish projection. PWSAC fell 44% short of their 1.60 million pink salmon harvest goal (cost recovery and broodstock combined) at AFK with a harvest of 901,000 fish. The cost recovery harvest of 707,000 pink salmon came in under the cost recovery goal of 785,000 fish, while the broodstock harvest of 194,000 fish was under the broodstock goal of 289,000 fish by 33%. The AFK cost recovery harvest contribution estimates were 99% enhanced stock and 1% wild stock pink salmon during the purse seine portion of the cost recovery fishery. Run entry at AFK was late, with a daily average of 31,000 pink salmon harvested for cost recovery from July 31 to August 5. This was below the average daily cost recovery harvest of 358,000 fish in 2007 and 58,000 fish in 2006. Run entry gradually increased through the rest of the season with an average daily harvest of 335,000 pink salmon from August 6 to August 29. The pink salmon CPF did not start until August 9 because of the slow cost recovery progress. CPF open area was initially limited to waters of the Port San Juan Subdistrict south of the latitude of a point on

Evans Island approximately 1 nautical mile to the south of Bishop Rock. Hatchery-wild contribution estimates suggested continued interception of wild stocks so Port San Juan Subdistrict was opened on an every-other-day schedule between August 18 and September 10 to further minimize the harvest of wild stocks. Windowing the Port San Juan Subdistrict openings was intended to allow wild stock pink and chum salmon to pass through the Port San Juan Subdistrict while providing harvest opportunity outside the AFK THA and SHA. The total Southwestern District pink salmon CPF harvest of 7.55 million fish was composed of 5% wild stock, 65% AFK, 14% WNH, 17% CCH, and <1% VFDA fish. Of the estimated 420,000 wild stock pink salmon harvested in the Southwestern District CPF, the majority were harvested in the Port San Juan Subdistrict. It is unknown how many of those fish were destined for the Southwestern District or other areas in the sound.

Montague District Summary

Montague District wild stock pink and chum salmon cumulative aerial escapement indices were below anticipated levels for the entire season. Aerial surveys were conducted into late September to capture the entirety of pink salmon escapement ensuring late-timed stocks were represented in the escapement indices. Wild stock pink salmon spawning escapement of 57,000 fish was 25% below the even-year escapement lower bound of 75,500. Montague District had an estimated 5,403 wild chum salmon spawning escapement, but has no chum salmon escapement goal.

The 2008 Montague District harvest was composed of 1.23 million chum, 216,000 pink, 10,200 sockeye, 23 coho, and 88 Chinook salmon. The Port Chalmers remote release chum salmon run exceeded the 787,000 fish forecast with a harvest of 1.58 million fish in PWS. A fishing schedule of 9 consecutive, 156-hour periods was initiated in the Port Chalmers Subdistrict on May 26 and continued through July 27. The peak harvest occurred during period 5 (6/23–6/29) with a harvest of 271,000 chum salmon. During period 7 (7/7–7/13), 119,000 pink salmon were harvested in Port Chalmers Subdistrict and fishing area was subsequently restricted to within 0.5 miles of Montague Island to focus effort on enhanced chum salmon and limit pink salmon interception. There was no fishing effort reported in the Montague District after July 21. The Montague District chum salmon harvest was 4% wild fish and 96% enhanced fish and the pink salmon harvest was 7% wild fish and 93% enhanced (primarily SGH origin).

Southeastern District Summary

Southeastern District wild stock pink and chum salmon aerial survey escapement indices remained below the daily and cumulative anticipated escapement in July, August, and September. These low escapement indices did not allow for fishing opportunity on wild salmon stocks. The 2008 aerial survey pink salmon escapement index was 112,000 fish, below the lower bound even-year escapement of 215,000 fish. The 2008 aerial survey chum salmon escapement index was 22,000 fish, almost three times the SEG lower threshold of 8,000 chum salmon.

Southeastern District was limited to 3 fishing periods with no fishing effort during the 2008 season. Southeastern District CPF periods were scheduled concurrently with early season Eastern and Northern district openings in an effort to provide harvest opportunity on wild chum salmon stocks during early run entry in June.

PRINCE WILLIAM SOUND AND COPPER RIVER SUBSISTENCE FISHERIES (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. State of Alaska Subsistence fishing permits are not required for marine finfish other than salmon. Herring spawn on kelp may be taken for subsistence purposes as described in 5 AAC 01.610(d)(1)(2); therein, herring spawn on kelp may be taken above water from March 15 through June 15 or harvested using dive gear only during fishing periods open for the wild herring spawn-on-kelp commercial fishery. Lingcod 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 PWS Area.

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

> "Subsistence fishing in Alaska is allowed, usually by authority of a permit, as a means for low income families to supplement their diet. Unfortunately, a complete control of the fishery has not been maintained which has allowed abuse of the subsistence fishery by persons actually seeking recreation and sport rather than actual need of the resource for livelihood" (AMR 1966).

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

In February 1984, the Alaska Board of Fisheries determined salmon stocks of the Chitina Subdistrict do not support customary and traditional uses and those in the Glennallen Subdistrict

do support customary and traditional uses. Accordingly, the Alaska Board of Fisheries amended its Copper River Subsistence Salmon Fisheries Management Plan to include provisions for subsistence salmon fishing only in the Glennallen Subdistrict. While the Chitina Subdistrict was closed to subsistence fishing, a personal use fishery was authorized. Participation in the Glennallen Subdistrict subsistence salmon fishery was limited to residents of the Copper River basin and certain upper Tanana communities. In addition, the $12,000 income restriction granting eligibility for the additional 200 or 500 salmon allocation was removed, with permits for these additional salmon available by request to Alaska residents regardless of income.

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

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

At the 2003 Alaska Board of Fisheries 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 fishing 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 Alaska Board of Fisheries, 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 in the Copper River District from May 15 until 2 days before the opening of the commercial fishery, seven days per week. Boundary lines for Copper River District subsistence fishing are the same as the commercial drift gillnet fishery. Once the commercial season has commenced, subsistence fishing is allowed only during commercial

fishing periods or by emergency order. Regulation stipulates that 2 days following the closure of the Copper River District to commercial salmon fishing for the season, subsistence fishing is allowed, seven days a week, until September 30. Within the Copper River District, drift gillnets are the only legal gear and nets may have a maximum length of 50 fathoms with a maximum mesh size of 6 inches prior to July 15. In 2008, 506 permits were issued, of which 26 were not returned. Of the 480 permits that were returned, 232 permit holders reported not fishing. A harvest of 470 Chinook, 3,969 sockeye, and 53 coho salmon were reported from the 248 permits that reported fishing (Appendix F1).

In 2008, 11 subsistence permits were issued for the PWS general subsistence district. Ten permits were returned at the end of the season. Six permit holders reported that they did not fish. The four permit holders that fished reported a harvest total of 32 sockeye and 1 Chinook salmon (Appendix F2).

In addition to traditional subsistence harvest, both residents and non-residents engaged in commercial fishing are permitted to retain any legal portion of their commercial finfish catch for their own use ("homepack"); these fish cannot be bartered or sold, but may be used as bait in another commercial fishery (5 AAC 39.010). Any commercially caught finfish not sold must be reported on a fish ticket. During the 2008 season in the Copper River District, 2,172 sockeye, 537 Chinook and 423 coho salmon were reported as retained by 223 commercial permit holders (Appendix A1, A3, A17 and F7). In PWS, 18 permit holders reported retaining 243 sockeye, 69 Chinook, and 26 coho salmon as homepack from their commercial harvests.

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 2008, a total of 43 federal permits were issued; 42 permits were returned, with 98 sockeye and 103 coho salmon reported as harvested. Current and historical federal harvest numbers are listed in Appendices F5 and F6.

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)). Initially, only residents of Chenega and Tatitlek were eligible for subsistence permits in their respective areas. In 1989, a court ruling qualified all residents of Alaska for a subsistence permit in both of these subsistence areas, invalidating 5AAC 01.648(a)(7) and (b)(7) which stipulates that permits may only be issued in these villages. Permit holders are allowed to fish in these areas from May 15, seven days per week, until 2 days before the initial commercial fishing period in the associated commercial fishing districts: Southwestern and Montague districts, Chenega or Eastern District, Tatitlek. Once the commercial fishing season is established, area and time within these subsistence areas is defined by the area and time in the associated commercial fishing district. Two days after the closure of the commercial fishing season in the associated commercial fishing district, subsistence fisheries are open, seven days per week, until September 30 in the Chenega subsistence area and until October 31 in the Tatitlek subsistence area.

In 2008, 15 permits were issued for the Chenega subsistence area, of which 3 permits were returned. Of those returned permits, 1 permit holder reported fishing, with a total harvest of 4 Chinook, 97 sockeye, 75 coho, 70 pink, and 30 chum salmon. In the Tatitlek area, 2 permits were issued of which one was returned. That permit holder reported harvesting 60 sockeye salmon (Appendix F3).

UPPER COPPER RIVER

Glennallen Subdistrict Subsistence Fishery

The Glennallen Subdistrict is that portion of the main stem Copper River upstream of the McCarthy Bridge to the mouth of the Slana River; this subdistrict is open June 1 through September 30 for continuous fishing. Fish wheels and dip nets are legal gear. Participants must be Alaska residents and are allowed one permit per household per year and the permit identifies the single gear type to be used. Total annual harvest, assuming that additional salmon were requested by the permit holder, cannot exceed 200 salmon for a household of 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 2008, a total of 536 dipnet permits and 650 fishwheel permits were issued to subsistence users in the Glennallen Subdistrict. A combined total of 2,238 Chinook and 40,214 sockeye salmon were reported harvested in the Glennallen Subdistrict. This compares to the previous 10-year average of 59,101 sockeye and 2,946 Chinook salmon for this subdistrict. Total effort has remained somewhat constant over the last 10-years, with an average number of 697 fishwheel permits and 384 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, A17 and F4). Additionally, approximately 25% of the Chinook salmon harvested were landed by 2% of the permit holders, indicating that some subsistence users effectively target Chinook salmon.

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 2008, a total of 270 federal permits were issued for the Glennallen Subdistrict. Of these 219 permits were returned. A total 11,347 sockeye, 705 Chinook, and 156 coho salmon were reported harvested (Appendices A1, A3, A17). Current and historical federal harvest numbers are listed in Appendix F6.

Batzulnetas Subsistence Fishery

In 1988, an interim subsistence fishery was provided by emergency regulation at Batzulnetas to settle the United States District Court case of John vs. Alaska. The Batzulnetas fishery, as described in 5 AAC 01.647(i), encompasses all waters from the regulatory markers near the mouth of Tanada Creek and approximately one-half mile downstream from that mouth and in Tanada Creek between ADF&G regulatory markers identifying the open waters of the creek. Salmon may be taken, as established by emergency order, starting June 1 when fishing periods are limited to one 48-hour period per week; beginning in July, fishing periods are increased to 84-hours per week until September 1, when the fishery closes.

In 1987, the fishery was conducted near the mouth of Tanada Creek near the historical village site of Batzulnetas. Eight permits were issued in that year to individuals, or family groups, from Mentasta and Dot Lake, and the fishery was conducted during July and August. A total harvest of 22 sockeye salmon was reported in 1987. The Alaska Board of Fisheries reviewed the fishery before the 1988 season and set seasons, eliminated the quota, and provided for additional gear types. Permits can be issued throughout the season and must be completed and returned to ADF&G by October 31. No permits were issued for this fishery between 1988 and 1992 and in 1996. Between 1993 and 2002 the average harvest was 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. Beginning in 2005, the National Park Service (NPS) in the Wrangell-St. Elias National Park and Preserve began enforcing NPS regulations that only allow subsistence salmon harvest by rural community residents. The enforcement of these regulations prohibited the subsistence fishing by non-rural residents in that portion of the Copper River upstream of Indian River. This includes 15 river miles of the Glennallen Subdistrict and the entire Batzulnetas fishery. As a result of the rural preference, no state subsistence fishing permits were issued after 2004. A single federal permit was issued in 2005, 2007 and 2008 with only one sockeye salmon reported harvested in 2007 and in 2008 (Appendices A1 and F5).

Chitina Subdistrict Personal Use Fishery

The Chitina Subdistrict is the portion of the main stem Copper River from the downstream edge of the McCarthy Road Bridge to a marker 200 yards above Haley Creek. Regulations for the Chitina Subdistrict personal use fishery remain similar to the Glennallen subsistence fishery regulations, with three 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 Alaska Board of Fisheries determined that retaining the bag limit of one Chinook salmon provided for a reasonable opportunity to harvest Chinook salmon, and would also maintain Chinook salmon harvests at historical levels. Annual bag limits would continue to be 15 salmon for a household of one, and 30 salmon for a household of 2 or more individuals. Based upon recent harvests, the 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 to be opened on June 1; an emergency order (EO) 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 2008, there were eleven EOs issued to make adjustments to the dip net fishery. The first period started on June 5 and the last period closed on August 31. The fishery is then open by regulation from Sept 1–30.

Reported harvest for the Chitina Subdistrict personal use fishery in 2008 was 1,690 Chinook, 70,885 sockeye, and 2,346 coho salmon. The previous 10-year average reported harvests are 3,011 Chinook, 106,469 sockeye, and 2,132 coho salmon. There were 8,258 permits issued for

the Chitina Personal Use fishery in 2008. This is slightly below the 10-year average of 8,446 permits issued (Appendices A1, A3, A17 and F4).

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 2008, a total of 82 federal permits were issued. Of the 70 permits returned, 789 sockeye, 22 Chinook and 74 coho salmon were reported harvested (Appendices A1, A3, A17). Current and historical federal harvest numbers are listed in Appendix F6.

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

Fisheries enhancement has played a significant role in Prince William Sound and Copper River salmon production for over three 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, all of which may contribute to lowered instream survival rates. Hatchery programs 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 run by 2 non-profit corporations: Prince William Sound Aquaculture Corporation and Valdez Fisheries Development Association. These 2 non-profit corporations are among 15 other non-profit corporations in the state of Alaska that maintain and operate private hatcheries that produce salmon for harvest in common property fisheries. PWSAC is the largest producer of salmon in Alaska, with a permitted capacity of 665.8 million eggs and is also 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 the second largest producer of 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 47.8 million eggs. In addition to the aforementioned species, PWSAC and VFDA have a permitted coho salmon capacity of 4.0 million and 2.0 million eggs, respectively. 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. Current permitted egg capacities, in millions of eggs, for the seven largest aquaculture associations in Alaska are listed below:

Hatchery non-profit corporation	**Chinook salmon**	**chum salmon**	**coho salmon**	**pink salmon**	**sockeye salmon**	**total**
Cook Inlet Aquaculture Assn. (CIAA)	4.00	0	6.16	125.00	48.66	**183.82**
Douglas Island Pink and Chum (DIPAC)	0.95	121.00	1.65	50.00	33.50	**207.10**
Kodiak Region Aquaculture Assn. (KRAA)	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)	4.0	148.00	4.0	462.00	47.75	**665.75**
Southern Southeast Regional Aquaculture Assn. (SSRAA)	3.50	128.30	10.90	0	2.70	**145.40**
Valdez Fisheries Development Assn. (VFDA)	0.30	0	2.00	230.00	0	**232.30**
all others	3.00	40.00	10.78	196.00	6.35	**256.13**
Statewide egg capacity totals (millions)	**25.05**	**618.10**	**49.13**	**1,278.30**	**161.56**	**2,132.14**

In 2008, PWSAC and VFDA contributed 96.2% of the total Area E salmon harvest of 49.3 million fish (Table 1, Appendix E1).

PWSAC and VFDA produced 41.3 million (97.4%) of the 42.4 million pink salmon and 387,000 coho salmon (70.4%) of the 551,000 harvested overall in Area E. In addition, PWSAC produced 4.9 million (95.7%) of the 5.1 million chum salmon harvested as well as 947,000 sockeye salmon (72.8%) of the 1.3 million harvested overall in Area E (Table 1, Appendix E1).

Gulkana Hatchery

The Gulkana Hatchery consists of 2 rearing facilities (Gulkana I and II) located above Paxson Lake on the east fork of the Gulkana River approximately 260 miles north of Cordova. This facility is owned by ADF&G and has been managed by PWSAC since 1993. Gulkana I was constructed in 1973 after spawning sockeye were identified in several warm water springs adjacent to the east fork of the Gulkana River. These springs produce approximately 1,600 l/s of water, of which 1,100–1,600 l/s are required for hatchery operations. Gulkana II was constructed in 1987. 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 180,000 and 32.3 million fry annually since 1974 (Appendix E8). Annual total Gulkana produced sockeye salmon runs since 1997 have ranged from 91,640 to over 1.1 million fish (Appendix E7).

In 2008, the overall run of sockeye salmon produced by the Gulkana hatcheries totaled 88,746 fish (Appendix E1). This was lower than PWSAC's forecast run of 251,872 sockeye salmon. A total of 19,839 sockeye salmon were reported harvested for broodstock and 19,175 Gulkana produced sockeye salmon were harvested in the Chitina Subdistrict Personal Use and the Glennallen Subdistrict subsistence fisheries. In addition an estimated 235 were harvested by sport fisherman in the Copper and Gulkana rivers. The Copper River District commercial gillnet fleet harvested 39.7% of the total hatchery run, or 21,699 sockeye salmon (Appendix E7).

The 2008 GH sockeye salmon harvest contributions by period and the historical GH contributions, fry releases, total hatchery runs and estimated marine survivals are in Appendices E6–E8.

Wally Noerenberg Hatchery

WNH is located in the Coghill District at the terminus of Lake Bay on the southern end of Esther Island in PWS. 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. 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. In addition to releases at the WNH facility, there are 2 chum salmon remote release sites, Port Chalmers located on Montague Island, and Sawmill Bay, adjacent to the AFK hatchery.

In 2008, the total run of chum salmon released as fry from WNH as well as both remote release sites was 4.8 million fish (Appendix E1). Due to errors in the thermal marking program, the

overall run of chum salmon to each release site is uncertain. Chum salmon returning to all release locations originated from brood years 2002 to 2005 releases. PWSAC reported cumulative survival rates for these brood years of 1.2%, 5.3%, 3.0% and 0.7%, respectively (WNH 2008 Annual Report, Schedule C–1, Item 12). The overall run was greater than PWSAC's forecast of 2.3 million chum salmon. A total of 568,899 chum salmon were harvested for hatchery cost recovery at WNH and were worth approximately $2.6 million dollars (3/9/2009 PWSAC Board of Directors report, page 30). PWSAC reported 9,000 pounds of roe sold from chum salmon harvested for broodstock. A total of 148,747 chum salmon were harvested for broodstock or were excess. The commercial fleet harvested 87.2% of the total WNH chum salmon run including remote releases at AFK and Port Chalmers (Appendix E1).

In 2008, the overall run of pink salmon produced by the WNH totaled 8.7 million fish (Appendix E1). These fish originated entirely from the BY2006 release and had a survival rate of 11.3% (Appendix E3). The overall run was higher than PWSAC's preseason projection of 3.7 million pink salmon. PWSAC reported 16,000 pounds of roe sold from pink salmon harvested for broodstock. The commercial fleet harvested 7.4 million WNH pink salmon, 85.4% of the total pink salmon run to this facility. A total of 202,568 pink salmon were harvested by PWSAC for broodstock (Appendix E13). A total of 1.3 million pink salmon were harvested for hatchery cost recovery.

In 2008, the overall run of coho salmon produced by the WNH totaled 120,767 fish. These fish originated entirely from the BY2005 release and had a survival rate of 6.5% (Appendix E5).The overall run was lower than PWSAC's preseason projection of 148,000 coho salmon. The commercial fleet harvested 116,641 WNH coho salmon, 96.6% of the total coho salmon run to this facility. PWSAC harvested 2,609 coho salmon for broodstock and 267 coho salmon for cost recovery.

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

Main Bay Hatchery

The MBH, constructed in 1982, 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 566 l/s, of which 85-566 l/s are required for hatchery operations. Originally built to raise chum salmon, Main Bay produced pink salmon until 1990 and currently produces only sockeye salmon. The MBH has annually released between 300,000 and 10.8 million sockeye salmon since 1988 (Appendix E19).

In 2008, the total run of sockeye salmon produced by the Main Bay Hatchery was 851,600 fish (Appendix E18), below the forecasted run of 929,000 sockeye salmon. The commercial fleet harvested 98.1% of the total run, or 835,241 sockeye salmon. A total of 15,659 were harvested for broodstock purposes.

Detailed MBH contributions to the CPF, and total contribution summaries as well as historical fry release information are in Appendices E14 and E16–E19.

Solomon Gulch Hatchery

SGH is owned and 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 2008, the overall run of pink salmon produced by the SGH was 15.5 million fish (Appendix E1). These fish originated entirely from the BY2006 release, had a survival rate of approximately 7.0% (Appendix E3), and exceeded the preseason projection of 9.8 million fish. A total of 4.3 million pink salmon, worth approximately $4.2 million dollars, were harvested for hatchery cost recovery. Roe recovery harvest of 158,102 pink salmon at SGH, yielded 53,053 pounds of roe and 106,958 carcasses sold. Pink salmon broodstock escapement (viable and unviable broodstock, unspawned fish, holding mortalities, and unharvested fish) of 283,434 produced 71,461 carcasses sold. The commercial fleet harvested 10.9 million SGH pink salmon, 70.8% of the total pink salmon run to this facility.

In 2008, the overall run of coho salmon produced by the SGH was 264,368 fish. These fish originated entirely from the BY2005 release and had a survival rate of 13.4% (Appendix E5). The overall run exceeded the preseason projection of 211,000 coho salmon by more than 50,000 fish. The commercial fleet harvested 154,383 SGH coho salmon, 58.4% of the total coho salmon run to this facility. VFDA harvested 22,356 coho salmon for cost recovery, and 3,101 for broodstock.

Historical pink and coho salmon harvest contributions, fry release, total hatchery run and estimated marine survival for SGH are in Appendices EI, E3 and E5. SGH's contribution to pink and coho salmon harvests in the Eastern district is located in Appendix E20. The 2008 cost recovery summary is located in Appendix E21.

Cannery Creek Hatchery

The CCH, constructed in 1978, is owned by ADF&G and has been operated by PWSAC under contract since 1988. CCH is located in PWS within 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, discontinued in 1990, was not as successful as the pink salmon program due to the extremely cold lake water from January through March.

In 2008, the overall run of pink salmon produced by CCH was 11.0 million fish (Appendix E1). These fish originated from the BY2006 release, had a survival rate of approximately 7.8% (Appendix E3), and exceeded the preseason projection of 4.5 million fish. A total of 1.2 million pink salmon were harvested for hatchery cost recovery. PWSAC reported 19,000 pounds of roe sold from fish harvested for broodstock purposes. The commercial fleet harvested 9.7 million CCH pink salmon, 88.5% of the total pink salmon run to this facility. A total of 206,926 pink salmon were harvested for broodstock. Historical pink salmon harvest contributions, fry release, total hatchery run and estimated marine survival for the CC hatchery are in Appendices E3, E24–E26, and E28.

Armin F. Koernig Hatchery

The AFK hatchery was converted from an existing cannery in 1974 and is owned and operated by PWSAC. The AFK hatchery is located on Evans Island in southwestern 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 hatchery currently produces only pink salmon, although chum salmon were produced in 1996 and 1997. Chum salmon from WNH are remotely released from this facility. See WNH section for details regarding the 2008 chum salmon release.

In 2008, the overall run of pink salmon produced at AFK hatchery was 6.1 million fish (Appendix E1). This was below the anticipated run of 8.0 million pink salmon. These fish originated from the BY2006 release and had a survival rate of 3.4% (Appendix E3). A total of 893,600 pink salmon were harvested for hatchery cost recovery. A total of 193,982 pink salmon were harvested for broodstock. PWSAC reported 35,000 pounds of roe sold from fish harvested for broodstock purposes. The commercial fleet harvested 85.2% of the total run, 5.2 million pink salmon.

Historical AFK hatchery pink salmon harvest contributions, fry releases, total hatchery runs, and estimated marine survival for AFK hatchery are in Appendices E3, E20, E23, E24, E26, E28, and E29.

2008 PRINCE WILLIAM SOUND HERRING FISHERIES

PRESEASON OUTLOOK AND HARVEST STRATEGY

The Prince William Sound herring management area encompasses all coastal waters of the Gulf of Alaska between Cape Suckling and Cape Fairfield, extending offshore to 59° N. lat. A total of 5 herring fisheries may occur annually. During the spring season, 2 fisheries target herring for sac roe using either purse seine or gillnet gear and 2 spawn-on-kelp fisheries harvest either naturally occurring spawn on kelp or spawn on kelp suspended in pounds. In the fall a food/bait fishery may occur. Of the 5 herring fisheries, only the wild spawn-on kelp and the food/bait fishery are open entry fisheries. Each of these possible fisheries is managed depending on observed herring 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 the minimum spawning biomass threshold was raised from 8,400 to 22,000 tons for the PWS stock; no fishery may be opened if the estimated spawning biomass is below this level. The 22,000 ton threshold is 25% of the potential spawning biomass from an unfished stock (For methods, see Funk and Rowell 1995). The higher threshold established manageable harvest levels while reducing the risk of 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 five fisheries based on a 0–20% harvest rate. The maximum harvest rate of 20% is applied when stock size is greater than 42,500 tons. The sac roe seine fishery is allocated 58.1% of the available surplus; the food/bait fishery 16.3%; the pound spawn-on-kelp fishery 14.2%; the wild spawn-on-kelp fishery 8.0%; and the gillnet sac roe fishery is allocated 3.4%. The sac roe fishery has dominated harvests with a peak in the early 1990's followed by a precipitous decline and a fishery closure since 1999 (Appendices G2 and G3).

During the 1999 and 2003 BOF meetings several regulatory changes were made to PWS herring fisheries. In 1999, regulations were standardized for PWS herring buyer, buyer's agent, and fishermen's fish ticket reporting requirements with those in other parts of the state. The 1999 BOF further created new regulations that would increase the legal depth of a purse seine used in the fall food/bait fishery and specified herring spawn-on-kelp pound marking requirements. Also, in December 1999 the BOF closed Tatitlek Narrows to all commercial herring fishing. This closure was repealed at the 2003 BOF meeting (5AAC 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 the Cordova ADF&G 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 PWS herring purse seine fishery is composed of 104 permanent and 2 interim permits. Purse seines can be 150 fathoms long and 1,025 meshes deep, and mesh size is not regulated. There are 24 gillnet permits in PWS. Gillnets are limited to 100 fathoms in aggregate length and 120 meshes in depth during the spring sac roe fishery (1 March through 30 June). Gillnets may be 150 fathoms in aggregate length for the food and bait fishery. Mesh size is regulated from a minimum of 2 1/8 inches to a maximum of 3 inches. Historical sac roe harvests are presented in Appendices G3–G4. There are 128 herring pound permits in PWS. Seine specifications for the closed pound fishery are the same as the sac roe seine fishery. Open and closed pound fisheries can be managed separately or in combination. The size of the pound is limited to 2,000 square feet at the surface and walls of a closed pound cannot exceed 30 feet in depth. The herring allocation for this fishery is divided among the number of permit holders and ADF&G establishes the maximum number of blades of kelp a permit may maintain in the pound based on the number of permits registered to fish by 15 March. The historical pound spawn-on-kelp harvest peaked in the early 1990's and has declined since that time with multiple season closures (Appendix G6). The wild spawn-on-kelp fishery, utilizing native PWS kelp, occurs after a major spawning event takes place on marketable species of kelp. Wild kelp is taken by divers or by hand picking depending on the type of kelp available for harvest and market demand. The historical wild spawn-on-kelp fishery harvests are given in Appendix G5. Once instituted, pound fisheries dominated harvests of wild spawn on kelp (Appendix G7). The food/bait fishery season may run from October 1 through January 31; however, industry concerns over product quality usually results in a delay of the season's opening date until November. Purse seine size is not restricted for the food/bait fishery and trawling or gillnetting may also occur. The historical food/bait fishery harvests are given in Appendices G8–G9. Historical fishery harvest values for all PWS fisheries are presented in Appendix G12.

SEASON SUMMARY

Based on herring stock assessment information, all 2008 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 2008 PWS herring biomass estimate was below the minimum spawning biomass threshold of 22,000 tons.

Age structured assessment modeling was used to project the 2008 biomass of Pacific herring. The PWS herring biomass forecast for 2008 was 10,252 tons. Hydroacoustic, net sampling, and aerial surveys were conducted in 2008 to assess herring biomass, disease prevalence, age composition, and growth.

Acoustic surveys were conducted during March and April 2008 with the ADF&G research vessel *Solstice* and the M/V *Auklet*, contracted by the Prince William Sound Science Center. ADF&G conducted broad scale surveys in eastern PWS up to Tatitlek Narrows; north and central Montague Island; and from Sawmill Bay to Whale Bay. Detailed acoustics data were collected on major concentrations of herring in St. Matthews Bay, Port Fidalgo, Two Moon Bay, Whale Bay, and near Bishop Rock. Age composition samples varied by location and sample gear: spawning fish samples from Eastern PWS were predominately age 4 and age 9, but spawning samples from other locations were predominately younger fish (age 3 and 4). The biomass documented in Whale Bay was mostly juvenile fish (65% age 2).

Herring disease assessment has been included as part of the annual age, sex, and size assessment ADF&G has completed each spring since 1993. Disease sampling in 2002 documented a viral hemorrhagic septicemia virus (VHSV) prevalence of 14%. Although this did not appear to seriously impact the adult population, it may have increased mortality of juveniles. Also, the prevalence of *Ichthyophonus hoferi* increased significantly between 2002 (14%) and 2005 (25%). In March and April, ADF&G examined herring for prevalence of focal skin reddening and the pathogen Ichthyophonus hoferi. Prevalence of focal skin reddening associated with VHSV was low; however, prevalence of *I. hoferi* was high (25%) and is consistent with the increasing age of the predominant 1999 age class. Evidence suggests both VHSV and *I. hoferi* may occur in approximately 4-year cycles (reference). The last *I. hoferi* peak was in 2001 and prevalence of *I. hoferi* is positively correlated with age. Therefore, there may have been increased mortality from *I. hoferi* in older age groups in 2006 and 2007. If this trend continues, mortality of the predominant age class may increase significantly. ADF&G will continue to monitor these disease indices.

Aerial surveys documented a peak biomass estimate of 10,700 tons of herring in 2008 versus 770 tons in 2007, 540 tons in 2006, 4,773 tons in 2005 and 12,305 tons in 2004. The predominate portion of the biomass estimate (10,000 tons) was observed in Port Gravina and Port Fidalgo. A total of 54.7 mile-days of spawn were observed in spring 2008, almost triple the mile-days observed in 2007. However, of the total, 9.3 mile-days were observed on Kayak Island and more than half (53%) was classified as active light spawn or dissipating from light spawn. The largest individual spawning event occurred between St. Matthews Bay and Knowles Head (10.8 miles of spawn). Additionally, there were 29.8 mile-days of spawn in the Montague Island area. This included about equal amounts of spawn on Montague and Knight Islands. (Appendix G13).

ADF&G collected additional age, sex, and size data along with disease information throughout PWS during the fall of 2008. Updates on the status of the PWS herring population will be announced as new information becomes available.

2008–2009 HERRING SEASON OUTLOOK

Given the PWS herring spawning population, current size and age structure, a commercial harvest is not anticipated in 2009. Consecutive years of low recruitment will further delay the recovery of the herring population to a size capable of supporting a sustainable commercial harvest. ADF&G will continue to monitor the PWS herring biomass to assess growth and recruitment. An ongoing disease study will continue to examine the incidence of VHSV and *I. hoferi* in the PWS herring population.

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PERMANENT EMPLOYEES WITH THE COMMERCIAL FISHERIES DIVISION

Dave Anderson	Captain, R/V *Solstice*
Jenefer Bell	Asst. Area Management. Biologist
Jeremy Botz	Purse Seine Management Biologist
Rich Brenner	Asst. Finfish Research Biologist
Glenn Hollowell	Gillnet Management Biologist
Ted Jewel	Vessel Technician II, *R/V Solstice*
Lisa Laird	Office Administration
Bert Lewis	Regional Resource Management Biologist
Steve Moffitt	Finfish Area Research Biologist

SEASONAL EMPLOYEES WITH THE COMMERCIAL FISHERIES DIVISION

Name	Job Class	Project/Title
Lucinda Hjort	Admin. Clerk II	Fish Ticket Clerk / Office Admin.
Jim Vansant	FWT III	Herring GIS project
Nancy DelPesco	FWT III	Age, Weight and Length Crew Leader
Julia McMahon	FWT II	Age, Weight and Length Technician
Brittany Blain	FWT II	Age, Weight and Length Technician
Amanda Kelly	FWT II	Age, Weight and Length Technician
Jim O'Rourke	FWT II	Age, Weight and Length Technician
Dayna Norris	FB I	Otolith Lab Supervisor
Krysta Williams	FB I	Otolith Lab Supervisor
Jane Allen	FWT II	Otolith Lab Technician
Shelly Fogel	FWT II	Otolith Lab Technician
Katie Froning	FWT II	Otolith Lab Technician
Melanie O'Rourke	FWT III	Otolith Rec. Crew Leader
Elenin Mejia-Rosa	FWT II	Otolith Recovery -- Cordova
Steve Barry	FWT II	Otolith Recovery -- Cordova
Gerald Navaro	FWT II	Otolith Recovery -- Cordova
Larry Nehls	FWT II	Otolith Recovery - Seward
Brian Behrends	FWT II	Otolith Recovery -- Straying Project
Rebecca Brewer	FWT II	Otolith Recovery -- Straying Project
Al Cox	FWT II	Otolith Recovery - Valdez
Julian Bertmaring	FWT II	Otolith Recovery- Cordova
James Canfield	FWT II	Otolith Recovery--Cordova
Karina Tomco	FWT II	Otolit Recovery -- Whittier
Desiree Demers	FWT II	Coghill Lake Weir
Ryan Burich	FWT II	Coghill/Eshamy Lake Weir
Jonathan Syder	FWT II	Coghill/Eshamy Lake Weir
Bell Mickelson	FWT II	Eshamy Lake Weir
Kirsti Jurica	FWT II	Eshamy Lake Weir
Rosemary McGuire	FWT II	Eshamy Lake Weir
Roger Johnson	FB I	Miles Lake Sonar Crew Leader
Breena Apgar-Kurtz	FWT II	Miles Lake Sonar Technician
Don Malherek	FWT II	Miles Lake Sonar Technician

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TABLES AND FIGURES

Table 1.–Prince William Sound Management Area salmon harvest by gear type and district, 2008.

District	Permits	Chinook	Sockeye	Coho	Pink	Chum	Total
Eastern	129	1	760	157,883	10,829,504	20,808	11,008,956
Northern	91	3	1,487	660	8,547,490	38,525	8,588,165
Coghill	75	14	551	36,831	6,585,095	9,358	6,631,849
Northwestern	0	0	0	0	0	0	0
Southwestern	88	21	61,889	6,606	7,548,950	517,449	8,134,915
Montague	81	88	10,225	23	216,013	1,233,909	1,460,258
Southeastern	0	0	0	0	0	0	0
Unakwik	0	0	0	0	0	0	0
Purse seine total	141	127	74,912	202,003	33,727,052	1,820,049	35,824,143
Bering River	60	42	1,175	40,380	8	1	41,606
Copper River	492	11,450	320,815	202,412	1,437	1,330	537,444
Coghill	413	103	177,974	80,527	854,465	2,308,231	3,421,300
Eshamy	366	48	560,869	1,930	103,325	251,493	917,665
Unakwik	5	0	389	0	878	58	1,325
Drift gillnet total	507	11,643	1,061,222	325,249	960,113	2,561,113	4,919,340
Eshamy	25	18	162,403	151	20,455	53,627	236,654
Set gillnet total	25	18	162,403	151	20,455	53,627	236,654
Solomon Gulch	1	0	0	22,356	4,247,241	0	4,269,597
Cannery Creek	1	0	0	0	1,270,289	0	1,270,289
Wally Noerenberg	1	0	0	267	1,265,683	641,332	1,907,282
Main Bay	0	0	0	0	0	0	0
Armin F. Koernig	1	0	0	0	893,600	0	893,600
Hatchery total[a]		0	0	22,623	7,676,813	641,332	8,340,768
Educational Permit	1	47	29	0	0	0	76
Personal Use	252	615	2,421	449	53	14	3,552
Donated Fish	72	4	80	154	6,596	0	6,834
Misc.		666	2,530	603	6,649	14	10,462
Prince William Sound total		12,454	1,301,067	550,629	42,391,082	5,076,135	49,331,367

[a] Hatchery sales for hatchery operating costs.

Table 2.–Total commercial salmon harvest by species from all gear types, Prince William Sound Area, 1971–2008.

	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	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
2007 [e]	41,149	3,231,202	328,980	63,464,830	3,579,068	70,645,229
10-Year Average	44,419	2,218,081	504,685	38,647,417	3,243,729	44,657,498
2008 [f]	12,454	1,301,067	550,629	42,391,082	5,076,135	49,331,367

[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.

[f] Includes commercial common property, hatchery sales, and test fisheries harvest, personal use and educational special use.

Table 3.–Mean price and estimated exvessel value of the total commercial salmon harvest by gear type, Prince William Sound, 2008.

PURSE SEINE			Average		
Species	Number	Pounds [a]	Weight	Price [a]	Value
Chinook	127	2,383	18.76	$1.04	$2,487
Sockeye	74,912	459,725	6.14	$1.17	$540,113
Coho	202,003	1,838,787	9.10	$1.12	$2,056,932
Pink	33,727,052	114,828,548	3.40	$0.34	$39,059,344
Chum	1,820,049	14,157,467	7.78	$0.57	$8,002,952
	35,824,143	131,286,910			$49,661,828
DRIFT GILLNET			Average		
Species	Number	Pounds	Weight	Price	Value
Chinook	11,643	255,200	21.92	$5.92	$1,511,402
Sockeye	1,061,222	6,520,283	6.14	1.77	$11,533,354
Coho	325,249	3,185,661	9.79	$1.24	$3,937,198
Pink	960,113	3,559,632	3.71	0.34	$1,195,812
Chum	2,560,173	19,611,842	7.66	$0.55	$10,853,908
	4,918,400	33,132,618			$29,031,674
SET GILLNET [b]			Average		
Species	Number	Pounds	Weight	Price	Value
Chinook	18	365	20.28	$1.46	$533
Sockeye	162,403	1,005,782	6.19	$1.23	$1,238,739
Coho	151	1,232	8.16	$1.15	$1,414
Pink	20,455	75,112	3.67	$0.28	$20,966
Chum	53,627	420,780	7.85	$0.55	$231,785
	236,654	1,503,271			$1,493,437
HATCHERY SALES [c]			Average		
Species	Number	Pounds	Weight	Price	Value
Chinook	0	0		$0.00	$0
Sockeye	0	0		$0.00	$0
Coho	22,623	202,909	8.97	$0.33	$67,879
Pink	7,639,384	25,054,063	3.28	$0.30	$7,574,535
Chum	641,332	5,163,151	8.05	$0.48	$2,465,426
	8,303,339	30,420,123			$10,107,840

-continued-

Table 3.–Page 2 of 2.

OTHER GEAR [d] Species	Number	Pounds	Average Weight	Price	Value
Chinook	0	0	0	$0	$0
Sockeye	0	0	0	$0	$0
Coho	0	0	0	$0	$0
Pink	0	0	0	$0	$0
Chum	0	0	0	$0	$0
	0	0	0	$0	$0

Gear Type	Value of Catch	No. of Permits	Average Earnings
Purse Seine	$49,661,828	141	$352,212
Drift Gillnet	$29,031,674	507	$57,262
Set Gillnet	$1,493,437	25	$59,737
Subtotal Value of CPF Catch	$80,186,939		
Hatchery	$10,107,840		
Other Gear	$0		
GRAND TOTAL	$90,294,779		

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

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

[c] Number and pounds from fish ticket data. Value from hatchery annual reports. VFDA coho sales are not finalized; hatchery coho salmon harvest value is based on preseason price per pound assumption.

[d] Includes the sales of confiscated fish.

Table 4.–Average price paid to permit holders for salmon, Prince William Sound, 1988–2008.

	Chinook salmon			Sockeye salmon			Coho salmon			Pink salmon			Chum salmon		
	Gillnet			Gillnet			Gillnet			Gillnet			Gillnet		
	Copper and Bering	PWS	Purse seine	Copper and Bering	PWS	Purse seine	Copper and Bering	PWS	Purse seine	Copper and Bering	PWS	Purse seine	Copper and Bering	PWS	Purse seine
1988	$2.23	$2.43	$2.23	$3.20	$2.74	$2.68	$2.35	$1.19	$1.85	NA	$0.60	$0.79	NA	$0.92	$0.72
1989	$2.25	$0.00	$2.41	$2.30	$0.00	$2.68	$0.60	$0.00	$1.58	NA	$0.00	$0.48	NA	$0.00	$0.43
1990	$2.24	$1.45	$1.50	$2.13	$1.59	$1.50	$0.97	$0.69	$0.50	NA	$0.30	$0.30	NA	$0.70	$0.70
1991	$1.65	$1.00	$1.00	$1.28	$1.28	$1.00	$0.65	$0.44	$0.45	NA	$0.12	$0.12	NA	$0.40	$0.40
1992	$2.50	$1.55	$1.55	$2.50	$1.55	$1.55	$0.90	$0.90	$0.90	NA	$0.18	$0.18	NA	$0.55	$0.55
1993	$1.82	$0.97	$0.63	$1.32	$0.87	$0.83	$0.80	$0.66	$0.54	NA	$0.17	$0.16	NA	$0.71	$0.36
1994	$1.43	$0.84	$0.63	$1.27	$1.16	$0.89	$0.74	$0.67	$0.54	NA	$0.11	$0.16	NA	$0.32	$0.24
1995	$2.19	$0.79	$0.67	$1.67	$1.07	$0.86	$0.52	$0.37	$0.39	NA	$0.18	$0.18	NA	$0.39	$0.28
1996	$1.96	$0.68	$0.55	$1.38	$0.85	$0.73	$0.53	$0.24	$0.36	NA	$0.04	$0.07	NA	$0.14	$0.13
1997	$2.00	$1.00	$1.00	$0.88	$0.85	$0.85	$0.30	$0.25	$0.30	NA	$0.07	$0.12	NA	$0.25	$0.30
1998	$2.07	$1.25	$1.10	$1.49	$1.11	$1.01	$0.46	$0.41	$0.31	NA	$0.14	$0.12	NA	$0.21	$0.27
1999	$3.44	$0.50	$1.15	$1.84	$0.89	$0.98	$0.58	$0.23	$0.49	NA	$0.06	$0.10	NA	$0.15	$0.27
2000	$4.02	$4.04	$0.95	$1.72	$1.38	$0.90	$0.57	$0.56	$0.42	NA	$0.11	$0.15	NA	$0.26	$0.28
2001	$3.30	$1.94	$0.65	$1.35	$0.77	$0.74	$0.32	$0.20	$0.26	NA	$0.05	$0.13	NA	$0.38	$0.37
2002	$3.34	$1.26	$0.34	$1.29	$1.14	$0.57	$0.35	$0.09	$0.25	NA	$0.05	$0.09	NA	$0.15	$0.15
2003	$3.48	$0.00	$0.48	$1.16	$0.80	$0.71	$0.48	$0.48	$0.42	NA	$0.06	$0.07	NA	$0.17	$0.17
2004	$4.69	$1.38	$0.45	$1.81	$0.85	$0.55	$0.69	$0.28	$0.42	NA	$0.04	$0.10	NA	$0.23	$0.18
2005	$4.70	$0.00	$0.52	$1.79	$0.92	$0.54	$0.83	$0.69	$0.10	NA	$0.05	$0.08	NA	$0.28	$0.18
2006	$5.03	$1.20	$1.26	$1.83	$1.15	$1.05	$0.92	$0.67	$0.60	NA	$0.11	$0.16	NA	$0.37	$0.33
2007	$4.50	$2.70	$0.97	$1.81	$1.04	$0.82	$0.90	$0.30	$0.59	NA	$0.11	$0.17	NA	$0.33	$0.37
10-year Average	$3.86	$1.43	$0.79	$1.61	$1.01	$0.79	$0.61	$0.39	$0.39	NA	$0.08	$0.12	NA	$0.25	$0.26
2008	$5.96	$1.04	$1.40	$3.12	$1.24	$1.17	$1.23	$1.24	$1.12	$0.27	$0.33	$0.34	$0.21	$0.55	$0.57

[a] These prices are based on weighted average prices given voluntarily by processors and hatchery operators and do not represent prices reported in the Commercial Operators Annual Report. These prices are estimates and do not reflect postseason adjustments and bonuses. Caution should be used when estimating value from these prices.

Table 5.–Estimated exvessel value of the total commercial salmon harvest by gear type with previous 10-year average, Prince William Sound, 1998–2008.

PURSE SEINE

Species	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Previous 10-yr Average	2008
Chinook	4,386	7,427	2,706	5,435	1,353	924	1,270	1,787	4,940	9,330	3,956	2,487
Sockeye	127,854	141,923	195,169	539,388	58,142	847,966	46,573	207,022	219,984	338,262	272,228	540,113
Coho	124,325	329,317	965,404	398,532	69,207	226,619	121,688	103,312	1,426,736	546,805	431,194	2,056,932
Pink	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	10,740,217	39,059,344
Chum	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	2,355,807	8,002,952
	$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	$13,803,403	$49,661,828

DRIFT GILLNET

Species												
Chinook	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	3,550,165	1,511,402
Sockeye	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	16,457,189	11,533,354
Coho	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	1,947,913	3,937,198
Pink	249,293	43,612	177,559	144,896	23,889	27,904	12,134	84,308	54,070	82,356	90,002	1,195,812
Chum	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	1,884,603	10,853,908
	$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	$23,929,873	$29,031,674

SET GILLNET

Species												
Chinook	25	592	2,902	787	765	0	189	0	143	1,267	667	533
Sockeye	177,723	407,497	912,603	844,123	1,701,077	1,070,058	454,709	608,528	822,232	1,318,799	831,735	1,238,739
Coho	336	1,877	3,346	1,686	388	1,611	1,635	4,737	1,869	873	1,836	1,414
Pink	16,659	8,721	53,160	22,048	10,848	6,324	7,439	23,542	8,325	5,416	16,248	20,966
Chum	337	13,630	25,641	20,045	27,638	6,742	17,261	6,880	29,925	53,380	20,148	231,785
	$195,079	$432,317	$997,652	$888,689	$1,740,716	$1,084,735	$481,233	$643,687	$862,493	$1,379,735	$870,634	$1,493,437

-continued-

Table 5.–Page 2 of 2.

HATCHERY SALES											Previous 10 yr	
Species	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Average	2008
Chinook	22,621	0	0	0	15	0	0	0	0	0	2,264	0
Sockeye	953,857	143,855	478	174,418	418,114	1,769,179	997,020	2,383,400	2,173,808	1,790,819	1,080,495	0
Coho	63,980	0	2	9,459	1	0	35,733	0	102,792	161,995	37,396	67,879
Pink	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	6,356,054	7,574,535
Chum	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	2,363,975	2,465,426
	$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	$9,840,183	$10,107,840
OTHER GEAR												
Species												
Chinook	5,004	448	1,266	0	200	26	493	81	0	0	752	0
Sockeye	2,085	68,525	5,944	509	1,324	195	614	289	0	0	7,948	0
Coho	10	106		468	0	0	0	0	0	0	65	0
Pink	271	81,476		382	0	2812	0	0	0	0	9,438	0
Chum	13	358		4,206	5	0	0	0	0	0	509	0
	$7,383	$150,913	$7,210	$5,565	$1,529	$3,033	$1,107	$370	$0	$0	$17,711	$0

AVERAGE EARNINGS	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007		2008
Purse Seine	$65,590	$93,983	$143,942	$88,101	$41,481	$127,443	$54,210	$137,767	$102,232	$299,400	$115,415	$352,212
Drift Gillnet	$34,922	$53,280	$41,994	$39,731	$41,039	$39,327	$42,219	$46,807	$55,452	$67,335	$46,211	$57,262
Set Gillnet	$12,192	$20,587	$35,630	$27,772	$62,168	$38,741	$17,823	$23,840	$33,173	$53,067	$32,499	$59,737

NUMBER OF PERMITS FISHED												
Purse Seine	149	139	131	152	120	106	105	103	111	111	123	141
Drift Gillnet	522	523	535	535	534	514	522	508	494	506	519	507
Set Gillnet	16	21	28	32	28	28	27	27	26	26	26	25

Table 6.–Preseason harvest or total run projections for the 2008 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	47		742	64 – 1,420	288	69 – 507				
Bering River [d]	commercial harvest			19	1 – 37	43	0 – 95				
Coghill [e]	commercial harvest			90	0 – 257						
Eshamy [e]	commercial harvest			54	39 – 69						
Unakwik [f]	commercial harvest			9	6 – 12						
General PWS Districts	commercial harvest							1,510	0 – 7,560	246	134 – 357
Total Wild Stock		47		914	75 – 1,445	331	69 – 516	1,510	0 – 7,560	246	134 – 357
Solomon Gulch	total return							9,825	7,273 – 16,971		
Armin F. Koernig	total return							8,000	6,000 – 10,100	309	266 – 351
Wally Noerenberg [g]	total return					125		3,700	2,300 – 5,000	2,267	1,893 – 2,641
Cannery Creek	total return							4,500	2,000 – 8,100		
Main Bay [h]	total return			929	743 – 1,115						
Gulkana	total return			252	137 – 367						
Total Hatchery				1,181	756 – 1,174	125	0 – 0	26,025	9,909 – 21,923	2,576	1,912 – 2,664
Total Hatchery and Wild		47		2,095		456		27,535		2,822	

Note: All values are in thousands.

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

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

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

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

[e] Formalized sibling model forecast procedures are used for Coghill and Eshamy District sockeye salmon runs. The Coghill District's wild pink and chum salmon harvest is included in the "General PWS Districts" projection.

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

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

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

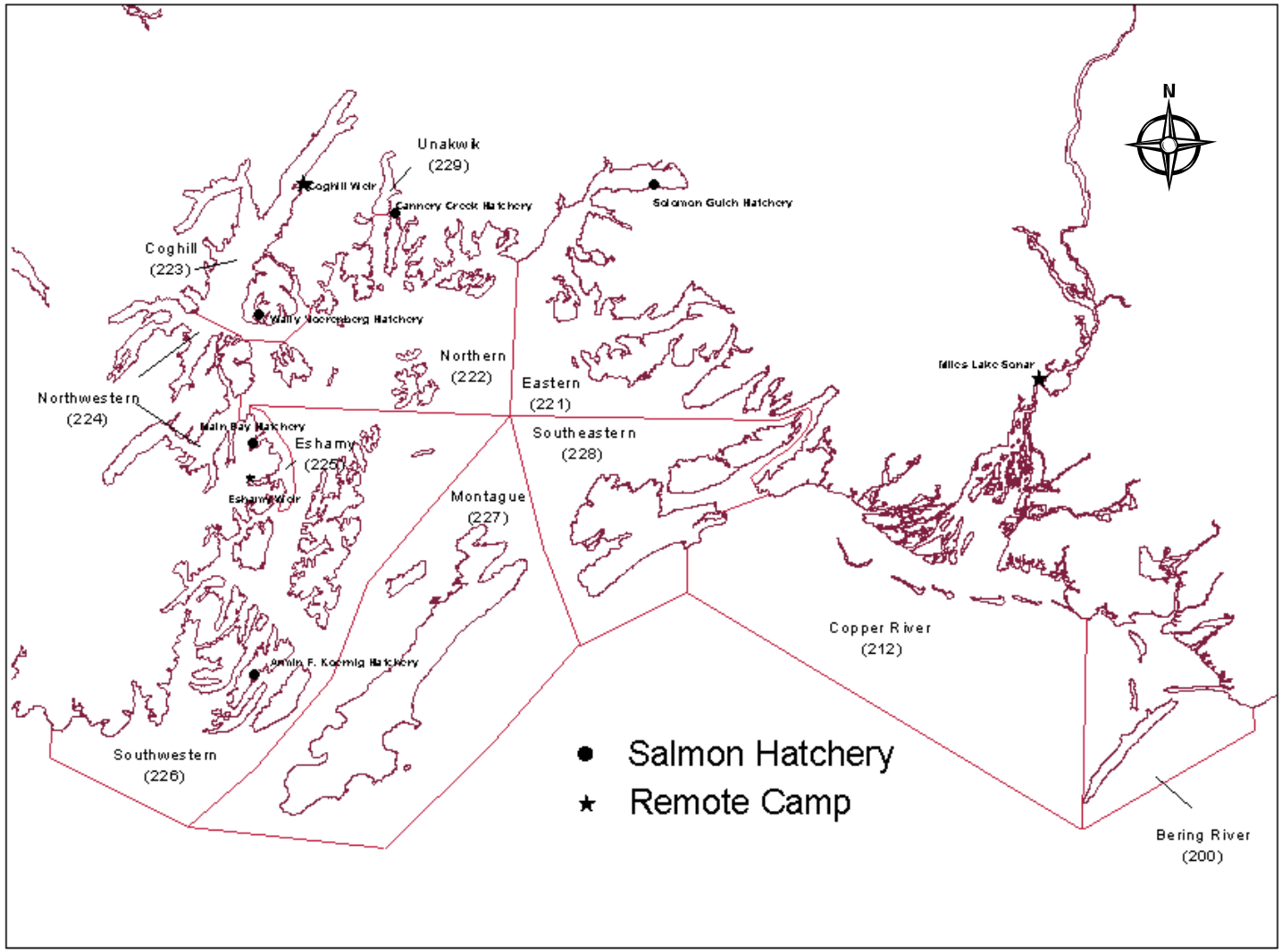

Figure 1.–Prince William Sound Management Area showing commercial fishing districts, salmon hatcheries, weir locations, and Miles Lake sonar camp.

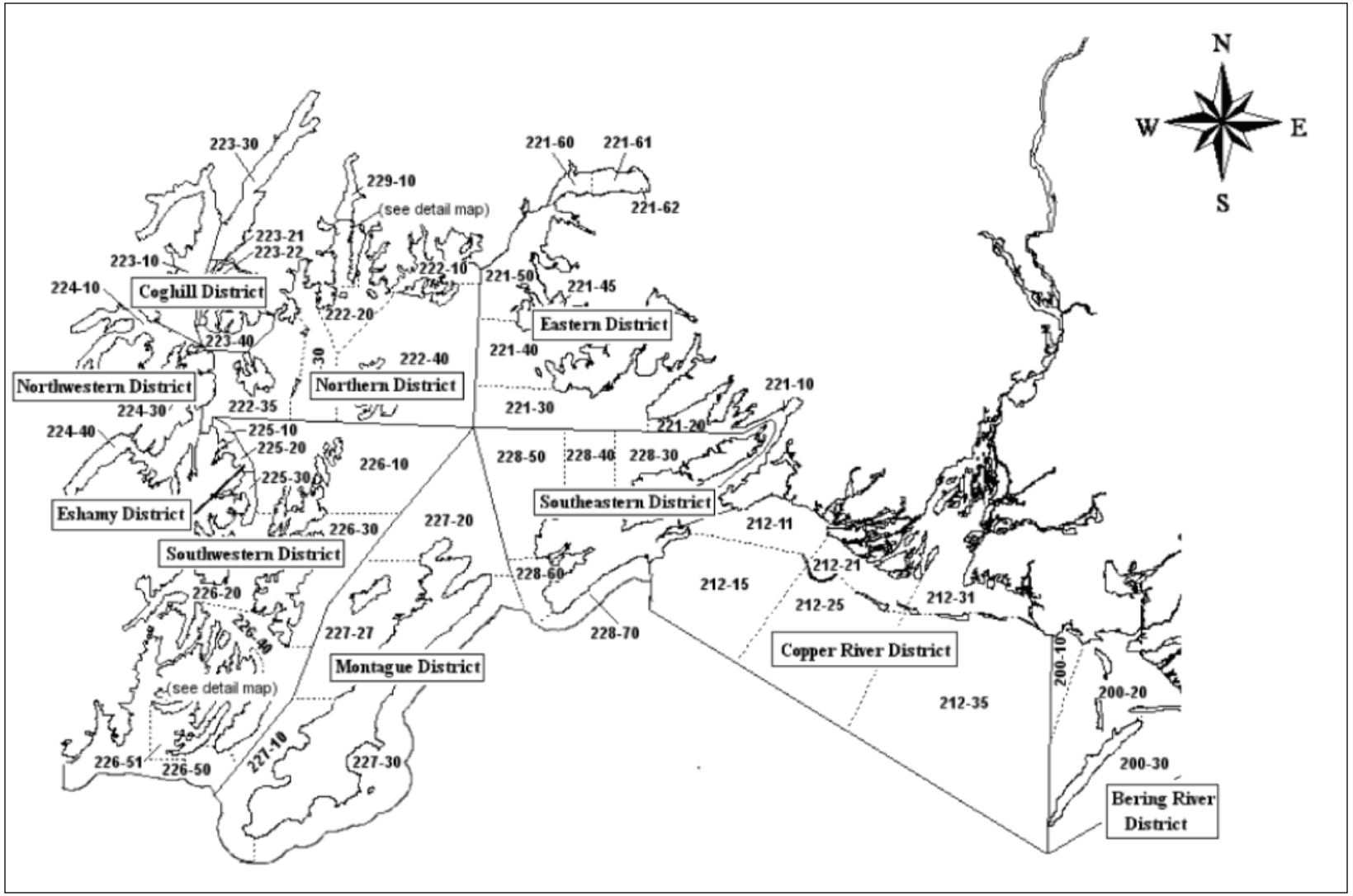

Figure 2.–Prince William Sound Area showing commercial fishing districts and statistical reporting areas.

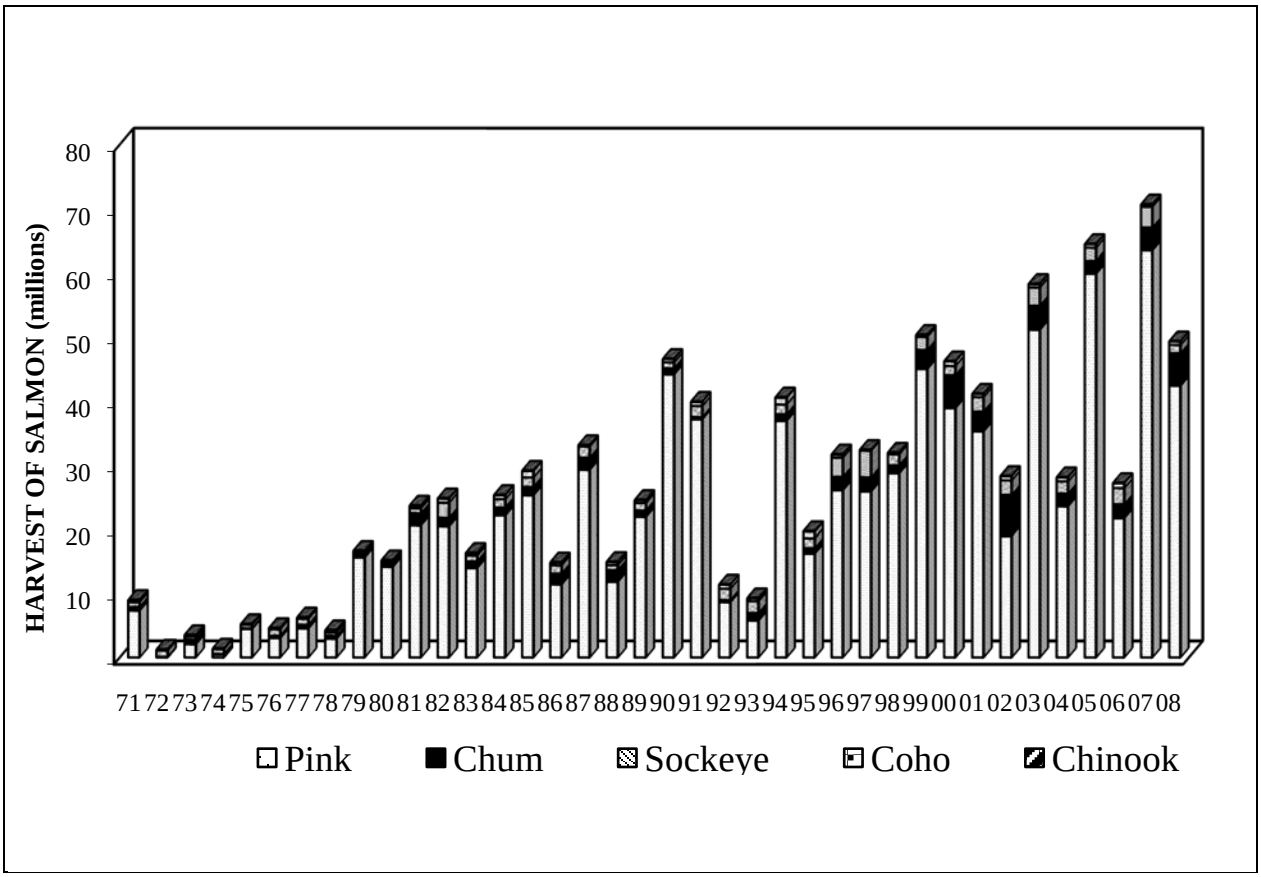

Figure 3.–Commercial salmon harvests in Prince William Sound, 1971–2008.

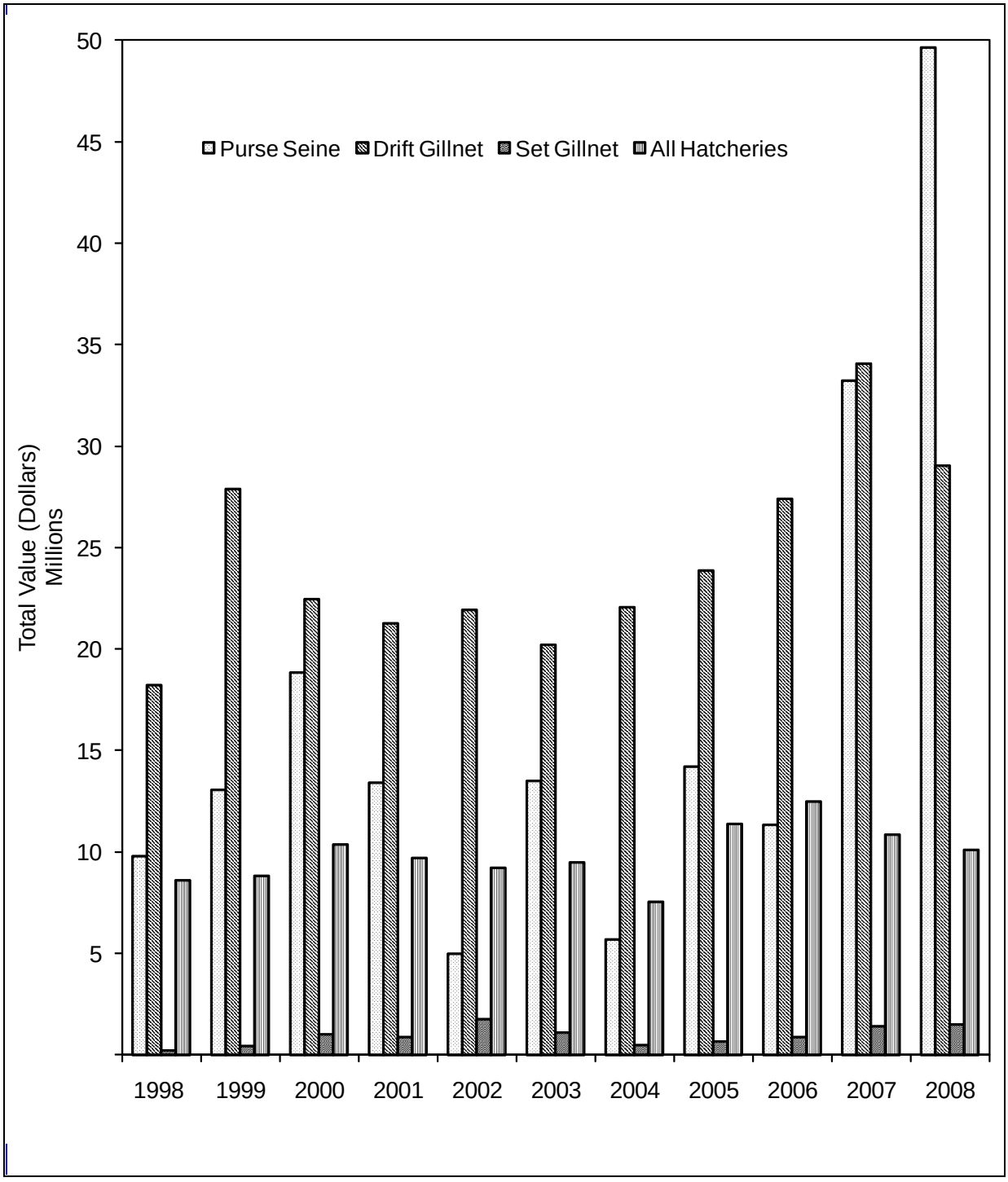

Figure 4.–Exvessel value of the commercial salmon harvest by gear type, 1998–2008.

APPENDIX A

Appendix A1.–Total estimated sockeye salmon runs to the Copper River by end user or destination with previous 10-year average, 1998–2008.

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	10-year Average	2008
Commercial harvest[a]	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	1,901,773	1,344,291	320,815
Commercial, homepack[a]	1,435	1,333	651	2,113	1,138	4,077	525	1,785	1,539	2,023	1,662	2,172
Commercial, donated[a]	0	0	434	0	128	35	74	83	114	0	87	80
Educational drift gillnet permit[a]	0	0	0	0	151	0	0	42	16	62	27	29
Subsistence (Cordova, drift gillnet)[b]	850	1,330	4,360	3,072	3,067	1,607	1,822	830	4,355	6,148	2,744	3,969
Federal Subsistence (PWS/Chugach Nat'l Forest, dipnet, spear, rod and reel)	0	0	0	0	0	0	0	109	150	36	30	32
Subsistence (Batzulnetas, dipnet, fish wheel or spear)[b]	582	55	0	62	208	164	182	0	0	1	125	1
Subsistence Reported (Glennallen Subdistrict, dipnet, fish wheel or spear)[b]	61,363	72,901	58,241	76,337	47,892	44,209	52,130	60,966	55,492	61,477	59,101	40,214
Federal Subsistence (Glennallen subdistrict, dipnet, fish wheel or spear)	0	0	0	0	7,950	13,616	17,704	19,973	16,711	15,225	9,118	11,347
Personal Use Reported (Chitina Subdistrict, dipnet)[b]	132,929	137,729	103,329	117,440	75,881	80,134	93,182	108,868	102,443	112,753	106,469	70,885
Federal Subsistence (Chitina subdistrict, dipnet)	0	0	0	0	575	717	1,215	1,265	1,379	929	608	789
Upriver sport harvest[c]	11,184	11,101	12,361	8,169	7,761	7,108	6,464	8,135	14,297	23,028	10,961	11,806
Delta sport harvest[c]	2,015	2,855	2,189	298	798	631	952	656	113	1,704	1,221	811
Upriver spawning escapement[d]	470,322	458,643	300,134	516,163	584,293	464,807	451,455	533,407	605,043	632,236	501,650	498,587
Delta spawning escapement[e]	175,000	201,950	196,090	142,130	151,470	146,300	138,770	116,812	197,792	176,570	164,288	135,900
Hatchery broodstock/Excess[f]	144,174	138,432	75,385	75,620	62,361	45,024	6,618	91,058	96,552	27,602	76,283	44,499
Total estimated sockeye salmon run size	2,341,546	2,708,888	1,633,508	2,264,981	2,192,176	1,996,481	1,819,097	2,275,653	2,592,750	2,961,567	2,278,665	1,141,936

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

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

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

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

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

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

Appendix A2.–Total estimated sockeye salmon runs to the Copper River by origin with previous 10-year average, 1998–2008.

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	10-year Average	2008
Upriver wild contribution[a]	1,175,931	961,490	642,148	1,576,270	1,371,926	1,380,008	1,353,766	1,753,108	1,773,690	2,264,899	1,425,324	853,652
Delta wild contribution[b]	463,646	620,420	514,399	380,346	393,448	413,253	371,485	306,820	531,312	564,510	455,964	202,289
Gulkana contributions[c]	701,969	1,126,979	476,960	308,365	426,801	203,219	93,845	215,724	287,748	132,158	397,377	85,996
Total estimated sockeye salmon run size	2,341,546	2,708,888	1,633,508	2,264,981	2,192,176	1,996,481	1,819,097	2,275,653	2,592,750	2,961,567	2,278,665	1,141,936

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

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

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

Appendix A3.–Total estimated Chinook salmon run to the Copper River by end user or destination with previous 10-year average, 1998–2008.

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	10-year Average	2008
Commercial harvest[a]	68,827	62,337	31,259	39,524	38,734	47,721	38,191	34,624	30,278	39,095	43,059	11,437
Commercial, homepack[a]	1,411	1,115	740	935	773	1,073	539	760	779	1,019	914	537
Commercial, donated[a]	0	0	6	0	4	3	5	11	3	0	3	4
Educational drift gillnet permit[a]	0	0	0	0	25	0	0	92	11	70	20	47
Subsistence (Cordova, drift gillnet)[b]	295	353	689	826	549	710	1,106	260	779	1,145	671	470
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]	1,752	3,058	4,782	3,254	3,424	2,395	3,166	2,080	2,444	3,106	2,946	2,238
Federal Subsistence (Glennallen subdistrict, dipnet, fish wheel or spear)	0	0	0	0	564	554	636	345	430	569	310	705
Personal Use harvests (Chitina Subdistrict, dipnet)[b]	6,610	5,755	3,037	2,731	1,763	1,870	2,108	1,776	2,071	2,388	3,011	1,690
Federal Subsistence (Chitina subdistrict, dipnet)	0	0	0	0	33	18	7	22	13	26	12	22
Sport harvest[c]	8,245	6,742	5,531	4,904	5,098	5,717	3,435	4,093	3,425	5,123	5,231	4,359
Upriver spawning escapement[d]	11,386	16,157	24,490	26,534	21,574	22,802	23,911	21,604	59,337	35,957	26,375	30,143
Total estimated Chinook salmon run size	98,526	95,517	70,534	78,708	72,541	82,863	73,104	65,667	99,570	88,498	82,553	51,652

[a] Numbers are from fish ticket data.

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

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

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

Appendix A4.–Total commercial salmon harvest by species in the Copper River District, 1960–2008.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1960	14,052	593,824	118,395	375	314	726,960
1961	7,621	528,223	133,987	1,639	106	671,576
1962	14,792	677,626	174,628	1,880	513	869,439
1963	10,871	375,925	202,621	1,487	85	590,989
1964	12,751	699,548	242,666	548	62	955,575
1965	15,390	818,277	70,786	803	331	905,587
1966	11,422	1,005,615	116,147	717	115	1,134,016
1967	9,853	679,503	160,532	573	218	850,679
1968	9,743	573,270	230,867	4,343	473	818,696
1969	14,040	696,836	77,405	847	244	789,372
1970	19,375	1,115,695	161,892	645	687	1,298,294
1971	16,486	616,801	208,915	1,762	5,287	849,251
1972	22,250	727,144	103,021	2,304	717	855,436
1973	19,947	332,816	132,164	8,964	10,173	504,064
1974	18,980	607,766	46,625	9,839	664	683,874
1975	19,644	335,384	53,805	236	807	409,876
1976	31,479	865,195	111,900	3,392	178	1,012,144
1977	21,722	602,737	131,356	23,185	335	779,335
1978	29,062	249,872	220,338	3,512	2,233	505,017
1979	17,678	80,528	194,885	1,295	107	294,493
1980	8,454	18,908	225,299	3,966	198	256,825
1981	20,178	477,662	310,154	23,952	1,799	833,745
1982	47,362	1,177,632	454,763	7,154	1,177	1,688,088
1983	50,022	626,735	234,243	7,345	2,217	920,562
1984	38,957	900,043	382,432	32,194	6,935	1,360,561
1985	42,214	927,553	587,990	19,061	5,966	1,582,784
1986	40,670	780,808	295,980	3,016	17,614	1,138,088
1987	41,001	1,180,782	111,599	31,635	14,796	1,379,813
1988	30,741	576,950	315,568	2,775	11,022	937,056
1989	30,863	1,025,923	194,454	25,877	5,845	1,282,962
1990	21,702	844,778	246,797	1,596	7,545	1,122,418
1991	34,787	1,206,811	385,086	1,246	20,220	1,648,150
1992	39,810	970,938	291,627	1,664	5,807	1,309,846
1993	29,727	1,398,234	281,469	9,579	13,002	1,732,011
1994	47,061	1,152,220	677,633	12,079	19,055	1,908,048
1995	65,675	1,271,822	542,658	19,809	56,100	1,956,064
1996	55,646	2,356,365	193,042	6,372	25,533	2,636,958
1997	51,273	2,955,431	18,656	8,483	2,465	3,036,308
1998	68,827	1,341,692	108,232	20,829	5,022	1,544,602
1999	62,337	1,682,559	153,061	10,205	25,321	1,933,483
2000	31,259	880,334	304,944	9,804	5,363	1,231,704
2001	39,524	1,323,577	251,473	9,387	2,789	1,626,750
2002	38,734	1,248,503	504,223	3,677	31,627	1,826,764
2003	47,721	1,188,052	363,489	12,934	10,110	1,622,306
2004	38,191	1,048,004	467,859	5,175	3,386	1,562,615
2005	34,624	1,331,664	263,465	34,987	3,515	1,668,255
2006	30,278	1,496,754	318,285	30,844	17,203	1,893,364
2007	39,095	1,901,773	117,182	80,715	9,657	2,148,422
10-Year Average	43,059	1,344,291	285,221	21,856	11,399	1,705,827
2008	11,437	320,815	202,621	1,437	1,279	537,589

Appendix A5.–Copper River District commercial drift gillnet salmon harvest by period, 2008.

		Emergency Order				Chinook		Sockeye		Coho		Pink		Chum	
Period [a]	Date	Issued	Hours	Permits	Landings	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds
01 [b]	05/15–05/15	2-F-E-001-08	12	170	190	765	17,158	2,469	13,532	0	0	0	0	0	0
02 [b]	05/19–05/19	2-F-E-002-08	12	466	559	2,068	43,056	31,025	168,531	1	17	0	0	97	680
03	05/22–05/22	2-F-E-003-08	12	444	533	1,915	38,140	38,853	216,375	0	0	0	0	45	298
04	05/26–05/26	2-F-E-005-08	12	457	517	1,584	33,108	49,952	279,855	0	0	0	0	25	177
05 [c]	06/02–06/02	2-F-E-007-08	12	372	491	1,503	34,749	43,887	257,138	0	0	0	0	173	1,251
06	06/05–06/05	2-F-E-010-08	12	341	410	1,763	42,447	43,480	256,554	1	6	2	5	484	3,164
07	06/09–06/09	2-F-E-013-08	12	339	389	975	21,232	47,073	276,558	1	11	0	0	38	271
08	06/16–06/16	2-F-E-021-08	12	220	271	814	20,414	26,564	161,206	1	8	0	0	27	208
09	07/05–07/05	2-F-E-059-08	12	125	138	11	246	9,626	61,961	7	57	10	35	110	898
10	07/07–07/08	2-F-E-060-08	24	69	82	30	837	6,328	39,605	39	289	84	246	246	1,906
11	07/10–07/11	2-F-E-067-08	24	35	46	4	98	7,177	42,918	17	141	40	161	8	71
12	07/14–07/15	2-F-E-073-08	24	57	71	1	41	8,250	50,220	55	453	14	49	5	37
13	07/17–07/18	2-F-E-077-08	24	29	30	0	0	775	4,760	11	75	5	17	14	95
14	07/21–07/22	2-F-E-084-08	24	43	43	8	50	2,948	17,977	226	1,912	197	759	39	330
15	07/24–07/25	2-F-E-092-08	24	6	6	0	0	501	3,272	19	153	5	17	3	28
16	07/28–07/29	2-F-E-095-08	24	28	30	1	3	1,439	8,943	315	2,379	114	476	4	32
17	07/31–08/01	2-F-E-099-08	24	8	8	0	0	134	802	65	509	25	103	0	0
18	08/04–08/05	2-F-E-102-08	24	4	4	0	0	41	235	112	797	541	1,948	3	27
19	08/07–08/08	2-F-E-108-08	24	6	6	0	0	89	515	347	2,886	78	279	0	0
20	08/11–08/12	2-F-E-110-08	24	35	38	7	61	96	598	2,395	23,260	168	560	3	22
21	08/14–08/15	2-F-E-115-08	24	47	49	0	0	32	206	3,797	37,117	34	102	1	10
22	08/18–08/19	2-F-E-119-08	24	144	206	1	13	37	227	20,163	189,634	78	265	0	0
23	08/25–08/26	2-F-E-124-08	24	202	360	0	0	27	170	53,794	544,558	20	83	2	17
24	08/28–08/29	2-F-E-128-08	24	195	407	0	0	5	36	39,910	402,521	4	16	0	0
25	09/01–09/02	2-F-E-131-08	24	124	182	0	0	3	19	19,588	194,895	9	31	1	6
26	09/04–09/05	2-F-E-137-08	24	129	185	0	0	0	0	19,339	198,319	5	24	0	0
27	09/08–09/09	2-F-E-138-08	24	115	146	0	0	0	0	16,208	165,614	4	14	0	0
28	09/11–09/13	2-F-E-139-08	48	108	209	0	0	4	24	14,716	154,024	0	0	2	12
29	09/15–09/17	2-F-E-147-08	48	88	141	0	0	0	0	9,795	100,392	0	0	0	0
30	09/18–09/20	2-F-E-150-08	60	22	26	0	0	0	0	1,029	10,442	0	0	0	0
31	09/22–09/24	2-F-E-154-08	60	11	15	0	0	0	0	461	4,851	0	0	0	0
32	09/25–09/27	2-F-E-158-08	60	0	0	0	0	0	0	0	0	0	0	0	0
33	09/29–10/01	2-F-E-161-08	60	0	0	0	0	0	0	0	0	0	0	0	0
34	10/02–10/04	2-F-E-163-08	60	0	0	0	0	0	0	0	0	0	0	0	0
35	10/06–10/11	2-F-E-165-08	132	0	0	0	0	0	0	0	0	0	0	0	0
Total			1,068	492	5,788	11,450	251,653	320,815	1,862,237	202,412	2,035,320	1,437	5,190	1,330	9,540
Average Weight						21.9		5.8		10.0		3.6		7.1	

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

[b] Waters inside of the barrier islands to the grass bank markers were open.

[c] Waters north of a line from Pt. Steele (60° 20.90' N. lat., 146° 11.70' W. long) to the southern tip of Wingham Island (59° 59.25' N.lat., 144° 22.25' W. long.) were open.

Appendix A6.–Daily salmon escapement estimates at Miles Lake sonar, 2008.

		Estimated Daily Escapement Counts						Minimum Inriver Escapement Objective		Maximum Inriver Escapement Objective	
Date	Water Level	North Bank	South Bank	Daily	Cumulative	0600 Count	Projected Daily	Daily	Cumulative	Daily	Cumulative
15 May [a]			6	6	6		0	NA	NA	NA	NA
16 May	39.20	NA	84	84	90	6	24	398	398	527	527
17 May	39.14	NA	186	186	276	60	240	630	1,028	835	1,363
18 May	39.07	90	402	492	768	102	408	1,893	2,921	2,509	3,872
19 May	39.09	258	1,285	1,543	2,311	151	604	3,325	6,247	4,407	8,278
20 May	39.11	762	3,816	4,578	6,889	864	3,456	4,846	11,093	6,422	14,700
21 May	39.28	759	5,994	6,753	13,642	1,494	5,976	5,467	16,560	7,245	21,945
22 May	39.39	1,002	3,690	4,692	18,334	1,200	4,800	8,414	24,974	11,150	33,096
23 May	39.53	795	4,134	4,929	23,263	804	3,216	9,602	34,576	12,725	45,821
24 May	39.56	1,946	4,911	6,857	30,120	1,443	5,772	10,598	45,175	14,045	59,866
25 May	39.68	1,342	4,314	5,656	35,776	1,152	4,608	12,097	57,271	16,031	75,896
26 May	39.94	3,182	3,360	6,542	42,318	1,098	4,392	14,928	72,200	19,783	95,679
27 May	40.41	3,739	3,696	7,435	49,753	1,507	6,028	14,130	86,330	18,725	114,404
28 May	40.57	3,456	7,326	10,782	60,535	1,944	7,776	15,027	101,357	19,914	134,318
29 May	40.84	3,700	6,030	9,730	70,265	2,422	9,688	15,082	116,438	19,986	154,305
30 May	41.00	3,463	7,092	10,555	80,820	2,142	8,568	16,463	132,902	21,817	176,122
31 May	40.80	4,788	9,798	14,586	95,406	2,742	10,968	14,437	147,339	19,132	195,254
1 Jun	40.63	4,646	13,280	17,926	113,332	4,116	16,464	16,565	163,903	21,952	217,205
2 Jun	40.52	8,530	14,802	23,332	136,664	4,853	19,412	14,977	178,880	19,847	237,052
3 Jun	40.50	7,124	20,442	27,566	164,230	5,412	21,648	14,843	193,723	19,669	256,722
4 Jun	40.50	5,232	20,022	25,254	189,484	5,875	23,500	13,686	207,409	18,137	274,859
5 Jun	40.55	4,795	10,278	15,073	204,557	3,404	13,616	14,878	222,286	19,716	294,574
6 Jun	40.43	3,605	9,762	13,367	217,924	2,847	11,388	12,638	234,924	16,748	311,322
7 Jun	40.33	3,270	8,184	11,454	229,378	2,344	9,376	13,864	248,788	18,373	329,695
8 Jun	40.36	2,136	6,168	8,304	237,682	2,173	8,692	14,523	263,311	19,246	348,941

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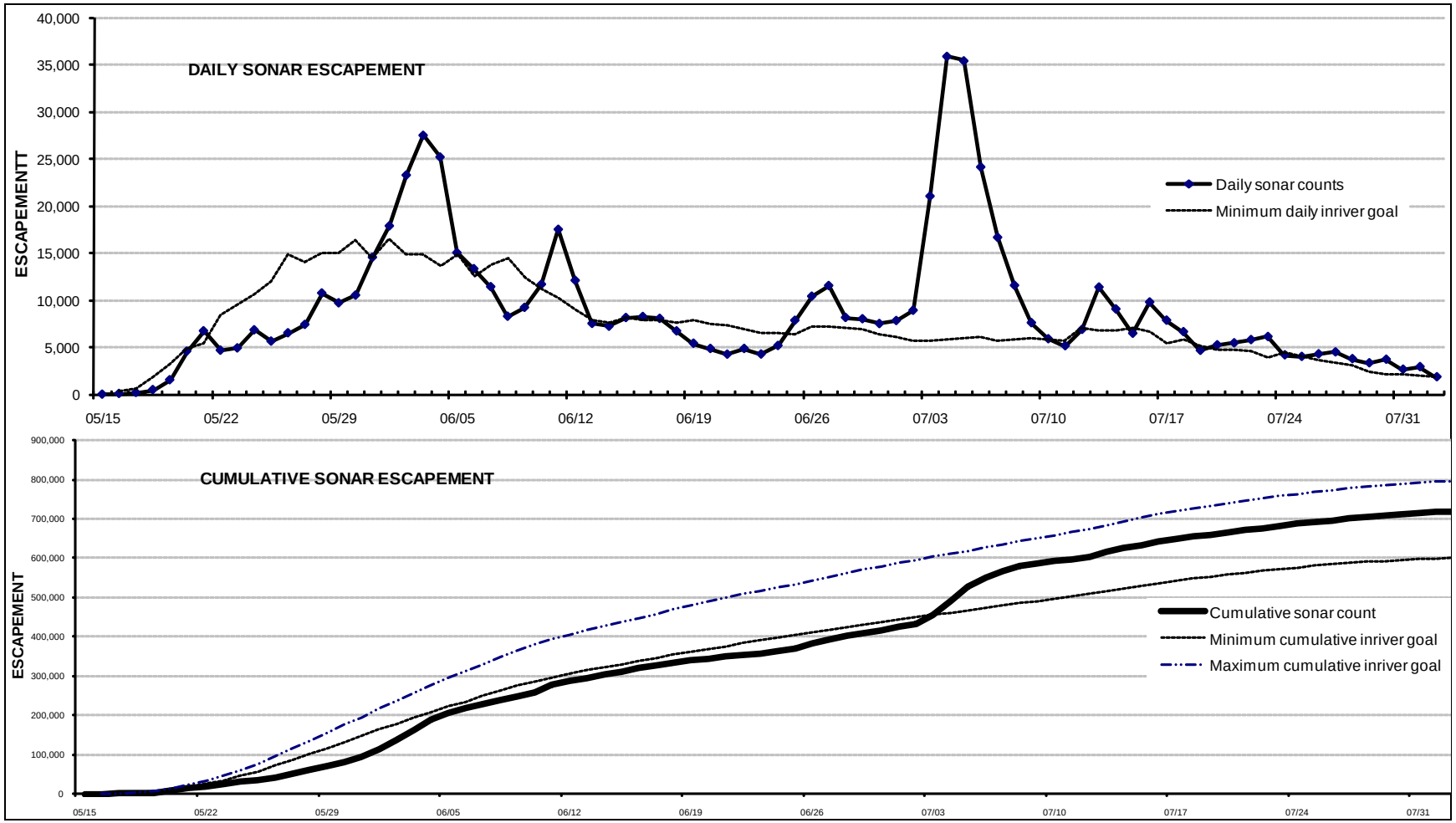
Appendix A6.–Page 2 of 2.

Date	Water Level	Estimated Daily Escapement Counts: North Bank	South Bank	Daily	Cumulative	0600 Counts	Projected Daily	Minimum Inriver Escapement Objective: Daily	Cumulative	Minimum Inriver Escapement Objective: Daily	Cumulative
9 Jun	40.27	2,948	6,297	9,245	246,927	1,744	6,976	12,508	275,820	16,576	365,517
10 Jun	40.51	1,968	9,744	11,712	258,639	2,250	9,000	11,210	287,029	14,855	380,372
11 Jun	40.66	3,768	13,788	17,556	276,195	3,432	13,728	10,235	297,264	13,563	393,935
12 Jun	40.87	2,151	9,972	12,123	288,318	3,018	12,072	9,051	306,315	11,995	405,930
13 Jun	41.05	1,698	5,838	7,536	295,854	2,040	8,160	7,894	314,210	10,462	416,392
14 Jun	41.22	1,764	5,478	7,242	303,096	1,560	6,240	7,709	321,919	10,216	426,608
15 Jun	41.43	3,198	4,968	8,166	311,262	1,524	6,096	8,159	330,078	10,812	437,420
16 Jun	41.56	2,634	5,640	8,274	319,536	2,100	8,400	7,963	338,041	10,553	447,973
17 Jun	41.74	1,917	6,156	8,073	327,609	1,896	7,584	7,888	345,929	10,453	458,426
18 Jun	41.93	1,152	5,592	6,744	334,353	1,710	6,840	7,643	353,572	10,128	468,554
19 Jun	42.07	630	4,800	5,430	339,783	1,236	4,944	7,895	361,467	10,463	479,017
20 Jun	42.17	618	4,254	4,872	344,655	1,062	4,248	7,512	368,979	9,955	488,972
21 Jun	42.29	624	3,642	4,266	348,921	798	3,192	7,316	376,295	9,695	498,667
22 Jun	42.53	330	4,542	4,872	353,793	1,062	4,248	7,015	383,310	9,297	507,964
23 Jun	42.80	216	4,062	4,278	358,071	786	3,144	6,558	389,868	8,690	516,654
24 Jun	42.57	312	4,875	5,187	363,258	1,016	4,064	6,511	396,379	8,629	525,283
25 Jun	42.21	696	7,176	7,872	371,130	1,470	5,880	6,436	402,815	8,529	533,812
26 Jun	42.05	930	9,504	10,434	381,564	2,196	8,784	7,181	409,996	9,516	543,328
27 Jun	42.00	1,398	10,176	11,574	393,138	2,634	10,536	7,225	417,221	9,574	552,902
28 Jun	41.86	1,152	7,020	8,172	401,310	1,800	7,200	7,084	424,305	9,387	562,290
29 Jun	41.70	1,944	6,090	8,034	409,344	1,806	7,224	6,958	431,263	9,221	571,511
30 Jun	41.54	1,920	5,604	7,524	416,868	1,524	6,096	6,424	437,687	8,514	580,024
1 Jul	41.43	1,524	6,324	7,848	424,716	1,692	6,768	6,106	443,793	8,092	588,116

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

Appendix A7.–Minimum and maximum inriver sonar goal versus actual daily and cumulative salmon escapement, Miles Lake Sonar, 2008.



Appendix A8.–Salmon escapement at the Miles Lake Sonar, 1978–2008.

Year	Total	Rank
1978	107,011	31
1979	248,709	30
1980	283,856	29
1981	535,263	23
1982	467,306	26
1983	545,724	21
1984	536,806	22
1985	436,313	28
1986	457,421	27
1987	480,917	25
1988	488,398	24
1989	607,797	15
1990	581,859	19
1991	579,435	20
1992	601,952	16
1993	833,387	9
1994	715,577	12
1995	599,265	17
1996	906,239	4
1997	1,148,079	1
1998	866,957	5
1999	850,951	7
2000	587,497	18
2001	833,569	8
2002	819,794	10
2003	700,543	13
2004	669,514	14
2005	855,125	6
2006	959,706	2
2007	919,600	3
10-Year Average	806,326	
2008	718,344	11

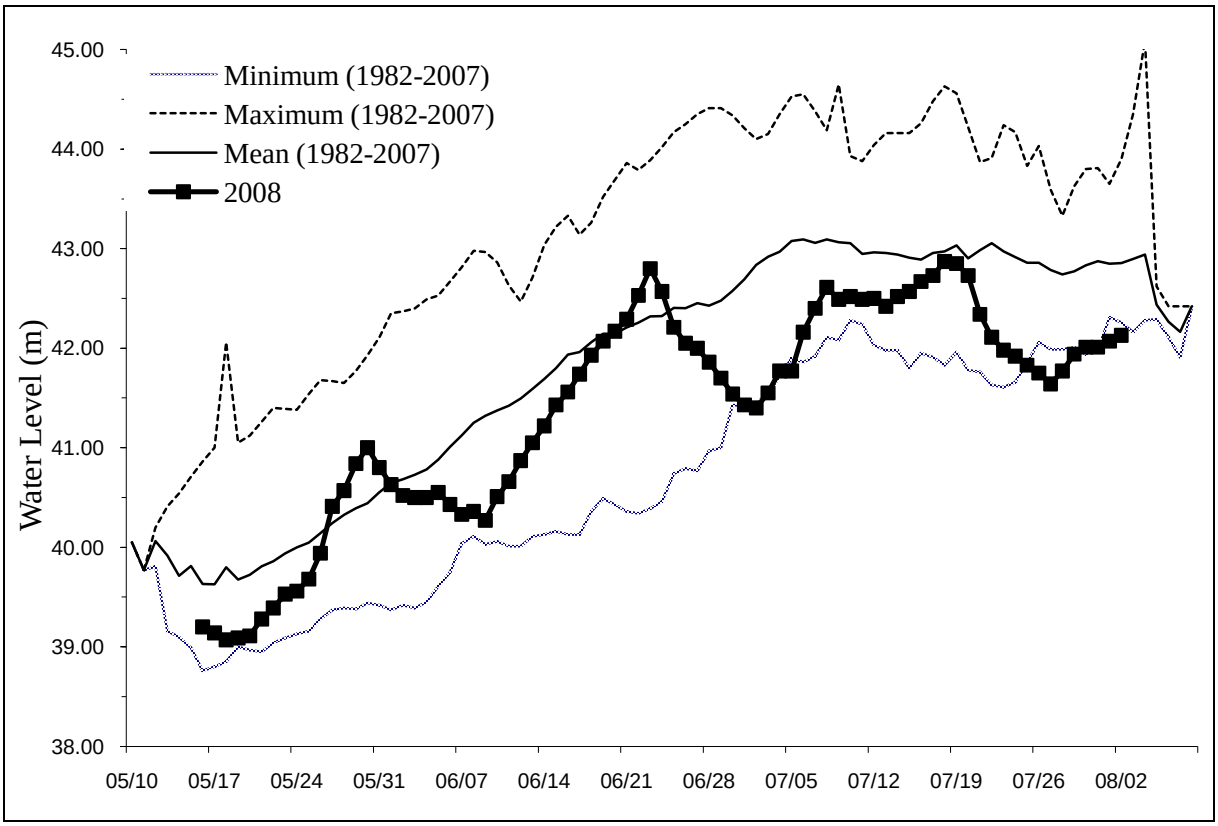
Appendix A9.–Anticipated and actual semi-weekly harvest of sockeye, Chinook and coho salmon in the Copper River District drift gillnet fishery, 2008.

Semi-Weekly Date		Fishing Time (Hours)	Anticipated Sockeye salmon Harvest [a]	Actual Sockeye salmon Harvest	Anticipated Chinook salmon Harvest [b]	Actual Chinook salmon Harvest	Anticipated Coho salmon Harvest [c]	Actual Coho salmon Harvest
05/17	Sat	12	17,105	2,469	5,673	765	0	0
05/21	Wed	12	44,823	31,025	6,729	2,068		1
05/24	Sat	12	56,013	38,853	6,927	1,915	2	0
05/28	Wed	12	53,343	49,952	4,379	1,584		0
05/31	Sat	0	38,557	0	3,767	0	23	0
06/04	Wed	12	74,724	43,887	6,072	1,503		0
06/07	Sat	12	44,650	43,480	3,607	1,763	15	1
06/11	Wed	12	27,804	47,073	2,505	975		1
06/14	Sat	0	23,596	0	1,908	0	54	0
06/18	Wed	12	34,289	26,564	2,111	814		1
06/21	Sat	0	24,052	0	984	0	88	0
06/25	Wed	0	35,978	0	815	0		0
06/28	Sat	0	27,671	0	424	0	224	0
07/02	Wed	0	31,804	0	374	0		0
07/05	Sat	12	30,279	9,626	183	11	390	7
07/09	Wed	24	40,825	6,328	204	30		39
07/12	Sat	24	29,141	7,177	78	4	743	17
07/16	Wed	24	37,049	8,250	73	1		55
07/19	Sat	24	17,484	775	30	0	1,871	11
07/23	Wed	24	17,621	2,948	25	8		226
07/26	Sat	24	7,636	501	17	0	1,973	19
07/30	Wed	24	9,215	1,439	7	1		315
08/02	Sat	24	5,561	134	5	0	4,304	65
08/06	Wed	24	4,130	41	3	0		112
08/09	Sat	24	2,605	89	2	0	13,037	347
08/13	Wed	24	2,790	96	5	7		2,395
08/16	Sat	24	1,341	32	1	0	26,348	3,797
08/20	Wed	24	770	37	3	1		20,163
08/23	Sat	0	589	0	1	0	48,087	0
08/27	Wed	24	317	27	1	0		53,794
08/30	Sat	24	157	5	0	0	58,235	39,910
09/03	Wed	24	124	3	0	0		19,588
09/06	Sat	24	73	0	0	0	64,484	19,339
09/10	Wed	24	28	0	0	0		16,208
09/13	Sat	48	10	4	0	0	40,913	14,716
09/17	Wed	48	8	0	0	0		9,795
09/20	Sat	60	3	0	0	0	18,210	1,029
09/24	Wed	60	0	0	0	0		461
09/27	Sat	60	0	0	0	0	7,523	0
10/01	Wed	60	0	0	0	0		0
10/04	Sat	60	0	0	0	0	1,175	0
10/08	Wed	60	0	0	0	0		0
10/11	Sat	132	0	0	0	0	311	0
Total		1,128	742,165	320,815	46,915	11,450	288,010	202,412

[a] Sockeye salmon anticipated harvest is based on the midpoint preseason forecast (742,166) and the 1998–2007 harvest timing.

[b] Chinook salmon anticipated harvest is based on the preseason harvest forecast (46,908) and the 1998–2007 harvest timing. This harvest forecast is the total run forecast minus the lower escapement goal threshold times the mean commercial exploitation rate. Therefore, the Chinook salmon harvest should be considered a maximum harvest because the escapement goal is a lower threshold, not a range based on midpoint preseason forecast (742,166) and the 1998–2007 harvest timing.

[c] Coho salmon anticipated harvest is based on the midpoint preseason forecast (288,013) and the 1969–2007 harvest timing.



Appendix A10.–Water height at the Million Dollar Bridge, 2008.

Appendix A11.–Aerial escapement indices by statistical week and location for sockeye salmon returning to the Copper River Delta, 2008.

	Weekly Escapement Indices (Statistical Week Ending Date Listed) [b]																					
System [a]	Jun 14	Jun 21	Jun 28	Jul 5	Jul 12	Jul 19	Jul 26	Aug 2	Aug 9	Aug 16	Aug 23	Aug 30	Sep 6	Sep 13	Sep 20	Sep 27	Oct 4	Oct 11	Oct 18	Oct 25	Site [d]	System [e]	Anticipated (by drainage)
Eyak River																							
Eyak River		2,640*		2,520	530			60		200		0				0	0				2,640	10,070	9,972 to 23,571
West Shore Beaches		0		10	210			280		570*		420				400	0				570		
East Shore Beaches		330		500	2,160			2,810		4,020*		3,460				700	150				4,020		
Middle Arm Beaches [c]		270		340	371			1,800		1,900*		1,830				370	330				1,900		
North Shore Beaches		0		10	0			0		50		0				160*	0				160		
Hatchery Creek Delta		0		140	30			130		400*		410				0	0				400		
Hatchery Creek		0		10	160*			10		0		0				10	0				160		
Power Creek Delta		0		30	0			0		100*		20				1	0				100		
Power Creek		0		0	40			120*		100		40				0	0				120		
Ibeck Creek																							
Ibeck Creek		ns		ns	ns			41*		23		21				2	0				41	41	
Alaganik Slough																							
Alaganik Slough		200		610*	0			20		0		0				0	0				610	4,940	8,359 to 19,758
McKinley Lake		0		0	2,110			1,020		3,510*		2,201				410	700				3,510		
Salmon Creek West Fork		0		0	0			610*		370		420				380	70				610		
Salmon Creek East Fork		0		0	0			210*		60		60				10	0				210		
26/27 Mile Creek																							
26/27 Mile Creek		0		0	0			0		0		0				0	8*				8	8	2,182 to 5,157
39 Mile Creek																							
39 Mile Creek		10		0	200			1,960		2,950*		1,978				225	40				2,950	2,950	5,772 to 13,642
Goat Mountain																							
Goat Mountain Creek		0		0	0			0		100*		0				23	0				100	100	549 to 1,298
Pleasant Creek																							
Pleasant Creek		420		4,350	4,920*			600		80		0				0	0				4,920	4,920	1,075 to 2,542
Martin River																							
Martin River - Lower		50		510	3,220*			30		0		0				0	0				3,220	3,220	
Ragged Point River		0		110	20			450*		0		10				0	10				450	3,430	
Ragged Point Lake Outlet		0		0	0			0		0		140*				112	0				140		
Ragged Point Lake		0		0	0			1,100		2,310		2,840*				1,610	860				2,840		

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	Weekly Escapement Indices (Statistical Week Ending Date Listed) [b]																							
System [a]	Jun 14	Jun 21	Jun 28	Jul 5	Jul 12	Jul 19	Jul 26	Aug 2	Aug 9	Aug 16	Aug 23	Aug 30	Sep 6	Sep 13	Sep 20	Sep 24	Oct 4	Oct 11	Oct 16	Oct 25	Site [d]	System [e]	Anticipated, (by drainage)	
Martin River - Upper [c]		280		2,890	3,220*			90		40		0				0	0				3,220	3,220		
Martin Lake Outlet		100*		0	0			20		0		0				0	0				100	8,970	17,598 to	41,596
Martin Lake		60		5,020*	660			1,180		40		200				960	320				5,020			
Martin Lake Feeders		0		160	3,850*			3,490		3,380		20				0	20				3,850			
Pothole River		ns		0	560*			440		50		110				0	0				560	5,800		
Pothole Lake		ns		0	20			10		5,240*		3,610				1,700	1530				5,240			
Little Martin River		40		0	10			140*		0		1				0	0				140	1,060		
Little Martin Lake		0		10	130			431		920*		670				70	60				920			
Tokun																								
Tokun Springs		0		420*	0			0		250		0				0	0				420	18,321	5,352 to	12,649
Tokun River		1,200		2,060*	520			410		50		310				20	0				2,060			
Tokun Lake Outlet		0		0	4,000			3,000		1,200*		100				0	0				1,200			
Tokun Lake		3,300		13,300	5,380			6,640		14,641*		7,762				4,600	2,501				14,641			
Martin River Slough																								
Martin River Slough		410		900*	881			633		100		12				0	0				900	900	4,141 to	9,787
Total	0	9,310	0	33,900	33,202	0	0	27,735	0	42,654	0	26,645	0	0	0	11,763	6,599	0	0	0		67,950		
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

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

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

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

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

[d] The escapement estimates for each site is in the asterisked 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.

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

Appendix A12.–Copper River and Bering River area sockeye salmon escapement indices, 1998–2008.

Stream/Lake [a,b]	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	10 yr Average	2008
Eyak Lake	16,300	18,100	20,500	7,400	13,375	12,900	14,300	9,130	26,290	28,640	16,694	9,290
Hatchery Creek	3,300	200	2,800	950	1,700	0	500	290	2,700	980	1,342	560
Power Creek	1,500	1,400	6,700	2,450	1,600	850	1,500	566	2,320	1,030	1,992	220
Ibek Creek	[c]	50	[c]	1,500	0	475	2,300	500	620	142	698	41
McKinley Lake	11,300	400	2,850	2,080	4,200	3,200	4,500	360	4,306	3,740	3,694	3,510
Salmon Creek	3,300	7,100	4,220	9,650	4,900	1,800	7,400	7,260	4,660	2,630	5,292	820
26/27 Mile Creek	1,800	3,800	3,300	4,000	850	475	1,125	3,000	3,200	700	2,225	8
39 Mile Creek	11,500	12,000	6,500	9,000	10,000	7,800	2,600	2,900	2,700	2,710	6,771	2,950
Goat Mountain	300	60	60	5	70	0	700	1,250	1,450	363	426	100
Pleasant Creek	1,000	7,615	2,300	8,100	2,425	6,850	3,525	50	6,600	4,860	4,333	4,920
Martin River	2,700	2,800	2,650	200	700	3,425	2,275	800	1,570	9,270	2,639	6,440
Ragged Pt. River/Lake	4,800	5,900	3,600	2,900	3,375	4,750	1,975	500	3,050	3,870	3,472	3,430
Martin Lake	13,600	19,150	22,900	7,100	10,600	18,900	17,300	23,300	23,300	4,200	16,035	8,970
Pothole Lake	1,500	2,100	3,050	1,910	8,400	1,500	1,350	1,200	5,600	2,430	2,904	5,800
L. Martin Lake	750	1,800	830	825	2,540	2,175	1,610	1,500	600	450	1,308	1,060
Tokun Lake/River	8,950	7,600	6,485	5,695	6,500	3,600	3,775	1,800	4,280	16,920	6,561	18,321
Martin River Slough	4,900	10,900	9,300	7,300	4,500	4,450	2,650	4,000	5,650	5,350	5,900	900
Copper River Delta Total	87,500	100,975	98,045	71,065	75,735	73,150	69,385	58,406	98,896	88,285	82,144	67,340
Upper Copper River [d]	510,585	466,124	302,404	504,654	586,530	463,745	454,055	518,287	606,514	653,300	506,620	484,720
Copper River District Total	598,085	567,099	400,449	575,719	662,265	536,895	523,440	576,693	705,410	741,585	588,764	552,060
Bering River/Lake	21,600	39,030	21,050	7,750	19,540	32,075	22,550	19,890	9,310	8,550	20,135	17,545
Shepherd Creek	[c]	1,215	950	60	60	205	195	1,220	60	0	441	180
Stillwater Creek	400	950	320	320	350	375	500	0	140	450	381	111
Kushtaka Lake	500	1,100	700	293	265	185	15	230	61	40	339	100
Katalla River	900	3,900	1,200	400	4,500	17,000	1,875	9,550	5,100	12,130	5,656	260
Bering River Area Total	23,400	46,195	24,220	8,823	24,715	49,840	25,135	30,890	14,671	21,170	26,906	18,196
Copper/Bering River Total	621,485	613,294	424,669	584,542	686,980	586,735	548,575	607,583	720,081	762,755	615,670	570,256

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

[b] The stream/lake represents the combined survey sites corresponding to the "system" designations presented elsewhere in the 2008 Annual Management Report.

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

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

Appendix A13.–Aerial survey indices of sockeye salmon escapement to the upper Copper River drainage, 1996–2008.

	Yearly Survey Indices [a]													Anticipated
Location	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Estimate [c]
Mentasta Lake	2,800		6,100	715	1,200	13,000	5,400	4,800	6,000	7,090	7,790	8,507	3,379	3,277
Fish Creek-Mentasta	400		1,400	450	800	3,500	900		[b]	3,330	3,700	323	1,440	963
Bad Crossing 1 & 2	780		7,800	195	19	2,000	157	90	30	5,120	620	1,683	520	2,604
Suslota Lake	4,100		1,060	0	3,000	2,500	1,500	2,750	1,975	1,230	1,300	30	86	1,416
Tanada Lake				350	3,200	200	950	0	3,950	683	30	563	986	3,849
Dickey Lake	0		350	11	0	1	0	0	10	55	185	71	37	115
Keg Creek	850	420	160	125	0	1	30	38	0	7	190	0	1	725
Swede Lake	20		770	270	135	500	150	325	225	7	2,570	731	343	531
Mahlo Creek	3,800	11,800	12,300	325	1,000	400	5,000	6,850	500	1,950	5,000	14,512	10,261	2,648
Mendeltna Creek	1,250	400		120	2,800	800	1,875	1,200	50	318	700	473	727	2,470
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	14,000	4,888
Tonsina Lake									0		20	20	3	1,080
Long Lake									[b]		1,400	505	382	1,577
Tana River								250	[b]	[b]	1,392	312	434	1,345
Salmon Creek (Bremner)				0	500	1,500	1,400	300	[b]	217	790	750	3,500	825
Fish Lake	4,800		4,900	1,880	5,000	5,000	125	1,300	0	281	7,250	1,066	158	6,418
Mud Creek.- Summit Lake			700	820	140	450	2,800	3,900	40	[b]	1,800	2,705	11,410	7,445
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	4,665	6,560
Mud Creek and Lake	240			20	30	300	30	75	5	145	310	2	10	172
Paxson Lake Outlet			200	1,800	1,000	200	140		5	155	270	324	596	2,661
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	52,938	51,569

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

[b] No survey flown.

[c] Calculated using the 1983–1992 average.

Appendix A14.–Estimated age and sex composition of sockeye salmon harvested in the Copper River District commercial common property drift gillnet fishery, 2008.

Strata Combined:	05/15 – 09/23	Brood Year and Age Class[a]									
Sampling dates:	05/15 – 07/08	2005	2004		2003			2002		2001	
Sample size:	3,284	0.2	0.3	1.2	0.4	1.3	2.2	1.4	2.3	2.4	Total
Female	Percentage of sample	0.0	1.4	3.2	0.1	35.5	0.6	0.5	4.8	0.0	46.1
	Number in harvest	85	4,617	10,299	163	113,880	1,994	1,452	15,453	0	147,945
Male	Percentage of sample	0.3	2.0	4.6	0.1	38.6	0.4	0.7	3.2	0.0	49.9
	Number in harvest	863	6,446	14,821	170	123,872	1,206	2,241	10,336	0	159,955
Total	Percentage of sample	0.3	3.5	8.4	0.1	77.3	1.1	1.2	8.1	0.0	100.0
	Number in harvest	1,016	11,131	27,102	333	247,897	3,494	3,694	26,082	67	320,815
	Standard error	297	1,146	1,540	203	2,532	647	639	1,692	67	

[a] Fish with resorbed scales have been removed. Strata #3 had 1, #4 – 1, #6 – 14.

Appendix A15.–Temporally stratified age and sex composition of Chinook salmon harvested in the Copper River District commercial common property drift gillnet fishery, 2008.

Strata Combined:	05/15 – 09/23	Brood Year and Age Class										
Sampling dates:	05/15 – 06/10	2005		2004		2003		2002		2001		
Sample size:	1,365	0.2	1.1	1.2	2.1	1.3	2.2	1.4	2.3	1.5	2.4	Total
Female	Percentage of sample	0.1	0.0	4.4	0.0	30.2	0.4	11.3	0.7	0.1	0.1	47.3
	Number in harvest	14	0	506	0	3,454	40	1,294	78	13	11	5,411
Male	Percentage of sample	0.0	0.1	7.3	0.1	26.6	0.1	18.0	0.3	0.1	0.1	52.6
	Number in harvest	0	7	834	14	3,048	14	2,062	29	6	11	6,026
Total	Percentage of sample	0.13	0.06	11.70	0.13	56.84	0.48	29.37	0.93	0.17	0.20	100.0
	Number in harvest	14	7	1,340	14	6,508	55	3,363	107	20	22	11,450
	Standard error	14	7	110	14	162	25	145	32	11	16	

Appendix A16.–Estimated age and sex composition of coho salmon harvested in the Copper River District commercial common property drift gillnet fishery, 2008.

Strata Combined:	05/13 – 09/23	Brood Year and Age Class			
Sampling dates:	08/15 – 09/02	2005	2004	2003	
Sample size:	1,224	1.1	2.1	3.1	Total
Female	Percentage of sample	21.1	16.8	0.0	37.9
	Number in harvest	42,785	33,941	0	76,726
Male	Percentage of sample	37.0	23.0	0.4	60.4
	Number in harvest	74,890	46,637	756	122,283
Total	Percentage of sample	59.2	40.4	0.4	100.0
	Number in harvest	119,826	81,830	756	202,412
	Standard error	3,382	3,375	441	

Appendix A17.–Total estimated coho salmon run to the Copper River by end user or destination with previous 10-year average, 1998–2008.

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	10-year Average	2008
Commercial harvest[a]	108,232	153,061	304,944	251,473	504,223	363,489	467,859	263,465	318,285	117,182	285,221	202,621
Commercial, homepack[a]	14	36	0	24	187	0	2	119	137	340	86	423
Commercial, donated[a]	0	0	0	5,141	0	0	0	0	0	0	514	154
Educational drift gillnet permit[a]	0	0	0	0	0	0	0	0	0	0	0	0
Subsistence (Cordova, drift gillnet)[b]	680	682	44	70	28	36	46	15	1	15	162	53
Federal Subsistence (PWS/Chugach Nat'l Forest, dipnet, spear, rod and reel)	0	0	0	0	0	0	0	141	100	68	31	119
Subsistence (Batzulnetas, fish wheel, dip net or spear)[b]	0	0	0	0	na	na	0	0	0	0	0	0
Subsistence (Glennallen Subdistrict, dip net or fish wheel)[b]	520	292	511	1,027	524	450	541	97	210	231	440	472
Federal Subsistence (Glennallen subdistrict, dipnet or fish wheel)	0	0	0	0	81	152	152	126	28	34	57	156
Personal Use (Chitina Subdistrict, dipnet)[b]	1,999	2,095	3,540	2,274	1,761	2,409	2,304	1,562	1,886	1,492	2,132	2,346
Federal Subsistence (Chitna subdistrict, dipnet)	0	0	0	0	0	70	18	0	20	40	15	74
Delta sport harvest[c]	3,941	6,954	4,155	12,052	6,525	14,166	14,512	9,727	5,477	6,749	8,426	10,126
Upriver sport harvest[c]	289	24	324	92	384	277	131	72	54	0	165	107
Upriver spawning escapement[d]	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown
Delta spawning escapement[e]	60,000	87,450	85,660	80,662	174,830	144,110	199,010	199,364	178,140	102,430	131,166	153,784
Total estimated coho salmon run size	175,675	250,594	399,178	352,815	688,543	525,159	684,575	474,688	504,338	228,581	428,415	370,435

[a] Numbers are from fish ticket data.

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

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

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

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

Appendix A18.–Aerial escapement indices by statistical week and location for coho salmon returning to the Copper River Delta, 2008.

		Weekly Escapement Indices (Statistical Week Ending Date Listed)[b]															
Drainage	System[a]	26 Jul	2 Aug	9 Aug	16 Aug	23 Aug	30 Aug	6 Sep	13 Sep	20 Sep	27 Sep	4 Oct	11 Oct	18 Oct	25 Oct	Site [d]	System [e]	Anticipated (by drainage)
Eyak River	Eyak River				1,670		12,990*				391	410				12,990	18,540	6,916
	East Shore Beaches				0		4,000*				110	160				4,000		
	West Shore Beaches				0		0				0	0						
	Middle Arm Beaches				0		0				0	40*				40		
	North Shore Beaches				0		0				0	0						
	Hatchery Creek Delta				0		300*				0	200				300		
	Hatchery Creek				0		0				40	70				70		
	Power Creek Delta				0		0				0	150*				150		
	Power Creek				0		0				690	990*				990		
Ibeck Creek	Ibeck Creek				70		920				10,265*	9,680				10,265	10,265	6,227
Scott River	Scott Lake				0		0				0	40*				40	1,450	
	Scott River				1,400*		320				170	40				1,400		
	Elsner Lake [c]				10*		0				0	0				10		
Alaganik Slough	Alaganik Slough				0		670*				20	0				670	1,831	4,020
	18/20 Mile Creek				0		101				160	161*				161		
	McKinley Lake				0		200				300*	0				300		
	Salmon Creek West Fork				0		100				20	500*				500		
	Salmon Creek East Fork				0		0				130	200*				200		
26/27 Mile Creek	26/27 Mile Creek				0		0				2	10*				10	10	829
39 Mile Creek	39 Mile Creek				0		0				5,460*	2,560				5,460	5,460	3,831
Goat Mountain Cr.	Goat Mountain Creek				300		140				920*	321				920	920	1,181
Pleasant Creek	Pleasant Creek				0		2800*				54	491				2,800	2,800	
Martin River	Martin River - Lower				330		483*				0	20				483	483	
	Ragged Point River				200		0				280	282*				282	302	849
	Ragged Point Lake Outlet				0		0				10	20*				20		
	Ragged Point Lake				0		0				0	0						
	Martin River - Upper				1,770		8,840*				740	2,150				8,840	8,840	6,522
	Martin Lake Outlet				180		620*				10	0				620	2,770	1,936
	Martin Lake				120		300				40	440*				440		
	Martin Lake Feeders				10		160				1,710*	500				1,710		

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Drainage	System[a]	26 Jul	2 Aug	9 Aug	16 Aug	23 Aug	30 Aug	6 Sep	13 Sep	20 Sep	27 Sep	4 Oct	11 Oct	18 Oct	25 Oct	Site [d]	System [e]	Anticipated (by drainage)
	Pothole River				0		0				1,361*	910				1,361	3,661	1,370
	Pothole Lake				0		0				2,300*	170				2,300		
	Little Martin River				10		401				8,750*	6,370				8,750	8,760	5,413
	Little Martin Lake				10*		0				0	0				10		
	Tokun Springs				0		100				960*	610				960	3,020	1,376
	Tokun River				32		10				1,760*	980				1,760		
	Tokun Lake Outlet				0		0				0	0				0		
	Tokun Lake				0		0				0	300*				300		
Martin River Slough	Martin River Slough				1,810		2,650				7,780*	4,512				7,780	7,780	9,531
Copper River Total	Aerial Survey Daily	0	0	0	7,922	0	36,105	0	0	0	44,433	33,287	0	0	0		76,892	
Lower SEG		86	1,225	2,025	5,846	9,298	16,147	21,447	18,286	16,908	15,542	17,896	8,474			9,841		32,000
Average SEG, (average anticipated escapement)		134	1,914	3,164	9,134	14,528	25,229	33,510	28,571	26,418	24,284	27,962	13,241			15,377		50,001
Upper SEG		180	2,565	4,240	12,239	19,468	33,807	44,904	38,285	35,401	32,540	37,470	17,743			20,605		67,000

* Survey count was used as the peak survey for the site.

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

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

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

[d] 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.

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

Appendix A19.–Copper River Delta and Bering River coho salmon escapement indices, 1998–2008.

Stream/Lake [a,b] Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Previous 10 yr Average	2008
Eyak Lake	2,550	1,250	2,130	7,800	17,425	10,050	12,700	2,812	1,940	5,810	6,447	17,030
Hatchery Creek	1,200	300	1,900	450	1,400	0	1,450	0	160	710	757	370
Power Creek	4,900	2,700	1,450	480	2,000	1,500	500	40	360	800	1,473	1,140
Ibeck Creek	1,500	4,600	7,000	14,000	23,900	26,000	32,000	34,900	36,300	13,200	19,340	10,265
Scott & Elsner River [c]	750	2,500	300	600	2,400	125	475	1,400	200	1,520	1,027	3,281
18/20 Mile	1,300	610	420	420	1,450	205	1,560	610	740	550	787	161
McKinley Lake	400	50	120	800	2,200	0	275	140	1,400	280	567	300
Salmon Creek	2,100	3,080	2,600	200	1,100	725	6,100	2,250	200	150	1,851	700
26/27 Mile	700	2,610	1,000	400	240	275	850	820	60	480	744	10
39 Mile	2,100	3,650	5,000	1,800	4,500	1,250	3,120	9,900	4,400	3,300	3,902	5,460
Goat Mountain	800	650	430	330	160	125	450	4,500	3,100	1,400	1,195	920
Pleasant Creek [c]	450	1,220	45	210	0	2,000	3,950	3,790	7,030	500	1,920	2,800
Martin River	6,250	3,900	4,500	3,755	13,325	10,200	11,600	1,050	9,100	8,830	7,251	9,323
Ragged Point River/Lake	850	275	330	440	3,400	375	575	650	360	260	752	302
Martin Lake	300	600	1,350	311	1,850	6,300	4,475	24,100	2,900	4,775	4,696	2,770
Pothole Lake	1,500	600	245	390	3,400	4,000	500	140	120	870	1,177	3,661
Little Martin Lake	3,800	3,600	3,000	3,010	500	1,000	7,900	2,100	7,500	2,700	3,511	8,760
Tokun River/Lake	2,000	1,130	710	1,600	540	550	1,750	2,030	700	830	1,184	3,020
Martin River Slough	6,400	12,900	10,600	4,100	10,025	7,500	9,750	9,850	12,700	5,770	8,960	7,780
Copper River Delta Total	39,850	46,225	43,130	41,096	89,815	72,180	99,980	101,082	89,270	52,735	67,536	78,053
Katalla River	5,100	3,000	2,800	2,900	5,000	10,000	6,500	12,100	8,900	5,510	6,181	3,340
Bering Lake	14,300	13,800	10,370	21,040	15,375	13,750	10,125	15,040	13,052	4,910	13,176	8,491
Dick Creek	0	1,270	2,500	760	1,700	2,050	2,750	362	1,660	530	1,358	1,410
Shepherd Creek	NC	200	450	300	675	700	1,125	100	60	130	416	370
Nichawak River	2,500	4,800	4,300	1,300	1,420	900	1,475	6,900	3,200	11,900	3,870	10,120
Gandil River	950	3,000	600	900	330	900	2,000	4,450	640	2,650	1,642	840
Controller Bay	6,900	5,220	5,360	2,807	9,700	4,175	6,210	5,590	5,680	7,332	5,897	4,251
Bering River Area Total	29,750	31,290	26,380	30,007	34,200	32,475	30,185	44,542	33,192	32,962	32,498	28,822
Copper/Bering Total	69,600	77,515	69,510	71,103	124,015	104,655	130,165	145,624	122,462	85,697	100,035	106,875

NC=not counted due to poor stream or environmental conditions.

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

[b] The stream/lake in this table represents combined survey sites corresponding to the "system" designations for the current year survey results presented elsewhere in the 2008 Annual Management Report.

[c] Not an index stream.

Appendix A20.–Total commercial salmon harvest by species in the Bering River District, 1974–2008.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1974	32	4,208	28,615	7	2	32,864
1975	162	21,637	24,162	0	0	45,961
1976	228	30,908	42,423	43	1	73,603
1977	127	14,445	47,218	192	221	62,203
1978	331	33,554	91,097	266	2,391	127,639
1979	385	139,015	114,046	6,895	23,094	283,435
1980	0	0	108,872	0	0	108,872
1981	200	55,585	82,626	9,882	8,307	156,600
1982	254	129,667	144,752	47	333	275,053
1983	610	179,273	117,669	851	4,615	303,018
1984	330	91,784	214,632	309	20,408	327,463
1985	215	26,561	419,276	214	9,642	455,908
1986	128	19,038	115,809	15	243	135,233
1987	34	16,926	15,864	54	7	32,885
1988	19	7,152	86,539	23	181	93,914
1989	30	9,225	26,952	7	2	36,216
1990	14	8,332	42,952	2	1	51,301
1991	28	19,181	110,951	4	195	130,359
1992	21	19,721	125,616	4	1	145,363
1993	130	33,951	115,833	82	22	150,018
1994	121	27,926	259,003	34	63	287,147
1995	44	21,585	282,045	26	229	303,929
1996	111	37,712	93,763	0	30	131,616
1997	23	9,651	97	2	0	9,773
1998	70	8,439	12,284	5	2	20,800
1999	42	13,697	9,852	204	96	23,891
2000	5	1,279	56,329	0	0	57,613
2001	76	5,450	2,715	0	0	8,241
2002	14	235	108,522	0	0	108,771
2003	151	18,266	59,481	33	0	77,931
2004	87	13,165	95,595	2	21	108,870
2005	277	77,464	43,030	9,327	14	130,112
2006	238	36,867	56,713	54	39	93,911
2007	88	16,470	9,305	6	1	25,870
10-Year Average	105	19,133	45,383	963	17	65,601
2008	42	1,175	40,380	8	1	41,606

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

Appendix A21.–Aerial escapement indices by statistical week and location for sockeye salmon returning to the Bering River District, 2008.

Drainage	System[a]	Weekly Escapement Indices (Statistical Week Ending Date Listed)[b] 14 Jun	21 Jun	28 Jun	5 Jul	12 Jul	19 Jul	26 Jul	2 Aug	9 Aug	16 Aug	23 Aug	30 Aug	6 Sep	13 Sep	20 Sep	27 Sep	4 Oct	11 Oct	18 Oct	25 Oct	Site[d]	System[e]	Anticipated (by drainage)
Bering River	Bering River		450		2,240*	1,010			30		0		0				0	0				2,240	17,545	21,903
	Bering Lake		30		4,660	13,140 *			320		90		20				0	0				13,140		
	Dick Creek		ns		0	350			2,165*		1,180		230				0	0				2,165		
	Shepherd Creek- Lagoon		ns		0	50*			10		0		0				0	0				50	180	4,375
	Shepherd Creek		ns		0	0			50		60*		40				0	0				60		
	Carbon Creek		ns		ns	0			70*		0		0				0	0				70		
	Clear Creek		ns		ns	0			50		111*		30				0	0				111	111	1,197
	Kushtaka Lake		ns		ns	0			30		100*		60				0	0				100		
	Shockum Creek		ns		ns	0			20		120		200*				0	20				200	300	1,226
Katalla River[c]	Katalla River		ns		10	ns			92		30		260*				0	0				260	260	
Bering River District Weekly Index		0	480	0	6,910	14,550	0	0	2,837	0	1,691	0	840	0	0	0	0	20	0	0	0		18,396	
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, (ave anticipated escapement)		1,710	6,221	7,746	11,656	21,075	21,145	21,054	17,988	16,089	8,229	4,623	2,834	1,998	1,093	1,410								28,701
Upper SEG		2,085	7,586	9,446	14,214	25,701	25,787	25,675	21,936	19,620	10,036	5,638	3,456	2,436	1,332	1,719								35,000
Anticipated Escapement Index																								115,402

* 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 the majority of known sockeye salmon spawning locations in the Bering River drainage.

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

[c] This stream is not included in the estimated escapement for the Bering River drainage, 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 A22.–Bering River District commercial drift gillnet salmon harvest by period, 2008.

		Emergency order				Chinook		Sockeye		Coho		Pink		Chum	
Period	Date	Issued	Hours	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
01	06/05–06/05	2-F-E-010-08	12	1	1	2	21	132	792	0	0	0	0	0	0
02	06/09–06/09	2-F-E-013-08	12	11	11	19	348	664	3,952	0	0	0	0	0	0
03	06/16–06/16	2-F-E-021-08	12	4	6	21	679	378	2,248	0	0	0	0	0	0
04	08/11–08/12	2-F-E-110-08	24	0	0	0	0	0	0	0	0	0	0	0	0
05	08/14–08/15	2-F-E-115-08	24	19	46	0	0	0	0	10,034	100,123	0	0	0	0
06	09/01–09/02	2-F-E-131-08	24	34	62	0	0	0	0	9,932	101,083	0	0	0	0
07	09/04–09/05	2-F-E-137-08	24	22	41	0	0	0	0	7,094	72,386	8	46	0	0
08	09/08–09/09	2-F-E-138-08	24	32	85	0	0	1	6	9,679	99,532	0	0	0	0
09	09/11–09/13	2-F-E-139-08	48	23	34	0	0	0	0	3,641	37,180	0	0	0	0
10	09/15–09/17	2-F-E-147-08	48	0	0	0	0	0	0	0	0	0	0	0	0
11	09/18–09/20	2-F-E-150-08	60	0	0	0	0	0	0	0	0	0	0	0	0
12	09/22–09/24	2-F-E-154-08	60	0	0	0	0	0	0	0	0	0	0	0	0
13	09/25–09/27	2-F-E-158-08	60	0	0	0	0	0	0	0	0	0	0	0	0
14	09/29–10/01	2-F-E-161-08	60	0	0	0	0	0	0	0	0	0	0	0	0
15	10/02–10/04	2-F-E-163-08	60	0	0	0	0	0	0	0	0	0	0	0	0
16	10/07–10/11	2-F-E-165-08	132	0	0	0	0	0	0	0	0	0	0	0	0
	Total		684	60	286	42	1,048	1,175	6,998	40,380	410,304	8	46	0	0
Average Weight							24.95		5.96		10.16		5.75		0.00

Appendix A23.–Aerial escapement indices by statistical week and location for coho salmon returning to the Bering River District, 2008.

		Weekly Escapement Indices (Statistical Week Ending Date Listed)[b]																
Drainage	System[a]	26 Jul	2 Aug	9 Aug	16 Aug	23 Aug	30 Aug	6 Sep	13 Sep	20 Sep	27 Sep	4 Oct	11 Oct	18 Oct	25 Oct	Site[e]	System[f]	Anticipated, (by drainage)
Bering River	Bering River[c]				120	1,430*					781	270				1,430	9,901	7,720
	Bering Lake				600	5,250					4,100	7,061*				7,061		
	Dick Creek				0	330					1,410*	430				1,410		
	Shepherd Creek - Lagoon				0	360*					0	41				360	420	
	Shepherd Creek				0	0					10*	10				10		
	Carbon Creek[d]				0	0					50*					50		
Katalla River	Katalla River				450	3,340*					235	530				3,340	3,340	4,993
Lower Bering River	Gandil River				0	20					840*	510				840	10,960	2,910
	Nichawak River				0	530					10,120*	1,930				10,120		
Controller Bay	Campbell River				ns	60*					0	0				60	4,311	7,378
	Edwardes River				ns	760					3,190	4,100*				4,100		
	Okalee River				ns	50					151*	10				151		
	Other Clear Streams				ns	ns					0	0				0		
Bering River District Weekly Index		0	0	0	1,170	0	12,130	0	0	0	20,887	14,892	0	0	0		28,932	
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

* 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 the majority of known coho salmon spawning locations in the Bering River drainage.

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

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

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

[e] 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.

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

APPENDIX B

Appendix B1.–Anticipated daily and cumulative salmon escapement versus actual escapement through the Coghill River weir, 2008.

	Sockeye Salmon					Pink Salmon	
	Actual		Projected		Below	Actual	
Date	Daily	Cumulative	Daily	Cumulative	Weir	Daily	Cumulative
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	0	0	3	6		0	0
06/09	0	0	2	8	NA	0	0
06/10	0	0	7	16	NA	0	0
06/11	0	0	8	24	NA	0	0
06/12	0	0	39	63	NA	0	0
06/13	0	0	55	118	NA	0	0
06/14	0	0	38	156	0	0	0
06/15	0	0	53	209	0	0	0
06/16	14	14	91	300	20	0	0
06/17	40	54	105	405	3	0	0
06/18	17	71	149	554	30	0	0
06/19	16	87	230	784	25	0	0
06/20	31	118	173	957	15	0	0
06/21	145	263	209	1,166	50	0	0
06/22	321	584	352	1,518	45	0	0
06/23	263	847	309	1,827	40	0	0
06/24	240	1,087	462	2,289	32	0	0
06/25	43	1,130	350	2,639	50	0	0
06/26	438	1,568	419	3,058	60	0	0
06/27	221	1,789	398	3,455	60	0	0
06/28	0	1,789	612	4,068	100	0	0
06/29	828	2,617	724	4,791	250	0	0
06/30	22	2,639	800	5,591	1,500	0	0
07/01	750	3,389	1,015	6,606	2,000	0	0
07/02	1,274	4,663	833	7,439	1,000	0	0
07/03	3,031	7,694	818	8,257	1,500	2	2
07/04	2,512	10,206	1,152	9,409	2,000	0	2
07/05	4,598	14,804	1,011	10,420	3,700	0	2
07/06	1,085	15,889	904	11,324	1,500	0	2
07/07	459	16,348	602	11,926	1,000	0	2
07/08	461	16,809	731	12,657	400	10	12
07/09	867	17,676	747	13,404	1,500	4	16
07/10	650	18,326	710	14,113	800	2	18
07/11	2,037	20,363	940	15,054	1,000	1	19
07/12	1,046	21,409	1,037	16,091	750	2	21
07/13	1,013	22,422	983	17,074	300	32	53
07/14	600	23,022	819	17,893	300	54	107
07/15	239	23,261	586	18,480	600	16	123
07/16	950	24,211	443	18,923	1,500	112	235

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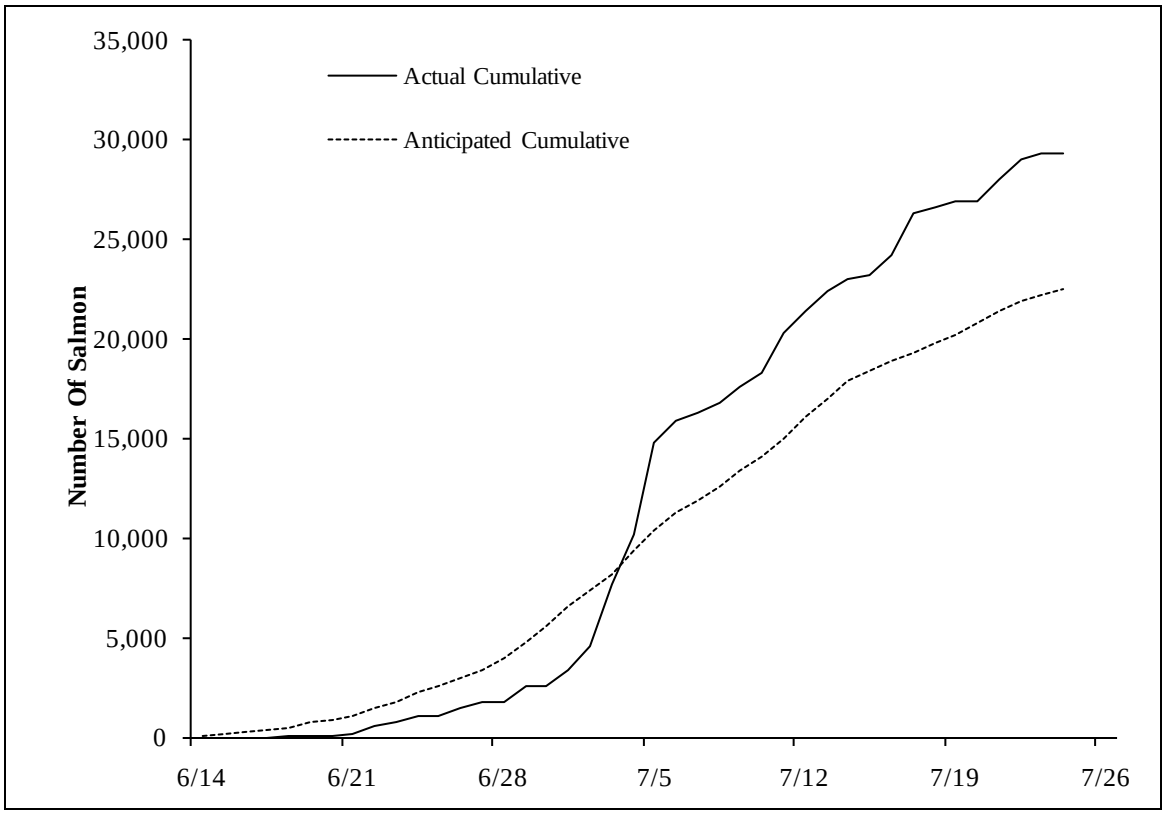
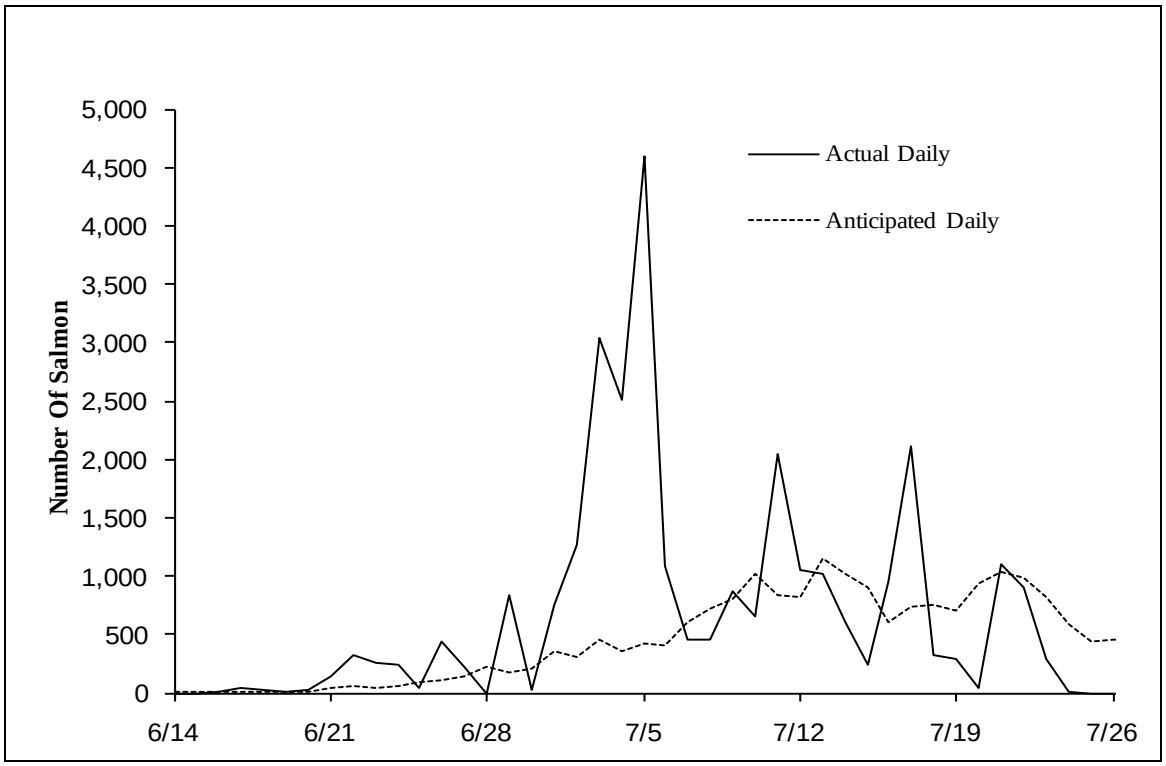
Appendix B1.–Page 2 of 2.

	Sockeye Salmon					Pink Salmon	
	Actual		Projected		Below	Actual	
Date	Daily	Cumulative	Daily	Cumulative	Weir	Daily	Cumulative
07/17	2,119	26,330	447	19,370	1,000	297	532
07/18	323	26,653	447	19,817	2,000	121	653
07/19	287	26,940	455	20,272	500	97	750
07/20	43	26,983	602	20,874	700	11	761
07/21	1,109	28,092	606	21,480	300	291	1,052
07/22	907	28,999	434	21,914	1,000	713	1,765
07/23	297	29,296	318	22,232	300	85	1,850
07/24	2	29,298	293	22,524	200	NA	1,850
07/25	NA	29,298	301	22,825	700	NA	1,850
07/26	NA	29,298	372	23,197	386	NA	1,850
07/27	NA	29,298	196	23,393	750	NA	1,850
07/28	NA	29,298	89	23,482	NA	NA	1,850
07/29	NA	29,298	151	23,634	NA	NA	1,850
07/30	NA	29,298	157	23,791	NA	NA	1,850
07/31	NA	29,298	143	23,933	NA	NA	1,850

Appendix B2.–Anticipated cumulative and daily sockeye salmon escapement versus actual escapement through the Coghill River weir, 2008.





Appendix B3.–Salmon escapement by species in the Coghill District, 1971–2008.

Year	Sockeye[a]	Pink[b]	Chum[b]
1971	15,000	62,160	6,600
1972	51,000	30,960	28,160
1973	55,000	493,780	72,610
1974	22,333	56,940	29,280
1975	34,855	452,430	3,640
1976	9,056	53,908	31,398
1977	31,562	320,680	79,957
1978	42,284	67,084	15,966
1979	48,281	125,544	7,823
1980	142,253	148,066	20,919
1981	156,112	140,436	2,389
1982	180,314	309,202	21,586
1983	38,783	284,164	55,127
1984	63,622	365,226	13,500
1985	163,311	238,728	14,514
1986	71,095	109,798	16,300
1987	187,263	67,761	22,472
1988	72,052	42,985	42,536
1989	37,751	48,802	22,434
1990	8,949	45,558	20,494
1991	9,752	84,790	7,055
1992	29,642	23,122	7,583
1993	9,232	41,666	7,404
1994	7,264	65,648	14,176
1995	30,382	46,029	11,596
1996	38,693	104,781	19,669
1997	35,517	52,961	3,101
1998	28,923	85,968	22,764
1999	59,311	168,816	5,057
2000	28,446	223,646	20,488
2001	38,558	148,665	13,388
2002	28,323	54,882	7,430
2003	75,427	375,147	19,729
2004	30,569	36,717	5,000
2005	30,313	528,264	11,979
2006	23,479	145,511	15,900
2007	70,001	197,405	14,052
10-Year Average	41,335	196,502	13,579
2008	29,298	145,177	39,660

Note: Historical data revised in 1990.

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

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

Appendix B4.–Total Coghill District commercial common property salmon harvest by period in the drift gillnet fisheries, 2008.

Period	Date	Emergency Orders Issued		Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
						Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1[a]	06/02–06/04	2-F-E-008-08	48	54	172	4	118	31	178	0	0	0	0	33,822	262,254
2[b]	06/05–06/08	2-F-E-011-08	72	88	416	5	115	87	568	0	0	0	0	115,722	897,058
3[b]	06/09–06/11	2-F-E-014-08	48	169	723	7	126	298	1,924	0	0	1	3	198,135	1,535,116
4[c]	06/12–06/14	2-F-E-017-08	48	298	1,046	10	115	1,702	10,908	3	21	5	17	189,289	1,426,596
5[c]	06/16–06/18	2-F-E-022-08	48	236	932	14	266	3,798	24,303	0	0	4	10	205,017	1,564,096
6[c]	06/19–06/21	2-F-E-033-08	48	278	795	15	316	7,789	49,450	0	0	15	50	168,425	1,246,877
7[d]	06/23–06/24	2-F-E-038-08	36	183	609	6	129	28,400	189,493	0	0	15	69	146,774	1,080,451
8[e]	06/26–06/29	2-F-E-043-08 and 2-F-E-046-08	72	241	981	6	119	41,336	269,869	6	41	21	75	266,919	2,034,239
9[f]	06/30–7/02	2-F-E-049-08	48	259	953	1	34	18,652	123,142	5	18	122	403	227,414	1,759,389
10[f]	07/03–07/06	2-F-E-055-08	72	243	992	5	92	15,186	101,544	17	129	760	2,742	277,627	2,141,354
11[g]	07/07–07/09	2-F-E-061-08	48	239	798	5	88	24,601	161,491	62	416	2,301	7,564	222,939	1,711,803
12[h]	07/10–07/13	2-F-E-068-08	72	269	942	13	171	19,698	129,442	136	1,106	9,714	32,485	141,119	1,109,278
13[h]	07/14–07/16	2-F-E-074-08	48	198	492	6	73	10,596	67,982	84	690	15,433	53,368	53,266	409,788
14[i]	07/17–07/20	2-F-E-078-08	72	133	303	5	53	3,461	22,102	62	485	9,490	35,197	49,091	376,040
15[j]	07/21–07/23	2-F-E-088-08	48	41	71	1	12	934	5,733	33	219	3,773	13,369	9,239	66,421
16[k]	07/24–07/24	2-F-E-090-08	14	10	12	0	0	129	810	31	198	987	3,405	717	5,701
17[k]	07/26–07/26	2-F-E-090-08	14	3	5	0	0	30	177	0	0	1,210	4,238	1,129	9,039
18[l]	07/28–07/28	2-F-E-105-08	14	8	9	0	0	60	349	22	177	2,266	7,678	528	4,011
19[m]	07/31–07/31	2-F-E-106-08	14	0	0	0	0	0	0	0	0	0	0	43	480
20[m]	08/02–08/02	2-F-E-106-08	14	0	0	0	0	0	0	0	0	0	0	58	287
21[m]	08/04–08/04	2-F-E-107-08	14	1	1	0	0	2	10	0	0	267	856	38	237
22[m]	08/06–08/06	2-F-E-107-08	14	1	1	0	0	0	0	0	0	343	1,168	63	465
23[n]	08/09–08/09	2-F-E-112-08	14	9	16	0	0	39	229	35	300	9,379	32,957	90	680
24[o]	08/11–08/11	2-F-E-113-08	14	17	25	0	0	37	246	92	661	21,449	85,025	120	960
25[o]	08/12–08/12	2-F-E-113-08	14	27	44	0	0	109	658	156	1,124	27,858	97,684	47	376
26[o]	08/13–08/13	2-F-E-113-08	14	26	40	0	0	51	319	239	1,908	23,242	90,680	112	869
27[p]	08/14–08/14	2-F-E-118-08	14	14	24	0	0	35	242	189	1,426	13,740	52,450	102	792
28[p]	08/15–08/15	2-F-E-118-08	14	31	56	0	0	77	494	430	3,220	42,317	162,671	18	153
29[p]	08/16–08/16	2-F-E-118-08	14	36	59	0	0	53	338	449	3,157	46,108	174,985	33	250

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Period	Date	Emergency Orders Issued		Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
						Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
30[q]	08/17–08/17	2-F-E-121-08	14	15	23	0	0	24	139	130	1,091	11,237	43,828	29	220
31[q]	08/1–08/18	2-F-E-121-08	14	35	52	0	0	29	176	633	5,031	34,262	127,279	38	274
32[q]	08/1–08/19	2-F-E-121-08	14	33	55	0	0	20	132	670	5,578	41,307	157,480	22	182
33[q]	08/2–08/20	2-F-E-121-08	14	52	86	0	0	57	403	1,180	10,556	62,852	240,172	24	192
34[p]	08/2–08/21	2-F-E-122-08	14	58	89	0	0	27	198	1,321	11,128	62,031	244,509	12	93
35[p o]	08/2–08/22	2-F-E-122-08	14	59	90	0	0	39	283	1,591	15,580	76,342	280,048	11	93
36[p]	08/2–08/23	2-F-E-122-08	14	55	84	0	0	23	164	1,696	15,953	63,635	243,651	19	137
37[r]	08/2–08/24	2-F-E-126-08	14	25	30	0	0	6	39	790	7,286	23,092	86,085	8	76
38[s]	08/2–08/25	2-F-E-126-08	14	68	86	0	0	236	1,674	2,333	20,490	41,687	163,124	6	47
39[t]	08/2–08/26	2-F-E-126-08	14	72	105	0	0	13	94	2,696	24,621	57,843	205,580	2	15
40[s]	08/2–08/27	2-F-E-126-08	14	71	103	0	0	165	1,153	4,249	39,380	46,789	169,354	2	16
41[u]	08/2–08/28	2-F-E-127-08	13	48	63	0	0	1	7	3,981	35,352	23,270	81,394	4	27
42[v]	08/2–08/29	2-F-E-127-08	13	53	68	0	0	1	6	4,691	42,341	17,576	66,825	4	34
43[u]	08/3–08/30	2-F-E-127-08	13	67	82	0	0	1	6	6,089	57,100	26,047	89,571	1	10
44[s]	08/3–08/31	2-F-E-133-08	13	45	50	0	0	7	32	3,598	33,406	7,096	25,189	0	0
45[t]	09/0–09/01	2-F-E-133-08	13	55	69	0	0	3	20	8,355	77,826	13,778	50,072	1	8
46[s]	09/0–09/02	2-F-E-133-08	13	71	80	0	0	7	40	9,221	81,308	7,200	25,918	151	1,286
47[t]	09/0–09/03	2-F-E-133-08	13	66	74	0	0	0	0	6,336	56,433	4,022	14,463	1	8
48[w]	09/0–09/04	2-F-E-134-08	13	76	81	0	0	124	997	4,571	41,857	1,556	5,542	0	0
49[x]	09/0–09/05	2-F-E-134-08, 2-F-E-135-08 and 2-F-E-143-08	13	81	83	0	0	0	0	5,244	46,894	1,217	4,362	0	0
50[y]	09/0–09/06	2-F-E-134-08, 2-F-E-135-08 and 2-F-E-144-08	13	59	69	0	0	0	0	5,385	47,608	680	2,561	0	0
51[y]	09/0–09/10	2-F-E-144-08	60	66	108	0	0	0	0	3,338	29,782	126	485	0	0
52[y]	09/1–09/13	2-F-E-145-08	60	3	4	0	0	0	0	222	1,863	0	0	0	0
53[y]	09/1–09/17	2-F-E-149-08	60	1	1	0	0	0	0	111	953	0	0	0	0
54[y]	09/1–09/20	2-F-E-152-08	60	2	2	0	0	0	0	45	411	0	0	0	0
55[y]	09/2–09/24	2-F-E-156-08	60	0	0	0	0		0	0	0	0	0	0	0
56[y]	09/2–09/27	2-F-E-159-08	60	0	0	0	0	0	0	0	0	0	0	0	0
57[y]	09/2–10/01	2-F-E-162-08	60	0	0	0	0	0	0	0	0	0	0	0	0
58[y]	10/0–10/04	2-F-E-164-08	60	0	0	0	0	0	0	0	0	0	0	0	0
59[y]	10/0–10/11	2-F-E-166-08	132	0	0	0	0	0	0	0	0	0	0	0	0
Total			1,920	413	12,154	103	1,827	177,974	1,167,564	80,527	725,124	854,465	3,186,641	2,308,231	17,647,778
Average Weight							17.74		6.56		9.00		3.73		7.65

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[a] Waters of the Coghill District, including the Esther Subdistrict were open.

[b] Waters of the Coghill District excluding the Wally Noerenberg Hatchery SHA (waters in Lake Bay north of 60° 47.56' N. lat) were open.

[c] Waters of the Coghill District excluding the Esther Subdistrict were open for 48 hours. The Esther Subdistrict excluding the WNH SHA and THA were open for 24 hours.

[d] Waters of the Coghill District excluding the Esther Subdistrict were open.

[e] Waters of the Coghill District, excluding Esther subdistrict and Granite Bay subdistrict were open for 36 hours. The Esther subdistrict, excluding WHN SHA and THA were open for 12 hours.

[f] Waters of the Coghill district excluding the WHN SHA, THA and waters in Port Wells north of the north end of Esther Passage (60° 55.81' N. lat) were open.

[g] Waters of the Coghill District excluding the WHN SHA and THA were open. Deep gear was allowed.

[h] Waters of the Coghill District excluding the WNH SHA and THA were open.

[I] Waters of the Coghill District excluding waters behind the row of buoys in front of the barrier seine were open.

[j] Waters of the Coghill District excluding waters west of a line from Pt. Pigot to Pt. Pakenham and waters south of 60° 46.10' N. Lat. were open to purse seine and drift gillnet. Waters of the WNH SHA, behind the row of buoys in front of the barrier seine were closed.

[k] Waters of the Coghill District north of the latitude of Point Pakenham and waters of the Esther Subdistrict north of 60 46.10' N. Lat., were open. Waters of the WNH SHA, behind the row of buoys in front of the barrier seine were closed.

[l] Water of the Coghill District north of the latitude of Point Pakenham and waters of the Esther Subdistrict north of 60 46.10' N. lat., excluding the WNH SHA and THA were open to purse seine and drift gillnet.

[m] Waters of the Coghill District north of the latitude of Point Pakenham were open to purse seine and drift gillnet gear.

[n] Waters of the Esther Subdistrict, west of 147° 55.10' W. Long., and within 0.5 nautical miles of Esther Island, excluding the WHN THA and SHA were open to purse seine and drift gillnet gear.

[o] Waters of the Coghill District within the Esther Subdistrict, west of 147° 55.10' W. Long., including the WNH THA, and within the Granite Bay Subdistrict, west of 148° 03.80' W. Long., .were open to purse seine and drift gillnet gear.

[p] Waters of the Esther Subdistrict west of 147° 55.10' W. Long. and north of 60° 46.10' N. Lat., including the WNH THA were open to purse seine and drift gillnet gear.

[q] Waters of the Esther Subdistrict west of 147° 55.10' W. Long. and north of 60° 46.10' N. Lat., excluding the WNH THA and SHA were open to purse seine and drift gillnet gear.

[r] Waters of the Coghill District, excluding WNH SHA and Bettles Bay west of 148° 15.98' W. Long., Hummer Bay west of 148° 17.48' W. Long. and Pigot Bay west of 148 20.10' W. Long were open to seine and drift.

[s] Waters of the Coghill District within the Esther Subdistrict, west of 147° 55.10' W. Long., including the WNH THA, and within the Granite Bay Subdistrict west of 148° 03.80' W. Long., were open to seine and drift

[t] Waters of the Coghill District, excluding the WNH SHA, the Granite Bay Subdistrict east of 148° 03.80' W. Long., and Bettles Bay west of 148° 15.98' W. Long., Hummer Bay west of 148° 17.48' W. Long., and Pigot Bay west of 148° 20.10' W. Long., were open to purse seine and drift gillnet.

[u] Waters of the Coghill District, excluding the WNH THA and SHA, the Granite Bay Subdistrict east of 148° 03.80' W. Long., and Bettles Bay west of 148° 15.98' W. Long., Hummer Bay west of 148° 17.48' W. Long., and Pigot Bay west of 148° 20.10' W. Long. were open to purse seine and drift gillnet.

[v] Waters of the Coghill District within the Esther Subdistrict, west of 147 55.10' W. Long., excluding the WNH THA and SHA, and within the Granite Bay Subdistrict, west of 148 03.80' W. Long., were open to both gear groups.

[w] Waters of the Coghill District, excluding the Granite Bay Subdistrict east of 148° 03.80' W. Long., and Bettles Bay west of 148° 15.98' W. Long., Hummer Bay west of 148° 17.48' W. Long., and Pigot Bay west of 148 20.10'W. Long., were open to purse seine and drift gillnet.

[x] Waters of the Coghill District within the Esther Subdistrict, west of 147° 55.10' W. Long., including the WNH THA and SHA up to a line of buoys in front of the barrier seine, and within the Granite Bay subdistrict, west of 148° 03.80' W. Long., were open to drift gillnet only (per 5 AAC 24.370).

[y] Waters of the Coghill District, excluding the Granite Bay Subdistrict east of 148° 03.80' W. Long., and Bettles Bay west of 148° 15.98' W. Long., Hummer Bay west of 148° 17.48' W. Long., and Pigot Bay west of 148° 20.10' W. Long. were open to drift gillnet only (per 5 AAC 24.370).

Appendix B5.–Total Coghill District commercial common property salmon harvest by period in the purse seine fisheries, 2008.

Period	Date	Emergency Orders Issued	Hours	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
						Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
15[j]	07/21–07/23	2-F-E-088-08	48	4	4	0	0	27	181	5	45	1,723	5,674	1,503	12,771
16[k]	07/24–07/24	2-F-E-090-08	14	2	2	0	0	28	189	0	0	1,918	5,755	423	3,269
17[k]	07/26–07/26	2-F-E-090-08	14	3	3	0	0	9	50	3	16	3,900	12,776	591	5,195
18[l]	07/28–07/28	2-F-E-105-08	14	8	8	0	0	107	601	2	11	21,307	66,885	982	7,857
19[m]	07/31–07/31	2-F-E-106-08	14	3	3	0	0	0	0	0	0	1,048	3,576	79	468
20[m]	08/02–08/02	2-F-E-106-08	14	4	5	0	0	13	71	2	13	20,533	64,715	334	3,187
21[m]	08/04–08/04	2-F-E-107-08	14	10	10	0	0	28	157	16	109	45,208	143,464	1,386	13,705
22[m]	08/06–08/06	2-F-E-107-08	14	19	19	0	0	6	29	19	136	58,420	189,891	3,729	36,594
23[n]	08/09–08/09	2-F-E-112-08	14	38	73	0	0	70	405	43	307	676,380	2,341,544	45	359
24[o]	08/11–08/11	2-F-E-113-08	14	44	86	12	118	94	583	66	491	764,700	2,717,107	122	1,012
25[o]	08/12–08/12	2-F-E-113-08	14	43	57	2	9	31	205	68	572	468,861	1,610,864	57	464
26[o]	08/13–08/13	2-F-E-113-08	14	37	56	0	0	7	47	155	1,188	341,643	1,275,230	18	145
27[p]	08/14–08/14	2-F-E-118-08	14	33	56	0	0	4	27	129	1,021	450,398	1,602,926	0	0
28[p]	08/15–08/15	2-F-E-118-08	14	34	62	0	0	28	172	512	3,686	641,486	2,322,543	2	16
29[p]	08/16–08/16	2-F-E-118-08	14	35	66	0	0	36	242	360	2,880	450,304	1,730,706	43	363
30[q]	08/17–08/17	2-F-E-121-08	14	38	54	0	0	18	111	329	2,610	269,538	980,484	17	125
31[q]	08/18–08/18	2-F-E-121-08	14	24	30	0	0	0	0	546	4,705	153,839	552,850	0	0
32[q]	08/19–08/19	2-F-E-121-08	14	28	34	0	0	3	23	1,212	11,055	292,071	1,067,364	6	45
33[q]	08/20–08/20	2-F-E-121-08	14	27	44	0	0	4	28	2,745	21,808	409,438	1,508,966	5	36
34[p]	08/21–08/21	2-F-E-122-08	14	33	58	0	0	16	106	3,167	28,036	386,525	1,397,747	10	75
35[po]	08/22–08/22	2-F-E-122-08	14	25	45	0	0	6	40	3,640	29,297	252,988	947,016	3	17
36[p]	08/23–08/23	2-F-E-122-08	14	28	38	0	0	2	14	2,807	21,877	225,598	817,142	0	0
37[r]	08/24–08/24	2-F-E-126-08	14	26	36	0	0	7	50	5,093	44,437	231,391	797,795	3	28
38[s]	08/25–08/25	2-F-E-126-08	14	22	25	0	0	0	0	1,935	14,631	94,170	337,983	0	0
39[t]	08/26–08/26	2-F-E-126-08	14	17	18	0	0	0	0	3,031	29,493	128,913	422,046	0	0
40[s]	08/27–08/27	2-F-E-126-08	14	10	10	0	0	0	0	2,779	27,361	53,623	192,041	0	0
41[u]	08/28–08/28	2-F-E-127-08	13	12	12	0	0	5	32	2,480	20,372	55,735	202,387	0	0
42[v]	08/29–08/29	2-F-E-127-08	13	11	11	0	0	2	10	2,951	22,875	30,481	109,001	0	0

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Period	Date	Emergency Orders Issued	Hours	Permits	Landings	Chinook Number	Chinook Pounds	Sockeye Number	Sockeye Pounds	Coho Number	Coho Pounds	Pink Number	Pink Pounds	Chum Number	Chum Pounds
43[u]	08/30–08/30	2-F-E-127-08	13	7	7	0	0	0	0	1,109	8,407	20,296	66,608	0	0
44[s]	08/31–08/31	2-F-E-133-08	13	3	3	0	0	0	0	325	2,363	11,335	44,335	0	0
45[t]	09/01–09/01	2-F-E-133-08	13	3	3	0	0	0	0	480	4,690	9,863	37,649	0	0
46[s]	09/02–09/02	2-F-E-133-08	13	2	2	0	0	0	0	822	6,578	11,462	37,953	0	0
47[t]	09/03–09/03	2-F-E-133-08	13	0	0	0	0	0	0	0	0	0	0	0	0
48[w]	09/04–09/04	2-F-E-134-08	13	0	0	0	0	0	0	0	0	0	0	0	0
Total			502	75	940	14	127	551	3,373	36,831	311,070	6,585,095	23,613,023	9,358	85,731
Average Weight							9.07		6.12		8.45		3.59		9.16

[j] Waters of the Coghill District excluding waters west of a line from Pt. Pigot to Pt. Pakenham and waters south of 60° 46.10' N. Lat. were open to purse seine and drift gillnet. Waters of the WNH SHA, behind the row of buoys in front of the barrier seine were closed.

[k] Waters of the Coghill District north of the latitude of Point Pakenham and waters of the Esther Subdistrict north of 60° 46.10' N. Lat., were open. Waters of the WNH SHA, behind the row of buoys in front of the barrier seine were closed.

[l] Water of the Coghill District north of the latitude of Point Pakenham and waters of the Esther Subdistrict north of 60° 46.10' N. lat., excluding the WNH SHA and THA were open to purse seine and drift gillnet.

[m] Waters of the Coghill District north of the latitude of Point Pakenham were open to purse seine and drift gillnet gear.

[n] Waters of the Esther Subdistrict, west of 147° 55.10' W. Long., and within 0.5 nautical miles of Esther Island, excluding the WHN THA and SHA were open to purse seine and drift gillnet gear.

[o] Waters of the Coghill District within the Esther Subdistrict, west of 147° 55.10' W. Long., including the WNH THA, and within the Granite Bay Subdistrict, west of 148° 03.80' W. Long., were open to purse seine and drift gillnet gear.

[p] Waters of the Esther Subdistrict west of 147° 55.10' W. Long. and north of 60° 46.10' N. Lat., including the WNH THA were open to purse seine and drift gillnet gear.

[q] Waters of the Esther Subdistrict west of 147° 55.10' W. Long. and north of 60° 46.10' N. Lat., excluding the WNH THA and SHA were open to purse seine and drift gillnet gear.

[r] Waters of the Coghill District, excluding WNH SHA and Bettles Bay west of 148° 15.98' W. Long., Hummer Bay west of 148° 17.48' W. Long. and Pigot Bay west of 148 20.10' W. Long were open to seine and drift.

[s] Waters of the Coghill District within the Esther Subdistrict, west of 147° 55.10' W. Long., including the WNH THA, and within the Granite Bay Subdistrict west of 148° 03.80' W. Long., were open to seine and drift.

[t] Waters of the Coghill District, excluding the WNH SHA, the Granite Bay Subdistrict east of 148° 03.80' W. Long., and Bettles Bay and Pigot Bay west of 148° 20.10' W. Long., were open to purse seine and drift gillnet.

[u] Waters of the Coghill District, excluding the WNH THA and SHA, the Granite Bay Subdistrict east of 148° 03.80' W. Long., and Bettles Bay west of 148° 15.98' W. Long., Hummer Bay west of 148° 17.48' W. Long., and Pigot Bay west of 148° 20.10' W. Long. were open to purse seine and drift gillnet.

[v] Waters of the Coghill District within the Esther Subdistrict, west of 147 55.10' W. Long., excluding the WNH THA and SHA, and within the Granite Bay Subdistrict, west of 148 03.80' W. Long.,were open to both gear groups.

Appendix B6.–Total commercial common property harvest by species in the Coghill District, 1984–2008.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
			Drift Gillnet			
1984	396	94,956	563	897,496	264,878	1,258,289
1985	380	339,296	1,131	454,531	246,824	1,042,162
1986	617	381,565	789	68,887	218,971	670,829
1987	352	377,454	13,396	712,897	318,842	1,422,941
1988	501	82,294	41,307	1,314,061	346,388	1,784,551
1989	364	106,114	80,737	628,522	194,584	1,010,321
1990	126	11,988	128,605	1,907,510	301,209	2,349,438
1991	92	3,888	78,363	231,501	34,223	348,067
1992	242	57,919	86,782	167,384	182,433	494,760
1993	576	66,532	37,898	141,279	635,208	881,493
1994	390	12,928	50,879	58,334	554,181	676,712
1995	468	57,797	29,343	161,493	379,659	628,760
1996	575	177,530	20,926	59,447	612,969	871,447
1997	862	227,231	5,618	154,969	689,977	1,078,657
1998	605	59,463	2,925	383,604	347,317	793,914
1999	401	106,028	1,114	32,408	689,210	829,161
2000	269	176,452	82,869	88,228	1,643,801	1,991,619
2001	216	87,539	3,185	308,707	1,142,449	1,542,096
2002	203	59,758	784	6,457	1,660,443	1,727,645
2003	114	161,872	9,900	44,419	726,431	942,736
2004	126	216,156	10,200	20,081	534,959	781,522
2005	115	94,748	52,416	72,110	880,967	1,100,356
2006	71	96,435	97,002	24,659	266,233	484,400
2007	89	173,430	60,982	65,407	858,179	1,158,087
10-Year Average	221	123,188	32,138	104,608	874,999	1,135,154
2008	103	177,974	80,527	854,465	2,308,231	3,421,300
			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

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Appendix B6.–Page 2 of 2.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
	Drift Gillnet					
2003	15	125,641	724	11,439,915	750,834	12,317,129
2004	2	195	133	23,609	386,042	409,981
2005	1	10,722	1,558	3,246,778	275,783	3,534,842
2006	9	5,944	16,995	1,348,377	297,576	1,668,901
2007	9	12,472	24,602	2,334,590	318,626	2,690,299
10-Year Average	10	16,736	8,066	2,993,898	347,174	3,365,884
2008	14	551	36,831	6,585,095	9,358	6,631,849
Year	Chinook	Sockeye	Coho	Pink	Chum	Total
	Combined Purse Seine and Drift Gillnet					
1984	396	94,977	563	908,407	266,004	1,270,347
1985	465	350,053	1,243	523,773	266,154	1,141,688
1986	803	400,079	887	214,593	246,049	862,411
1987	410	416,353	15,352	1,578,568	378,094	2,388,777
1988	564	83,917	57,094	2,914,542	358,143	3,414,260
1989	425	108,144	120,221	3,925,487	319,223	4,473,500
1990	128	12,274	140,424	2,692,788	312,160	3,157,774
1991	103	5,450	78,984	2,211,575	45,742	2,341,854
1992	248	58,684	114,164	363,887	184,036	721,019
1993	622	72,782	39,658	493,747	638,853	1,245,662
1994	440	33,988	81,396	3,597,094	557,756	4,270,674
1995	501	78,467	34,680	1,078,693	382,256	1,574,597
1996	576	180,170	26,245	1,543,869	613,432	2,364,292
1997	869	232,925	6,887	2,030,586	723,116	2,994,383
1998	625	61,165	4,456	3,228,761	368,917	3,663,924
1999	435	109,257	1,452	3,542,130	1,310,559	4,963,833
2000	270	179,436	114,860	3,359,542	1,645,139	5,299,247
2001	224	89,937	3,541	957,042	1,146,251	2,196,995
2002	208	61,826	3,215	1,277,637	2,455,237	3,798,123
2003	129	287,513	10,624	11,484,334	1,477,265	13,259,865
2004	128	216,351	10,333	43,690	921,001	1,191,503
2005	116	105,470	53,974	3,318,888	1,156,750	4,635,198
2006	80	102,379	113,997	1,373,036	563,809	2,153,301
2007	98	185,902	85,584	2,399,997	1,176,804	3,848,385
10-Year Average	231	139,924	40,204	3,098,506	1,222,173	4,501,037
2008	117	178,525	117,358	7,439,560	2,317,589	10,053,149

Appendix B7.–Estimated age and sex composition of the sockeye salmon escapement through the weir on the outlet stream of Coghill Lake, 2008.

Strata Combined:	06/08 - 07/24	Brood Year and Age Class [a]								
Sampling dates:	06/26 - 07/24	2005		2004		2003		2002		
Sample size:	1,306	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	Total
Female	Percentage of sample	0.0	0.4	9.9	0.0	35.1	0.7	0.7	1.2	47.9
	Number in escapement	0	105	2,891	0	10,284	201	195	358	14,034
Male	Percentage of sample	1.7	0.0	27.5	0.1	18.7	1.9	1.0	1.2	52.1
	Number in escapement	508	0	8,053	16	5,488	559	285	354	15,262
Total	Percentage of sample	1.7	0.4	37.4	0.1	53.8	2.6	1.6	2.4	100.0
	Number in escapement	508	105	10,944	16	15,772	760	480	711	29,296
	Standard error	104	57	420	16	440	149	109	151	

[a] Ages determined using length frequency data.

Appendix B8.–Total commercial common property salmon harvest by period in the Unakwik District drift gillnet and purse seine fisheries, 2008.

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	06/16-06/18	2-F-E-024-08	48	0	0	0	0	0	0	0	0	0	0	0	0
02	06/19-06/22	2-F-E-035-08	72	0	0	0	0	0	0	0	0	0	0	0	0
03	06/23-06/25	2-F-E-040-08	48	0	0	0	0	0	0	0	0	0	0	0	0
04	06/26-06/29	2-F-E-045-08	72	1	1	0	0	52	323	0	0	0	0	0	0
05	06/30-07/02	2-F-E-051-08	48	1	1	0	0	22	134	0	0	0	0	1	8
06	07/03-07/06	2-F-E-057-08	72	1	1	0	0	18	132	0	0	0	0	15	123
07	07/07-07/09	2-F-E-063-08	48	0	0	0	0	0	0	0	0	0	0	0	0
08	07/10-07/13	2-F-E-070-08	72	0	0	0	0	0	0	0	0	0	0	0	0
09	07/14-07/16	2-F-E-076-08	48	0	0	0	0	0	0	0	0	0	0	0	0
10	07/17-07/20	2-F-E-080-08	72	0	0	0	0	0	0	0	0	0	0	0	0
11	07/21-07/23	2-F-E-086-08	48	1	1	0	0	27	190	0	0	255	1,270	0	0
12	07/24-07/27	2-F-E-094-08	72	0	0	0	0	0	0	0	0	0	0	0	0
13	07/28-07/30	2-F-E-097-08	48	2	2	0	0	270	1,357	0	0	623	1,869	42	308
14	07/31-08/03	2-F-E-101-08	72	0	0	0	0	0	0	0	0	0	0	0	0
Total			840	5	6	0	0	389	2,136	0	0	878	3,139	58	439
Average Weight							0.00		5.49		0.00		3.58		7.57
Purse Seine															
01	06/16-06/18	2-F-E-026-08	48	0	0	0	0	0	0	0	0	0	0	0	0
02	06/19-06/22	2-F-E-035-08	72	0	0	0	0	0	0	0	0	0	0	0	0
03	06/23-06/25	2-F-E-040-08	48	0	0	0	0	0	0	0	0	0	0	0	0
04	06/26-06/29	2-F-E-045-08	72	0	0	0	0	0	0	0	0	0	0	0	0
05	06/30-07/02	2-F-E-051-08	48	0	0	0	0	0	0	0	0	0	0	0	0
06	07/03-07/06	2-F-E-057-08	72	0	0	0	0	0	0	0	0	0	0	0	0
07	07/07-07/09	2-F-E-063-08	48	0	0	0	0	0	0	0	0	0	0	0	0
08	07/10-07/13	2-F-E-070-08	72	0	0	0	0	0	0	0	0	0	0	0	0
09	07/14-07/16	2-F-E-076-08	48	0	0	0	0	0	0	0	0	0	0	0	0
10	07/17-07/20	2-F-E-080-08	72	0	0	0	0	0	0	0	0	0	0	0	0
11	07/21-07/23	2-F-E-086-08	48	0	0	0	0	0	0	0	0	0	0	0	0
12	07/24-07/27	2-F-E-094-08	72	0	0	0	0	0	0	0	0	0	0	0	0
13	07/28-07/30	2-F-E-097-08	48	0	0	0	0	0	0	0	0	0	0	0	0
14	07/31-08/03	2-F-E-101-08	72	0	0	0	0	0	0	0	0	0	0	0	0
Total			840	0	0	0	0	0	0	0	0	0	0	0	0
Average Weight						0.0		0.0		0.0		0.0		0.0	

Appendix B9.–Total commercial common property salmon harvest by species in the Unakwik District, 1983–2008.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
			Drift Gillnet			
1983	3	13,215	0	1,515	1,426	16,159
1984	2	18,522	0	27,742	7,125	53,391
1985	26	27,532	22	9,191	3,942	40,713
1986	5	25,759	1	1,973	2,463	30,201
1987	2	5,894	1	4,871	1,356	12,124
1988	15	8,589	0	281	1,504	10,389
1989	31	21,412	27	41,820	404	63,694
1990	3	247	127	9,986	23	10,386
1991	13	4,482	11	12,299	118	16,923
1992	3	2,224	13	3,972	94	6,306
1993	5	14,691	4	3,338	978	19,016
1994	0	548	0	300	0	848
1995	8	2,116	0	1	36	2,161
1996	3	6,063	0	17	694	6,777
1997	3	3,411	0	0	177	3,591
1998	10	13,651	55	1,932	586	16,234
1999	4	8,544	5	0	296	8,849
2000	0	1,119	0	0	20	1,139
2001	3	2,298	2	4	44	2,351
2002	5	9,825	14	0	761	10,605
2003	0	2,163	0	0	0	2,163
2004	5	7,438	1	0	168	7,612
2005	6	23,027	27	1,540	858	25,458
2006	1	698	1	36	171	907
2007	1	15,146	0	0	222	15,369
10-Year Average	4	8,391	11	351	313	9,069
2008	0	389	0	878	58	1,325
			Purse Seine			
1983	0	6	0	3,344	716	4,066
1984	0	0	0	0	0	0
1985	0	138	0	28,210	4,123	32,471
1986	0	76	0	4,718	4,675	9,469
1987	0	146	0	187,752	6,549	194,447
1988	0	667	7	57,844	23,860	82,378
1989	0	0	0	0	0	0
1990	0	0	0	0	0	0
1991	0	819	3	121,068	79	121,969
1992	0	42	2	13,264	119	13,427
1993	0	79	0	3,233	67	3,379
1994	0	226	102	388,901	73	389,302
1995	0	0	0	0	0	0
1996	0	0	0	0	0	0
1997	0	0	0	0	0	0
1998	0	0	0	0	0	0
1999	1	386	0	0	2	389

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Year	Chinook	Sockeye	Coho	Pink	Chum	Total
2000	0	0	0	20,485	0	20,485
2001	0	0	0	0	0	0
2002	3	1,141	16	133	123	1,416
2003	0	1,017	0	2,261	20	3,298
2004	0	0	0	0	0	0
2005	0	80	0	81,858	0	81,938
2006	0	0	0	0	0	0
2007	0	547	0	0	4	551
10-Year Average	0	317	2	10,474	15	10,808
2008	0	0	0	0	0	0
			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	0	58,125	25,364	92,760
1989	31	21,412	27	41,820	404	63,694
1990	3	247	127	9,986	23	10,386
1991	13	5,301	11	133,367	197	138,889
1992	3	2,266	13	17,236	213	19,731
1993	5	14,770	4	6,571	1,045	22,395
1994	0	774	0	389,201	73	390,048
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	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	14	133	884	12,005
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
2007	1	15,693	0	0	226	15,920
10-Year Average	4	8,708	11	10,825	328	19,875
2008	0	389	0	878	58	1,325

APPENDIX C

Appendix C1.–Anticipated daily and cumulative salmon escapement versus actual escapement past the Eshamy River weir, 2008.

	Sockeye				Pink[a]		Chum		Coho	
	Actual		Projected		Actual		Actual		Actual	
Date	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative
07/06	NA	NA	59	695	NA	NA	NA	NA	NA	NA
07/07	NA	NA	48	743	NA	NA	NA	NA	NA	NA
07/08	NA	NA	79	822	NA	NA	NA	NA	NA	NA
07/09	NA	NA	85	907	NA	NA	NA	NA	NA	NA
07/10	0	0	99	1,005	0	0	0	0	0	0
07/11	0	0	102	1,107	0	0	0	0	0	0
07/12	0	0	74	1,181	0	0	0	0	0	0
07/13	0	0	88	1,269	0	0	0	0	0	0
07/14	0	0	102	1,371	0	0	0	0	0	0
07/15	1	1	104	1,475	0	0	0	0	0	0
07/16	0	1	142	1,617	0	0	0	0	0	0
07/17	0	1	121	1,738	0	0	0	0	0	0
07/18	0	1	104	1,842	0	0	0	0	0	0
07/19	2	3	100	1,942	0	0	0	0	0	0
07/20	0	3	86	2,027	0	0	0	0	0	0
07/21	5	8	159	2,186	0	0	0	0	0	0
07/22	697	705	137	2,323	0	0	0	0	0	0
07/23	358	1,063	150	2,473	0	0	0	0	0	0
07/24	349	1,412	216	2,689	0	0	0	0	0	0
07/25	124	1,536	274	2,964	0	0	0	0	0	0
07/26	191	1,727	321	3,285	0	0	0	0	0	0
07/27	323	2,050	268	3,553	8	8	1	1	0	0
07/28	253	2,303	219	3,771	10	18	0	1	0	0
07/29	307	2,610	162	3,933	2	20	0	1	0	0
07/30	442	3,052	361	4,294	3	23	0	1	0	0
07/31	383	3,435	210	4,505	4	27	0	1	0	0
08/01	153	3,588	100	4,605	1	28	0	1	0	0
08/02	551	4,139	220	4,825	9	37	18	19	0	0
08/03	56	4,195	207	5,032	1	38	0	19	0	0
08/04	37	4,232	264	5,296	0	38	0	19	0	0
08/05	519	4,751	226	5,522	0	38	0	19	0	0
08/06	114	4,865	293	5,815	12	50	0	19	0	0
08/07	26	4,891	347	6,162	0	50	0	19	0	0
08/08	1,384	6,275	370	6,532	1	51	0	19	0	0
08/09	59	6,334	437	6,969	2	53	0	19	0	0
08/10	744	7,078	551	7,520	4	57	0	19	0	0
08/11	97	7,175	479	7,999	0	57	0	19	0	0
08/12	362	7,537	551	8,549	1	58	0	19	0	0
08/13	669	8,206	496	9,046	10	68	0	19	0	0
08/14	1,091	9,297	653	9,699	3	71	0	19	0	0
08/15	1,085	10,382	583	10,282	8	79	0	19	0	0

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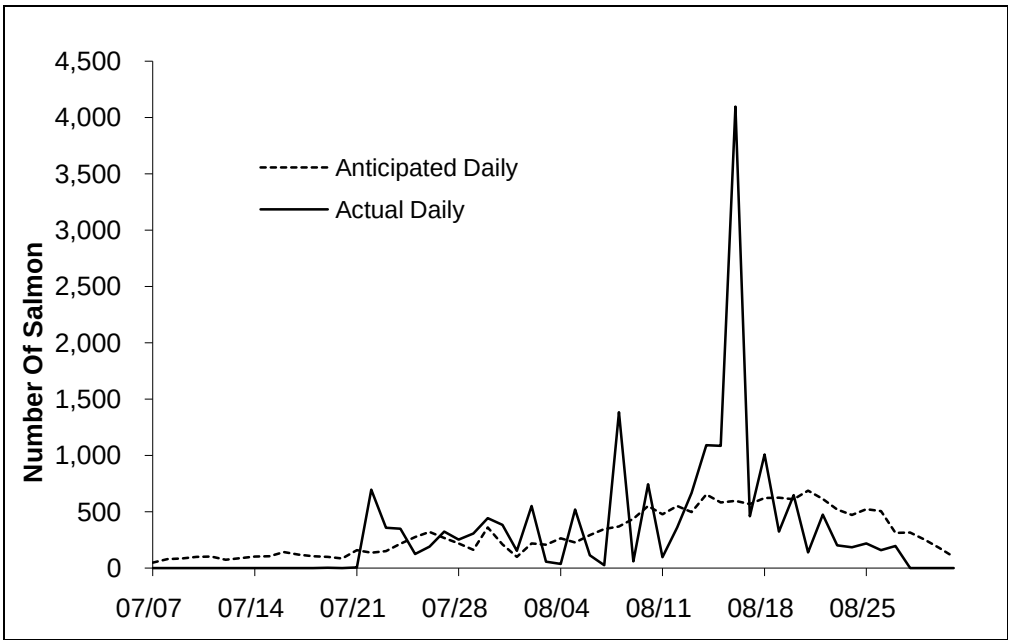
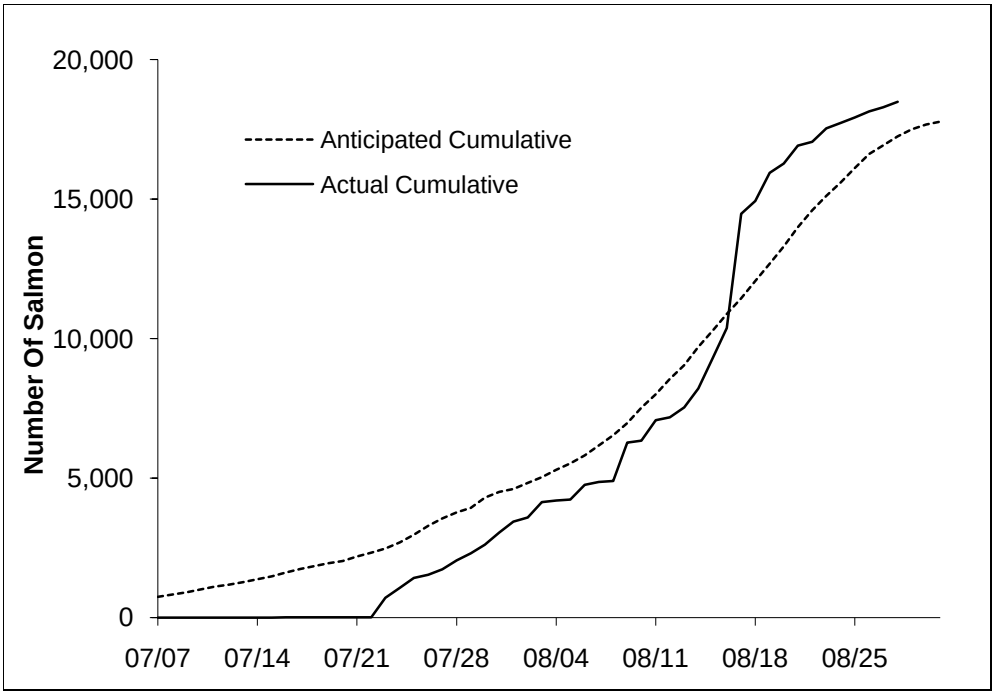
Appendix C1.–Page 2 of 2.

	Sockeye				Pink[a]		Chum		Coho	
	Actual		Projected		Actual		Actual		Actual	
Date	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative
08/16	4,097	14,479	595	10,877	128	207	0	19	0	0
08/17	460	14,939	568	11,445	15	222	0	19	0	0
08/18	1,009	15,948	621	12,066	125	347	0	19	0	0
08/19	325	16,273	624	12,690	89	436	0	19	0	0
08/20	649	16,922	609	13,300	266	702	0	19	0	0
08/21	139	17,061	687	13,987	58	760	0	19	0	0
08/22	474	17,535	614	14,601	275	1,035	0	19	0	0
08/23	203	17,738	519	15,121	101	1,136	0	19	0	0
08/24	186	17,924	472	15,593	174	1,310	0	19	8	8
08/25	218	18,142	522	16,115	195	1,505	1	20	8	16
08/26	158	18,300	504	16,619	292	1,797	0	20	11	27
08/27	195	18,495	313	16,932	263	2,060	0	20	0	27
08/28	NA	18,495	316	17,248	NA	2,060	NA	20	NA	27
08/29	NA	18,495	252	17,501	NA	2,060	NA	20	NA	27
08/30	NA	18,495	178	17,678	NA	2,060	NA	20	NA	27
08/31	NA	18,495	101	17,779	NA	2,060	NA	20	NA	27

[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, 2008.





Appendix C3.–Salmon escapement by species past the Eshamy River weir, 1967–2008.

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
1971 [b]	0	28,683	0	0	0	28,683
1973	0	10,202	205	1,698	0	12,105
1974 [b]	0	633	0	0	0	633
1975 [b]	0	1,724	0	0	0	1,724
1976 [b]	0	19,367	0	0	0	19,367
1977	0	11,746	230	32,080	0	44,056
1978	0	12,580	20	552	0	13,152
1979	0	12,169	5	3,654	1	15,829
1980	5	44,263	128	963	2	45,361
1981	1	23,048	249	5,956	13	29,267
1982	0	6,782	79	1,056	79	7,996
1983	0	10,348	40	7,047	4	17,439
1984	2	36,121	881	3,970	0	40,974
1985	0	26,178	96	6,271	0	32,545
1986	2	6,949	55	1,004	31	8,041
1987 [c]	NA	NA	NA	NA	NA	NA
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	0	0	0	0	0	
1999	1	27,057	194	32,756	3	60,011
2000	2	22,653	151	20,515	381	43,702
2001	0	55,187	335	21,027	176	76,725
2002	0	40,478	14	4,843	1,072	46,407
2003	2	39,845	N/A	2,440	335	42,622
2004	0	13,443	0	1,518	0	14,961
2005	1	23,523	46	11,024	529	35,123
2006	0	41,823	201	3,585	608	46,217
2007	0	16,646	831	29,409	243	46,673
10-Year Average	1	28,066	197	12,712	335	41,309
2008	0	18,494	27	2,060	20	20,601

N/A= Count is not available

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

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

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

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

Appendix C4.–Total drift gillnet common property salmon harvest by period in the Eshamy District, 2008.

Period	Date	Emergency Orders	Hours	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
						Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
01[a]	06/02-06/04	2-F-E-009-08	48	0	0	0	0	0	0	0	0	0	0	0	0
02[b]	06/05-06/08	2-F-E-012-08	72	0	0	0	0	0	0	0	0	0	0	0	0
03[a]	06/09-06/11	2-F-E-015-08	48	1	4	0	0	55	286	0	0	0	0	209	1,659
04[b]	06/12-06/14	2-F-E-018-08	48	23	59	1	28	2,034	12,058	0	0	0	0	9,046	69,658
05[a]	06/16-06/18	2-F-E-023-08	48	61	135	1	19	12,277	75,152	0	0	4	15	9,969	79,183
06[b]	06/19-06/22	2-F-E-034-08	72	245	830	9	124	58,842	360,800	0	0	58	207	61,535	490,243
07[c]	06/23-06/25	2-F-E-039-08	24	270	838	9	155	87,386	544,088	5	42	56	215	42,383	334,952
08[d]	06/26-06/29	2-F-E-044-08	72	263	979	4	41	155,888	984,677	340	2,050	147	492	54,264	412,937
09[b]	06/30-07/02	2-F-E-050-08	48	187	613	0	0	70,382	433,678	6	47	759	2,638	15,751	120,651
10[c]	07/03-07/06	2-F-E-056-08	72	180	582	3	39	60,147	371,646	24	179	3,697	12,347	21,810	169,886
11[ae]	07/07-07/09	2-F-E-062-08	48	96	275	1	23	35,646	219,046	67	605	4,070	13,956	10,967	84,733
12[c]	07/10-07/13	2-F-E-069-08	72	96	317	7	74	28,302	173,634	109	779	9,386	31,159	8,743	68,172
13[c]	07/14-07/16	2-F-E-075-08	24	75	189	2	49	13,408	80,203	264	1,996	7,196	24,052	5,362	41,426
14[fl]	07/17-07/20	2-F-E-079-08	72	44	147	8	66	11,763	74,914	233	1,858	9,530	30,270	4,270	33,767
15[g]	07/21-07/23	2-F-E-085-08	48	37	88	1	7	6,091	37,765	131	1,021	5,093	15,991	2,714	21,609
16[g]	07/24-07/27	2-F-E-093-08	72	38	76	0	0	4,656	27,814	48	357	3,914	13,687	977	7,780
17[g]	07/28-07/30	2-F-E-096-08	48	21	43	0	0	3,194	19,111	27	209	4,246	15,422	616	4,942
18[fh]	07/31-08/03	2-F-E-100-08	72	23	61	1	15	5,222	32,060	177	1,516	7,188	25,664	1,628	12,992
19[h]	08/04-08/06	2-F-E-103-08	48	21	31	0	0	1,582	9,574	20	150	4,779	16,981	349	2,650
20[i]	08/07-08/10	2-F-E-109-08	72	15	16	0	0	1,619	9,699	169	1,296	5,999	20,993	276	2,197
21j	08/11-08/12	2-F-E-111-08	24	25	33	0	0	1,436	8,971	113	996	14,203	51,145	565	2,625
22ij	08/14-08/15	2-F-E-116-08	24	9	10	1	32	441	2,684	54	504	4,993	17,592	32	256
23j	08/18-08/19	2-F-E-120-08	24	10	20	0	0	332	2,305	84	728	9,920	39,715	23	188
24ij	08/21-08/22	2-F-E-123-08	24	10	18	0	0	166	1,183	59	580	8,087	32,075	4	32
25hk	08/25-08/27	2-F-E-125-08	48	0	0	0	0	0	0	0	0	0	0	0	0
26ik	08/28-08/30	2-F-E-129-08	48	0	0	0	0	0	0	0	0	0	0	0	0
27hk	09/01-09/03	2-F-E-132-08	48	0	0	0	0	0	0	0	0	0	0	0	0
28k	09/04-09/06	2-F-E-140-08	48	0	0	0	0	0	0	0	0	0	0	0	0
29hk	09/08-09/10	2-F-E-141-08	48	0	0	0	0	0	0	0	0	0	0	0	0
30ik	09/11-09/13	2-F-E-142-08	60	0	0	0	0	0	0	0	0	0	0	0	0
31b	09/15-09/17	2-F-E-148-08	60	0	0	0	0	0	0	0	0	0	0	0	0
32d	09/18-09/20	2-F-E-151-08	60	0	0	0	0	0	0	0	0	0	0	0	0
33b	09/22-09/24	2-F-E-155-08	60	0	0	0	0	0	0	0	0	0	0	0	0
Total			1,704	366	5,364	48	672	560,869	3,481,348	1,930	14,913	103,325	364,616	251,493	1,962,538
Average Weight							14.00		6.21		7.73		3.53		7.80

[a] Waters of the Eshamy District were open. The AGZ was open to drift gillnet.

[b] Waters of the Eshamy District were open. The AGZ was closed to drift gillnet.

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

[d] Waters of the Eshamy District were open including the AGZ to a line of bouys in front of the barrier seine.

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

[f] Waters of the Eshamy District, excluding the AGZ and waters south of Loomis Creek (60° 29.442' N. Lat), were open.

[g] Waters of the Main Bay Subdistrict, excluding the AGZ, were open. The remainder of Eshamy District, excluding waters south of Loomis Creek (60° 29.442' N. Lat), were open.

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

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

[j] Waters of Eshamy Bay west of a line from 60° 28.012' N, 147° 57.812' W to 60° 28.818' N, 147° 58.544' W to within 100 yards outside the narrows at the entrance of Eshamy Lagoon and Main Bay Subdistrict, excluding the AGZ, were open.

[k] Waters of Eshamy Bay east of 148 04.250' W and west of a line from 60° 28.012' N, 147° 57.812' W to 60° 28.818' N, 147° 58.544' W were open.

[l] Anadromous stream closures were suspended.

Appendix C5.–Total set gillnet common property salmon harvest by period in the Eshamy District, 2008.

		Emergency				Chinook		Sockeye		Coho		Pink		Chum	
Period	Date	Orders	Hours	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
01[a]	06/02-06/04	2-F-E-009-08	48	4	4	0	0	0	0	0	0	0	0	116	874
02[b]	06/05-06/08	2-F-E-012-08	72	9	29	3	87	42	270	0	0	1	2	1,536	11,359
03[a]	06/09-06/11	2-F-E-015-08	48	15	58	4	80	988	5,190	0	0	0	0	5,246	41,896
04[b]	06/12-06/14	2-F-E-018-08	48	16	85	0	0	2,427	14,429	0	0	1	4	4,572	36,111
05[a]	06/16-06/18	2-F-E-023-08	48	20	101	3	46	8,616	52,383	1	9	8	32	4,291	34,685
06[b]	06/19-06/22	2-F-E-034-08	72	22	157	4	94	15,497	96,516	4	33	57	185	9,842	78,216
07[c]	06/23-06/25	2-F-E-039-08	48	23	114	1	15	13,678	86,733	0	0	14	43	4,172	33,138
08[d]	06/26-06/29	2-F-E-044-08	72	25	214	0	0	32,824	207,414	5	37	136	437	6,719	52,182
09[b]	06/30-07/02	2-F-E-050-08	48	25	156	0	0	23,932	147,484	0	0	347	1,147	2,789	21,462
10[c]	07/03-07/06	2-F-E-056-08	72	24	198	0	0	27,176	167,383	11	68	1,430	4,567	6,013	47,455
11[ae]	07/07-07/09	2-F-E-062-08	48	25	143	1	5	17,031	104,691	5	32	1,982	6,239	4,901	37,560
12[c]	07/10-07/13	2-F-E-069-08	36	23	84	1	19	7,667	46,673	5	33	1,486	4,646	1,704	13,214
13[c]	07/14-07/16	2-F-E-075-08	24	22	67	1	19	5,229	30,320	11	78	865	3,106	642	4,050
14[fl]	07/17-07/20	2-F-E-079-08	12	12	23	0	0	1,247	8,605	1	7	335	1,115	255	1,998
15[g]	07/21-07/23	2-F-E-085-08	24	12	30	0	0	2,420	15,341	3	23	619	2,080	370	2,910
16[g]	07/24-07/27	2-F-E-093-08	12	7	9	0	0	741	4,205	2	16	77	242	52	415
17[g]	07/28-07/30	2-F-E-096-08	24	8	12	0	0	1,100	6,602	0	0	672	2,477	153	1,228
18[fh]	07/31-08/03	2-F-E-100-08	24	5	8	0	0	636	3,824	0	0	679	2,386	158	1,254
19[h]	08/04-08/06	2-F-E-103-08	24	3	6	0	0	449	2,703	3	21	371	1,306	36	288
20[i]	08/07-08/10	2-F-E-109-08	12	2	2	0	0	131	785	4	37	437	1,532	12	96
21[j]	08/11-08/12	2-F-E-111-08	24	2	4	0	0	181	1,166	23	190	893	3,359	13	105
22[ij]	08/14-08/15	2-F-E-116-08	12	2	4	0	0	145	1,030	38	315	1,703	6,821	17	140
23[j]	08/18-08/19	2-F-E-120-08	24	2	4	0	0	153	1,375	10	90	4,878	19,530	18	144
24[ij]	08/21-08/22	2-F-E-123-08	12	3	3	0	0	93	660	17	175	3,460	13,840	0	0
25[hk]	08/25-08/27	2-F-E-125-08	24	1	1	0	0	0	0	8	68	4	16	0	0
26[ik]	08/28-08/30	2-F-E-129-08	12	0	0	0	0	0	0	0	0	0	0	0	0
27[hk]	09/01-09/03	2-F-E-132-08	24	0	0	0	0	0	0	0	0	0	0	0	0
28[k]	09/04-09/06	2-F-E-140-08	12	0	0	0	0	0	0	0	0	0	0	0	0
29[hk]	09/08-09/10	2-F-E-141-08	24	0	0	0	0	0	0	0	0	0	0	0	0
30[ik]	09/11-09/13	2-F-E-142-08	12	0	0	0	0	0	0	0	0	0	0	0	0
31[b]	09/15-09/17	2-F-E-148-08	24	0	0	0	0	0	0	0	0	0	0	0	0
32[d]	09/18-09/20	2-F-E-151-08	12	0	0	0	0	0	0	0	0	0	0	0	0
33[b]	09/22-09/24	2-F-E-155-08	24	0	0	0	0	0	0	0	0	0	0	0	0
Total			1,056	25	1,516	18	365	162,403	1,005,782	151	1,232	20,455	75,112	53,627	420,780
Average Weight							20.28		6.19		8.16		3.67		7.85

-continued-

[a] Waters of the Eshamy District were open. The AGZ was open to set gillnet.

[b] Waters of the Eshamy District were open. The AGZ was closed to set gillnet.

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

[d] Waters of the Eshamy District, including the AGZ to a line of bouys in front of the barrier seine, were open.

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

[f] Waters of the Eshamy District, excluding the AGZ and waters south of Loomis Creek (60° 29.442’ N. Lat), were open.

[g] Waters of the Main Bay Subdistrict, excluding the AGZ, were open. The remainder of Eshamy District, excluding waters south of Loomis Creek (60° 29.442’ N. Lat), were open.

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

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

[j] Waters of Eshamy Bay west of a line from 60° 28.012' N, 147° 57.812' W to 60° 28.818' N, 147° 58.544' W to within 100 yards outside the narrows at the entrance of Eshamy Lagoon and Main Bay Subdistrict, excluding the AGZ, were open.

[k] Waters of Eshamy Bay east of 148 04.250' W and west of a line from 60° 28.012' N, 147° 57.812' W to 60° 28.818' N, 147° 58.544' W were open.

[l] Anadromous stream closures were suspended.

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

Appendix C6.–Total commercial common property harvest by species in the Eshamy District, 1980–2008.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
			Drift Gillnet			
1980	0	684	25	3,225	130	4,064
1981	0	0	0	0	0	0
1982	0	0	0	0	0	0
1983	1	924	8	162,541	3,427	166,901
1984	7	23,490	282	247,326	15,451	286,556
1985	1	667	0	24,899	1,021	26,588
1986	0	4	1	938	65	1,008
1987	2	642	3	3,225	7,060	10,932
1988	94	50,868	794	348,873	206,060	606,689
1989 [a]	0	0	0	0	0	0
1990	110	12,967	574	165,362	264,772	443,785
1991	107	296,234	468	44,516	202,183	543,508
1992	158	373,596	1,017	153,018	50,974	578,763
1993	8	80,807	673	45,974	27,045	154,507
1994	2	61,848	623	254,535	9,497	326,505
1995	21	29,851	1,468	60,712	13,284	105,336
1996	19	179,064	1,056	19,043	23,552	222,734
1997	17	475,498	426	146,324	34,768	657,033
1998	2	98,002	252	101,068	343	199,667
1999	30	86,032	2,036	127,082	13,120	228,300
2000	634	235,085	5,396	375,250	27,511	643,876
2001	47	499,972	10,423	367,588	21,316	899,346
2002	428	589,199	3,532	122,365	104,284	819,808
2003	19	575,608	1,764	61,565	16,057	655,013
2004	21	215,460	1,467	55,832	43,228	316,008
2005	15	79,227	1,636	110,499	3,493	194,870
2006	15	381,911	5,429	89,755	30,841	507,951
2007	27	538,183	2,556	42,822	81,410	664,998
10-Year Average	124	329,868	3,449	145,383	34,160	512,984
2008	48	560,869	1,930	103,325	251,493	917,665
			Set Gillnet			
1980	0	2,000	38	2,371	134	4,543
1981	0	0	0	0	0	0
1982	0	0	0	0	0	0
1983	1	1,328	10	167,942	4,463	173,744
1984	5	23,226	98	278,176	3,000	304,505
1985	1	3,439	74	33,284	1,295	38,093

-continued-

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
			Set Gillnet			
1986	9	1,043	86	42,123	5,764	49,025
1987	31	5,387	336	86,677	45,099	137,530
1988	100	18,321	283	180,456	93,577	292,737
1989 [a]	0	0	0	0	0	0
1990	56	10,204	532	369,589	94,494	474,875
1991	76	184,028	504	20,075	49,394	254,077
1992	101	144,568	1,242	390,097	4,695	540,703
1993	55	101,717	832	84,568	20,369	207,541
1994	9	97,664	628	311,134	6,908	416,343
1995	19	30,814	695	28,118	6,621	66,267
1996	13	132,268	309	16,648	9,276	158,514
1997	12	196,005	163	76,610	8,475	281,265
1998	1	25,533	91	33,916	214	59,755
1999	131	74,378	1,092	43,443	11,101	130,145
2000	41	101,105	662	139,008	12,319	253,135
2001	25	176,060	1,006	127,737	7,057	311,885
2002	30	241,660	525	64,421	22,987	329,623
2003	0	215,733	663	28,537	6,265	251,198
2004	11	91,412	825	51,655	10,381	154,284
2005	0	109,532	882	126,135	3,452	240,001
2006	9	124,087	352	20,863	9,883	155,194
2007	18	196,537	365	13,796	24,651	235,367
10-Year Average	27	135,604	646	64,951	10,831	212,059
2008	18	162,403	151	20,455	53,627	236,654
Year	Chinook	Sockeye	Coho	Pink	Chum	Total
			Combined Gear			
1980	0	2,684	63	5,596	264	8,607
1981	0	0	0	0	0	0
1982	0	0	0	0	0	0
1983	2	2,252	18	330,483	7,890	340,645
1984	12	46,716	380	525,502	18,451	591,061
1985	2	4,106	74	58,183	2,316	64,681
1986	9	1,047	87	43,061	5,829	50,033
1987	33	6,029	339	89,902	52,159	148,462
1988	194	69,189	1,077	529,329	299,637	899,426
1989 [a]	0	0	0	0	0	0
1990	166	23,171	1,106	534,951	359,266	918,660
1991	183	480,262	972	64,591	251,577	797,585
1992	259	518,164	2,259	543,115	55,669	1,119,466
1993	63	182,524	1,505	130,542	47,414	362,048
1994	11	159,512	1,251	565,669	16,405	742,848

-continued-

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
			Set Gillnet			
1995	40	60,665	2,163	88,830	19,905	171,603
1996	32	311,332	1,365	35,691	32,828	381,248
1997	29	671,503	589	222,934	43,243	938,298
1998	3	123,535	343	134,984	557	259,422
1999	161	160,410	3,128	170,525	24,221	358,445
2000	675	336,190	6,058	514,258	39,830	897,011
2001	72	676,032	11,429	495,325	28,373	1,211,231
2002	458	830,859	4,057	186,786	127,271	1,149,431
2003	19	791,341	2,427	90,102	22,322	906,211
2004	32	306,872	2,292	107,487	53,609	470,292
2005	15	188,759	2,518	236,634	6,945	434,871
2006	24	505,998	5,781	110,618	40,724	663,145
2007	45	734,720	2,921	56,618	106,061	900,365
10 Year Average	150	465,472	4,095	210,334	44,991	725,042
2008	66	723,272	2,081	123,780	305,120	1,154,319

[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 gillnet fishery, 2008.

Strata Combined:	06/02 – 08/25	Brood Year and Age Class [a]					
Sampling dates:	06/26 – 07/08	2004	2003		2002		
Sample size:	1,182	1.2	1.3	2.2	1.4	2.3	Total
Female	Percentage of sample	28.7	12.7	0.3	0.0	0.2	41.9
	Number in harvest	207,857	92,137	1,841	0	1,131	302,966
Male	Percentage of sample	33.8	18.7	0.3	0.0	0.0	52.7
	Number in harvest	244,459	134,987	1,841	0	0	381,287
Total	Percentage of sample	65.9	33.4	0.5	0.1	0.2	100.0
	Number in harvest	476,632	241,261	3,682	565	1,131	723,272
	Standard error	9,929	9,884	1,501	565	799	

[a] Fish with resorbed scales have been removed. Strata #1 had 4, #2 – 13, #3 – 48.

Appendix C8.–Estimated age and sex composition of the sockeye salmon escapement through the Eshamy River weir, 2008.

Strata Combined:	07/10 - 08/28	Brood Year and Age Class [a]					
Sampling dates:	08/03 - 08/27	2005	2004	2003		2002	
Sample size:	1,376	1.1	1.2	1.3	2.2	2.3	Total
Female	Percentage of sample	0.0	39.8	5.4	0.6	0.0	45.8
	Number in escapement	0	7,356	1,005	111	3	8,475
Male	Percentage of sample	0.2	47.4	6.0	0.6	0.0	54.2
	Number in escapement	38	8,765	1,107	110	0	10,020
Total	Percentage of sample	0.2	87.2	11.4	1.2	0.0	100.0
	Number in escapement	38	16,121	2,112	221	3	18,495
	Standard error	27	192	182	64	3	

[a] Ages determined using length frequency data.

APPENDIX D

Appendix D1.–Prince William Sound commercial common property purse seine harvest by day, 2008.

			Chinook		Sockeye		Coho		Pink		Chum	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
05/27	3	6	0	0	0	0	0	0	0	0	9,963	79,704
05/28	3	3	0	0	0	0	0	0	0	0	8,754	73,421
05/29	9	9	12	230	0	0	0	0	0	0	14,072	116,317
05/30	2	2	0	0	0	0	0	0	0	0	2,798	22,392
05/31	10	10	0	0	0	0	0	0	0	0	13,756	111,592
06/01	3	3	0	0	0	0	0	0	0	0	1,946	15,564
06/02	12	12	0	0	0	0	0	0	0	0	12,797	110,514
06/03	1	1	0	0	0	0	0	0	0	0	1,529	15,298
06/04	14	14	0	0	0	0	0	0	0	0	10,777	82,898
06/05	3	3	0	0	0	0	0	0	0	0	4,505	40,281
06/06	20	20	0	0	0	0	0	0	0	0	25,735	201,488
06/07	22	23	1	20	0	0	0	0	0	0	43,445	340,775
06/08	26	26	0	0	0	0	0	0	0	0	61,212	441,436
06/09	30	31	3	51	8	64	0	0	28	100	58,906	442,667
06/10	33	33	0	0	0	0	0	0	0	0	57,126	458,291
06/11	25	26	0	0	34	272	0	0	71	250	36,032	274,544
06/12	40	44	0	0	5	40	0	0	21	76	58,984	444,782
06/13	49	52	2	25	176	1,326	0	0	169	501	50,895	417,701
06/14	32	32	1	14	147	1,030	0	0	0	0	23,213	172,215
06/15	54	54	10	211	231	1,393	0	0	1,084	2,348	56,411	433,318
06/16	62	67	7	179	288	1,802	1	7	1,091	3,276	78,537	576,586
06/17	24	24	3	49	380	2,502	0	0	121	389	23,158	180,286
06/18	50	59	19	352	2,278	14,453	0	0	275	742	85,005	649,689
06/19	39	41	4	70	2,089	12,113	0	0	180	647	76,200	579,248
06/20	42	42	6	102	2,341	14,559	0	0	777	2,343	56,770	438,187
06/21	38	38	2	48	1,678	10,291	0	0	10	30	57,837	456,975
06/22	44	46	6	147	2,215	13,577	0	0	418	1,239	68,328	526,796
06/23	49	49	2	48	1,111	6,393	0	0	35,014	80,584	59,576	458,051
06/24	50	52	10	209	1,998	12,221	0	0	289	904	82,783	648,198
06/25	34	35	4	97	3,862	22,829	0	0	0	0	37,463	286,380
06/26	37	43	3	52	5,232	29,487	0	0	2,133	6,406	45,635	345,946

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			Chinook		Sockeye		Coho		Pink		Chum	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
06/27	47	47	1	40	7,891	45,666	0	0	7	25	47,506	365,141
06/28	44	44	4	46	7,043	44,820	0	0	750	2,053	62,008	476,190
06/29	41	41	4	147	6,427	45,366	0	0	4,135	10,164	55,804	436,082
06/30	36	40	2	37	1,446	8,147	0	0	2,355	6,993	53,238	399,417
07/01	103	141	0	0	2,884	19,992	0	0	1,523,402	4,355,290	33,833	290,084
07/02	21	24	0	0	2,534	14,639	0	0	6,969	22,313	44,767	333,397
07/03	21	21	3	27	430	3,177	9	62	8,742	25,890	35,494	298,034
07/04	108	159	0	0	31	197	10	64	1,550,826	4,657,156	14,810	118,625
07/05	10	11	0	0	3,677	22,066	0	0	4,450	13,351	32,327	274,711
07/06	13	15	0	0	652	3,580	0	0	157	471	54,503	405,428
07/07	113	175	0	0	762	4,571	0	0	1,466,497	4,531,424	28,233	213,711
07/08	7	8	0	0	3,162	21,933	0	0	262	745	23,166	189,248
07/09	115	186	0	0	671	3,367	6	44	1,762,454	5,454,323	18,874	168,543
07/10	6	7	0	0	2,608	14,969	0	0	0	0	9,868	70,807
07/11	117	173	0	0	194	1,181	9	74	1,405,726	4,388,834	14,337	114,348
07/12	5	5	2	35	1,333	8,123	2	26	73,909	243,879	5,860	48,681
07/13	114	139	0	0	1,452	10,563	0	0	1,194,362	3,714,999	15,814	125,294
07/14	11	11	0	0	2,034	10,379	0	0	52,605	154,807	3,915	30,886
07/15	6	6	0	0	72	398	3	34	7,333	23,450	5,069	40,581
07/16	113	132	1	10	218	1,276	0	0	956,630	3,014,108	1,490	11,671
07/17	3	4	0	0	1,207	7,245	0	0	58	174	2,377	15,714
07/18	1	1	0	0	259	1,818	0	0	0	0	1,298	10,389
07/19	109	110	0	0	9	54	13	120	573,589	1,793,513	3,818	30,437
07/21	89	91	0	0	1,208	6,412	29	327	419,119	1,328,778	2,418	20,367
07/22	4	5	0	0	249	1,505	5	45	998	3,273	1,669	14,074
07/23	1	1	0	0	143	1,004	0	0	268	938	965	7,726
07/24	2	2	0	0	28	189	0	0	1,918	5,755	423	3269
07/26	3	3	0	0	9	50	3	16	3,900	12,776	591	5195

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			Chinook		Sockeye		Coho		Pink		Chum	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
07/27	1	1	0	0	295	2,065	0	0	2,853	9,986	1233	9867
07/28	8	8	0	0	107	601	2	11	21,307	66,885	982	7857
07/31	3	3	0	0	0	0	0	0	1,048	3,576	79	468
08/02	4	5	0	0	13	71	2	13	20,533	64,715	334	3187
08/03	1	1	0	0	928	4,642	0	0	109	351	0	0
08/04	10	10	0	0	28	157	16	109	45,208	143,464	1386	13705
08/06	19	19	0	0	6	29	19	136	58,420	189,891	3729	36594
08/09	116	189	0	0	128	753	318	2,387	1,836,298	6,322,649	111	894
08/10	2	2	0	0	0	0	0	0	13,068	43,780	0	0
08/11	121	210	13	128	227	1,419	736	5,867	1,927,795	6,774,857	6762	66494
08/12	116	164	2	9	49	324	87	716	1,411,237	4,955,827	68	573
08/13	117	166	0	0	73	432	207	1,606	1,268,127	4,439,528	55	442
08/14	109	149	0	0	31	193	145	1,133	1,281,629	4,574,209	0	0
08/15	115	179	0	0	53	319	551	4,005	1,689,226	6,001,238	13	94
08/16	113	185	0	0	42	264	547	4,149	1,345,038	4,989,423	60	500
08/17	114	169	0	0	19	116	333	2,642	1,166,920	4,286,011	21	157
08/18	113	161	0	0	26	148	743	6,239	1,151,573	4,177,397	17	141
08/19	106	131	0	0	12	84	1,252	11,333	947,252	3,300,978	6	45
08/20	115	174	0	0	64	404	3,559	27,646	1,502,740	5,489,364	10	71
08/21	106	161	0	0	30	191	3,285	29,051	1,233,090	4,371,002	12	88
08/22	107	168	0	0	41	263	4,224	34,648	1,252,694	4,559,100	4	23
08/23	97	124	0	0	4	28	2,866	22,425	796,821	2,848,612	0	0
08/24	104	153	0	0	12	77	6,803	60,545	1,060,611	3,806,136	4	36
08/25	74	84	0	0	1	5	1,963	14,906	351,515	1,297,031	0	0
08/26	68	85	0	0	0	0	4,089	37,944	602,646	2,161,935	0	0
08/27	52	54	0	0	6	36	3,029	29,624	261,487	983,293	0	0
08/28	51	55	0	0	5	32	3,127	25,736	341,403	1,199,255	0	0
08/29	40	46	0	0	2	10	3,071	23,853	164,817	566,470	0	0
08/30	19	19	0	0	0	0	1,222	9,535	90,021	308,221	0	0

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			Chinook		Sockeye		Coho		Pink		Chum	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
08/31	15	16	0	0	2	14	495	4,081	94,366	355,396	0	0
09/01	7	8	0	0	0	0	540	5,129	71,491	261,523	0	0
09/02	77	79	0	0	2	9	144,041	1,348,144	89,417	310,083	5,883	50,638
09/03	21	21	0	0	0	0	7,497	61,860	28,173	114,976	435	3,978
09/04	9	9	0	0	0	0	2,874	27,134	49,904	191,514	136	1,223
09/05	5	5	0	0	0	0	2,274	18,189	0	0	60	544
09/06	4	7	0	0	0	0	509	4,076	114,720	419,370	8	70
09/07	2	2	0	0	0	0	601	6,008	0	0	12	123
09/08	4	4	0	0	0	0	617	4,932	59,703	214,935	5	52
09/09	1	1	0	0	0	0	269	2,156	0	0	1	13
09/10	3	6	0	0	0	0	0	0	106,057	399,750	0	0
09/11	3	3	0	0	0	0	0	0	86,181	315,000	0	0
09/12	2	2	0	0	0	0	0	0	54,718	200,000	0	0
09/13	1	1	0	0	0	0	0	0	27,359	100,000	0	0
09/15	3	3	0	0	0	0	0	0	36,375	145,500	0	0
Total	141	5,544	127	2,383	74,912	459,725	202,003	1,838,787	33,727,052	114,828,548	1,820,049	14,157,467
Average Weight				18.76		6.14		9.10		3.40		7.78

Appendix D2.–Area E commercial salmon harvest by species, excluding Copper River and Bering River Districts, 1971–2008.

Year[a]	Chinook	Sockeye	Coho	Pink	Chum	Total
1971	3,551	88,368	30,551	7,310,964	574,265	8,007,699
1972[b]	547	197,526	1,634	54,783	45,370	299,860
1973	2,405	124,802	1,399	2,056,878	729,839	2,915,323
1974[b]	1,590	129,366	801	448,773	88,544	669,074
1975	2,519	189,613	6,142	4,452,805	100,479	4,751,558
1976	1,044	112,809	6,171	3,018,991	370,478	3,509,493
1977	648	310,358	843	4,513,082	572,610	5,397,541
1978	1,042	222,083	1,495	2,913,721	485,147	3,623,488
1979	2,015	150,040	6,843	15,607,620	326,414	16,092,932
1980	189	189,816	2,952	14,157,057	482,016	14,832,030
1981	404	251,222	4,383	20,524,470	1,878,716	22,659,195
1982	255	1,055,099	24,362	20,396,222	1,335,368	22,811,306
1983	1,048	92,111	10,496	14,038,796	1,041,309	15,183,760
1984	489	311,955	12,420	22,086,806	1,201,842	23,613,512
1985	1,104	493,278	19,753	25,056,663	1,280,093	26,850,891
1986	1,330	488,715	12,277	11,407,271	1,683,049	13,592,642
1987	874	540,109	47,751	29,198,507	1,904,494	31,691,735
1988	1,037	183,572	75,709	11,817,323	1,832,114	13,909,755
1989	1,113	140,090	203,574	21,860,582	995,962	23,201,321
1990	447	58,497	234,525	44,163,479	959,838	45,416,786
1991	445	507,815	145,311	37,134,311	331,906	38,119,788
1992	1,475	780,932	202,311	8,635,448	328,568	9,948,734
1993	2,148	418,948	48,310	5,761,436	1,173,341	7,404,183
1994	1,376	334,183	121,518	36,874,188	1,039,095	38,370,360
1995	1,364	230,057	140,314	16,045,396	702,216	17,119,347
1996	700	606,525	172,448	26,036,570	2,077,996	28,894,239
1997	1,186	1,197,776	64,360	25,828,078	2,224,725	29,316,125
1998	2,013	365,591	74,105	28,664,281	1,266,887	30,372,877
1999	1,055	339,037	81,841	44,993,247	2,963,838	48,379,018
2000	1,133	548,790	353,013	38,875,724	5,158,397	44,937,057
2001	861	932,070	239,947	35,237,137	3,097,005	39,507,020
2002	958	1,013,396	37,586	18,947,254	6,341,864	26,341,058
2003	256	1,519,598	98,947	51,962,716	3,793,499	57,375,016
2004	864	831,356	56,430	23,526,306	1,998,511	26,413,467
2005	1,217	579,643	230,180	59,852,105	1,993,427	62,656,572
2006	1,118	990,880	388,722	21,691,138	2,164,338	25,236,196
2007	873	1,310,694	202,153	63,383,923	3,569,283	68,466,926
2008	962	979,077	307,837	42,352,208	5,074,804	48,714,888
Ten year average	930	904,454	199,666	40,082,176	3,615,497	44,802,722

[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, 1975–2008.

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	[b]	[b]	[b]	73,177	13,795,415
1990	7,970,364	5,482,585	2,692,788	891,444	534,951	17,811,479	10,658	12,325	35,406,594
1991	2,617,222	4,150,612	2,211,575		64,591	17,849,425			26,893,425
1992	489,228	1,142,061	363,887		543,115	3,039,775			5,578,066
1993		413,308	493,747		130,542	2,475,798			3,513,395
1994	11,554,320	7,171,038	3,597,094		565,669	3,408,093			26,296,214
1995	4,235,638	3,656,119	1,078,693		88,830	1,707,745	18,239	11,418	10,796,682
1996	6,059,063	5,039,988	1,543,869		35,691	5,046,919			17,725,530
1997 [c]	4,534,365	3,162,822	2,030,586		222,934	5,929,544	65,107	28,040	15,973,398
1998 [c]	2,231,061	5,035,736	3,228,761		134,984	8,425,853	430,525	350,081	19,837,001
1999	12,305,629	4,981,085	3,542,130		170,525	9,511,998	189,641	914,907	31,615,915
2000	9,819,466	4,093,620	3,359,542	17,223	514,258	9,308,399	87,634	549,763	27,749,905
2001	16,050,235	404,899	957,042		495,325	3,072,848	807,010	534,538	22,321,897
2002	355,964	594,245	1,277,637		186,786	5,710,938	32,857	1,075	8,159,502
2003	14,945,744	5,909,643	11,439,915		90,102	5,789,419	60,287	514,452	38,749,562
2004	9,512,987	45,355	43,690		107,487	1,628,219	102,352	260,992	11,701,082
2005	20,516,356	10,175,784	3,318,875		236,634	11,376,513	844,658	770,570	47,239,390
2006	5,712,890	1,331,740	1,373,036		110,618	3,269,037	144,417	21,805	11,963,543
2007	22,059,138	6,221,016	2,399,997		56,618	17,907,847	878,371	1,869,245	51,392,232
2008	11,008,956	8,589,490	10,053,149	0	1,154,319	8,134,915	1,460,258	0	40,401,087
10-year average	12,228,737	4,234,688	3,776,501	8,612	312,267	7,571,013	460,749	543,735	29,129,412

[a] Includes purse seine, drift gillnet, and set gillnet harvests from all Prince William Sound districts; Unakwik harvests are included in Northern.

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

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

Appendix D4.–Aerial escapement indices for pink and chum salmon by district, 2008.

Pink Salmon

District	Escapement Midpoint	Even Cycle Escapement Goal Range			1976-2008 Even years Mean Index	Observed Escapement Index [a]	Deviation From Midpoint
Eastern	677,500	425,000	-	930,000	445,871	193,844	-71.4%
Northern/Unakwik	282,500	175,000	-	390,000	166,165	141,396	-49.9%
Coghill	182,500	115,000	-	250,000	121,740	145,177	-20.5%
Northwestern	175,000	110,000	-	240,000	104,395	141,787	-19.0%
Eshamy	10,000	5,000	-	15,000	3,691	579	-94.2%
Southwestern	207,500	130,000	-	285,000	117,879	70,291	-66.1%
Montague	122,500	75,000	-	170,000	99,634	56,999	-53.5%
Southeastern	342,500	215,000	-	470,000	274,935	112,347	-67.2%
Total	2,000,000				1,334,310	862,419	-56.9%

Chum Salmon

District	Escapement Range [b]		1976-2008 Mean Index	Observed Escapement Index [a]	Deviation From Midpoint
Eastern	50,000	and up	107,179	74,740	49.5%
Northern/Unakwik	20,000	and up	39,840	38,798	94.0%
Coghill	8,000	and up	19,337	39,660	395.7%
Northwestern	5,000	and up	14,515	28,051	461.0%
Eshamy	None		87	0	NA
Southwestern [c]	None		2,935	3,090	NA
Montague [c]	None		4,732	5,085	NA
Southeastern	8,000	and up	28,375	21,614	170.2%
Total[d]	91,000	and up	209,246	202,864	122.9%

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

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

[c] Escapement goal removed in 2003 after review.

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

Appendix D5.–Pink salmon escapement indices by district, 1965–2008.

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

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Year	Eastern	Northern	Coghill	Northwestern	Eshamy	Southwestern	Montague	Southeastern	Total
	Escapement Indices								
1992	194,962	72,323	23,122	42,805	2,716	64,652	47,029	94,928	542,537
1993	314,727	95,602	41,666	45,847	9,348	98,573	144,784	315,093	1,065,640
1994	613,866	178,151	65,648	141,290	11,799	143,479	58,820	196,228	1,409,281
1995	396,696	84,447	46,029	50,582	10,182	82,490	183,448	336,310	1,190,184
1996	584,236	218,022	104,781	86,709	3,000	63,337	92,966	330,285	1,483,336
1997	345,725	65,260	52,961	53,740	914	112,010	206,943	585,135	1,422,688
1998	377,700	213,288	85,968	97,485	4,644	280,335	161,275	199,410	1,420,105
1999	622,502	214,723	168,816	52,340	6,900	163,347	381,054	853,180	2,462,862
2000	554,984	168,247	223,646	66,078	4,286	131,648	227,881	282,258	1,659,028
2001	436,585	163,573	148,665	102,294	2,963	176,503	314,323	655,480	2,000,386
2002	226,068	138,204	54,882	50,981	1,397	35,554	71,461	364,630	943,177
2003	957,327	262,502	375,147	103,931	5,206	130,356	320,494	691,769	2,846,732
2004	724,663	163,858	79,010	51,306	2,300	108,192	183,891	687,903	2,001,123
2005	1,025,756	579,079	528,264	401,640	32,396	272,572	566,002	1,330,407	4,736,116
2006	248,592	211,603	145,511	127,836	11,247	118,205	149,798	178,009	1,190,802
2007	374,723	156,063	197,405	68,667	9,461	116,130	142,769	443,914	1,509,133
2008	193,844	141,396	145,177	141,787	579	70,291	56,999	112,347	862,419
	Even Cycle Average (1966-2008)								
	430,825	167,448	113,459	102,623	4,554	115,890	86,687	244,180	1,265,667
	Odd Cycle Average (1965-2007)								
	486,227	158,614	187,856	96,482	5,793	131,114	219,260	470,179	1,742,238

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

Appendix D6.–Weekly aerial survey indices of pink salmon escapement by statistical area, 2008.

Survey Location	Statistical Area	Week Ending Dates[a] 6/21	6/28	7/05	7/12	7/19	7/26	8/02	8/09	8/16	8/23	8/30	9/27	10/04	Escapement Index[b]
Orca Inlet	221-10	0	NS	0	0	0	120	150	2,100	NS	2,050	4,000	NS	NS	3,792
Simpson & Sheep Bay	221-20	0	0	0	50	0	2,000	625	7,210	NS	26,200	26,250	NS	NS	23,625
Port Gravina	221-30	0	0	0	100	0	0	2,275	28,450	NS	35,775	30,600	NS	0	45,510
Port Fidalgo	221-40	0	NS	0	0	0	0	6,250	20,400	3,500	30,000	22,125	NS	0	57,986
Valdez Arm	221-50	0	NS	0	50	150	0	9,300	13,700	18,725	NS	31,500	NS	0	62,931
Port Valdez	221-61	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Eastern District		0	0	0	200	150	2,120	18,600	71,860	22,225	94,025	114,475	NS	0	193,844
Columbia & Long Bay	222-10	0	NS	0	0	0	0	8,100	5,825	13,325	NS	9,450	NS	0	25,544
Wells Bay & Unakwik Inlet	222-20	0	0	0	0	0	0	23,300	16,900	31,300	36,200	12,300	NS	32	72,054
Eaglek Bay	222-30	0	0	NS	0	750	0	3,950	10,250	9,695	16,375	NS	NS	0	43,797
Northern District		0	0	0	0	750	0	35,350	32,975	54,320	52,575	21,750	NS	32	141,396
West Side Port Wells	223-10	NS	NS	NS	0	3,200	6,000	9,550	20,600	28,081	25,400	NS	NS	0	54,513
Esther Passage	223-20	NS	NS	NS	0	0	0	325	3,900	1,200	5,000	NS	NS	0	12,963
College Fiord	223-30	NS	NS	NS	0	100	0	17,050	36,100	40,000	45,200	NS	NS	0	77,700
Coghill District		NS	NS	NS	0	3,300	6,000	26,925	60,600	69,281	75,600	NS	NS	0	145,177
Passage Canal & Cochrane	224-10	NS	NS	NS	0	4,175	100	7,900	18,400	15,100	23,100	NS	NS	0	51,355
Culross Passage	224-30	NS	NS	NS	0	0	0	1,085	265	6,125	7,201	NS	NS	0	14,849
Port Nellie Juan	224-40	NS	NS	NS	0	800	0	8,850	4,200	4,900	28,800	NS	NS	0	75,584
Northwestern District		NS	NS	NS	0	4,975	100	17,835	22,865	26,125	59,101	NS	NS	0	141,787
Main Bay	225-20	0	NS	NS	0	0	0	10	0	0	0	NS	NS	2	5
Eshamy Bay	225-30	0	NS	NS	0	0	0	125	0	130	175	NS	NS	0	574
Eshamy District		0	NS	NS	0	0	0	135	0	130	175	NS	NS	2	579
Herring Bay	226-10	NS	NS	NS	0	0	0	0	NS	0	0	NS	NS	0	0
Chenega Is. & Dangerous Pass.	226-20	NS	NS	NS	NS	315	NS	3,995	6,700	26,565	20,000	18,100	0	NS	44,852
East Knight Is.	226-30	NS	NS	NS	NS	250	NS	2,500	1,800	7,075	4,000	3,400	0	NS	19,186
Bainbridge & Latouche	226-40	NS	NS	NS	NS	30	NS	0	0	1,095	1,475	1,350	0	NS	4,617
Port Bainbridge	226-50	NS	NS	NS	NS	0	NS	200	100	500	800	NS	0	NS	1,635
Southwestern District		NS	NS	NS	0	595	0	6,695	8,600	35,235	26,275	22,850	0	0	70,291
Montague Strait	227-10	NS	NS	NS	NS	0	NS	820	50	7,335	21,720	31,250	1,152	NS	13,766
Green Is.	227-20	NS	NS	NS	NS	0	210	715	850	5,050	13,793	28,240	3	NS	43,233

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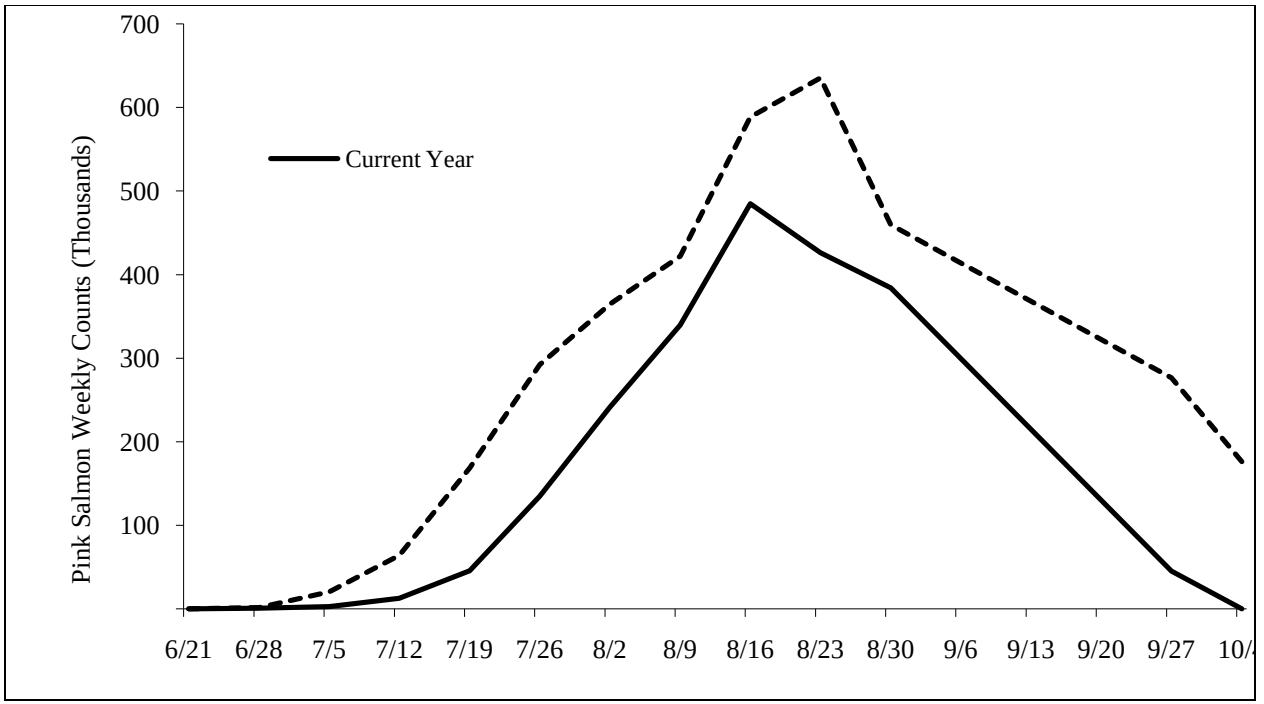
Montague District		NS	NS	NS	NS	0	210	1,535	900	12,385	35,513	59,490	1,155	NS	56,999
Orca Is. & East Hawkins	228-10	NS	NS	NS	NS	NS	500	0	50	NS	2,600	1,500	NS	NS	1,864
Hawkins Cutoff	228-20	NS	NS	NS	NS	NS	6,050	4,150	14,400	NS	17,150	19,950	NS	NS	22,985
North Hawkins & Canoe Pass.	228-30	NS	NS	NS	NS	NS	2,610	3,850	4,450	NS	23,500	34,600	NS	NS	27,151
Double Bay	228-40	NS	NS	NS	NS	NS	3,060	3,450	4,800	NS	15,400	13,500	NS	NS	15,511
Johnstone Point	228-50	NS	NS	NS	NS	NS	1,250	2,600	4,300	NS	5,500	7,100	NS	NS	8,569
Port Etches	228-60	NS	NS	NS	NS	NS	3,950	2,200	14,325	NS	26,400	42,400	NS	NS	36,266
Southeastern District		NS	NS	NS	NS	NS	17,420	16,250	42,325	NS	90,550	119,050	NS	NS	112,347
Upper Unakwik Inlet	229-10	0	NS	NS	0	0	0	0	50	25	100	NS	NS	0	131
Unakwik District		0	NS	NS	0	0	0	0	50	25	100	NS	NS	0	131
TOTAL OF 9 DISTRICTS		0	0	0	200	9,770	25,850	123,325	240,175	219,726	433,914	337,615	1,155	34	862,550

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

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

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



Appendix D7.–Current year and historical weekly pink salmon escapement performance of index spawning streams, 2008.

Appendix D8.–Total chum salmon harvests and escapement indices, including hatchery sales harvests and broodstock, 1965–2008.

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

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	Chum Salmon Escapements [a]									Hatchery		Common Property	Total
Year	Eastern	Northern	Coghill	Northwest	Eshamy	Southwest	Montague	Southeast	Total	Sales	Brood	Harvest [b]	Run [c]
1992	47,292	12,458	7,583	10,258	300	2,940	784	3,891	85,506	57,392	183,940	271,176	598,014
1993	49,904	19,265	7,404	17,692	0	1,250	30	19,173	114,718	475,148	140,330	706,196	1,436,392
1994	40,476	23,942	14,176	12,992	100	2,225	0	4,057	97,968	380,365	114,654	677,848	1,270,835
1995	75,655	28,899	11,596	4,883	0	2,250	1,000	23,200	147,483	231,539	172,542	486,510	1,038,074
1996	137,908	55,568	19,669	24,405	0	2,231	5,216	47,334	292,331	1,066,705	253,751	1,011,291	2,624,078
1997	93,146	19,429	3,101	8,387	0	800	4,000	43,274	172,137	811,179	178,933	1,413,546	2,575,795
1998	86,227	28,867	22,764	7,553	0	1,602	10,690	52,103	209,806	519,215	179,875	747,672	1,656,568
1999	242,713	36,886	5,057	4,544	0	2,393	8,725	36,181	336,499	777,180	207,073	2,186,658	3,507,410
2000	196,253	23,655	20,488	10,150	16	11,440	66,202	34,969	363,173	1,729,876	85,441	3,428,521	5,607,011
2001	198,683	75,473	13,388	6,373	700	5,187	10,408	37,526	347,738	936,028	171,046	2,153,920	3,608,732
2002	94,046	30,531	7,430	16,194	60	3,985	565	104,906	257,717	2,580,936	209,833	3,760,934	6,809,420
2003	198,921	44,565	19,729	12,736	110	12,373	9,015	116,131	413,580	1,540,227	200,933	3,981,763	6,136,503
2004	108,833	42,456	9,685	10,371	0	1,810	4,170	42,344	219,669	528,676	208,795	1,473,242	2,430,382
2005	113,135	30,657	11,979	12,696	500	1,951	0	25,547	196,465	535,773	280,881	1,461,146	2,474,265
2006	109,403	52,069	15,900	25,860	660	7,293	10,642	26,739	248,565	824,558	217,146	1,356,997	2,647,266
2007	123,814	49,740	14,052	10,778	69	4,095	16,648	60,464	279,660	1,099,730	173,452	2,479,210	4,032,052
2008	74,740	38,798	39,660	28,051	0	3,090	5,085	21,614	211,038	472,905	148,747	4,235,043	5,067,733
Avg.	99,462	38,702	19,233	12,693	67	2,641	5,173	25,177	203,148	510,682	136,798	1,168,615	1,792,294

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

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

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

Appendix D9.–Weekly aerial survey indices of chum salmon escapement by statistical area, 2008.

Survey Location	Statistical Area	Week Ending Dates[a] 6/21	6/28	7/05	7/12	7/19	7/26	8/02	8/09	8/16	8/23	8/30	9/27	10/04	Escapement Index[b]
Orca Inlet	221-10	0	NS	0	0	0	1,350	0	400	NS	510	415	NS	NS	1,675
Simpson & Sheep Bay	221-20	0	0	0	0	0	0	2,300	4,710	NS	7,275	2,550	NS	NS	8,013
Port Gravina	221-30	0	100	200	1,350	1,000	9,000	10,625	20,490	NS	11,000	10,090	NS	0	35,909
Port Fidalgo	221-40	0	NS	0	0	0	0	2,835	5,600	450	5,860	6,710	NS	200	18,605
Valdez Arm	221-50	0	NS	0	70	0	800	2,605	4,410	3,300	NS	2,715	NS	0	10,538
Port Valdez	221-61	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Eastern District		0	100	200	1,420	1,000	11,150	18,365	35,610	3,750	24,645	22,480	NS	200	74,740
Columbia & Long Bay	222-10	0	NS	0	10	175	0	1,350	3,300	2,275	NS	1,105	NS	0	5,715
Wells Bay & Unakwik Inlet	222-20	0	4	150	150	7,600	10,100	13,255	13,700	3,800	3,652	1,745	NS	0	29,629
Eaglek Bay	222-30	0	0	NS	0	10	3,400	80	680	1,750	555	NS	NS	0	3,447
Northern District		0	4	150	160	7,785	13,500	14,685	17,680	7,825	4,207	2,850	NS	0	38,791
West Side Port Wells	223-10	NS	NS	NS	0	1,410	28,700	5,575	16,340	4,475	8,100	NS	NS	0	38,356
Esther Passage	223-20	NS	NS	NS	0	0	0	0	50	0	200	NS	NS	0	325
College Fiord	223-30	NS	NS	NS	0	0	0	0	2,000	0	0	NS	NS	0	979
Coghill District		NS	NS	NS	0	1,410	28,700	5,575	18,390	4,475	8,300	NS	NS	0	39,660
Passage Canal & Cochrane	224-10	NS	NS	NS	0	1,080	8,400	4,140	4,850	2,850	4,825	NS	NS	0	17,050
Culross Passage	224-30	NS	NS	NS	0	0	150	20	20	0	2,150	NS	NS	0	3,315
Port Nellie Juan	224-40	NS	NS	NS	0	560	11,800	420	0	1,850	680	NS	NS	0	7,686
Northwestern District		NS	NS	NS	0	1,640	20,350	4,580	4,870	4,700	7,655	NS	NS	0	28,051
Main Bay	225-20	0	NS	NS	0	0	0	0	0	0	0	NS	NS	0	0
Eshamy Bay	225-30	0	NS	NS	0	0	0	0	0	0	0	NS	NS	0	0
Eshamy District		0	NS	NS	0	0	0	0	0	0	0	NS	NS	0	0
Herring Bay	226-10	NS	NS	NS	0	0	0	0	NS	0	0	NS	NS	0	0
Chenega Is. & Dangerous Pass.	226-20	NS	NS	NS	NS	0	NS	700	1	1,460	972	775	0	NS	2,726
East Knight Is.	226-30	NS	NS	NS	NS	0	NS	0	0	75	80	150	0	NS	242
Bainbridge & Latouche	226-40	NS	NS	NS	NS	0	NS	75	0	70	25	0	0	NS	100
Port Bainbridge	226-50	NS	NS	NS	NS	0	NS	0	0	20	10	NS	0	NS	22
Southwestern District		NS	NS	NS	0	0	0	775	1	1,625	1,087	925	0	0	3,090
Montague Strait	227-10	NS	NS	NS	NS	0	NS	141	0	605	1,340	375	0	NS	985
Green Is.	227-20	NS	NS	NS	NS	0	211	385	60	650	751	2,460	0	NS	4,100
Montague District		NS	NS	NS	NS	0	211	526	60	1,255	2,091	2,835	0	NS	5,085

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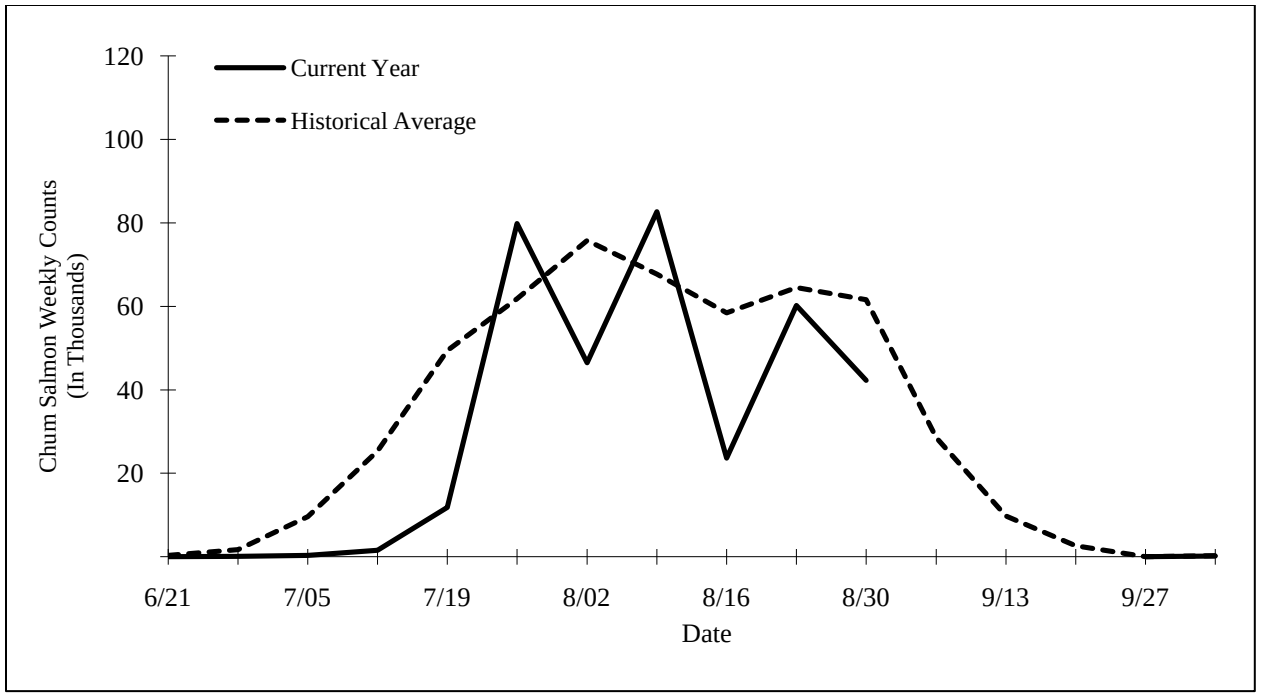
Survey Location	Statistical Area	6/21	6/28	7/05	7/12	7/19	7/26	8/02	8/09	8/16	8/23	8/30	9/27	10/04	Escapement Index [b]
Orca Is. & East Hawkins	228-10	NS	NS	NS	NS	NS	0	0	0	NS	20	10	NS	NS	10
Hawkins Cutoff	228-20	NS	NS	NS	NS	NS	2,650	385	800	NS	2,560	1,410	NS	NS	3,470
North Hawkins & Canoe Pass.	228-30	NS	NS	NS	NS	NS	30	50	975	NS	529	777	NS	NS	1,194
Double Bay	228-40	NS	NS	NS	NS	NS	305	130	50	NS	310	530	NS	NS	872
Johnstone Point	228-50	NS	NS	NS	NS	NS	410	440	725	NS	435	355	NS	NS	1,508
Port Etches	228-60	NS	NS	NS	NS	NS	2,510	1,000	3,500	NS	8,345	10,060	NS	NS	14,560
Southeastern District		NS	NS	NS	NS	NS	5,905	2,005	6,050	NS	12,199	13,142	NS	NS	21,614
Upper Unakwik Inlet	229-10	0	NS	NS	0	0	15	0	0	0	0	NS	NS	0	7
Unakwik District		0	NS	NS	0	0	15	0	0	0	0	NS	NS	0	7
TOTAL OF 9 DISTRICTS		0	104	350	1,580	11,835	79,831	46,511	82,661	23,630	60,184	42,232	0	200	189,424

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

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

[b] The escapement index is based on a geometric method used since the inception of the systematic survey program in the early 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, escapement indices in this table may be used for interannual comparisons, but should not be interpreted as the true escapement.



Appendix D10.–Current year and historical weekly chum salmon escapement performance of index spawning streams, 2008.

Appendix D11.–Aerial survey escapement indices of sockeye salmon from selected systems, 2008.

		Week Ending Date [a]										
	Stream	27	28	29	30	31	32	33	34	35	39	40
System Name	Number	7/5	7/12	7/19	7/26	8/2	8/9	8/16	8/23	8/30	9/27	10/4
Billy's Cr.	218	80	300	325	300	40	75			30		
Cowpen Cr.	242					50	25		2			125
Miners River	244			300		200	300		30			
Red Cr.	300						30					
Golden Lagoon	310						100					
Halferty Cr.	454							1	25			
Cochrane Cr.	461								35			
Shrode Cr.	476			30		50	25	350	325			25
Ewan Cr.	603										20	
Jackpot Rvr	608						50	250	300	400	4	
Brizgaloff Cr	623								30			
Bainbridge	630							75	100			
Cabin Creek	747					10						
Total		80	300	655	300	350	605	676	847	430	24	150

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

Appendix D12.–Temporally stratified age and sex composition of chum salmon harvested in the Prince William Sound commercial purse seine common property fishery, 2008.

				Brood Year and Age Class					
				2005	2004	2003	2002	2001	
				0.2	0.3	0.4	0.5	0.6	Total [b]
Coghill District[a]									
Strata Combined:	06/02	-	09/20						
Sampling dates:	06/04	-	06/25						
Sample size:	1563								
	Sample size			4	457	357	3	0	821
Female	Percentage of sample			0.5	36.3	20.7	0.2	0.0	57.7
	Number in harvest			11,663	836,840	478,286	5,522	0	1,332,310
	Sample size			10	374	342	3	1	730
Male	Percentage of sample			1.2	22.7	17.1	0.2	0.0	41.3
	Number in harvest			27,340	524,105	395,287	4,900	382	952,014
	Sample size			14	838	704	6	1	1,563
Total	Percentage of sample			1.7	59.7	38.1	0.5	0.0	100.0
	Number in harvest			39,003	1,377,566	879,917	10,422	382	2,307,291
	Standard error			11,297	36,729	36,070	5,329	382	

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			Brood Year and Age Class					
			2005	2004	2003	2002	2001	
			0.2	0.3	0.4	0.5	0.6	Total [b]
Montague District								
Strata Combined:	05/27	- 07/22						
Sampling dates:	05/30	- 06/12						
Sample size:	1181							
	Sample size		2	357	178	2	0	539
Female	Percentage of sample		0.2	24.7	15.2	0.0	0	40.2
	Number in harvest		2,705	304,870	187,479	539	0	495,593
	Sample size		1	404	233	4	0	642
Male	Percentage of sample		0.2	40.5	18.7	0.5	0	59.8
	Number in harvest		2,596	499,375	230,614	5,731	0	738,316
	Sample size		3	761	411	6	0	1181
Total	Percentage of sample		0.4	65.2	33.9	0.5	0	100.0
	Number in harvest		5,301	804,245	418,093	6,270	0	1,233,909
	Standard error		3,669	24,975	24,808	3,720	0	

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			Brood Year and Age Class					
			2005	2004	2003	2002	2001	
			0.2	0.3	0.4	0.5	0.6	Total [b]
SW District								
Stratum dates:	05/26	- 06/29						
Sampling dates:	06/24	- 06/26						
Sample size:	662							
	Sample size		9	274	115	1	0	399
Female	Percentage of sample		1.4	41.4	17.4	0.2	0	60.3
	Number in harvest		7,035	214,171	89,889	782	0	311,876
	Sample size		2	181	80	0	0	263
Male	Percentage of sample		0.3	27.3	12.1	0.0	0	39.7
	Number in harvest		1,563	141,478	62,532	0	0	205,573
	Sample size		11	455	195	1	0	662
Total	Percentage of sample		1.7	68.7	29.5	0.2	0	100.0
	Number in harvest		8,598	355,648	152,421	782	0	517,449
	Standard error		2,573	9,330	9,175	782	0	

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			Brood Year and Age Class					
			2005	2004	2003	2002	2001	
			0.2	0.3	0.4	0.5	0.6	Total [b]
Eshamy District[a]								
Stratum dates:	06/02	- 08/25						
Sampling date:	06/25	- 06/25						
Sample size:	392							
	Sample size		1	183	49	0	0	233
Female	Percentage of sample		0.255102	46.683673	12.5	0	0	59.4
	Number in harvest		778.3673	142441.22	38140	0	0	181,360
	Sample size		2	121	32	0	0	155
Male	Percentage of sample		0.510204	30.867347	8.1632653	0	0	39.5
	Number in harvest		1556.735	94182.449	24907.755	0	0	120,647
	Sample size		3	306	83	0	0	392
Total	Percentage of sample		0.765306	78.061224	21.173469	0	0	100
	Number in harvest		2335.102	238180.41	64604.49	0	0	305,120
	Standard error		1344.719	6385.6656	6303.9755	0	0	

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		Brood Year and Age Class					
		2005	2004	2003	2002	2001	
		0.2	0.3	0.4	0.5	0.6	Total [b]
All Districts Combined							
Strata Combined:	05/29 - 07/21						
Sampling dates:	06/21 - 06/28						
Sample size:	3782						
Female	Sample size	16	1,271	699	6	0	1,992
	Percentage of sample	0.5	34.5	18.3	0.2	0.0	53.5
	Number in harvest	22,181	1,498,321	793,794	6,842	0	2,321,139
Male	Sample size	15	1,080	0 687	0 7	0 1	1,790
	Percentage of sample	0.8	29.0	16.4	0.2	0.0	46.5
	Number in harvest	33,056	1,259,140	713,340	10,632	382	2,016,550
Total	Sample size	31	2,351	1,386	13	1	3,782
	Percentage of sample	1.3	63.6	34.7	0.4	0.0	100
	Number in harvest	55,237	2,757,461	1,507,134	17,474	382	4,337,689
	Standard error	12,228	45,833	45,171	6,546	382	

[a] All samples were taken from the Coghill and Eshamy 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, 2008.

Eastern (221)			Northern (222)			Coghill (223)			Northwestern (224)			Southwestern (226)			Montague (227)			Southeastern (228)			Unakwik (229)[a]		
Date	Hours		Date	Hours		Dates	Hours		Dates	Hours		Date	Hours		Dates	Hours		Date	Hours		Date	Hours	
												05/26–06/01	156	a	05/26–06/01	156	a						
												06/02–06/08	156	ab	06/02–06/08	156	a						
												06/09–06/15	156	abcd	06/09–06/15	156	a						
06/16	12	a	06/16	12	a							06/16–06/22	156	abcd	06/16–06/22	156	a	06/16	12	a	06/16–06/18	48	a
06/19	12	a	06/19	12	a													06/19	12	a	06/19–06/22	72	a
06/23	12	b	06/23	12	b							06/23–06/29	156	abcd	06/23–06/29	156	a	06/23	12	a	06/23–06/25	48	a
												06/30–07/06	156	abcde	06/30–07/06	156	a				06/26–06/29	72	a
																					06/30–07/02	48	a
07/01	12	c																					
																					07/03–07/06	72	a
07/04	14	cd																					
07/07	14	cef										07/07–07/13	156	abcd	07/07–07/13	156	a				07/07–07/09	48	a
07/09	14	cdf																					
																					07/10–07/13	72	a
07/11	14	cdf																					
07/13	14	cgf																					
												07/14–07/20	156	abcd	07/14–07/20	156	ac				07/14–07/16	48	a
07/16	14	hij																					
																					07/17–07/20	72	a
07/19	14	cij																					
								j															
07/21	14	cij				07/21–07/23	48					07/21–07/27	06/04	abcd	07/21–07/27	06/04	de				07/21–07/23	48	a
						07/24	14	k													07/24–07/27	72	a
						07/26	14	k															
						07/28	14	l				07/28–08/03	156	c							07/28–07/30	48	a
						07/31	14	m													07/31–08/03	72	a
						08/02	14	m															
						08/04	14	m				08/04–08/10	156	c									
						08/06	14	m															

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Eastern (221)			Northern (222)			Coghill (223)			Northwestern (224)			Southwestern (226)			Emergency
Date	Hours		Date	Hours		Dates	Hours		Dates	Hours		Date	Hours		Orders
			08/23	14	f	08/23	14	p				08/23	14	ik	2-F-E-122-08
			08/24	14	g	08/24	14	r	08/24	14	a	08/24	14	jk	2-F-E-126-08
			08/25	14	f	08/25	14	s				08/25	14	ik	2-F-E-126-08
			08/26	14	f	08/26	14	t	08/26	14	a	08/26	14	jk	2-F-E-126-08
			08/27	14	f	08/27	14	s				08/27	14	ik	2-F-E-126-08
			08/28	13	c	08/28	13	u	08/28	13	a	08/28	13	jk	2-F-E-127-08
			08/29	13	f	08/29	13	v				08/29	13	ik	2-F-E-127-08
			08/30	13	f	08/30	13	u	08/30	13	a	08/30	13	jk	2-F-E-127-08
			08/31	13	fg	08/31	13	s	08/31	13	a	08/31	13	jk	2-F-E-133-08
			09/01	13	f	09/01	13	t				09/01	13	jk	2-F-E-133-08
09/02	13	cef	09/02	13	eh	09/02	13	s	09/02	13	a	09/02	13	jk	2-F-E-133-08, 2-F-E-168-08
09/03	13	cfl	09/03	13	eh	09/03	13	t				09/03	13	jk	2-F-E-133-08, 2-F-E-168-08
09/04	13	cfl	09/04	13	di	09/04	13	w				09/04	13	lk	2-F-E-134-08
09/05	13	cflm	09/05	13	di							09/05	13	mk	2-F-E-134-08, 2-F-E-135-08
09/06	13	cflm	09/06	13	ij							09/06	13	lk	2-F-E-134-08, 2-F-E-135-08, 2-F-E-136-08
09/07	13	cflm	09/07	15	ij							09/07	13	mn	2-F-E-136-08
09/08	13	cflm	09/08	15	ij							09/08	13	ln	2-F-E-136-08
09/09	13	cflm	09/09	15	ij							09/09	13	mn	2-F-E-136-08
09/10	13	clfm	09/10	15	ij							09/10	13	ln	2-F-E-136-08, 2-F-E-146-08
09/11-09/13	60	cflm	09/11-09/13	60	ij							09/11-09/13	60	po	2-F-E-146-08
09/14-09/17	84	cflm	09/14-09/17	84	ij							09/14-09/17	84	po	2-F-E-169-08
09/18-09/20	60	cflm	09/18-09/20	60	ij							09/18-09/20	60	po	2-F-E-153-08
09/21-09/24	84	cflm	09/21-09/24	84	ij							09/21-09/24	84	po	2-F-E-157-08
09/25-09/28	84	cflm	09/25-09/27	60	ij							09/25-09/27	60	po	2-F-E-160-08

Eastern District

[a] Waters of the Eastern District were open.

[b] Waters of the Eastern District south of the Latitude of Rocky Point (60° 57.00' N. Lat.) were open.

[c] Waters of the Eastern District north of a line from 61° 02.855' N, 146° 44.204' W to 61° 03.003' N 146° 39.293' W, were open

[d] Waters in Port Valdez east of 146 23.00' W. Long., remain closed

[e] Waters in Port Valdez south and east of 61 06.00' N, 146 21.50'W remain closed

[f] Anadromous stream closures and regulatory closed waters north of a line from Potato Point to Entrance Point were not in effect

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[g] Waters in Port Valdez east of 146° 25.77' W. Long., remain closed

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

[i] Waters in Port Valdez east of 146° 30.30' W. Long., remain closed

[j] Anadromous stream closures and regulatory closed waters north of a line from Potato Point to Entrance Point were in effect

[k] Waters of the Eastern District within Port Fidalgo east of 146° 24.5 W. Long., and west and south of a line from 60° 50.83' N, 146° 11.94' W to 60° 52.00' N 146° 16.08' W, and within Port Gravina north and east of a line from 60° 44.38' N, 146° 04.87' W to 60° 44.38' N, 146° 07.22' W. were open

[l] Waters in Port Valdez south and east of 61° 06.00' N, 146° 21.50'W, waters within the Valdez small boat harbor and all waters within 50 yards of the entrance to the Valdez small harbor will be closed

[m] 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.

Northern District

[a] Waters of the Northern District, excluding the Perry Island Subdistrict, were open.

[b] Waters of the Northern District east of the longitude of Payday Point (Unakwik Point) were open.

[c] Waters of the Cannery Creek Subdistrict north of 60° 54.22' N lat. and east of 147° 34.40' W long., excluding CCH SHA and THA, were open.

[d] Waters of the Cannery Creek Subdistrict north of 60° 54.22' N lat. and east of 147° 34.40' W long., including CCH THA and SHA west of a line from 61° 00.42' N, 147° 31.52' W, were open.

[e] Waters of the Cannery Creek Subdistrict north of 60° 53.70' N lat. and east of 147° 34.40' W long., including CCH THA, were open.

[f] Waters of the Cannery Creek Subdistrict north of 60° 53.70' N lat. and east of 147° 34.40' W long., excluding CCH SHA and THA, were open.

[g] Waters of the Perry Island Subdistrict, Hidden Bay, west of 148 06.00' W were open.

[h] Anadromous stream closures within CCH THA were suspended.

[i] Anadrmous stream closures within CCH SHA and THA were suspended.

[j] Waters of the Cannery Creek Subdistrict north of 60° 53.70' N lat. and east of 147° 34.40' W long., including CCH SHA and THA, were open.

Coghill District

[j] Waters of the Coghill District excluding waters west of a line from Pt. Pigot to Pt. Pakenham and waters south of 60° 46.10' N. Lat. were open to purse seine and drift gillnet. Waters of the WNH SHA, behind the row of buoys in front of the barrier seine were closed.

[k] Waters of the Coghill District north of the latitude of Point Pakenham and waters of the Esther Subdistrict north of 60° 46.10' N. Lat., were open. Waters of the WNH SHA, behind the row of buoys in front of the barrier seine were closed.

[l] Water of the Coghill District north of the latitude of Point Pakenham and waters of the Esther Subdistrict north of 60° 46.10' N. lat., excluding the WNH SHA and THA were open to purse seine and drift gillnet.

[m] Waters of the Coghill District north of the latitude of Point Pakenham were open to purse seine and drift gillnet gear.

[n] Waters of the Esther Subdistrict, west of 147° 55.10' W. Long., and within 0.5 nautical miles of Esther Island, excluding the WHN THA and SHA were open to purse seine and drift gillnet gear.

[o] Waters of the Coghill District within the Esther Subdistrict, west of 147° 55.10' W. Long., including the WNH THA, and within the Granite Bay Subdistrict, west of 148° 03.80' W. Long., were open to purse seine and drift gillnet gear.

[p] Waters of the Esther Subdistrict west of 147° 55.10' W. Long. and north of 60° 46.10' N. Lat., including the WNH THA were open to purse seine and drift gillnet gear.

[q] Waters of the Esther Subdistrict west of 147° 55.10' W. Long. and north of 60° 46.10' N. Lat., excluding the WNH THA and SHA were open to purse seine and drift gillnet gear.

[r] Waters of the Coghill District, excluding WNH SHA and Bettles Bay west of 148° 15.98' W. Long., Hummer Bay west of 148° 17.48' W. Long. and Pigot Bay west of 148 20.10' W. Long were open to seine and drift.

[s] Waters of the Coghill District within the Esther Subdistrict, west of 147° 55.10' W. Long., including the WNH THA, and within the Granite Bay Subdistrict west of 148° 03.80' W. Long., were open to seine and drift.

-continued-

[t] Waters of the Coghill District, excluding the WNH SHA, the Granite Bay Subdistrict east of 148° 03.80' W. Long., and Bettles Bay and Pigot Bay west of 148° 20.10' W. Long., were open to purse seine and drift gillnet.

[u] Waters of the Coghill District, excluding the WNH THA and SHA, the Granite Bay Subdistrict east of 148° 03.80' W. Long., and Bettles Bay west of 148° 15.98' W. Long., Hummer Bay west of 148° 17.48' W. Long., and Pigot Bay west of 148° 20.10' W. Long. were open to purse seine and drift gillnet.

[v] Waters of the Coghill District within the Esther Subdistrict, west of 147 55.10' W. Long., excluding the WNH THA and SHA, and within the Granite Bay Subdistrict, west of 148 03.80' W. Long.,were open to both gear groups.

[w] Waters of the Coghill District, excluding the Granite Bay Subdistrict east of 148° 03.80' W. Long., and Bettles Bay west of 148° 15.98' W. Long., Hummer Bay west of 148° 17.48' W. Long., and Pigot Bay west of148 20.10'W. Long., were open to purse seine and drift gillnet.

Northwestern

[a] Waters of the Northwestern District, excluding waters south of 60° 33.47' N. Lat., waters of Kings Bay and the waters of Culross Passage south of 60° 45.47' N. Lat.,

Southwestern District

[a] Waters of the AFK Hatchery THA and SHA inside of a line from 60° 03.63'N.Lat., 147° 59.45' W. Long to 60° 02.63' N. Lat., 148° 01.70' W. Long were open.

[b] Anadromous stream closures within the AFK Hatchery THA and SHA were not in effect.

[c] Waters of Marsha Bay, west of 147° 39.75' W. Long., were open.

[d] Anadromous stream closures within Marsha Bay were not in effect.

[e] Effective 12:00 pm July 1 the AFK THA area was reduced to waters west of a line from 60° 03.807' N. Lat., 148° 01.089' W. Long. To 60° 02.923' N. Lat., 148° 01.950' W. Long. until Sunday, July 6 at 8:00 pm

[f] Waters in the Port San Juan Subdistrict south of 60° 05.50 N. Lat., including the AFK THA were open

[g] Anadromous stream closures in the Port San Juan Subdistrict were in effect.

[h] Waters of the AFK THA were open

[i] Waters of the AFK THA and SHA north and east of a line from 60° 03.38' N., 148° 03.35' W to 60° 03.02' N, 148° 02.52' W were open.

[j] Waters in the Port San Juan Subdistrict south of 60° 05.50 N. Lat., including the AFK THA and SHA north and east of a liine from 60° 03.38' N, 148° 03.35' W to 60° 03.02'N, 148° 02.52' W were open

[k] Anadromous stream closures were not in effect.

[l] Waters in the Port San Juan Subdistrict south of 60° 05.50 N. Lat., including the AFK THA and SHA north and east of a line from 60° 03.25' N, 148° 03.56' W to 60° 02.95'N, 148° 02.64' W were open

[m] Waters of the AFK THA and SHA north and east of a line from 60° 03.25' N., 148° 03.56' W to 60° 02.95' N, 148° 02.64' W were open.

[n] Anadromous stream closures in the AFK SHA were not in effect.

[p] Waters in the Port San Juan Subdistrict south of 60° 05.50 N. Lat., including the AFK THA and THA were open

Montague District

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

[b] Waters of the Montague District were open.

[c] The Port Chalmers Subdistrict was reduced to waters within 0.5 miles of Montague Island effective at 8:00 am, July 16, until 8:00 pm, July 20.

[d] Waters of the Port Chalmers Subdistrict, north of 60° 09.55' N. Lat., and within 0.5 miles of Montague Island were open.

[e] Regulatory closed waters within the Port Chalmers Subdistrict were not in effect. Anadromous stream closures were in effect

Southeastern District

[a] All waters of the Southeastern District were open.

Unakwik District

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

APPENDIX E

Appendix E1.–Summary of salmon runs to Prince William Sound and Copper River hatcheries, 2008.

Sockeye salmon [a,b]

Hatchery	BY 2003 Release	BY 2004 Release	2008 Forecast Run [c]	Estimated CPF Contribution	Estimated Sales Harvest Contribution [d]	Broodstock Contribution [e]	Estimated Total Run [f]	Eggs Collected
Gulkana hatchery I	26,019,038	5,577,880	238,449	41,079	0	47,667	88,746	31,900,000
Gulkana hatchery II	1,323,551	1,433,480	13,422		0			1,750,000
Main Bay [h]	1,194,426	680,307	957,100	835,941	0	15,659	851,600	11,200,000
Total Sockeye Salmon	28,537,015	7,691,667	1,208,971	877,020	0	63,326	940,346	44,850,000

Coho salmon [a,g]

Hatchery or release site	BY 2005 Release	2008 Forecast Run [c]	Estimated CPF Contribution	Estimated Sales Harvest Contribution [d]	Broodstock Contribution [e]	Estimated Total Run [g]	Eggs Collected
Solomon Gulch	1,973,604	211,176	238,911	22,356	3,101	264,368	2,304,760
Wally Noerenberg	1,850,000	148,000	116,641	267	2,609	119,517	4,000,000
Total Coho Salmon	3,823,604	359,176	355,552	22,623	5,710	383,885	6,304,760

Pink salmon [a]

Hatchery	BY 2006 Release	2008 Forecast Run [c]	Estimated CPF Contribution	Estimated Sales Harvest Contribution [d]	Broodstock Contribution [e]	Estimated Total Run [g]	Eggs Collected
Solomon Gulch	220,408,302	9,824,700	10,946,866	4,226,915	283,434	15,457,215	230,166,288
Armin F. Koernig	179,000,000	8,000,000	5,209,753	708,534	193,982	6,112,269	161,000,000
Wally Noerenberg	77,200,000	3,700,000	7,429,854	1,068,239	202,568	8,700,661	148,000,000
Cannery Creek	141,000,000	4,500,000	9,749,992	1,056,676	206,926	11,013,594	152,000,000
Total Pink Salmon	617,608,302	26,024,700	33,336,464	7,060,364	886,910	41,283,738	691,166,288

Chum salmon [a]

Hatchery or release site	BY 2003 Release	BY 2004 Release	BY 2005 Release	2008 Forecast Run [c]	Estimated CPF Contribution	Estimated Sales Harvest Contribution [d]	Broodstock Contribution [e]	Estimated Total Run [g]	Eggs Collected

-continued-

Sockeye salmon a,b Hatchery		BY 2003 Release	BY 2004 Release	2008 Forecast Run	c	Estimated CPF Contribution	Estimated Sales Harvest Contribution	d	Broodstock Contribution	e	Estimated Total Run	f	Eggs Collected
Sawmill Bay	16,198,524	15,163,742	15,797,568	309,000					0				0
Wally Noerenberg	73,883,852	71,343,434	90,402,140	2,267,000		4,235,043	459,532		148,747		4,856,695		148,000,000
Port Chalmers	41,090,505	40,478,815	39,815,183	787,000			13,373		0				0
Total Chum Salmon	131,172,881	126,985,991	146,014,891	3,363,000		4,235,043	472,905		148,747		4,856,695		148,000,000
Total-All Salmon						38,804,079	7,555,892		1,104,693		47,464,664		890,321,048

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

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

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

[f] Does not include donated, discarded, confiscated, and Southwestern District test fishery salmon.

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

[h] Includes remote releases at Solf Lake and Marsha Bay

Appendix E2.–Sales harvests of salmon by species from private not-for-profit hatcheries in Prince William Sound as reported on fish tickets, 1977–2008.

Year	Hatchery [a]	Sockeye Sales[b]	Sockeye Broodstock Sales[c]	Coho Sales[b]	Coho Broodstock Sales[c]	Pink Sales[b]	Pink Broodstock Sales[c]	Chum Sales[b]	Chum Broodstock Sales[c]	Total
1977	AFK					15545				15545
1978	AFK					114,188				114,188
1979	AFK					223,748				223,748
1980	AFK, N					346,728		6		346,734
1981	AFK					707,037		118		707,155
1982	AFK					1,354,732				1,354,732
1983	AFK					616,963				616,963
1984	AFK, SG					415,393		4,886		420,279
1985	AFK, SG					1,209,960		3,840		1,213,800
1986	AFK, SG			2,156		905,464		20,683		928,303
1987 [d]	AFK, SG, E, CC			7,015		2,691,190		2,549		2,700,754
1988	AFK, SG, E			6,110		1,632,701		42,694		1,681,505
1989 [e]	AFK, SG, WNH, CC, MB			52,307		7,812,373		131,362		7,996,042
1990	AFK, SG, WNH, CC			14,199		8,732,658		24,554		8,771,411
1991	AFK, SG, WNH, CC			52,625		5,955,561		13,471		6,021,657
1992	AFK, SG, WNH, CC, MB	163,086		73,530		3,049,394		57,392		3,343,402
1993	AFK, SG, WNH, CC, MB	113,738		3,259		2,212,403		475,148		2,804,548
1994	AFK, SG, WNH, CC, MB	79,541		22,454		10,521,439		380,365		11,003,799
1995	AFK, SG, WNH, CC, MB	63,326		13,248		5,100,819		231,539		5,408,932
1996 [f]	AFK, SG, WNH, CC, MB	86,911		38,945		8,291,205		1,066,683		9,483,744
1997	AFK, SG, WNH, CC, MB,GH	266,335		2,933		9,854,675		811,179		10,935,122
1998	AFK, SG, WNH, CC, MB,GH	148,288		20,199		8,825,226		519,215		9,512,928
1999	AFK, SG, WNH, CC, GH	28,769		0		13,130,211		777,180		13,936,168
2000	AFK, SG, WNH, CC, MB	218		1		11,125,819		1,729,876		12,855,914
2001	AFK, SG, WNH, CC, MB	43,073		21,781		12,914,314		936,028		13,915,196
2002	AFK, SG, WNH, CC, MB	93,722		1		10,787,752		2,580,926		13,462,402
2003	AFK, SG, WNH, CC, MB	366,770		0	19,782	12,426,375	730,599	1,540,227	22,792	15,083,753
2004	AFK, SG, WNH, CC, MB	279,902		0		11,825,224		528,676		12,633,802
2005	AFK, SG, WNH, CC, MB	207,605		27,417	60,676	12,529,283	1,246,992	535,783	98,695	14,607,756
2006 [g]	AFK, SG, WNH, CC, MB	348,156		17,198	5,090	9,727,499	239,905	824,558	22,105	10,917,531
2007	AFK, SG, WNH, CC, MB	321,330	0	11,954	17,690	11,990,924	912,585	1,099,730	173,452	14,354,213
10-Year Average		183,783		9,855		11,528,263		1,107,220		13,127,966
2008	AFK, SG, WNH, CC	0	0	267	22,356	6,563,243	1,076,140	478,690	162,643	8,303,339

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

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

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

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

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

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

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

Appendix E3.–Historical harvest contributions, thermally marked otolith releases, and total returns of pink salmon to Prince William Sound hatcheries, return years 1998–2008.

Brood Year	Return Year	Fry Release	Hatchery Contribution to Broodstock Esc. [a]	Total Sales Harvest	Hatchery Contribution to Sales Harvest	Hatchery Contribution to the CCPF [b]	Total Hatchery Return	Estimated Marine Survival
Solomon Gulch Hatchery								
1996	1998	188,862,094	295,438	3,428,348	3,076,945	1,226,679	4,599,062	2.44%
1997	1999	195,162,163	954,305	4,379,659	4,354,601	9,465,378	14,774,284	7.57%
1998	2000	213,906,642	520,934	4,033,635	3,983,473	7,635,581	12,139,988	5.68%
1999	2001	195,763,690	524,857	3,970,310	3,932,080	11,458,958	15,915,895	8.13%
2000	2002	203,897,201	420,062	4,430,173	4,368,519	360,850	5,149,431	2.53%
2001	2003	202,573,328	1,636,618	4,188,294	4,184,463	11,871,024	17,692,105	8.73%
2002	2004	206,397,607	300,362	3,782,011	3,597,708	7,262,379	11,160,448	5.41%
2003	2005	215,000,000	585,196	3,534,939	3,534,939	13,713,349	17,833,484	8.29%
2004	2006	222,218,569	481,121	3,855,271	3,762,010	4,840,097	9,083,228	4.09%
2005	2007	216,921,213	294,054	3,967,798	3,967,798	19,586,090	23,847,942	10.99%
2006	2008	220,408,302	283,434	4,267,840	4,226,915	10,946,866	15,457,215	7.01%
2007	2009	199,639,850						
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%

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Appendix E3.–Page 2 of 3.

Brood Year	Return Year	Fry Release	Hatchery Contribution to Broodstock Esc.	Total Sales Harvest	Hatchery Contribution to Sales Harvest	Hatchery Contribution to the CCPF	Total Hatchery Return	Estimated Marine Survival
Armin F. Koernig Hatchery								
2005	2007	159,616,613	265,216	3,040,328	3,045,323	12,449,638	15,760,177	9.87%
2006	2008	179,000,000	193,982	893,600	708,534	5,209,753	6,112,269	3.41%
2007	2009	144,000,000						
Wally Noerenberg Hatchery								
1996	1998	106,440,456	1,163,890	2,437,615	2,427,120	4,817,354	8,408,364	7.90%
1997	1999	103,675,208	886,277	3,860,431	3,861,891	4,828,682	9,576,850	9.24%
1998	2000	123,869,678	255,851	3,536,232	3,520,212	4,980,503	8,756,566	7.07%
1999	2001	116,069,339	325,003	4,937,169	4,949,180	1,906,503	7,180,686	6.19%
2000	2002	127,651,881	350,000	3,471,338	3,426,483	1,840,319	5,616,802	4.40%
2001	2003	106,229,524	982,982	4,400,958	4,400,958	12,422,082	17,806,022	16.76%
2002	2004	119,553,743	360,928	2,292,300	2,292,300	144,533	2,797,761	2.34%
2003	2005	110,000,000	1,043,736	3,619,170	3,619,170	4,515,479	9,178,385	8.34%
2004	2006	84,060,920	321,679	2,327,268	2,327,268	1,459,313	4,108,260	4.89%
2005	2007	84,795,328	236,438	3,472,456	3,456,332	3,831,328	7,524,098	8.87%
2006	2008	77,200,000	202,568	1,265,683	1,068,239	7,429,854	8,700,661	11.27%
2007	2009	136,000,000						
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%

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Brood Year	Return Year	Fry Release	Hatchery Contribution to Broodstock Esc.	Total Sales Harvest	Hatchery Contribution to Sales Harvest	Hatchery Contribution to the CCPF	Total Hatchery Return	Estimated Marine Survival
Cannery Creek Hatchery								
2002	2004	135,584,680	540,129	2,265,538	2,265,538	135,021	2,940,688	2.17%
2003	2005	139,400,000	590,559	2,436,874	2,436,874	10,452,306	13,479,739	9.67%
2004	2006	126,575,805	431,920	1,164,563	1,155,733	1,319,036	2,906,689	2.30%
2005	2007	138,157,160	348,619	1,443,191	1,443,191	5,638,233	7,430,043	5.38%
2006	2008	141,000,000	206,926	1,270,289	1,056,676	9,749,992	11,013,594	7.81%
2007	2009	131,000,000						

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

[b] Commercial common property fisheries.

Appendix E4.–Historical harvest contributions, coded wire tag (CWT) and thermally marked otolith releases, and total returns of pink salmon to all hatcheries combined, 1977–2008.

Brood Year (BY)	Return Year	Fry Release [a]	CWT/Otolith Applied to Fry Release [b] [c]	Hatchery Contributions[f] Hatchery Cost Recovery Harvest [c]	Commercial Common Property Harvest	Other Harvests [d]	Broodstock Escapement [g]	Total Return	Estimated Marine Survival
1975	1977	1,000,000	0	7,745	4,000	0	16,112	27,857	2.79%
1976	1978	11,010,577	0	114,188	0	0	40,432	154,620	1.40%
1977	1979	16,950,784	0	223,748	275,000	0	54,207	552,955	3.26%
1978	1980	25,600,739	0	346,728	1,092,048	0	145,061	1,583,837	6.19%
1979	1981	24,194,000	0	707,037	1,430,747	0	268,501	2,406,285	9.95%
1980	1982	91,076,000	0	1,354,732	4,303,900	0	239,945	5,898,577	6.48%
1981	1983	91,951,000	0	686,963	3,338,366	0	258,062	4,283,391	4.66%
1982	1984	115,107,533	0	415,393	3,313,423	0	341,259	4,070,075	3.54%
1983	1985	116,336,000	0	1,209,960	6,259,923	0	640,340	8,110,223	6.97%
1984	1986	191,306,265	0	905,464	5,662,315	0	466,471	7,034,250	3.68%
1985	1987	231,538,713	646,561	2,691,190	14,197,065	0	1,158,908	18,047,163	7.79%
1986	1988	218,830,647	568,688	1,632,701	8,748,000	0	824,302	11,205,003	5.12%
1987	1989	532,045,966	939,498	5,767,911	10,561,099	0	856,927	19,052,529 [e]	3.58%
1988	1990	507,688,297	1,074,099	6,691,160	24,379,475	0	749,910	33,315,579 [e]	6.56%
1989	1991	615,139,948	1,128,899	5,201,860	20,900,355	3,573,805	1,324,255	32,750,955 [e]	5.32%
1990	1992	603,519,636	1,091,403	2,626,248	4,345,805	30,290	789,880	8,579,332 [e]	1.42%
1991	1993	495,700,200	823,128	1,544,727	2,392,162	14,648	921,073	6,177,575 [e]	1.25%
1992	1994	567,320,470	950,976	7,613,582	21,173,273	56,396	1,422,306	35,100,601 [e]	6.19%
1993	1995	488,575,978	941,811	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	5,363,551	14,502,198	0	544,531	24,284,522 [e]	3.96%
1995	1997	651,675,427	1,079,354	9,780,451	14,893,055	226	1,974,521	26,648,253	4.09%
1996	1998	484,525,934	484,525,934	8,666,960	16,145,999	6,931	3,008,251	27,828,141	5.74%
1997	1999	542,356,070	542,356,934	12,988,616	24,838,848	237,318	4,529,055	42,593,837	7.85%
1998	2000	602,128,903	602,128,903	11,055,419	22,099,196	728	1,293,409	34,448,752	5.72%
1999	2001	586,607,038	586,607,038	12,765,960	15,625,341	1,204	1,647,425	30,039,930	5.12%
2000	2002	621,063,728	621,063,728	10,703,126	7,926,335	992	1,497,115	20,127,568	3.24%
2001	2003	603,412,393	603,412,393	12,422,544	34,177,600	606	4,306,418	50,907,168	8.44%
2002	2004	607,943,252	607,943,252	11,825,224	8,835,385	652	1,951,671	22,612,932	3.72%
2003	2005	638,600,000	638,600,000	12,529,283	35,111,009	272	5,013,716	52,654,280	8.25%
2004	2006	564,053,077	564,053,077	9,726,272	10,010,169	384	1,694,390	21,431,215	3.80%
2005	2007	599,490,314	599,490,314	11,888,945	41,505,289	653	1,144,327	54,539,214	9.10%
2006	2008	617,608,302	617,608,302	7,060,364 [h]	33,336,465	715	886,910 [i]	41,284,454	6.68%

-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.

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

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

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

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

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

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

Appendix E5.–Historical harvest contributions, thermally marked otolith releases, and total returns of coho salmon to Prince William Sound hatcheries, brood years 1988–2008.

Brood Year	Return Year	Fry Release	Hatchery Contribution to the CCPF	Hatchery Contribution to Subs/PU Harvest	Hatchery Contribution to Sport Harvest	Hatchery Contribution to Broodstock Esc. [a]	Hatchery Contribution to Cost Recovery. [b]	Total Hatchery Return	Estimated Marine Survival
Solomon Gulch Hatchery									
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	154,383	0	84,528	3,101	22,356	264,368	13.40%
2006	2009	1,828,100							
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%

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Appendix E5.–Page 2 of 2.

Brood Year	Return Year	Fry Release	Hatchery Contribution to the CCPF	Hatchery Contribution to Subs/PU Harvest	Hatchery Contribution to Sport Harvest	Hatchery Contribution to Broodstock Esc. [a]	Hatchery Contribution to Cost Recovery. [b]	Total Hatchery Return	Estimated Marine Survival
	Solomon Gulch Hatchery								
1996	1999	407,715	338	0	4,100	2,533	0	6,971	1.71%
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	84,867	0	19,182	2,129	11,975	118,153	11.22%
2005	2008	1,850,000	116,641	0	1,250	2,609	267	120,767	6.53%
2006	2009	1,930,000							

[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, 2008.

Dates			Period		Hours	Origin [a]							
						Gulkana		Main Bay		Hatchery	Wild		
						Nr.	Percent	Nr.	Percent	Total	Nr.	Percent	Total
05/15	-	05/15	1	[b]	12	ND	ND	ND	ND	ND	2,469	100.0	2,469
05/19	-	05/19	2	[b]	12	ND	ND	ND	ND	ND	31,025	100.0	31,025
05/22	-	05/22	3	[b]	12	ND	ND	ND	ND	ND	38,853	100.0	38,853
05/26	-	05/26	4	[b]	12	ND	ND	ND	ND	ND	49,952	100.0	49,952
06/02	-	06/02	5	[b]	12	ND	ND	ND	ND	ND	43,887	100.0	43,887
06/05	–	06/05	6		12	0	0.0	0	0.0	0	43,480	100.0	43,480
06/09	–	06/09	7	[c]	12	4,006	8.5	ND	ND	4,006	43,067	91.5	47,073
06/16	–	06/16	8	[d]	12	2,261	8.5	0	0.0	2,261	24,303	91.5	26,564
07/05	–	07/05	9		12	4,608	47.9	0	0.0	4,608	5,018	52.1	9,626
07/07	–	07/08	10		24	1,973	31.2	74	1.2	2,047	4,281	67.6	6,328
07/10	–	07/11	11		24	3,110	43.3	0	0.0	3,110	4,067	56.7	7,177
07/14	–	07/15	12		24	3,523	42.7	0	0.0	3,523	4,727	57.3	8,250
07/17	–	07/18	13	[e]	24	251	32.4	0	0.0	251	524	67.6	775
07/21	–	07/22	14		24	1,186	40.2	0	0.0	1,186	1,762	59.8	2,948
07/24	–	07/25	15	[f]	24	202	40.2	ND	ND	202	299	59.8	501
07/28	–	07/29	16	[f]	24	579	40.2	ND	ND	579	860	59.8	1,439
07/31	–	08/01	17	[b]	24	ND	ND	ND	ND	ND	134	100.0	134
08/04	–	08/05	18	[b]	24	ND	ND	ND	ND	ND	41	100.0	41
08/07	–	08/08	19	[b]	24	ND	ND	ND	ND	ND	89	100.0	89
08/11	–	08/12	20	[b]	24	ND	ND	ND	ND	ND	96	100.0	96
08/14	–	08/15	21	[b]	24	ND	ND	ND	ND	ND	32	100.0	32
08/18	–	08/19	22	[b]	24	ND	ND	ND	ND	ND	37	100.0	37
08/25	–	08/26	23	[b]	24	ND	ND	ND	ND	ND	27	100.0	27
08/28	–	08/29	24	[b]	24	ND	ND	ND	ND	ND	5	100.0	5
09/01	–	09/02	25	[b]	24	ND	ND	ND	ND	ND	3	100.0	3
09/04	–	09/05	26		24	0	0.0	0	0.0	0	0	0.0	0
09/08	–	09/09	27		24	0	0.0	0	0.0	0	0	0.0	0
09/11	–	09/13	28	[b]	48	ND	ND	ND	ND	ND	4	100.0	4
09/15	–	09/17	29		48	0	0.0	0	0.0	0	0	0.0	0
09/18	–	09/20	30		60	0	0.0	0	0.0	0	0	0.0	0
09/22	–	09/24	31		60	0	0.0	0	0.0	0	0	0.0	0
09/25	–	09/27	32		60	0	0.0	0	0.0	0	0	0.0	0
09/29	–	10/01	33		60	0	0.0	0	0.0	0	0	0.0	0
10/02	–	10/04	34		60	0	0.0	0	0.0	0	0	0.0	0
10/06	–	10/11	35		132	0	0.0	0	0.0	0	0	0.0	0
Total						21,699	6.8	74	0.0	21,773	299,042	93.2	320,815

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

[b] Allocated to wild stocks.

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

[d] The Main Bay Hatchery contribution for period 8 was estimated from samples in period 9.

[e] The Main Bay Hatchery contribution for period 13 was estimated from samples in period 12.

[f] The Gulkana Hatchery contribution for periods 15 and 16 was estimated from samples in period 14.

Appendix E7.–Gulkana sockeye salmon harvests and total contribution, 1977–2008.

Year	Hatchery Contributions				Total Hatchery Run
	Commercial[a]	Subsistence/ Personal Use[b]	Sport[c]	BroodStock/ Escapement[d]	
1977	183	12	0	122	317
1978	720	74	2	1,300	2,096
1979	900	393	9	3,425	4,727
1980	350	589	34	4,250	5,223
1981	3,600	478	13	4,650	8,741
1982	3,600	322	6	5,740	9,668
1983	6,600	1,167	23	6,502	14,292
1984	5,318	450	14	14,650	20,433
1985	31,955	2,121	114	20,680	54,870
1986	30,404	2,667	113	20,975	54,159
1987	47,347	3,071	184	28,200	78,802
1988	92,552	9,351	260	30,125	132,288
1989	175,643	13,734	534	47,075	236,986
1990	64,917	7,203	209	19,100	91,429
1991	102,009	9,449	228	40,659	152,346
1992	87,120	11,455	261	32,396	131,232
1993	149,844	14,812	370	97,249	262,274
1994	94,656	9,157	175	69,750	173,738
1995	147,844	15,289	343	65,640	229,116
1996	314,916	16,144	855	145,903	477,818
1997	266,724	8,857	190	129,017	404,788
1998	524,985	31,824	1,045	119,130	676,984
1999	945,287	42,281	861	130,735	1,119,163
2000	366,372	34,113	1,006	73,115	474,606
2001	196,326	35,699	369	80,485	312,879
2002	335,451	28,305	585	60,254	424,595
2003	138,056	19,513	263	44,961	202,793
2004	59,540	27,117	184	6,695	93,537
2005	95,897	28,031	223	91,058	215,209
2006	163,691	26,860	179	96,552	287,282
2007	94,232	9,656	97	27,602	131,587
10 Year Average	291,984	28,340	481	73,059	393,863
2008	21,669	19,175	235	[e] 47,667	88,746

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

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

[c] Sport fishery contributions are the sum of sport harvest from Copper River mainstem and Gulkana Rivers multiplied by Gulkana Hatchery contribution percentage to the Glennallen Subsistence and Chitina multiplied by Gulkana Hatchery contribution percentage to the Glennallen Subsistence and Chitina

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

[e] 2008 Sport harvest from Copper River mainstem and Gulkana River is a 5-year average.

Appendix E8.–Gulkana Hatchery salmon fry releases, 1974–2008.

	Chinook salmon			Sockeye salmon					
Release Year	Monsoon Lake	Gulkana River (E. Fork)	Total Chinook salmon released	Gulkana I&II (Paxson Lake)	Summit Lake	Crosswind Lake	Harding Lake	Ten Mile Lake	Total sockeye salmon released
1974				79,691				99,620	179,311
1975				785,110				101,446	886,556
1976				626,007				101,600	727,607
1977				516,326				112,248	628,574
1978				479,864				104,058	583,922
1979				940,666				99,589	1,040,255
1980				1,105,397	1,340,660				2,446,057
1981				3,388,682	1,860,491				5,249,173
1982				5,985,270	2,047,947				8,033,217
1983				5,470,056	4,312,628				9,782,684
1984				6,079,838	4,739,293				10,819,131
1985				10,130,942	9,296,882	1,419,095			20,846,919
1986				8,586,509	14,999,085				23,585,594
1987				9,905,907	12,491,826				22,397,733
1988		1,388	1,388	6,389,963	12,026,642	2,487,396	503,375		21,407,376
1989	15,977		15,977	10,870,655	12,004,491	3,130,373	515,046		26,520,565
1990				14,127,313	6,445,011	4,906,005	505,305		25,983,634
1991	26,209		26,209	11,288,721	6,109,833	5,469,759			22,868,313
1992	30,488	34,842	65,330	11,640,000	7,049,000	8,420,000			27,109,000
1993				5,866,230	2,661,549	5,627,346			14,155,125
1994				11,008,964	7,637,009	9,144,382			27,790,355
1995				12,345,894	7,418,311	9,973,600			29,737,805
1996				12,241,896	8,400,148	9,732,911			30,374,955
1997				12,286,366	8,987,213	10,516,107			31,789,686
1998				11,589,845	10,162,655	10,512,299			32,264,799
1999				11,551,836	9,191,217	9,984,392			30,727,445
2000				10,705,795	3,300,504	8,331,080			22,337,379
2001				7,870,334	493,516	5,585,665			13,949,515
2002				11,922,685	5,805,231	8,174,754			25,902,670
2003				11,284,330	6,599,519	8,360,966			26,244,815
2004				12,408,512	6,574,962	8,359,115			27,342,589
2005				3,308,065	0	3,703,295			7,011,360
2006				5,523,920	4,681,325	10,017,211			20,222,456
2007				6,000,000	6,000,000	10,000,000			22,000,000
10-Year Average				9,216,532	5,280,893	8,302,878			22,800,303
2008				6,000,000	6,000,000	9,980,000			21,980,000

Appendix E9.–Sockeye salmon hatchery and wild stock contributions to the Coghill District commercial common property fishery by period, 2008.

Dates	Period	Hours	Origin									
			Gulkana [a]		Main Bay		Solf Lake		Hatchery	Wild		
			Nr.	Percent	Nr.	Percent	Nr.	Percent	Total	Nr.	Percent	Total
06/02 – 06/04	1 [b]	48	ND	ND	ND	ND	ND	ND	ND	31	100	31
06/05 – 06/08	2	72	ND	ND	ND	ND	ND	ND	ND	87	100	87
06/09 – 06/11	3	48	ND	ND	298	100.0	0	0.0	298.0	0	0	298
06/12 – 06/14	4	48	ND	ND	1,305	76.7	28	1.7	1333.2	369	22	1702
06/16 – 06/18	5	48	ND	ND	2,550	67.1	0	0.0	2550.1	1248	33	3798
06/19 – 06/21	6	48	ND	ND	5,329	68.4	0	0.0	5329.3	2460	32	7789
06/23 – 06/24	7	36	ND	ND	21,149	74.5	302	1.1	21451.1	6949	24	28400
06/26 – 06/29	8	72	ND	ND	34,669	83.9	0	0.0	34668.9	6667	16	41336
06/30 – 07/02	9	48	ND	ND	12,056	64.6	0	0.0	12055.6	6596	35	18652
07/03 – 07/06	10	72	ND	ND	12,497	82.3	0	0.0	12496.8	2689	18	15186
07/07 – 07/09	11	48	ND	ND	14,761	60.0	0	0.0	14760.6	9840	40	24601
07/10 – 07/13	12	72	ND	ND	10,989	55.8	0	0.0	10989.4	8709	44	19698
07/14 – 07/16	13	48	ND	ND	7,014	66.2	0	0.0	7014.3	3582	34	10596
07/17 – 07/20	14 [c]	72	ND	ND	2,291	66.2	0	0.0	2291.1	1170	34	3461
07/21 – 07/23	15 [c]	48	ND	ND	636	66.2	0	0.0	636.2	325	34	961
07/24 – 07/24	16 [c]	14	ND	ND	104	66.2	0	0.0	103.9	53	34	157
07/26 – 07/26	17 [c]	14	ND	ND	26	66.2	0	0.0	25.8	13	34	39
07/28 – 07/28	18 [c]	14	ND	ND	111	66.2	0	0.0	110.5	56	34	167
07/31 – 07/31	19	14	0	0.0	0	0.0	0	0.0	0.0	0	0	0
08/02 – 08/02	20 [c]	14	ND	ND	9	66.2	0	0.0	8.6	4	34	13
08/04 – 08/04	21 [c]	14	ND	ND	20	66.2	0	0.0	19.9	10	34	30
08/06 – 08/06	22 [c]	14	ND	ND	4	66.2	0	0.0	4.0	2	34	6
08/09 – 08/09	23 [c]	14	ND	ND	72	66.2	0	0.0	72.2	37	34	109
08/11 – 08/11	24 [c]	14	ND	ND	87	66.2	0	0.0	86.7	44	34	131
08/12 – 08/12	25 [c]	14	ND	ND	93	66.2	0	0.0	92.7	47	34	140
08/13 – 08/13	26 [c]	14	ND	ND	38	66.2	0	0.0	38.4	20	34	58
08/14 – 08/14	27 [c]	14	ND	ND	26	66.2	0	0.0	25.8	13	34	39
08/15 – 08/15	28 [c]	14	ND	ND	70	66.2	0	0.0	69.5	35	34	105
08/16 – 08/16	29 [c]	14	ND	ND	59	66.2	0	0.0	58.9	30	34	89
08/17 – 08/17	30 [c]	14	ND	ND	28	66.2	0	0.0	27.8	14	34	42
08/18 – 08/18	31 [c]	14	ND	ND	19	66.2	0	0.0	19.2	10	34	29
08/19 – 08/19	32 [c]	14	ND	ND	15	66.2	0	0.0	15.2	8	34	23
08/20 – 08/20	33 [c]	14	ND	ND	40	66.2	0	0.0	40.4	21	34	61
08/21 – 08/21	34 [c]	14	ND	ND	28	66.2	0	0.0	28.5	15	34	43
08/22 – 08/22	35 [c]	14	ND	ND	30	66.2	0	0.0	29.8	15	34	45
08/23 – 08/23	36 [c]	14	ND	ND	17	66.2	0	0.0	16.5	8	34	25
08/24 – 08/24	37 [c]	14	ND	ND	9	66.2	0	0.0	8.6	4	34	13

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Appendix E9.–Page 2 of 2.

Dates	Period	Hours	Origin									
			Gulkana [a]		Main Bay		Solf Lake		Hatchery	Wild		
			Nr.	Percent	Nr.	Percent	Nr.	Percent	Total	Nr.	Percent	Total
08/25 – 08/25	38 [c]	14	ND	ND	156	66.2	0	0.0	156.2	80	34	236
08/26 – 08/26	39 [c]	14	ND	ND	9	66.2	0	0.0	8.6	4	34	13
08/27 – 08/27	40 [c]	14	ND	ND	109	66.2	0	0.0	109.2	56	34	165
08/28 – 08/28	41 [c]	13	ND	ND	4	66.2	0	0.0	4.0	2	34	6
08/29 – 08/29	42 [d]	13	ND	ND	ND	ND	ND	ND	ND	3	100	3
08/30 – 08/30	43 [d]	13	ND	ND	ND	ND	ND	ND	ND	1	100	1
08/31 – 08/31	44 [d]	13	ND	ND	ND	ND	ND	ND	ND	7	100	7
09/01 – 09/01	45 [d]	13	ND	ND	ND	ND	ND	ND	ND	3	100	3
09/02 – 09/02	46 [d]	13	ND	ND	ND	ND	ND	ND	ND	7	100	7
09/03 – 09/03	47	13	0	0.0	0	0.0	0	0.0	0.0	0	0	0
09/04 – 09/04	48 [d]	13	ND	ND	ND	ND	ND	ND	ND	124	100	124
09/05 – 09/05	49	13	0	0.0	0	0.0	0	0.0	0.0	0	0	0
09/06 – 09/06	50	13	0	0.0	0	0.0	0	0.0	0.0	0	0	0
09/08 – 10/04	51–58 [e]	60	0	0.0	0	0.0	0	0.0	0.0	0	0	0
10/06 – 10/11	59	132	0	0.0	0	0.0	0	0.0	0.0	0	0	0
Total			0	0.0	126,725	71.0	330	0.2	127,055	51,470	29	178,525

[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 2 were used to allocate harvest.
[c] The Main Bay Hatchery contributions in periods 14–18 and 20–41 were based on samples from period 13.
[d] Allocated to wild stocks.
[e] Periods 51–58 were 60 hours each and no sockeye salmon were harvested.

Appendix E10.–Pink salmon hatchery and wild stock contributions to the Coghill District commercial common property fishery by period, 2008.

			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
06/02 – 06/04	1	48	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
06/05 – 06/08	2	72	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
06/09 – 06/11	3 [a]	48	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	100.0	1
06/12 – 06/14	4 [a]	48	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	100.0	5
06/16 – 06/18	5 [a]	48	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	100.0	4
06/19 – 06/21	6 [a]	48	ND	ND	ND	ND	ND	ND	ND	ND	ND	15	100.0	15
06/23 – 06/24	7 [a]	36	ND	ND	ND	ND	ND	ND	ND	ND	ND	15	100.0	15
06/26 – 06/29	8 [a]	72	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	100.0	21
06/30 – 07/02	9 [a]	48	ND	ND	ND	ND	ND	ND	ND	ND	ND	122	100.0	122
07/03 – 07/06	10 [a]	72	ND	ND	ND	ND	ND	ND	ND	ND	ND	760	100.0	760
07/07 – 07/09	11	48	0	0.0	0	0.0	0	0.0	0	0.0	0	2,301	100.0	2,301
07/10 – 07/13	12	72	971	10.0	0	0.0	0	0.0	0	0.0	971	8,743	90.0	9,714
07/14 – 07/16	13 [b]	48	1,543	10.0	0	0.0	0	0.0	0	0.0	1,543	13,890	90.0	15,433
07/17 – 07/20	14 [b]	72	949	10.0	0	0.0	0	0.0	0	0.0	949	8,541	90.0	9,490
07/21 – 07/23	15 [b]	48	550	10.0	0	0.0	0	0.0	0	0.0	550	4,946	90.0	5,496
07/24 – 07/24	16	14	0	0.0	968	33.3	807	27.8	0	0.0	1,775	1,130	38.9	2,905
07/26 – 07/26	17	14	0	0.0	0	0.0	4,566	89.4	0	0.0	4,566	544	10.6	5,110
07/28 – 07/28	18	14	1,072	4.5	2,947	12.5	6,697	28.4	0	0.0	10,715	12,858	54.5	23,573
07/31 – 07/31	19	14	0	0.0	0	0.0	0	0.0	0	0.0	0	1,048	100.0	1,048
08/02 – 08/02	20	14	0	0.0	0	0.0	0	0.0	0	0.0	0	20,533	100.0	20,533
08/04 – 08/04	21	14	0	0.0	0	0.0	947	2.1	0	0.0	947	44,528	97.9	45,475
08/06 – 08/06	22	14	0	0.0	0	0.0	612	1.0	0	0.0	612	58,151	99.0	58,763
08/09 – 08/09	23	14	0	0.0	7,143	1.0	621,469	90.6	0	0.0	628,612	57,147	8.3	685,759
08/11 – 08/11	24	14	0	0.0	0	0.0	745,204	94.8	8,189	1.0	753,393	32,756	4.2	786,149
08/12 – 08/12	25	14	0	0.0	98,309	19.8	388,062	78.1	0	0.0	486,371	10,348	2.1	496,719
08/13 – 08/13	26	14	0	0.0	15,527	4.3	318,304	87.2	0	0.0	333,831	31,054	8.5	364,885
08/14 – 08/14	27	14	0	0.0	10,201	2.2	402,933	86.8	15,301	3.3	428,435	35,703	7.7	464,138
08/15 – 08/15	28	14	0	0.0	14,246	2.1	641,065	93.8	0	0.0	655,311	28,492	4.2	683,803
08/16 – 08/16	29	14	0	0.0	41,368	8.3	424,019	85.4	15,513	3.1	480,899	15,513	3.1	496,412
08/17 – 08/17	30	14	0	0.0	17,922	6.4	244,931	87.2	0	0.0	262,853	17,922	6.4	280,775
08/18 – 08/18	31	14	0	0.0	13,716	7.3	158,710	84.4	5,878	3.1	178,304	9,797	5.2	188,101
08/19 – 08/19	32	14	0	0.0	31,254	9.4	291,706	87.5	6,945	2.1	329,905	3,473	1.0	333,378
08/20 – 08/20	33	14	0	0.0	19,886	4.2	367,889	77.9	39,772	8.4	427,547	44,743	9.5	472,290
08/21 – 08/21	34	14	0	0.0	128,960	28.8	297,168	66.3	0	0.0	426,128	22,428	5.0	448,556
08/22 – 08/22	35	14	0	0.0	44,597	13.5	267,581	81.3	3,431	1.0	315,608	13,722	4.2	329,330
08/23 – 08/23	36	14	0	0.0	36,154	12.5	244,040	84.4	0	0.0	280,194	9,039	3.1	289,233
08/24 – 08/24	37	14	0	0.0	37,503	14.7	192,871	75.8	5,358	2.1	235,732	18,751	7.4	254,483

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			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
08/25 – 08/25	38	14	0	0.0	5,843	4.3	108,101	79.6	13,147	9.7	127,092	8,765	6.5	135,857
08/26 – 08/26	39	14	0	0.0	9,727	5.2	165,357	88.5	3,891	2.1	178,975	7,782	4.2	186,756
08/27 – 08/27	40	14	0	0.0	4,366	4.3	87,315	87.0	2,910	2.9	94,591	5,821	5.8	100,412
08/28 – 08/28	41	13	0	0.0	11,286	14.3	67,719	85.7	0	0.0	79,005	0	0.0	79,005
08/29 – 08/29	42	13	0	0.0	4,090	8.5	41,922	87.2	1,022	2.1	47,035	1,022	2.1	48,057
08/30 – 08/30	43	13	0	0.0	6,620	14.3	35,750	77.1	2,648	5.7	45,019	1,324	2.9	46,343
08/31 – 08/31	44 [c]	13	0	0.0	2,633	14.3	14,218	77.1	1,053	5.7	17,904	527	2.9	18,431
09/01 – 09/01	45	13	0	0.0	2,313	9.8	19,273	81.5	514	2.2	22,099	1,542	6.5	23,641
09/02 – 09/02	46	13	0	0.0	5,489	29.4	7,318	39.2	4,757	25.5	17,564	1,098	5.9	18,662
09/03 – 09/03	47 [d]	13	0	0.0	1,183	29.4	1,577	39.2	1,025	25.5	3,785	237	5.9	4,022
09/04 – 09/04	48 [d]	13	0	0.0	458	29.4	610	39.2	397	25.5	1,464	92	5.9	1,556
09/05 – 09/05	49 [d]	13	0	0.0	358	29.4	477	39.2	310	25.5	1,145	72	5.9	1,217
09/06 – 09/06	50 [d]	13	0	0.0	200	29.4	267	39.2	173	25.5	640	40	5.9	680
09/08 – 09/10	51 [d]	60	0	0.0	37	29.4	49	39.2	32	25.5	119	7	5.9	126
09/11 – 10/04	52-58 [e]	60	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
10/06 – 10/11	59	132	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
Total			5,085	0.1	575,303	7.7	6,169,536	82.9	132,267	1.8	6,882,191	557,369	7.5	7,439,560

ND=No data

[a] Allocated to wild stocks.

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

[c] Proportions from period 43 were used to allocate harvest.

[d] Proportions from period 46 were used to allocate harvest.

[e] Periods 52-58 were 60 hours each and no pink salmon were harvested.

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

Dates			Period		Hours	Wally Noerenburg		Port Chalmers		Hatchery	Wild		
						Nr.	%	Nr.	%	Total	Nr.	%	Total
06/02	–	06/04	1		48	29,410	87.0	0	0.0	29,410	4,412	13.0	33,822
06/05	–	06/08	2		72	108,489	93.8	6,027	5.2	114,517	1,205	1.0	115,722
06/09	–	06/11	3		48	165,113	83.3	16,511	8.3	181,624	16,511	8.3	198,135
06/12	–	06/14	4		48	159,713	84.4	25,633	13.5	185,345	3,944	2.1	189,289
06/16	–	06/18	5		48	190,068	92.7	8,542	4.2	198,610	6,407	3.1	205,017
06/19	–	06/21	6		48	150,162	89.2	10,146	6.0	160,308	8,117	4.8	168,425
06/23	–	06/24	7		36	131,485	89.6	13,760	9.4	145,245	1,529	1.0	146,774
06/26	–	06/29	8		72	249,355	93.8	5,541	2.1	254,897	11,082	4.2	265,979
06/30	–	07/02	9		48	211,003	92.8	14,067	6.2	225,070	2,344	1.0	227,414
07/03	–	07/06	10		72	268,951	96.9	5,784	2.1	274,735	2,892	1.0	277,627
07/07	–	07/09	11		48	211,328	94.8	4,645	2.1	215,972	6,967	3.1	222,939
07/10	–	07/13	12		72	136,615	96.8	0	0.0	136,615	4,504	3.2	141,119
07/14	–	07/16	13		48	49,382	92.7	0	0.0	49,382	3,884	7.3	53,266
07/17	–	07/20	14		72	46,023	93.8	1,534	3.1	47,557	1,534	3.1	49,091
07/21	–	07/23	15		48	9,378	87.3	341	3.2	9,719	1,023	9.5	10,742
07/24	–	07/24	16	b	14	995	87.3	36	3.2	1,031	109	9.5	1,140
07/26	–	07/26	17	b	14	1,502	87.3	55	3.2	1,556	164	9.5	1,720
07/28	–	07/28	18	b	14	1,318	87.3	48	3.2	1,366	144	9.5	1,510
07/31	–	07/31	19	b	14	69	87.3	3	3.2	71	8	9.5	79
08/02	–	08/02	20	b	14	292	87.3	11	3.2	302	32	9.5	334
08/04	–	08/04	21	b	14	1,248	87.3	45	3.2	1,293	136	9.5	1,429
08/06	–	08/06	22		14	39	1.0	0	0.0	39	3,748	99.0	3,787
08/09	–	08/09	23	c	14	1	1.0	0	0.0	1	82	99.0	83
08/11	–	08/11	24	c	14	2	1.0	0	0.0	2	183	99.0	185
08/12	–	08/12	25	c	14	2	1.0	0	0.0	2	145	99.0	147
08/13	–	08/13	26	c	14	1	1.0	0	0.0	1	137	99.0	138
08/14	–	08/14	27	c	14	0	1.0	0	0.0	0	47	99.0	47
08/15	–	08/15	28	c	14	1	1.0	0	0.0	1	113	99.0	114
08/16	–	08/16	29	c	14	2	1.0	0	0.0	2	143	99.0	145
08/17	–	08/17	30	c	14	0	1.0	0	0.0	0	35	99.0	35
08/18	–	08/18	31	c	14	0	1.0	0	0.0	0	33	99.0	33
08/19	–	08/19	32	c	14	0	1.0	0	0.0	0	35	99.0	35
08/20	–	08/20	33	c	14	0	1.0	0	0.0	0	43	99.0	43
08/21	–	08/21	34	c	14	0	1.0	0	0.0	0	32	99.0	32
08/22	–	08/22	35	c	14	0	1.0	0	0.0	0	27	99.0	27
08/23	–	08/23	36	c	14	0	1.0	0	0.0	0	12	99.0	12
08/24	–	08/24	37	c	14	0	1.0	0	0.0	0	14	99.0	14
08/25	–	08/25	38	c	14	0	1.0	0	0.0	0	19	99.0	19

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Dates			Period	Hours	Wally Noerenburg Nr.	Wally Noerenburg %	Port Chalmers Nr.	Port Chalmers %	Hatchery Total	Wild Nr.	Wild %	Total
08/26	-	08/26	39 [c]	14	0	1.0	0	0.0	0	8	99.0	8
08/27	-	08/27	40 [c]	14	0	1.0	0	0.0	0	6	99.0	6
08/28	-	08/28	41 [c]	13	0	1.0	0	0.0	0	2	99.0	2
08/29	-	08/29	42 [c]	13	0	1.0	0	0.0	0	2	99.0	2
08/30	-	08/30	43	13	0	0.0	0	0.0	0	4	100.0	4
08/31	-	08/31	44 [d]	13	ND	ND	ND	ND	ND	4	100.0	4
09/01	-	09/01	45	13	0	0.0	0	0.0	0	1	100.0	1
09/02	-	09/02	46	13	0	0.0	0	0.0	0	0	0.0	0
09/03	-	09/03	47 [d]	13	ND	ND	ND	ND	ND	1	100.0	1
09/04	-	09/04	48	13	0	0.0	0	0.0	0	151	100.0	151
09/05	-	09/05	49 [d]	13	ND	ND	ND	ND	ND	1	100.0	1
09/06	-	09/06	50	13	0	0.0	0	0.0	0	0	0.0	0
09/08	-	10/04	51-58 [e]	60	0	0.0	0	0.0	0	0	0.0	0
10/06	-	10/11	59	132	0	0.0	0	0.0	0	0	0.0	0
Total					2,121,949	91.6	112,729	4.9	2,234,678	81,971	3.5	2,316,649

ND=No data

[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 15 were used to allocate harvest.

[c] Proportions from period 22 were used to allocate harvest.

[d] Allocated to wild stocks.

[e] Periods 51-58 were 60 hours each and no chum salmon were harvested.

Appendix E12.–Wally Noerenberg Hatchery salmon cost recovery sales by day as reported on fish tickets, 2008.

Catch [a]		Chinook		Sockeye		Coho		Pink		Chum	
Date	Landings	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds
06/14	1	0	0	0	0	0	0	0	0	26,942	218,231
06/15	2	0	0	0	0	0	0	0	0	42,409	361,982
06/17	1	0	0	0	0	0	0	0	0	31,069	248,550
06/18	2	0	0	0	0	0	0	0	0	49,869	408,926
06/19	2	0	0	0	0	0	0	0	0	53,021	444,088
06/20	2	0	0	0	0	0	0	0	0	39,298	300,388
06/21	2	0	0	0	0	0	0	0	0	31,279	256,431
06/22	2	0	0	0	0	0	0	0	0	63,724	487,264
06/23	2	0	0	0	0	0	0	0	0	49,661	395,779
06/24	2	0	0	0	0	0	0	0	0	20,833	163,177
06/25	2	0	0	0	0	0	0	0	0	43,514	335,948
06/27	2	0	0	0	0	0	0	0	0	27,158	230,078
07/07	1	0	0	0	0	0	0	0	0	3,354	27,167
07/08	1	0	0	0	0	0	0	0	0	6,384	51,710
07/09	1	0	0	0	0	0	0	0	0	8,527	69,069
07/10	1	0	0	0	0	0	0	0	0	8,445	68,405
07/11	1	0	0	0	0	0	0	0	0	6,430	52,083
07/12	1	0	0	0	0	0	0	0	0	10,536	85,342
07/13	1	0	0	0	0	0	0	0	0	8,915	72,212
07/14	1	0	0	0	0	0	0	0	0	10,270	83,187
07/15	1	0	0	0	0	0	0	0	0	9,132	73,969
07/16	1	0	0	0	0	0	0	0	0	9,882	80,044
07/17	1	0	0	0	0	0	0	0	0	11,218	90,866
07/18	1	0	0	0	0	0	0	0	0	10,989	89,011
07/19	1	0	0	0	0	0	0	0	0	10,470	84,807
07/20	1	0	0	0	0	0	0	0	0	10,789	87,391
07/22	1	0	0	0	0	0	0	0	0	9,141	74,042
07/23	1	0	0	0	0	0	0	0	0	3,781	30,626
07/24	1	0	0	0	0	0	0	0	0	4,742	38,410
07/25	1	0	0	0	0	0	0	0	0	888	7,193
07/26	1	0	0	0	0	0	0	481	1,443	3,623	28,918
07/27	1	0	0	0	0	0	0	224	672	2,216	17,950
07/28	1	0	0	0	0	0	0	579	1,737	2,335	18,914

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Catch [a]		Chinook		Sockeye		Coho		Pink		Chum	
Date	Landings	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds
07/29	2	0	0	0	0	0	0	24,204	77,223	646	5,233
07/30	2	0	0	0	0	0	0	9,358	30,713	3,054	21,885
07/31	1	0	0	0	0	0	0	25,728	92,619	865	6,489
08/02	1	0	0	0	0	0	0	47,572	152,231	1,215	8,383
08/03	1	0	0	0	0	0	0	26,128	88,835	1,470	10,583
08/04	2	0	0	0	0	0	0	117,938	389,196	527	3,318
08/05	3	0	0	0	0	0	0	157,880	617,394	1,863	18,656
08/06	3	0	0	0	0	0	0	203,242	688,289	848	6,446
08/07	3	0	0	0	0	0	0	161,556	758,005	0	0
08/08	4	0	0	0	0	267	1,466	207,445	746,800	0	0
08/24	1	0	0	0	0	0	0	17,503	63,011	0	0
08/25	1	0	0	0	0	0	0	17,448	62,813	0	0
08/26	1	0	0	0	0	0	0	21,438	77,177	0	0
08/27	1	0	0	0	0	0	0	18,186	65,470	0	0
08/28	1	0	0	0	0	0	0	17,354	62,474	0	0
08/29	1	0	0	0	0	0	0	18,340	66,024	0	0
08/30	1	0	0	0	0	0	0	19,377	69,757	0	0
08/31	1	0	0	0	0	0	0	15,764	56,750	0	0
09/01	1	0	0	0	0	0	0	14,404	51,854	0	0
09/02	1	0	0	0	0	0	0	17,901	64,444	0	0
09/03	1	0	0	0	0	0	0	19,442	69,991	0	0
09/04	1	0	0	0	0	0	0	18,366	66,118	0	0
09/05	1	0	0	0	0	0	0	14,274	51,386	0	0
09/06	1	0	0	0	0	0	0	18,506	66,662	0	0
09/07	1	0	0	0	0	0	0	16,407	59,065	0	0
09/08	1	0	0	0	0	0	0	9,960	35,856	0	0
09/09	1	0	0	0	0	0	0	5,519	19,868	0	0
09/10	1	0	0	0	0	0	0	3,159	11,372	0	0
Total	84	0	0	0	0	267	1,466	1,265,683	4,665,249	641,332	5,163,151
Average Weight			0.00		0.00		5.49		3.69		8.05

Appendix E13.–Daily salmon sales and sex ratios, sales summary, and broodstock summary at the Wally Noerenberg Hatchery, 2008.

	Pink Salmon					Chum Salmon					Coho Salmon	
Date	% Female	Sales Harvest[a]	Sales Harvest cumulative	Brood Stock[b]	Brood Stock cumulative	% Female	Sales Harvest[a]	Sales Harvest cumulative	Brood Stock[b]	Brood Stock cumulative	Sales Harvest	Sales Harvest cumulative
06/14	-----	0	0	0	0	28.2%	26,942	26,942	0	0	0	0
06/15	-----	0	0	0	0	27.9%	42,409	69,351	0	0	0	0
06/16	-----	0	0	0	0	-----	0	69,351	0	0	0	0
06/17	-----	0	0	0	0	39.5%	31,069	100,420	0	0	0	0
06/18	-----	0	0	0	0	36.7%	49,869	150,289	0	0	0	0
06/19	-----	0	0	0	0	45.4%	53,021	203,310	0	0	0	0
06/20	-----	0	0	0	0	45.0%	39,298	242,608	0	0	0	0
06/21	-----	0	0	0	0	52.8%	31,279	273,887	0	0	0	0
06/22	-----	0	0	0	0	50.5%	63,724	337,611	0	0	0	0
06/23	-----	0	0	0	0	61.5%	49,661	387,272	0	0	0	0
06/24	-----	0	0	0	0	60.1%	20,833	408,105	0	0	0	0
06/25	-----	0	0	0	0	49.9%	43,514	451,619	0	0	0	0
06/26	-----	0	0	0	0	-----	0	451,619	0	0	0	0
06/27	-----	0	0	0	0	42.5%	27,158	478,777	0	0	0	0
06/28	-----	0	0	0	0	-----	0	478,777	0	0	0	0
06/29	-----	0	0	0	0	-----	0	478,777	0	0	0	0
06/30	-----	0	0	0	0	-----	0	478,777	0	0	0	0
07/01	-----	0	0	0	0	-----	0	478,777	0	0	0	0
07/02	-----	0	0	0	0	-----	0	478,777	0	0	0	0
07/03	-----	0	0	0	0	-----	0	478,777	0	0	0	0
07/04	-----	0	0	0	0	-----	0	478,777	0	0	0	0
07/05	-----	0	0	0	0	-----	0	478,777	0	0	0	0
07/06	-----	0	0	0	0	-----	0	478,777	0	0	0	0
07/07	-----	0	0	0	0	-----	399	479,176	2,955	2,955	0	0
07/08	-----	0	0	0	0	-----	853	480,029	5,559	8,514	0	0
07/09	-----	0	0	0	0	-----	635	480,664	7,925	16,439	0	0
07/10	-----	0	0	0	0	-----	846	481,510	7,629	24,068	0	0
07/11	-----	0	0	0	0	-----	334	481,844	6,136	30,204	0	0
07/12	-----	0	0	0	0	-	651	482,495	10,178	40,382	0	0
07/13	-----	0	0	0	0	-----	967	483,462	8,159	48,541	0	0

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Date	Pink Salmon					Chum Salmon					Coho Salmon	
	% Female	Sales Harvest[a]	Sales Harvest cumulative	Brood Stock[b]	Brood Stock cumulative	% Female	Sales Harvest[a]	Sales Harvest cumulative	Brood Stock[b]	Brood Stock cumulative	Sales Harvest	Sales Harvest cumulative
07/12	-----	0	0	0	0	-----	651	482,495	10,178	40,382	0	0
07/13	-----	0	0	0	0	-----	967	483,462	8,159	48,541	0	0
07/14	-----	0	0	0	0	-----	1,432	484,894	9,040	57,581	0	0
07/15	-----	0	0	0	0	-----	680	485,574	8,745	66,326	0	0
07/16	-----	0	0	0	0	-----	584	486,158	9,567	75,893	0	0
07/17	-----	0	0	0	0	-----	780	486,938	10,654	86,547	0	0
07/18	-----	0	0	0	0	-----	1,284	488,222	10,797	97,344	0	0
07/19	-----	0	0	0	0	-----	1,391	489,613	9,387	106,731	0	0
07/20	-----	0	0	0	0	-----	1,367	490,980	9,735	116,466	0	0
07/21	-----	0	0	0	0	-----	1,064	492,044	8,500	124,966	0	0
07/22	-----	0	0	0	0	-----	608	492,652	3,672	128,638	0	0
07/23	-----	0	0	0	0	-----	877	493,529	4,198	132,836	0	0
07/24	-----	0	0	0	0	-----	227	493,756	965	133,801	0	0
07/25	-----	0	0	0	0	-----	836	494,592	3,141	136,942	0	0
07/26	-----	481	481	0	0	-----	408	495,000	2,349	139,291	0	0
07/27	-----	224	705	0	0	-----	445	495,445	2,480	141,771	0	0
07/28	-----	579	1,284	0	0	-----	121	495,566	1,259	143,030	0	0
07/29	7.6%	24,204	25,488	0	0	-----	147	495,713	1,317	144,347	0	0
07/30	9.9%	9,358	34,846	NR	0	-----	85	495,798	400	144,747	0	0
07/31	13.8%	25,728	60,574	0	0	-----	1,215	497,013	0	144,747	0	0
08/01	-----	0	60,574	0	0	-----	0	497,013	0	144,747	0	0
08/02	11.0%	47,572	108,146	0	0	-----	1,470	498,483	0	144,747	0	0
08/03	12.0%	26,128	134,274	0	0	-----	527	499,010	0	144,747	0	0
08/04	15.6%	117,938	252,212	0	0	-----	1,863	500,873	0	144,747	0	0
08/05	14.5%	157,880	410,092	0	0	-----	848	501,721	0	144,747	0	0
08/06	15.0%	203,242	613,334	0	0	-----	0	501,721	0	144,747	0	0
08/07	14.7%	161,556	774,890	0	0	-----	0	501,721	0	144,747	0	0
08/08	18.6%	207,445	982,335	0	0	-----	0	501,721	0	144,747	267	267

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Date	Pink Salmon					Chum Salmon					Coho Salmon	
	% Female	Sales Harvest[a]	Sales Harvest cumulative	Brood Stock[b]	Brood Stock cumulative	% Female	Sales Harvest[a]	Sales Harvest cumulative	Brood Stock[b]	Brood Stock cumulative	Sales Harvest	Sales Harvest cumulative
08/09	-----	0	982,335	0	0	-----	0	501,721	0	144,747	0	267
08/10	-----	0	982,335	0	0	-----	0	501,721	0	144,747	0	267
08/11	-----	0	982,335	0	0	-----	0	501,721	0	144,747	0	267
08/12	-----	0	982,335	0	0	-----	0	501,721	0	144,747	0	267
08/13	-----	0	982,335	0	0	-----	0	501,721	0	144,747	0	267
08/14	-----	0	982,335	0	0	-----	0	501,721	0	144,747	0	267
08/15	-----	0	982,335	0	0	-----	0	501,721	0	144,747	0	267
08/16	-----	0	982,335	0	0	-----	0	501,721	0	144,747	0	267
08/17	-----	0	982,335	0	0	-----	0	501,721	0	144,747	0	267
08/18	-----	0	982,335	0	0	-----	0	501,721	0	144,747	0	267
08/19	-----	0	982,335	0	0	-----	0	501,721	0	144,747	0	267
08/20	-----	0	982,335	0	0	-----	0	501,721	0	144,747	0	267
08/21	-----	0	982,335	0	0	-----	0	501,721	0	144,747	0	267
08/22	-----	0	982,335	0	0	-----	0	501,721	0	144,747	0	267
08/23	-----	0	982,335	0	0	-----	0	501,721	0	144,747	0	267
08/24	-----	9,606	991,941	7,923	7,923	-----	0	501,721	0	144,747	0	267
08/25	-----	9,126	1,001,067	8,347	16,270	-----	0	501,721	0	144,747	0	267
08/26	-----	14,571	1,015,638	6,907	23,177	-----	0	501,721	0	144,747	0	267
08/27	-----	10,308	1,025,946	7,958	31,135	-----	0	501,721	0	144,747	0	267
08/28	-----	5,837	1,031,783	11,677	42,812	-----	0	501,721	0	144,747	0	267
08/29	-----	3,238	1,035,021	15,185	57,997	-----	0	501,721	0	144,747	0	267
08/30	-----	6,673	1,041,694	12,896	70,893	-----	0	501,721	0	144,747	0	267
08/31	-----	1,887	1,043,581	14,027	84,920	-----	0	501,721	0	144,747	0	267
09/01	-----	1,757	1,045,338	12,657	97,577	-----	0	501,721	0	144,747	0	267
09/02	-----	2,944	1,048,282	15,202	112,779	-----	0	501,721	0	144,747	0	267
09/03	-----	3,507	1,051,789	16,440	129,219	-----	0	501,721	0	144,747	0	267
09/04	-----	3,811	1,055,600	15,668	144,887	-----	0	501,721	0	144,747	0	267
09/05	-----	1,089	1,056,689	13,378	158,265	-----	0	501,721	0	144,747	0	267

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Hatchery escapement summary[c]	Pink salmon	Chum Salmon	Coho Salmon
Purse seine whole fish harvest	982,335	478,777	267
Raceway whole fish harvest	91,272	22,944	0
Viable broodstock (spawned, eggs in incubators)	192,076	137,027	1,953
Unviable broodstock (green/over-ripe/bad)	NR	NR	23
Unspawned fish (roe recovery, excess males)	NR	NR	14
Holding mortalities (raceway, pen mortalities)	6,492	7,720	419
Estimated unharvested return[d]	4,000	4,000	200
Estimated total return to hatchery	1,276,175	650,468	2,876

Sales Summary	Pink salmon	Chum Salmon	Coho Salmon
Purse seine whole fish sales	982,335	478,777	267
Raceway whole fish sales	91,272	22,944	0
Carcass sales[e]	192,076	137,027	0
Total sales	1,265,683	638,748	267

NR- not reported

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

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

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

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

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

Appendix E14.–Sockeye salmon hatchery and wild stock contributions to the Eshamy District commercial common property fishery by period, 2008.

						Origin									
						Gulkana [a]		Solf Lake		Main Bay		Hatchery	Wild		
		Dates	Period		Hours	Nr.	Percent	Nr.	Percent	Nr.	Percent	Total	Nr.	Percent	Total
06/02	–	06/04	1		48	0	0.0	0	0.0	0	0.0	0	0	0.0	0
06/05	–	06/08	2	[b]	72	ND	ND	0	0.0	41	97.1	41	1	2.9	42
06/09	–	06/11	3	[b]	48	ND	ND	0	0.0	1,013	97.1	1,013	30	2.9	1,043
06/12	–	06/14	4		48	ND	ND	0	0.0	4,334	97.1	4,334	127	2.9	4,461
06/16	–	06/18	5		48	ND	ND	0	0.0	20,057	96.0	20,057	836	4.0	20,893
06/19	–	06/22	6		72	ND	ND	0	0.0	69,327	93.3	69,327	5,012	6.7	74,339
06/23	–	06/25	7		48	ND	ND	0	0.0	95,000	94.0	95,000	6,064	6.0	101,064
06/26	–	06/29	8		72	ND	ND	1,986	1.1	160,902	85.3	162,888	25,824	13.7	188,712
06/30	–	07/02	9		48	ND	ND	0	0.0	90,541	96.0	90,541	3,773	4.0	94,314
07/03	–	07/06	10		72	ND	ND	0	0.0	85,577	98.0	85,577	1,746	2.0	87,323
07/07	–	07/09	11		48	ND	ND	0	0.0	51,623	98.0	51,623	1,054	2.0	52,677
07/10	–	07/13	12		72	ND	ND	0	0.0	29,495	82.0	29,495	6,474	18.0	35,969
07/14	–	07/16	13		48	ND	ND	0	0.0	15,469	83.0	15,469	3,168	17.0	18,637
07/17	–	07/20	14	[c]	72	ND	ND	0	0.0	10,798	83.0	10,798	2,212	17.0	13,010
07/21	–	07/23	15	[c]	48	ND	ND	0	0.0	7,064	83.0	7,064	1,447	17.0	8,511
07/24	–	07/27	16		72	ND	ND	0	0.0	3,778	70.0	3,778	1,619	30.0	5,397
07/28	–	07/30	17		48	ND	ND	0	0.0	2,386	55.6	2,386	1,908	44.4	4,294
07/31	–	08/03	18		72	ND	ND	0	0.0	2,085	35.6	2,085	3,773	64.4	5,858
08/04	–	08/06	19	[d]	48	ND	ND	0	0.0	723	35.6	723	1,308	64.4	2,031
08/07	–	08/10	20	[d]	72	ND	ND	0	0.0	623	35.6	623	1,127	64.4	1,750
08/11	–	08/12	21	[d]	24	ND	ND	0	0.0	576	35.6	576	1,041	64.4	1,617
08/14	–	08/15	22	[d]	24	ND	ND	0	0.0	209	35.6	209	377	64.4	586
08/18	–	08/19	23	[d]	24	ND	ND	0	0.0	173	35.6	173	312	64.4	485
08/21	–	08/22	24	[d]	24	ND	ND	0	0.0	92	35.6	92	167	64.4	259
08/25	–	09/13	25-30	[e]	48	0	0.0	0	0.0	0	0.0	0	0	0.0	0
09/15	–	09/24	31-33	[f]	60	0	0.0	0	0.0	0	0.0	0	0	0.0	0
Total						0	0.0	1,986	0.3	651,885	90.1	653,871	69,401	9.6	723,272

ND=No data

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

[b] Proportions from period 4 were used to allocate harvest.

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

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

[e] Periods 25-30 were 48 hours each and no sockeye salmon were harvested.

[f] Periods 31-33 were 60 hours each and no sockeye salmon were harvested.

Appendix E15.–Pink salmon hatchery and wild stock contributions to the Eshamy District commercial common property fishery by period, 2008.

Dates			Period	Hours	Origin											
					Solomon Gulch		Cannery Creek		W. Noerenberg		A.F. Koernig		Hatchery	Wild		
					Nr.	Percent	Nr.	Percent	Nr.	Percent	Nr.	Percent	Total	Nr.	Percent	Total
06/02	–	06/04	1	48	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
06/05	–	06/08	2 [a]	72	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	100.0	1
06/09	–	06/11	3	48	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
06/12	–	06/14	4 [a]	48	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	100.0	1
06/16	–	06/18	5 [b]	48	0	0.0	0	0.0	0	0.0	0	0.0	0	12	100.0	12
06/19	–	06/22	6 [b]	72	0	0.0	0	0.0	0	0.0	0	0.0	0	115	100.0	115
06/23	–	06/25	7 [b]	48	0	0.0	0	0.0	0	0.0	0	0.0	0	70	100.0	70
06/26	–	06/29	8 [b]	72	0	0.0	0	0.0	0	0.0	0	0.0	0	283	100.0	283
06/30	–	07/02	9 [b]	48	0	0.0	0	0.0	0	0.0	0	0.0	0	1,106	100.0	1,106
07/03	–	07/06	10 [b]	72	0	0.0	0	0.0	0	0.0	0	0.0	0	5,127	100.0	5,127
07/07	–	07/09	11 [b]	48	0	0.0	0	0.0	0	0.0	0	0.0	0	6,052	100.0	6,052
07/10	–	07/13	12 [b]	72	0	0.0	0	0.0	0	0.0	0	0.0	0	10,872	100.0	10,872
07/14	–	07/16	13 [b]	48	0	0.0	0	0.0	0	0.0	0	0.0	0	8,061	100.0	8,061
07/17	–	07/20	14	72	0	0.0	0	0.0	0	0.0	0	0.0	0	9,865	100.0	9,865
07/21	–	07/23	15 [b]	48	0	0.0	0	0.0	0	0.0	0	0.0	0	5,712	100.0	5,712
07/24	–	07/27	16 [c]	72	69	1.7	69	1.7	138	3.5	0	0.0	276	3,715	93.1	3,991
07/28	–	07/30	17	48	85	1.7	85	1.7	170	3.5	0	0.0	340	4,578	93.1	4,918
07/31	–	08/03	18 [c]	72	136	1.7	136	1.7	272	3.5	0	0.0	544	7,323	93.1	7,867
08/04	–	08/06	19 [c]	48	89	1.7	89	1.7	178	3.5	0	0.0	356	4,794	93.1	5,150
08/07	–	08/10	20 [c]	72	111	1.7	111	1.7	222	3.5	0	0.0	445	5,991	93.1	6,436
08/11	–	08/12	21 [c]	24	261	1.7	261	1.7	522	3.5	0	0.0	1,044	14,052	93.1	15,096
08/14	–	08/15	22 [c]	24	116	1.7	116	1.7	231	3.5	0	0.0	463	6,233	93.1	6,696
08/18	–	08/19	23 [c]	24	256	1.7	256	1.7	512	3.5	0	0.0	1,023	13,775	93.1	14,798
08/21	–	08/22	24 [c]	24	200	1.7	200	1.7	399	3.5	0	0.0	798	10,749	93.1	11,547
08/25	–	08/27	25 [a]	48	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	100.0	4
08/28	–	09/13	26–30 [d]	48	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
09/15	–	09/17	31	60	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
09/18	–	09/20	32	60	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
09/22	–	09/24	33	60	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
Total					1,322	1.1	1,322	1.1	2,644	2.1	0	0.0	5,289	118,491	95.7	123,780

ND=No data

[a] Allocated to wild stocks.

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

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

[d] Periods 26–30 were 48 hours each and no pink salmon were harvested.

Appendix E16.–Daily salmon sales and sex ratios, sales summary, and broodstock summary at the Main Bay Hatchery, 2008.

	Sockeye Salmon					Chum Salmon	
Date	% Female	Sales Harvest[a]	Sales Harvest cumulative	Brood Stock[b]	Brood Stock cumulative	Sales Harvest	Sales Harvest cumulative
07/03	-----	0	0	5	5	0	0
07/04	-----	0	0	9	14	0	0
07/05	-----	0	0	0	14	0	0
07/06	-----	0	0	2	16	0	0
07/07	-----	0	0	16	32	0	0
07/08	-----	0	0	0	32	0	0
07/09	-----	0	0	0	32	0	0
07/10	-----	0	0	1	33	0	0
07/11	-----	0	0	1	34	0	0
07/12	-----	0	0	6	40	0	0
07/13	-----	0	0	10	50	0	0
07/14	-----	0	0	9	59	0	0
07/15	-----	0	0	13	72	0	0
07/16	-----	0	0	8	80	0	0
07/17	-----	0	0	24	104	0	0
07/18	-----	0	0	10	114	0	0
07/19	-----	0	0	7	121	0	0
07/20	-----	0	0	13	134	0	0
07/21	-----	0	0	16	150	0	0
07/22	-----	0	0	26	176	0	0
07/23	-----	0	0	29	205	0	0
07/24	-----	0	0	37	242	0	0
07/25	-----	0	0	6	248	0	0
07/26	-----	0	0	8	256	0	0
07/27	-----	0	0	13	269	0	0
07/28	-----	0	0	10	279	0	0
07/29	-----	0	0	34	313	0	0
07/30	-----	0	0	554	867	0	0
07/31	-----	0	0	1050	1,917	0	0
08/01	-----	0	0	1371	3,288	0	0
08/02	-----	0	0	388	3,676	0	0
08/03	-----	0	0	718	4,394	0	0
08/04	-----	0	0	15	4,409	0	0
08/05	-----	0	0	858	5,267	0	0
08/06	-----	0	0	14	5,281	0	0
08/07	-----	0	0	975	6,256	0	0
08/08	-----	0	0	66	6,322	0	0
08/09	-----	0	0	985	7,307	0	0
08/10	-----	0	0	22	7,329	0	0
08/11	-----	0	0	990	8,319	0	0

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Date	Sockeye Salmon % Female	Sockeye Salmon Sales Harvest[a]	Sockeye Salmon Sales Harvest cumulative	Sockeye Salmon Brood Stock[b]	Sockeye Salmon Brood Stock cumulative	Chum Salmon Sales Harvest	Chum Salmon Sales Harvest cumulative
08/12	-----	0	0	9	8,328	0	0
08/13	-----	0	0	447	8,775	0	0
08/14	-----	0	0	0	8,775	0	0
08/15	-----	0	0	0	8,775	0	0
08/16	-----	0	0	1884	10,659	0	0

Cost Recovery Sales Summary[a]	Sockeye salmon	Chum salmon
Pounds Sold	0	0
Average Weight		

Broodstock Summary[c]

(Including Roe Sales)	Sockeye salmon
Viable broodstock (spawned, eggs in incubators)	5,395
Inviable broodstock (green/over-ripe/bad)	108
Unspawned fish (roe recovery, excess males)	5,016
Holding mortalities (raceway, pen mortalities)	140
Total adults captured for broodstock	10,659
Estimated unharvested return[d]	5,000
Estimated total return to hatchery	15,659

NR- not reported

[a] There was no cost recovery at Main Bay Hatchery in 2008.

[b] Broodstock daily harvest numbers are from PWSAC inseason daily updates.

[c] Broodstock summary numbers from Main Bay 2008 annual report.

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

Appendix E17.–Sockeye salmon hatchery and wild stock contributions to Main Bay Hatchery cost recovery by statistical week, 2008.

		Origin						
	Stat	Gulkana [a]		Main Bay		Wild		
Dates	Week	Nr.	Percent	Nr.	Percent	Nr.	Percent	Total
Total [b]		ND		ND		ND		0

ND=No data

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

[b] No cost recovery was conducted at Main Bay Hatchery in 2008.

Appendix E18.–Main Bay sockeye salmon harvests and total contribution, 1990–2008.

	Hatchery Contributions					Total
		Subsistence/		BroodStock/	Cost	Hatchery
Year	Commercial	Personal Use[a]	Sport	Escapement	Recovery	Contribution
1990	9,000	0	0	0	0	9,000
1991	480,200	0	0	4,700	0	484,900
1992	368,427	0	0	6,185	158,893	533,505
1993	208,709	0	0	8,020	97,594	314,323
1994	214,737	0	0	72,335	85,511	372,583
1995	134,778	0	0	11,148	62,782	208,708
1996	406,100	0	0	7,979	83,430	497,509
1997	845,871	0	0	16,498	236,031	1,098,400
1998	128,702	0	6,738	10,596	111,026	257,062
1999	143,511	0	7,150	7,104	0	157,765
2000	339,305	200	2,360	5,426	0	347,291
2001	770,884	400	3,500	10,508	50,458	835,750
2002	846,534	2,971	4,000	7,352	93,794	954,651
2003	1,047,133	0	4,000	6,878	366,768	1,424,779
2004	355,821	0	1,200	17,578	279,139	653,738
2005	233,089	0	750	44,366	188,904	467,109
2006	668,780	0	500	15,854	350,742	1,035,876
2007	819,244	0	500	20,285	321,330	1,161,359
10-Year Average	535,300	357	3,070	14,595	176,216	729,538
2008	835,241	0	700	15,659	0	851,600

[a] Commercial proportion from otolith marks, Sport and Sub/PU from average proportion of previous estimates.

Appendix E19.–Main Bay Hatchery salmon fry releases, 1983–2008.

		Sockeye salmon				Pink salmon	Chum salmon
Release Year	Primary Return Years	Coghill Lake stock	Eshamy Lake stock	Eyak Lake stock	Total Released	Total Released	Total Released
1983						25,751,531	8,644,179
1984						41,945,403	7,490,291
1985						29,286,498	11,033,065
1986	1990/91					32,728,663	5,258,175
1987	1991/92					2,660,000	76,646,750
1988	1992/93	330,025			330,025		
1989	1993/94	3,925,357			3,925,357	10,200,000	
1990	1994/95	2,616,498			2,616,498		
1991	1995/96	1,960,774	1,843,176		3,803,950		
1992	1996/97	1,546,929	2,475,390	47,609	4,069,928		
1993	1997/98	3,288,689	966,750	63,822	4,319,261		
1994	1998/99	3,289,824	691,633		3,981,457		
1995	1999/00	4,049,763	1,546,011	90,348	5,686,122		
1996	2000/01	4,194,174	114,475	82,514	4,391,163		
1997	2001/02	239,023	845,190	131,503	1,215,716		
1998	2002/03		2,485,000	181,000	2,666,000		
1999	2003/04		4,165,786	2,913,460	7,079,246		
2000	2004/05	8,401,117			8,401,117		
2001	2005/06	7,612,350			7,612,350		
2002	2006/07	7,858,190			7,858,190		
2003	2008/08	6,576,535			6,576,535		
2004	2008/09	9,057,829			9,057,829		
2005	2009/10	10,868,642			10,868,642		
2006	2010/11	9,516,461			9,516,461		
2007	2011/12	9,393,000			9,393,000		
10-Year Average					8,660,516		
2008	20012/13	9,384,000			9,384,000		

Appendix E20.–Pink salmon hatchery and wild stock contributions to the Eastern District commercial common property fishery by period, 2008.

			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
06/16 – 06/16	1 [a]	12	101	100.0	0	0.0	0	0.0	0	0.0	101	0	0.0	101
06/19 – 06/19	2	12	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
06/23 – 06/23	3 [a]	12	35,003	100.0	0	0.0	0	0.0	0	0.0	35,003	0	0.0	35,003
07/01 – 07/01	4	12	1,518,209	100.0	0	0.0	0	0.0	0	0.0	1,518,209	0	0.0	1,518,209
07/04 – 07/04	5	14	1,527,712	98.9	0	0.0	0	0.0	16,252	1.1	1,543,964	0	0.0	1,543,964
07/07 – 07/07	6	14	1,466,421	100.0	0	0.0	0	0.0	0	0.0	1,466,421	0	0.0	1,466,421
07/09 – 07/09	7	14	1,707,048	96.9	0	0.0	0	0.0	0	0.0	1,707,048	55,066	3.1	1,762,114
07/11 – 07/11	8	14	1,390,981	99.0	0	0.0	0	0.0	0	0.0	1,390,981	14,642	1.0	1,405,623
07/13 – 07/13	9	14	1,136,975	99.0	0	0.0	0	0.0	0	0.0	1,136,975	11,968	1.0	1,148,943
07/16 – 07/16	10	14	956,619	100.0	0	0.0	0	0.0	0	0.0	956,619	0	0.0	956,619
07/19 – 07/19	11	14	573,499	100.0	0	0.0	0	0.0	0	0.0	573,499	0	0.0	573,499
07/21 – 07/21	12	14	418,262	100.0	0	0.0	0	0.0	0	0.0	418,262	0	0.0	418,262
08/11 – 08/11	13 [b]	14	746	100.0	0	0.0	0	0.0	0	0.0	746	0	0.0	746
09/02 – 09/10	14–22 [c]	13	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
09/11 – 09/13	23	61	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
09/14 – 09/17	24	85	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
09/18 – 09/20	25	60	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
09/21 – 09/24	26	84	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
09/25 – 09/28	27	84	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
Total			10,731,576	99.1	0	0.0	0	0.0	16,252	0.2	10,747,828	81,676	0.8	10,829,504

[a] Proportions from period 4 were used to allocate harvest.

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

[c] Periods 14–22 were 13 hours each and no pink salmon were harvested.

Appendix E21.–Daily salmon sales and sex ratios, sales summary, and broodstock summary at the Solomon Gulch Hatchery, 2008.

	Pink Salmon					Coho Salmon	
Date	% Female	Sales Harvest[a]	Sales Harvest cumulative	Brood Stock[b]	Brood Stock cumulative	Sales Harvest	Sales Harvest cumulative
06/23	7.0%	37,707	37,707	0	0	0	0
06/24	13.0%	118,184	155,891	0	0	0	0
06/25	12.0%	153,391	309,282	0	0	0	0
06/26	16.0%	147,091	456,373	0	0	0	0
06/27	10.0%	266,744	723,117	0	0	0	0
06/28	17.0%	286,729	1,009,846	0	0	0	0
06/29	-----	274,847	1,284,693	0	0	0	0
06/30	12.0%	345,582	1,630,275	0	0	0	0
07/01	17.0%	0	1,630,275	0	0	0	0
07/02	35.0%	294,206	1,924,481	0	0	0	0
07/03	32.0%	446,775	2,371,256	0	0	0	0
07/04	-----	0	2,371,256	0	0	0	0
07/05	40.0%	411,683	2,782,939	0	0	0	0
07/06	29.0%	586,316	3,369,255	0	0	0	0
07/07	-----	0	3,369,255	0	0	0	0
07/08	49.0%	183,495	3,552,750	0	0	0	0
07/09	45.0%	0	3,552,750	0	0	0	0
07/10	56.0%	160,626	3,713,376	0	0	0	0
07/11	55.0%	0	3,713,376	0	0	0	0
07/12	58.0%	157,756	3,871,132	0	0	0	0
07/13	-----	0	3,871,132	0	0	0	0
07/14	62.0%	218,289	4,089,421	0	0	0	0
07/28	-----	0	4,089,421	14,439	14,439	0	0
07/29	-----	0	4,089,421	9,265	23,704	0	0
07/30	-----	0	4,089,421	0	23,704	0	0
07/31	-----	0	4,089,421	17,568	41,272	0	0
08/01	-----	0	4,089,421	15,903	57,175	0	0
08/02	-----	0	4,089,421	0	57,175	0	0
08/03	-----	0	4,089,421	0	57,175	0	0
08/04	-----	2,024	4,091,445	14,401	71,576	0	0
08/05	-----	3,231	4,094,676	14,151	85,727	0	0
08/06	-----	2,988	4,097,664	13,923	99,650	0	0
08/07	-----	2,543	4,100,207	13,189	112,839	0	0
08/08	-----	2,703	4,102,910	14,754	127,593	0	0
08/09	-----	0	4,102,910	0	127,593	0	0
08/10	-----	0	4,102,910	0	127,593	0	0
08/11	-----	101	4,103,011	18,703	146,296	0	0
08/12	-----	3,702	4,106,713	12,122	158,418	0	0

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Date	Pink Salmon					Coho Salmon	
	% Female	Sales Harvest[a]	Sales Harvest cumulative	Brood Stock[b]	Brood Stock cumulative	Sales Harvest	Sales Harvest cumulative
08/13	-----	2,367	4,109,080	10,381	168,799	0	0
08/14	-----	3,701	4,112,781	13,266	182,065	0	0
08/15	-----	8,267	4,121,048	12,420	194,485	0	0
08/16	-----	0	4,121,048	0	194,485	0	0
08/17	-----	0	4,121,048	0	194,485	0	0
08/18	-----	7,625	4,128,673	12,374	206,859	0	0
08/19	-----	5,388	4,134,061	11,665	218,524	0	0
08/20	-----	5,759	4,139,820	11,293	229,817	0	0
08/21	-----	5,230	4,145,050	12,256	242,073	0	0
08/22	-----	16,185	4,161,235	0	242,073	0	0
08/23	-----	0	4,161,235	0	242,073	0	0
08/24	-----	0	4,161,235	0	242,073	0	0
08/25	-----	12,797	4,174,032	0	242,073	0	0
08/26	-----	13,297	4,187,329	0	242,073	0	0
08/27	-----	15,868	4,203,197	0	242,073	0	0
08/28	-----	14,665	4,217,862	0	242,073	0	0
08/29	-----	19,587	4,237,449	0	242,073	0	0
08/30	-----	0	4,237,449	0	242,073	0	0
08/31	-----	0	4,237,449	0	242,073	0	0
09/01	-----	0	4,237,449	0	242,073	0	0
09/02	-----	9,792	4,247,241	0	242,073	0	0
09/03	-----	0	4,247,241	0	242,073	0	0
09/04	-----	0	4,247,241	0	242,073	0	0
09/05	-----	0	4,247,241	0	242,073	2,027	2,027
09/06	-----	0	4,247,241	0	242,073	0	2,027
09/07	-----	0	4,247,241	0	242,073	0	2,027
09/08	-----	0	4,247,241	0	242,073	2,020	4,047
09/09	-----	0	4,247,241	0	242,073	2,006	6,053
09/10	-----	0	4,247,241	0	242,073	2,026	8,079
09/11	-----	0	4,247,241	0	242,073	0	8,079
09/12	-----	0	4,247,241	0	242,073	2,006	10,085
09/13	-----	0	4,247,241	0	242,073	0	10,085
09/14	-----	0	4,247,241	0	242,073	0	10,085
09/15	-----	0	4,247,241	0	242,073	2,045	12,130
09/16	-----	0	4,247,241	0	242,073	2,008	14,138
09/17	-----	0	4,247,241	0	242,073	2,024	16,162
09/18	-----	0	4,247,241	0	242,073	1,017	17,179
10/14	-----	0	4,247,241	0	242,073	2,655	19,834
10/15	-----	0	4,247,241	0	242,073	2,522	22,356

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Hatchery escapement summary[c]	Pink salmon	Coho Salmon
Purse seine whole fish harvest	4,089,421	–
Roe and milt recovery harvest	157,820	22,356
Viable broodstock (spawned, eggs in incubators)	199,087	839
Unviable broodstock (green/over-ripe/bad)	3,479	586
Unspawned fish (roe recovery, excess males)	34,092	418
Holding mortalities (raceway, pen mortalities)	5,415	258
Estimated unharvested return[d]	41,361	1,000
Estimated total return to hatchery	4,530,675	25,457

Sales Summary	Pink salmon	Coho Salmon
Purse seine whole fish sales	4,089,421	–
Roe and milt recovery whole fish sales	106,958	17,179
Carcass sales[e]	71,461	0
Total sales	4,267,840	17,179

NR- not reported

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

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

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

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

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

Appendix E22.–Chum salmon hatchery and wild stock contributions to the Montague District commercial common property fishery by period, 2008.

			Origin							
			W. Noerenberg		Port Chalmers		Hatchery	Wild		
Dates	Period	Hours	Nr.	Percent	Nr.	Percent	Total	Nr.	Percent	Total
05/26 – 06/01	1	156	556	1.3	41,171	94.9	41,727	1,669	3.8	43,396
06/02 – 06/08	2	156	19,301	15.8	95,219	77.9	114,520	7,720	6.3	122,240
06/09 – 06/15	3	156	20,887	9.4	187,986	84.4	208,873	13,925	6.3	222,798
06/16 – 06/22	4	156	19,445	7.3	244,451	91.7	263,896	2,778	1.0	266,674
06/23 – 06/29	5	156	39,681	14.6	218,244	80.2	257,925	14,172	5.2	272,097
06/30 – 07/06	6	156	4,381	2.1	203,697	96.9	208,078	2,190	1.0	210,268
07/07 – 07/13	7	156	6,065	7.3	74,511	89.6	80,576	2,599	3.1	83,175
07/14 – 07/20	8	156	1,069	8.6	7,481	60.0	8,549	3,919	31.4	12,468
07/21 – 07/27	9 [b]	156	68		476		544	249	31.4	793
Total			111,453	9.0	1,073,235	87.0	1,184,688	49,221	4.0	1,233,909

[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 8 were used to allocate harvest.

Appendix E23.–Pink salmon hatchery and wild stock contributions to the Montague District commercial common property fishery by period, 2008.

Dates	Period	Hours	Origin											
			Solomon Gulch		Cannery Creek		W. Noerenberg		A.F. Koernig		Hatchery	Wild		
			Nr.	Percent	Nr.	Percent	Nr.	Percent	Nr.	Percent	Total	Nr.	Percent	Total
05/26 – 06/01	1	156	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
06/02 – 06/08	2	156	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
06/09 – 06/15	3 [a]	156	1,148	93.3	0	0.0	0	0.0	0	0.0	1,148	82	6.7	1,230
06/16 – 06/22	4	156	1,624	93.3	0	0.0	0	0.0	0	0.0	1,624	116	6.7	1,740
06/23 – 06/29	5	156	2,372	97.5	0	0.0	0	0.0	61	2.5	2,433	0	0.0	2,433
06/30 – 07/06	6	156	31,319	100.0	0	0.0	0	0.0	0	0.0	31,319	0	0.0	31,319
07/07 – 07/13	7	156	110,424	92.6	1,255	1.1	0	0.0	0	0.0	111,679	7,529	6.3	119,208
07/14 – 07/20	8	156	51,899	86.5	1,251	2.1	0	0.0	0	0.0	53,150	6,878	11.5	60,028
07/21 – 07/27	9	156	0	0.0	0	0.0	0	0.0	0	0.0	0	55	100.0	55
Total			198,787	92.0	2,505	1.2	0	0.0	61	0.0	201,353	14,660	6.8	216,013

[a] Proportions from period 4 were used to allocate harvest.

Appendix E24.–Pink salmon hatchery and wild stock contributions to the Northern District commercial common property fishery by period, 2008.

Dates	Period	Hours	Origin											
			Solomon Gulch		Cannery Creek		W. Noerenberg		A.F. Koernig		Hatchery	Wild		
			Nr.	Percent	Nr.	Percent	Nr.	Percent	Nr.	Percent	Total	Nr.	Percent	Total
06/16 – 06/16	1 [a]	12	0	0.0	207	89.6	2	1.0	12	5.2	221	10	4.2	231
06/19 – 06/19	2 [a]	12	0	0.0	148	89.6	2	1.0	9	5.2	158	7	4.2	165
06/23 – 06/23	3	12	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
08/09 – 08/09	4	14	0	0.0	746,457	89.6	8,680	1.0	43,399	5.2	798,535	34,719	4.2	833,254
08/11 – 08/11	5	14	0	0.0	708,972	97.9	0	0.0	0	0.0	708,972	15,085	2.1	724,057
08/12 – 08/12	6	14	0	0.0	566,068	93.8	6,290	1.0	6,290	1.0	578,647	25,159	4.2	603,806
08/13 – 08/13	7	14	0	0.0	441,793	90.5	10,274	2.1	30,823	6.3	482,890	5,137	1.1	488,027
08/14 – 08/14	8	14	0	0.0	391,913	99.0	4,125	1.0	0	0.0	396,038	0	0.0	396,038
08/15 – 08/15	9	14	0	0.0	543,372	94.7	12,211	2.1	6,105	1.1	561,687	12,211	2.1	573,898
08/16 – 08/16	10	14	0	0.0	450,003	95.8	9,783	2.1	0	0.0	459,785	9,783	2.1	469,568
08/17 – 08/17	11	14	0	0.0	579,067	84.0	7,330	1.1	58,640	8.5	645,037	43,980	6.4	689,017
08/18 – 08/18	12	14	0	0.0	306,744	96.9	6,597	2.1	0	0.0	313,341	3,298	1.0	316,639
08/19 – 08/19	13	14	2,757	1.0	245,137	92.6	2,757	1.0	5,513	2.1	256,164	8,473	3.2	264,637
08/20 – 08/20	14	14	0	0.0	399,238	96.7	0	0.0	9,178	2.2	408,416	4,589	1.1	413,005
08/21 – 08/21	15	14	0	0.0	526,383	97.9	0	0.0	0	0.0	526,383	11,200	2.1	537,583
08/22 – 08/22	16	14	0	0.0	371,104	95.8	4,034	1.0	4,034	1.0	379,172	8,067	2.1	387,239
08/23 – 08/23	17	14	0	0.0	277,650	87.4	40,142	12.6	0	0.0	317,792	0	0.0	317,792
08/24 – 08/24	18	14	0	0.0	271,578	68.8	111,100	28.1	4,115	1.0	386,792	8,230	2.1	395,022
08/25 – 08/25	19	14	0	0.0	89,617	98.9	0	0.0	0	0.0	89,617	996	1.1	90,613
08/26 – 08/26	20	14	0	0.0	114,520	97.9	1,218	1.0	0	0.0	115,739	1,218	1.0	116,957
08/27 – 08/27	21	14	0	0.0	88,866	97.9	945	1.0	945	1.0	90,757	0	0.0	90,757
08/28 – 08/28	22	13	0	0.0	72,270	99.0	761	1.0	0	0.0	73,031	0	0.0	73,031
08/29 – 08/29	23	13	0	0.0	41,026	97.9	873	2.1	0	0.0	41,899	0	0.0	41,899
08/30 – 08/30	24	13	0	0.0	47,865	98.1	0	0.0	0	0.0	47,865	903	1.9	48,768

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Appendix E24.–Page 2 of 2.

Dates	Period	Hours	Origin											
			Solomon Gulch		Cannery Creek		W. Noerenberg		A.F. Koernig		Hatchery	Wild		
			Nr.	Percent	Nr.	Percent	Nr.	Percent	Nr.	Percent	Total	Nr.	Percent	Total
08/31 – 08/31	25	13	0	0.0	49,234	90.5	2,591	4.8	0	0.0	51,825	2,591	4.8	54,416
09/01 – 09/01	26	13	0	0.0	51,873	96.4	961	1.8	0	0.0	52,833	961	1.8	53,794
09/02 – 09/02	27 [b]	13	0	0.0	40,678	96.4	753	1.8	0	0.0	41,432	753	1.8	42,185
09/03 – 09/03	28 [b]	13	0	0.0	25,505	96.4	472	1.8	0	0.0	25,978	472	1.8	26,450
09/04 – 09/04	29 [b]	13	0	0.0	48,122	96.4	891	1.8	0	0.0	49,013	891	1.8	49,904
09/05 – 09/05	30	13	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
09/06 – 09/06	31 [b]	13	0	0.0	110,623	96.4	2,049	1.8	0	0.0	112,671	2,049	1.8	114,720
09/07 – 09/07	32	15	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
09/08 – 09/08	33 [b]	15	0	0.0	57,571	96.4	1,066	1.8	0	0.0	58,637	1,066	1.8	59,703
09/09 – 09/09	34	15	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
09/10 – 09/10	35 [b]	15	0	0.0	102,269	96.4	1,894	1.8	0	0.0	104,163	1,894	1.8	106,057
09/11 – 09/13	36 [b]	60	0	0.0	162,249	96.4	3,005	1.8	0	0.0	165,253	3,005	1.8	168,258
09/14 – 09/17	37	84	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
09/18 – 09/20	38	60	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
09/21 – 09/24	39	84	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
09/25 – 09/27	40	60	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
Total			2,757	0.0	7,928,122	92.8	240,805	2.8	169,062	2.0	8,340,745	206,745	2.4	8,547,490

[a] Proportions from period 4 were used to allocate harvest.

[b] Proportions from period 26 were used to allocate harvest.

Appendix E25.–Daily salmon sales and sex ratios, sales summary, and broodstock summary at the Cannery Creek Hatchery, 2008.

	Pink Salmon				
Date	% Female	Sales Harvest[a]	Sales Harvest cumulative	Brood Stock[b]	Brood Stock cumulative
07/31	4.0%	11,027	11,027	0	0
08/01	-----	0	11,027	0	0
08/02	8.6%	49,729	60,756	0	0
08/03	7.0%	70,829	131,585	0	0
08/04	5.0%	147,912	279,497	0	0
08/05	8.0%	134,575	414,072	0	0
08/06	12.0%	114,081	528,153	0	0
08/07	11.0%	125,446	653,599	0	0
08/08	14.0%	208,353	861,952	0	0
08/09	-----	0	861,952	0	0
08/10	19.0%	129,477	991,429	0	0
08/24	-----	0	991,429	0	0
08/25	-----	0	991,429	0	0
08/26	-----	9,071	1,000,500	16,306	16,306
08/27	-----	6,734	1,007,234	18,065	34,371
08/28	-----	0	1,007,234	25	34,396
08/29	-----	7,376	1,014,610	17,492	51,888
08/30	-----	5,555	1,020,165	19,979	71,867
08/31	-----	4,152	1,024,317	20,377	92,244
09/01	-----	3,508	1,027,825	21,212	113,456
09/02	-----	3,670	1,031,495	18,900	132,356
09/03	-----	2,461	1,033,956	17,314	149,670
09/04	-----	3,086	1,037,042	20,014	169,684
09/05		3,103	1,040,145	16,385	186,069
09/06	-----	7,594	1,047,739	10,257	196,326
09/07	-----	11,950	1,059,689	257	196,583
09/08	-----	9,703	1,069,392	180	196,763
09/09	-----	3,984	1,073,376	109	196,872
09/10	-----	3,955	1,077,331	54	196,926

Hatchery escapement summary[c]	Pink salmon
Purse seine whole fish harvest	991,429
Raceway whole fish harvest	85,902
Viable broodstock (spawned, eggs in incubators)	192,958
Unviable broodstock (green/over-ripe/bad)	NR

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Unspawned fish (roe recovery, excess males)	NR
Holding mortalities (raceway, pen mortalities)	3,968
Estimated unharvested return[d]	10,000
Estimated total return to hatchery	1,284,257

Sales Summary	Pink salmon
Purse seine whole fish sales	991,429
Raceway whole fish sales	85,902
Carcass sales[e]	192,958
Total sales	1,270,289

NR- not reported

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

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

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

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

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

Appendix E26.–Pink salmon hatchery and wild stock contributions to the Southeastern District commercial common property fishery by period, 2008.

			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
06/16	1 [a]	12									0			0
06/19	2 [a]	12									0			0
06/23	3 [a]	12									0			0
Total			0		0		0		0		0	0		0

[a] No pink salmon were harvested.

Appendix E27.–Sockeye salmon hatchery and wild stock contributions to the Southwestern District commercial common property fishery by period, 2008.

Dates			Period		Hours	Origin							
						Gulkana [a]		Main Bay		Hatchery	Wild		
						Nr.	Percent	Nr.	Percent	Total	Nr.	Percent	Total
05/26	–	06/01	1		156	0	0.0	0	0.0	0	0	0.0	0
06/02	–	06/08	2		156	0	0.0	0	0.0	0	0	0.0	0
06/09	–	06/15	3		156	ND	ND	457	100.0	457	0	0.0	457
06/16	–	06/22	4		156	ND	ND	8,613	94.3	8,613	522	5.7	9,135
06/23	–	06/29	5		156	ND	ND	28,818	94.5	28,818	1,675	5.5	30,493
06/30	–	07/06	6		156	ND	ND	7,905	68.4	7,905	3,649	31.6	11,554
07/07	–	07/13	7		156	ND	ND	4,962	92.3	4,962	413	7.7	5,375
07/14	–	07/20	8	[b]	156	ND	ND	1,487	92.3	1,487	124	7.7	1,611
07/21	–	07/27	9	[b]	156	ND	ND	1,722	92.3	1,722	143	7.7	1,865
07/28	–	08/03	10	[b]	156	ND	ND	857	92.3	857	71	7.7	928
08/04	–	08/10	11	[b]	156	ND	ND	42	92.3	42	3	7.7	45
08/11	–	08/11	12	[b]	14	ND	ND	121	92.3	121	10	7.7	131
08/12	–	08/12	13	[b]	14	ND	ND	14	92.3	14	1	7.7	15
08/13	–	08/13	14	[b]	14	ND	ND	56	92.3	56	5	7.7	61
08/14	–	08/14	15	[b]	14	ND	ND	25	92.3	25	2	7.7	27
08/15	–	08/15	16	[b]	14	ND	ND	23	92.3	23	2	7.7	25
08/16	–	08/16	17	[b]	14	ND	ND	6	92.3	6	0	7.7	6
08/17	–	08/17	18	[b]	14	ND	ND	1	92.3	1	0	7.7	1
08/18	–	08/18	19	[b]	14	ND	ND	24	92.3	24	2	7.7	26
08/19	–	08/19	20	[b]	14	ND	ND	8	92.3	8	1	7.7	9
08/20	–	08/20	21	[b]	14	ND	ND	55	92.3	55	5	7.7	60
08/21	–	08/21	22	[b]	14	ND	ND	13	92.3	13	1	7.7	14
08/22	–	08/22	23	[b]	14	ND	ND	32	92.3	32	3	7.7	35
08/23	–	08/23	24	[b]	14	ND	ND	2	92.3	2	0	7.7	2
08/24	–	08/24	25	[b]	14	ND	ND	5	92.3	5	0	7.7	5
08/25	–	08/25	26	[b]	14	ND	ND	1	92.3	1	0	7.7	1
08/26	–	08/26	27		14	0	0.0	0	0.0	0	0	0.0	0
08/27	–	08/27	28	[b]	14	ND	ND	6	92.3	6	0	7.7	6
08/28	–	08/28	29		13	0	0.0	0	0.0	0	0	0.0	0
08/29	–	08/29	30		13	0	0.0	0	0.0	0	0	0.0	0
08/30	–	08/30	31		13	0	0.0	0	0.0	0	0	0.0	0
08/31	–	08/31	32	[b]	13	ND	ND	2	92.3	2	0	7.7	2
09/01	–	09/10	33–42	[c]	13	0	0.0	0	0.0	0	0	0.0	0
09/11	–	09/13	43		60	0	0.0	0	0.0	0	0	0.0	0
09/14	–	09/17	44		84	0	0.0	0	0.0	0	0	0.0	0
09/18	–	09/20	45		60	0	0.0	0	0.0	0	0	0.0	0
09/21	–	09/24	46		84	0	0.0	0	0.0	0	0	0.0	0
09/25	–	09/27	47		60	0	0.0	0	0.0	0	0	0.0	0
Total						0	0.0	55,254	89.3	55,254	6,635	10.7	61,889

ND=No data

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

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

[c] Periods 33-42 were 13 hours each and no sockeye salmon were harvested.

Appendix E28.–Pink salmon hatchery and wild stock contributions to the Southwestern District commercial common property fishery by period, 2008.

				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
05/26 – 06/01	1		156	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
06/02 – 06/08	2		156	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
06/09 – 06/15	3	[a]	156	0	0.0	18	12.8	26	18.1	85	59.6	129	14	9.6	143
06/16 – 06/22	4	[a]	156	0	0.0	81	12.8	115	18.1	378	59.6	574	61	9.6	635
06/23 – 06/29	5	[a]	156	0	0.0	625	12.8	885	18.1	2,914	59.6	4,424	468	9.6	4,892
06/30 – 07/06	6	[a]	156	0	0.0	435	12.8	617	18.1	2,031	59.6	3,083	326	9.6	3,409
07/07 – 07/13	7	[a]	156	0	0.0	115	12.8	163	18.1	537	59.6	815	86	9.6	901
07/14 – 07/20	8	[a]	156	0	0.0	9	12.8	12	18.1	41	59.6	62	7	9.6	69
07/21 – 07/27	9	[a]	156	0	0.0	408	12.8	578	18.1	1,905	59.6	2,892	306	9.6	3,198
07/28 – 08/03	10	[a]	156	0	0.0	14	12.8	20	18.1	65	59.6	99	10	9.6	109
08/04 – 08/10	11		156	0	0.0	43,370	12.8	61,441	18.1	202,394	59.6	307,204	32,528	9.6	339,732
08/11 – 08/11	12		14	0	0.0	105,007	24.0	50,221	11.5	241,974	55.2	397,202	41,090	9.4	438,292
08/12 – 08/12	13		14	0	0.0	71,278	21.1	32,075	9.5	220,961	65.3	324,314	14,256	4.2	338,570
08/13 – 08/13	14	[b]	14	0	0.0	92,307	21.1	41,538	9.5	286,151	65.3	419,996	18,461	4.2	438,457
08/14 – 08/14	15		14	0	0.0	72,532	16.7	86,132	19.8	249,329	57.3	407,993	27,200	6.3	435,193
08/15 – 08/15	16		14	0	0.0	81,899	17.3	122,848	25.9	216,446	45.7	421,193	52,649	11.1	473,842
08/16 – 08/16	17		14	0	0.0	53,146	12.5	57,575	13.5	279,015	65.6	389,736	35,431	8.3	425,166
08/17 – 08/17	18		14	0	0.0	26,046	12.5	30,387	14.6	145,421	69.8	201,854	6,511	3.1	208,365
08/18 – 08/18	19		14	7,095	1.0	305,074	44.8	99,326	14.6	241,221	35.4	652,716	28,379	4.2	681,095
08/19 – 08/19	20		14	0	0.0	0	0.0	13,467	3.4	363,610	93.1	377,077	13,467	3.4	390,544
08/20 – 08/20	21		14	0	0.0	134,642	19.8	120,469	17.7	403,926	59.4	659,038	21,259	3.1	680,297
08/21 – 08/21	22		14	0	0.0	23,009	7.4	16,435	5.3	262,963	85.1	302,408	6,574	2.1	308,982
08/22 – 08/22	23		14	0	0.0	64,470	10.5	32,235	5.3	477,080	77.9	573,785	38,682	6.3	612,467
08/23 – 08/23	24		14	0	0.0	39,599	15.6	15,839	6.3	192,713	76.0	248,151	5,280	2.1	253,431

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				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
08/24 – 08/24	25		14	0	0.0	63,321	14.6	180,916	41.7	180,916	41.7	425,152	9,046	2.1	434,198
08/25 – 08/25	26		14	0	0.0	10,642	6.4	7,095	4.3	143,673	86.2	161,411	5,321	3.2	166,732
08/26 – 08/26	27		14	0	0.0	26,015	7.3	22,299	6.3	289,881	81.3	338,194	18,582	5.2	356,776
08/27 – 08/27	28		14	0	0.0	3,660	3.1	6,099	5.2	102,469	87.5	112,228	4,879	4.2	117,107
08/28 – 08/28	29		13	0	0.0	22,383	10.5	11,191	5.3	172,348	81.1	205,922	6,715	3.2	212,637
08/29 – 08/29	30		13	0	0.0	0	0.0	5,777	6.3	84,734	91.7	90,511	1,926	2.1	92,437
08/30 – 08/30	31		13	0	0.0	0	0.0	466	2.2	20,491	97.8	20,957	0	0.0	20,957
08/31 – 08/31	32		13	0	0.0	0	0.0	622	2.2	27,371	95.7	27,993	622	2.2	28,615
09/01 – 09/01	33		13	0	0.0	253	3.2	0	0.0	7,581	96.8	7,834	0	0.0	7,834
09/02 – 09/02	34	[c]	13	0	0.0	1,154	3.2	0	0.0	34,616	96.8	35,770	0	0.0	35,770
09/03 – 09/03	35	[c]	13	0	0.0	56	3.2	0	0.0	1,667	96.8	1,723	0	0.0	1,723
09/04 – 09/04	36–42	[d]	13	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
09/11 – 09/13	43		60	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
09/14 – 09/17	44	[c]	84	0	0.0	1,173	3.2	0	0.0	35,202	96.8	36,375	0	0.0	36,375
09/18 – 09/20	45		60	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
09/21 – 09/24	46		84	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
09/25 – 09/27	47		60	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0.0	0
Total				7,095	0.1	1,242,739	16.5	1,016,869	13.5	4,892,111	64.8	7,158,814	390,136	5.2	7,548,950

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

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

[c] Proportions from period 33 were used to allocate harvest.

[d] Periods 36–42 were 13 hours each and no pink salmon were harvested.

Appendix E29.–Daily salmon sales and sex ratios, sales summary, and broodstock summary at the Armin F. Koerning Hatchery, 2008.

	Pink Salmon					Chum Salmon		
Date	% Female	Sales Harvest[a]	Sales Harvest cumulative	Brood Stock[b]	Brood Stock cumulative	% Female	Sales Harvest	Sales Harvest cumulative
06/05	-----	0	0	0	0	-----	–	–
06/06	-----	0	0	0	0	-----	–	–
06/08	-----	0	0	0	0	-----	–	–
06/09	-----	0	0	0	0	-----	–	–
06/10	-----	0	0	0	0	-----	–	–
06/11	-----	0	0	0	0	-----	–	–
06/12	-----	0	0	0	0	-----	–	–
06/16	-----	0	0	0	0	-----	–	–
06/17	-----	0	0	0	0	-----	–	–
06/21	-----	0	0	0	0	-----	–	–
06/26	-----	0	0	0	0	-----	–	–
07/01	-----	0	0	0	0	-----	–	–
07/12	-----	0	0	0	0	-----	–	–
07/13	-----	0	0	0	0	-----	–	–
07/26	-----	0	0	0	0	-----	–	–
07/27	-----	0	0	0	0	-----	–	–
07/28	-----	0	0	0	0	-----	–	–
07/29	-----	0	0	0	0	-----	–	–
07/31	4.0%	18,626	18,626	0	0	-----	–	–
08/01		0	18,626	0	0	-----	–	–
08/02	8.6%	33,873	52,499	0	0	-----	–	–
08/03	7.0%	24,550	77,049	0	0	-----	–	–
08/04	5.0%	48,264	125,313	0	0	-----	–	–
08/05	8.0%	30,813	156,126	0	0	-----	–	–
08/06	12.0%	75,895	232,021	0	0	-----	–	–
08/07	11.0%	75,967	307,988	0	0	-----	–	–
08/08	14.0%	125,092	433,080	0	0	-----	–	–
08/09		0	433,080	0	0	-----	–	–
08/10	19.0%	87,576	520,656	0	0	-----	–	–
08/11		0	520,656	0	0	-----	–	–
08/12		0	520,656	0	0	-----	–	–
08/24	-----	0	520,656	0	0	-----	–	–
08/25	-----	6,406	527,062	4,499	4,499	-----	–	–
08/26	-----	9,376	536,438	4,856	9,355	-----	–	–
08/27	-----	5,893	542,331	3,981	13,336	-----	–	–
08/28	-----	6,180	548,511	7,040	20,376	-----	–	–
08/29	-----	6,974	555,485	7,716	28,092	-----	–	–
08/30	-----	5,065	560,550	10,710	38,802	-----	–	–
08/31	-----	6,758	567,308	12,761	51,563	-----	–	–
09/01	-----	15,174	582,482	10,812	62,375	-----	–	–

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	Pink Salmon					Chum Salmon		
Date	% Female	Sales Harvest[a]	Sales Harvest cumulative	Brood Stock[b]	Brood Stock cumulative	% Female	Sales Harvest	Sales Harvest cumulative
09/02	-----	0	582,482	0	62,375	-----	–	–
09/03	-----	15,674	598,156	15,055	77,430	-----	–	–
09/04	-----	10,462	608,618	17,182	94,612	-----	–	–
09/05	-----	5,578	614,196	17,773	112,385	-----	–	–
09/06	-----	6,683	620,879	13,075	125,460	-----	–	–
09/07	-----	4,977	625,856	18,494	143,954	-----	–	–
09/08	-----	4,151	630,007	18,800	162,754	-----	–	–
09/09	-----	5,045	635,052	17,165	179,919	-----	–	–
09/10	-----	11,974	647,026	6,667	186,586	-----	–	–
09/11	-----	19,582	666,608	0	186,586	-----	–	–
09/12	-----	20,237	686,845	0	186,586	-----	–	–
09/13	-----	7,354	694,199	0	186,586	-----	–	–
09/14	-----	13,238	707,437	396	186,982	-----	–	–

Hatchery escapement summary[c]	Pink salmon	Chum salmon
Purse seine whole fish harvest	520,656	
Raceway whole fish harvest	186,781	
Viable broodstock (spawned, eggs in incubators)	186,163	
Unviable broodstock (green/over-ripe/bad)	NR	
Unspawned fish (roe recovery, excess males)	NR	
Holding mortalities (raceway, pen mortalities)	819	
Estimated unharvested return[d]	7,000	
Estimated total return to hatchery	901,419	

Sales Summary	Pink salmon	Chum salmon
Purse seine whole fish sales	520,656	
Raceway whole fish sales	186,781	
Carcass sales[e]	186,163	
Total sales	893,600	

NR- not reported

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

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

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

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

[e] Represents the sale of viable broodstock carcasses.

APPENDIX F

Appendix F1.–Salmon harvest and effort in the Copper River District subsistence drift gillnet fishery, 1961–2008.

	Permits				Reported Harvest[b]			
Year	Issued	Returned	Fished	Not fished[a]	Chinook	Sockeye	Coho	Total
1961	14	0	0	0	60	137	99	296
1962	14	0	0	0	44	135	3	182
1963	8	0	0	0	3	13	157	173
1964	5	0	0	2	14	0	0	14
1965	31	20	15	5	12	459	85	556
1966	45	31	21	10	47	175	0	222
1967	61	56	37	19	83	153	0	236
1968	17	15	7	8	11	36	0	47
1969	49	33	20	13	16	63	85	164
1970	32	27	24	3	66	179	0	245
1971	29	26	17	9	10	32	4	46
1972	104	80	75	5	149	569	53	771
1973	94	89	89	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
2007	469	440	295	145	1,145	6,148	15	7,308
10-Year Average	380	359	236	125	671	2,744	162	3,577
2008	506	480	248	232	470	3,969	53	4,492

[a] As reported on returned permits.

[b] Reported harvest only.

Appendix F2.–Salmon harvest and effort in the Prince William Sound general area subsistence fishery, 1965–2008.

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

[a] As reported on returned permits.

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

Appendix F3.–Salmon harvest and effort in the Tatitlek and Chenega subsistence fisheries, 1988–2008.

	Permits				Reported Harvest[b]						
Year	Issued	Returned	Fished	Not fished[a]	Chinook	Sockeye	Coho	Pink	Chum	Unknown	Total
					Tatitlek						
1988	17	13	9	4	2	210	211	143	245	0	811
1989	14	10	7	3	1	107	653	33	43	0	837
1990	13	6	3	3	0	5	241	10	4	0	260
1991	17	10	7	3	0	107	984	320	28	0	1,439
1992	16	7	5	2	2	441	369	30	49	0	891
1993	18	11	7	4	2	512	305	144	74	180	1,217
1994	14	5	4	1	0	50	143	50	70	0	313
1995	15	3	0	3	0	0	0	0	0	0	0
1996	6	3	1	2	0	0	38	0	0	0	38
1997	6	4	3	1	0	107	45	0	54	0	206
1998	11	4	3	1	0	2	321	4	28	0	355
1999	17	10	8	2	0	344	541	31	31	0	947
2000	12	3	3	0	0	140	468	40	40	0	688
2001	14	9	8	1	0	114	230	60	12	0	416
2002	19	6	5	1	0	375	136	28	36	0	575
2003	15	8	6	2	0	81	185	20	12	0	298
2004	18	12	9	3	2	322	315	46	28	0	713
2005	16	3	2	1	0	98	286	200	16	0	600
2006	12	2	1	1	0	3	18	35	25	0	81
2007	14	0	NR	NR	NR	NR	NR	NR	NR	NR	0
10 Year Average	15	6	5	1	0	164	278	52	25	0	519
2008	2	1	1	NR	0	60	0	0	0	0	60
					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

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	Permits				Reported Harvest[b]						
Year	Issued	Returned	Fished	Not fished[a]	Chinook	Sockeye	Coho	Pink	Chum	Unknown	Total
2001	16	9	8	1	2	119	92	95	146	0	454
2002	10	5	4	1	10	142	123	83	60	0	418
2003	13	7	5	2	6	219	156	149	147	0	677
2004	8	5	4	1	3	535	44	56	84	0	722
2005	13	8	6	2	10	516	84	124	174	0	908
2006	11	6	4	2	0	159	1	28	111	0	299
2007	4	3	2	1	2	293	27	4	55	0	381
10 Year Average	11	6	5	2	13	264	84	98	114	0	572
2008	15	3	1	2	4	97	75	70	30	0	276

[a] As reported on returned permits.

[b] Reported harvest only.

Appendix F4.–Personal use and subsistence salmon harvests by year, district and gear types for the Upper Copper River subsistence and personal use fisheries, 1997–2008.

					Reported Harvest				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	253	7,711	0	7,964	2,583	82,807	187	85,577	105	61
	Glennallen	Fishwheel	847	795	2,155	69,677	177	72,009						
	Chitina	Dipnet	9,086	8,913	5,336	145,881	155	151,372	5,447	148,727	160	154,334	3	12
	total		10,219	9,967	7,744	223,269	332	231,345	8,030	231,534	347	239,911	108	73
1998	Glennallen	Dipnet	272	244	232	7,640	96	7,968	1,842	64,463	533	66,838	35	78
	Glennallen	Fishwheel	738	703	1,520	53,723	424	55,667						
	Chitina	Dipnet	10,006	9,747	6,610	132,929	1,999	141,538	6,723	137,161	2,145	146,029	0	46
	total		11,016	10,694	8,362	194,292	2,519	205,173	8,565	201,624	2,678	212,867	35	124
1999	Glennallen	Dipnet	336	295	351	8,937	86	9,374	3,278	77,369	1,121	81,768	31	320
	Glennallen	Fishwheel	765	712	2,707	63,964	206	66,877						
	Chitina	Dipnet	9,944	8,966	5,755	137,729	2,095	145,579	5,913	141,658	2,128	149,699	0	29
	total		11,045	9,973	8,813	210,630	2,387	221,830	9,191	219,027	3,249	231,467	31	349
2000	Glennallen	Dipnet	464	422	537	8,368	78	8,983	4,856	59,497	532	64,885	52	169
	Glennallen	Fishwheel	787	757	4,245	49,873	433	54,551						
	Chitina	Dipnet	8,151	7,617	3,037	103,329	3,540	109,906	3,168	107,856	3,657	114,681	0	203
	total		9,402	8,796	7,819	161,570	4,051	173,440	8,024	167,353	4,189	179,566	52	372
2001	Glennallen	Dipnet	408	367	280	7,992	17	8,289	3,553	83,787	1,154	88,494	64	19
	Glennallen	Fishwheel	832	809	2,974	68,345	1,010	72,329						
	Chitina	Dipnet	9,462	9,311	2,731	117,440	2,274	122,445	3,113	132,108	2,720	137,941	0	484
	total		10,702	10,487	5,985	193,777	3,301	203,063	6,666	215,895	3,874	226,435	64	503
2002	Glennallen	Dipnet	460	384	409	6,855	142	7,406	470	7,641	148	8,259	87	1
	Glennallen	Fishwheel	662	626	3,015	41,037	382	44,434	3,183	43,209	382	46,774		
	Chitina	Dipnet	6,805	6,748	1,763	75,881	1,761	79,405	2,056	86,543	1,934	90,533	0	317
	total		7,927	7,758	5,187	123,773	2,285	131,245	5,709	137,393	2,464	145,566	87	318

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			Permits		Reported Harvest				Expanded Harvest					
					Salmon				Salmon				other species	
Year	District	Gear	Issued	Returned	Chinook	Sockeye	Coho	Total	Chinook	Sockeye	Coho	Total	Steelhead	other
2003	Glennallen	Dipnet	399	343	318	6,132	58	6,508	345	6,934	58	7,337	48	0
	Glennallen	Fishwheel	613	580	2,077	38,077	392	40,546	2,193	40,073	409	42,675		
	Chitina	Dipnet	6,418	0	1,870	80,134	2,409	84,413	1,921	81,513	2,533	85,967	0	264
	total		7,430	923	4,265	124,343	2,859	131,467	4,459	128,520	3,000	135,979	48	264
2004	Glennallen	Dipnet	330	262	273	4,851	76	5,200	310	5,315	112	5,737	76	0
	Glennallen	Fishwheel	626	594	2,893	47,279	465	50,637	3,036	50,195	465	53,696		
	Chitina	Dipnet	8,386	6,285	2,108	93,182	2,304	97,594	2,502	108,862	2,860	114,224	0	509
	total		9,342	7,141	5,274	145,312	2,845	153,431	5,848	164,372	3,437	173,657	76	509
2005	Glennallen	Dipnet	363	303	264	6,305	0	6,569	310	7,486	0	7,796	19	41
	Glennallen	Fishwheel	598	557	1,816	54,661	97	56,574	1,919	56,727	154	58,800		
	Chitina	Dipnet	8,230	8,131	1,776	108,868	1,562	112,206	2,065	121,278	1,869	125,212	0	478
	total		9,191	8,991	3,856	169,834	1,659	175,349	4,294	185,491	2,023	191,808	19	519
2006	Glennallen	Dipnet	338	273	266	6,520	10	6,796	335	7,170	10	7,515	37	83
	Glennallen	Fishwheel	646	605	2,178	48,972	200	51,350	2,434	50,540	202	53,176		
	Chitina	Dipnet	8,566	6,831	2,071	102,443	1,886	106,400	2,676	124,640	2,715	130,031	0	464
	total		9,550	7,709	4,515	157,935	2,096	164,546	5,445	182,350	2,927	190,722	37	547
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	2,720	126,055	1,742	130,517	0	660
	total		9,664	8,224	5,494	174,230	1,723	181,447	5,996	191,769	1,980	199,745	0	716
1998-2007 10-year Average	Glennallen	Dipnet	384	328	336	7,176	59	7,506	3,134	62,612	552	67,933	45	77
	Glennallen	Fishwheel	697	660	2,610	51,925	381	56,497						
	Chitina	Dipnet	8,446	7,082	3,011	106,469	2,132	115,086	3,286	116,767	2,430	133,423	0	345
	total		9,527	8,070	5,957	165,570	2,573	179,089	6,420	179,379	2,982	201,356	45	422
2008	Glennallen	Dipnet	536	447	445	6,517	35	6,997	498	7,157	28	7,683	0	
	Glennallen	Fishwheel	650	600	1,793	33,697	437	35,927	1,794	35,016	432	37,242	0	
	Chitina	Dipnet	8,258	7,078	1,690	70,885	2,346	74,921	1,999	81,359	2,711	86,069	0	
	total		9,444	8,125	3,928	111,099	2,818	117,845	4,291	123,532	3,171	130,994	0	0

Appendix F5.–Salmon harvest and effort in the Batzulnetas subsistence harvests, 1987–2008.

	Permits				Reported Harvest[b]			
Year	Issued	Returned	Fished	Not fished[a]	Chinook	Sockeye	Coho	Total
1987	0	0	0	0	0	22	0	22
1988	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0
1993	1	0	0	0	0	160	0	160
1994	5	0	0	0	0	997	0	997
1995	4	0	0	0	0	16	0	16
1996	0	0	0	0	0	0	0	0
1997	3	0	0	0	0	427	0	427
1998	1	0	0	0	0	582	0	582
1999	1	0	0	0	0	55	0	55
2000	0	0	0	0	0	0	0	0
2001	0	0	0	0	0	62	0	62
2002	1	1	1	0	0	208	0	208
2003	1	1	1	0	0	164	0	164
2004	1	1	1	0	0	182	0	182
2005	1	1	0	1	0	0	0	0
2006	0	NA	NA	NA	0	0	0	0
2007	1	1	1	0	0	1	0	1
10-Year Average	1	1	0	0	0	125	0	125
2008	1	1	1	0	0	1	0	1

[a] As reported on returned permits.

[b] Reported harvest only.

Appendix F6.–Salmon harvest and effort in the PWS and upper Copper River Federal subsistence harvests, 2002–2008.

	Permits				Reported Harvest[b]			
Year	Issued	Returned	Fished	Not fished[a]	Chinook	Sockeye	Coho	Total
Chitina Subdistrict								
2002	122	89	NA	NA	33	575	0	608
2003	100	82	NA	NA	18	717	70	805
2004	109	83	NA	NA	7	1,215	18	1,240
2005	76	64	NA	NA	22	1,265	0	1,287
2006	75	64	NA	NA	13	1,379	20	1,412
2007	98	87	75	12	26	929	40	995
2008	82	70	0	0	22	789	74	885
Glennallen Subdistrict								
2002	201	162	NA	NA	564	7,950	81	8,595
2003	221	184	NA	NA	554	13,616	152	14,322
2004	262	206	NA	NA	636	17,704	152	18,492
2005	267	229	NA	NA	345	19,973	126	20,444
2006	254	222	NA	NA	430	16,711	28	17,169
2007	281	237	223	14	569	15,225	34	15,828
2008	270	219	0	0	705	11,347	156	12,208
PWS/Chugach Subdistrict								
2005	46	45	22	23	0	109	141	250
2006	49	48	23	25	0	150	100	250
2007	33	33	17	16	0	36	68	104
2008	45	45	23	22	0	32	119	151
Total federal subsistence harvests								
2002	323	251	NA	NA	597	8,525	81	9,203
2003	321	266	NA	NA	572	14,333	222	15,127
2004	371	289	NA	NA	643	18,919	170	19,732
2005	389	338	NA	NA	367	21,347	267	21,981
2006	378	334	NA	NA	443	18,240	148	18,831
2007	412	357	315	42	595	16,190	142	16,927
2008	397	334	23	22	727	12,168	349	13,244

NA = data not available

[a] As reported on returned permits.

[b] Reported harvest only.

Appendix F7.–Salmon retained from the commercial harvest for personal use (homepack) by district, species, and gear type, in Prince William Sound and the Copper River and Bering River districts, 1994–2008.

Prince William Sound (drift gillnet, set gillnet and purse seine)

		Chinook			Sockeye			Coho			Pink			Chum		
Year	Permits	Seine	Drift gillnet	Set gillnet	Seine	Drift gillnet	Set gillnet	Seine	Drift gillnet	Set gillnet	Seine	Drift gillnet	Set gillnet	Seine	Drift gillnet	Set gillnet
1994	5	0	5	0	0	0	12	0	32	0	0	0	0	0	0	0
1995	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1996	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1998	14	0	18	0	19	28	0	18	0	0	0	0	0	0	4	0
1999	6	0	5	1	18	43	0	13	0	0	0	0	0	0	0	0
2000	9	1	1	0	4	47	0	0	2	0	0	0	0	0	6	0
2001	11	1	6	1	0	46	18	0	20	0	0	0	0	0	2	0
2002	8	0	6	5	0	51	5	0	0	0	0	0	0	0	0	0
2003	14	0	24	0	0	23	0	0	0	0	0	0	0	0	1	0
2004	4	0	0	0	0	129	0	0	0	0	0	0	0	0	1	0
2005	5	0	1	0	0	60	0	0	107	0	0	0	0	0	20	0
2006	7	2	0	0	0	58	0	0	19	0	0	7	0	0	2	0
2007	9	1	7	0	0	63	1	0	13	0	0	7	0	0	1	0
10-Year Average	9	1	7	1	4	55	2	3	16	0	0	1	0	0	4	0
2008	18	3	65	1	0	171	72	0	26	0	0	0	0	0	0	0

Copper River District (all drift gillnet)

Year	Permits	Chinook	Sockeye	Coho
1994	192	751	947	21
1995	318	1,688	0	0
1996	345	2,169	0	0
1997	284	1,243	0	0
1998	309	1,411	1,435	14
1999	297	1,115	1,333	36
2000	245	740	651	0

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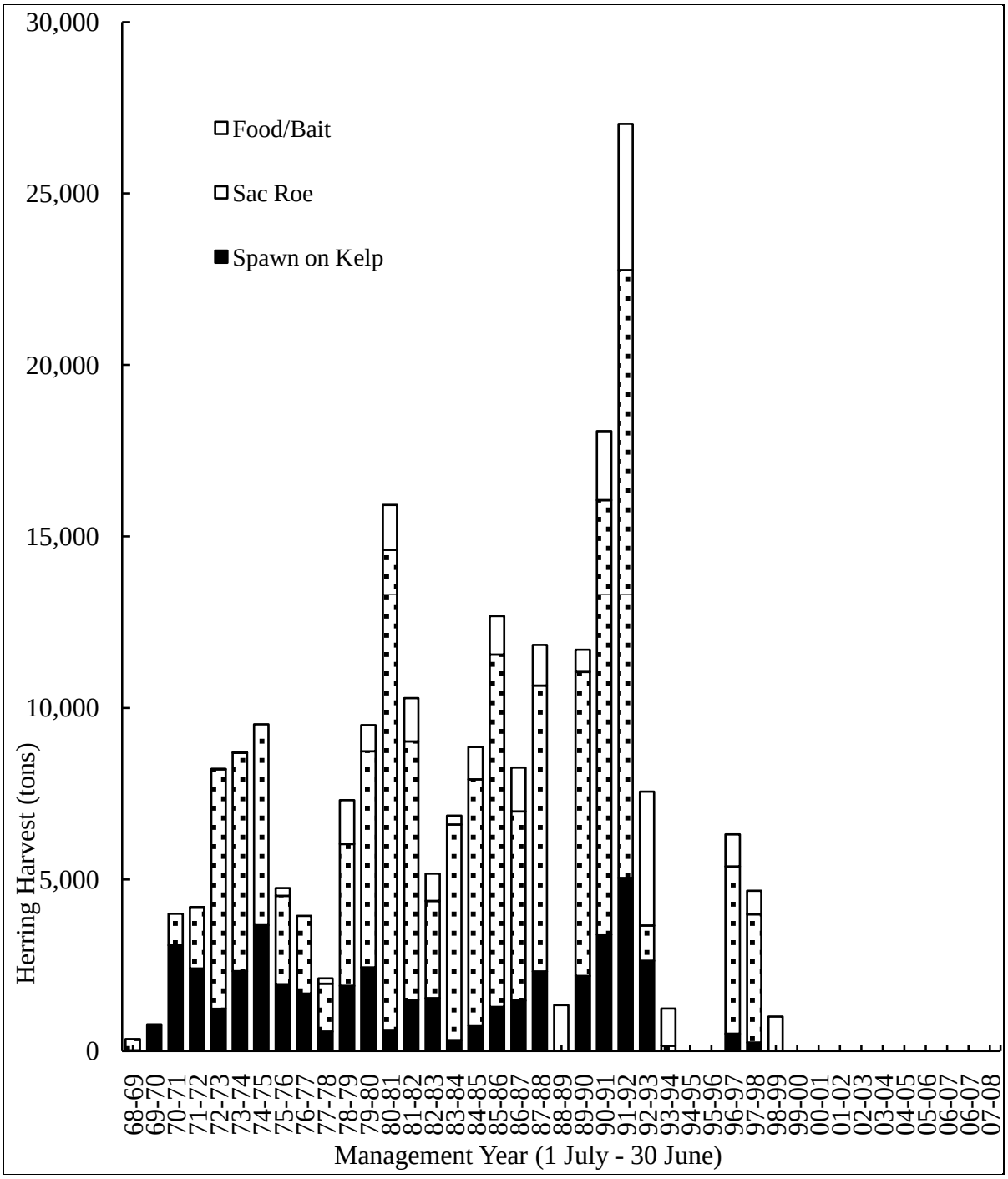
Copper River District (all drift gillnet)

Year	Permits	Chinook	Sockeye	Coho
2001	289	935	2,113	24
2002	247	773	1,138	187
2003	287	1,073	4,077	0
2004	174	539	525	2
2005	228	760	1,785	119
2006	264	779	1,539	137
2007	280	1,019	2,023	340
10 Year Average	262	1,288	874	86
2008	223	537	2,172	423

Bering River District (all drift gillnet)

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

APPENDIX G



Appendix G1.–Prince William Sound commercial Pacific herring harvest by management year and fishery, 1968–2008.

Appendix G2.–Pacific herring sac roe purse seine and drift gillnet fishery effort, anticipated harvest, and actual harvest, 1969–2008.

	Purse Seine Fishery							Drift Gillnet Fishery							Total
Calendar Year	Opening Dates	Hours	Effort (Boats)	Guideline Harvest [a]	Harvest (tons)	CPUE (tons/Boat Hr)	Estimated Roe %	Opening Dates	Hours	Effort (Boats)	Guideline Harvest [a]	Harvest (tons)	CPUE (tons/Boat Hr)	Estimated Roe %	Harvest (tons)
1969	03/01 – 06/30		5		325.4										325.4
1970	03/01 – 06/30														
1971	03/01 – 06/30		12		919.2										919.2
1972	03/01 – 06/30		18		1,777.2										1,777.2
1973	04/23 – 05/09		31		6,991.9										6,991.9
1974	04/10 – 04/17		72		6,371.0			04/10 – 04/17		3		3.8			6,374.8
1975	04/15 – 04/22	14.0	76		5,853.8	5.50			14.0						5,853.8
1976	05/08 & 06/01	13.0	66		2,584.2	3.01			13.0						2,584.2
1977	04/09 – 04/10	38.0	58		2,265.6	1.03		04/09 – 04/10	38.0	1		1.6	0.04		2,267.1
1978	04/17 – 04/21 [b]	106.0	75	5,000	1,329.5	0.17		04/17 – 04/21	106.0	38		61.7	0.02		1,391.2
1979	04/07 – 04/19	215.5	89	5,000	4,138.0	0.22		CLOSED [c]							4,138.0
1980	04/01 – 04/09	162.0	76	5,000	6,042.2	0.49		04/17 – 05/05		16		264.4			6,306.7
1981	04/01 – 04/09	60.0	106	5,000	13,768.2	2.16		04/16 – 04/18	53.0	18		234.5	0.25		14,002.8
1982	04–23	2.0	95 [d]	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 [e]	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 [f]	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	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

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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)	Estimated Roe %	Opening Dates	Hours	Effort (Boats)	Guideline Harvest [a]	Harvest (tons)	CPUE (tons/Boat Hr)	Estimated Roe %	Harvest (tons)
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 [h]	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 [i]	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	80.69	10.0%	04/23 – 04/24	11.0	24	825	940.6	3.56	10.8%	17,724.8
1993	No Harvest			15,586				04/15, 04/17–04/19	36.0	24	912	1,029.9	1.19	11.01%	1,029.9
1994	Season Closed [j]			0	151.0 [k]						0				151.0
1995	Season Closed [j]			0							0				0
1996	Season Closed [j]			0							0				0
1997	04/13,04/15	1.8	71	2,965	4,703.5	36.80	9.75%	04/09	2.5	22	175	175.7	3.19	8.00%	4,879.2
1998	04/06	0.5	46	3,367	3,329.7	144.77	9.6%	04/11, 04/12	6.5	20	197	415.1	3.19	11.0%	3,744.8
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
2008	Season Closed [j]			0							0				0

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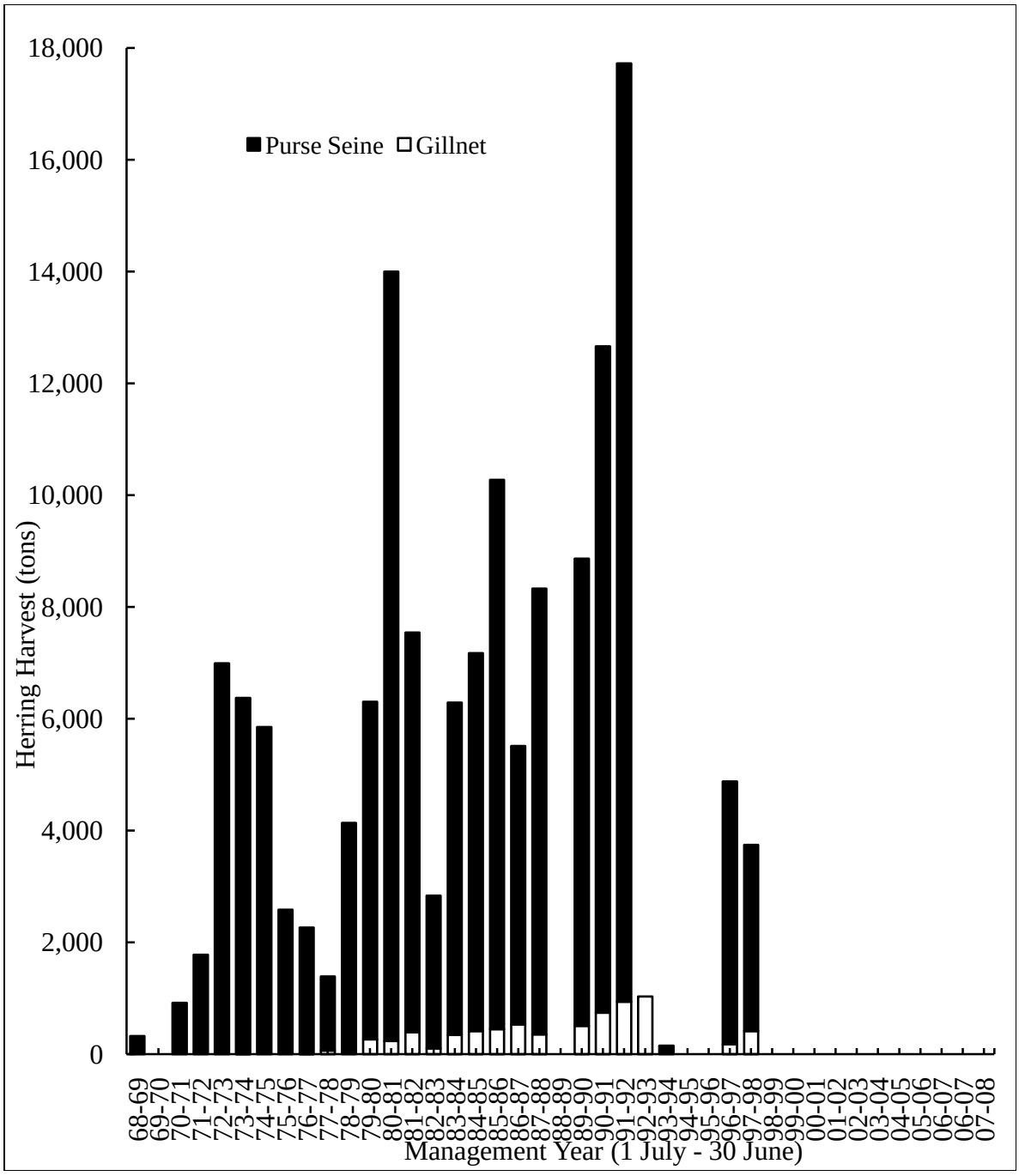
[a] Guideline harvest based on preseason harvest projection beginning in 1986.
[b] An additional opening on 6/14 for 6 hours resulted in no harvest.
[c] Drift gillnet fishery closed by Board of Fisheries action.
[d] Of 103 permit holders participating, 72 actually made deliveries.
[e] Of 105 permit holders 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, 1968–2008.

Appendix G4.–Pacific herring spawn-on-kelp harvest produced in pounds, 1979–2008.

Calendar Year	Fishery Dates [c]	Effort: CFEC Permits [d]	Effort: Permits Committed [e]	Effort: Producing Permits [a] Closed [f]	Effort: Producing Permits [a] Open [g]	Guideline Harvest (tons)	Blades per Permit Holder Closed [f]	Blades per Permit Holder Open [g]	Spawn-on-Kelp Harvest (tons) Ribbon	Macrocystis	Total	Herring Utilized [b] (tons)
1979		2	0									
1980	04–14	14	4	2		8			0.9	0.4	1.3	16.6
1981	04–14	18	18	7		16			8.6	1.1	9.7	120.7
1982	04/29 – 05/10	25	20	18		26			25.1	0.5	25.5	319.2
1983	04/30 – 05/04	47	38	26		26			17.7	10.1	27.7	346.7
1984	04/24 – 05/08	65	45	37		26			6.4	18.8	25.2	315.1
1985	04/25 – 05/07	81	59	50		40			12.1	28.1	40.2	502.1
1986	04/21 – 04/28	104	82	81		60			0	72.2	72.2	903.0
1987	04/10 – 04/21	111	111	108		85			0	61.2	61.2	765.1
1988	04/12 – 04/23	122	122	119		85			0	123.2	123.2	1,540.5
1989	Season Closed [h]											
1990	04/11 – 04/26	128	128	122		118			0	98.8	98.8	1,235.3
1991	04/07 – 04/20	126	126	119		220	1200		0	202.4	202.4	2,530.5
1992	04/07 – 04/24	127	127	127		276	1770		0	242.2	242.2	3,027.7
1993	04/10 – 04/22	128	124	52		305	1950		0	106.4	106.4	1,330.5
1994	Season Closed [i]											
1995	Season Closed [i]											
1996	Season Closed [i]											
1997	04/10 – 05/06	128	116	7	84	725	410	640	0	34.3	34.3	290.5
1998	[j]	128	36	13	20	823	425	660	0	10.7	10.7	104.3
1999	[k]	128	27	7	2	843	435	680	0	6.2	6.2	48.8
2000	Season Closed [i]											
2001	Season Closed [i]											
2002	Season Closed [i]											
2003	Season Closed [i]											
2004	Season Closed [i]											
2005	Season Closed [i]											
2006	Season Closed [i]											
2007	Season Closed [i]											
2008	Season Closed [i]											

-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, Commssioner's permits issued to applicants registering prior to the March 1 deadline. After 1994, the number of permits represents limited entry permits. Beginning in 1997 permit holders could operate pounds in open or closed configuration, but were required to state intended configuration prior to season.

[e] The number of individuals receiving an equal allocation of the guideline harvest. Prior to 1994 this represents the number of individual pounds constructed by the April 1 deadline. Beginning in 1997, this number represents permit holders stating intended configuration prior to season.

[f] A pound fished in a closed configuration consists of a rectangular floating frame with webbing suspended below, that encloses herring and kelp for period of time during spawning.

[g] A pound fished in an open configuration consists of a rectangular floating frame with either no webbing suspended below, or with webbing that permits volitional entry and exit of herring on at least one side

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

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

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

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

Appendix G5.–Natural spawning pacific herring spawn-on-kelp harvests, 1969–2008.

Calendar Year	Fishery Dates	Effort Hours	Effort (Nr. of Divers)	Guideline Harvest (tons)	Harvest by Kelp Species and Grounds Price ($/lb) Ribbon Percent	Ribbon Price	Sieve Percent	Sieve Price	Fucus Percent	Fucus Price	Other Percent	Other Price	Spawn-on-Kelp Harvest lbs.	Spawn-on-Kelp Harvest tons	Herring Utilized [a] tons
1969	05/18 – 05/31		3										5,424	2.7	21.7
1970	04/19 – 06/06		34										190,374	95.2	761.5
1971	04/18 – 05/15		159										769,481	384.7	3,077.9
1972	04/30 – 05/20		397										600,453	300.2	2,401.8
1973	04/23 – 05/26		176										306,358	153.2	1,225.4
1974	04/22 – 05/04		143		Mostly Ribbon – Some Sieve and Hair				$0.60–0.75				580,588	290.3	2,322.4
1975	04/25 – 05/10		328										916,919	458.5	3,667.7
1976	04/21– ?		279										485,043	242.5	1,940.2
1977	04/27 – 12/31		104										417,000	208.5	1,668.0
1978	04/20 – 04/30		66	165	23%		50%				27% [b]		141,268	70.6	565.1
1979	04/25 – 05/03		97	200									474,242	237.1	1,897.0
1980	04/23 – 04/30	10	458	200	60%	$1.25	40%	$0.85					603,880	301.9	2,415.5
1981	04–25	12	196	200	38%	$1.25	60%	$0.85			2% [b]	$0.60	122,532	61.3	490.1
1982	05/05 – 05/08	73	152	187	83%	$1.42	11%	$0.95			6% [b]	$0.74	291,430	145.7	1,165.7
1983	04/27	12	185	187	51%	$2.00–2.45	35%	$1.50–1.70			14% [c]		298,362	149.2	1,193.4
1984	Season Closed [d]		225 [e]	187											
1985	05/06 & 05/08	20	106	169	51%	$1.25	49%	$0.50					60,832	30.4	243.3
1986	04/30 – 05/03	86	29	142	97%	$1.75		$0.80			[b]	$0.80	95,205	47.6	380.8
1987	04/15 – 04/17	44	59	103	90%	$1.70		$0.85			[b]	$0.80	176,485	88.2	705.9
1988	04/29 & 04/30	12	159	103	64%	$1.50	24%	$0.75–1.00			12% [b]	$0.75–1.00	194,762	97.4	779.0
1989	Season Closed [f]			110											
1990	04/21 – 04/22	16	134	104	37%	$0.99	6%	$0.52			57% [b]	$0.88	237,575	118.8	950.3
1991	05/11 – 05/17	95	48	195					100%	$0.75–0.85			215,147	107.6	860.8
1992	04/24 – 04/30	101	217	243	21%	$0.70			76%	$0.40	3%		504,663	252.3	2,018.7
1993	04/19 – 04/24	114	83	268					100%	$0.55			325,181	162.6	1,300.7
1994	Season Closed [g]			110											
1995	Season Closed [g]														
1996	Season Closed [g]														
1997	04/25 & 04/26	26.4	45	56.4					100%				52,800	26.4	211.2

-continued-

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

[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.

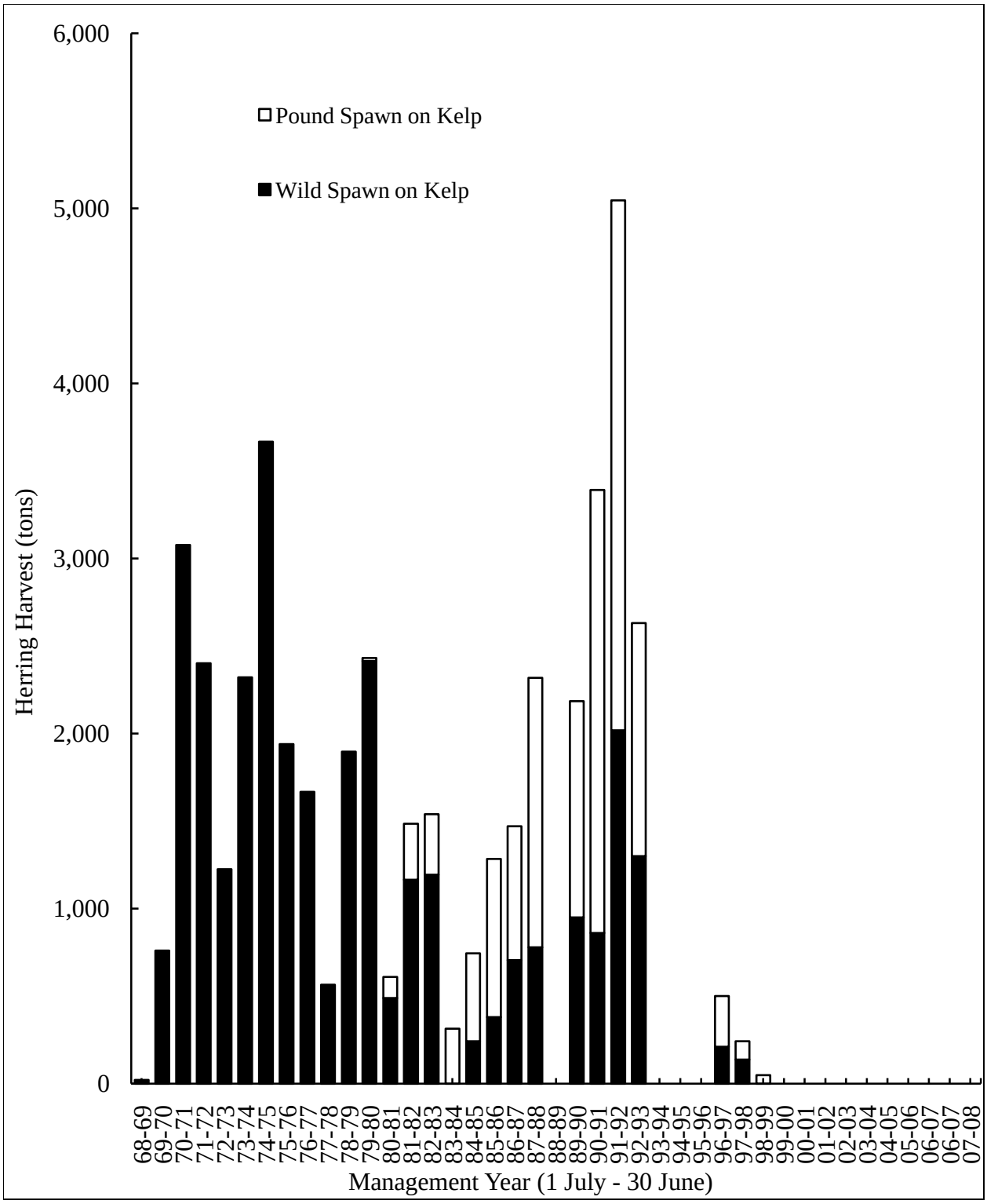
[c] Mostly *Macrocystis*. Some hair kelp.

[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, 1968–2008.

Appendix G7.–Prince William Sound commercial Pacific herring food/bait fishery effort and harvests, management years 1969–2008.

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

-continued-

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

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

[b] No official quota, but unofficial goal was 1,500 tons.

[c] Harvest from special June food-and-bait fishery opening. Although this harvest actually occurred at the end of the 1975 management year, it is included in the 1976 harvest management year to be consistent

[d] Fishery closed from 1 January to 6 January 1979.

[e] Fishery closed from 1 January to 15 February 1980.

[f] Fishing season opened by regulation on September 1, 1987 in the District. The north-shore and east-shore herring districts opened on September 23. The season was closed by emergency order on October 6 for a period of five weeks, reopened on November 9, and closed for the duration of the 1987-88 season on November 12, 1987.

[g] Fishery open from September 21 until November 24. The Montague Island area was open from September 24 until November 24.

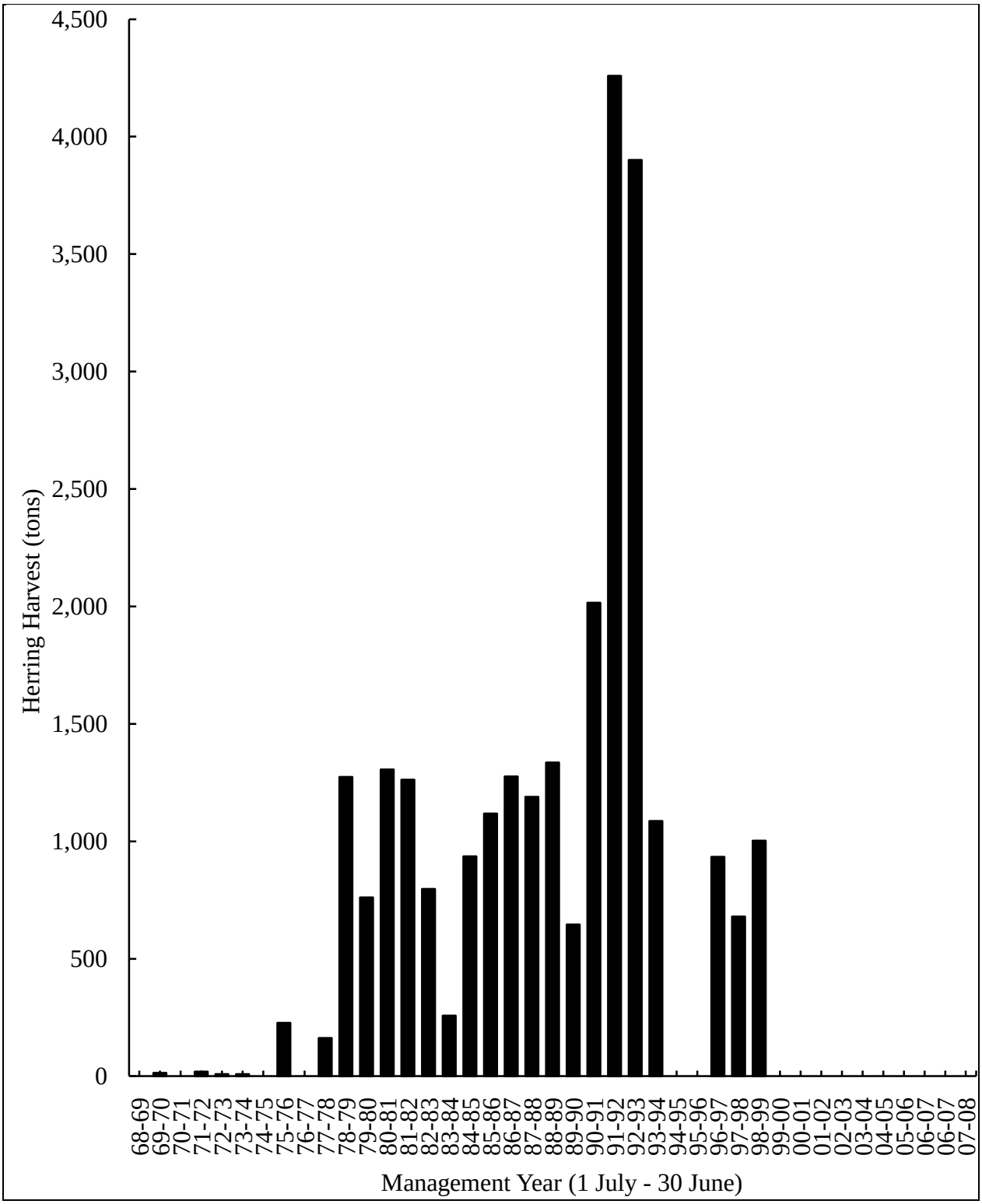
[h] Preseason guideline harvest level based on spawn deposition biomass estimate. Final guideline harvest based on age-structured analysis was issued in January 1993 and was 4,373 tons.

[i] Preseason guideline harvest level based on preliminary aerial survey biomass estimate of 40,000 tons.

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

[k] Season reopened in spring 1998 based on final age structured assessment 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 1968–2008.

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, 1978–2008.

	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		

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	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**
1995	SEASON CLOSED								SEASON CLOSED		
1996	SEASON CLOSED								$ 200	$ 187,000	$ 187,000
1997	$ 200	$ 940,600	$ 80	$ 14,080	$ 0.61	$ 32,000	$ 8.00	$ 426,816	$ 250	$ 170,000	$ 1,583,496
1998	$ 300	$ 999,000	$ 375	$ 156,000	$ 0.65	$ 23,000	$ 5.00	$ 107,000	$ 295	$ 296,000	$ 1,581,000
1999	SEASON CLOSED						$ 8.00	$ 99,000	SEASON CLOSED		
2000	SEASON CLOSED								SEASON CLOSED		
2001	SEASON CLOSED								SEASON CLOSED		
2002	SEASON CLOSED								SEASON CLOSED		
2004	SEASON CLOSED								SEASON CLOSED		
2005	SEASON CLOSED								SEASON CLOSED		
2006	SEASON CLOSED								SEASON CLOSED		
2007	SEASON CLOSED								SEASON CLOSED		
2008	SEASON CLOSED								SEASON CLOSED		

[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 1973–2008.

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	ND	ND	ND	ND	ND
1974–1975	5,854	ND	ND	34.2	54.0	ND	ND	ND	ND	ND
1975–1976	2,584	7,330	25,247	32.8	41.2	ND	ND	ND	ND	ND
1976–1977	2,267	16,830	17,460	39.3	78.2	ND	ND	ND	ND	ND
1977–1978	1,391	13,410	36,540	28.7	50.8	ND	ND	ND	ND	ND
1978–1979	4,138	42,100	107,390	54.5	89.0	ND	ND	ND	ND	ND
1979–1980	6,323	62,110	122,050	50.5	95.5	60,259	65,478	ND	ND	ND
1980–1981	14,124	77,810	161,690	85.4	144.0	61,265	74,728	ND	ND	ND
1981–1982	7,861	68,790	97,620	49.0	85.5	56,518	64,067	ND	ND	ND
1982–1983	3,181	41,850	107,710	67.4	93.5	67,705	70,526	ND	ND	ND
1983–1984	6,604	58,870	158,760	60.1	104.8	77,437	83,448	ND	ND	ND
1984–1985	7,679	20,830	60,954	101.2	156.7	92,759	100,010	ND	ND	ND
1985–1986	11,180	15,180	54,820	72.4	146.8	73,573	84,217	ND	ND	ND
1986–1987	6,281	26,530	52,192	65.3	186.8	80,191	85,483	ND	ND	ND
1987–1988	9,871	34,270	67,175	166.3	269.8	108,941	117,966	ND	ND	43,992
1988–1989	[h]	56,915	186,708	98.4	228.1	115,564	115,564	ND	ND	54,899
1989–1990	10,103	57,900	145,013	94.1	164.4	90,112	100,244	ND	ND	51,692
1990–1991	15,196	42,765	141,375	58.0	71.5	73,313	87,529	ND	ND	96,666
1991–1992	20,752	53,835	130,569	74.7	119.8	78,343	97,028	ND	ND	121,342
1992–1993	2,360	20,725	109,865	20.4	50.3	31,172	33,272	ND	ND	134,133
1993–1994	151	19,640	154,008	14.6	23.1	16,631	16,631	20,998	ND	29,787
1994–1995	0	7,113	20,868	20.4	28.2	17,269	17,269	13,840	14,639	19,009
1995–1996	0	10,691	37,771	27.2	37.3	21,829	21,829	26,776	25,346	24,332
1996–1997	5,170	10,858	57,114	42.7	64.3	27,508	32,118	3,086	44,082	37,599
1997–1998	3,849	13,817	50,124	38.7	62.0	22,530	26,104	ND	19,456	38,640
1998–1999	49	6,366	10,872	25.4	40.7	18,915	18,966	ND	22,397	39,557
1999–2000	0	1,610	2,889	19.5	31.7	15,196	15,196	ND	8,024	23,987

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Harvest Management Year	Total Spring Use and Harvest Mortality [a] (tons)	Aerial Survey Estimates: Peak Biomass Estimate [b] (tons)	Maximum Possible Observed Biomass [c]	Miles of Spawn [d]	Mile Days of Spawn [e]	Unexploitated Esc. Biomass Age Structured Analysis [f] (tons)	Pre-Fishery Run Biomass Age Structured Analysis [f] (tons)	Observed Peak Acoustic Biomass Estimates: Fall (tons)	Spring (tons)	Prior Year Forecast (tons)
2000–2001	0	587	1,075	16.0	14.8	10,572	10,572	ND	7,035	NA
2001–2002	0	646	1,433	21.5	23.6	14,734	14,734	ND	11,791	NA
2002–2003	0	5,600	8,951	25.2	26.1	18,627	18,627	ND	29,864	NA
2003–2004	0	12,305	17,650	29.7	30.4	20,831	20,831	ND	21,046	NA
2004–2005	0	4,773	5,230	29.9	31.7	14,280	14,280	ND	12,480 [i]	21,064
2005–2006	0	540	609	19.9	21.7	10,630	10,630	ND	7,551 [i]	17,554
2006–2007	0	770	1,615	NA[j]	18.3	8,055	8,055	ND	10,635 [i]	15,830
2007–2008	0	10,700	13,740	NA[j]	45.4	NA	NA	ND	22,853 [i]	10,252

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

[b] Largest single day aerial estimate of herring biomass in short tons (2,000 lbs.).

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

[d] Total linear miles of spawn (statute miles).

[e] The sum of the daily observed linear miles of herring spawn was calculated in ArcMap from digitized hand-annotated paper maps and data collected electronically with ArcPad (statute miles).

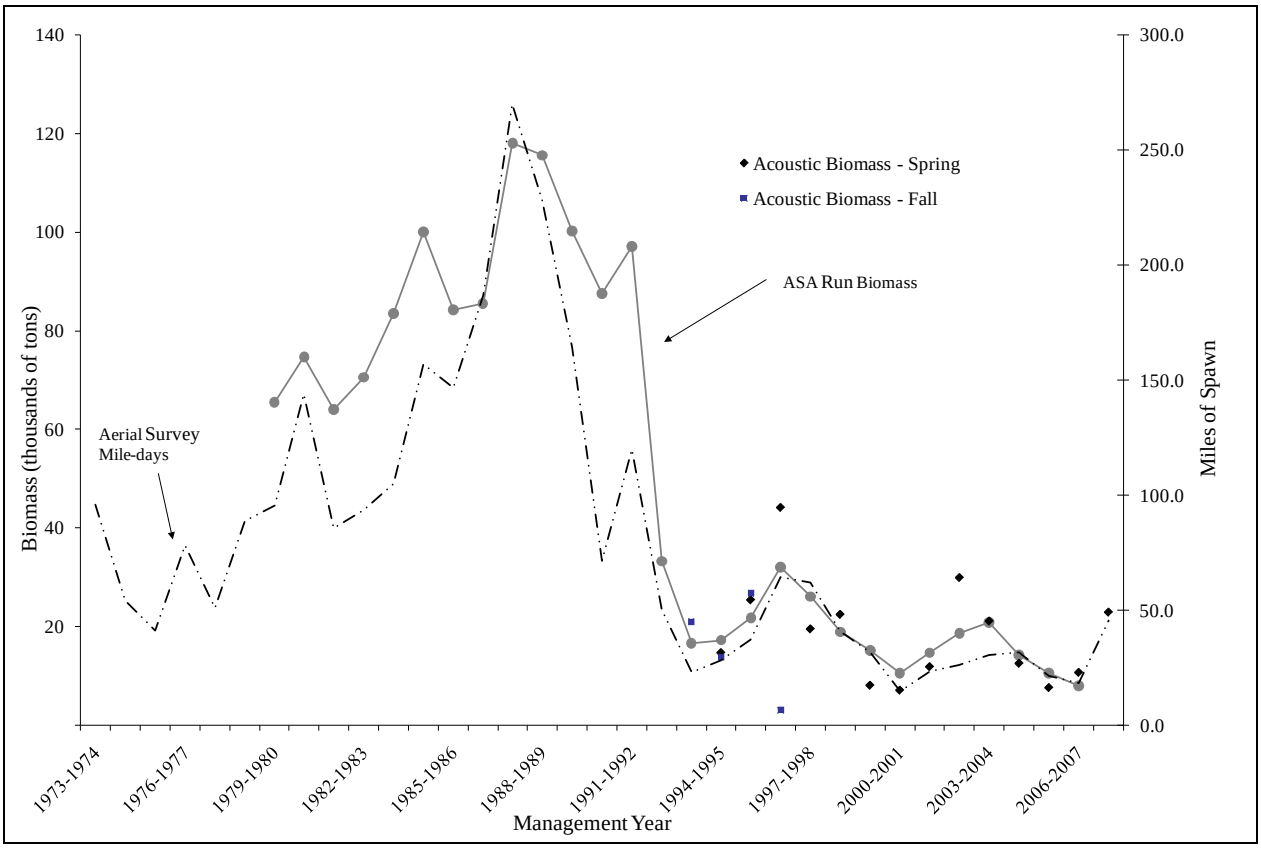
[f] Unexploited escapement and run biomass estimates from age structured analysis, September 2007. The 2008 numbers are projections from the 2007 run of the model.

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

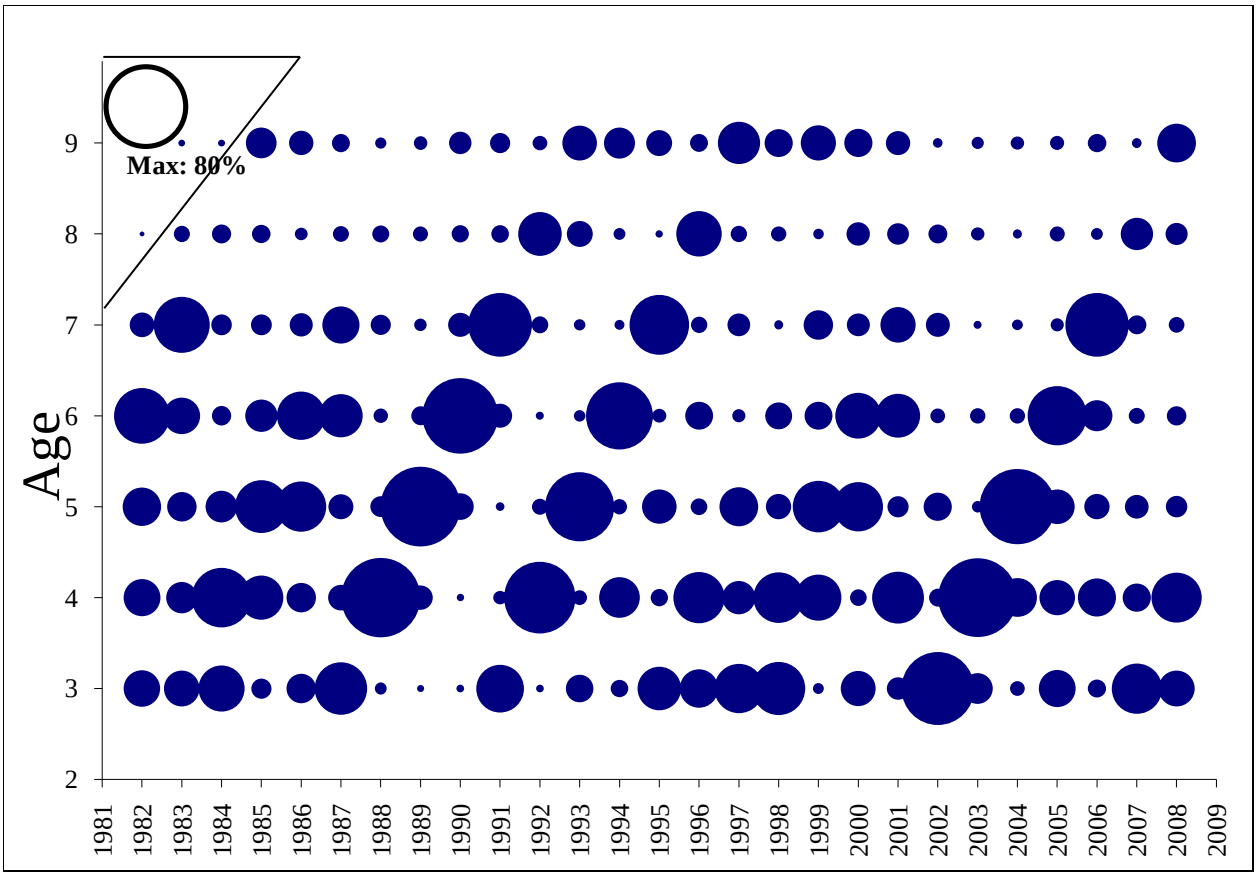
[h] All herring commercial fisheries in PWS were closed in the spring of 1989 because of the potential for the contamination of harvests from the *T/V Exxon Valdez* oil spill.

[i] The acoustics estimates for 2005-2008 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. Therefore, they represent the total biomass and not the spawning biomass.

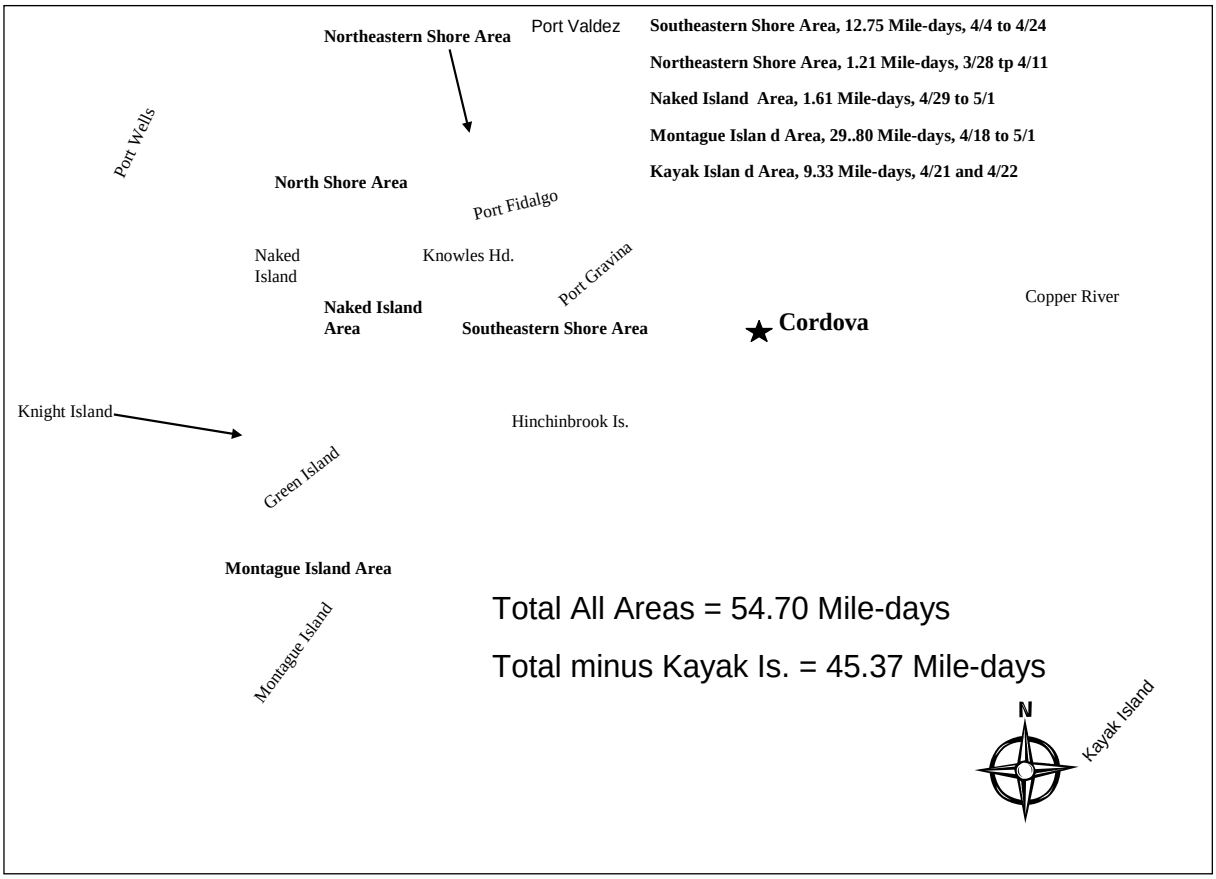
[j] Miles of spawn estimate for 2007 and 2008 are not available.



Appendix G11.–Prince William Sound annual Pacific herring biomass indices by management year, 1973–2008, and forecast run biomass from 2007 run of the ASA model.



Appendix G12.–Pacific herring percentage contribution by number of each age group to the spring run biomass, 1982–2008.



Appendix G13.–Location of spawning herring and miles of spawn observed during aerial surveys in Prince William Sound, 2008.

APPENDIX H

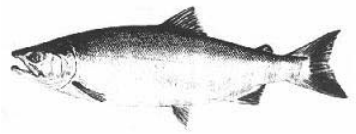
ALASKA DEPARTMENT OF FISH AND GAME

DIVISION OF COMMERCIAL FISHERIES

NEWS RELEASE

Denby S. Lloyd, Commissioner

John Hilsinger, Director



Contact:
Glenn Hollowell, Area Management Biologist
Bert Lewis, Area Management Biologist
Steve Moffitt, Area Research Biologist

Phone: (907) 424-3212
Fax: (907) 424-3235

Cordova Area Office
401 Railroad Avenue, PO Box 669
Cordova, Alaska 99574-0669

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.php

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 the department 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. The department 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 5AAC 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 (5AAC 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 5AAC

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 mid-point 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 eight 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.