Fishery Management Report No. 07-33

2005 Prince William Sound Area Finfish Management Report

by

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and

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

Symbols and Abbreviations

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

Weights and measures (metric)

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

Weights and measures (English)

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

Time and temperature

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

Physics and chemistry

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

General

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

Measures (fisheries)

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

Mathematics, statistics

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

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2005 PRINCE WILLIAM SOUND AREA FINFISH MANAGEMENT REPORT

by

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ABSTRACT

The 2005 Prince William Sound (PWS) Area commercial salmon harvest of 64.5 million fish is the largest on record. The harvest was comprised of 59.9 million pink salmon *Oncorhynchus gorbuscha*, 1.9 million sockeye *O. nerka*, 2.0 million chum *O. keta*, 536,675 coho *O. kisutch*, and 36,118 Chinook salmon *O. tshawytscha*. Approximately 80% of the harvest, 51.1 million fish, was common property harvest and 13.3 million were sold for hatchery cost recovery (exclusive of post egg-take roe sales). Personal use, educational permits, and donated fish accounted for less than 1 percent. Despite larger than forecast hatchery returns Prince William Sound Aquaculture Corporation (PWSAC) failed to achieve their cost recovery goal. This was the second consecutive year of PWSAC cost recovery short falls.

Using 2005 Commercial Operators Annual Report (COAR) values, the total value of the combined commercial salmon harvest is $53.7 million dollars, including hatchery sales. During the 2005 season, 508 drift gillnet permit holders fished. Drift gillnet harvest is valued at an estimated $24.0 million, setting average exvessel value at $47,212. Set gillnet harvest is valued at an estimated $538,000 dollars setting average exvessel value of the 27 participating permits at $19,943. Seine fishery harvest was worth an estimated $18.4 million for an average exvessel value of $178,624, for the 103 permit holders that participated this year. Revenue generated for hatchery operations (exclusive of roe/meal sales) was approximately $10.9 million dollars.

The PWS and Copper River drainage personal use and subsistence fisheries harvested a total of 220,000 fish. There were approximately 9,000 subsistence and personal use permits issued to Alaska residents.

Sport fish permit holders landed a total of 22,000 salmon in PWS and the Copper River drainage.

The commercial Pacific herring *Clupea pallasi* fishery in Prince William Sound was closed in 2005 for the eighth consecutive year because the spawning biomass remains below 22,000 ton 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 AND COPPER RIVER COMMERCIAL SALMON FISHERIES

MANAGEMENT AREA DESCRIPTION

Prince William Sound (PWS) management area encompasses all coastal waters and inland drainages entering the north central Gulf of Alaska between Cape Suckling and Cape Fairfield (Figure 1 and Figure 4). This area includes the Bering River, Copper River, and all of Prince William Sound with a total adjacent land area of approximately 38,000 square miles.

The salmon management area is divided into eleven 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, the Alaska Department of Fish and Game (ADF&G) follows regulatory plans to manage fisheries and allow private non-profit (PNP) hatcheries to achieve cost recovery and broodstock objectives.

Six hatcheries contribute to the area's fisheries. Prince William Sound Aquaculture Corporation (PWSAC) operates five of the hatcheries. Gulkana Hatchery (GH) in Paxson augments production of sockeye salmon *Oncorhynchus nerka* in the Copper River. Cannery Creek Hatchery (CCH) located on the north shore of PWS, and Armin F. Koernig (AFK) Hatchery in southwestern PWS produce pink salmon *O. gorbuscha*, Wally Noerenberg Hatchery (WNH) in northwestern PWS produces pink, chum *O. keta*, and coho salmon *O. kisutch* and Main Bay Hatchery (MBH) in western PWS produces sockeye salmon. Valdez Fisheries Development Association (VFDA) operates Solomon Gulch Hatchery (SGH) in Port Valdez and produces pink and coho salmon.

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

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

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

OVERVIEW OF AREA WIDE SALMON FISHERIES

The 2005 Prince William Sound Area commercial salmon harvest of 64.5 million fish is the largest on record. The harvest was comprised of 59.9 million pink, 1.9 million sockeye, 2.0 million chum, 536,675 coho, and 36,118 Chinook salmon *O. tshawytscha* (Figures 1, 2 and Tables 1, 2). The 2005 COAR exvessel values for the 3 gear groups for both wild and enhanced salmon excluding hatchery cost recovery are $18,398,276 (42.9%) for seine, $23,983,671 (55.9%) for drift gillnet, and $538,472 (1.3%) for set gillnet. Exvessel harvest values for enhanced PWSAC only salmon are $8,477,319 (68.1%) for seine, $3,966,720 (31.9%) for drift gillnet, and $425,065 (3.3%) for set gillnet (Figure 3 and Table 3, 5). The average prices paid to fishermen were comparable to those paid in previous years (Table 4). Approximately 80% of the harvest, 51.1 million fish, was common property harvest and 13.3 million were sold for hatchery cost recovery (exclusive of post egg-take roe sales). Personal use, educational permits, and donated fish accounted for less than 1 percent. Despite larger than forecast hatchery returns PWSAC failed to achieve their cost recovery goal. This was the second consecutive year of PWSAC cost recovery short falls. No commercial fisheries for herring occurred in 2005 because the spawning biomass was below the regulatory threshold of 22,000 tons of herring (5 AAC 27.365).

SALMON SEASON SUMMARY BY DISTRICT

COPPER RIVER DISTRICT

For more detailed information on this district see Appendices A1–A17, and A24–A28.

ADF&G, with direction from the Alaska Board of Fisheries (BOF), has consistently endeavored to manage salmon runs to the Copper River District to assure sustained yield and to meet all user group allocations, as outlined in 5 AAC 24.360 Copper River District Salmon Management Plan. To these ends, the past decade can be measured more by its successes than shortfalls. At the December 1999 meeting in Valdez, the BOF amended 5 AAC 24.361 COPPER RIVER CHINOOK SALMON FISHERY MANAGEMENT PLAN to provide the department both the tools and the discretion to manage the early season as necessary to maintain the spawning escapement within the range of 28,000 to 55,000 Chinook salmon. In 2003 the Board of Fisheries modified the spawning escapement goal to 24,000 or greater Chinook salmon.

Management tools currently available to ADF&G have allowed it to consistently respond to indices of abundance inseason and to regulate the commercial salmon harvest accordingly. In 2000, the department began reassessing the feasibility of using dip nets and small mesh gillnets to assess run strength and species apportionment in the lower river. Accurately monitoring inriver movement of salmon above the commercial fishing district and below the Miles Lake sonar has long been recognized as a useful tool that could add precision to early season management actions. The department has been pursuing lower Copper River assessment projects since the 1992 season.

Working in the lower Copper River in May has proven to be challenging. Initial fish monitoring results may be used to confirm that inriver migration has begun, while the long term goal is to establish an early mechanism to evaluate inriver escapement in response to commercial fishing effort before reliable Miles Lake sonar escapement trends are available. ADF&G in cooperation with Native Village of Eyak (NVE) initiated a lower river assessment project designed to provide additional salmon migration information closer to the fishing grounds and, during some years of heavy snowfall, prior to installation of the sonar at Miles Lake. The lower river sonar has been in place for three seasons.

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

The Copper River District commercial fishing season has historically opened in mid May. Since 1968, periods are now established inseason by emergency order following many years of "book openings" that ran from Monday mornings to Friday evenings. In general, fishing time has steadily been reduced over the years in response to increased efficiency of the commercial fleet, changing patterns in the fishery, and reallocations by the BOF. Two commercial fishing periods

per week has been the recent pattern with the duration of a given fishing period dependant upon trends in escapement, harvest, and environmental conditions.

The current upriver sustainable escapement goal (SEG) for wild stock sockeye salmon is 300,000 to 500,000 fish. Adopted in 1972 and placed into regulation in 1980 (Fried 1994), the sockeye salmon spawning escapement goal was 300,000 fish until 2003 when the Board of Fisheries adopted a range of 300,000–500,000 as the SEG. The Copper River District Salmon Management Plan outlines the 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 2005 inriver goal were as follows:

Spawning escapement	300,000 to 500,000 sockeye
Other salmon	17,500 salmon
Subsistence/Personal use harvest	178,500 salmon
Sport fishery	15,000 salmon
Gulkana broodstock	20,000 sockeye
Gulkana Hatchery surplus	48,000 sockeye
Total	579,000 to 779,000 salmon

Of the seven categories contained within the inriver goal, the most significant increases over time have been in the hatchery surplus, subsistence, and personal use categories. In the early 1980s, the inriver goal stood at 516,000 salmon. Since that time, the Miles Lake sonar minimum inriver goal has been as high as 725,000, primarily in response to large forecasts of enhanced sockeye salmon and increasing subsistence and personal use harvests.

The inriver goal for subsistence and personal use harvests is set annually based on harvest in recent years. In 2005, the 3-year average harvest from both the Glennallen Subdistrict and Chitina Subdistrict were combined and incorporated into the inriver goal. The number of hatchery surplus sockeye salmon within the inriver goal is determined annually based on the Gulkana Hatchery run forecast and a preseason estimate of commercial harvest exploitation rate that wild stocks can likely sustain during the late June and July mixed stock fishery in the Copper River District. It is important to note that these surplus salmon do not fulfill any biological escapement needs, nor are they specifically linked to any upriver subsistence harvest or sport allocations. An unknown percentage of the hatchery surplus is taken during July and August in these upriver fisheries.

Preseason Outlook and Harvest Strategy

The 2005 commercial harvest forecast for the Copper River District was 49,900 Chinook, 1.35 million sockeye, and 294,169 coho salmon (Table 6). Enhanced sockeye salmon returns to the Gulkana Hatchery, were forecast to be 301,000 fish. PWSAC requires approximately 20,000 fish for broodstock leaving 281,000 sockeye salmon available for subsistence and sport harvests as

well as an estimated 152,000 for the common property drift gillnet fishery in the Copper River District. The 2005 inriver goal for salmon passing Miles Lake was set at 578,859 to 778,859 fish. This number equated to a preseason sonar goal of 542,530 to 742,530 salmon by July 31, the normal season ending date for sonar counting at Miles Lake.

The traditional fishing schedule for the Copper River District is two evenly spaced periods per week. Periods generally occur on Mondays and Thursdays. Duration of fishing periods is adjusted by emergency order based on sonar counts, aerial surveys, harvest rate, age compositions, and other assessment tools.

Prior to Miles Lake sonar installation, early-season management of the Copper River District is based on actual versus anticipated harvest combined with environmental conditions, fishing effort, harvest consistency, and lower river sonar counts. 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 available and are also considered when scheduling commercial fishing periods. Because of the many spawning systems in the Copper River Delta, an actual weekly escapement index of selected sockeye and coho salmon systems is compared to an anticipated weekly escapement index. The SEG for Copper River Delta sockeye salmon stocks is 55,000 to 130,000.

Typically, coho salmon management begins in the second week of August. In the past, the strategy provided an initial single opening per week of 24 hours that is increased to either 48 hours, or a second 24-hour period as harvest or aerial survey numbers warrant. 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 can make accurate aerial identification problematic. The SEG for the Copper River Delta is 32,000 to 67,000 coho salmon.

Sockeye and Chinook Salmon Fishery Season Summary

The total run size for sockeye salmon in the Copper River in 2005 was 2,252,314 fish with 59.1% commercially harvested, 9.4% harvested by upriver subsistence and personal use users in state managed fisheries, 0.6% by users participating in federal subsistence fisheries, and 0.4% by upriver sport users. The remaining 30.6% comprised the upriver and delta wild spawning sockeye salmon escapement with an additional 19,860 (0.9%) returning to the Gulkana Hatchery for use as broodstock, (Appendix A1). Of these sockeye salmon, 76.9% originated from upriver wild spawning systems, 13.9% from delta spawning systems, and 9.2% overall came from the Gulkana Hatchery, (Appendix A2). The 2005 total Chinook salmon run was 65,949 fish with 52.5% of those commercially harvested, 7.2% harvested by personal use and subsistence users, and 6.2% harvested by upriver sport users. The remaining 32.8%, (21,604) went into the spawning escapement, (Appendix A3). This is below the Sustainable Escapement Goal of 24,000 or more for Copper River Chinook salmon as defined by the Board of Fish in 5 AAC 24.361(a). The entire Chinook salmon run originated from wild upriver stocks.

The Copper River commercial sockeye salmon harvest was 1.33 million fish. This was 98% of the projected harvest of 1.35 million and 14% below the 10-year average of 1.53 million sockeye salmon (Appendix A7). The harvest of 34,624 Chinook salmon was 31% below the 10-year average of 49,919 fish (Appendix A7). Inriver escapement to the upper Copper River (854,268 salmon) surpassed the upper inriver escapement goal of 779,000 salmon. The escapement index

count for the Copper River delta systems was 58,406 sockeye salmon, and was within the Sustainable Escapement Goal range of 55,000–130,000.

Based on strontium chloride otolith mark analysis there were 95,897 Gulkana Hatchery sockeye salmon harvested in the Copper River District commercial fishery in 2005, accounting for 7.2% of the total sockeye salmon commercial harvest. The majority of these were from the 13.9 million fry released in 2001 by PWSAC from the Gulkana Hatcheries (Appendix A5). Additionally in 2005, there were an estimated 997 sockeye salmon harvested in the Copper River District that originated from the PWSAC Main Bay Hatchery.

The Miles Lake south bank sonar became operational on May 9 and observed salmon escapement on the first day of operations with 192 fish counted (Appendices A6 and A8). North bank sonar became functional 2 days later with 12 fish counted. Prior to the opening of the commercial fishing season on May 16, the cumulative sonar estimate was 4,871, this is above the minimum escapement goal for that date of 11 fish. The lower river sonar began observing fish passage through Flag Point Channel on May 5 (40 fish).

The first two Copper River District commercial fishing periods occurred on May 16 and May 19 for 24 hours each. The harvest from the first and second periods combined was 144,864 sockeye and 11,691 Chinook salmon with 481 permits fishing in the first period and 480 in the second (Appendix A13). Anticipated harvest for this week was 122,074 sockeye and 14,752 Chinook salmon (Appendices A9 and A12). Copper River water levels were unusually high during the early weeks of the season (Appendix 11).

ADF&G did not implement an inside area closure for these periods because of the higher than expected sonar counts at Miles Lake, restrictive fishing time, lower than expected Chinook salmon harvest levels, and sockeye salmon harvest numbers close to anticipated levels.

Escapement past Miles Lake sonar remained above the minimum cumulative escapement objective. On May 21 the cumulative estimate was 40,881 fish versus a minimum escapement objective of 6,121.

During the week of May 22, two fishing periods occurred. The 24 hour and 36 hour periods had a combined harvest of 236,549 sockeye and 6,702 Chinook salmon (Appendix A13). The expected harvest for these periods was 215,182 sockeye and 12,357 Chinook salmon (Appendices A9 and A12).

In response to larger than expected sockeye salmon harvests and greater fish passage levels at Miles Lake than required to meet the minimum inriver goal, three 24 hour fishing periods were scheduled on Monday, Wednesday, and Friday during statistical week 23, (May 29–June 4). Harvests for the week were 237,736 sockeye and 6,894 Chinook salmon versus expected levels of 211,833 sockeye and 9,811 Chinook salmon (Appendices A9, A12, and A13).

The first aerial survey of the Copper River Delta on June 3 documented 1,975 sockeye salmon in index streams (Appendix A14). The anticipated index was 3,887 sockeye salmon.

During the weeks of June 5 and June 12, two 24-hour periods occurred each week with 402 permits fishing the first week, and 355 the following week. Daily escapement at the Miles Lake sonar site continued to remain above the minimum inriver goal. River level at the Million Dollar Bridge remained above the 22-year average throughout much of the summer (Appendix A11). The second delta aerial survey on June 10 documented only a slight increase in sockeye salmon numbers. The third delta aerial survey on June 16 documented a significant increase in sockeye

salmon with 15,360 fish counted versus an expected 11,222 fish. During statistical week 26 (June 19–25), two 36-hour openings occurred, harvesting 141,128 sockeye and 874 Chinook salmon.

In response to high fish passage at Miles Lake and a higher than anticipated June 23 aerial survey count, two 48-hour openings were scheduled in statistical week 27, (June 26–July 2). During these periods 81,128 sockeye salmon were harvested. In spite of the increased fishing opportunity, upriver fish passage at Miles Lake remained elevated until sonar operation ceased at the end of July. There was a 60 hour period on July 4 followed by two 48 hour periods per week for the following 3 weeks (July 3–24), because of the upriver surplus, as well as consistently higher than anticipated delta aerial survey index counts. Sockeye salmon harvests continued to remain generally above the weekly projections throughout the remainder of the season.

Beginning in the fourth week of July, delta aerial survey numbers declined for sockeye salmon and remained depressed through the remainder of the season. These low numbers likely were related to high levels of silt that occluded and prevented observation of several of the major index systems such as the Eyak River and Eyak Lake. Additionally, the 2005 season saw record numbers of pink salmon returning to Prince William Sound. Unusual numbers of pink salmon were present in delta systems where they mixed with and made enumeration of sockeye salmon (and later coho salmon) problematic. The final escapement index value for delta sockeye salmon stocks (58,406) was within the SEG for delta stocks of 55,000–130,000 sockeye salmon (Appendix A10).

Upper Copper River aerial survey index counts for Chinook and sockeye salmon may be found in Appendices A24 and A25 respectively.

The estimated age and sex compositions of sockeye, Chinook, and coho salmon harvested in the commercial fishery can be found in Appendices A26, A27 and A28 respectively.

Coho Salmon Fishery Season Summary

The total run size for coho salmon in the Copper River is not known because the number of coho salmon migrating upriver is unknown. The total delta run size was estimated at 478,152 coho salmon. A total of 263,465 (55.1%) coho salmon were harvested commercially, 119 (<0.1%) were retained as “homepacks” from commercial harvests, 15 coho salmon were harvested in the Copper River District in subsistence gillnets, 1,869 (0.4%) were harvested by personal use dipnetters in Chitina, 154 (<0.1%) were harvested in the Glennallen Subdistrict subsistence fishery, 10,168 (2.1%) were harvested by sport users on the Copper River delta near Cordova, and 72 (<0.1%) were harvested by upriver sport users (Appendix A4). The delta spawning escapement was estimated at 202,164.

The coho salmon harvest of 263,465 was 10.4% below the projected harvest of 294,154 (Appendix A15). Aerial escapement estimation of coho salmon were hampered by high silt levels in several of the major index streams as well as an unusually high number of pink salmon in many streams (Appendix A16).

ADF&G met with the PWS Salmon Harvest Task Force and the public in April to discuss Copper River coho salmon management. It was decided that a single 24-hour period per week schedule would be maintained until escapement warranted either extending or decreasing fishing time. Deciding on the most appropriate fishing strategy to apply to the coho salmon run has been a contentious issue in the past. Two distinct fishing periods per week will potentially allow for

two “clean up” harvests to occur when milling coho salmon may be vulnerable to harvest. Unlike sockeye and Chinook salmon, coho 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 weekly period will allow a broader window of time for fish to mill in the estuary and still escape the fishery. Arriving at a harvest strategy consensus between processors and the fishing fleet has also proven difficult to achieve.

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

The coho salmon season officially began at 7:00 a.m. on Monday, August 15 during statistical week 34 with a single 24-hour period. The harvest from this period was 7,315 coho and 9,151 sockeye salmon with 143 permit holders participating. An aerial survey was conducted on August 19 under poor observational conditions due to overcast skies and silt in two of the main index systems with 1,130 coho salmon observed versus an anticipated count of 9,674. A second 24-hour opening occurred on Monday August 22 with 32,122 coho salmon harvested. The next aerial survey, delayed until August 29 due to weather, had a count of 8,326 coho salmon with fair to poor observational conditions. The anticipated count for this date was 15,646. The next opening on August 29 was for 24 hours. An aerial survey was flown on September 2 under fair to excellent observational conditions with 36,795 coho salmon observed, and was 31% above the anticipated count of 25,229. Over half of the observed fish were in Ibeck Creek, (12,550) and in the Martin River system, (8,670). Based upon this survey, below expected female percentages, and improving harvests, the next period was extended from 24 to 36 hours. On September 5, a 36-hour opening harvested 68,924 coho salmon and 268 vessels participated. Due to poor weather, the next aerial survey could not be flown until September 11 when 18,539 coho salmon were observed versus an anticipated 33,510. Several of the systems observed on the previous flight on September 2 were again silty, thereby depressing the overall index value for the second flight. With a coho salmon escapement that was above the minimum during the September 2 survey, a second fishing period during week 38, (September 11–17) was scheduled. During this period a total of 42,978 coho salmon were harvested. An aerial survey was flown on September 20 with 56,032 coho salmon observed, above the anticipated count of 26,418 fish. During this week, 36,170 coho salmon were harvested during the 24 hour Monday and 48 hour Thursday openings. During the following week, September 25–October 1, two openings occurred: 48 hours on Monday and 60 hours on Thursday. The last day of processing for the remaining Cordova processors was Wednesday, September 28. During these two periods, 2,586 coho salmon were harvested. The following 60 hour period from October 3–5 saw 8 coho salmon delivered by one permit holder. There were no more commercial deliveries from any of the three remaining openings in the 2005 season, although there were subsistence harvests reported. The estimated coho salmon escapement into the Copper River delta was above the SEG Range of 33,000 to 67,000 coho salmon with a cumulative index count of 101,082 (Appendix A17). The final delta aerial survey was conducted under fair to good conditions on October 3 with an index count of 40,515.

Estimated age and sex composition of coho salmon harvested in the Copper River commercial fishery can be found in Appendix A28.

BERING RIVER DISTRICT

For more detailed information on this district see Appendices A18–A23, and A26–A28.

Preseason Outlook and Harvest Strategy

Opening in early June, the Bering River District is managed concurrently with the Copper River District (Appendix A18).

Sockeye Salmon Season Summary

The 2005 harvest of 77,464 sockeye salmon from the Bering River District was over five times the recent 10-year average of 12,948 fish (Appendix A19). The index count of sockeye salmon escapement into Bering River District streams was 30,890 salmon and was within the SEG range of 26,000 to 38,000 fish (Appendix A20). Bering Lake, the largest sockeye salmon spawning system in the district, had a peak index count of 19,890 sockeye salmon on July 14. This compares to a total anticipated peak count of 21,145 sockeye salmon for this district during that week.

The first period for the 2005 season began on May 30 and was for 24-hours. Minimal fishing effort and harvest for Bering River District was reported for the first fishing period. The district was opened to commercial harvest concurrently with Copper River District until the close of the season on October 15. Peak sockeye salmon harvest and effort occurred during the fourth fishing period on June 6 when 46 permit holders harvested 14,628 sockeye salmon for the period (Appendices A22 and A23).

Coho Salmon Season Summary

The coho salmon harvest of 43,030 fish was below the recent 10-year average of 72,068. The coho salmon SEG of 13,000 to 33,000 fish was exceeded with a peak escapement index of 44,542 (Appendix A21).

In 2005 the Bering River District coho salmon fishery began on August 15 with a 24-hour fishing period. No permit holders fished for the first two periods. The district was managed concurrently with the Copper River District until the close of the season on October 15. Peak fishing effort was during the fifth coho fishing period on September 12 when 47 permit holders harvested 15,323 coho salmon (Appendix A22).

Aerial surveys conducted from September 2 through October 3 indicated that coho salmon escapement into Bering River spawning areas were near or above anticipated levels (Appendix A21). The Edwards River peak coho salmon escapement was observed on October 3 with 5,430 coho salmon observed. The Katalla River had a peak observed escapement of 12,100 coho salmon (September 2), and the Okalee River had a peak observed escapement of 460 coho salmon (September 14). Bering Lake had a peak observed escapement on September 20 with 13,600 coho salmon observed. The Gandil River had a peak observed escapement of 4,450 (October 3) and the Nichawak River had a peak observed escapement of 6,900 coho salmon on September 14 (Appendix A16).

COGHILL DISTRICT (PRIOR TO JULY 21)

For more detailed information on this district see Appendices B1–B8, B11, and E20.

Preseason Outlook and Harvest Strategy

The 2005 forecast of sockeye salmon returning to Coghill Lake was 246,000 fish. Meeting the midpoint Biological Escapement Goal (BEG) of 30,000 sockeye salmon would leave approximately 216,000 fish for the common property fishery (CPF). Enhanced chum salmon returns to Wally Noerenberg Hatchery were forecast to be 1.47 million fish. PWSAC requires approximately 753,000 fish for cost recovery and broodstock leaving 720,000 chum salmon for the CPF. The projected return of pink salmon to the WNH facility was 3.6 million fish. Of those PWSAC requires 2.7 million for cost recovery and broodstock, leaving approximately 950,000 pink salmon available to the CPF. An estimated 54,460 coho salmon were projected to return to the WNH with 1,100 required for broodstock leaving 53,360 fish for the CPF.

PWSAC, in consultation with ADF&G, elected to harvest 60% of the pink and chum, salmon cost recovery returns before having CPF openings in the various hatchery subdistricts, but the department would retain the option of opening the CPF in the case of cost recovery not keeping pace with run entry.

For the third year in a row, the Commercial Operators Annual Report (COAR) exvessel value calculated the 2004 purse seine fleet harvest at less than 40% of the commercial value. Because the 40% allocation was not met, the seine fleet was allowed in the Esther Subdistrict prior to July 21 in accordance with 5 AAC 24.370(e)(2). ADF&G developed the following management strategy. The drift gillnet fleet will fish the first period in the Esther Subdistrict on a Monday, concurrent with a Copper River District fishing period. The date for the first period is unknown because PWSAC planned to harvest 60% of the chum salmon revenue goal prior to allowing a CPF in the Esther Subdistrict. The purse seine fleet would then follow with a period of equal time but not necessarily equal area on the Thursday after the first drift gillnet period and concurrent with open purse seine fishing in the Port Chalmers Subdistrict. Thereafter, the two gear groups would alternate periods on a similar weekly schedule until run strength allows more fishing time. Area for the drift gillnet fleet would be the Coghill general district and the Esther Subdistrict and would be adjusted based on wild stock escapements, effort, and PWSAC cost recovery. Area for the purse seine fleet would be waters of the Esther Subdistrict east of 148^{o} 06’ W. longitude, west of 147^{o} 56’ W. longitude, and within 1 nautical mile of Esther Island. If either cost recovery or wild stock escapement concerns arose, the purse seine fleet would be restricted to the WNH Terminal Harvest Area (THA) and waters of Esther Bay. If cost recovery or wild stock escapement concerns persist, closures may occur for both the purse seine and drift gillnet fishers. During fishing periods when the Esther Subdistrict is open to purse seine gear, the waters of Port Wells south of the 60° 52.71' N. lat. buffer zone line and the waters of Esther Passage south of the 60° 50.84' N. lat. buffer zone line will be closed to drift gillnet gear to facilitate passage of enhanced chum salmon into the Esther Subdistrict.

SEASON SUMMARY

The total CPF sockeye salmon harvest for the Coghill District was 105,470 fish. The total CPF chum harvest was 1.16 million fish, and harvests for pink and coho salmon were 3.2 million and 52,416 respectively (Appendices B1 and B2). PWSAC harvested 661,111 chum salmon for cost

recovery, and 280,811 for broodstock purposes, as well as 4,648,575 pink salmon for cost recovery and broodstock requirements.

There were 46,598 Main Bay Hatchery sockeye salmon harvested by the drift gillnet fleet in the Coghill District CPF accounting for 49.1% of 94,748 drift gillnet sockeye salmon harvested in this district. The chum harvest was composed of 862,123 WNH fish, 7,747 Port Chalmers fish, and 11,097 wild stock fish.

The CPF gillnet fishery began in the Coghill District on June 6. A schedule of two openings per week, coinciding with openings in the Copper River and Bering River districts, was maintained until July 21 when management for purse seine effort began. Starting on June 13, the southern portion of the Coghill District, (Port Wells) was opened south of the western entrance to Esther Passage only for the first 24-hours of each opening (Appendix B6). The intent was to focus effort in the northern part of the district on wild Coghill Lake sockeye salmon. Openings in the northern part of the district began with 24-hour periods and gradually were expanded to 72-hour periods in early July because escapement levels at the Coghill weir remained on track. The Coghill District was closed to purse seine gear on September 15 when coho salmon harvest numbers exceeded pink salmon harvest numbers. The district remained open to drift gillnet harvest until it closed for the season on October 16.

PWSAC chum salmon cost recovery began on June 8 and continued until August 4 (Appendix B11). On June 18, 22, and 26 the department, by Emergency Order (EO), expanded the WNH Special Harvest Area (SHA) to within 300 fathoms of the southern shore of Esther Island upon request from PWSAC. On June 29, July 3, and July 8 ADF&G expanded the WNH SHA to within 0.5 nautical miles of shore to further facilitate hatchery cost recovery and broodstock harvest. The department also issued an EO on June 15 to expand the SHA to include the eastern end of Esther Passage including Shoestring Cove. However PWSAC was unable to harvest any fish in that area.

The Coghill River weir was deployed on June 10 to monitor sockeye salmon escapement. The weir was operated until July 23 when the weir was dismantled. Total escapement was 30,313 sockeye, 293,373 pink, and 386 chum salmon (Appendices B3, B4, and B5).

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

UNAKWIK DISTRICT

For more detailed information on this district see Appendices B6, B9, and B10.

Preseason Outlook and Harvest Strategy

The Unakwik District is the smallest district in the Prince William Sound management area. Both drift gillnet and purse seine gears are allowed during all fishing periods. This district was established for management of relatively small runs of sockeye salmon to Cowpen and Miners Lakes. Escapement enumeration is by aerial survey, however water clarity is marginal thus escapement indices are considered qualitative at best. A major pink salmon hatchery, Cannery Creek Hatchery, borders the southern boundary of the district.

Season Summary

The total 2005 Unakwik District harvest was 23,107 sockeye, 27 coho, 83,398 pink, and 858 chum salmon (Appendices B9 and B10). The sockeye salmon harvest in 2005 was over four times the 10-year average harvest of 5,663 and was less than half of the 1982 record harvest of 49,000 sockeye salmon (Appendix B10). Purse seine permit holders delivered only 80 sockeye salmon and the drift gillnet fleet harvested the remaining 23,027 sockeye salmon. The Unakwik District opened June 13 for a 48-hour period (Appendix B6) and followed a schedule of two evenly spaced periods per week concurrent with Copper River District periods. Peak harvest occurred during the fifth commercial fishing period (June 27–29) with 7,434 sockeye salmon landed by six permit holders. No changes were made to the concurrent fishing schedule until July 14 when the Unakwik District was closed for the season because of the return of pink salmon to the Cannery Creek Hatchery in the Northern District. However, continued interest on the part of drift gillnetters prompted a reopening of this district on July 18. The Unakwik District was closed for the 2005 season at 8 pm on August 5.

ESHAMY DISTRICT

For more detailed information on this district see Appendices C1–C8, E5, E6, and E14.

Preseason Outlook and Harvest Strategy

The 2005 forecast of the sockeye salmon run to Eshamy Lake was 77,000 fish. Meeting the midpoint BEG of 30,000 would leave approximately 47,000 fish for the CPF set and drift gillnet fisheries. The Main Bay Hatchery sockeye salmon forecast was projected by PWSAC to be 1.29 million fish. This was composed of 317,000 Coghill sockeye salmon stock of which 8,000 fish were to be used for broodstock with all of the remaining 309,000 used to achieve 60% of the assigned sockeye revenue goal of $2,383,400. PWSAC anticipated that once the peak of the run had passed, a CPF opportunity would occur within the hatchery subdistrict. The later returning Eshamy stock, (projected at 810,900 fish) would be used to harvest 150,000 sockeye salmon to make up the remaining 40% of the sockeye salmon revenue. These fish represent the last of Eshamy stock production at the MBH, and therefore no broodstock would be collected.

Season Summary

In 2005 PWSAC failed to achieve the MBH cost recovery goal. Enhanced Coghill stock sockeye salmon began arriving at the MBH in mid June in numbers less than anticipated (Appendix E5). In the second week of June, PWSAC requested that ADF&G expand the MBH SHA to include the waters of Falls Bay. This was done on June 13. Cost recovery fishing was determined to be non-productive in Falls Bay and there were no more requests for MBH SHA expansions during the 2005 season. As of June 27, only 2,300 fish had been harvested for broodstock purposes and 10,000 for cost recovery versus an anticipated harvest of 317,000. On July 28, PWSAC reported the Coghill portion of the sockeye salmon run complete with only 7,900 sockeye salmon collected for broodstock and 105,000 for cost recovery. At that time PWSAC announced that approximately 253,000 sockeye salmon would be required for cost recovery from the Eshamy portion of the run to make up the shortfall from the Coghill run. However, by mid August it was apparent that the returning numbers of Eshamy stock sockeye salmon were below the expected 810,900. By early September PWSAC had harvested only 86,000 sockeye salmon from the enhanced Eshamy stock, approximately one-third of their cost recovery target.

There were 63,533 MBH and 15,694 wild stock sockeye salmon harvested by the drift gillnet fleet in the Eshamy District for a total of 79,227 fish. The Eshamy District drift gillnet chum salmon harvest was composed of 1,498 WHN, 48 Port Chalmers, and 1,491 wild stock fish (Appendices C1 and C7).

There were 87,836 MBH sockeye salmon harvested by the set gillnet fleet in the Eshamy District accounting for 80.2% of 109,532 set gillnet harvest. The remaining 19.8% were of wild origin. The Eshamy District set gillnet chum salmon harvest of 3,452 fish was composed of 1,932 WHN, 47 Port Chalmers, and 1,520 wild stock fish (Appendices C1 and C7).

Harvests of hatchery pink salmon in the Eshamy District are listed in Appendix E14.

CPF openings began in the Eshamy District on July 18 (Appendix C2). This is later that in previous years when CPF openings have occurred in mid June targeting enhanced Coghill stocks, or in mid May targeting enhanced Eyak stocks. In 2005 PWSAC requested that fishery managers delay opening the CPF until a significant portion of MBH cost recovery was completed. However, the enhanced Coghill stock run was below forecast, and CPF commenced in mid July with the primary focus on Eshamy Lake wild stocks. A schedule of two 24-hour periods was maintained through August 12 at which point the Thursday openers were expanded to 26 hours, closing at 10 am on Friday rather than 8 am. The final two periods on September 5 and 12 were both 48 hours in length. The scheduled openings from August 4 through September 2 included only waters in the district south of the southern extreme of Falls Bay.

The peak harvest occurred during the first opening of the season when 23 set gillnetters and 124 drift gillnetters harvested 18,323 and 24,112 sockeye salmon respectively. In total 27 set gillnet and 137 drift gillnet permit holders participated in the Eshamy District harvest in 2005.

The Eshamy River weir was operated from July 9 to August 27 to monitor sockeye salmon escapment (Appendices C5 and C6). The total escapement passed the weir was 23,523 sockeye, 11,024 pink, 529 chum, 46 coho, and 1 Chinook salmon. This was below the 10-year average for sockeye salmon (29,406 fish), and within the BEG range of 20,000–40,000 sockeye salmon (Appendix C8).

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 C3 and C4.

GENERAL PURSE SEINE DISTRICTS

For more detailed information on these districts see 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 (Appendix D). The PWS Management and Salmon Enhancement Allocation Plan (5 AAC 24.370(d)) closes the Southwestern District prior to July 18. The plan also closes the Coghill District to purse seine gear prior to July 21, except under the WNH Management Plan (5 AAC 24.368(f)), to prevent deterioration of fish quality of the harvestable surplus of chum salmon, or under the PWS Management and Salmon Enhancement Allocation Plan (5AAC 24.370(e)) if the purse seine fleet caught 40 percent or less of the total commercial CPF exvessel value in the PWS area in the previous year. Beginning July 21, both purse seine and drift gillnet gear are allowed in the Coghill District. Purse seine gear is

allowed in the district as long as the harvestable surplus is predominantly pink salmon by number. Fishing periods in all districts are established by emergency order.

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. Escapement of pink and chum salmon is monitored through the season by weekly aerial surveys of 209 index streams. Management to achieve hatchery cost recovery goals is accomplished by opening and closing subdistricts near the hatcheries. Subdistrict openings are also utilized to target the fleet on hatchery stocks when wild salmon escapement is weak.

The 2005 pink salmon forecast for PWS was 33.3 million fish. This estimate includes 6.2 million wild stock fish, 11.6 million VFDA fish, and 15.5 million PWSAC hatchery fish. PWSAC required 10.7 million of the projected 15.5 million pink salmon for cost recovery. The remaining 4.9 million PWSAC fish would be available for CPF harvest. Approximately 4.2 million pink salmon of the projected 11.6 million pink salmon returning to the VFDA hatchery would be needed for cost recovery. The price that VFDA and PWSAC receive for their sales harvest fish influenced the actual CPF harvest of enhanced stocks. A total of 4.3 million wild stock pink salmon are projected to be available for harvest leaving 2.0 million fish in the escapement.

The 2005 chum salmon run forecast to Prince William Sound was 2.6 million fish. The wild chum salmon forecast was 644,000 fish with the rest of the return composed of PWSAC hatchery production. Approximately 468,000 enhanced chum salmon were expected to return to Port Chalmers and 1.47 million to WNH. PWSAC also forecast 18,500 chum salmon to return to AFK. PWSAC initially required 753,000 chum salmon for cost recovery and broodstock leaving 717,000 chum salmon for the CPF. Because of increased prices PWSAC only needed to harvest 601,000 chum salmon to meet the 2005 WNH chum salmon cost recovery goal.

As in 2004, poor market conditions, harvest limits, and low prices caused concern over the potential for a successful purse seine season at the Prince William Sound SHTF. Recent purse seine effort has been reduced due to low prices. The SHTF felt that the remaining purse seiners would likely concentrate their fishing effort on hatchery runs where high volume harvests could occur. ADF&G restated its intent to open multiple districts concurrently as wild stock escapements allow. This would help to relieve congestion in the hatchery subdistricts where a majority of the hatchery runs have traditionally been harvested. Additionally, the use of the SHTF markers was discussed at the spring meeting. In the past ADF&G has started the first openers with the area behind the SHTF markers closed. In 2005 the department will start the first openers with the area behind the SHTF markers open and only close them as aerial survey indices fall behind.

Both VFDA and PWSAC produced smaller numbers of coho salmon in 2005. PWSAC's expected 2005 run of coho salmon to WNH was 54,000 fish. Assuming the hatchery harvest rate will be insignificant (interception during pink salmon cost recovery), all of the fish will be harvested by the CPF. The 2005 adult run of coho salmon to the VFDA hatchery was anticipated to be 132,000 fish. A total of 1,000 salmon were anticipated to be needed for VFDA egg take objectives.

Chum Salmon Season Summary

In 2005, the purse seine fleet was allowed to fish the Esther Subdistrict as a consequence of the 2004 exvessel value allocation shortfall. The purse seine fleet harvested 276,000 chum salmon in

the Coghill District while the gillnet fleet took 881,000 chum salmon. The peak of the harvest occurred from July 9 to 16 with more than 260,000 fish harvested during three fishing periods. A total of 1.2 million enhanced chum salmon were harvested in the Coghill District CPF. The enhanced chum salmon return to AKF was a complete failure with basically no fish harvested. The enhanced chum salmon harvest in Port Chalmers was 239,000 fish, only 44% of PWSAC's forecast. The largest wild stock chum salmon harvests occurred in the Eastern District (32,000 fish), Northern District (6,200 fish), and Southeastern District (4,300 fish). Wild stock chum salmon escapement was not available at this time. In 2005 high pink salmon densities during aerial surveys made accurate chum salmon counting difficult. At times an aerial survey of a specific stream would record zero chum salmon, but subsequent foot surveys found high numbers of chum salmon mixed in with large numbers of pink salmon. The 2005 PWS chum salmon population estimates are likely underestimates.

The regulatory provision in the PWS Management and Salmon Enhancement Allocation Plan (5AAC 24.370(e)) was exercised in 2005. This allows the purse seine fleet into the Esther Subdistrict prior to July 21 if in the previous year they caught 40 percent or less of the total commercial CPF exvessel value in the PWS area. The purse seine fleet harvested 276,000 chum salmon in the Coghill District while the gillnet fleet took 881,000 chum salmon. Purse seiners targeted wild chum salmon primarily in the Eastern and Southeastern Districts. The total wild 2005 chum salmon harvest in PWS was approximately 69,913 fish and the escapement was above the PWS total SEG range at 196,465 fish. The total wild chum salmon escapement was 196,465 and was below the escapement goal range for the Northern District and between the midpoint and low end of the SEG for the Coghill District (Appendix D). The Eastern, Northern, and Southeastern Districts comprise 68% of the expected chum salmon escapement goal.

Pink Salmon Season Summary

A record 59 million pink salmon were harvested in PWS in 2005. The harvest was composed of 47 million CPF fish and 12 million cost recovery fish. Approximately 40% (100 permit holders) of the Area E salmon purse seine permit holders made at least one delivery during the 2005 season. Pink salmon harvest management was based on aerial survey escapement data, test fishing in the Southwestern District, harvest rates, and terminal area run entry. The structure of the PWS pink salmon industry is largely controlled by processor capacity. In 2005 the timing, location, and quantity of pink salmon harvest was almost completely controlled by processors. Seine boats were on limits the entire season and were directed when and where to fish in most instances. Several larger processors continued to harvest enhanced pink salmon until the run was over. A capacity of 2–3 million lbs per day was available until late in the season. Strong run entry continued at the PWSAC hatcheries into late August. It remained unclear if additional roe fisheries would develop given the unknown portion of the run left to return and the remaining capacities ability to keep up with run entry. However, continued processor participation and an aggressive fishing schedule prevented the build-up of large numbers of poor quality fish. The numbers of poor quality pink salmon never reached the level that warranted a roe fishery and associated emergency regulation. Remaining pink salmon were sold for roe by PWSAC as part of their broodstock collection.

In 2005 PWSAC successfully completed their pink salmon cost recovery goal. Enhanced pink salmon returns for the WNH, AFK, and CCH were larger than PWSAC's preseason projections. PWSAC cost recovery harvests were 2.9 million fish at AFK, 2.5 million fish at CCH, and 3.6 million fish at WNH. The PWSAC Board of Directors directed that 60% of cost recovery should

be completed before any CPF in hatchery subdistricts. However, as large enhanced pink salmon abundance became apparent, PWSAC ignored this requirement and recommended opening hatchery subdistricts to CPF earlier.

Aerial surveys to assess early chum and pink salmon escapements in the Eastern and Northern Districts began in mid June. In July, surveys began in all other purse seine districts. Large escapements of pink salmon allowed for liberal commercial fishing openings throughout the season. All PWS fishing districts, except the Northwestern District, were open continuously for 16 hour daily periods for much of the season. ADF&G had no pink salmon escapement concerns for most of the season. Pink salmon escapement was above the SEG midpoint for all districts.

Eastern District

VFDA's anticipated 2005 adult return of pink salmon to the Solomon Gulch Hatchery was 11.59 million fish, assuming a 5.21% marine survival from the 2004 fry release of 222.5 million. A total of 323,000 salmon were needed to meet egg take objectives at the hatchery. The 2005 sales harvest revenue goal was approximately $2.3 million and would require ~4.4 pink salmon for cost recovery and broodstock. Approximately 7.1 million pink salmon were forecast to be available for CPF.

The 2005 VFDA enhanced pink salmon return was early and doubled the preseason forecast. ADF&G began receiving reports of early pink salmon in the area in late May. Cost recovery generally starts on June 23 but began on June 19 and was 30% complete by June 23. VFDA completed cost recovery in mid July with a total of 3.4 million pink salmon. VFDA recommended opening the CPF on June 25 because of abundant fish.

The first 12 hour CPF, on June 26, harvested over 6 million pounds of pink salmon. An average of 2.9 million lbs of daily processor capacity was filled during the first 20 fishing periods. The Eastern District CPF remained open on a daily basis until mid September with a total harvest of over 20 million pink salmon. The wild pink salmon harvest in Port Gravina alone was over 1.1 million fish. A total of 69 CPF fishing periods were prosecuted in 2005 with a total of 99 permits recording 1,913 landings. The 2005 Eastern District harvest was composed of 20.5 million pink salmon, 32,423 chum salmon, 6,756 sockeye salmon, 135,775 coho salmon, and 6 Chinook salmon (Appendix D).

The unexpectedly large run of hatchery pink salmon outpaced harvest and processor capacity and resulted in a build up of poor quality fish in Port Valdez. As of July 15 an estimated 3.0 million fish in the port had deteriorated to the point that their flesh had become unmarketable. Although the salmon are generally suitable for fishmeal and fertilizer production, fishmeal facilities in the area were already operating at full capacity. If left unharvested, a significant number of the hatchery salmon could be expected to stray into 39 nearby pink salmon streams and interfere with natural stocks. To prevent further waste, hatchery salmon straying, and accumulations of dying salmon; under authority of AS 16.05.831, the commissioner of ADF&G found it consistent with maximum and wise use of the resource to allow the roe to be harvested from these salmon and the salmon carcasses disposed of properly. Daily roe fisheries were started on July 16. The roe fishery continued uninterrupted, except for periodic pauses for broodstock collection, until late July when roe quality deteriorated and became unmarketable. Even with roe fishery regulations implemented, large numbers of rotting carcasses were reported in the harbor, at the boat ramp, stream mouths, and throughout the port. Approximately 2.5 million fish were harvested in the CPF roe fishery.

Aerial surveys throughout the season provided wild pink and chum salmon escapement estimates above anticipated counts. ADF&G had no escapement concerns for the entire season. Some of the larger pink salmon producing systems in the Eastern District had up to 150,000 fish in the bays.

Wild stock pink and chum salmon escapement was within or above the escapement goal range in the Eastern District. The 2005 adjusted aerial pink salmon survey index was 1,025,756 fish, above the odd year SEG midpoint of 567,500 pink salmon. The 2005 adjusted aerial chum salmon survey index was 113,135 fish also above the SEG mid-point of 90,000 chum salmon, (Appendix D).

The purse seine fleet harvested approximately 135,000 VFDA enhanced coho salmon in 2005. The waters of Port Valdez north of the latitude of Rocky Point were opened on September 6 to allow the harvest of coho salmon returning to Solomon Gulch Hatchery (Appendix D). VFDA expressed concern that allowing the fleet into Port Valdez near the hatchery could jeopardize coho salmon broodstock collection.

Southeastern District

Southeastern District wild stock pink and chum salmon escapements remained ahead of anticipated escapement for the entire season. The 2005 adjusted aerial pink salmon survey index was 2,967,041 fish, five times the odd year SEG midpoint of 535,000 pink salmon. The 2005 adjusted aerial chum salmon survey index was 25,547 fish, also above the SEG mid-point of 17,500 chum salmon (Appendix D).

Southeastern District CPF periods were scheduled concurrently with the Eastern District openings. A total of 36 CPF fishing periods were prosecuted in 2005 with a total of 18 permits recording 77 landings. Peak effort and harvest occurred on July 14 when 261,251 pink salmon and 383 chum salmon were harvested. While fish abundance was high, the Southeastern District received little effort in 2005 due to processor control over fishing locations. There was no fishing effort after period 18 on August 2. The 2005 Southeastern District harvest was composed of 770,570 pink salmon, 4,329 chum salmon, 762 sockeye salmon, and 153 coho salmon (Appendix D).

Southwestern District

In 2005 PWSAC achieved their pink salmon cost recovery goal at AFK. Enhanced pink salmon returns at AFK were almost double PWSAC's preseason 7.6 million fish projection. PWSAC harvested approximately 2.9 million fish at AFK for cost recovery. Pink salmon harvest management was based on aerial survey escapement data, test fishing in the Southwestern District, harvest rates, and terminal area run entry. Test fishing in the Southwestern District by the *R/V Solstice* provided crucial pink salmon stock composition and sex ratio data. Because of large wild and hatchery salmon returns, the results of the test fishing were not critical to management decisions. Large wild stock escapements allowed for a regular schedule of CPFs, despite the relatively high ratio of wild stock pink salmon in the test fishery. Daily bay estimates and harvest of pink salmon at AFK remained high. Pink salmon run entry remained strong as the female sex ratio in the test fishery and cost recovery harvests climbed to 30–40%. In late July, it was apparent that the enhanced pink salmon return was early and stronger than PWSAC had projected. Wild stock pink escapement of 272,572 fish was above the midpoint of the odd year

SEG of 162,500. The Southwestern District has minimal chum salmon and has no SEG or population estimates.

A fishing schedule of eight consecutive 156-hour periods was initiated in the Southwestern District on May 30 through July 24 to harvest enhanced chum salmon at AFK. The PWSAC 18,500 enhanced chum forecast failed to return and no hatchery chum were harvested in the Southwestern District. In 2005, 51 CPF periods harvested 11.4 million pink salmon in the Southwestern District. The harvest was composed of 2.2 million wild stock pink salmon and 9.1 million hatchery fish (6.1 million AFK, 1.5 million WNH, 1.5 million CCH and 67,000 VFDA). The majority of the harvest (5.9 million pink salmon) was harvested in the Point Elrington Subdistrict. An average of 275,000 pink salmon (900,000 lbs) was harvested everyday from July 4 to August 27. The 2005 Southwestern District harvest was composed of 11.4 million pink salmon, 3,759 chum salmon, 39,455 sockeye salmon, and 9,211 coho salmon, (Appendices D and E).

Northern District

In 2005 PWSAC achieved their pink salmon cost recovery goal at CCH. The enhanced pink salmon return of more than 11 million fish at CCH almost doubled PWSAC's preseason projections. PWSAC harvested approximately 2.5 million fish for cost recovery at CCH. PWSAC's anticipated 2005 adult return of pink salmon to the CCH was 4.3 million fish. Northern District wild stock pink salmon escapement indices were above anticipated escapements for the entire season. Wild stock pink escapement of 570,079 fish was above the upper range of the odd year 172,500 SEG. Wild stock chum escapement of 30,657 was below the 38,000 SEG midpoint, (Appendix D).

In 2005 the Northern District was open for 49 CPF periods. Abundant wild escapement combined with large hatchery returns allowed for almost continuous commercial fishing. An average of 284,000 pink salmon (926,000 lbs) was harvested every day from July 21 until August 27. The 2005 Northern District harvest was composed of 10.2 million pink salmon, 14,037 chum salmon, 3,712 sockeye salmon, and 776 coho salmon. The 10.2 million pink salmon were composed of 1.0 wild stock pink salmon and 9.1 hatchery fish (8.6 million CCH, 395,000 WNH, 62,000 AFK, and 31,000 VFDA) (Appendices D and E).

Montague District

Montague District wild stock pink salmon escapements were above anticipated levels for the entire season. Wild stock pink escapement of 566,002 fish was above the odd year SEG mid-point of 250,000. The Montague District had no wild chum salmon escapement and has no chum salmon escapement goals, (Appendix D).

A fishing schedule of eight consecutive 156-hour periods was initiated in the Montague District on May 30 through July 24 to harvest enhanced chum salmon. The peak Port Chalmers harvest occurred during the three periods between June 13 and July 10. An unexpected 718,000 pink salmon were harvested in the Port Chalmers chum salmon fishery. Fishing area was restricted to 1 mile offshore of Montague Island to limit pink salmon interception and focus effort on enhanced chum salmon. The Montague District total CPF chum harvest was 239,000 fish; composed of 210,000 Port Chalmers remote release salmon, 25,000 WNH chum salmon and 3,334 wild chum salmon. The harvest represented 44% of PSWAC's forecast return of 468,000. Additionally, 10,000 Port Chalmers chum salmon harvest were found in the Coghill District

purse seine and gill net harvests, (Appendix E20). The Montague District was open for a total of 33 CPF periods composed of the eight 156-hour periods at the beginning of the season and 25 daily 16 hour periods from July 25 to August 20. There was no harvest or effort in the Montague District reported after August 5. The district was kept open to provide additional opportunity. The 2005 Montague District harvest was composed of 238,516 chum salmon, 844,658 pink salmon, 1,995 sockeye salmon, 103 coho salmon, and 210 Chinook salmon, (Appendix D). The pink salmon harvest was composed of 180,342 wild fish and 664,316 hatchery fish (531,000 VFDA, 13,000 CCH, 19,000 WNH, and 101,000 AFK fish). The Montague District closed to salmon fishing for the 2005 season on August 20, (Appendices D and E).

Coghill District

PWSAC's 2005 forecast for pink salmon returning to WNH was 3.7 million fish. Preseason PWSAC assumed a broodstock goal of 176,000 pink salmon and approximately 1.8 million pink salmon would be needed to meet production revenue needs. This equated to 54% of the anticipated return of pink salmon to WNH for PWSAC corporate escapement needs. Based on preseason forecast the CPF harvest of pink salmon returning to WNH would be 1.7 million fish. Management for pink salmon returning to WNH begins after July 20.

In 2005 PWSAC achieved their pink salmon cost recovery goal and WNH enhanced pink salmon returns were significantly greater than PWSAC's preseason projections. The preseason outlook, harvest strategy and results are detailed in the gillnet section of this report. PWSAC harvested approximately 3.6 million pink salmon for cost recovery at WNH. Pink salmon cost recovery harvests began on July 18 and continued through late August. Run entry and harvest rates were early and stronger than anticipated. The Esther Subdistrict opened to purse seine on July 9. The 2005 Coghill District CPF purse seine harvest was composed of 275,783 chum salmon, 3.2 million pink salmon, 10,722 sockeye salmon, 1,558 coho salmon, and 1 Chinook salmon, (Appendix D).

Coghill District wild stock pink salmon escapements were above anticipated levels for the entire season. Wild stock pink escapement of 528,264 fish was above the midpoint of the odd year SEG of 200,000. Wild stock chum escapement of 11,979 fish was above the lower range of the SEG of 8,000 but below the 17,500 SEG mid-point, (Appendix D).

Conclusions and Recommendations

ADF&G continues to improve pink salmon utilization by broadening its ability to use otolith marks for improved forecasting and inseason management. With otolith marked fish, the risks to wild stocks associated with a harvest decision can be evaluated prior to a fishery being announced. Post-fishery analysis can be used to further refine management. Stream escapements, commercial harvests, and migration routes can all be accurately characterized using otolith marks. As a management tool, otolith marks offer a great deal of information about wild and hatchery pink salmon interactions.

During the past 3 years, a series of investigations have consistently found evidence of surprisingly high rates (>15%) of PWSAC enhanced chum salmon straying. ADF&G is concerned about these high rates of straying. An evaluation of remote release fish straying into streams is identified as one of the required evaluations in the Prince William Sound-Copper River Phase III Comprehensive Salmon Plan (1994). The Phase Three Plan delineates a set of studies that were determined to be 'necessary to evaluate the effect of remote release programs

on wild stocks' (RPT 1994). The Phase Three Plan also identifies a 2% or less straying rate as acceptable. In 2003 ADF&G recommended a straying study of enhanced chum salmon in PWS because of the incomplete nature of the initial study, current evidence of straying, and possible negative interactions with wild stocks. ADF&G is further concerned because of the implications of high straying rates on the PWS Management and Salmon Enhancement Allocation Plan (5 AAC 24.370). Catch data documents the drift gillnet harvest of significant numbers of Port Chalmers chum salmon in the Coghill District that are allocated for the purse seine fleet.

The information from the current straying investigations and the previous work by Sharp et al. (1993) and Joyce and Evans (1999) suggest 1) PWS hatchery pink and chum salmon may stray at high rates into streams, and 2) ADF&G has been overestimating the escapement of wild pink and chum salmon in PWS. This study documented chum salmon strays from PWS hatcheries and remote release comprising as much as 100% of the sampled otoliths in some streams (Merizon in press). Chum salmon strays from WNH releases were documented in streams as far as 90 water miles from their release site and strays from Port Chalmers releases were documented ~79 water miles from their release site. The department has assumed that all salmon counted during aerial surveys are wild stocks. Commercial fisheries management of wild pink and chum salmon stocks is based on the assumption that the average productivity of these stocks is known (fixed escapement goal policy). Stream escapements with high proportions of hatchery fish have an unknown productivity. If hatchery stocks do successfully spawn in wild systems, this may result in altered run timing and reduced genetic fitness of existing wild stocks (MacKey et al. 2001). These studies add to the increasing documentation of hatchery strays in PWS escapements (Joyce and Evans 1999; Sharp et al. 1993; Joyce and Evans unpublished data). ADF&G and PWSAC should address issues related to hatchery strays outlined by the Sound Science Review Team in 1999.

PRINCE WILLIAM SOUND AND COPPER RIVER SUBSISTENCE FISHERIES

For more detailed information on these districts see Appendices F1–F7.

Subsistence and personal use harvests have increased over the recent years in both the Prince William Sound Management area and upper Copper River. The largest subsistence fisheries occur on the upper Copper River, upstream of regulatory markers above Haley Creek to the Copper River's confluence with the Slana River. A major change occurred in this fishery for the 2003 season. At the 2003 Prince William Sound Board of Fisheries meeting, the board reversed its 1999 positive Customary and Traditional Use finding for salmon stocks in the Chitina Subdistrict on the upper Copper River. This resulted in the Chitina Subdistrict subsistence fishery reverting back to a personal use fishery. As a result, there are currently only two subsistence fisheries north of Miles Lake: the Glennallen fishery where the gear is primarily fish wheels and dip nets, and the Batzulnetas subsistence fishery that has also been primarily a dip net and fish wheel fishery.

The Prince William Sound Area includes all waters of Alaska between the longitude of Cape Fairfield and the longitude of Cape Suckling. Subsistence fishing permits are not required for marine finfish other than salmon. Herring spawn on kelp may be taken for subsistence purposes as described in 5 AAC 01.610(d)(1)(2). Herring spawn on kelp may be taken from above water from March 15 through June 15. Herring spawn on kelp may be harvested using dive gear only during periods open for the wild herring spawn-on-kelp commercial fishery. Lingcod may be

taken for subsistence purposes only from July 1 through December 31. Herring, rockfish, and groundfish other than lingcod or rockfish may also be harvested for subsistence purposes in the Prince William Sound Area.

Lower Copper River

Boundary lines for the state managed Copper River District subsistence fishing are the same as for the commercial drift gillnet fishery. Subsistence fishing is allowed from May 15 until September 30, until 2 days before the commercial opening of Copper River District, 7 days a week (5 AAC 01.647(j)(2) and (3)). Once the commercial season has commenced, subsistence fishing is allowed only during commercial fishing periods or by emergency order. Within the Copper River District, drift gillnets are the only legal gear and may have a maximum length of 50 fathoms with a maximum mesh size of 6 inches prior to July 15.

A total of 237 state subsistence permits were issued in 2005, of which 13 were not returned. Of the 224 permits that were returned, 103 permit holders did not fish. A harvest of 260 Chinook, 830 sockeye, and 15 coho salmon was reported from the 121 permits that fished, (Appendix F3). There were a total of 46 subsistence permits issued by the US Forest Service for federally managed subsistence harvests on federal land in the PWS/Chugach area. Of the 45 permits that were returned, 22 reported having harvested 109 and 141 sockeye and coho salmon respectively (Appendix F7).

In addition to traditional subsistence harvest, both resident and non-resident commercial permit holders are permitted to retain a portion of their commercial harvest as “home packs” for private, non-commercial use (5 AAC 39.010). Any commercially caught Chinook salmon not sold must be reported on a fish ticket. During the 2005 season 1,897 sockeye, 767 Chinook, 226 coho, 27 chum and 21 pink salmon were retained by commercial users for this purpose, (Appendix F6).

Prince William Sound, Tatitlek and Chenega Area Subsistence Fisheries

In 2005, 13 state subsistence permits were issued for the general Prince William Sound area (Appendices F1 and F2). All permits were returned. Twelve permit holders reported that they did not fish. The one permit holder that fished reported a harvest total of 4 sockeye salmon.

In addition to the PWS general subsistence district, two state subsistence areas were established in 1988 primarily to provide opportunities for customary and traditional uses of salmon by residents of Tatitlek and Chenega villages. The Chenega area includes the entirety of the Southwestern District, (5 AAC 01.648(A)) as well as a portion of the Montague District along the northwestern shore of Green Island from the westernmost tip of the island to the northernmost tip, and the Tatitlek subsistence are is located south of Valdez arm in portions of the Northern and Eastern districts, (5 AAC 01.648(7)(B)). Residents of both Chenega and Tatitlek are eligible for subsistence permits in their respective areas. In 1989, a court ruling qualified all residents of Alaska for a subsistence permit in both of these subsistence areas. Permit holders are allowed to fish in these areas from May 15 until 2 days before the first commercial fishing period. Once the commercial fishing season is established, subsistence fishing may occur only during commercial fishing periods. Two days after the closure of the commercial fishing season, subsistence harvesting is open to 7 days per week fishing until September 30 in the Chenega subsistence area and until October 31 in the Tatitlek subsistence area.

In 2005, 16 permits were issued for the Tatitlek subsistence area of which 3 permits were returned. Two permit holders reported fishing, harvesting a total of 98 sockeye, 286 coho, 200 pink, and 16 chum salmon. In the Chenega area, 13 permits were issued with 8 returned. Two permit holders reported not fishing. The six permit holders who did fish reported harvesting 10 Chinook, 516 sockeye, 84 coho, 124 pink, and 174 chum salmon, (Appendix F4).

UPPER COPPER RIVER

Glennallen Subdistrict Subsistence Fishery

Glennallen Subdistrict is that portion of the main stem Copper River upstream of the McCarthy Bridge to the mouth of the Slana River. This subdistrict is open June 1 through September 30 for continuous fishing. Fish wheels and dip nets are legal gear. During the 1996 Board of Fisheries meeting, the Copper River District Salmon Fishery Management Plan was modified and a range of 60,000–75,000 subsistence salmon was established to accommodate for variability in harvest levels and allow for increased harvests between board cycles. Participants are allowed 1 permit per household and the permit identifies the gear type to be used. Total annual harvest cannot exceed 500 salmon for a household of two or more and 200 salmon for a household of one. No more than 5 Chinook salmon may be taken by each dip net permit holder. Caudal fins must be clipped from all salmon that are harvested. State subsistence permits with completed harvest information are required to be returned to ADF&G by October 31 of each year.

In 2005, a total of 961 state subsistence permits were issued to both fish wheel and dip net users for the Glennallen Subdistrict. Total effort has remained largely constant since 2000 with an average number of 1,116 permits issued and 63,782 salmon harvested per season. There was an average of 991 permits issued from 1995–1999 with an average of 68,885 salmon harvested. Sockeye salmon dominate the harvest comprising approximately 95% of the catch, followed by Chinook and coho salmon, (Appendices F1, F5, A1 and A3).

The 2005 a total of 2,080 Chinook salmon were reported harvested from the Glennallen subdistrict in the state subsistence fishery. This compares to a record harvest of 4,782 set in 2000 and a 10-year average of 2,773 fish. The 2005 reported harvest of 60,966 sockeye salmon was above the previous 10-year harvest average of 59,511. From the permits received in the past, it appears that approximately 25% of the Chinook salmon harvested are landed by 2% of the permit holders, indicating that some individuals effectively target Chinook salmon for subsistence uses.

There were 249 permits issued to participants in the Glennallen federal subsistence fishery. Of the 140 permits returned, there were 265 Chinook salmon reported harvested, as well as 14,446 sockeye and 70 coho salmon (Appendix F7).

Batzulnetas Subsistence Fishery

In 1987, an interim state subsistence fishery was provided by emergency regulation at Batzulnetas to settle the United States District Court case of John vs. Alaska. The Batzulnetas fishery 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. The fishery may begin after June 1. Fishing periods during the month of June are 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 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&Gt by October 31. No permits were issued for this fishery between 1988 and 1992 and 1996. Between 1993 and 2002 the average harvest was 211 sockeye salmon. From 1999 to 2002 only 1 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 1 permit was issue with a reported harvest of 182 salmon. There were no reported harvests in the Batzulnetas subsistence fishery in 2005 (Appendix A1).

Chitina Subdistrict Personal Use Fishery

Chitina Subdistrict is the portion of the main stem Copper River from a marker just above Haley Creek to the downstream edge of the McCarthy-McCarthy Road Bridge. The Alaska Board of Fisheries changed this fishery from a subsistence fishery to a personal use fishery in 2003. Regulations for the Chitina Subdistrict personal use fishery remained similar to the Copper River Subsistence Use Salmon Dip Net Fishery regulations with one exception. The exception is that permit holders are required to possess a sport fishing license and the annual bag limit is 30 salmon for a household of two or more, and 15 salmon for a household of one, only 1 fish may be a Chinook salmon. The Board of Fisheries determined that retaining the bag limit of 1 Chinook salmon provided for a reasonable opportunity to harvest Chinook salmon, but would also maintain Chinook salmon harvests at historic levels. Based upon recent harvests the board determined that 100,000–150,000 sockeye salmon were necessary for personal use needs to be met for the Chitina Subdistrict fishery. This number included contributions of hatchery fish, and after this contribution was subtracted, resulted in an 85,000–130,000 wild sockeye salmon harvest level.

5 AAC 77.591 Copper River Personal Use Dip Net Salmon Fishery Management Plan requires the fishery to be opened between June 1 and June 11 depending on the strength and timing of the sockeye run. In 2005, the dip net fishery was opened by emergency order on June 3 for a 90-hour fishing period ending at 11:59 p.m. June 6. Beginning June 7, the fishery remained open continuously until September 30.

Reported harvest for the Chitina Subdistrict personal use fishery in 2005 was 1,773 Chinook, 106,797 sockeye, and 1,562 coho salmon. Average previous 10-year harvests for these species are 106,151, 3,732, and 2,474 respectively. The sockeye salmon harvest was slightly above average and was still within the 10 year range of 75,747 (2002) to 146,311 (1997) fish. There were 8,230 permits issued for the subdistrict in 2005 (Appendices F1, F5, A1 and A3).

There were a total of 75 federal subsistence permits issued for the Chitina Subdistrict. Of the 51 permits returned, the reported harvest was 10 Chinook and 746 sockeye salmon (Appendix A7).

2005 PRINCE WILLIAM SOUND HERRING FISHERIES

Preseason Outlook and Harvest Strategy

The Prince William Sound (PWS) herring management area encompasses all coastal waters of the Gulf of Alaska between Cape Suckling and Cape Fairfield, extending offshore to 59° N.

latitude. A total of five Pacific herring *Clupea pallasi* fisheries may occur annually. During the spring season, two fisheries target herring for sac roe using either seine or gillnet gear and two 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 five herring fisheries, only the wild spawn-on-kelp and the food/bait fishery are open entry fisheries. Each of these possible fisheries are managed depending on observed population size and age structure.

For management purposes, all herring fisheries target what is treated as a single major stock of herring that spawns from mid April to early May. At the 1994 BOF meeting in Cordova, the minimum spawning biomass threshold was raised from 8,400 to 22,000 tons for the PWS stock. No fishery may be opened if the estimated spawning biomass is below this level. The 22,000-ton threshold is 25% of the potential spawning biomass from an unfished stock. The higher threshold will establish manageable harvest levels while reducing the risk of driving the population to low abundance through overfishing. When the stock size is between 22,000 and 42,500 tons, the PWS Herring Management Plan (5 AAC 27.365) allocates the projected available surplus to the 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 catches with a peak in the early 1990's followed by a precipitous decline and a fishery closure in 8 of the past 10 years, (Appendices G2, 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 fishers' fish ticket reporting requirements with those in other parts of the state. The 1999 BOF further created new regulations that would increase the legal depth of a purse seine used in the fall food/bait fishery and specified herring spawn-on-kelp pound marking requirements. Also in December 1999 the BOF closed Tatitlek Narrows to all commercial herring fishing. This closure was repealed at the 2003 BOF meeting (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 ADF&G Cordova office by March 15 of that year. A further regulation change included restriction of the number of kelp blades annually based on the number of permit holders registered.

The Prince William Sound herring purse seine fishery is comprised of 104 permanent and 2 interim permits. Purse seines can be 150 fathoms long and 1,025 meshes deep. Mesh size is not regulated. There are 24 gillnet permits in Prince William Sound. Gillnets are limited to 100 fathoms in aggregate length and 120 meshes in depth during the spring sac roe fishery (1 March through 30 June). Gillnets may be 150 fathoms in aggregate length for the food and bait fishery. Mesh size is regulated from a minimum of 2 1/8 inches to a maximum of 3 inches. Historical sac roe harvest is presented in Appendices G3 and G4. There are 128 herring pound permits in Prince William Sound. Seine specifications for the closed pound fishery are the same as the sac roe seine fishery. Open and closed pound fisheries can be managed separately or in combination. The size of the pound is limited to 2,000 square feet at the surface and walls of a closed pound cannot exceed 30 feet in depth. The herring allocation for this fishery is divided among the number of permit holders and ADF&G establishes the maximum number of blades of kelp a permit may maintain in the pound based on the number of permits registered to fish by 15 March. The 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 Prince William Sound kelp, occurs after a major spawning event takes place on marketable species of kelp. Wild kelp is taken by divers or by hand picking depending on the type of kelp available for harvest and market demand. The historical wild spawn-on-kelp fishery harvest is given in Appendix G5. Once instituted, pound fisheries, dominated harvests compared to 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 harvest is given in Appendices G8 and G9. Historical fishery harvest values for all Prince William Sound fisheries are presented in Appendix G12.

Season Summary

Based on current herring stock assessment information, all 2006 spring herring fisheries including the purse seine and gillnet sac roe harvests, the spawn-on-kelp in pound fishery, and the wild spawn-on-kelp harvest are closed. The Prince William Sound herring biomass estimate is below the minimum spawning biomass threshold of 22,000 tons. According to 5AAC 27.365(b) Prince William Sound herring management plan, no fishery may be opened if the estimated spawning biomass is below this threshold level.

Age Structured Assessment modeling was used to project the 2006 biomass of Pacific herring. The PWS herring biomass forecast for 2006 is 17,550 tons, (Appendix G). Hydroacoustic, net sampling, and aerial surveys were also conducted to assess herring biomass, disease prevalence, age composition, and growth.

Acoustic surveys were conducted with the ADF&G R/V *Solstice* and the F/V *Kyle David*, contracted by the Prince William Sound Science Center, during the last week of March, 2005. Broad scale sonar surveys were conducted in eastern Prince William Sound up to Valdez, the Naked Island archipelago, western Knight Island bays (including Mummy Bay to Point Helen), northern Prince of Wales Passage, and north and central Montague Island. Detailed acoustics data were collected on major concentrations of herring in the St. Matthews Bay to Red Head area and in Two Moon Bay. Age compositions from acoustics survey samples were 30% age-6 and 24% for both age-3 and 4 herring in Port Gravina, 30% age-6, 27% age-4, and 20% age-3 fish in Two Moon Bay.

Spawning samples were collected in locations throughout Prince William Sound from early April through early May. Samples were collected from Hell's Hole, Snug Corner Cove, Stockdale Harbor, and Herring Bay (Knight Island). Age composition samples were 57% age-6 in Snug Corner Cove, 69% age-6 in Hell's Hole and 56% age-6 at Herring Bay, (Appendix G).

Herring disease assessment has been included as part of the annual age, sex, and size assessment ADF&G completes each spring since 1993. In April, the department examined herring for prevalence of focal skin reddening and the pathogen *Ichthyophonus hoferi*. Prevalence of focal skin reddening associated with viral hemorrhagic septicemia virus (VHSV) was low; however, prevalence of *I. hoferi* was relatively high (25%) and is consistent with the increasing age of the predominant 1999 age class. If this trend continues, mortality of the predominant age class may increase significantly. The department will continue to monitor these indices of disease this spring.

Aerial surveys documented a peak aerial biomass estimate of 4,770 tons of herring. An estimated 2,350 tons of herring were seen in Port Gravina and 1,690 tons in Port Fidalgo area. A total of 33 miles of spawn were observed in spring 2005. Fourteen miles of spawn was documented in Port Gravina, 8 miles in Port Fidalgo, and 1 mile at Montague Island. Additional spawn was documented at Naked Island, Tatitlek Narrows, Simpson and Sheep Bays, and around Knight Island, (Appendix G1).

2005–2006 Herring Season Outlook

Given the PWS herring spawning population, current size and age structure, a commercial harvest is not anticipated in 2006. Consecutive years of low recruitment will further delay the recovery of the herring population to a size that is capable of supporting a sustainable commercial harvest. ADF&G will continue to monitor the PWS herring biomass to assess growth and recruitment. An ongoing disease study will continue to examine the incidence of VHSV in the PWS herring population.

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TABLES AND FIGURES

Table 1.–Prince William Sound Management Area commercial salmon harvest by gear type and district, 2005.

District	Permits	Chinook	Sockeye	Coho	Pink	Chum	Total
Eastern	99	6	6,756	135,775	20,516,356	32,423	20,691,316
Northern	74	5	3,712	776	10,175,784	14,037	10,194,314
Coghill	58	1	10,722	1,558	3,246,778	275,783	3,534,842
Southwestern	56	2	39,455	9,211	11,376,513	3,759	11,428,940
Montague	50	210	1,995	103	844,658	238,516	1,085,482
Southeastern	18	0	762	153	770,570	4,329	775,814
Unakwik	12	0	80	0	81,858	0	81,938
Purse Seine	103	224	63,482	147,576	47,012,517	568,847	47,792,646
Bering River	137	277	77,464	43,030	9,327	14	130,112
Copper River	499	34,624	1,331,664	263,465	34,987	3,515	1,668,255
Coghill	205	115	94,748	52,416	72,110	880,967	1,100,356
Eshamy	137	2	79,227	1,636	110,499	3,493	194,857
Unakwik	23	6	23,027	27	1,540	858	25,458
Drift Gillnet		35,024	1,606,130	360,574	228,463	888,847	3,119,038
Eshamy	27	0	109,532	882	126,135	3,452	240,001
Set Gillnet		0	109,532	882	126,135	3,452	240,001
Solomon Gulch	1	0	0	27,417	3,534,939	0	3,562,356
Cannery Creek	1	0	0	0	2,436,604	0	2,436,604
Wally Noerenberg	1	0	0	0	3,619,170	535,773	4,154,943
Main Bay	1	0	207,605	0	40,265	10	247,880
Armin F. Koernig	1	0	0	0	2,898,305	0	2,898,305
Hatchery [a]		0	207,605	27,417	12,529,283	535,783	13,300,088
Educational Permit	1	92	42				134
Personal Use	237	767	1,897	226	21	27	2,938
Donated Fish	69	11	83	0	0	0	94
Misc.	307	870	2,022	226	21	27	3,166
Prince William Sound Total		36,118	1,988,771	536,675	59,896,419	1,996,956	64,454,939

[a] Hatchery sales for hatchery operating costs.

Table 2.–Total commercial salmon harvest by species from all gear types, Prince William Sound Area, 1971–2005.

	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
1995–2004 Average	51,131	2,312,348	495,531	30,954,054	2,987,478	36,800,543
2005 [e]	36,118	1,988,771	536,675	59,896,419	1,996,956	64,446,609

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

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

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

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

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

Table 3.–Mean price and estimated exvessel value of the total commercial salmon harvest by gear type, Prince William Sound, 2005.

PURSE SEINE			Average		
Species	**Number**	**Pounds [a]**	**Weight**	**Price [a]**	**Value**
Chinook	224	3,439	15.35	$0.52	$1,787
Sockeye	63,482	386,306	6.09	$0.54	$207,022
Coho	147,576	1,065,470	7.22	$0.10	$103,312
Pink	47,012,517	163,717,462	3.48	$0.08	$13,104,242
Chum	568,847	4,355,654	7.66	$0.18	$773,620
	47,792,646	169,528,331			$14,189,982
DRIFT GILLNET			**Average**		
Species	**Number**	**Pounds**	**Weight**	**Price**	**Value**
Chinook	35,024	760,240	21.71	$4.70	$3,575,253
Sockeye	1,606,130	9,372,691	5.84	$1.69	$15,849,204
Coho	360,574	2,895,362	8.03	$0.82	$2,374,703
Pink	228,463	879,326	3.85	$0.10	$84,308
Chum	888,847	7,248,268	8.15	$0.27	$1,965,383
	3,119,038	21,155,886			$23,848,851
SET GILLNET [b]			**Average**		
Species	**Number**	**Pounds**	**Weight**	**Price**	**Value**
Chinook	0	0			
Sockeye	109,532	660,746	6.03	$0.92	$608,528
Coho	882	6,879	7.80	$0.69	$4,737
Pink	126,135	485,449	3.85	$0.05	$23,542
Chum	3,452	24,863	7.20	$0.28	$6,880
	240,001	1,177,937			$643,687
HATCHERY SALES			**Average**		
Species	**Number**	**Pounds**	**Weight**	**Price**	**Value**
Chinook	0	0			
Sockeye	207,605	1,307,258	6.30	$1.82	$2,383,400
Coho	0	0			
Pink	12,529,283	41,321,458	3.30	$0.18	$7,288,894
Chum	535,783	4,306,483	8.04	$0.40	$1,704,693
	13,272,671	46,935,199			$11,376,987
OTHER GEAR [c]			**Average**		
Species	**Number**	**Pounds**	**Weight**	**Price**	**Value**
Chinook	11	155	14.09	$0.52	$81
Sockeye	83	535	6.45	$0.54	$289
Coho	0	0			
Pink	0	0			
Chum	0	0			
	94	690			$370

Gear Type	**Value of Catch**	**No. of Permits**	**Average Earnings**
Purse Seine	$14,189,982	103	$137,767
Drift Gillnet	$23,848,851	508	$46,947
Set Gillnet	$643,687	27	$23,840
Subtotal-Value of CPF Catch	$38,682,520		
Hatchery	$11,376,987		
Other Gear	$370		
GRAND TOTAL	**$50,059,876**		

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

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

[c] Includes the sales of confiscated fish.

Table 4.–Average price per pound paid to permit holders for salmon, Prince William Sound, 1995–2005.

Species [a]	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Chinook Salmon											
Copper/Bering Districts	$2.19	$1.96	$2.00	$2.07	$3.44	$4.02	$3.30	$3.34	$3.48	$4.69	$4.70
Prince William Sound	$0.91	$0.71	$1.00	$0.94	$1.28	$1.59	$0.92	$0.92	$0.48	$0.82	$0.94
Sockeye Salmon											
Copper River	$1.67	$1.38	$0.88	$1.49	$1.84	$1.72	$1.35	$1.29	$1.16	$1.81	$1.79
Bering River	$1.44	$1.21	$0.88	$1.35	$1.81	$1.72	$1.35	$1.29	$1.16	$1.81	$1.79
Coghill/Unakwik Districts	$0.75	$0.82	$0.80	$1.24	$1.60	$1.14	$0.77	$0.64	$0.80	$0.85	$1.03
Eshamy	$1.06	$0.85	$0.80	$1.11	$0.89	$1.14	$0.77	$1.14	$0.80	$0.85	$1.03
General Purse Seine	$0.94	$0.73	$0.85	$1.06	$1.18	$0.90	$0.74	$0.56	$0.71	$0.55	$0.54
Coho Salmon											
Copper/Bering Districts	$0.52	$0.53	$0.30	$0.46	$0.58	$0.57	$0.32	$0.35	$0.48	$0.69	$0.83
Prince William Sound	$0.42	$0.36	$0.30	$0.33	$0.33	$0.42	$0.26	$0.26	$0.42	$0.39	$0.75
Pink Salmon	$0.18	$0.07	$0.12	$0.13	$0.15	$0.15	$0.13	$0.09	$0.08	$0.10	$0.08
Chum Salmon	$0.45	$0.13	$0.27	$0.22	$0.21	$0.28	$0.37	$0.15	$0.17	$0.20	$0.18

[a] The 2005 prices are preliminary, based on processor reports, fish tickets, and other sources prior to 1995. The 1995–2002 prices are based on processor reports. A weighted average is generally used. Prices are an estimate and generally do not reflect postseason adjustments. The 2003 prices are based on Commercial Operator Annual Reports, and do not accurately report prices for individual districts.

Table 5.–Estimated exvessel value of the total commercial salmon harvest by gear type, Prince William Sound, 1994–2005.

PURSE SEINE												
Species	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**
Chinook	1,104	1,169	570	3,422	4,386	7,427	2,706	5,435	1,353	924	1,270	1,787
Sockeye	432,156	205,178	111,337	151,532	127,854	141,923	195,169	539,388	58,142	847,966	46,573	207,022
Coho	208,661	327,260	314,773	125,946	124,325	329,317	965,404	398,532	69,207	226,619	121,688	103,312
Pink	12,537,403	6,736,581	4,445,231	6,795,323	8,565,392	9,456,108	13,728,606	9,584,465	2,425,505	10,716,380	4,293,551	13,104,242
Chum	164,181	152,047	386,967	1,742,759	950,912	3,128,816	3,964,546	2,863,466	2,423,525	1,717,083	1,228,965	773,620
	$13,343,505	$7,422,236	$5,258,878	$8,818,982	$9,772,869	$13,063,591	$18,856,431	$13,391,287	$4,977,731	$13,508,972	$5,692,047	14,189,982
DRIFT GILLNET												
Species												
Chinook	1,534,059	3,573,848	2,259,958	2,367,538	3,341,148	5,510,840	2,698,417	2,791,619	2,691,215	3,810,019	4,050,947	3,575,253
Sockeye	9,209,486	12,864,113	23,037,225	19,796,170	13,223,761	20,048,000	13,554,212	14,158,076	14,964,894	13,791,971	13,436,808	15,849,204
Coho	7,129,685	4,207,678	1,450,095	57,798	379,366	733,022	2,486,184	790,544	2,027,738	1,762,604	3,561,659	2,374,703
Pink	127,997	165,462	12,028	83,398	249,293	43,612	177,559	144,896	23,889	27,904	12,134	84,308
Chum	2,393,837	1,709,831	1,229,842	1,567,526	1,035,808	1,529,765	3,550,614	3,371,206	2,206,854	821,818	976,553	1,965,383
	$20,395,065	$22,520,932	$27,989,149	$23,872,430	$18,229,376	$27,865,239	$22,466,986	$21,256,342	$21,914,590	$20,214,316	$22,038,101	23,848,851
SET GILLNET												
Species												
Chinook	121	182	148	159	25	592	2,902	787	765	0	189	0
Sockeye	638,164	181,653	697,572	1,055,286	177,723	407,497	912,603	844,123	1,701,077	1,070,058	454,709	608,528
Coho	3,513	2,003	612	340	336	1,877	3,346	1,686	388	1,611	1,635	4,737
Pink	117,298	18,892	2,373	20,477	16,659	8,721	53,160	22,048	10,848	6,324	7,439	23,542
Chum	18,675	21,018	11,312	17,242	337	13,630	25,641	20,045	27,638	6,742	17,261	6,880
	$777,770	$223,747	$712,017	$1,093,504	$195,079	$432,317	$997,652	$888,689	$1,740,716	$1,084,735	$481,233	643,687
HATCHERY SALES												
Species												
Chinook	11,526	11,692	91	1,252	22,621	0	0	0	15	0	0	0
Sockeye	358,077	380,378	444,198	1,381,948	953,857	143,855	478	174,418	418,114	1,769,179	997,020	2,383,400
Coho	82,571	28,759	100,413	7,090	63,980	0	2	9,459	1	0	35,733	0
Pink	7,222,015	4,157,847	4,076,578	5,814,214	6,283,525	6,312,337	6,358,529	6,430,468	4,989,921	6,068,403	5,718,678	7,288,894
Chum	1,598,524	895,509	1,430,814	1,758,276	1,261,354	2,380,321	4,007,449	3,070,274	3,794,069	1,643,243	779,268	1,704,693
	$9,272,731	$5,474,186	$6,052,094	$8,965,780	$8,585,338	$8,836,513	$10,366,458	$9,684,619	$9,202,119	$9,480,825	$7,530,699	11,376,987

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Table 5.–Page 2 of 2.

PURSE SEINE												
Species	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**
OTHER GEAR												
Species												
Chinook	143	25	76	0	5,004	448	1,266	0	200	26	493	81
Sockeye	3,686	27,880	2,582	2,085	2,085	68,525	5,944	509	1,324	195	614	289
Coho	89	479	0	0	10	106		468	0	0	0	0
Pink	28,287	88,152	0	1	271	81,476		382	0	2812	0	0
Chum	35,139	4,234	1	190	13	358	600	4,206	5	0	0	0
	$67,344	$120,771	$2,659	$2,276	$7,383	$150,913	$7,811	$5,564	$1,529	$3,033	$1,107	370
AVERAGE EARNINGS	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**
Purse Seine	$78,032	$39,691	$58,432	$77,359	$65,590	$93,983	$143,942	$88,101	$41,481	$127,443	$54,210	137,767
Drift Gillnet	$39,990	$43,477	$54,989	$45,909	$34,922	$53,280	$41,994	$39,731	$41,039	$39,327	$42,219	46,807
Set Gillnet	$29,914	$8,606	$26,371	$42,058	$12,192	$20,587	$35,630	$27,772	$62,168	$38,741	$17,823	23,840
NUMBER OF PERMITS FISHED												
Purse Seine	171	187	90	114	149	139	131	152	120	106	105	103
Drift Gillnet	510	518	509	520	522	523	535	535	534	514	522	508
Set Gillnet	26	26	27	26	16	21	28	32	28	28	27	27

Table 6.–Preseason harvest or total run projections for the 2005 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	39	30 - 48	1,351	717 - 1,985	294	42 - 546				
Bering River [d]	commercial harvest			13	3 - 23	72	0 - 189				
Coghill [e]	commercial harvest			216	66 - 607						
Eshamy [c]	commercial harvest			47	0 - 98						
Unakwik [f]	commercial harvest			6	4 - 8						
General PWS Districts	commercial harvest							4,290	540 - 8,040	469	336 - 602
Total Wild Stock		39		1,632	720 - 2,078	366	42 - 578	4,290	540 - 8,040	469	336 - 602
Solomon Gulch [g]	total return							1,159	7,341 - 17,129		
Armin F. Koernig [g]	total return							7,612	4,653 - 10,570	18	6 - 31
Wally Noerenberg [g, h]	total return					54	36 - 73	3,653	2,649 - 8,138	1,956	1,028 - 2,992
Cannery Creek [g]	total return							4,285	3,062 - 5,509		
Main Bay [g, i]	total return			1,128	964 - 1,292						
Gulkana [j]	commercial harvest			153	69 - 236						
Total Hatchery				1,281	966 - 1,313	54	36 - 73	16,709	9,588 - 22,399	1,974	1,028 - 2,992
Total Hatchery and Wild		39		2,913		420		20,999		2,443	

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

[b] The Alaska Department of Fish and Game provided forecasts of commercial harvest for all wild stocks and Gulkana Hatchery sockeye salmon. All forecasts provided by the nonprofit aquaculture associations were for total runs. The harvest projections do not include salmon harvest by hatcheries for cost recovery.

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

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

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

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

[g] Harvest projections calculated by hatchery operator - not by ADF&G.

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

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

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

Table 7.–A listing of finfish processors, their location of operation, and type of product processed, Prince Willam Sound Area, 2005.

Executive Names, Address Location of Operations	Processor Code	Type of Product	Executive Names, Address Location of Operations	Processor Code	Type of Product
Alaska Seafood P.O. Box 878973 Wasilla, AK 99687 Dave Martinsen	F5805	Salmon	Copper River Caviar and Fish Co. PO Box 756 Cordova, AK 99574 John Renner	F5150	Salmon
Alaskan Marine Resources, LLC P.O. Box 1976 Cordova, AK 99574 Charles Smith	F4755	Salmon	Deep Creek Custom Box 229 Wasilla, AK 99639 Jeff Beoger	F1051 F3768	Salmon
Bear and Wolf Salmon Co. 4209 21st Ave W. Seattle, WA 98199 Peter Kuttel	F4287	Salmon Roe	Wild Salmon PO Box 1389 Cordova, AK 99574 Dennis Zadra	F6049	Salmon
Bowen, Mike 8731 Kiva Way Wasilla, AK Bowen, Mike	&5662	Salmon	Norquest Seafoods P.O. Box 260 Cordova, AK 99574 Bill Gilbert	F1484 F1486	Salmon Roe
Copper River Seafoods P.O. Box 158 Cordova, AK 99574 William A. Bailey III	F2977	Salmon Roe	North Pacific Processors, Inc. P.O. Box 1040 Cordova, Alaska 99574 Ken Roemhildt	F0232	Salmon
Edward W. Fee 9321 Arlene St. #10 Anchorage, AK 99502 Edward W. Fee	F5690	Salmon Roe	Ocean Beauty Seafoods P.O. Box 548 Cordova, AK 99574 Hap Symmonds / William Fejes	F1930 F5202	Salmon Roe
FAVCO Box 190968 Anchorage, AK 99519 Bill Buck	F0398	Salmon	Peter Pan Seafoods, Inc. P.O. Box 1027 Valdez, Alaska 99686 Mark Hansen	F1041	Salmon Roe
Gerald D. Thorne P.O. Box 1192 Cordova, AK 99574 Gerald D. Thorne	F5673 F4767	Salmon	Prime Select Seafoods, Inc. P.O. Box 846 Cordova, Alaska 99574 Susan Laird	F1816	Salmon
Great Pacific Seafoods PO Box 710 Whittier, AK 99693 Glen Brackett/ Judi Murdock	F1267 F2857	Salmon	Prince William Sound Aquaculture P.O. Box 1110 Cordova, Alaska 99574 David Reggiani	F1901 F1903 F3468	Salmon Salmon roe
Gulkana Seafoods P.O. Box 1230 Cordova. AK 99574 Bill Webber	F5617	Salmon	White Dawn PO Box 1566 Cordova, AK 99574 Thea Thomas	F6074	Salmon

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Table 7.–Page 2 of 2.

Executive Names, Address Location of Operations	Processor Code	Type of Product	Executive Names, Address Location of Operations	Processor Code	Type of Product
Icicle Seafoods Inc. P.O. Box 8 Seward, AK 99664 Tim Schmidt	F0135	Salmon	Snug Harbor Box 701 Kenai, AK 99611 Brenda Stoops	F3894	Salmon
Inlet Fish Producers, Inc. P.O. Box 114 Kenai, AK 99611 Robert Utrup	F4682	Salmon	Steven R. Smith P.O. Box 1724 Cordova, AK 99574 Steven R. Smith	F5526	Salmon Roe
Joseph G. Linville P.O. Box 1753 Seward, AK 99664 Gus Linvile	F5769	Salmon	Valdez Fisheries Development P.O. Box 125 Valdez, Alaska 99686 Mike Wells	F1355	Salmon Salmon roe
Lynn Potter P.O. Box 1472 Cordova, AK 99574 Lynn Potter	F3346 F4225	Salmon Roe	Waterkist Corporation P.O. Box 727 Valdez, AK 99686 Tom Waterer	F2003	Salmon Roe
Icicle Seafoods Inc. P.O. Box 8 Seward, Alaska 99664 Tim Schmidt	F0135	Salmon Roe			

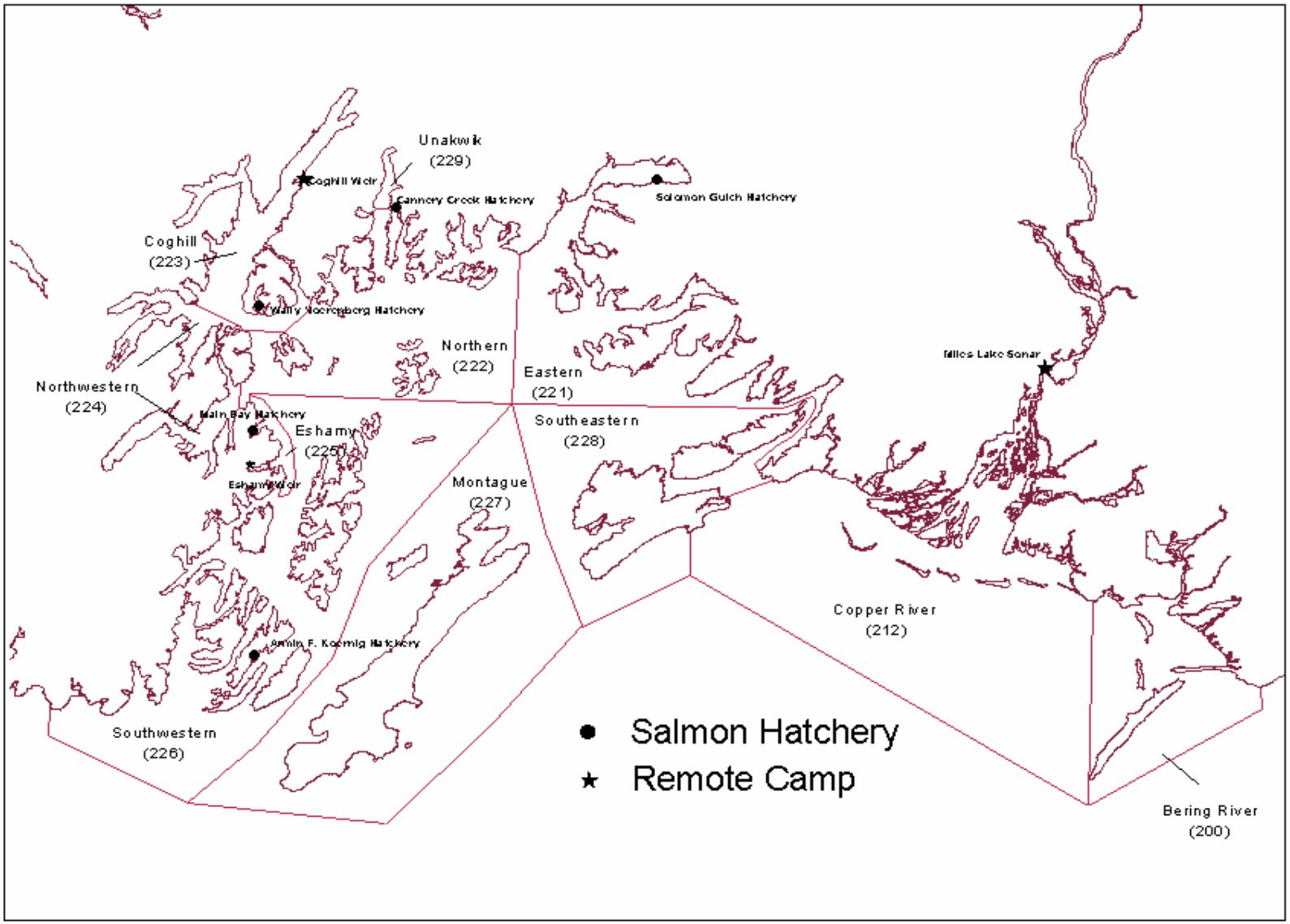


Figure 1.–Prince William Sound Management Area showing commercial fishing districts, salmon hatcheries, weir locations, and Miles Lake sonar camp.

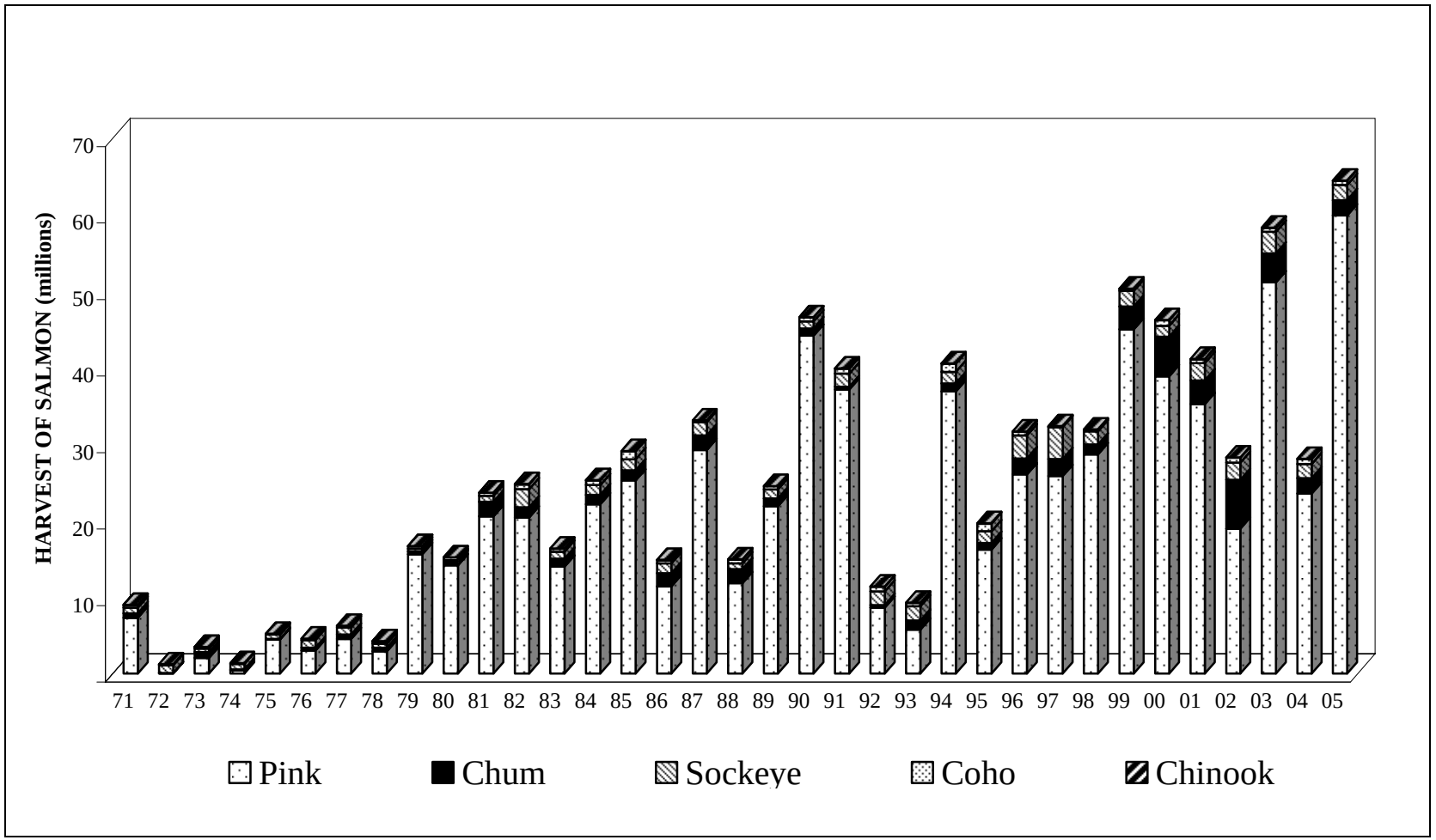


Figure 2.–Commercial salmon harvest by species for all gear types combined, Prince William Sound, 1971–2005.

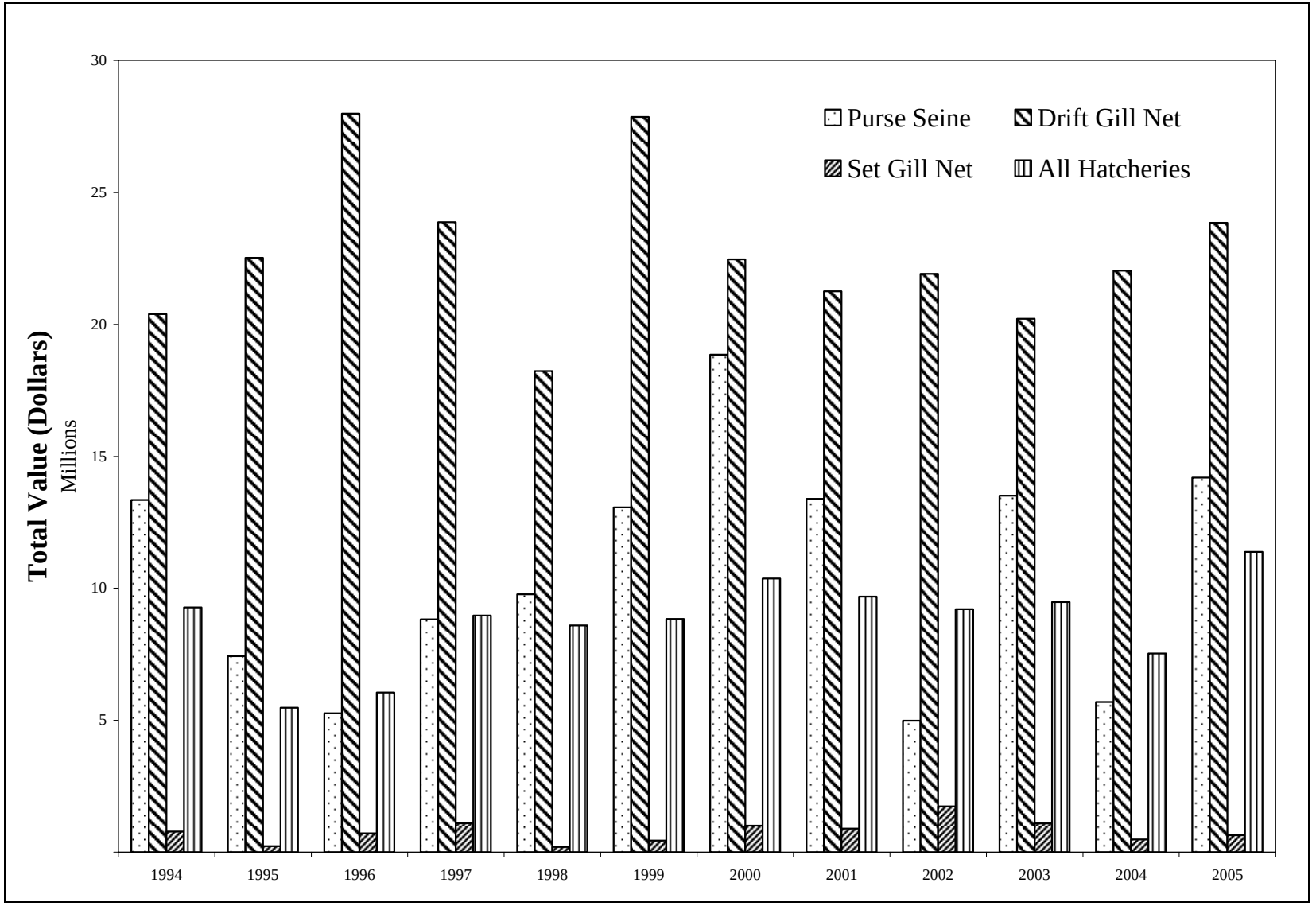


Figure 3.–Exvessel value of the commercial salmon harvest by gear type, 1994–2005.

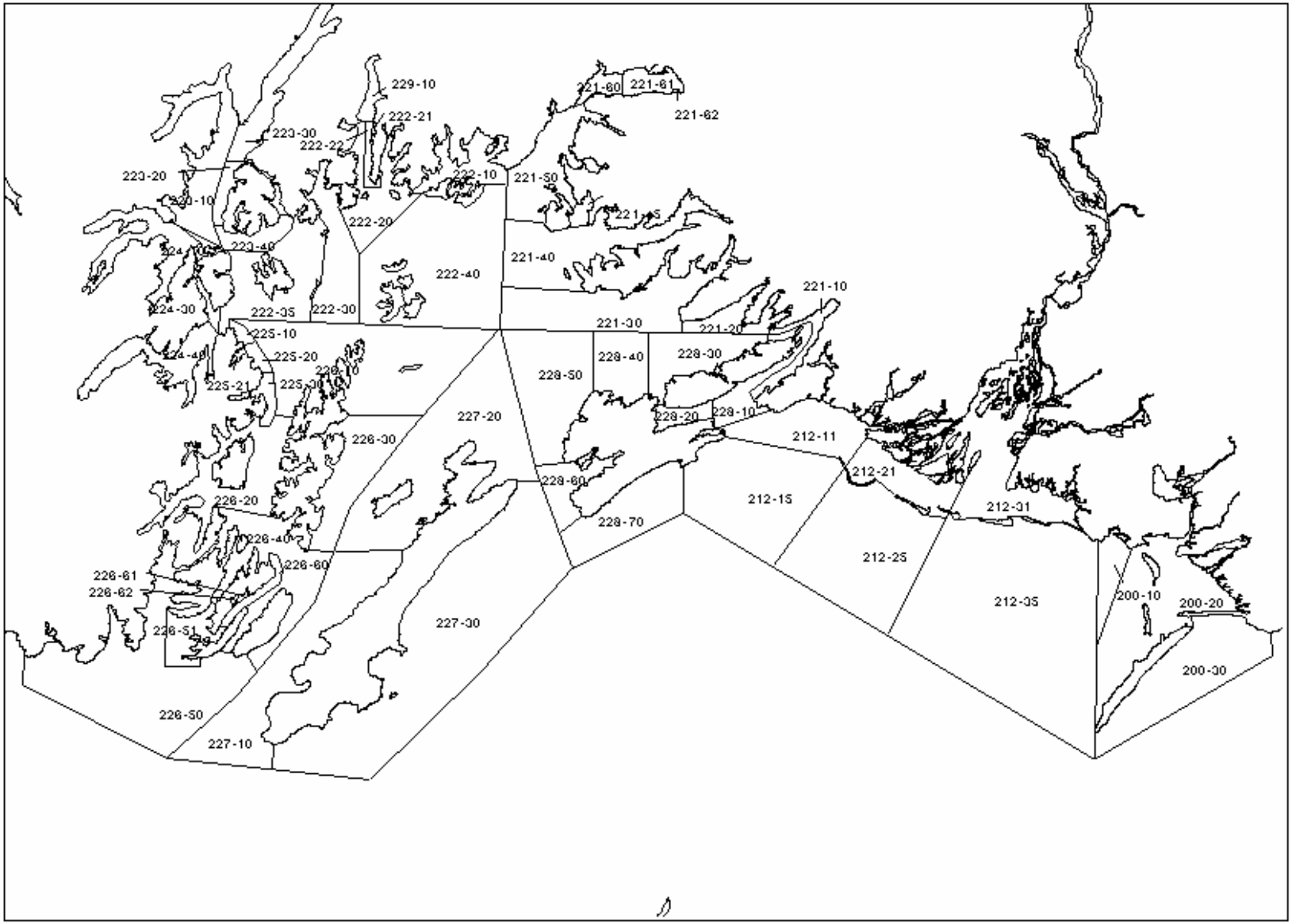


Figure 4.–Prince William Sound Area showing commercial fishing districts and statistical reporting areas, 2005.

APPENDIX A. COPPER RIVER AND BERING RIVER DISTRICTS

Appendix A1.–Copper River sockeye by end user, or destination, 1996–2005.

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2005 percentages
Commercial harvest[a]	2,356,365	2,955,431	1,341,692	1,682,559	880,334	1,323,577	1,248,503	1,188,052	1,048,004	1,331,664	59.12%
Commercial, homepack[a]	0	0	1,435	1,333	651	2,113	1,138	4,077	525	1,785	0.08%
Commercial, donated[a]	0	0	0	0	434	0	128	35	74	83	0.00%
Educational drift gillnet permit[a]	0	0	0	0	0	0	151	0	0	42	0.00%
Subsistence (Cordova, drift gillnet)[b]	969	1,001	850	1,330	4,360	3,072	3,067	1,607	1,822	728	0.03%
Federal Subsistence (PWS/Chugach Nat'l Forest, dip net, spear, rod and reel)[b]										109	0.00%
Subsistence (Batzulnetas, dip net, fish wheel or spear)[b]	0	427	582	55	0	62	208	164	182	0	0.00%
Subsistence (Glennallen Subdistrict, dip net, fish wheel or spear)[b]	48,747	78,188	61,268	72,901	58,241	79,117	47,892	47,719	52,130	60,966	2.71%
Federal Subsistence (Glennallen subdistrict, dip net, fish wheel or spear)[b]							7,950	13,616	17,609	14,446	0.64%
Personal Use (Chitina Subdistrict, dip net)[b]	92,590	146,311	134,299	137,945	103,329	121,304	75,747	80,134	93,182	106,797	4.74%
Federal Subsistence (Chitna subdistrict, dip net)[b]							575	717	1,550	746	0.03%
Upriver sport harvest	11,851	12,293	11,184	11,101	12,361	8,169	7,761	7,108	6,464	8,135	0.36%
Delta sport harvest	2,235	972	2,015	2,855	2,189	298	798	631	952	656	0.03%
Upriver spawning escapement[c]	649,838	802,389	537,533	486,059	300,667	512,490	586,746	490,173	454,587	589,485	26.17%
Delta spawning escapement[d]	130,940	114,140	175,000	201,950	196,090	142,130	151,470	146,300	138,770	116,812	5.19%
Hatchery broodstock[e]	20,555	18,919	19,255	17,890	9,699	16,094	16,608	15,250	6,163	19,860	0.88%
Hatchery on site excess fish[e]	56,737	57,392	72,927	92,910	65,153	56,555	43,430	3,283	0	0	0.00%
Total sockeye salmon run size	3,370,827	4,187,463	2,358,040	2,708,888	1,633,508	2,264,981	2,192,172	1,998,866	1,822,014	2,252,314	100%

[a] Numbers are from fish ticket data.

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

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

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

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

Appendix A2.–Total sockeye salmon runs to the Copper River by end user or destination, 1996–2005.

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2005 percentages
Upriver wild contribution[a]	2,399,094	3,354,867	1,233,136	1,632,138	872,187	1,632,816	1,423,909	1,269,749	1,360,702	1,674,095	74.3%
Delta wild contribution[b]	481,906	416,633	456,404	618,269	512,992	380,101	392,805	411,798	369,672	311,646	13.8%
Gulkana contributions[c]	489,827	415,962	668,500	458,481	248,329	252,064	375,458	317,319	91,640	266,573	11.8%
Total sockeye salmon run size	3,370,827	4,187,463	2,358,040	2,708,888	1,633,508	2,264,981	2,192,172	1,998,866	1,822,014	2,252,314	100.0%

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

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

[c] Gulkana contribution is based on CWT recovery from 1995-2003, 2004 and 2005 contribution is based on strontium marks of commercial and subsistence samples and historical average of sport CWT percentage.

Appendix A3.–Copper River Chinook by end user, or destination, 1996–2005.

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2005 percentages
Commercial harvest[a]	55,646	51,273	68,827	62,337	31,259	39,524	38,734	47,721	38,191	34,624	52.50%
Commercial, homepack[a]	2,169	1,243	1,411	1,115	740	935	773	1,073	539	760	1.15%
Commercial, donated[a]	0	0	0	0	6	0	4	3	5	11	0.02%
Educational drift gillnet permit[a]	0	0	0	0	0	0	25	0	0	92	0.14%
Subsistence (Cordova, drift gillnet)[b]	276	200	295	353	689	826	549	710	1,106	219	0.33%
Federal Subsistence (PWS/Chugach Nat'l Forest, dip net, spear, rod and reel)[b]										0	0.00%
Subsistence (Batzulnetas, fish wheel, dip net or spear)[b]	0	0	0	0	0	0	0	0	0	0	0.00%
Subsistence (Glennallen Subdistrict, dip net, fish wheel or spear)[b]	1,388	2,439	1,751	3,058	4,782	3,373	3,424	2,585	3,166	2,229	3.38%
Federal Subsistence (Glennallen subdistrict, dip net, fish wheel or spear)[b]							564	554	634	265	0.40%
Personal Use (Chitina Subdistrict, dip net)[b]	3,493	5,359	6,583	5,758	3,037	2,803	1,745	1,870	2,108	2,043	3.10%
Federal Subsistence (Chitna subdistrict, dip net)[b]							33	18	9	10	0.02%
Sport harvest[c]	9,116	8,346	8,245	6,742	5,531	4,904	5,098	5,717	3,435	4,092	6.20%
Upriver spawning escapement[d]	9,922	14,338	11,386	16,157	24,490	26,534	21,574	22,802	23,911	21,604	32.76%
Total Chinook salmon run size	82,010	83,198	98,498	95,520	70,534	78,899	72,523	83,053	73,104	65,949	100.00%

[a] Numbers are from fish ticket data.

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

[c] Upriver sport harvest only: there is no delta Chinook salmon sport harvest.

[d] Upriver spawning escapement is calculated by taking the inriver abundance estimate and from that subtracting the subsistence, personal use and sport harvests. Prior to 1999 inriver abundance was calculated using aerial and foot surveys, from 1999- 2005 inriver estimates were calculated using mark-recapture studies. Since 2003 the Alaska Board of Fish has directed that the SEG be 24,000 or more Chinook salmon. Prior to that from 1999-2002 the board directed that the spawning escapement range be 28,000- 55,000 Chinook salmon. Prior to this, at the 1996 board meeting ADF&G was directed to reduce the harvest potential of Chinook salmon by 5%.

Appendix A4.–Copper River coho by end user, or destination, 1996–2005.

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2005 percentages
Commercial harvest[a]	193,042	18,656	108,232	153,061	304,944	251,473	504,223	363,489	467,859	263,465	55.09%
Commercial, homepack[a]	0	0	14	36	0	24	187	0	2	119	0.02%
Commercial, donated[a]	0	0	0	0	0	5,141	0	0	0	0	0.00%
Educational drift gillnet permit[a]	0	0	0	0	0	0	0	na	na	0	0.00%
Subsistence (Cordova, drift gillnet)[b]	47	1,777	680	682	44	70	28	36	46	15	0.00%
Federal Subsistence (PWS/Chugach Nat'l Forest, dip net, spear, rod and reel)[b]										141	0.03%
Subsistence (Batzulnetas, fish wheel, dip net or spear)[b]	0	0	0	0	0	0	na	na	0	0	0.00%
Subsistence (Glennallen Subdistrict, dip net, fish wheel or spear)[b]	522	177	507	292	511	1,101	524	487	76	154	0.03%
Federal Subsistence (Glennallen subdistrict, dip net, fish wheel or spear)[b]							81	152	152	70	0.01%
Personal Use (Chitina Subdistrict, dip net)[b]	3,295	157	2,100	2,117	3,540	2,385	1,712	2,409	2,304	1,869	0.39%
Federal Subsistence (Chitna subdistrict, dip net)[b]							0	70	18	0	0.00%
Delta sport harvest[c]	6,172	2,729	3,941	6,954	4,155	12,052	6,525	14,166	14,512	10,168	2.13%
Upriver sport harvest[d]	192	96	289	24	324	92	384	277	131	72	0.02%
Upriver spawning escapement[e]	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	
Delta spawning escapement[f]	94,220	115,120	79,700	92,450	86,260	82,192	179,630	144,360	199,960	202,164	42.27%
Total coho salmon run size	297,490	138,712	195,463	255,616	399,778	354,530	693,294	525,446	685,060	478,237	100.00%

[a] Numbers are from fish ticket data.

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

[c] Copper River sport harvest below Baird Canyon. Estimates based on ADF&G Sportfish creel survey.

[d] Upriver sport harvest only.

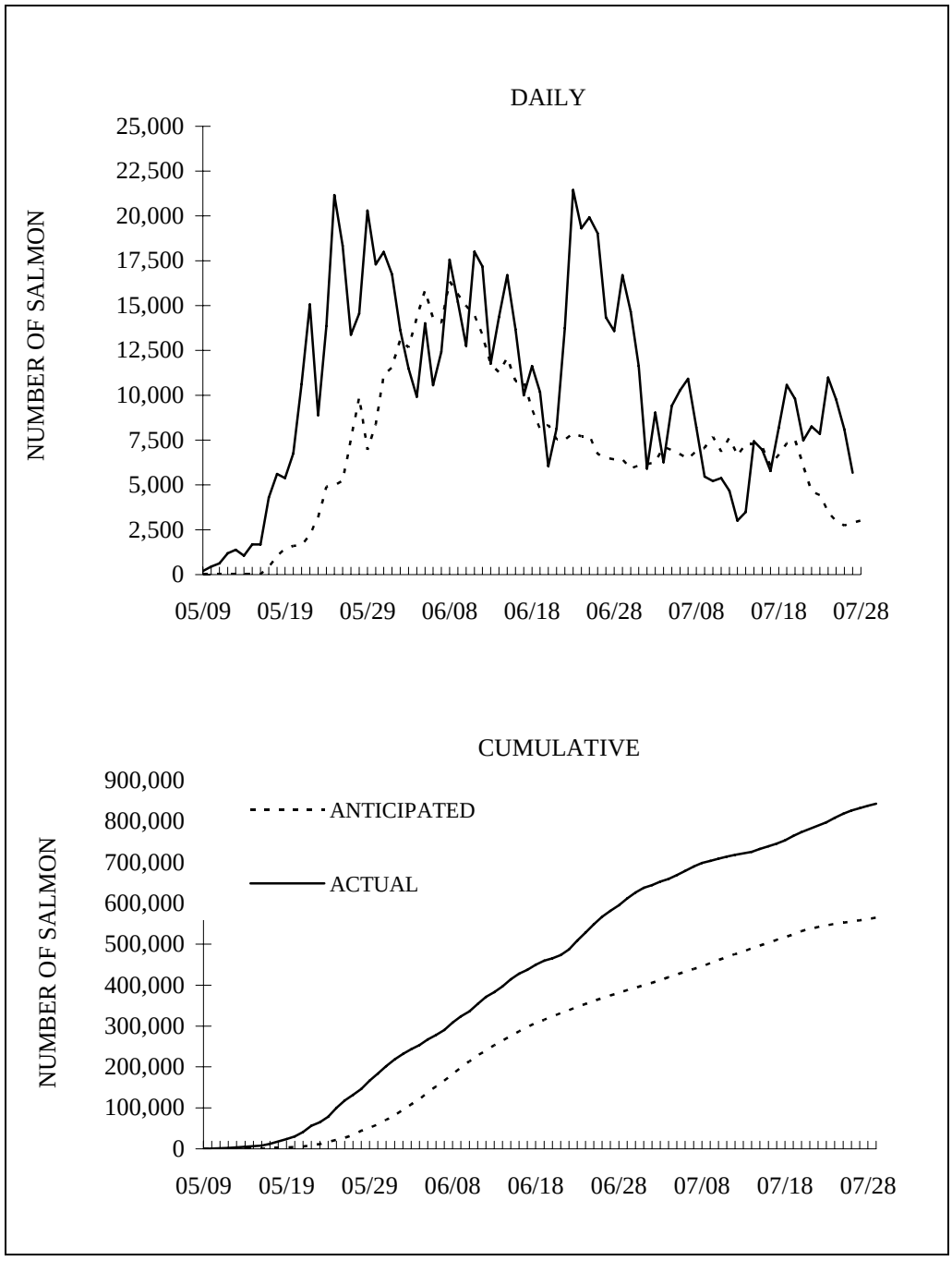
[e] Numbers of upriver coho salmon spawners is unavailable at this time.

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

Appendix A5.–Gulkana hatchery fry releases, 1975–2005.

Release Year	Gulkana (I&II) (Paxson Lake)	Summit Lake	Crosswind Lake	Total
1974	79,691			79,691
1975	785,110			785,110
1976	627,080			627,080
1977	514,922			514,922
1978	477,219			477,219
1979	940,974			940,974
1980	1,105,397			1,105,397
1981	3,368,642	1,340,660		4,709,302
1982	5,985,270	1,860,491		7,845,761
1983	5,470,056	2,047,947		7,518,003
1984	6,162,450	4,312,628		10,475,078
1985	9,261,785	4,741,759		14,003,544
1986	8,586,509	8,451,782	1,287,042	18,325,333
1987	9,905,907	14,999,085		24,904,992
1988	6,204,332	12,491,926	2,487,396	21,183,654
1989	10,105,238	12,026,642	3,130,373	25,262,253
1990	13,288,695	12,004,491	4,906,005	30,199,191
1991	10,522,819	6,455,011	5,469,759	22,447,589
1992	10,553,621	7,048,536	5,420,351	23,022,508
1993	5,295,017	2,651,542	4,495,966	12,442,525
1994	9,405,449	7,637,009	9,144,382	26,186,840
1995	10,317,116	7,418,311	9,973,600	27,709,027
1996	13,900,000	8,400,148	9,732,911	28,850,917
1997	11,589,845	10,162,655	10,512,299	32,264,799
1998	12,286,366	8,987,213	10,516,107	31,789,686
1999	10,198,541	9,191,217	9,984,392	29,374,150
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
10-year averages	10,547,447	5,951,497	8,326,058	24,506,788

Appendix A6.–Anticipated versus actual daily and cumulative salmon passage estimates at Miles Lake Sonar, 2005.



Appendix A7.–Total Commercial harvest by species in the Copper River District, 1975–2005.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1976	31,479	865,195	111,900	3,392	178	1,012,144
1977	21,722	602,737	131,356	23,185	335	779,335
1978	29,062	249,872	220,338	3,512	2,233	505,017
1979	17,678	80,528	194,885	1,295	107	294,493
1980	8,454	18,908	225,299	3,966	198	256,825
1981	20,178	477,662	310,154	23,952	1,799	833,745
1982	47,362	1,177,632	454,763	7,154	1,177	1,688,088
1983	52,500	626,735	234,243	7,345	2,217	923,040
1984	38,957	900,043	382,432	32,194	6,935	1,360,561
1985	42,214	927,553	587,990	19,061	5,966	1,582,784
1986	40,670	780,808	295,980	3,016	17,614	1,138,088
1987	41,001	1,180,782	111,599	31,635	14,796	1,379,813
1988	30,741	576,950	315,568	2,775	11,022	937,056
1989	30,863	1,025,923	194,454	25,877	5,845	1,282,962
1990	21,702	844,778	246,797	1,596	7,545	1,122,418
1991	34,787	1,206,811	385,086	1,246	20,220	1,648,150
1992	39,810	970,938	291,627	1,664	5,807	1,309,846
1993	29,727	1,398,234	281,469	9,579	13,002	1,732,011
1994	47,061	1,152,220	677,633	12,079	19,055	1,908,048
1995	65,675	1,271,822	542,658	19,809	56,100	1,956,064
1996	55,646	2,356,365	193,042	6,372	25,533	2,636,958
1997	51,273	2,955,431	18,656	8,483	2,465	3,036,308
1998	68,827	1,341,692	108,232	20,829	5,022	1,544,602
1999	62,337	1,682,559	153,061	10,205	25,321	1,933,483
2000	31,259	880,334	304,944	9,804	5,363	1,231,704
2001	39,524	1,323,577	251,473	9,387	2,789	1,626,750
2002	38,734	1,248,503	504,223	3,677	31,627	1,826,764
2003	47,721	1,188,052	363,489	12,934	10,110	1,622,306
2004	38,191	1,048,004	467,859	5,175	3,386	1,562,615
2005	34,624	1,331,664	263,465	34,987	3,515	1,668,255
(1995-2004)						
10-Year Average	49,919	1,529,634	290,764	10,668	16,772	1,897,755

Appendix A8.–Daily salmon passage at Miles Lake sonar, 2005.

		Estimated Daily Escapement							
	Water	North	South			Escapement Objective		0600	Projected
Date	Level (m)	Bank	Bank	Daily	Cumulative	Daily	Cumulative	Count	Daily
05/09			192	192	192	NA	NA	NA	NA
05/10	40.05		451	451	643	NA	NA	NA	NA
05/11	39.77	12	614	626	1,269	NA	NA	204	816
05/12	40.18	256	923	1,179	2,448	NA	NA	300	1,200
05/13	40.41	240	1,137	1,377	3,825	NA	NA	198	792
05/14	40.54	112	934	1,046	4,871	NA	NA	252	1,008
05/15	40.66	112	1,561	1,673	6,544	NA	NA	372	1,488
05/16	40.86	56	1,620	1,676	8,220	11	11	276	1,104
05/17	41.00	192	4,094	4,286	12,506	428	439	867	3,468
05/18	41.11	463	5,145	5,608	18,114	1,021	1,460	1,371	5,484
05/19	41.05	396	4,990	5,386	23,500	1,425	2,885	1,338	5,352
05/20	41.07	552	6,210	6,762	30,262	1,602	4,486	1,062	4,248
05/21	41.13	992	9,627	10,619	40,881	1,635	6,121	1,830	7,320
05/22	41.18	1,072	13,997	15,069	55,950	2,196	8,318	4,032	16,128
05/23	41.20	1,132	7,746	8,878	64,828	3,185	11,502	2,160	8,640
05/24	41.37	1,296	12,570	13,866	78,694	4,900	16,402	2,370	9,480
05/25	41.41	2,288	18,881	21,169	99,863	4,961	21,362	4,572	18,288
05/26	41.46	4,858	13,486	18,344	118,207	5,217	26,580	4,650	18,600
05/27	41.51	1,656	11,713	13,369	131,576	7,543	34,123	2,886	11,544
05/28	41.55	1,080	13,472	14,552	146,128	9,889	44,011	3,396	13,584
05/29	41.53	2,755	17,539	20,294	166,422	6,964	50,975	4,374	17,496
05/30	41.42	3,664	13,642	17,306	183,728	8,358	59,333	3,534	14,136
05/31	41.56	1,736	16,250	17,986	201,714	11,112	70,446	3,362	13,448
06/01	41.57	2,304	14,437	16,741	218,455	11,553	81,999	2,830	11,320
06/02	41.57	2,440	11,197	13,637	232,092	13,109	95,108	3,518	14,072
06/03	41.55	1,496	10,006	11,502	243,594	12,658	107,766	2,622	10,488
06/04	41.52	1,240	8,682	9,922	253,516	14,341	122,108	2,244	8,976
06/05	41.63	1,288	12,720	14,008	267,524	15,832	137,940	2,856	11,424
06/06	41.78	1,248	9,310	10,558	278,082	14,292	152,231	2,226	8,904
06/07	41.84	1,546	10,866	12,412	290,494	14,045	166,276	2,622	10,488
06/08	41.92	2,504	15,060	17,564	308,058	16,325	182,602	3,720	14,880
06/09	41.87	1,368	13,824	15,192	323,250	15,631	198,233	3,384	13,536
06/10	41.88	2,800	9,948	12,748	335,998	14,986	213,219	2,478	9,912
06/11	42.03	2,768	15,234	18,002	354,000	14,435	227,654	3,540	14,160
06/12	42.25	3296	13,890	17,186	371,186	13,362	241,016	3,750	15,000
06/13	42.39	2,960	8,801	11,761	382,947	11,739	252,755	2,346	9,384
06/14	42.53	1,464	12,900	14,364	397,311	11,287	264,042	2,514	10,056
06/15	42.74	3,000	13,692	16,692	414,003	12,087	276,129	3,648	14,592
06/16	42.96	1,248	12,444	13,692	427,695	10,796	286,925	4,056	16,224
06/17	NA	1,592	8,406	9,998	437,693	10,784	297,709	2,322	9,288
06/18	43.26	1,376	10,258	11,634	449,327	9,218	306,927	2,182	8,728
06/19	43.52	1,064	9,120	10,184	459,511	8,069	314,996	1,788	7,152
06/20	43.69	824	5,220	6,044	465,555	8,347	323,343	1,368	5,472
06/21	43.86	904	7,234	8,138	473,693	7,537	330,879	1,500	6,000
06/22	43.72	2,168	11,586	13,754	487,447	7,522	338,401	2,106	8,424

-continued-

Appendix A8.–Page 2 of 2.

		Estimated Daily Escapement							
	Water	North	South			Escapement Objective		0600	Projected
Date	Level (m)	Bank	Bank	Daily	Cumulative	Daily	Cumulative	Count	Daily
06/23	43.29	3,184	18,258	21,442	508,889	7,871	346,272	4,908	19,632
06/24	43.04	3,712	15,599	19,311	528,200	7,713	353,986	3,744	14,976
06/25	42.96	2,552	17,372	19,924	548,124	7,711	361,696	3,834	15,336
06/26	43.01	3,272	15,750	19,022	567,146	6,721	368,417	4,416	17,664
06/27	43.08	1,912	12,427	14,339	581,485	6,518	374,935	3,151	12,604
06/28	43.11	2,256	11,328	13,584	595,069	6,424	381,359	2,880	11,520
06/29	43.13	2,424	14,262	16,686	611,755	6,418	387,778	3,648	14,592
06/30	43.22	2,080	12,576	14,656	626,411	5,882	393,659	3,126	12,504
07/01	43.43	1,400	10,236	11,636	638,047	6,090	399,750	3,444	13,776
07/02	43.64	816	5,082	5,898	643,945	6,167	405,917	1,476	5,904
07/03	43.64	888	8,148	9,036	652,981	6,255	412,171	2,022	8,088
07/04	43.60	728	5,532	6,260	659,241	7,099	419,271	1,152	4,608
07/05	43.41	1,416	7,991	9,407	668,648	6,948	426,219	1,890	7,560
07/06	43.26	1,944	8,339	10,283	678,931	6,707	432,926	1,416	5,664
07/07	43.37	1,904	9,012	10,916	689,847	6,466	439,392	2,712	10,848
07/08	43.55	1,560	6,642	8,202	698,049	6,895	446,287	1,674	6,696
07/09	44.65	1,920	3,540	5,460	703,509	7,058	453,345	1,542	6,168
07/10	43.90	688	4,524	5,212	708,721	7,675	461,020	1,242	4,968
07/11	43.88	624	4,752	5,376	714,097	6,861	467,880	1,722	6,888
07/12	44.04	848	3,828	4,676	718,773	7,614	475,494	1,104	4,416
07/13	44.16	1,096	1,920	3,016	721,789	6,631	482,125	834	3,336
07/14	44.16	1,152	2,328	3,480	725,269	7,291	489,416	654	2,616
07/15	43.75	1,912	5,520	7,432	732,701	7,311	496,727	882	3,528
07/16	43.54	2,536	4,428	6,964	739,665	7,107	503,834	1,656	6,624
07/17	43.75	1,400	4,374	5,774	745,439	6,067	509,902	906	3,624
07/18	43.56	2,296	5,892	8,188	753,627	6,682	516,584	1,362	5,448
07/19	43.09	3,448	7,134	10,582	764,209	7,325	523,909	2,016	8,064
07/20	42.88	2,320	7,488	9,808	774,017	7,530	531,438	1,782	7,128
07/21	42.93	1,200	6,276	7,476	781,493	6,050	537,488	1,506	6,024
07/22	43.06	1,872	6,378	8,250	789,743	4,642	542,130	1,992	7,968
07/23	42.85	1,264	6,588	7,852	797,595	4,419	546,549	1,398	5,592
07/24	42.76	2,776	8,214	10,990	808,585	3,467	550,016	1,830	7,320
07/25	42.74	1,944	7,824	9,768	818,353	2,991	553,007	2,250	9,000
07/26	42.84	1,032	7,062	8,094	826,447	2,723	555,730	1,950	7,800
07/27	42.99	952	4,716	5,668	832,115	2,890	558,619	1,548	6,192
07/28	43.11	904	4,728	5,632	837,747	3,030	561,649	1,494	5,976
07/29	43.14	896	4,536	5,432	843,179	2,967	564,616	1,104	4,416
07/30	42.97	752	5,310	6,062	849,241	2,623	567,239	1,362	5,448
07/31	42.56	496	5,388	5,884	855,125	2,159	569,398	1,224	4,896
08/01				0		2,058	571,456		
08/02				0		1,874	573,330		

Note: South Bank deployed 5/9/05.

Appendix A9.–Anticipated and actual semi-weekly harvest and escapement of sockeye salmon in the Copper River District drift gillnet fishery, 2005.

Semi-Weekly Date		Fishing Time (Hours)	Anticipated Harvest [a]	Actual Harvest	Anticipated Cumulative Escapement [b]	Actual Cumulative Escapement [c]
05/14	Sat	0	10,024	0	0	4,871
05/18	Wed	24	39,258	48,074	1,460	18,114
05/21	Sat	24	82,816	96,790	6,121	40,881
05/25	Wed	24	91,521	137,475	21,362	99,863
05/28	Sat	36	123,662	103,071	44,011	146,128
06/01	Wed	24	83,267	100,693	81,999	218,455
06/04	Sat	24	128,566	70,518	122,108	253,516
06/08	Wed	24	66,855	70,985	182,602	308,058
06/11	Sat	24	66,753	74,704	227,654	354,000
06/15	Wed	24	42,923	50,116	276,129	414,003
06/18	Sat	24	60,381	47,655	306,927	449,327
06/22	Wed	24	32,892	38,204	338,401	487,447
06/25	Sat	36	62,403	63,876	361,696	548,124
06/29	Wed	36	45,406	77,252	387,778	611,755
07/02	Sat	48	63,817	48,507	405,917	643,945
07/06	Wed	48	51,978	32,621	432,926	678,931
07/09	Sat	60	77,013	46,800	453,345	703,509
07/13	Wed	48	48,995	36,257	482,125	721,789
07/16	Sat	48	60,658	30,614	503,834	739,665
07/20	Wed	48	31,481	38,861	531,438	774,017
07/23	Sat	48	31,581	25,498	546,549	797,595
07/27	Wed	48	14,216	24,095	558,619	832,115
07/30	Sat	24	14,530	7,254	567,239	849,241
08/03	Wed	24	6,294	14,832	574,870	
08/06	Sat	24	7,569	6,151		
08/10	Wed	24	3,453	8,818		
08/13	Sat	24	1,911	6,677		
08/17	Wed	24	1,045	8,427		
08/20	Sat	0	1,154	0		
08/24	Wed	24	561	9,151		
08/27	Sat	0	450	0		
08/31	Wed	36	212	5,307		
09/03	Sat	0	209	0		
09/07	Wed	24	89	1,523		
09/10	Sat	24	36	630		
09/14	Wed	48	0	163		
09/17	Sat	60	0	48		
09/21	Wed	48	0	9		
09/24	Sat	60	0	6		
09/28	Sat	48	0	2		
Total		996	1,353,979	1,331,436		

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

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

[c] Escapement estimate from sonar counters at Miles Lake. Sonar counts ended July 31.

Appendix A10.–Copper River and Bering River area sockeye salmon escapement indices, 1996–2005.

Stream/Lake [a,b]	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Eyak Lake	16,110	[c]	16,300	18,100	20,500	7,400	13,375	12,900	14,300	9,130
Hatchery Creek	1,900	[c]	3,300	200	2,800	950	1,700	0	500	290
Power Creek	1,200	[c]	1,500	1,400	6,700	2,450	1,600	850	1,500	566
Ibek Creek	100	[c]	[c]	50	[c]	1,500	0	475	2,300	500
McKinley Lake	8,600	8,500	11,300	400	2,850	2,080	4,200	3,200	4,500	360
Salmon Creek	2,600	3,100	3,300	7,100	4,220	9,650	4,900	1,800	7,400	7,260
26/27 Mile Creek	1,440	1,700	1,800	3,800	3,300	4,000	850	475	1,125	3,000
39 Mile Creek	6,200	9,300	11,500	12,000	6,500	9,000	10,000	7,800	2,600	2,900
Goat Mountain	1,000	350	300	60	60	5	70	0	700	1,250
Pleasant Creek	1,400	5,000	1,000	7,615	2,300	8,100	2,425	6,850	3,525	50
Martin River	2,700	1,100	2,700	2,800	2,650	200	700	3,425	2,275	800
Ragged Pt. River/Lake	1,540	4,400	4,800	5,900	3,600	2,900	3,375	4,750	1,975	500
Martin Lake	9,000	13,100	13,600	19,150	22,900	7,100	10,600	18,900	17,300	23,300
Pothole Lake	1,160	300	1,500	2,100	3,050	1,910	8,400	1,500	1,350	1,200
L. Martin Lake	300	470	750	1,800	830	825	2,540	2,175	1,610	1,500
Tokun Lake/River	7,150	5,750	8,950	7,600	6,485	5,695	6,500	3,600	3,775	1,800
Martin River Slough	3,070	4,000	4,900	10,900	9,300	7,300	4,500	4,450	2,650	4,000
Copper River Delta Total	65,470	57,070	87,500	100,975	98,045	71,065	75,735	73,150	69,385	58,406
Upper Copper River [d]	906,239	1,148,079	866,957	850,951	587,497	833,569	819,886	700,618	669,646	855,125
Copper River District Total	971,709	1,205,149	954,457	951,926	685,542	904,634	895,621	773,768	739,031	913,531
Bering River/Lake	22,420	[c]	21,600	39,030	21,050	7,750	19,540	32,075	22,550	19,890
Shepherd Creek	2,000	1,400	[c]	1,215	950	60	60	205	195	1,220
Stillwater Creek	1,100	700	400	950	320	320	350	375	500	
Kushtaka Lake	990	65	500	1,100	700	293	265	185	15	230
Katalla River	800	700	900	3,900	1,200	400	4,500	17,000	1,875	9,550
Bering River Area Total	27,310	2,865	23,400	46,195	24,220	8,823	24,715	49,840	25,135	30,890
Copper/Bering River Total	999,019	1,208,014	977,857	998,121	709,762	913,457	920,336	823,608	764,166	944,421

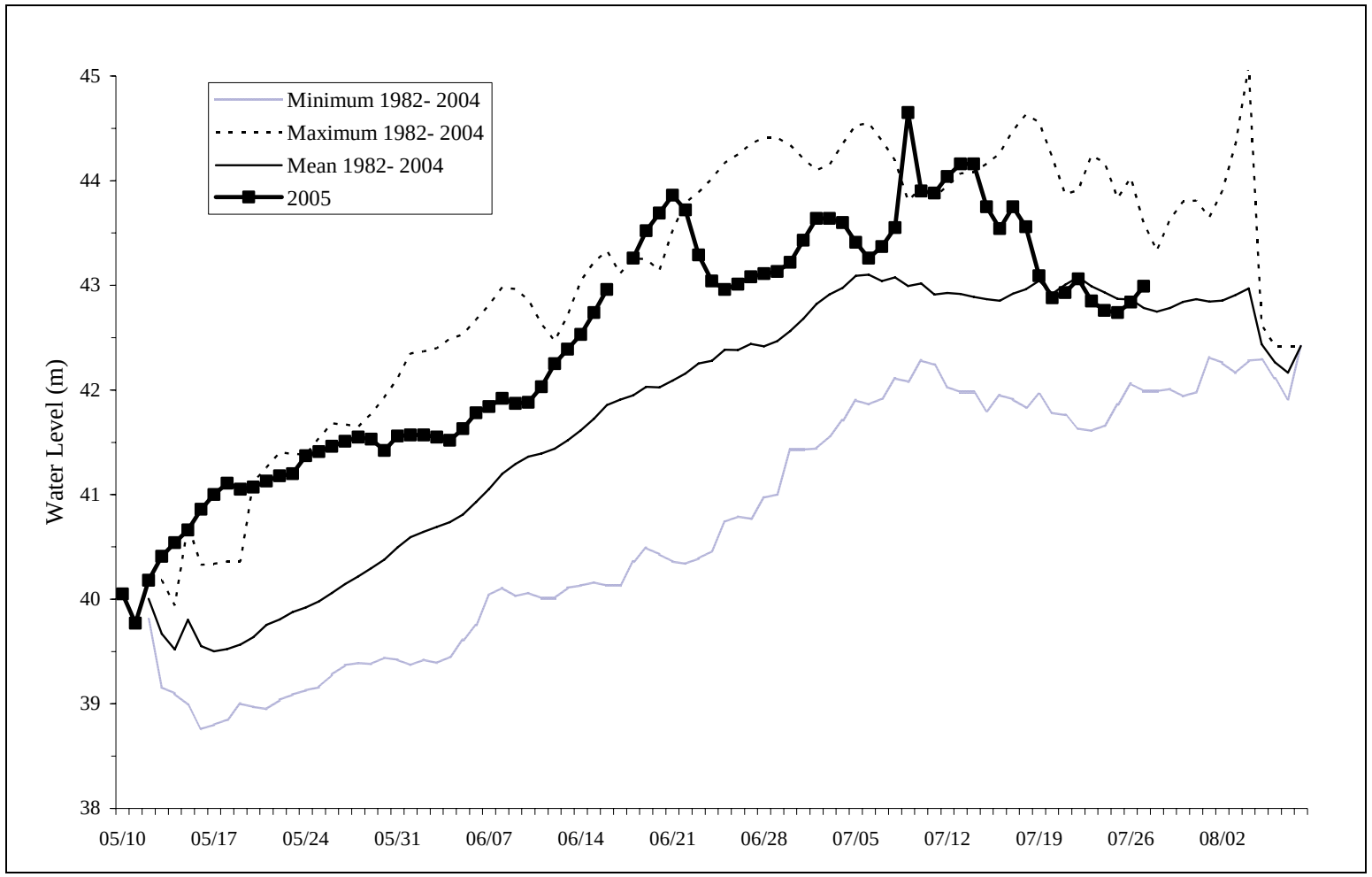
[a] The escapement figures in this table are based on peak aerial survey estimates and sonar counts from a majority of known salmon spawning areas in the Copper and Bering River Delta. These indices are not intended to provide a true estimate of total escapement for the coastal stocks, but a comparable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

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

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

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

Appendix A11.–Measured water stage height at the Million Dollar Bridge from 1982–2005.



Appendix A12.–Anticipated and actual weekly harvest of Chinook salmon in the Copper River District drift gillnet fishery, 2005.

Semi-Weekly Date		Fishing Time (Hrs.)	Anticipated Harvest [a]	Actual Harvest
05/14	Sat	0	2,817	7,500
05/18	Wed	24	6,810	4,191
05/21	Sat	24	7,942	3,717
05/25	Wed	24	6,113	3,404
05/28	Sat	36	6,245	3,356
06/01	Wed	24	4,414	2,400
06/04	Sat	24	5,396	1,675
06/08	Wed	24	2,923	2,364
06/11	Sat	24	2,715	2,096
06/15	Wed	24	1,334	1,105
06/18	Sat	24	1,363	453
06/22	Wed	24	432	492
06/25	Sat	36	584	382
06/29	Wed	36	241	223
07/02	Sat	48	188	660
07/06	Wed	48	95	449
07/09	Sat	60	124	27
07/13	Wed	48	50	5
07/16	Sat	48	60	23
07/20	Wed	48	24	13
07/23	Sat	48	16	78
07/27	Wed	48	5	1
07/30	Sat	24	6	2
08/03	Wed	24	3	3
08/06	Sat	24	4	2
08/10	Wed	24	2	2
08/13	Sat	24	3	0
08/17	Wed	24	3	1
08/20	Sat	0	1	0
08/24	Wed	24	1	0
08/27	Sat	0	1	0
08/31	Wed	36	1	0
09/03	Sat	0	0	0
09/07	Wed	0	0	0
09/10	Sat	0	0	0
Total		948	49,919	34,624

[a] Based on average historical harvests for comparable dates (1994–2004).

Appendix A13.–Total commercial salmon harvest by period in the Copper River District drift gillnet fishery, 2005.

					Chinook		Sockeye		Coho		Pink		Chum	
Period	**Date**	**Hours**	**Permits**	**Landings**	**Numbers**	**Pounds**	**Numbers**	**Pounds**	**Numbers**	**Pounds**	**Numbers**	**Pounds**	**Numbers**	**Pounds**
1	05/16-05/17	24	481	853	7,500	161,250	48,074	277,027	0	0	0	0	397	2,908
2	05/19-05/20	24	480	829	4,191	88,552	96,790	565,208	0	0	0	0	361	2,689
3	05/23-05/24	24	483	931	3,717	76,892	137,475	803,295	13	109	0	0	265	2,095
4	05/26-05/28	36	372	635	3,404	76,089	103,071	599,968	0	0	0	0	420	2,488
5	05/30-05/31	24	453	681	3,356	72,362	100,693	589,889	3	16	1	3	126	885
6	06/01-06/02	24	432	736	2,400	54,212	70,518	412,245	31	206	2	6	141	940
7	06/03-06/04	24	413	639	1,675	38,114	70,985	416,384	16	120	0	0	111	720
8	06/06-06/07	24	402	637	2,364	58,250	74,704	432,103	7	47	0	0	96	661
9	06/09-06/10	24	334	481	2,096	50,778	50,116	292,618	1	6	0	0	15	109
10	06/13-06/14	24	355	467	1,105	26,898	47,655	275,837	22	152	0	0	14	84
11	06/16-06/17	24	298	377	453	11,655	38,204	221,681	19	111	0	0	33	213
12	06/20-06/21	36	282	521	492	12,146	63,876	369,699	38	210	419	1,747	61	467
13	06/23-06/25	36	273	507	382	10,281	77,252	446,851	75	514	35	120	142	799
14	06/27-06/29	48	265	457	223	4,353	48,507	278,489	23	171	530	2,012	22	129
15	06/30-07/02	48	194	375	660	5,668	32,621	182,359	51	356	3,785	15,022	31	188
16	07/04-07/06	60	198	467	449	3,725	46,800	266,326	58	432	3,061	12,942	76	313
17	07/07-07/09	48	170	338	27	751	36,257	202,282	73	450	5,362	21,051	481	3,018
18	07/11-07/13	48	152	270	5	96	30,614	172,555	154	1,086	4,114	15,894	14	95
19	07/14-07/16	48	160	276	23	430	38,861	221,933	312	2,086	6,333	24,958	281	1,329
20	07/18-07/20	48	139	211	13	209	25,498	144,128	741	4,869	5,470	21,031	173	1,228
21	07/21-07/23	48	122	206	78	501	24,095	138,300	617	3,694	2,171	8,102	224	1,347
22	07/25-07/26	24	69	71	1	25	7,254	41,712	181	1,151	314	1,175	11	87
23	07/28-07/29	24	87	91	2	58	14,832	85,553	341	2,172	361	1,539	13	94
24	08/01-08/02	24	61	62	3	96	6,151	36,762	328	1,968	200	720	0	0
25	08/04-08/05	24	65	68	2	29	8,818	50,005	1,226	7,596	289	985	1	8
26	08/08-08/09	24	57	59	2	17	6,677	38,647	1,420	9,454	538	1,955	3	27
27	08/11-08/12	24	58	61	0	0	8,427	48,014	1,631	12,894	993	3,887	3	20
28	08/15-08/16	24	143	174	1	24	9,151	54,640	7,315	52,377	666	2,568	0	0
29	08/22-08/23	24	224	337	0	0	5,307	31,907	32,122	244,395	319	1,151	0	0
30	08/29-08/30	24	256	405	0	0	1,523	10,436	42,868	353,799	6	25	0	0
31	09/05-09/06	36	268	517	0	0	630	3,974	68,924	559,744	18	103	0	0
32	09/12-09/13	24	213	329	0	0	163	1,057	42,978	373,045	0	0	0	0
33	09/15-09/16	24	143	192	0	0	48	293	23,113	190,127	0	0	0	0
34	09/19-09/20	24	164	233	0	0	9	62	22,949	193,872	0	0	0	0
35	09/22-09/24	48	78	118	0	0	6	37	13,221	110,567	0	0	0	0
36	09/26-09/28	60	31	35	0	0	2	12	2,325	19,512	0	0	0	0
37	09/29-10/01	48	6	6	0	0	0	0	261	2,420	0	0	0	0
38	10/03-10/05	60	1	1	0	0	0	0	8	68	0	0	0	0
39	10/06-10/08	48	0	0	0	0	0	0	0	0	0	0	0	0
40	10/10-10/12	60	0	0	0	0	0	0	0	0	0	0	0	0
41	10/13-10/15	48	0	0	0	0	0	0	0	0	0	0	0	0
Total			499	13,653	34,624	753,461	1,331,664	7,712,288	263,465	2,149,796	34,987	136,996	3,515	22,941
Average Weight						21.76		5.79		8.16		3.92		6.53

Appendix A14.–Aerial escapement indices by date and location for sockeye salmon returning to the Copper River Delta, 2005.

		Escapement Indices					
Drainage [a]	**System**	**3-Jun**	**10-Jun**	**16-Jun**	**23-Jun**	**30-Jun**	**8-Jul**
Eyak River	Eyak River	25	100	100	75	20	475
	West Shore Beaches	0	25	125	650	400	1,500
	East Shore Beaches	200	600	150	150	200	1,800
	Middle Arm Beaches [b]	150	600	900	1,400	1,650	800
	North Shore Beaches	0	500	3,000	100	200	3,300
	Hatchery Creek Delta	0	0	0	100	0	550
	Hatchery Creek	NS	0	0	0	350	0
	Power Creek Delta	0	75	0	200	150	200
	Power Creek	NS	25	125	75	0	575
Ibeck Creek	Ibeck Creek	NS	NS	NS	NS	NS	NS
Alaganik Slough	Alaganik Slough	NS	0	0	0	0	0
	McKinley Lake	0	0	0	2,500	3,000	4,000
	Salmon Creek West Fork	0	0	0	50	40	100
	Salmon Creek East Fork	0	0	0	0	0	200
26/27 Mile Creek	26/27 Mile Creek	0	0	0	975	250	900
39 Mile Creek	39 Mile Creek	0	0	0	0	0	425
Goat Mountain	Goat Mountain Creek	NS	0	0	0	0	5
Pleasant Creek	Pleasant Creek	0	0	325	1,625	2,470	1,950
Martin River	Martin River - Lower	75	55	325	1,300	420	475
	Ragged Point River	NS	NS	0	10	200	275
	Ragged Point Lake Outlet	NS	NS	0	0	0	0
	Ragged Point Lake	NS	NS	0	0	0	0
	Martin River - Upper [b]	25	200	275	1,300	1,500	750
	Martin Lake Outlet	1,000	0	275	100	100	525
	Martin Lake	500	200	9,200	9,900	6,900	15,500
	Martin Lake Feeders	0	0	300	1,100	2,500	6,000
	Pothole River	NS	NS	0	275	900	500
	Pothole Lake	NS	NS	0	0	0	0
	Little Martin River	0	0	0	0	180	0
	Little Martin Lake	0	0	0	10	0	600
Tokun	Tokun Springs	0	0	0	150	0	275
	Tokun River	0	0	10	375	300	100
	Tokun Lake Outlet	0	0	0	0	0	0
	Tokun Lake	0	0	250	500	0	0
Martin River Slough	Martin River Slough	0	0	0	1,800	4,000 *	3,300
Copper River Aerial Survey Daily Total		1,975	2,380	15,360	24,720	25,730	45,080
Anticipated Escapement		3,887	4,139	11,222	21,850	27,004	43,318

-continued-

Appendix A14.–Page 2 of 5**.**

		Escapement Indices					
Drainage [a]	**System**	**14-Jul**	**22-Jul**	**29-Jul**	**5-Aug**	**11-Aug**	**19-Aug**
Eyak River	Eyak River	50	0	0 *	110	260	50
	West Shore Beaches	0	2,500	3,000 *	2,200	780	890
	East Shore Beaches	2,400	2,250	4,500 *	3,100	1,050	1,050
	Middle Arm Beaches [b]	1,800	850	1,600 *	2,100	980	550
	North Shore Beaches	1,000	NC	30 *	12	100	NS(silty)
	Hatchery Creek Delta	100	0	60 *	2	NS (silty)	120
	Hatchery Creek	1,200	100	230 *	380	NS (silty)	NS(silty)
	Power Creek Delta	300	0	16 *	NS	NS (silty)	NS(silty)
	Power Creek	400	600	550 *	48 *	NS (silty)	NS(silty)
Ibeck Creek	Ibeck Creek	NS	NS	NS	NS	24	500
Alaganik Slough	Alaganik Slough	300	0	0 *	0	0	0
	McKinley Lake	3,000	4,675	360 *	820	570	350
	Salmon Creek West Fork	1,100	1,000	3,100 *	2,000	1,600	1,400
	Salmon Creek East Fork	1,400	200	4,160 *	2,000	1,200	800
26/27 Mile Creek	26/27 Mile Creek	3,000 *	1,200	1,100	700	950	1,100
39 Mile Creek	39 Mile Creek	2,400	1,600	2,900 *	2,650	1,750	1,250
Goat Mountain	Goat Mountain Creek	300	350	390	80	1,250 *	NS(squall)
Pleasant Creek	Pleasant Creek	990	50	20	12	50 *	46
Martin River	Martin River - Lower	800 *	100	24	NS	0	NS(silt)
	Ragged Point River	500 *	300	390	40	120	210
	Ragged Point Lake Outlet	0 *	50	0	80	40	0
	Ragged Point Lake	0 *	100	12	420	460	650
	Martin River - Upper [b]	0 *	275	24	NS	95	130
	Martin Lake Outlet	900 *	0	0	NS	40	0
	Martin Lake	14,000 *	375	NS(squall)	NS	480	120
	Martin Lake Feeders [b]	8,000 *	6,300	5,500	1,950	1,350	2,700
	Pothole River [b]	1,200 *	150	61	50	40	20
	Pothole Lake	0 *	0	12	250	390	90
	Little Martin River	0	200 *	90	80	280	60
	Little Martin Lake	1,000	1,300 *	40	1,350	430	220
Tokun	Tokun Springs	500	0 *	8	180	185	60
	Tokun River	1,200	475 *	320	65	250	140
	Tokun Lake Outlet	0	25 *	0	0	0	0
	Tokun Lake	80	1,300 *	490	80	310	520
Martin River Slough	Martin River Slough	1,900	500	2,860	820	1,200	420
Copper River Aerial Survey Daily Total		49,820	26,825	31,847	21,579	16,234	13,446
Anticipated Escapement		46,147	48,214	49,196	49,977	38,480	40,611

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Drainage [a]	System	Escapement Indices 27-Aug	2-Sep	11-Sep	14-Sep	20-Sep	
Eyak River	Eyak River	NC(silt)	0	NC(silt)	NC(silt)	NC(silt)	
	West Shore Beaches	750	600	220	180	340	
	East Shore Beaches	820	750	90	550	450	
	Middle Arm Beaches [b]	310	520	240	120	60	
	North Shore Beaches	120	120	0	NC(silt)	0	
	Hatchery Creek Delta	200	350	200	500	560	
	Hatchery Creek	60	160	40	48	90	
	Power Creek Delta	720	380	0	36	120	
	Power Creek	110	0	0	40	0	
Ibeck Creek	Ibeck Creek	270	420	100	140	240	
Alaganik Slough	Alaganik Slough	0	0	0	0	12	
	McKinley Lake	NC(wind)	300	60	250	120	
	Salmon Creek West Fork	NC(wind)	400	0	0	60	
	Salmon Creek East Fork	NC(wind)	200	70	0	0	
26/27 Mile Creek	26/27 Mile Creek	NC(wind)	250	200	60	90	
39 Mile Creek	39 Mile Creek	1,090	2,400	600	600	1,000	
Goat Mountain	Goat Mountain Creek	90	100	0	0	0	
Pleasant Creek	Pleasant Creek	30	0	0	0	0	
Martin River	Martin River - Lower	0	0	0	0	0	
	Ragged Point River	60	80	0	0	0	
	Ragged Point Lake Outlet	NC(silt)	0	24	48	30	
	Ragged Point Lake	NC(silt)	650	600	600	400	
	Martin River - Upper [b]	0	120	0	0	200	
	Martin Lake Outlet	0	0	0	0	0	
	Martin Lake	0	0	100	120	448	
	Martin Lake Feeders [b]	0	100	0	0	60	
	Pothole River [b]	20	40	50	12	30	
	Pothole Lake	0	180	700	850	1,100	
	Little Martin River	0	50	10	0	60	
	Little Martin Lake	0	420	90	48	48	
Tokun	Tokun Springs	0	0	0	0	0	
	Tokun River	100	140	90	24	36	
	Tokun Lake Outlet	0	0	0	0	0	
	Tokun Lake	490	680	800	1,200	950	
Martin River Slough	Martin River Slough	NC(wind)	100	0	0	120	
Copper River Aerial Survey Daily Total		5,240	9,510	4,284	5,426	6,624	0
Anticipated Escapement		37,415	30,624	26,772	19,394	16,206	10,576

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Drainage [a]	System	Estimated Escapement Site [c]	System [d]	Anticipated		
Eyak River	Eyak River	0	9,986	9,972	to	23,571
	West Shore Beaches	3,000				
	East Shore Beaches	4,500				
	Middle Arm Beaches [b]	1,600				
	North Shore Beaches	30				
	Hatchery Creek Delta	60				
	Hatchery Creek	230				
	Power Creek Delta	16				
	Power Creek	550				
Ibeck Creek	Ibeck Creek	500	500			
Alaganik Slough	Alaganik Slough	0	7,620	8,359	to	19,758
	McKinley Lake	360				
	Salmon Creek West Fork	3,100				
	Salmon Creek East Fork	4,160				
26/27 Mile Creek	26/27 Mile Creek	3,000	3,000	2,182	to	5,157
39 Mile Creek	39 Mile Creek	2,900	2,900	5,772	to	13,642
Goat Mountain	Goat Mountain Creek	1,250	1,250	549	to	1,298
Pleasant Creek	Pleasant Creek	50	50	1,075	to	2,542
Martin River	Martin River - Lower	800	800			
	Ragged Point River	500	500			
	Ragged Point Lake Outlet	0				
	Ragged Point Lake	0				
	Martin River - Upper [b]	0	0			
	Martin Lake Outlet	900	23,300	17,598	to	41,596
	Martin Lake	14,400				
	Martin Lake Feeders	8,000				
	Pothole River	1,200	1,200			
	Pothole Lake	0				
	Little Martin River	200	1,500			
	Little Martin Lake	1,300				
Tokun	Tokun Springs	0	1,800	5,352	to	12,649
	Tokun River	475				
	Tokun Lake Outlet	25				
	Tokun Lake	1,300				
Martin River Slough	Martin River Slough	4,000	4,000	4,141	to	9,787
Copper River Aerial Survey Daily Total			58,406			
Anticipated Escapement				55,000	to	130,000

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Note: * Denotes peak counts.

[a] The survey sites represent most of the known sockeye salmon spawning locations in the Copper River Delta drainage. Weather permitting, the sites are surveyed weekly. The surveys provide information about the relative strength of escapement among years and within a year, time for spawning sites and relative escapement strength among sites. The indices are not intended to provide an actual estimate of escapement for coastal stocks, but have been used for that purpose in the absence of any other escapement estimating method. The abbreviations used in the table have the following meaning: NS = no survey, NC = surveyed but no count due to poor conditions. The + sign after some counts indicates that the count is the minimum estimate seen in less than ideal conditions. The symbol * indicates that this survey count was used as the peak survey for the site without duplication of counts for survey sites along migratory corridors (see footnote c).

[b] The sites typically have very protracted run timing or two temporally segregated spawning populations at the same sites. Aerial counts from more then 1 day may be astricted and used in the escapement estimate if the surveyor indicates the count which minimizes possible duplicate of counts across dates is selected.

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

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

Appendix A15.–Anticipated and actual weekly harvest of coho salmon in the Copper River District drift gillnet fishery, 2005.

Week Ending Date	Fishing Time (Hours)	Anticipated Harvest [a]	Actual Harvest
05/21	48	1	0
05/28	60	12	13
06/04	72	20	50
06/11	48	32	8
06/18	48	68	41
06/25	72	161	113
07/02	96	264	74
07/09	108	546	131
07/16	96	1,379	466
07/23	96	1,890	1,358
07/30	48	3,142	522
08/06	48	8,552	1,554
08/13	48	19,781	3,051
08/20	24	39,972	7,315
08/27	24	59,775	32,122
09/03	24	63,199	42,868
09/10	48	54,012	68,924
09/17	48	27,581	66,091
09/24	72	10,398	36,170
10/01	72	2,677	2,586
10/08	72	692	8
10/15	72		0
Total	1,296	294,154	263,465

[a] Based on average historical harvests for comparable dates, (1973–2004).

Appendix A16.–Aerial escapement indices by date and location for coho salmon returning to the Copper River Delta, 2005.

		Escapement Indices				
Drainage [a]	**System**	**29-Jul**	**5-Aug**	**11-Aug**	**19-Aug**	**29-Aug**
Eyak River	Eyak River	NS	NS	260	220	NC(silt)
	East Shore Beaches	NS	NS	0	80	0
	West Shore Beaches	NS	NS	0	0	0
	Middle Arm Beaches	NS	NS	0	0	20
	North Shore Beaches	NS	NS	0	NS(silt)	0
	Hatchery Creek Delta	NS	NS	0	0	0
	Hatchery Creek	NS	NS	0	NS(silt)	0
	Power Creek Delta	NS	NS	0	NS(silt)	0
	Power Creek	NS	NS	0	NS(silt)	0
Ibeck Creek	Ibeck Creek	NS	NS	60	80	3,220
Scott River	Scott Lake	NS	NS	0	NS	NC(silt)
	Scott River	NS	NS	0	NS	NC(silt)
	Elsner Lake [b]	NS	NS	0	0	0
Alaganik Slough	Alaganik Slough	NS	NS	0	0	0
	18/20 Mile Creek	NS	NS	0	0	42
	McKinley Lake	NS	NS	0	0	NC(wind)
	Salmon Creek West Fork	NS	NS	0	0	NC(wind)
	Salmon Creek East Fork	NS	NS	0	0	NC(wind)
26/27 Mile Creek	26/27 Mile Creek	NS	NS	50	0	12
39 Mile Creek	39 Mile Creek	NS	NS	125	150	280
Goat Mountain Cr.	Goat Mountain Creek	NS	NS	0	NS(squall)	90
Pleasant Creek	Pleasant Creek	NS	NS	0	40	12
Martin River	Martin River - Lower	NS	NS	25	40	0
	Ragged Point River	NS	NS	35	110	290
	Ragged Point Lake Outlet	NS	NS	0	0	NC(silt)
	Ragged Point Lake	NS	NS	0	0	NC(silt)
	Martin River - Upper	NS	NS	0	20	910
	Martin Lake Outlet	NS	NS	0	0	0
	Martin Lake	NS	NS	0	0	0
	Martin Lake Feeders	NS	NS	0	0	3,130
	Pothole River	NS	NS	0	110	40
	Pothole Lake	NS	NS	0	0	0
	Little Martin River	NS	NS	0	40	0
	Little Martin Lake	NS	NS	0	0	0
	Tokun Springs	NS	NS	0	60	70
	Tokun River	NS	NS	60	120	210
	Tokun Lake Outlet	NS	NS	0	0	0
	Tokun Lake	NS	NS	0	0	0
Martin River Slough	Martin River Slough	NS	NS	80	60	NC(wind)
Copper River Aerial Survey Daily Total		NS	0	695	1,130	8,326
Anticipated Escapement		134	1,914	3,164	9,134	14,528

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Drainage [a]	System	Escapement Indices 2-Sep		11-Sep	14-Sep	20-Sep		3-Oct	
Eyak River	Eyak River	2,800	*	NC(silty)	NC(silty)	NC(silty)		NC(silty)	
	East Shore Beaches	0	*	0	0	0		0	
	West Shore Beaches	0	*	0	0	0		0	
	Middle Arm Beaches	0	*	0	200	0		48	
	North Shore Beaches	0	*	0	NC(silty)	0		0	
	Hatchery Creek Delta	0	*	6	0	140		240	
	Hatchery Creek	0	*	0	0	0		0	
	Power Creek Delta	40	*	0	0	50		60	
	Power Creek	0	*	0	0	40		24	
Ibeck Creek	Ibeck Creek	12,550		4300(partial)	7150(partial)	34,900(partial)	*	31,280(partial)	
Scott River	Scott Lake	NC(silty)		1	24	0		38	
	Scott River	NC(silty)		0	0	0		0	
	Elsner Lake [b]	0		0	24	0		0	
Alaganik Slough	Alaganik Slough	1,700		24	260	12	*	10	
	18/20 Mile Creek	170		90	350	610	*	430	
	McKinley Lake	0		0	0	140	*	210	
	Salmon Creek West Fork	120		90	12	1,200	*	250	
	Salmon Creek East Fork	0		6	24	1,050	*	850	
26/27 Mile Creek	26/27 Mile Creek	820	*	670	190	740		440	
39 Mile Creek	39 Mile Creek	1,250		1,480	960	4,600		9,900	*
Goat Mountain Cr.	Goat Mountain Creek	3,350		1,780	2,900	4,500	*	3,900	
Pleasant Creek	Pleasant Creek	525		12	980	3,790	*	545	
Martin River	Martin River - Lower	1,450		180	600	1,050	*	1,140	
	Ragged Point River	350		470	480	550	*	420	
	Ragged Point Lake Outlet	0		0	12	0	*	0	
	Ragged Point Lake	400		0	360	100	*	80	
	Martin River - Upper	2,870		620	7,600	14,000	*	4,700	
	Martin Lake Outlet	0		4,000	300	1,200	*	400	
	Martin Lake	0		80	0	0	*	0	
	Martin Lake Feeders	4,350		2,550	2,500	8,900	*	3,400	
	Pothole River	0		60	120	100	*	0	
	Pothole Lake	40		0	0	40	*	0	
	Little Martin River	870		2,150	650	2,100	*	6,800	
	Little Martin Lake	70		0	0	0	*	0	
	Tokun Springs	120		80	300	940		1,450	*
	Tokun River	260		140	80	330		580	*
	Tokun Lake Outlet	0		0	0	0		0	*
	Tokun Lake	350		0	0	0		0	*
Martin River Slough	Martin River Slough	2,340		4,050	8,200	9,850	*	4,600	
Copper River Aerial Survey Daily Total		36,795		18,539	27,126	56,032		40,515	
Anticipated Escapement		25,229		33,510	28,571	26,418		24,284	

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Drainage [a]	System	Escapement Indices 26-Oct	Site [c]	System [d]	Anticipated
Eyak River	Eyak River	0	2,800	2,840	6,916
	East Shore Beaches	0	0		
	West Shore Beaches	0	0		
	Middle Arm Beaches	40	0		
	North Shore Beaches	50	0		
	Hatchery Creek Delta	730	0		
	Hatchery Creek	60	0		
	Power Creek Delta	560	40		
	Power Creek	320	0		
Ibeck Creek	Ibeck Creek	12,620	34,900	34,900	6,227
Scott River	Scott River	1,250 *	1,250	1,400	
	Elsner Lake [b]	150 *	150		
	Scott Lake	0 *	0		
Alaganik Slough	Alaganik Slough	NS	12	3,012	2,591
	18/20 Mile Creek	NS	610		1,429
	McKinley Lake	NS	140		
	Salmon Creek West Fork	NS	1,200		
	Salmon Creek East Fork	NS	1,050		
26/27 Mile Creek	26/27 Mile Creek	NS	820	820	829
39 Mile Creek	39 Mile Creek	NS	9,900	9,900	3,831
Goat Mountain Cr.	Goat Mountain Creek	NS	4,500	4,500	1,181
Pleasant Creek	Pleasant Creek	NS	3,790	3,790	
Martin River	Martin River - Lower	NS	1,050	1,050	
	Ragged Point River	NS	550	650	849
	Ragged Point Lake Outlet	NS	0		
	Ragged Point Lake	NS	100		
	Martin River - Upper	NS	14,000	14,000	6,522
	Martin Lake Outlet	NS	1,200	10,100	1,936
	Martin Lake	NS	0		
	Martin Lake Feeders	NS	8,900		
	Pothole River	NS	100	140	1,370
	Pothole Lake	NS	40		
	Little Martin River	NS	2,100	2,100	5,413
	Little Martin Lake	NS	0		
	Tokun Springs	NS	1,450	2,030	1,376
	Tokun River	NS	580		
	Tokun Lake Outlet	NS	0		
	Tokun Lake	NS	0		
Martin River Slough	Martin River Slough	NS	9,850	9,850	9,531
Copper River Aerial Survey Total				101,082	
Anticipated Escapement					50,001

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[a] The survey sites represent most of the known coho salmon spawning locations in the Copper River Delta drainage. Weather permitting, the sites are surveyed weekly. The surveys provide information about the relative strength of escapement among years and within a year, time for spawning sites and relative escapement strength among sites. The indices are not intended to provide an actual estimate of escapement for coastal stocks but have been used for that purpose in the absence of any other escapement estimating method. The abbreviations used in the following table have the following meaning: NS = no survey, NC = surveyed but no count due to poor conditions. A + sign after a count indicates that the count is a minimum estimate, made in less than ideal conditions. The symbol * indicates that this survey count was used as the peak survey for the site.

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

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

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

Appendix A17.–Copper River Delta and Bering River coho salmon escapement indices, 1992–2005.

Stream/Lake [a,b]	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Eyak Lake	9,900	4,050	5,100	6,800	2,550	1,250	2,130	7,800	17,425	10,050	12,700	2,812
Hatchery Creek	700	170	0	1,400	1,200	300	1,900	450	1,400	0	1,450	0
Power Creek	700	300	0	2,700	4,900	2,700	1,450	480	2,000	1,500	500	40
Ibeck Creek	3,060	3,000	6,300	4,700	1,500	4,600	7,000	14,000	23,900	26,000	32,000	34,900
Scott & Elsner River [c]	1,600	540	1,000	2,200	750	2,500	300	600	2,400	125	475	1,400
18/20 Mile	3,300	2,550	3,800	3,300	1,300	610	420	420	1,450	205	1,560	610
McKinley Lake	2,100	400	NC [d]	1,100	400	50	120	800	2,200	0	275	140
Salmon Creek	0	1,250	1,500	2,500	2,100	3,080	2,600	200	1,100	725	6,100	2,250
26/27 Mile	1,300	1,300	1,480	2,300	700	2,610	1,000	400	240	275	850	820
39 Mile	4,150	3,800	5,250	6,100	2,100	3,650	5,000	1,800	4,500	1,250	3,120	9,900
Goat Mountain	1,000	2,800	1,000	1,400	800	650	430	330	160	125	450	4,500
Pleasant Creek [c]	45	100	40	620	450	1,220	45	210	0	2,000	3,950	3,790
Martin River	10,600	5,000	15,400	NC [d]	6,250	3,900	4,500	3,755	13,325	10,200	11,600	1,050
Ragged Point River/Lake	0	100	0	80	850	275	330	440	3,400	375	575	650
Martin Lake	0	10	0	NC [d]	300	600	1,350	311	1,850	6,300	4,475	24,100
Pothole Lake	0	300	140	60	1,500	600	245	390	3,400	4,000	500	140
Little Martin Lake	200	1,500	700	10,500	3,800	3,600	3,000	3,010	500	1,000	7,900	2,100
Tokun River/Lake	1,780	1,900	1,300	1,300	2,000	1,130	710	1,600	540	550	1,750	2,030
Martin River Slough	5,120	5,950	4,100	10,500	6,400	12,900	10,600	4,100	10,025	7,500	9,750	9,850
Copper Delta Total	45,555	35,020	47,110	57,560	39,850	46,225	43,130	41,096	89,815	72,180	99,980	101,082
Katalla River	4,500	4,500	6,800	8,000	5,100	3,000	2,800	2,900	5,000	10,000	6,500	12,100
Bering Lake	5,800	10,600	6,000	14,800	14,300	13,800	10,370	21,040	15,375	13,750	10,125	15,040
Dick Creek	100	100	0	1,300	0	1,270	2,500	760	1,700	2,050	2,750	362
Shepherd Creek	900	800	NC [d]	NC [d]	NC [d]	200	450	300	675	700	1,125	100
Nichawak River	2,000	2,700	2,000	4,300	2,500	4,800	4,300	1,300	1,420	900	1,475	6,900
Gandil River	950	1,350	1,000	1,900	950	3,000	600	900	330	900	2,000	4,450
Controller Bay	14,300	7,400	11,000	12,100	6,900	5,220	5,360	2,807	9,700	4,175	6,210	5,590
Bering Area Total	28,550	27,450	26,800	42,400	29,750	31,290	26,380	30,007	34,200	32,475	30,185	44,542
Copper/Bering Total	74,105	62,470	73,910	99,960	69,600	77,515	69,510	71,103	124,015	104,655	130,165	145,624

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

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

[c] Not an indexed stream.

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

Appendix A18.–Summary of periods and emergency orders issued for the commercial salmon drift gillnet fisheries in the Bering and Copper River Districts, 2005.

Bering River District (200)			Copper River District (212)			Emergency
Periods	Dates	Hours Fished	Periods[a]	Dates	Hours Fished	Orders Issued
			01	05/16-05/17	24	2-F-E-001-05
			02	05/19-05/20	24	2-F-E-002-05
			03	05/23-05/24	24	2-F-E-003-05
			04	05/26-05/28	36	2-F-E-004-05
01[a]	05/30-05/31	24	05	05/30-05/31	24	2-F-E-005-05
02	06/01-06/02	24	06	06/01-06/02	24	2-F-E-137-05
03	06/03-06/04	24	07	06/03-06/04	24	2-F-E-007-05
04	06/06-06/07	24	08	06/06-06/07	24	2-F-E-008-05
05	06/09-06/10	24	09	06/09-06/10	24	2-F-E-011-05
06	06/13-06/14	24	10	06/13-06/14	24	2-F-E-015-05
07	06/16-06/17	24	11	06/16-06/17	24	2-F-E-018-05
08	06/20-06/21	36	12	06/20-06/21	36	2-F-E-022-05
09	06/23-06/25	36	13	06/23-06/25	36	2-F-E-027-05
10	06/27-06/29	48	14	06/27-06/29	48	2-F-E-031-05
11	06/30-07/02	48	15	06/30-07/02	48	2-F-E-038-05
12	07/04-07/06	60	16	07/04-07/06	60	2-F-E-042-05
13	07/07-07/09	48	17	07/07-07/09	48	2-F-E-046-05
14	07/11-07/13	48	18	07/11-07/13	48	2-F-E-052-05
15	07/14-07/16	48	19	07/14-07/16	48	2-F-E-055-05
16	07/18-07/20	48	20	07/18-07/20	48	2-F-E-064-05
17	07/21-07/23	48	21	07/21-07/23	48	2-F-E-068-05
18	07/25-07/26	24	22	07/25-07/26	24	2-F-E-070-05
19	07/28-07/29	24	23	07/28-07/29	24	2-F-E-138-05
20	08/01-08/02	24	24	08/01-08/02	24	2-F-E-074-05
21	08/04-08/05	24	25	08/04-08/05	24	2-F-E-083-05
22	08/08-08/09	24	26	08/08-08/09	24	2-F-E-086-05
23	08/11-08/12	24	27	08/11-08/12	24	2-F-E-088-05
24	08/15-08/16	24	28	08/15-08/16	24	2-F-E-093-05
25	08/22-08/23	24	29	08/22-08/23	24	2-F-E-094-05
26	08/29-08/30	24	30	08/29-08/30	24	2-F-E-097-05
27	09/05-09/06	36	31	09/05-09/06	36	2-F-E-107-05
28	09/12-09/13	24	32	09/12-09/13	24	2-F-E-110-05
29	09/15-09/16	24	33	09/15-09/16	24	2-F-E-112-05
30	09/19-09/20	24	34	09/19-09/20	24	2-F-E-114-05
31	09/22-09/24	48	35	09/22-09/24	48	2-F-E-124-05
32	09/26-09/28	60	36	09/26-09/28	60	2-F-E-125-05
33	09/29-10/01	48	37	09/29-10/01	48	2-F-E-127-05
34	10/03-10/05	60	38	10/03-10/05	60	2-F-E-128-05
35	10/06-10/08	48	39	10/06-10/08	48	2-F-E-129-05
36	10/10-10/12	60	40	10/10-10/12	60	2-F-E-131-05
37	10/13-10/15	48	41	10/13-10/15	48	2-F-E-132-05

[a] The Copper River schedule is typically 2 evenly spaced periods per week; periods commence at 7:00 a.m. on Mondays and at 7:00 p.m on Thursdays. All 12-hours periods began at 7:00 a.m.

Appendix A19.–Total commercial salmon harvest by species in the Bering River District, 1974–2005.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1974	32	4,208	28,615	7	2	32,864
1975	162	21,637	24,162	0	0	45,961
1976	228	30,908	42,423	43	1	73,603
1977	127	14,445	47,218	192	221	62,203
1978	331	33,554	91,097	266	2,391	127,639
1979	385	139,015	114,046	6,895	23,094	283,435
1980 [a]	0	0	108,872	0	0	108,872
1981	200	55,585	82,626	9,882	8,307	156,600
1982	254	129,667	144,752	47	333	275,053
1983	610	179,273	117,669	851	4,615	303,018
1984	330	91,784	214,632	309	20,408	327,463
1985	215	26,561	419,276	214	9,642	455,908
1986	128	19,038	115,809	15	243	135,233
1987	34	16,926	15,864	54	7	32,885
1988	19	7,152	86,539	23	181	93,914
1989	30	9,225	26,952	7	2	36,216
1990	14	8,332	42,952	2	1	51,301
1991	28	19,181	110,951	4	195	130,359
1992	21	19,721	125,616	4	1	145,363
1993	130	33,951	115,833	82	22	150,018
1994	121	27,926	259,003	34	63	287,147
1995	44	21,585	282,045	26	229	303,929
1996	111	37,712	93,763	0	30	131,616
1997	23	9,651	97	2	0	9,773
1998	70	8,439	12,284	5	2	20,800
1999	42	13,697	9,852	204	96	23,891
2000	5	1,279	56,329	0	0	57,613
2001	76	5,450	2,715	0	0	8,241
2002	14	235	108,522	0	0	108,771
2003	151	18,266	59,481	33	0	77,931
2004	87	13,165	95,595	2	21	108,870
2005	277	77,464	43,030	9,327	14	130,112
10-Year Average (1995–2004)	62	12,948	72,068	27	38	85,144

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

Appendix A20.–Aerial escapement indices by date and location for sockeye salmon returning to the Bering River Delta, 2005.

		Escapement Indicies					
Drainage [a]	**System**	**3-Jun**	**10-Jun**	**16-Jun**	**23-Jun**	**30-Jun**	**8-Jul**
Bering River	Bering River	550	125	350	200	0	0
	Bering Lake	25	0	5,000	9,300	10,000	17,800
	Dick Creek	0	0	0	0	0	1,225
	Shepherd Creek - Lagoon	0	0	0	50	0	0
	Shepherd Creek	NS	NS	NS	0	0	0
	Carbon Creek	NS	NS	NS	NS	NS	0
	Clear Creek	NS	NS	NS	0	0	0
	Kushtaka Lake	NS	NS	NS	0	0	0
	Shockum Creek	NS	NS	NS	0	0	0
Katalla River [b]	Katalla River	0	0	50	650	1,600	7,500
Daily Index Total		575	125	5,400	10,200	11,600	26,525
Anticipated Escapement Index		2,186	1,710	6,221	7,746	11,656	21,075

		Escapement Indicies					
Drainage [a]	**System**	**14-Jul**	**22-Jul**	**29-Jul**	**5-Aug**	**11-Aug**	**19-Aug**
Bering River	Bering River	0 *	220	NS(squall)	NS	405	50
	Bering Lake	18,270 *	1,950	NS(squall)	NS	350	190
	Dick Creek	1,620 *	4,200	4,900	2,740	2,110	1420
	Shepherd Creek - Lagoon	0	0	0	NS	110	0
	Shepherd Creek	600 *	100	400	380	220	120
	Carbon Creek	0	20	620 *	NS	95	150
	Clear Creek	0	150	590 *	260	275	120
	Kushtaka Lake	0	10	18	150 *	18	0
	Shockum Creek	0	0	0	80 *	50	0
Katalla River [b]	Katalla River	9,550 *	100	1,300	NS	510	350
Daily Index Total		30,040	6,750	7,828	3,610	4,143	2,400
Anticipated Escapement Index		21,145	21,054	17,988	16,089	8,229	4,623

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Drainage [a]	System	Estimated Escapement					
		28-Aug	2-Sep	11-Sep	14-Sep	System [c]	Anticipated [d]
Bering River	Bering River	NC(silt)	0	0	0	19,890	21,903
	Bering Lake	NC(silt)	0	40	0		
	Dick Creek	340	300	120	0		
	Shepherd Creek - Lagoon	NC(silt)	0	NC(silt)	NC(silt)	1,220	4,375
	Shepherd Creek	NC(silt)	400	NC(silt)	NC(silt)		
	Carbon Creek	0	300	NC(silt)	24		
	Clear Creek	0	0	0	0		1,197
	Kushtaka Lake	0	0	0	0	230	1,226
	Shockum Creek	0	0	0	0		
Katalla River [c]	Katalla River	0	250	0	0	9,550	
Index Total		340	1,250	160	24	30,890	
Anticipated Escapement Index		2,834	1,998	1,093	1,410		28,701

Note: NS = no survey, NC = surveyed but no count due to poor conditions, * = peak count.

[a] The survey drainages represent most of the known sockeye salmon spawning locations in the Bering River drainage. Weather permitting surveys are flown weekly. The indices are not intended to provide an actual estimate of escapement for coastal stocks but have been used for that purpose in the absence of any other escapement estimating method.

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

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

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

Appendix A21.–Aerial escapement indices by date and location for coho salmon returning to the Bering River Delta, 2005.

		Escapement Indicies					
Drainage [a]	**System**	**11-Aug**	**19-Aug**	**29-Aug**	**2-Sep**	**11-Sep**	**14-Sep**
Bering River	Bering River [b]	0	0	NC(poor light)	770	0	1,350
	Bering Lake	0	0	NC(poor light)	2,170	13,512	6,100
	Dick Creek	0	0	0	3,100	150	400
Shepherd Drainage	Shepherd Creek - Lagoon	0	0	NC(poor light)	NC(silt)	NC(silt)	NC(silt)
	Shepherd Creek	0	0	NC(poor light)	100 *	NC(silt)	NC(silt)
	Carbon Creek [c]	0	0	120 *	0	NC(silt)	0
Katalla River	Katalla River	100	350	2,360	12,100 *	1,750	4,900
Lower Bering River	Gandil River	NS	0	NS	120	NS	2,500
	Nichawak River	NS	0	NS	1,200	NS	6,900
Controller Bay	Campbell River	NS	0	NS	570	NS	50
	Edwardes River	NS	0	NS	2,890	NS	4,480
	Okalee River	NS	0	NS	400	NS	460
	Other Clear Streams	NS	0	NS	NC	NS	NS
Daily Index Total		100	350	2,480	23,420	15,412	27,140
Anticipated Aerial Index		861	4,482	7,080	15,448	15,574	12,330

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Drainage	System	Escapement Indicies 20-Sep		Escapement Indicies 3-Oct	Escapement Indicies Site [d]	Estimated Escapement System [e]	Estimated Escapement Anticipated [f]
Bering River	Bering River [b]	1,440	*	1,680	1,440	15,402	7,720
	Bering Lake	13,600	*	11,300	13,600		
	Dick Creek	362	*	370	362		
Shepherd Drainage	Shepherd Creek - Lagoon	NC(silt)		NC(silt)	NS	100	
	Shepherd Creek	NC(silt)		NC(silt)	100		
	Carbon Creek [c]	0		0	120		
Katalla River	Katalla River	5,400		4,250	12,100	12,100	4,993
Lower Bering River	Gandil River	2,880		4,450	4,450	11,350	2,910
	Nichawak River	NC(silt)		NC(silt)	6,900		
Controller Bay	Campbell River	0		40	40	5,590	7,378
	Edwardes River	4,600		5,430	5,430		
	Okalee River	NC(silt)		120	120		
	Other Clear Streams [c]	NS		NS	NS		
Daily Index Total		28,282		27,640		44,542	
Anticipated Aerial Index		8,919		7,429			23,001

Note: NS = no survey, NC = surveyed but no count due to poor conditions, * = Peak count.

[a] The survey drainages represent most of the known coho salmon spawning locations in the Bering River drainage. Weather permitting, surveys are flown weekly. The indices are not intended to provide an actual estimate of escapement for coastal stocks but have been used for that purpose in the absence of any other escapement estimating method.

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

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

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

[e] 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 duplication of counts across dates is selected.

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

Appendix A22.–Total commercial salmon harvest by period in the Bering River District drift gillnet fishery, 2005.

Period[a]	Date	Hours	Permits	Landings	Chinook Number	Chinook Pounds	Sockeye Number	Sockeye Pounds	Coho Number	Coho Pounds	Pink Number	Pink Pounds	Chum Number	Chum Pounds
01	05/30-05/31	24	4	4	7	140	1,065	6,159	0	0	0	0	0	0
02	06/01-06/02	24	20	31	66	1,361	3,349	19,830	0	0	0	0	0	0
03	06/03-06/04	24	4	4	0	0	597	3,395	0	0	0	0	0	0
04	06/06-06/07	24	46	73	59	1,278	14,628	84,409	0	0	0	0	0	0
05	06/09-06/10	24	32	45	10	204	5,959	34,397	0	0	0	0	2	14
06	06/13-06/14	24	17	18	13	270	2,725	15,420	0	0	0	0	0	0
07	06/16-06/17	24	6	7	1	17	929	5,557	0	0	0	0	0	0
08	06/20-06/21	36	16	33	17	425	8,440	47,435	0	0	0	0	0	0
09	06/23-06/25	36	25	46	15	278	9,439	54,259	16	117	2	6	8	50
10	06/27-06/29	48	28	54	12	256	8,059	46,334	0	0	0	0	0	0
11	06/30-07/02	48	30	63	25	371	6,112	35,949	32	239	480	1,513	0	0
12	07/04-07/06	60	19	44	28	502	4,475	26,613	36	270	1,139	3,959	1	7
13	07/07-07/09	48	19	52	14	241	5,803	34,822	21	156	3,604	12,584	2	15
14	07/11-07/13	48	14	44	8	124	4,316	25,649	18	143	3,169	12,017	1	10
15	07/14-07/16	48	9	20	1	16	1,494	9,021	1	8	933	3,078	0	0
16	07/18-07/20	48	0	0	0	0	0	0	0	0	0	0	0	0
17	07/21-07/23	48	0	0	0	0	0	0	0	0	0	0	0	0
18	07/25-07/26	24	0	0	0	0	0	0	0	0	0	0	0	0
19	07/28-07/29	24	0	0	0	0	0	0	0	0	0	0	0	0
20	08/01-08/02	24	0	0	0	0	0	0	0	0	0	0	0	0
21	08/04-08/05	24	0	0	0	0	0	0	0	0	0	0	0	0
22	08/08-08/09	24	0	0	0	0	0	0	0	0	0	0	0	0
23	08/11-08/12	24	0	0	0	0	0	0	0	0	0	0	0	0
24	08/15-08/16	24	0	0	0	0	0	0	0	0	0	0	0	0
25	08/22-08/23	24	0	0	0	0	0	0	0	0	0	0	0	0
26	08/29-08/30	24	12	17	0	0	41	258	1,163	10,888	0	0	0	0
27	09/05-09/06	36	9	20	0	0	7	45	5,274	41,844	0	0	0	0
28	09/12-09/13	24	47	90	1	15	23	168	15,323	108,764	0	0	0	0
29	09/15-09/16	24	29	51	0	0	0	0	8,229	57,002	0	0	0	0
30	09/19-09/20	24	30	52	0	0	3	18	7,689	59,828	0	0	0	0
31	09/22-09/24	48	13	31	0	0	0	0	5,228	40,072	0	0	0	0
32	09/26-09/28	60	0	0	0	0	0	0	0	0	0	0	0	0
33	09/29-10/01	48	0	0	0	0	0	0	0	0	0	0	0	0
34	10/03-10/05	60	0	0	0	0	0	0	0	0	0	0	0	0
35	10/06-10/08	48	0	0	0	0	0	0	0	0	0	0	0	0
36	10/10-10/12	60	0	0	0	0	0	0	0	0	0	0	0	0
37	10/13-10/15	48	0	0	0	0	0	0	0	0	0	0	0	0
Total		1,332	137	799	277	5,498	77,464	449,738	43,030	319,331	9,327	33,157	14	96
Average Weight						19.85		5.81		7.42		3.55		6.86

Appendix A23.–Anticipated and actual weekly harvest and escapement of coho salmon in the Bering River District drift gillnet fishery, 2005.

Week Ending Date	Fishing Time (hours)	Actual Harvest	Anticipated Harvest [a]	Actual Aerial Index [b]	Anticipated Index [c]
06/04	24 and 24	0			
06/11	24 and 24	0	2		
06/18	24 and 24	0	13		
06/25	36 and 36	16	16		
07/02	48 and 48	32	34		
07/09	60 and 48	57	53		
07/16	48 and 48	19	24		
07/23	48 and 48	0	18		
07/30	24 and 24	0	6		
08/06	24 and 24	0	71		
08/13	24 and 24	0	72	100	1,060
08/20	24	0	2,466	350	4,849
08/27	24	0	12,047	2,480	8,037
09/03	24	1,163	20,128	23,420	16,566
09/10	36	5,274	21,146	17,650	17,426
09/17	24 and 24	23,552	12,382	15,412	15,103
09/24	24 and 48	12,917	3,158	27,140	14,313
10/01	24 and 48	0	395	28,282	16,129
10/08	24 and 48	0	37	27,640	5,490
10/15	24 and 48	0	0		
Season Totals		43,030	72,068		

[a] Based on average historical harvest for comparable dates (1970-2002, excluding years 1972, 1975, 1987, 1997–1999).

[b] Coho salmon surveys were actively conducted weather permitting beginning August 9.

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

Appendix A24.–Upper Copper River Chinook salmon aerial escapement index counts, 1977–2005.

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

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

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

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

[d] No aerial survey conducted.

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

[f] Counts determined by 2 surveyors. In years where more than 1 surveyor was used, counts from the most experienced surveyor are listed.

[g] Visibility poor due to high water conditions.

[h] Averages exclude years when surveys were flown outside July 17–31.

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

Appendix A25.–Aerial survey indices of sockeye salmon escapement to the upper Copper River drainage, 1993–2005.

	Yearly Survey Indices												10-Year Average
Location [a]	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**1983-1992** [c]
Fish Lake			4,800		4,900	1,880	5,000	5,000	125	1,300	0	281	6,418
Bad Crossing 1 & 2			780		7,800	195	19	2,000	157	90	30	5,120	2,604
Suslota Lake			4,100		1,060	0	3,000	2,500	1,500	2,750	1,975	1,230	1,416
Dickey Lake			0		350	11	0	1	0	0	10	55	115
Keg Creek			850	420	160	125	0	1	30	38	0	7	725
Mahlo Creek			3,800	11,800	12,300	325	1,000	400	5,000	6,850	500	1,950	2,648
St. Anne Creek			3,500	4,800	4,100	1,300	1,100	300	3,500	3,750	970	1,692	4,888
Fish Creek-Mentasta			400		1,400	450	800	3,500	900		[b]	3,330	963
Swede Lake			20		770	270	135	500	150	325	225	7	531
Tana River										250	[b]	[b]	1,345
Mentasta Lake			2,800		6,100	715	1,200	13,000	5,400	4,800	6,000	7,090	3,277
Tanada Lake	6,270	3,100				350	3,200	200	950	0	3,950	683	3,849
Salmon Creek						0	500	1,500	1,400	300	[b]	217	825
Paxson Inlet-Mud Creek			16,800		15,200	5,700	2,200	7,000	4,800	2,800	2,200	363	6,560
Mud Creek and Lake			240			20	30	300	30	75	5	145	172
Mendeltna Creek			1,250	400		120	2,800	800	1,875	1,200	50	318	2,470
Paxson Lake Outlet					200	1,800	1,000	200	140		5	155	2,661
Mud Creek.- Summit Lake					700	820	140	450	2,800	3,900	40	[b]	7,445
Long Lake											[b]		1,577
Tonsina Lake											0		1,080
Totals	6,270	3,100	39,340	17,420	55,040	14,081	22,124	37,652	28,757	28,428	15,960	22,643	51,569

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

[b] No survey flown.

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

Appendix A26.–Temporally stratified age and sex composition of sockeye salmon harvested in the Copper River District commercial common property drift gillnet fishery, 2005.

Strata Combined:	**5/16 - 10/15**	**Brood Year and Age Class**										
Sampling dates:	**5/17 - 7/26**	**2002**		**2001**		**2000**			**1999**		**1998**	
Sample size:	**4929**	**0.2**	**1.1**	**0.3**	**1.2**	**0.4**	**1.3**	**2.2**	**1.4**	**2.3**	**1.5**	**Total**
	Sample size	12	0	158	262	0	1643	34	4	65	1	2179
Female	Percentage of sample	0.2	0.0	3.6	4.7	0.0	33.3	0.6	0.1	1.3	0.0	43.8
	Number in harvest	2,591	0	47,781	62,674	0	444,017	8,361	847	17,068	222	583,561
	Sample size	28	8	227	435	2	1870	33	8	64	0	2675
Male	Percentage of sample	0.5	0.1	5.5	7.4	0.1	39.0	0.7	0.1	1.4	0.0	54.9
	Number in harvest	7,304	1,618	73,634	98,078	717	519,193	8,931	1,836	19,239	0	730,551
	Sample size	40	8	389	718	2	3560	68	12	131	1	4929
Total	Percentage of sample	0.7	0.1	9.2	12.4	0.1	73.2	1.3	0.2	2.8	0.0	100.0
	Number in harvest	9,895	1,618	122,341	165,610	717	974,083	17,523	2,682	36,770	222	1,331,462
	Standard error	1,638	577	6,039	5,867	521	8,762	2,202	815	3,320	222	

Appendix A27.–Temporally stratified age and sex composition of Chinook salmon harvested in the Copper River District commercial common property drift gillnet fishery, 2005.

Strata Combined:	**5/16 - 10/15**	**Brood Year and Age Class**											
Sampling dates:	**5/16 - 6/11**	**2002**		**2001**			**2000**		**1999**		**1998**		
Sample size:	**2,103**	**0.2**	**1.1**	**0.3**	**1.2**	**2.1**	**1.3**	**2.2**	**1.4**	**2.3**	**1.5**	**2.4**	**Total**
Female	Percentage of sample	0.0	0.0	0.2	4.3	0.0	38.3	0.2	16.0	0.9	0.0	0.3	60.3
	Number in harvest	16	0	70	1,483	9	13,268	62	5,542	321	13	96	20,880
	Sample size	0	7	0	65	1	403	3	333	7	0	7	826
Male	Percentage of sample	0.0	0.3	0.0	2.5	0.0	18.2	0.1	17.0	0.3	0.0	0.3	38.9
	Number in harvest	0	109	0	876	9	6,315	43	5,891	96	0	108	13,446
	Sample size	1	7	3	160	2	1229	7	655	25	1	13	2103
Total	Percentage of sample	0.0	0.3	0.2	6.8	0.0	57.1	0.3	33.3	1.2	0.0	0.6	100.0
	Number in harvest	16	109	70	2,359	17	19,758	105	11,539	417	13	204	34,608
	Standard error	16	58	54	217	12	446	40	432	100	13	56	

Appendix A28.–Temporally stratified age and sex composition of coho salmon harvested in the Copper River District commercial common property drift gillnet fishery, 2005.

Stratum dates:	**5/17 - 8/23**	**Brood Year and Age Class**			
Sampling date:	**8/16 - 8/16**	**2002**	**2001**	**2000**	
Sample size:	**401**	**1.1**	**2.1**	**3.1**	**Total**
Female	Percentage of sample	18.5	14.7	0.0	33.2
	Number in harvest	8,640	6,888	0	15,528
	Sample size	154	112	0	266
Male	Percentage of sample	38.4	27.9	0.0	66.3
	Number in harvest	17,980	13,076	0	31,056
	Sample size	228	173	0	401
Total	Percentage of sample	56.9	43.1	0.0	100.0
	Number in harvest	26,620	20,198	0	46,818
	Standard error	1,159	1,159	0	

APPENDIX B. COGHILL AND UNAKWIK DISTRICTS

Appendix B1.–Total commercial common property salmon harvest by period in the Coghill District drift gillnet and purse seine fisheries, 2005.

					Chinook		Sockeye		Coho		Pink		Chum	
Period	Date	Hours	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Drift Gillnet														
1[a]	06/06-06/07	24	18	23	24	108	513	4,315	0	0	0	0	9,213	83,107
2[a]	06/09-06/10	24	32	49	2	28	295	2,008	1	7	0	0	24,872	212,780
3[b]	06/13-06/15	48	74	190	0	0	850	5,474	0	0	0	0	58,139	483,057
4[b]	06/16-06/18	48	100	249	19	206	4,472	29,310	0	0	0	0	56,555	454,207
5[b]	06/20-06/22	48	91	323	5	94	5,718	35,419	0	0	4	18	86,842	671,908
6[b]	06/23-06/25	48	106	387	39	364	11,466	72,846	0	0	54	234	86,151	646,360
7[b]	06/27-06/29	48	102	349	6	116	11,092	69,662	0	0	456	2,674	89,625	717,917
8[b]	06/30-07/02	48	124	385	4	35	11,940	75,021	38	258	842	3,431	135,033	1,038,175
9[b]	07/04-07/06	48	141	346	4	52	7,434	49,579	68	548	2,120	8,418	106,847	851,875
10[c]	07/07-07/10	72	114	391	8	81	8,572	55,427	150	1,193	10,804	40,232	116,010	925,593
11[b]	07/11-07/13	48	104	319	4	66	15,268	95,603	389	2,743	15,213	58,935	74,077	578,349
13[d]	07/14-07/16	48	70	167	0	0	11,019	70,086	501	4,018	20,897	82,401	31,318	234,666
15[e]	07/17-07/17	12	0	0	0	0	0	0	0	0	0	0	0	0
16[f]	07/18-07/21	72	36	79	0	0	6,061	36,114	721	3,415	21,448	78,980	6,285	49,228
17[g]	07/21-07/21	12	1	1	0	0	25	180	0	0	272	1,088	0	0
52[g]	08/29-08/29	16	2	2	0	0	0	0	122	1,014	0	0	0	0
53[g]	08/30-08/30	16	0	0	0	0	0	0	0	0	0	0	0	0
54[g]	08/31-08/31	16	0	0	0	0	0	0	0	0	0	0	0	0
55[g]	09/01-09/01	16	1	1	0	0	0	0	65	716	0	0	0	0
56[g]	09/02-09/02	16	2	2	0	0	0	0	227	1,955	0	0	0	0
57[g]	09/03-09/03	16	0	0	0	0	0	0	0	0	0	0	0	0
58[g]	09/04-09/04	16	0	0	0	0	0	0	0	0	0	0	0	0
59[g]	09/05-09/11	156	17	52	0	0	10	65	9,959	81,420	0	0	0	0
60[g]	09/12-09/14	60	9	14	0	0	9	55	3,708	30,461	0	0	0	0
61[g]	09/14-09/18	96	23	67	0	0	4	21	16,832	135,777	0	0	0	0
62[g]	09/19-09/25	156	23	83	0	0	0	0	18,653	143,023	0	0	0	0
63[g]	09/26-10/02	156	4	5	0	0	0	0	982	7,947	0	0	0	0
64[g]	10/03-10/09	156	0	0	0	0	0	0	0	0	0	0	0	0
65[g]	10/10-10/16	156	0	0	0	0	0	0	0	0	0	0	0	0
Total			205	3,484	115	1,150	94,748	601,185	52,416	414,495	72,110	276,411	880,967	6,947,222
Average Weight						10.00		6.35		7.91		3.83		7.89

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Period	Date	Hours	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
					Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Purse Seine														
10[h]	07/09-07/10	24	18	31	0	0	4,674	31,238	196	1,039	39,143	169,957	93,039	753,064
12[h]	07/13-07/14	24	19	28	0	0	53	363	2	12	16,883	88,831	111,759	879,137
14[h]	07/16-07/16	12	12	18	0	0	58	343	0	0	99,294	384,386	63,855	417,773
17[i]	07/21-07/21	12	7	9	0	0	1,156	7,218	84	592	100,728	406,089	1,028	8,748
18[j]	07/22-07/22	12	6	7	0	0	0	0	0	0	106,479	341,266	971	7,768
19[e]	07/23-07/23	12	19	25	0	0	1,303	8,321	17	116	294,666	1,070,468	763	6,669
20[e]	07/25-07/25	12	16	17	0	0	1,367	7,855	19	109	133,647	480,481	905	6,458
21[e]	07/27-07/27	16	14	17	0	0	1,067	5,710	33	179	152,736	561,322	2,985	23,628
22[e]	07/29-07/29	16	13	15	0	0	320	1,922	0	0	161,572	613,958	104	832
23[k]	07/31-07/31	16	0	0	0	0	0	0	0	0	0	0	0	0
24[k]	08/01-08/01	16	3	3	0	0	170	1,206	11	96	32,415	129,666	77	839
25[k]	08/02-08/02	16	2	2	0	0	61	366	0	0	22,545	90,181	84	672
26[k]	08/03-08/03	16	4	4	0	0	84	504	1	8	54,417	163,254	35	280
27[k]	08/04-08/04	16	4	4	1	4	41	267	2	18	41,769	153,881	27	262
28[k]	08/05-08/05	16	4	8	0	0	292	1,747	5	30	83,949	306,074	67	568
29[k]	08/06-08/06	16	0	0	0	0	0	0	0	0	0	0	0	0
30[i]	08/07-08/07	16	4	4	0	0	17	102	0	0	44,766	156,683	13	104
31[i]	08/08-08/08	16	7	7	0	0	21	119	0	0	109,477	341,623	16	150
32[i]	08/09-08/09	16	6	6	0	0	0	0	0	0	77,790	229,449	0	0
33[i]	08/10-08/10	16	4	4	0	0	3	15	0	0	39,732	155,621	9	54
34[k]	08/11-08/11	16	6	6	0	0	0	0	0	0	89,872	253,359	0	0
35[k]	08/12-08/12	16	4	4	0	0	0	0	0	0	38,250	153,006	0	0
36[k]	08/13-08/13	16	6	7	0	0	0	0	0	0	108,589	328,987	0	0
37[l]	08/14-08/14	16	6	7	0	0	0	0	0	0	104,095	343,122	0	0
38[l]	08/15-08/15	16	9	22	0	0	0	0	0	0	452,685	1,391,954	27	213
39[l]	08/16-08/16	16	6	12	0	0	8	85	0	0	215,699	605,218	0	0
40[l]	08/17-08/17	16	11	19	0	0	14	88	0	0	294,994	874,336	19	103
41[k]	08/18-08/18	16	7	14	0	0	10	73	0	0	117,075	420,387	0	0
42[k]	08/19-08/19	16	3	5	0	0	0	0	0	0	23,182	78,129	0	0
43[k]	08/20-08/20	16	5	6	0	0	0	0	0	0	61,029	211,727	0	0
44[k]	08/21-08/21	16	1	1	0	0	0	0	0	0	21,871	80,003	0	0
45[k]	08/22-08/22	16	7	20	0	0	0	0	0	0	82,086	264,182	0	0
56[i]	09/02-09/02	16	1	1	0	0	0	0	0	0	25,343	101,373	0	0
60[i]	09/12-09/14	60	1	1	0	0	3	12	1,188	9,942	0	0	0	0
Total			205	334	1	4	10,722	67,554	1,558	12,141	0 3,246,778	10,948,973	275,783	2,107,322
Average Weight						4.00		6.30		7.79		3.37		7.64

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

[b] The Coghill District excluding the Esther Subdistrict was open for the first 24 hrs, waters of the Coghill District north of 60^0 55.89' were open for 48 hrs.

[c] The Coghill District excluding the Esther Subdistrict was open for the first 24 hrs, waters of the Coghill District north of 60^0 55.89' were open for 72 hrs.

[d] Waters of the Coghill District, excluding the Esther Subdistrict were open for 48 hrs. The Esther Subdistrict, excluding the WNH THA and SHA was open for 12 hrs, the SHA and THA were open for 12hrs.

[e] In the Coghill District, waters of the Esther subdistrict excluding the Wally Noerenburg Hatchery Terminal Harvest Area and Special Harvest Area were open.

[f] Waters of the Coghill District, excluding the Esther Subdistrict were open for 72 hrs. The Esther Subdistrict, excluding the WNH THA and SHA were open were open for 12 hrs.

[g] Waters of the Coghill District, including the SHA and THA, were open up to a line of buoys in front of the barrier seine.

[h] Waters of the Esther Subdistrict east of 148^o 7' W. longitude, west of 147^o 56' W. longitude, within one nautical mile of Esther Island, excluding the WNH THA and SHA, were open.

[i] Waters of the Coghill District, including the SHA and THA, were open up to a line of buoys in front of the barrier seine.

[j] The Esther Subdistrict, including the SHA and THA up to a line of buoys in front of the barrier seine, was open.

[k] Waters of the Coghill District, excluding the SHA, were open.

[l] Waters of the Coghill District, excluding the in the SHA north of 60 47.810'N. Lat., were open.

Appendix B2.–Total commercial common property salmon harvest by species in the Coghill District, 1984–2005.

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
10-Year Average (1995-2004)	384	132,983	16,686	125,981	842,722	1,118,756
			Purse Seine			
1984	0	21	0	10,911	1,126	12,058
1985	85	10,757	112	69,242	19,330	99,526
1986	186	18,514	98	145,706	27,078	191,582
1987	58	38,899	1,956	865,671	59,252	965,836
1988	63	1,623	15,787	1,600,481	11,755	1,629,709
1989	61	2,030	39,484	3,296,965	124,639	3,463,179
1990	2	286	11,819	785,278	10,951	808,336
1991	11	1,562	621	1,980,074	11,519	1,993,787
1992	6	765	27,382	196,503	1,603	226,259
1993	46	6,250	1,760	352,468	3,645	364,169
1994	50	21,060	30,517	3,538,760	3,575	3,593,962
1995	33	20,670	5,337	917,200	2,597	945,837
1996	1	2,640	5,319	1,484,422	463	1,492,845
1997	7	5,694	1,269	1,875,617	33,139	1,915,726
1998	20	1,702	1,531	2,845,157	21,600	2,870,010
1999	34	3,229	338	3,509,722	621,349	4,134,672
2000	1	2,984	31,991	3,271,314	1,338	3,307,628
2001	8	2,398	356	648,335	3,802	654,899
2002	5	2,068	2,431	1,271,180	794,794	2,070,478
2003	15	125,641	724	11,439,915	750,834	12,317,129
2004	2	195	133	23,609	386,042	409,981
2005	1	10,722	1,558	3,246,778	275,783	3,534,842
10-Year Average (1995-2004)	13	16,722	4,943	2,728,647	261,596	3,011,921

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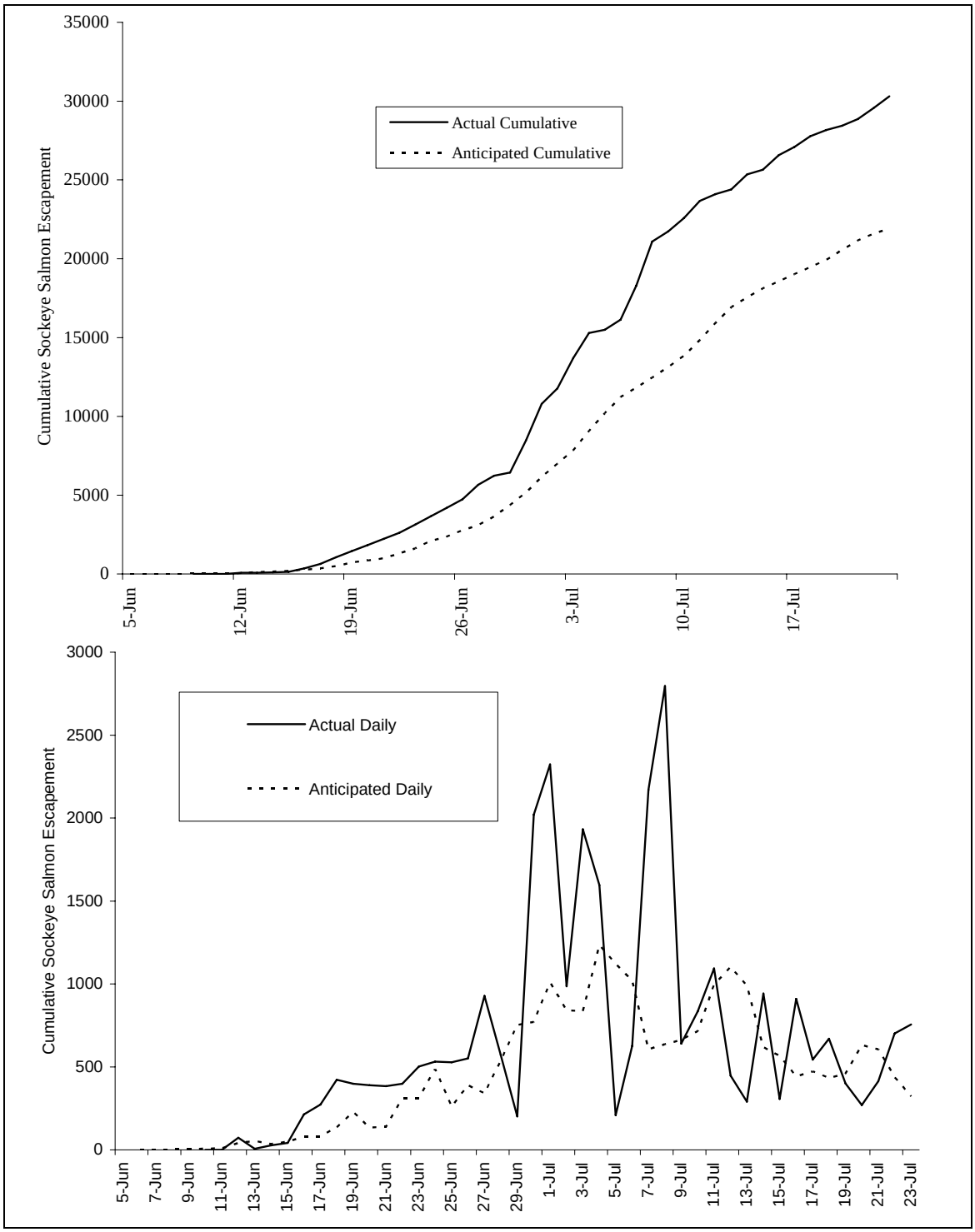
Year	Chinook	Sockeye	Coho	Pink	Chum	Total
	Combined Gear					
1984	396	94,977	563	908,407	266,004	1,270,347
1985	465	350,053	1,243	523,773	266,154	1,141,688
1986	803	400,079	887	214,593	246,049	862,411
1987	410	416,353	15,352	1,578,568	378,094	2,388,777
1988	564	83,917	57,094	2,914,542	358,143	3,414,260
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
10-Year Average (1995-2004)	397	149,705	21,629	2,854,628	1,104,317	4,130,676

Appendix B3.–Daily salmon escapement past the Coghill River weir, 2005.

	Sockeye		Projected	Projected	Sockeye	Pink		
Date	Daily	Cumulative	Daily	Cumulative	Below Weir	Daily	Cumulative	Comments
11-Jun	0	0	9	26	0	0		
12-Jun	72	72	41	67	25	0		
13-Jun	6	78	53	120	35	0		
14-Jun	26	104	35	156	35	0		
15-Jun	42	146	49	204	40	0		
16-Jun	214	360	80	285	50	0		
17-Jun	273	633	81	366	45	0		
18-Jun	422	1,055	135	501	150	0		
19-Jun	398	1,453	228	729	150	0		
20-Jun	390	1,843	135	864	100	0		
21-Jun	383	2,226	138	1,002	125	0		
22-Jun	398	2,624	310	1,312	200	0		
23-Jun	502	3,126	313	1,626	350	0		
24-Jun	532	3,658	486	2,111	300	0		
25-Jun	528	4,186	260	2,371	250	0	0	
26-Jun	551	4,737	389	2,761	200	50	50	
27-Jun	927	5,664	340	3,100	450	107	157	
28-Jun	572	6,236	535	3,635	400	72	229	
29-Jun	202	6,438	753	4,388	400	68	297	
30-Jun	2,021	8,459	770	5,158	600	291	588	
01-Jul	2,323	10,782	1,008	6,166	1,000	316	904	
02-Jul	985	11,767	842	7,008	700	968	1,872	
03-Jul	1,932	13,699	835	7,843	700	1,428	3,300	
04-Jul	1,595	15,294	1,234	9,077	1,200	1,640	4,940	
05-Jul	209	15,503	1,122	10,199	1,500	552	5,492	n-sockeye low, AWL holdback
06-Jul	627	16,130	1,021	11,220	1,300	2,056	7,548	n-sockeye low, AWL holdback
07-Jul	2,170	18,300	605	11,825	1,500	14,795	22,343	
08-Jul	2,795	21,095	638	12,462	2,000	21,390	43,733	
09-Jul	640	21,735	662	13,124	1,000	17,140	60,873	
10-Jul	835	22,570	715	13,839	500	27,810	88,683	
11-Jul	1,093	23,663	996	14,835	500	29,810	118,493	
12-Jul	447	24,110	1,102	15,938	500	16,860	135,353	
13-Jul	291	24,401	990	16,927	400	9,170	144,523	
14-Jul	942	25,343	618	17,546	300	21,590	166,113	
15-Jul	307	25,650	566	18,111	200	8,350	174,463	chum cumulative to date = 138
16-Jul	909	26,559	443	18,555	250	26,410	200,873	47 chum across weir
17-Jul	544	27,103	472	19,027	200	14,610	215,483	37 chum across weir on
18-Jul	670	27,773	433	19,460	300	22,240	237,723	33 chum across weir
19-Jul	400	28,173	460	19,920	200	12,560	250,283	32 chum acrosws weir
20-Jul	270	28,443	631	20,551	150	7,940	258,223	27 chum across weir
21-Jul	414	28,857	606	21,158	100	10,230	268,453	13 chum across weir
22-Jul	701	29,558	439	21,597	200	13,060	281,513	29 chum across weir
23-Jul	755	30,313	322	21,918	200	11,860	293,373	30 chum across, last day. Weir pulled on 7/24 in a.m.

Appendix B4.–Anticipated daily and cumulative sockeye salmon escapement versus actual escapement past the Coghill River weir, 2005.



Appendix B5.–Salmon escapement by species in the Coghill District, 1971-2005.

Year	Sockeye[a]	Pink[b]	Chum[b]
1971	15,000	62,160	6,600
1972	51,000	30,960	28,160
1973	55,000	493,780	72,610
1974	22,333	56,940	29,280
1975	34,855	452,430	3,640
1976	9,056	57,090	25,670
1977	31,562	130,510	43,940
1978	42,284	85,450	18,160
1979	48,281	70,980	6,330
1980	142,253	214,930	23,340
1981	156,112	106,450	2,050
1982	180,314	368,380	22,130
1983	38,783	310,330	61,410
1984	63,622	429,450	19,690
1985	163,311	296,970	22,140
1986	71,095	101,600	13,140
1987	187,263	147,060	24,510
1988	72,052	37,070	39,240
1989	37,751	45,510	22,680
1990	8,949	49,110	26,020
1991	9,752	98,580	6,070
1992	29,642	23,611	10,003
1993	9,232	41,837	8,430
1994	7,264	65,648	14,176
1995	30,382	46,029	11,596
1996	38,693	104,781	19,669
1997	35,517	52,961	3,101
1998	28,923	85,968	22,764
1999	59,311	168,816	5,057
2000	28,446	223,646	20,488
2001	38,558	148,665	13,388
2002	28,323	54,882	7,430
2003	75,427	375,147	19,729
2004	30,569	36,717	5,000
2005	30,313	528,264	11,979
10-Year Average (1994–2004)	39,415	129,761	12,822

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 in district by aerial surveys.

Appendix B6.–Summary of periods, dates, duration, and emergency orders issued for the commercial salmon fisheries in the Coghill and Unakwik Districts, 2005.

Drift Gillnet							
UNAKWIK (229)				COGHILL(223)			
Periods	Dates	Duration	Emergency Orders Issued	Periods	Dates	Duration	Emergency Orders Issued
01 [a]	06/13-06/15	48	2-F-E-017-05	1[a]	06/06-06/07	24	2-F-E-009-05
02	06/16-06/18	48	2-F-E-020-05	2[a]	06/09-06/10	24	2-F-E-012-05
03	06/20-06/22	48	2-F-E-024-05	3[b]	06/13-06/15	48	2-F-E-016-05
04	06/23-06/25	48	2-F-E-029-05	4[b]	06/16-06/18	48	2-F-E-019-05
05	06/27-06/29	48	2-F-E-033-05	5[b]	06/20-06/22	48	2-F-E-023-05
06	06/30-07/02	48	2-F-E-036-05	6[b]	06/23-06/25	48	2-F-E-028-05
07	07/04-07/06	48	2-F-E-044-05	7[b]	06/27-06/29	48	2-F-E-032-05
08	07/07-07/09	48	2-F-E-048-05	8[b]	06/30-07/02	48	2-F-E-035-05
09	07/11-07/13	48	2-F-E-054-05	9[b]	07/04-07/06	48	2-F-E-043-05
10	07/18-07/20	48	2-F-E-063-05	10[c]	07/07-07/10	72	2-F-E-047-05
11	07/21-07/23	48	2-F-E-069-05	11[b]	07/11-07/13	48	2-F-E-053-05
12	07/25-07/27	48	2-F-E-072-05	13[d]	07/14-07/16	48	2-F-E-057-05
13	07/28-07/30	48	2-F-E-141-05	15[e]	07/17-07/17	12	2-F-E-058-05
14	08/01-08/02	24	2-F-E-076-05	16[f]	07/18-07/21	72	2-F-E-062-05
15	08/04-08/05	24	2-F-E-085-05	17	07/21-07/21	12	2-F-E-067-05
				18[g]	07/22-07/22	12	2-F-E-067-05
				19[h]	07/23-07/23	12	2-F-E-067-05
				20[h]	07/25-07/25	16	2-F-E-077-05
				21[h]	07/27-07/27	16	2-F-E-079-05
				22[h]	07/29-07/29	16	2-F-E-079-05
				23[h]	07/31-07/31	16	2-F-E-081-05
				24[h]	08/01-08/01	16	2-F-E-081-05
				25[h]	08/02-08/02	16	2-F-E-081-05
				26[h]	08/03-08/03	16	2-F-E-081-05
				27[h]	08/04-08/04	16	2-F-E-081-05
				28[h]	08/05-08/05	16	2-F-E-081-05
				29[h]	08/06-08/06	16	2-F-E-081-05
				30[h]	08/07-08/07	16	2-F-E-090-05
				31[h]	08/08-08/08	16	2-F-E-090-05
				32[h]	08/09-08/09	16	2-F-E-090-05
				33[h]	08/10-08/10	16	2-F-E-090-05
				34[h]	08/11-08/11	16	2-F-E-091-05
				35[h]	08/12-08/12	16	2-F-E-091-05
				36[h]	08/13-08/13	16	2-F-E-091-05
				37[h]	08/14-08/14	16	2-F-E-099-05
				38[h]	08/15-08/15	16	2-F-E-099-05
				39[h]	08/16-08/16	16	2-F-E-099-05
				40[h]	08/17-08/17	16	2-F-E-099-05
				41[h]	08/18-08/18	16	2-F-E-100-05
				42[h]	08/19-08/19	16	2-F-E-100-05
				43[h]	08/20-08/20	16	2-F-E-100-05
				44[h]	08/21-08/21	16	2-F-E-100-05
				45[h]	08/22-08/22	16	2-F-E-100-05
				46[h]	08/23-08/23	16	2-F-E-100-05
				47[i]	08/24-08/24	16	2-F-E-100-05
				48[i]	08/25-08/25	16	2-F-E-103-05
				49[i]	08/26-08/26	16	2-F-E-103-05
				50[i]	08/27-08/27	16	2-F-E-103-05
				51[i]	08/28-08/28	16	2-F-E-103-05
				52[i]	08/29-08/29	16	2-F-E-103-05
				53[i]	08/30-08/30	16	2-F-E-103-05
				54[i]	08/31-08/31	16	2-F-E-103-05
				55[i]	09/01-09/01	16	2-F-E-103-05
				56[i]	09/02-09/02	16	2-F-E-103-05
				57[i]	09/03-09/03	16	2-F-E-103-05
				58[i]	09/04-09/04	16	2-F-E-103-05

-continued-

Appendix B6.–Page 2 of 3.

Drift Gillnet

UNAKWIK (229)				COGHILL(223)			
Periods	**Dates**	**Duration**	**Emergency Orders Issued**	**Periods**	**Dates**	**Duration**	**Emergency Orders Issued**
				59[i]	09/05-09/11	156	2-F-E-142-05
				60[i]	09/12-09/14	60	2-F-E-142-05
				61[i]	09/14-09/18	96	2-F-E-119-05
				62[i]	09/19-09/25	156	2-F-E-123-05
				63[i]	09/26-10/02	156	2-F-E-126-05
				64[i]	10/03-10/09	156	2-F-E-130-05
				65[i]	10/10-10/16	156	2-F-E-133-05

Purse Seine

UNAKWIK (229)				COGHILL(223)			
Periods	**Dates**	**Duration**	**Emergency Orders Issued**	**Periods**	**Dates**	**Duration**	**Emergency Orders Issued**
01 [a]	06/13-06/15	48	2-F-E-017-05	10[j]	07/09-07/10	24	2-F-E-060-05
02	06/16-06/18	48	2-F-E-020-05	12[j]	07/13-07/14	24	2-F-E-060-05
03	06/20-06/22	48	2-F-E-024-05	14[j]	07/16-07/16	12	2-F-E-061-05
04	06/23-06/25	48	2-F-E-029-05	17[i]	07/21-07/21	12	2-F-E-067-05
05	06/27-06/29	48	2-F-E-033-05	18[k]	07/22-07/22	12	2-F-E-067-05
06	06/30-07/02	48	2-F-E-036-05	19[h]	07/23-07/23	12	2-F-E-067-05
07	07/04-07/06	48	2-F-E-044-05	20[h]	07/25-07/25	12	2-F-E-077-05
08	07/07-07/09	48	2-F-E-048-05	21[h]	07/27-07/27	16	2-F-E-079-05
09	07/11-07/13	48	2-F-E-054-05	22[h]	07/29-07/29	16	2-F-E-079-05
10	07/18-07/20	48	2-F-E-063-05	23[l]	07/31-07/31	16	2-F-E-081-05
11	07/21-07/23	48	2-F-E-069-05	24[l]	08/01-08/01	16	2-F-E-081-05
12	07/25-07/27	48	2-F-E-072-05	25[l]	08/02-08/02	16	2-F-E-081-05
13	07/28-07/30	48	2-F-E-141-05	26[l]	08/03-08/03	16	2-F-E-081-05
14	08/01-08/02	24	2-F-E-076-05	27[l]	08/04-08/04	16	2-F-E-081-05
15	08/04-08/05	24	2-F-E-085-05	28[l]	08/05-08/05	16	2-F-E-081-05
				29[l]	08/06-08/06	16	2-F-E-081-05
				30[i]	08/07-08/07	16	2-F-E-090-05
				31[i]	08/08-08/08	16	2-F-E-090-05
				32[i]	08/09-08/09	16	2-F-E-090-05
				33[i]	08/10-08/10	16	2-F-E-090-05
				34[l]	08/11-08/11	16	2-F-E-091-05
				35[l]	08/12-08/12	16	2-F-E-091-05
				36[l]	08/13-08/13	16	2-F-E-091-05
				37[m]	08/14-08/14	16	2-F-E-099-05
				38[m]	08/15-08/15	16	2-F-E-099-05
				39[m]	08/16-08/16	16	2-F-E-099-05
				40[m]	08/17-08/17	16	2-F-E-099-05
				41[l]	08/18-08/18	16	2-F-E-100-05
				42[l]	08/19-08/19	16	2-F-E-100-05
				43[l]	08/20-08/20	16	2-F-E-100-05
				44[l]	08/21-08/21	16	2-F-E-100-05
				45[l]	08/22-08/22	16	2-F-E-100-05
				46[l]	08/23-08/23	16	2-F-E-100-05
				47[l]	08/24-08/24	16	2-F-E-100-05
				48[i]	08/25-08/25	16	2-F-E-103-05
				49[i]	08/26-08/26	16	2-F-E-103-05
				50[i]	08/27-08/27	16	2-F-E-103-05
				51[i]	08/28-08/28	16	2-F-E-103-05
				52[i]	08/29-08/29	16	2-F-E-103-05
				53[i]	08/30-08/30	16	2-F-E-103-05
				54[i]	08/31-08/31	16	2-F-E-103-05
				55[i]	09/01-09/01	16	2-F-E-103-05
				56[i]	09/02-09/02	16	2-F-E-103-05
				57[i]	09/03-09/03	16	2-F-E-103-05
				58[i]	09/04-09/04	16	2-F-E-103-05
				59[i]	09/05-09/11	156	2-F-E-103-05
				60[i]	09/12-09/14	60	2-F-E-103-05

-continued-

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

[b] The Coghill District excluding the Esther Subdistrict was open for the first 24 hrs, waters of the Coghill District north of 600 55.89' were open for 48 hrs.

[c] The Coghill District excluding the Esther Subdistrict was open for the first 24 hrs, waters of the Coghill District north of 600 55.89' were open for 72 hrs.

[d] Waters of the Coghill District, excluding the Esther Subdistrict were open for 48 hrs. The Esther Subdistrict, excluding the WNH THA and SHA was open for 12 hrs, the SHA and THA were open for 12hrs.

[e] In the Coghill District, waters of the Esther subdistrict excluding the Wally Noerenburg Hatchery Terminal Harvest Area and Special Harvest Area were open.

[f] Waters of the Coghill District, excluding the Esther Subdistrict were open for 72 hrs. The Esther Subdistrict, excluding the WNH THA and SHA were open were open for 12 hrs.

[g] In the Coghill District, waters of the Esther Subdistrict SHA and THA were open.

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

[i] Waters of the Coghill District, including the SHA and THA, were open up to a line of buoys in front of the barrier seine.

[j] Waters of the Esther Subdistrict east of 148o 7' W. longitude, west of 147o 56' W. longitude, within 1 nautical mile of Esther Island, excluding the WNH THA and SHA, were open.

[k] The Esther Subdistrict, including the SHA and THA up to a line of buoys in front of the barrier seine, was open.

[d] Waters of the Coghill District, excluding the SHA and THA, were open.

[l] Waters of the Coghill District, excluding the SHA, were open.

[m] Waters of the Coghill District, excluding the in the SHA north of 60 47.810'N. Lat., were open.

Appendix B7.–Temporally stratified age and sex composition of sockeye salmon harvested in the Coghill District commercial common property drift gillnet fisheries, 2005.

Strata Combined:	**06/06 - 10/16**	**Brood Year and Age Class**					
Sampling dates:	**06/25 - 07/09**	**2001**		**2000**		**1999**	
Sample size:	**953** [a]	**0.3**	**1.2**	**1.3**	**2.2**	**2.3**	**Total**
Female	Percentage of sample	0.1	0.2	58.8	0.3	0.4	59.9
	Number in harvest	139	217	55,714	308	369	56,746
Male	Percentage of sample	0.0	0.2	39.2	0.0	0.8	40.1
	Number in harvest	0	182	37,099	0	720	38,002
Total	Percentage of sample	0.1	0.4	98.0	0.3	1.1	100.0
	Number in harvest	139	399	92,813	308	1,089	94,748
	Standard error	99	164	526	243	429	

[a] Age composition generated using length frequency data only.

Appendix B8.–Temporally stratified age and sex composition of sockeye salmon escapement through the weir on the outlet stream of Coghill Lake, 2005.

Strata Combined:	**06/12 - 07/25**	**Brood Year and Age Class**								
Sampling dates:	**06/29 - 07/17**	**2002**	**2001**			**2000**		**1999**		
Sample size:	**1243** [a]	**1.1**	**0.3**	**1.2**	**2.1**	**1.3**	**2.2**	**1.4**	**2.3**	**Total**
Female	Percentage of sample	0.0	0.0	0.6	0.0	54.1	0.1	0.1	0.2	55.2
	Number in escapement	0	15	172	0	16,400	45	30	60	16,723
	Sample size	2	0	10	1	530	1	0	4	548
Male	Percentage of sample	0.1	0.0	0.9	0.1	43.3	0.1	0.0	0.3	44.8
	Number in escapement	43	0	279	28	13,120	30	0	90	13,590
	Sample size	2	1	17	1	1,210	4	1	7	1,243
Total	Percentage of sample	0.1	0.0	1.5	0.1	97.4	0.2	0.1	0.5	100.0
	Number in escapement	43	15	451	28	29,520	75	30	151	30,313
	Standard error	32	15	111	28	142	40	30	60	

[a] Age composition generated using length frequency data only.

Appendix B9.–Total commercial common property salmon harvest by period in the Unakwik District drift gillnet and purse seine fisheries, 2005.

Period	Date [a]	Hours	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
					Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Drift Gillnet														
01 [a]	06/13-06/15	48	0	0	0	0	0	0	0	0	0	0	0	0
02	06/16-06/18	48	5	5	0	0	1,238	8,303	0	0	0	0	275	2,470
03	06/20-06/22	48	8	16	0	0	1,273	8,346	0	0	0	0	78	663
04	06/23-06/25	48	5	14	0	0	3,229	21,423	0	0	0	0	59	538
05	06/27-06/29	48	6	28	2	30	7,434	43,435	0	0	0	0	39	314
06	06/30-07/02	48	10	22	3	80	3,524	21,131	0	0	0	0	97	716
07	07/04-07/06	48	10	11	0	0	1,548	9,412	0	0	0	0	138	1,034
08	07/07-07/09	48	5	5	0	0	1,529	9,141	0	0	16	64	53	383
09	07/11-07/13	48	7	7	1	15	1,138	6,797	0	0	250	1,002	73	520
10	07/18-07/20	48	2	2	0	0	261	1,562	0	0	0	0	0	0
11	07/21-07/23	48	4	4	0	0	978	5,872	5	39	618	2,472	42	300
12	07/25-07/27	48	6	6	0	0	807	4,167	22	151	656	2,631	4	25
13	07/28-07/30	48	1	1	0	0	68	408	0	0	0	0	0	0
14	08/01-08/02	24	0	0	0	0	0	0	0	0	0	0	0	0
15	08/04-08/05	24	0	0	0	0	0	0	0	0	0	0	0	0
Total			12	121	6	125	23,027	139,997	27	190	1,540	6,169	858	6,963
Average Weight						20.8		6.1		7.0		4.0		8.1
Purse Seine														
01 [a]	06/14-06/15	48	0	0	0	0	0	0	0	0	0	0	0	0
02	06/17-06/18	48	0	0	0	0	0	0	0	0	0	0	0	0
03	06/21-06/22	48	0	0	0	0	0	0	0	0	0	0	0	0
04	06/24-06/26	48	1	1	0	0	80	485	0	0	0	0	0	0
05	06/28-06/30	48	0	0	0	0	0	0	0	0	0	0	0	0
06	07/01-07/03	48	0	0	0	0	0	0	0	0	0	0	0	0
07	07/05-07/07	48	0	0	0	0	0	0	0	0	0	0	0	0
08	07/08-07/10	48	0	0	0	0	0	0	0	0	0	0	0	0
09	07/12-07/14	48	0	0	0	0	0	0	0	0	0	0	0	0
10	07/15-07/17	48	0	0	0	0	0	0	0	0	0	0	0	0
11	07/19-07/21	48	0	0	0	0	0	0	0	0	0	0	0	0
12	07/22-07/24	48	6	7	0	0	0	0	0	0	31,562	110,470	0	0
13	07/28-07/30	48	4	12	0	0	0	0	0	0	36,969	118,471	0	0
14	08/01-08/02	24	1	1	0	0	0	0	0	0	13,327	46,644	0	0
15	08/04-08/05	24	0	0	0	0	0	0	0	0	0	0	0	0
Total			12	21	0	0	80	485	0	0	81,858	275,585	0	0
Average Weight								6.1		0.00		3.4		0.00

[a] For area and opening times refer to Appendix B6.

Appendix B10.–Total commercial common property salmon harvest by species in the Unakwik District, 1990-2005.

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
10- Year Average (1995-2004)	4	5,663	8	195	278	6,148
Purse Seine						
1983	0	6	0	3,344	716	4,066
1986[a]						
1985	0	138	0	28,210	4,123	32,471
1986	0	76	0	4,718	4,675	9,469
1987	0	146	0	187,752	6,549	194,447
1988	0	667	7	57,844	23,860	82,378
1989[a]						
1990[a]						
1991	0	819	3	121,068	79	121,969
1992	0	42	2	13,264	119	13,427
1993	0	79	0	3,233	67	3,379
1994	0	226	102	388,901	73	389,302
1995[a]						
1996[a]						
1997[a]						
1998[a]						
1999	1	386	0	0	2	389
2000	0	0	0	20,485	0	20,485
2001[a]						
2002	3	1,141	16	133	123	1,416
2003	0	1,017	0	2,261	20	3,298
2004[a]						
2005	0	80	0	81,858	0	81,938
10-Year Average (1995-2004)	1	636	4	5,720	36	6,397

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Year	Chinook	Sockeye	Coho	Pink	Chum	Total
			Combined Gear			
1983	3	13,221	0	4,859	2,142	20,225
1984	2	18,522	0	27,742	7,125	53,391
1985	26	27,670	22	37,401	8,065	73,184
1986	5	25,835	1	6,691	7,138	39,670
1987	2	6,040	1	192,623	7,905	206,571
1988	15	9,256	7	58,125	25,364	92,767
1989	31	21,412	27	41,820	404	63,694
1990	3	247	127	9,986	23	10,386
1991	13	5,301	14	133,367	197	138,892
1992	3	2,266	15	17,236	213	19,733
1993	5	14,770	4	6,571	1,045	22,395
1994	0	774	102	389,201	73	390,150
1995	8	2,116	0	1	36	2,161
1996	3	6,063	0	17	694	6,777
1997	4	3,797	0	0	179	3,980
1998	10	14,668	55	4,193	606	19,532
1999	5	8,930	5	0	298	9,238
2000	0	1,119	0	20,485	20	21,624
2001	3	2,298	2	4	44	2,351
2002	8	10,966	30	133	884	12,021
2003	0	3,180	0	2,261	20	5,461
2004	5	7,438	1	0	168	7,612
2005	6	23,107	27	83,398	858	107,396
10-Year Average (1995-2004)	5	6,058	9	2,709	295	9,076

[a] No harvest recorded.

Appendix B11.–Wally Noerenburg Hatchery cost recovery, 2005.

Harvest		Chinook			Sockeye		Coho		Pink		Chum	
Dates	Landings	Number	Pounds		Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
06/08	1	0	0	0	0	0	0	0	0	0	5,141	47,301
06/09	1	0	0	0	0	0	0	0	0	0	18,845	180,908
06/10	1	0	0	0	0	0	0	0	0	0	26,574	247,141
06/11	2	0	0	0	0	0	0	0	0	0	32,718	297,734
06/12	2	0	0	0	0	0	0	0	0	0	41,036	360,359
06/13	1	0	0	0	0	0	0	0	0	0	22,088	192,170
06/14	1	0	0	0	0	0	0	0	0	0	16,119	149,910
06/15	2	0	0	0	0	0	0	0	0	0	14,809	110,922
06/16	2	0	0	0	0	0	0	0	0	0	25,554	218,274
06/17	1	0	0	0	0	0	0	0	0	0	16,565	140,801
06/18	2	0	0	0	0	0	0	0	0	0	26,909	228,580
06/19	2	0	0	0	0	0	0	0	14,331	120,381	11,327	92,884
06/20	4	0	0	0	0	0	0	0	0	0	48,589	392,427
06/21	1	0	0	0	0	0	0	0	0	0	12,687	98,960
06/22	3	0	0	0	0	0	0	0	0	0	32,244	269,450
06/23	1	0	0	0	0	0	0	0	0	0	10,172	81,376
06/24	1	0	0	0	0	0	0	0	0	0	979	8,516
06/25	2	0	0	0	0	0	0	0	0	0	13,311	111,808
06/27	1	0	0	0	0	0	0	0	0	0	6,638	54,428
07/04	1	0	0	0	0	0	0	0	0	0	8,607	61,968
07/05	1	0	0	0	0	0	0	0	0	0	3,839	26,873
07/08	1	0	0	0	0	0	0	0	847	3,217	9,674	71,587
07/18	3	0	0	0	0	0	0	0	125,232	413,267	26,364	172,295
07/19	2	0	0	0	0	0	0	0	60,644	196,876	33,978	230,638
07/20	1	0	0	0	0	0	0	0	67,081	221,367	11,352	73,789
07/23	1	0	0	0	0	0	0	0	41,926	138,355	1,858	11,705
07/24	5	0	0	0	0	0	0	0	297,967	923,697	35,326	228,811
07/25	1	0	0	0	0	0	0	0	30,795	95,464	1,007	6,746
07/26	5	0	0	0	0	0	0	0	211,267	645,932	15,074	100,031
07/28	4	0	0	0	0	0	0	0	217,779	649,588	2,729	15,199
07/30	4	0	0	0	0	0	0	0	281,667	847,603	469	3,426

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Harvest		Chinook		Sockeye		Coho		Pink		Chum	
Dates	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
08/01	3	0	0	0	0	0	0	135,658	402,015	1,139	6,605
08/03	2	0	0	0	0	0	0	101,905	295,525	1,413	8,824
08/04	1	0	0	0	0	0	0	58,046	168,332	639	3,963
08/05	4	0	0	0	0	0	0	220,915	682,255	0	0
08/06	4	0	0	0	0	0	0	347,213	1,028,515	0	0
08/10	4	0	0	0	0	0	0	195,151	577,641	0	0
08/11	4	0	0	0	0	0	0	186,622	544,959	0	0
08/12	4	0	0	0	0	0	0	174,222	510,120	0	0
08/13	3	0	0	0	0	0	0	157,364	456,354	0	0
08/14	6	0	0	0	0	0	0	230,077	662,484	0	0
08/18	2	0	0	0	0	0	0	116,916	327,365	0	0
08/19	3	0	0	0	0	0	0	170,307	476,858	0	0
08/20	2	0	0	0	0	0	0	40,578	113,618	0	0
08/22	1	0	0	0	0	0	0	107,496	300,988	0	0
08/31	1	0	0	0	0	0	0	27,164	78,775	0	0
Total	104	0	0	0	0	0	0	3,619,170	10,881,551	535,773	4,306,409
Average Weight			0.00		0.00		0		3.01		8.04

Note: Numbers do not include 469,840 pink and 182,166 chum salmon for egg take, and 573,896 pink and 98695 chum salmon harvested for roe.

APPENDIX C. ESHAMY DISTRICT

Appendix C1.–Total commercial salmon harvest by period in the Eshamy District drift gillnet and set gillnet fisheries, 2005.

Drift Gillnet														
			Number		Chinook		Sockeye		Coho		Pink		Chum	
Period	Date	Hours	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
01[a]	07/18-07/19	24	124	226	1	8	24,112	144,714	256	1,798	28,869	114,601	1,421	10,863
02[a]	07/21-07/22	24	51	113	0	0	14,435	85,666	209	1,452	15,685	59,826	586	4,579
03[a]	07/25-07/26	24	30	61	1	7	9,249	54,983	338	1,811	9,648	37,843	453	3,250
04[a]	07/28-07/29	24	26	58	0	0	11,396	68,261	49	388	10,821	40,787	413	3,209
05[a]	08/01-08/02	24	36	60	0	0	10,059	60,583	119	853	9,656	37,718	442	3,163
06[b]	08/04-08/05	24	19	27	0	0	2,839	16,833	269	2,052	7,782	27,580	104	753
07[b]	08/08-08/09	24	16	27	0	0	3,822	19,260	155	1,194	11,476	45,541	40	315
08[b]	08/11-08/12	24	16	25	0	0	1,563	9,182	123	975	9,957	37,697	16	127
09[b]	08/15-08/16	26	12	14	0	0	1,081	6,188	87	763	6,168	23,378	14	114
10[b]	08/18-08/19	24	2	2	0	0	428	2,470	30	250	437	1,676	4	32
11[b]	08/22-08/23	26	2	2	0	0	243	1,383	1	6	0	0	0	0
12[b]	08/25-08/26	24	0	0	0	0	0	0	0	0	0	0	0	0
13[b]	08/29-08/30	26	0	0	0	0	0	0	0	0	0	0	0	0
14[b]	09/01-09/02	24	0	0	0	0	0	0	0	0	0	0	0	0
15[c]	09/05-09/07	48	0	0	0	0	0	0	0	0	0	0	0	0
16[c]	09/08-09/10	48	0	0	0	0	0	0	0	0	0	0	0	0
17[d]	09/12-09/14	48	0	0	0	0	0	0	0	0	0	0	0	0
18[e]	09/15-09/17	48	0	0	0	0	0	0	0	0	0	0	0	0
Total			137	615	2	15	79,227	469,523	1,636	11,542	110,499	426,647	3,493	26,405
Average Weight						7.50		5.93		7.06		3.86		7.56

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					Set Gillnet									
					Chinook		Sockeye		Coho		Pink		Chum	
Period	Date	Hours	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
01[f]	07/18-07/19	24	23	67	0	0	18,323	112,252	38	285	10,335	41,496	813	6,103
02[g]	07/21-07/22	24	24	76	0	0	20,377	124,392	57	457	11,816	45,710	535	4,049
03[f]	07/25-07/26	24	20	46	0	0	13,699	83,126	38	301	8,736	34,250	347	2,597
04[h]	07/28-07/29	24	22	65	0	0	21,471	129,397	25	214	14,685	56,100	748	4,386
05[h]	08/01-08/02	24	24	73	0	0	16,105	97,604	20	177	13,232	50,422	545	4,097
06[h]	08/04-08/05	24	18	42	0	0	4,761	28,224	305	2,156	12,229	45,486	242	1,920
07[h]	08/08-08/09	24	16	52	0	0	7,216	42,402	181	1,537	17,205	67,783	127	970
08[i]	08/11-08/12	24	16	38	0	0	4,004	23,144	113	883	19,493	74,373	42	321
09[j]	08/15-08/16	26	13	14	0	0	2,527	14,148	92	767	14,475	54,747	44	346
10[j]	08/18-08/19	24	4	4	0	0	1,049	6,057	13	102	3,929	15,082	9	74
11[j]	08/22-08/23	26	0	0	0	0	0	0	0	0	0	0	0	0
12[j]	08/25-08/26	24	0	0	0	0	0	0	0	0	0	0	0	0
13[k]	08/29-08/30	26	0	0	0	0	0	0	0	0	0	0	0	0
14[k]	09/01-09/02	24	0	0	0	0	0	0	0	0	0	0	0	0
15[k]	09/05-09/07	48	0	0	0	0	0	0	0	0	0	0	0	0
16[k]	09/12-09/14	48	0	0	0	0	0	0	0	0	0	0	0	0
Total			27	477	0	0	109,532	660,746	882	6,879	126,135	485,449	3,452	24,863
Average Weight						0.00		6.03		7.80		3.85		7.20

[a] Waters of the Eshamy District excluding the Main Bay Hatchery SHA were open.

[b] In the Eshamy District, waters of the Crafton Island Subdistrict south of 60° 31’10’’ N. latitude were open.

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

[d] Waters of the Eshamy district were open. The alternating gear zone (AGZ) was open to set gillnet.

[e] Waters of the Eshamy district were open. The alternating gear zone (AGZ) was open to drift gillnet.

[f] Waters of the Eshamy district were open. The alternating gear zone (AGZ) was open to drift gillnet.

[g] Waters of the Eshamy district were open. The alternating gear zone (AGZ) was open to set gillnet.

[h] Waters of the Eshamy District excluding the Main Bay Hatchery SHA and THA were open.

[i] The Crafton Island Subdistrict south of 60° 32. 86 N. latitude was open.

[j] The Crafton Island Subdistrict south of 60° 31’10’’ N. latitude, excluding Falls Bay, was open.

[k] The Crafton Island Subdistrict was open.

Appendix C2.–Summary of periods, dates, duration, and emergency orders issued for the commercial salmon fisheries in the Eshamy District, 2005.

Main Bay Subdistrict (225-21)			Crafton Island Subdistrict (225-10, 20, 30)			Emergency Orders
Period	Dates	Duration	Periods	Dates	Duration	Issued
01[a]	07/18-07/19	24	01[a]	07/18-07/19	24	2-F-E-056-05
02[b]	07/21-07/22	24	02[b]	07/21-07/22	24	2-F-E-056-05
03[a]	07/25-07/26	24	03[a]	07/25-07/26	24	2-F-E-071-05
04[c]	07/28-07/29	24	04[c]	07/28-07/29	24	2-F-E-139-05
05[c]	08/01-08/02	24	05[c]	08/01-08/02	24	2-F-E-075-05
06[c]	08/04-08/05	0	06[c]	08/04-08/05	24	2-F-E-084-05
07[c]	08/08-08/09	0	07[c]	08/08-08/09	24	2-F-E-087-05
08[d]	08/11-08/12	0	08[d]	08/11-08/12	24	2-F-E-089-05
09[e]	08/15-08/16	0	09[e]	08/15-08/16	24	2-F-E-140-05
10[e]	08/18-08/19	0	10[e]	08/18-08/19	24	2-F-E-095-05
11[e]	08/22-08/23	0	11[e]	08/22-08/23	26	2-F-E-092-05
12[e]	08/25-08/26	0	12[e]	08/25-08/26	24	2-F-E-096-05
13[e]	08/29-08/30	0	13[f]	08/29-08/30	26	2-F-E-098-05
14[e]	09/01-09/02	0	14[f]	09/01-09/02	24	2-F-E-106-05
15[f]	09/05-09/07	0	15[f]	09/05-09/07	48	2-F-E-108-05
16[f]	09/08-09/10	0	16[f]	09/08-09/10	48	2-F-E-109-05
17[f]	09/12-09/14	48	16[f]	09/12-09/14	48	2-F-E-111-05
18[f]	09/15-09/17	48	16[f]	09/15-09/17	48	2-F-E-113-05
19[f]	09/19-09/21	48	16[f]	09/19-09/21	48	2-F-E-115-05

[a] Waters of the Eshamy district were open. The alternating gear zone (AGZ) was open to drift gillnet.

[b] Waters of the Eshamy district were open. The alternating gear zone (AGZ) was open to set gillnet.

[c] Waters of the Eshamy District excluding the Main Bay Hatchery SHA and THA were open.

[d] The Crafton Island Subdistrict south of 60° 32. 86 N. latitude was open.

[e] The Crafton Island Subdistrict south of 60° 31’10’’ N. latitude, excluding Falls Bay, was open.

[f] The Crafton Island Subdistrict was open.

Appendix C3.–Temporally stratified age and sex composition of sockeye salmon harvested in the Eshamy District commercial common property gillnet fishery, 2005.

Stratum dates:	**07/18 - 08/20**	**Brood Year and Age Class [a]**				
Sampling date:	**08/03 - 08/10**	**2001**	**2000**		**1999**	
Sample size:	**990**	**1.2**	**1.3**	**2.2**	**2.3**	**Total**
Female	Percentage of sample	25.2	24.9	0.1	0.0	50.1
	Number in harvest	47,524	46,908	215	0	94,647
	Sample size	306	229	5	5	545
Male	Percentage of sample	23.4	25.4	0.3	0.1	49.2
	Number in harvest	44,115	47,961	576	269	92,921
	Sample size	545	431	9	5	990
Total	Percentage of sample	48.7	50.7	0.4	0.1	100.0
	Number in harvest	91,999	95,699	791	269	188,759
	Standard error	3,834	3,834	391	120	

[a] Age composition based on length frequency data only.

Appendix C4.–Temporally stratified age and sex composition of the sockeye salmon escapement through the weir at the head of Eshamy Lagoon, 2005.

Strata Combined:	**07/13 - 08/28**	**Brood Year and Age Class** [a]							
Sampling dates:	**07/18 - 08/13**	**2002**		**2001**		**2000**		**1999**	
Sample size:	**1,358**	**1.1**	**0.3**	**1.2**	**2.1**	**1.3**	**2.2**	**2.3**	**Total**
Female	Percentage of sample	0.0	0.0	36.5	0.0	19.4	1.3	1.3	58.6
	Number in escapement	0	10	8,596	0	4,565	317	294	13,782
	Sample size	1	0	400	3	143	15	2	564
Male	Percentage of sample	0.1	0.0	30.4	0.2	9.3	1.2	0.1	41.4
	Number in escapement	22	0	7,158	52	2,195	294	20	9,741
	Sample size	1	1	870	3	430	34	19	1358
Total	Percentage of sample	0.1	0.0	67.0	0.2	28.7	2.6	1.3	100.0
	Number in escapement	22	10	15,754	52	6,760	610	314	23,523
	Standard error	22	10	304	31	291	107	75	

[a] Generated using length frequency data only.

Appendix C5.–Daily salmon escapement through the Eshamy weir, 2005.

	Sockeye		Pink[a]		Chum		Coho		Chinook	
Date	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative
7/02	0	0	0	0	0	0	0	0	0	0
7/03	0	0	0	0	0	0	0	0	0	0
7/04	0	0	0	0	0	0	0	0	0	0
7/05	0	0	0	0	0	0	0	0	0	0
7/06	0	0	0	0	0	0	0	0	0	0
7/07	0	0	0	0	0	0	0	0	0	0
7/08	0	0	0	0	0	0	0	0	0	0
7/09	0	0	0	0	0	0	0	0	0	0
7/10	0	0	0	0	0	0	0	0	0	0
7/11	0	0	0	0	0	0	0	0	0	0
7/12	0	0	0	0	30	30	0	0	0	0
7/13	5	5	0	0	82	112	0	0	0	0
7/14	31	36	1	1	65	177	0	0	0	0
7/15	6	42	0	1	17	194	0	0	0	0
7/16	112	154	0	1	82	276	0	0	0	0
7/17	113	267	0	1	45	321	0	0	0	0
7/18	144	411	0	1	54	375	0	0	0	0
7/19	23	434	0	1	33	408	0	0	0	0
7/20	149	583	1	2	17	425	0	0	0	0
7/21	76	659	0	2	33	458	0	0	0	0
7/22	157	816	1	3	19	477	0	0	0	0
7/23	161	977	1	4	14	491	0	0	0	0
7/24	45	1,022	1	5	5	496	0	0	0	0
7/25	370	1,392	2	7	4	500	0	0	0	0
7/26	102	1,494	1	8	5	505	0	0	0	0
7/27	50	1,544	7	15	1	506	0	0	0	0
7/28	1,201	2,745	23	38	12	518	0	0	0	0
7/29	577	3,322	18	56	2	520	0	0	0	0
7/30	237	3,559	26	82	0	520	0	0	0	0
7/31	307	3,866	7	89	0	520	0	0	0	0

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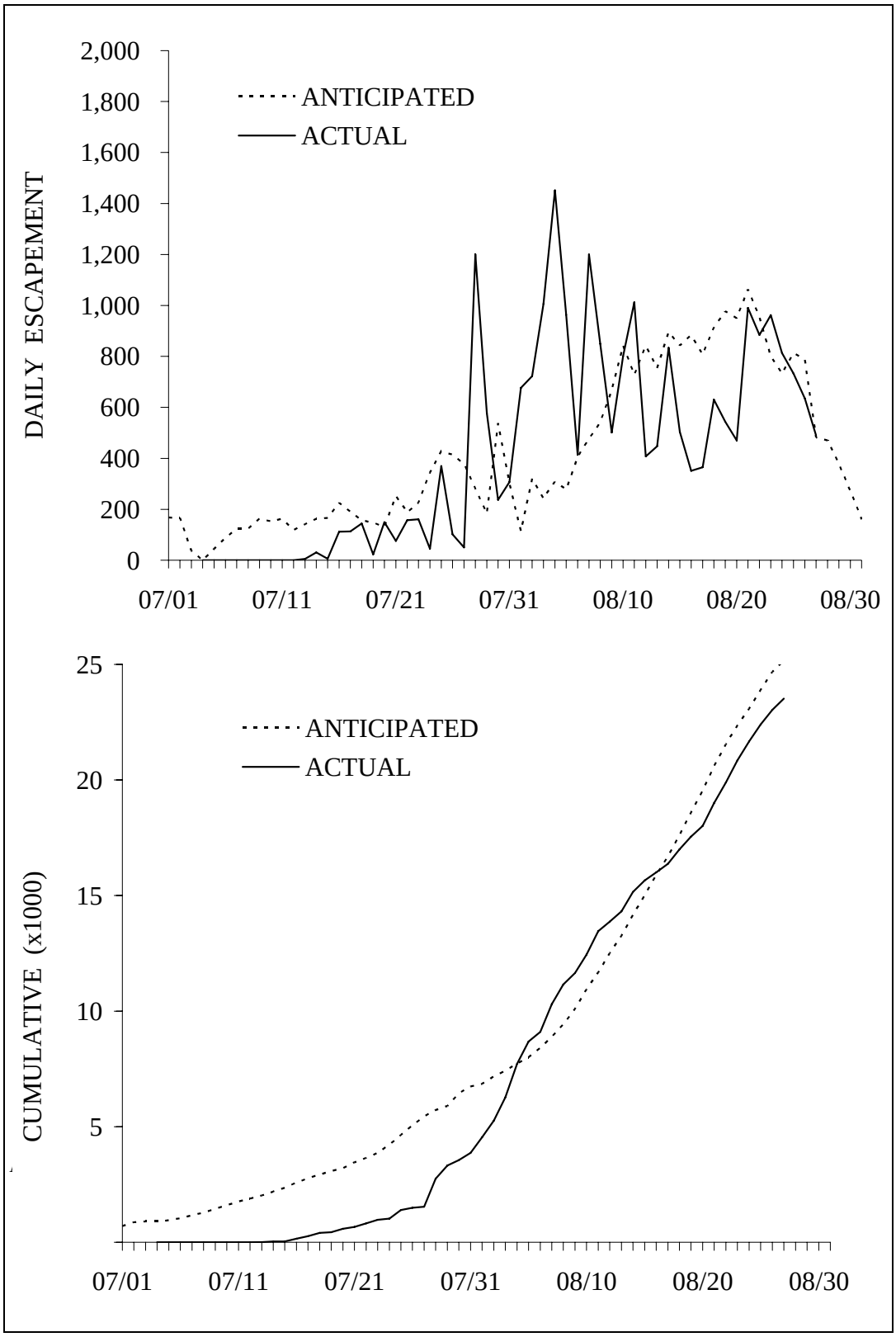
	Sockeye		Pink[a]		Chum		Coho		Chinook	
Date	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative
8/01	676	4,542	29	118	0	520	0	0	0	0
8/02	722	5,264	15	133	1	521	0	0	0	0
8/03	1,006	6,270	268	401	1	522	0	0	0	0
8/04	1,452	7,722	314	715	0	522	0	0	0	0
8/05	964	8,686	224	939	1	523	0	0	0	0
8/06	414	9,100	59	998	0	523	0	0	0	0
8/07	1,200	10,300	176	1,174	0	523	0	0	0	0
8/08	850	11,150	207	1,381	1	524	0	0	0	0
8/09	501	11,651	86	1,467	0	524	0	0	0	0
8/10	800	12,451	159	1,626	0	524	0	0	1	1
8/11	1,012	13,463	169	1,795	2	526	0	0	0	1
8/12	408	13,871	52	1,847	0	526	0	0	0	1
8/13	447	14,318	88	1,935	2	528	1	1	0	1
8/14	834	15,152	424	2,359	0	528	0	1	0	1
8/15	504	15,656	260	2,619	0	528	0	1	0	1
8/16	351	16,007	125	2,744	0	528	0	1	0	1
8/17	365	16,372	343	3,087	0	528	1	2	0	1
8/18	630	17,002	611	3,698	0	528	6	8	0	1
8/19	544	17,546	351	4,049	1	529	8	16	0	1
8/20	470	18,016	440	4,489	0	529	9	25	0	1
8/21	990	19,006	1,333	5,822	0	529	15	40	0	1
8/22	884	19,890	934	6,756	0	529	6	46	0	1
8/23	962	20,852	1390	8,146	0	529	10	56	0	1
8/24	813	21,665	1020	9,166	0	529	5	61	0	1
8/25	733	22,398	719	9,885	1	530	6	67	0	1
8/26	635	23,033	592	10,477	0	530	3	70	0	1
8/27	490	23,523	547	11,024	0	530	6	76	0	1
Totals	23,523		11,024		529		46		1	

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

Appendix C6.–Anticipated daily and cumulative sockeye salmon escapement versus actual escapement past the Eshamy River weir, 2005.



Appendix C7.–Total commercial salmon harvest by species in the Eshamy District, 1988–2005.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
			Drift Gillnet			
1988	94	50,868	794	348,873	206,060	606,689
1989 [a]						
1990	110	12,967	574	165,362	264,772	443,785
1991	107	296,234	468	44,516	202,183	543,508
1992	158	373,596	1,017	153,018	50,974	578,763
1993	8	80,807	673	45,974	27,045	154,507
1994	2	61,848	623	254,535	9,497	326,505
1995	21	29,851	1,468	60,712	13,284	105,336
1996	19	179,064	1,056	19,043	23,552	222,734
1997	17	475,498	426	146,324	34,768	657,033
1998	2	98,002	252	101,068	343	199,667
1999	30	86,032	2,036	127,082	13,120	228,300
2000	634	235,085	5,396	375,250	27,511	643,876
2001	47	499,972	10,423	367,588	21,316	899,346
2002	428	589,199	3,532	122,365	104,284	819,808
2003	19	575,608	1,764	61,565	16,057	655,013
2004	21	215,460	1,467	55,832	43,228	316,008
2005	15	79,227	1,636	110,499	3,493	194,870
10-Year Average (1995–2004)	124	298,377	2,782	143,683	29,746	474,712
			Set Gillnet			
1988	100	18,321	283	180,456	93,577	292,737
1989 [a]						
1990	56	10,204	532	369,589	94,494	474,875
1991	76	184,028	504	20,075	49,394	254,077
1992	101	144,568	1,242	390,097	4,695	540,703
1993	55	101,717	832	84,568	20,369	207,541
1994	9	97,664	628	311,134	6,908	416,343
1995	19	30,814	695	28,118	6,621	66,267
1996	13	132,268	309	16,648	9,276	158,514
1997	12	196,005	163	76,610	8,475	281,265
1998	1	25,533	91	33,916	214	59,755
1999	131	74,378	1,092	43,443	11,101	130,145
2000	41	101,105	662	139,008	12,319	253,135
2001	25	176,060	1,006	127,737	7,057	311,885
2002	30	241,660	525	64,421	22,987	329,623
2003	0	215,733	663	28,537	6,265	251,198
2004	11	91,412	825	51,655	10,381	154,284
2005	0	109,532	882	126,135	3,452	240,001
10-Year Average (1995–2004)	28	128,497	603	61,009	9,470	199,607

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Year	Chinook	Sockeye	Coho	Pink	Chum	Total
			Combined Gear			
1988	194	69,189	1,077	529,329	299,637	899,426
1989 [a]						
1990	166	23,171	1,106	534,951	359,266	918,660
1991	183	480,262	972	64,591	251,577	797,585
1992	259	518,164	2,259	543,115	55,669	1,119,466
1993	63	182,524	1,505	130,542	47,414	362,048
1994	11	159,512	1,251	565,669	16,405	742,848
1995	40	60,665	2,163	88,830	19,905	171,603
1996	32	311,332	1,365	35,691	32,828	381,248
1997	29	671,503	589	222,934	43,243	938,298
1998	3	123,535	343	134,984	557	259,422
1999	161	160,410	3,128	170,525	24,221	358,445
2000	675	336,190	6,058	514,258	39,830	897,011
2001	72	676,032	11,429	495,325	28,373	1,211,231
2002	458	830,859	4,057	186,786	127,271	1,149,431
2003	19	791,341	2,427	90,102	22,322	906,211
2004	32	306,872	2,292	107,487	53,609	470,292
2005	15	188,759	2,518	236,634	6,945	434,871
10-Year Average (1995–2004)	152	426,874	3,385	204,692	39,216	674,319

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

Appendix C8.–Salmon escapement by species at the Eshamy River weir, 1967–2005.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1967	0	10,821	192	10,433	1	21,447
1968	1	68,048	450	919	1	69,419
1969	0	61,196	96	3,095	2	64,389
1970	0	11,460	25	387	0	11,872
1971 [a]	0	954	97	3,179	0	4,230
1972 [b]	0	28,683	0	0	0	28,683
1973	0	10,202	205	1,698	0	12,105
1974 [b]	0	633	0	0	0	633
1975 [b]	0	1,724	0	0	0	1,724
1976 [b]	0	19,367	0	0	0	19,367
1977	0	11,746	230	32,080	0	44,056
1978	0	12,580	20	552	0	13,152
1979	0	12,169	5	3,654	1	15,829
1980	5	44,263	128	963	2	45,361
1981	1	23,048	249	5,956	13	29,267
1982	0	6,782	79	1,056	79	7,996
1983	0	10,348	40	7,047	4	17,439
1984	2	36,121	881	3,970	0	40,974
1985	0	26,178	96	6,271	0	32,545
1986	2	6,949	55	1,004	31	8,041
1987 [c]						
1988	2	31,747	48	1,205	1	33,003
1989	1	57,232	0	7,782	210	65,225
1990	0	14,477	43	2,209	5	16,734
1991	2	46,229	907	31,241	17	78,396
1992	1	36,237	52	3,004	5	39,299
1993	1	42,893	92	3,435	9	46,430
1994	1	64,660	1,184	12,061	87	77,993
1995	7	21,701	1,076	18,601	407	41,792
1996	2	5,271	108	7,959	9	13,349
1997	2	39,015	111	15,142	18	54,288
1998 [c]						
1999	1	27,057	194	32,756	3	60,011
2000	2	22,653	151	20,515	381	43,702
2001	0	55,187	335	21,027	176	76,725
2002	0	40,478	14	4,843	1,072	46,407
2003	2	39,845	N/A	2,440	335	42,622
2004	0	13,443	0	1,518	0	14,961
2005	1	23,523	46	11,024	529	35,123
10-Year Average (1995–2004)	2	29,406	221	13,867	267	43,762

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

[a] Escapement estimate may be low due to holes in weir. Actual escapement is estimated to be more than 3,000 sockeye salmon.

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

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

APPENDIX D. PRINCE WILLIAM SOUND PURSE SEINE DISTRICTS

Appendix D1.–Prince William Sound commercial common property purse seine harvest by day, 2005.

			Chinook		Sockeye		Coho		Pink		Chum	
Date	**Permits**	**Landings**	**Number**	**Pounds**	**Number**	**Pounds**	**Number**	**Pounds**	**Number**	**Pounds**	**Number**	**Pounds**
06/01	1	1	0	0	0	0	0	0	0	0	32	278
06/02	4	4	13	236	0	0	0	0	0	0	291	2,814
06/03	4	4	0	0	0	0	0	0	0	0	428	3,582
06/05	3	3	3	44	1	8	0	0	3	12	185	1,778
06/06	5	5	0	0	0	0	0	0	0	0	303	2,640
06/08	6	6	11	86	3	14	0	0	14	56	289	2,614
06/09	2	2	0	0	0	0	0	0	34	102	278	2,500
06/11	9	9	12	135	0	0	0	0	0	0	989	8,891
06/12	7	7	1	16	0	0	0	0	0	0	671	6,741
06/13	9	12	29	329	2	10	0	0	1,014	3,959	3,844	31,793
06/14	11	12	16	190	7	34	0	0	793	3,152	4,032	34,919
06/15	17	18	66	1,108	80	456	1	7	24,061	92,414	7,085	60,576
06/16	10	10	19	325	67	531	0	0	19,128	76,207	2,778	23,586
06/17	19	19	17	342	219	1,213	19	108	52,184	184,839	2,972	24,775
06/18	10	10	0	0	66	450	0	0	25,915	93,080	1,538	12,698
06/19	19	21	4	72	159	1,061	1	10	58,334	214,183	5,891	50,273
06/20	7	7	0	0	41	330	0	0	14,320	57,270	1,265	10,104
06/21	23	26	12	187	218	1,350	1	9	122,387	442,383	8,163	72,780
06/22	5	5	0	0	20	122	0	0	22,037	88,142	756	6,040
06/23	19	22	4	60	250	1,554	37	249	119,254	423,272	13,896	117,835
06/24	7	7	2	26	323	1,937	1	8	63,153	241,677	2,915	23,233
06/25	20	20	1	21	414	2,514	18	113	107,882	417,796	13,986	117,471
06/26	83	135	0	0	9	56	0	0	1,536,713	5,661,534	51	352
06/27	1	1	0	0	0	0	0	0	26	102	3,336	26,690
06/28	61	79	0	0	0	0	0	0	1,192,978	4,534,778	2,292	19,580
06/29	65	86	0	0	2	10	0	0	1,017,652	3,875,072	15,477	121,777
06/30	59	71	0	0	0	0	0	0	712,911	2,674,988	21,649	176,943
07/01	61	88	0	0	0	0	0	0	1,089,405	3,969,847	2,268	22,232

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			Chinook		Sockeye		Coho		Pink		Chum	
Date	**Permits**	**Landings**	**Number**	**Pounds**	**Number**	**Pounds**	**Number**	**Pounds**	**Number**	**Pounds**	**Number**	**Pounds**
07/02	66	73	0	0	14	102	0	0	808,766	3,007,893	18,712	174,999
07/03	57	64	0	0	3	28	0	0	869,028	3,169,811	13,462	96,390
07/04	5	5	0	0	36	289	0	0	1,771	7,087	30,961	108,403
07/05	69	90	0	0	0	0	0	0	1,129,099	4,193,280	17,577	140,565
07/06	57	108	0	0	18	116	0	0	856,894	3,155,977	127	1,019
07/07	69	105	0	0	86	537	0	0	857,156	3,238,493	21,274	168,224
07/08	3	4	0	0	0	0	0	0	874	3,398	10,779	72,557
07/09	64	116	0	0	3,783	25,613	191	999	811,131	3,031,422	66,214	532,326
07/10	54	75	0	0	1,162	7,437	5	40	761,582	2,864,454	32,511	263,637
07/12	64	87	0	0	19	119	1	7	665,029	2,583,855	10,050	77,498
07/13	78	122	1	5	300	2,011	117	829	661,925	2,471,572	114,784	903,526
07/14	60	89	2	58	408	2,343	68	517	677,377	2,462,133	3,522	27,251
07/15	71	86	2	12	810	4,921	189	1,278	744,765	2,686,644	3,790	29,956
07/16	70	89	0	0	984	6,419	92	703	887,330	3,214,566	66,390	437,559
07/17	66	82	0	0	790	4,825	184	1,210	1,018,639	3,701,580	7,132	60,855
07/18	22	29	0	0	52	324	0	0	612,562	2,268,570	99	797
07/19	56	61	1	31	1,134	7,586	147	1,149	786,283	2,961,050	2,928	24,555
07/20	21	26	0	0	64	367	7	51	556,227	1,933,451	212	1,556
07/21	69	89	0	0	3,078	17,859	546	3,377	962,216	3,464,673	2,780	23,066
07/22	27	37	0	0	75	450	0	0	513,594	1,841,663	1,040	8,326
07/23	78	114	0	0	2,419	15,920	171	1,375	1,560,390	5,570,957	1,702	14,691
07/24	13	14	0	0	0	0	0	0	330,659	1,245,303	447	3,576
07/25	71	89	0	0	4,466	26,346	163	1,287	961,539	3,396,738	2,367	19,081
07/27	88	136	2	60	5,786	33,180	250	1,740	1,460,401	5,186,381	5,277	43,086
07/29	86	123	5	92	4,580	27,571	195	1,714	1,206,152	4,279,407	1,171	9,930
07/30	26	29	0	0	2,963	18,699	83	706	293,529	1,037,037	123	919
07/31	53	62	0	0	1,682	10,329	42	324	630,066	2,249,181	394	3,590
08/01	33	42	0	0	3,641	21,975	307	1,925	337,608	1,149,484	391	3,330
08/02	67	79	0	0	1,507	9,416	36	248	703,848	2,324,637	1,325	10,117

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			Chinook		Sockeye		Coho		Pink		Chum	
Date	**Permits**	**Landings**	**Number**	**Pounds**	**Number**	**Pounds**	**Number**	**Pounds**	**Number**	**Pounds**	**Number**	**Pounds**
08/03	52	60	0	0	1,956	11,132	71	406	465,171	1,485,347	522	3,891
08/04	30	41	1	4	782	4,619	39	267	316,636	1,141,949	79	653
08/05	35	40	0	0	1,461	9,206	87	683	345,445	1,181,143	217	1,703
08/06	40	50	0	0	2,705	16,123	387	2,668	418,482	1,469,509	263	2,101
08/07	54	86	0	0	1,066	6,597	118	893	677,850	2,361,424	365	2,675
08/08	29	29	0	0	1,016	5,770	128	772	348,630	1,171,546	104	777
08/09	62	91	0	0	1,295	8,743	4,991	20,355	627,850	2,066,958	225	1,682
08/10	65	82	0	0	1,001	5,660	75	469	599,571	2,054,236	7,858	31,706
08/11	78	100	0	0	748	4,929	133	1,089	796,911	2,580,246	131	1,070
08/12	59	68	0	0	334	2,017	58	394	567,367	1,933,583	83	647
08/13	44	50	0	0	583	3,189	36	287	487,505	1,584,718	29	221
08/14	49	64	0	0	623	3,496	73	472	564,904	1,793,806	332	2,674
08/15	62	97	0	0	703	5,266	24	208	1,134,504	3,596,406	99	783
08/16	41	78	0	0	8	85	0	0	709,222	2,131,318	0	0
08/17	52	90	0	0	649	4,209	13,581	41,756	907,031	2,872,433	158	1,322
08/18	58	107	0	0	650	4,073	148	1,105	919,248	2,911,898	1	8
08/19	58	88	0	0	632	3,967	276	2,169	908,491	2,937,235	250	2,165
08/20	54	92	0	0	745	4,230	289	1,875	921,100	2,986,644	53	457
08/21	49	106	0	0	543	2,691	343	2,484	954,123	2,942,473	176	1,652
08/22	51	106	0	0	171	909	407	3,306	856,792	2,764,579	110	1,056
08/23	55	83	0	0	293	1,596	215	1,442	979,368	3,081,624	10	84
08/24	50	110	0	0	144	673	78	498	1,096,705	3,345,977	12	92
08/25	39	49	0	0	1,243	6,274	5,052	25,625	668,077	2,209,620	257	2,076
08/26	38	74	0	0	268	1,482	1,691	16,489	871,754	2,689,874	199	1,976
08/27	42	53	0	0	606	3,104	5,540	30,622	770,828	2,377,007	489	4,031
08/28	18	19	0	0	602	4,589	1,911	17,403	185,273	629,698	240	2,270
08/29	23	23	0	0	466	2,370	1,848	11,229	252,628	849,445	113	937
08/30	24	29	0	0	190	1,409	4,480	27,817	220,479	777,747	181	1,471
08/31	19	21	0	0	199	1,113	361	2,968	214,396	738,627	33	297

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			Chinook		Sockeye		Coho		Pink		Chum	
Date	**Permits**	**Landings**	**Number**	**Pounds**	**Number**	**Pounds**	**Number**	**Pounds**	**Number**	**Pounds**	**Number**	**Pounds**
09/01	11	11	0	0	19	110	1,627	13,022	157,244	526,165	105	944
09/02	5	5	0	0	2	14	411	3,894	43,541	164,240	38	378
09/03	7	8	0	0	17	104	1,646	13,726	61,075	206,234	100	901
09/04	3	3	0	0	0	0	362	3,627	36,864	125,897	12	123
09/05	4	6	0	0	2	12	369	2,986	80,798	272,230	14	126
09/06	15	15	0	0	0	0	11,334	112,253	16	64	364	3,661
09/07	17	17	0	0	0	0	21,357	154,742	0	0	259	2,064
09/08	11	11	0	0	0	0	13,440	132,444	0	0	76	733
09/09	5	5	0	0	0	0	17,936	97,455	0	0	58	458
09/10	8	9	0	0	16	101	10,107	97,980	0	0	29	221
09/12	1	1	0	0	3	12	1,188	9,942	0	0	0	0
09/13	2	3	0	0	0	0	5,408	52,999	0	0	0	0
09/15	3	3	0	0	0	0	2,385	20,701	0	0	2	22
09/16	1	1	0	0	0	0	1,247	11,231	0	0	0	0
09/17	1	1	0	0	0	0	532	4,796	0	0	0	0
09/20	2	2	0	0	0	0	2,896	23,161	0	0	0	0
09/21	1	1	0	0	0	0	4,654	37,228	0	0	0	0
09/23	2	2	0	0	0	0	5,365	37,549	0	0	0	0
Total	103	4,905	224	3,439	63,482	386,306	147,576	1,065,470	47,012,517	163,717,462	568,847	4,326,988
Average Weight				15.35		6.09		7.22		3.48		7.61

Appendix D2.–Total commercial salmon harvest by species, all gear and districts combined, 1971–2005.

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
1995–2004 Average	1,039	758,420	131,899	31,011,671	2,962,494	34,865,522

[a] Includes purse seine, drift gillnet, and set gillnet harvests from all PWS fishing districts; Eastern, Northern, Unakwik, Coghill, Northwestern, Eshamy, Southwestern, Montague and Southeastern. Also includes hatchery sales harvests, confiscated fish, donated and discarded fish, the surimi study fish, and special use educational permit harvests.

[b] General purse seine season closed.

Appendix D3.–Commercial common property pink salmon harvest for all gear types, by district, 1975–2005.

Year	Eastern	Northern	Coghill	Northwestern	Eshamy	Southwestern	Montague	Southeastern	Total
1975	712,328	171,657	303,597	420,891		1,673,887	118,467	875,456	4,276,283
1976	1,380,943	384,267	217,696	207,190		589,458		82,366	2,861,920
1977	1,673,044	147,964	230,215	208,727		930,469	77,104	824,374	4,091,897
1978	1,516,076	933,013	13,059					216,696	2,678,844
1979	4,500,032	115,886	38,560	59,423		5,111,073	1,347,413	4,160,925	15,333,312
1980	3,140,134	1,271,177	134,876	306,109		7,507,776	950	1,271,389	13,632,411
1981	4,797,583	1,194,621	34,155	46,874		10,371,220	278,879	3,221,268	19,944,600
1982	2,959,601	2,331,903	1,000,524	520,972	3,997	10,801,771	6,444	747,116	18,372,328
1983	2,430,063	1,021,345	273,131	714,522		5,957,068	158,241	1,482,013	12,036,383
1984	4,525,029	2,194,904	996,483	1,412,822	544,082	10,197,349	11,587	1,245,042	21,127,298
1985	6,715,143	1,002,872	523,773	527,132	58,183	10,843,752	1,448,809	2,733,562	23,853,226
1986	2,488,540	944,871	214,593	285,184	43,061	6,374,535		147,268	10,498,052
1987	6,964,549	2,419,611	1,578,568	750,877	89,902	13,341,940	111,011	955,988	26,212,446
1988	481,324	286,743	2,932,072	7,738	529,329	5,411,424		1,776	9,650,406
1989	3,151,096	6,464,090	3,925,487	181,565	[a]	[a]	[a]	73,177	13,795,415
1990	7,970,364	5,482,585	2,692,788	891,444	534,951	17,811,479	10,658	12,325	35,406,594
1991	2,617,222	4,150,612	2,211,575		64,591	17,849,425			26,893,425
1992	489,228	1,142,061	363,887		543,115	3,039,775			5,578,066
1993		413,308	493,747		130,542	2,475,798			3,513,395
1994	11,554,320	7,171,038	3,597,094		565,669	3,408,093			26,296,214
1995	4,235,638	3,656,119	1,078,693		88,830	1,707,745	18,239	11,418	10,796,682
1996	6,059,063	5,039,988	1,543,869		35,691	5,046,919			17,725,530
1997 [b]	4,534,365	3,162,822	2,030,586		222,934	5,929,544	65,107	28,040	15,973,398
1998 [b]	2,231,061	5,035,736	3,228,761		134,984	8,425,853	430,525	350,081	19,837,001
1999	12,305,629	4,981,085	3,542,130		170,525	9,511,998	189,641	914,907	31,615,915
2000	9,819,466	4,093,620	3,359,542	17,223	514,258	9,308,399	87,634	549,763	27,749,905
2001	16,050,235	404,899	957,042		495,325	3,072,848	807,010	534,538	22,321,897
2002	355,964	594,245	1,277,637		186,786	5,710,938	32,857	1,075	8,159,502
2003	14,945,744	5,909,643	11,439,915		90,102	5,789,419	60,287	514,452	38,749,562
2004	9,512,987	45,355	43,690		107,487	1,628,219	102,352	260,992	11,701,082
2005	20,516,356	10,175,784	3,318,875		236,634	11,376,513	844,658	770,570	47,239,390
1995-2004 Average	8,005,015	3,292,351	2,850,187	17,223	204,692	5,613,188	199,295	351,696	20,463,047

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

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

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

Appendix D4.–Aerial escapement indices for pink and chum salmon by district, 2005.

District	Escapement Midpoint	Odd Cycle Escapement Goal Range	1977-2003 Mean Index	Observed Escapement Index [a]	Deviation From Midpoint
Eastern	567,500	355,000 - 780,000	527,063	1,025,756	80.7%
Northern/Unakwik	172,500	110,000 - 235,000	148,602	570,079	230.5%
Coghill	200,000	125,000 - 275,000	153,156	528,264	164.1%
Northwestern	105,000	65,000 - 145,000	94,888	401,640	282.5%
Eshamy	7,500	5,000 - 10,000	5,478	32,396	331.9%
Southwestern	162,500	100,000 - 225,000	152,858	272,572	67.7%
Montague	250,000	155,000 - 345,000	258,228	566,002	126.4%
Southeastern	535,000	335,000 - 735,000	536,019	1,339,668	150.4%
Total	2,000,000			4,736,377	136.8%

Chum Salmon

District	Escapement Midpoint	Escapement Goal Range	1976-2003 Mean Index	Observed Escapement Index[a]	Deviation From Midpoint
Eastern	90,000	50,000 - 130,000	111,129	113,135	25.7%
Northern/Unakwik	38,000	21,000 - 55,000	40,916	30,657	-19.3%
Coghill	16,500	8,000 - 25,000	19,743	11,979	-27.4%
Northwestern	12,500	6,000 - 19,000	13,557	12,696	1.6%
Eshamy		None - None	77	-	-
Southwestern		None - None	2,851	1,951	-
Montague		None - None	4,623	0	-
Southeastern	17,500	15,000 - 20,000	24,725	25,547	46.0%
Total	174,500			194,014	11.2%

[a] Based on weekly aerial survey counts of 208 index spawning streams in Prince William Sound. This does not represent the total spawning escapement but rather a comparable annual index.

Appendix D5.–Pink salmon escapement indices by district, 1971–2005.

Year	Eastern	Unakwik	Coghill	Northwestern	Eshamy	Southwestern	Montague	Southeastern	Total
	Escapement Indicies								
1965	257,853	59,820	91,584	159,011	9,340	65,380	77,042	255,926	975,956
1966	544,980	288,710	135,440	79,960	11,720	115,570	42,220	204,570	1,423,170
1967	255,240	144,200	65,240	82,980	5,020	42,950	10,020	236,610	842,260
1968	364,930	151,120	108,020	117,430	10,770	172,770	52,350	179,120	1,156,510
1969	160,600	94,770	39,020	23,830	0	57,890	1,550	26,910	404,570
1970	387,090	125,360	95,170	82,660	7,610	66,790	73,880	140,660	979,220
1971	352,800	126,210	62,160	14,320	1,710	79,140	296,730	179,480	1,112,550
1972	344,470	83,900	30,960	39,020	1,100	29,530	33,140	79,060	641,180
1973	309,040	69,660	493,780	2,910	0	52,320	119,520	177,780	1,225,010
1974	256,880	206,750	56,940	163,930	6,240	160,980	11,750	94,650	958,120
1975	412,560	38,260	452,430	4,990	0	77,270	85,380	194,670	1,265,560
1976	472,080	139,600	57,090	68,150	5,840	52,120	13,790	117,590	926,260
1977	390,930	69,980	130,510	80,890	16,450	178,670	152,960	277,780	1,298,170
1978	279,120	163,010	85,450	132,300	5,430	258,980	56,690	164,030	1,145,010
1979	642,220	200,730	70,980	124,020	0	231,300	219,400	728,630	2,217,280
1980	535,960	189,140	214,930	159,260	13,100	133,470	118,400	307,680	1,671,940
1981	599,340	243,170	106,450	51,210	3,990	93,630	255,420	359,870	1,713,080
1982	573,070	332,560	368,380	174,290	15,080	195,950	132,380	482,860	2,274,570
1983	481,950	168,410	310,330	196,630	12,610	161,290	230,200	601,680	2,163,100
1984	1,209,740	593,310	429,450	452,370	16,860	345,760	191,810	792,560	4,031,860
1985	750,530	214,210	296,970	199,190	1,410	181,270	332,240	645,510	2,621,330
1986	356,380	141,420	101,600	81,490	3,840	74,980	44,680	155,830	960,220
1987	514,570	132,960	147,060	75,390	3,450	112,920	149,260	330,630	1,466,240
1988	362,370	143,850	37,070	73,780	490	126,440	67,990	152,540	964,530
1989	359,730	106,530	45,510	68,540	19,470	176,230	181,760	315,000	1,272,770
1990	443,660	131,580	49,110	115,870	17,870	150,100	113,572	304,090	1,325,852
1991	474,380	165,930	98,580	101,320	18,800	197,095	247,890	533,170	1,837,165

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Year	Eastern	Unakwik	Coghill	Northwestern	Eshamy	Southwestern	Montague	Southeastern	Total
					Escapement Indicies				
1992	204,383	72,915	23,611	42,308	2,709	66,953	47,156	95,070	555,105
1993	315,209	95,614	41,837	46,011	9,348	98,573	144,784	315,093	1,066,469
1994	615,240	178,151	65,648	141,290	11,799	144,594	60,084	196,378	1,413,184
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	975,327	255,059	375,147	103,931	5,206	130,356	320,494	691,769	2,857,289
2004	724,663	158,958	79,010	51,306	2,300	108,192	183,891	687,903	1,996,223
2005	1,025,756	570,079	528,264	401,640	32,396	272,572	566,002	1,339,668	4,736,377
					Even Cycle Average (1966-2004)				
	470,900	191,905	120,358	113,833	7,304	135,703	89,868	266,559	1,396,430
					Odd Cycle Average (1971-2003)				
	479,978	156,362	179,634	95,037	7,627	130,629	213,163	459,061	1,721,491

Note: Historical data revised in 1989. Coghill and Northwestern escapement numbers correspond to current district boundaries.

Appendix D6.–Weekly aerial survey indices of pink salmon escapement by statistical area, 2005.

Survey Location	Statistical Area	Week Ending Dates [a] 6/25	7/2	7/9	7/16	7/23	7/30	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	Adjusted Total [b]
Orca Inlet	221-10	0	10	0	NS	4,500	64,000	NS	NS	30,500	7,500	7,100	2,245	100	NS	0	96,323
Simpson & Sheep Bay	221-20	1,000	0	NS	19,400	18,200	25,000	NS	NS	30,400	52,500	NS	45,100	22,100	NS	275	138,196
Port Gravina	221-30	0	1,000	NS	43,222	86,700	107,950	NS	NS	74,500	138,000	NS	78,800	11,730	NS	0	354,252
Port Fidalgo	221-40	0	1,000	NS	12,400	46,300	68,300	NS	NS	43,650	NS	NS	43,350	11,740	NS	600	180,559
Valdez Arm	221-50	0	NS	NS	49,800	56,450	76,250	NS	NS	53,400	89,000	NS	31,000	10,925	NS	470	256,426
Port Valdez	221-61	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0
Eastern District		1,000	2,010	0	124,822	212,150	341,500	NS	NS	232,450	287,000	7,100	200,495	56,595	NS	1,345	1,025,756
Columbia & Long Bay	222-10	NS	NS	NS	5,600	10,180	14,350	NS	NS	13,450	37,000	NS	10,000	600	NS	NS	63,471
Wells Bay & Unakwik Inlet	222-20	NS	NS	0	14,000	33,400	45,500	16,700	NS	59,850	189,000	67,000	14,800	8,700	NS	0	329,266
Eaglek Bay	222-30	NS	NS	0	100	11,400	NS	10,150	NS	111,100	58,000	84,000	NS	4,570	NS	0	177,342
Northern District		NS	NS	0	19,700	54,980	59,850	26,850	NS	184,400	284,000	151,000	24,800	13,870	NS	0	570,079
Upper Unakwik Inlet	22-910	NS	NS	0	0	200	NS	200	NS	2,000	9,000	4,000	NS	100	NS	0	9,000
Unakwik District		NS	NS	0	0	200	NS	200	NS	2,000	9,000	4,000	NS	100	NS	0	9,000
West Side Port Wells	223-10	NS	NS	0	200	3,000	NS	20,200	NS	50,900	59,700	59,850	NS	5,370	NS	0	126,145
Esther Passage	22-320	NS	NS	0	0	400	NS	650	NS	2,500	8,000	17,500	NS	1,100	NS	0	17,500
College Fiord	22-330	NS	NS	1,000	5,000	60,000	NS	300,000	NS	NS	45,000	40,000	NS	3,200	NS	0	384,619
Coghill District		NS	NS	1,000	5,200	63,400	NS	320,850	NS	53,400	112,700	117,350	NS	9,670	NS	0	528,264
Passage Canal & Cochrane	22-410	NS	NS	0	400	5,100	NS	12,650	NS	45,750	63,400	63,500	NS	6,840	NS	0	126,136
Culross Passage	22-430	NS	NS	0	1,200	2,100	NS	4,600	NS	10,900	173,000	23,036	NS	4,910	NS	0	174,243
Port Nellie Juan	22-440	NS	NS	0	0	26,500	NS	850	27,000	20,100	50,300	30,100	NS	10,330	NS	0	101,261
Northwestern District		NS	NS	0	1,600	33,700	NS	18,100	27,000	76,750	286,700	116,636	NS	22,080	NS	0	401,640
Eshamy Bay	22-530	NS	NS	0	NS	200	NS	NS	2,550	2,300	22,500	24,500	NS	798	NS	0	32,396
Eshamy District		NS	NS	0	NS	200	NS	NS	2,550	2,300	22,500	24,500	NS	798	NS	0	32,396
Chenega Is. & Dangerous Pass.	22-620	NS	NS	NS	12,520	116,480	NS	NS	85,550	51,450	NS	43,170	NS	NS	80	NS	227,144
East Knight Is.	22-630	NS	NS	NS	25	3,000	NS	NS	700	750	NS	1,200	NS	NS	75	NS	4,198
Bainbridge & Latouche	22-640	NS	NS	NS	0	5,000	NS	NS	11,300	8,600	NS	5,150	NS	NS	420	NS	23,281
Port Bainbridge	22-650	NS	NS	NS	0	1,400	NS	NS	7,000	14,000	NS	2,000	NS	NS	0	NS	17,949
Southwestern District		NS	NS	NS	12,545	125,880	NS	NS	104,550	74,800	NS	51,520	NS	NS	575	NS	272,572
Montague Strait	22-710	NS	NS	NS	1,100	105,698	NS	NS	110,800	193,700	NS	91,500	NS	NS	1,185	NS	441,396
Green Is.	22-720	NS	NS	NS	1,500	61,700	NS	NS	17,050	34,050	NS	19,750	NS	NS	100	NS	124,606
Montague District		NS	NS	NS	2,600	167,398	NS	NS	127,850	227,750	NS	111,250	NS	NS	1,285	NS	566,002
Orca Is. & East Hawkins	22-810	NS	0	50	NS		2,200	NS	NS	5,600	NS	2,000	1,200	NS	NS	0	9,261
Hawkins Cutoff	22-820	NS	0	2,370	NS	47,560	200,400	NS	NS	98,000	NS	55,200	2,750	NS	NS	0	340,837
North Hawkins & Canoe Pass.	22-830	NS	0	580	NS	1,828	102,600	NS	NS	198,000	NS	51,000	16,500	NS	NS	0	316,012
Double Bay	22-840	NS	0	0	NS	1,620	42,800	NS	NS	95,200	NS	25,200	11,500	NS	NS	0	149,914
Johnstone Point	22-850	NS	0	100	NS	1,640	12,800	NS	NS	29,600	NS	48,500	8,800	NS	NS	0	76,040
Port Etches	22-860	NS	0	160	NS	34,400	163,600	NS	NS	182,200	NS	131,000	37,700	NS	NS	0	447,604
Southeastern District		NS	0	3,260	NS	87,048	524,400	NS	NS	608,600	NS	312,900	78,450	NS	NS	0	1,339,668
TOTAL OF 9 DISTRICTS		1,000	2,010	4,260	166,467	744,956	925,750	366,000	261,950	1,462,450	1,001,900	896,256	303,745	103,113	1,860	1,345	4,745,377

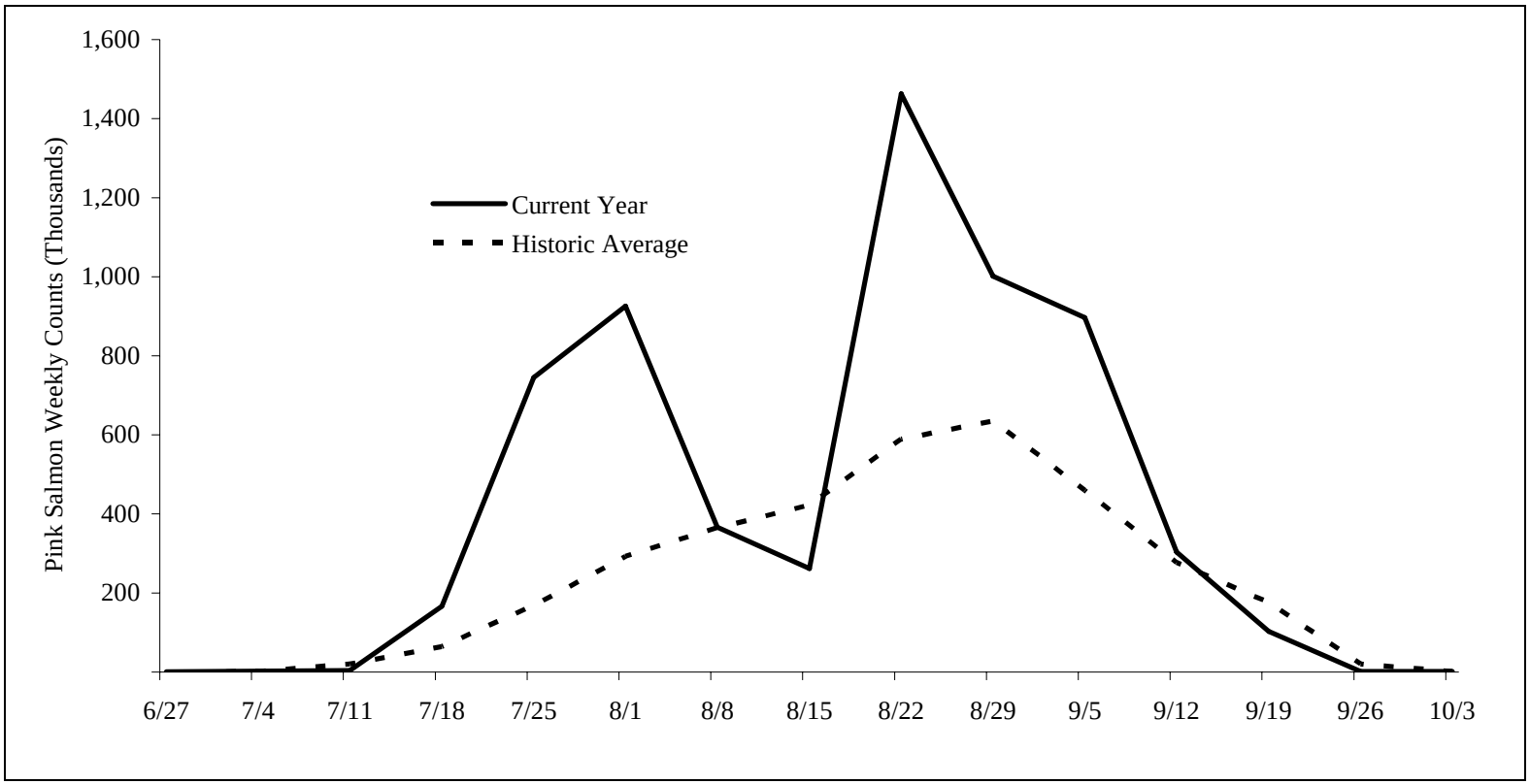
-continued-

Note: NS = No Survey.

[a] There are a total of 208 streams included in the systematic aerial survey program. The survey program commences in the Eastern District where the earliest escapements in the Sound occur. Weather and conditions permitting, each stream is flown weekly. Failure to fly a survey due to run timing or bad survey conditions is denoted by NS (no survey). A notation of NC (no count) occurs when a stream is flown but no count is possible because of survey conditions (i.e., water clarity). During the peak of the pink salmon run many streams are flown twice weekly to provide fisheries managers with more timely escapement data. In cases where more than 1 survey per week was flown the weekly observation shown in this table is the average of the two counts if observing conditions during both were good or, the maximum of the two counts if conditions during the minimum count were poor.

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

Appendix D7.–Current year and historical weekly pink salmon escapement performance of index spawning streams, 2005.



Appendix D8.–Total chum salmon harvests and escapement indices, including hatchery sales harvests and broodstock, 1965–2005.

	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	16,260	29,430	25,670	8,300	0	90	0	770	80,520			370,478	450,998
1977	47,880	48,600	43,940	10,090	0	700	0	8,280	159,490			575,839	735,329
1978	90,250	27,480	18,160	12,940	0	790	0	6,550	156,170			485,147	641,317
1979	42,630	17,320	6,330	8,770	0	90	0	5,140	80,280			324,040	404,320
1980	26,720	27,880	23,340	3,060	0	2,040	70	6,710	89,820	6		412,948	502,774
1981	71,560	28,670	2,050	15,130	0	710	0	16,010	134,130	118		1,745,869	1,880,117
1982	146,120	68,580	22,130	21,880	0	1,530	0	25,260	285,500	0	86,200	1,335,368	1,707,068
1983	143,800	85,720	61,410	31,660	340	3,170	0	21,410	347,510	0	44,000	1,030,546	1,422,056
1984	129,190	59,080	19,690	7,920	0	20	0	8,650	224,550	4,886	3,000	1,196,785	1,429,221
1985	111,310	33,410	22,140	13,290	0	620	0	4,470	185,240	3,840	0	1,302,090	1,491,170
1986	126,690	50,740	13,140	17,420	0	1,890	0	8,830	218,710	20,683	12,523	1,662,366	1,914,282
1987	183,620	38,700	24,510	26,460	0	1,690	0	44,020	319,000	2,549	15,574	1,902,063	2,239,186
1988	258,560	75,420	39,240	40,780	0	2,350	500	66,930	483,780	42,694	108,271	1,792,616	2,427,361
1989	112,080	46,470	22,680	27,430	320	11,690	0	22,640	243,310	129,551	74,513	862,551	1,309,925
1990	115,100	112,480	26,020	37,020	0	80	1,050	7,275	299,025	24,554	107,284	935,284	1,366,147
1991	86,360	19,080	6,070	8,960	0	2,800	925	9,203	133,398	13,471	114,814	318,435	580,118

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Appendix D8.–Page 2 of 2.

	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	48,804	12,903	10,003	11,072	300	2,940	783	3,881	90,686	57,392	183,940	271,176	603,194
1993	54,102	24,975	8,430	18,966	0	1,300	30	19,172	126,975	475,148	140,330	706,196	1,448,649
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	36,691	5,057	4,544	0	2,393	8,725	36,181	336,304	777,180	207,073	2,186,658	3,507,215
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	44,272	19,729	12,736	110	12,373	9,015	116,131	413,287	1,540,227	200,933	3,981,763	6,136,210
2004	108,833	42,456	9,685	10,371				42,344	213,689	528,676	208,795	1,473,242	2,424,402
2005	113,135	30,657	11,979	12,696	500	1,961		25,547	196,475	535,773	280,881	1,461,146	2,474,275
Avg.	103,328	39,892	18,589	12,974	64	2,507	4,888	24,980	206,919	477,407	131,425	1,057,264	1,643,861

[a] Coghill and Northwestern District escapement numbers correspond to current district boundaries.

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

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

Appendix D9.–Weekly aerial survey indices of chum salmon escapement by statistical area, 2005.

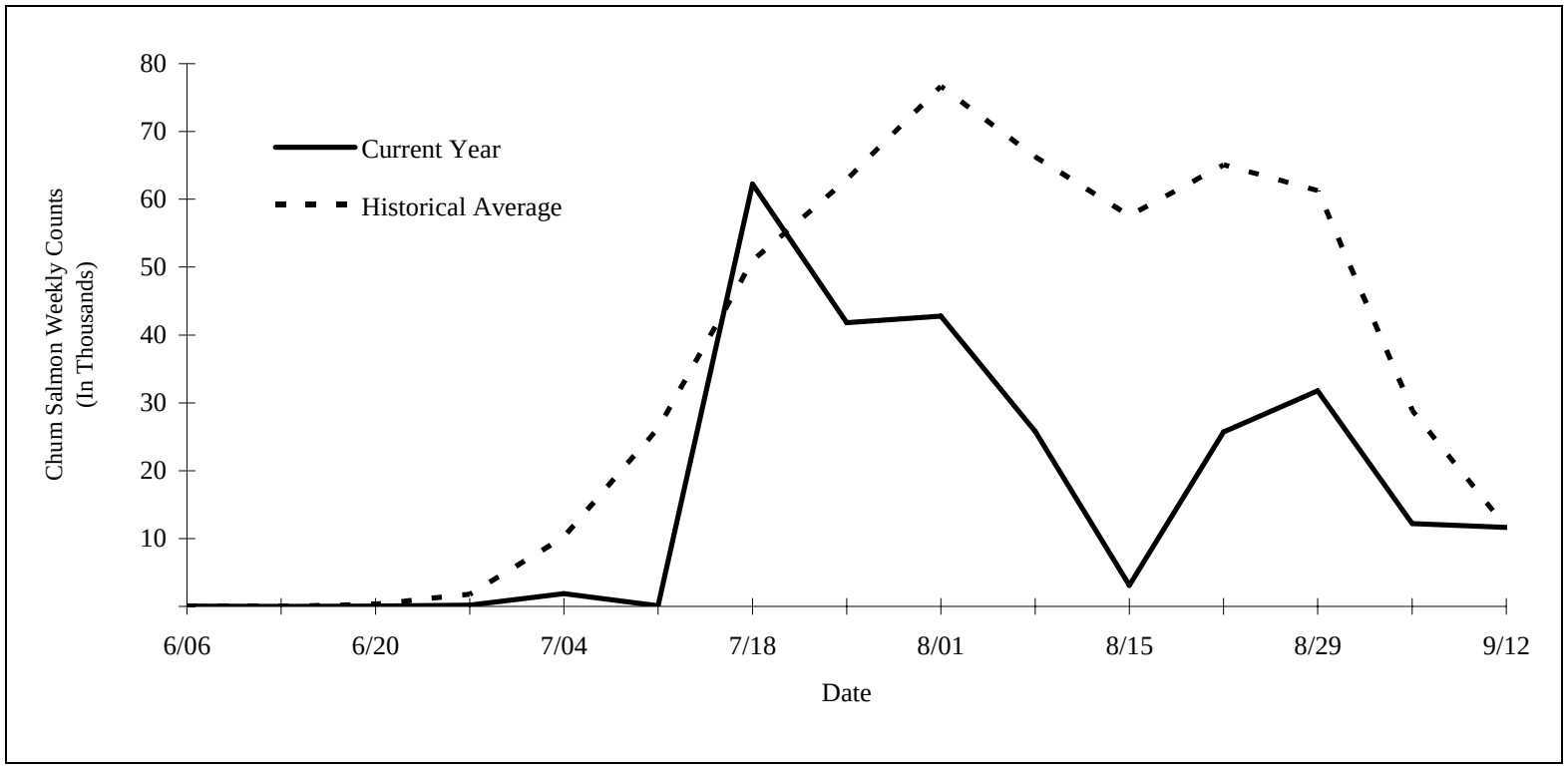
Survey Location	Statistical Area	Week Ending Dates [a] 6/25	7/2	7/9	7/16	7/23	7/30	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	Adjusted Total [b]
Orca Inlet	22-110	0	40	40	NS	0	4,000	NS	NS	0	0	200	0	0	NS	0	4,000
Simpson & Sheep Bay	22-120	0	0	NS	14,800	8,520	11,850	NS	NS	2,800	4,550	NS	3,100	0	NS	0	27,937
Port Gravina	22-130	200	1,850	NS	19,500	12,900	13,300	NS	NS	5,900	11,000	NS	5,600	0	NS	0	42,605
Port Fidalgo	22-140	0	0	NS	5,700	3,650	2,900	NS	NS	2,050	NS	NS	450	800	NS	220	10,197
Valdez Arm	22-150	0	NS	NS	15,000	8,000	6,800	NS	NS	2,350	8,800	NS	400	1,050	NS	20	28,396
Port Valdez	22-161	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0
Eastern District		200	1,890	40	55,000	33,070	38,850	NS	NS	13,100	24,350	200	9,550	1,850	NS	240	113,135
Columbia & Long Bay	22-210	NS	NS	NS	3,600	1,100	950	NS	NS	600	800	NS	0	0	NS	NS	4,974
Wells Bay & Unakwik Inlet	22-220	NS	NS	0	3,650	0	3,000	3,900	NS	4,700	6,600	0	400	0	NS	0	20,286
Eaglek Bay	22-230	NS	NS	0	0	0	NS	4,900	NS	1,700	0	0	NS	0	NS	0	5,397
Northern District		NS	NS	0	7,250	1,100	3,950	8,800	NS	7,000	7,400	0	400	0	NS	0	30,657
Upper Unakwik Inlet	22-910	NS	NS	0	0	0	NS	0	NS	0	0	0	NS	0	NS	0	0
Unakwik District		NS	NS	0	0	0	NS	0	NS	0	0	0	NS	0	NS	0	0
West Side Port Wells	22-310	NS	NS	0	0	450	NS	8,550	NS	2,000	0	0	NS	0	NS	0	8,579
Esther Passage	22-320	NS	NS	0	0	0	NS	400	NS	0	0	0	NS	0	NS	0	400
College Fiord	22-330	NS	NS	0	0	0	NS	3,000	NS	NS	0	0	NS	0	NS	0	3,000
Coghill District		NS	NS	0	0	450	NS	11,950	NS	2,000	0	0	NS	0	NS	0	11,979
Passage Canal & Cochrane	22-410	NS	NS	0	0	1,250	NS	3,300	NS	2,300	0	0	NS	0	NS	0	4,675
Culross Passage	22-430	NS	NS	0	0	1,000	NS	1,750	NS	0	0	0	NS	0	NS	0	2,750
Port Nellie Juan	22-440	NS	NS	0	0	3,100	NS	0	2,300	1,300	0	0	NS	0	NS	0	5,271
Northwestern District		NS	NS	0	0	5,350	NS	5,050	2,300	3,600	0	0	NS	0	NS	0	12,696
Eshamy Bay	22-530	NS	NS	0	NS	500	NS	NS	0	0	0	0	NS	0	NS	0	500
Eshamy District		NS	NS	0	NS	500	NS	NS	0	0	0	0	NS	0	NS	0	500
Chenega Is. & Dangerous Pass.	22-620	NS	NS	NS	0	1,320	NS	NS	500	0	NS	0	NS	NS	0	NS	1,651
East Knight Is.	22-630	NS	NS	NS	0	0	NS	NS	0	0	NS	0	NS	NS	0	NS	0
Bainbridge & Latouche Pass.	22-640	NS	NS	NS	0	0	NS	NS	300	0	NS	0	NS	NS	0	NS	300
Port Bainbridge	22-650	NS	NS	NS	0	0	NS	NS	0	0	NS	0	NS	NS	0	NS	0
Southwestern District		NS	NS	NS	0	1,320	NS	NS	800	0	NS	0	NS	NS	0	NS	1,951
Montague Strait	22-710	NS	NS	NS	0	0	NS	NS	0	0	NS	0	NS	NS	0	NS	0
Green Is.	22-720	NS	NS	NS	0	0	NS	NS	0	0	NS	0	NS	NS	0	NS	0
Montague District		NS	NS	NS	0	0	NS	NS	0	0	NS	0	NS	NS	0	NS	0
Orca Is. & East Hawkins	22-810	NS	0	0	NS	NS	0	NS	NS	0	NS	0	0	NS	NS	0	0
Hawkins Cutoff	22-820	NS	0	0	NS	0	0	NS	NS	0	NS	100	0	NS	NS	0	100
North Hawkins & Canoe Pass.	22-830	NS	0	0	NS	0	0	NS	NS	0	NS	0	0	NS	NS	0	0
Double Bay	22-840	NS	0	0	NS	0	0	NS	NS	0	NS	0	0	NS	NS	0	8,260
Johnstone Point	22-850	NS	0	50	NS	0	0	NS	NS	0	NS	500	0	NS	NS	0	500
Port Etches	22-860	NS	0	16	NS	0	0	NS	NS	0	NS	11,400	1,700	NS	NS	0	16,687
Southeastern District		NS	0	66	NS	0	0	NS	NS	0	NS	12,000	1,700	NS	NS	0	25,547
TOTAL OF 9 DISTRICTS		200	1,890	106	62,250	41,790	42,800	25,800	3,100	25,700	31,750	12,200	11,650	1,850	0	240	196,465

-continued-

[a] There are a total of 208 streams included in the systematic aerial survey program. The survey program commences in the Eastern District where the earliest escapements in the Sound occur. Weather and conditions permitting, each stream is flown weekly. Failure to fly a survey due to run timing or bad survey conditions is denoted by NS (no survey). A notation of NC (no count) occurs when a stream is flown but no count is possible because of survey conditions (i.e., water clarity). During the peak of the pink salmon run many streams are flown twice weekly to provide fisheries managers with more timely escapement data. In cases where more than 1 survey per week was flown the weekly observation shown in this table is the average of the two counts if observing conditions during both were good or, the maximum of the two counts if conditions during the minimum count were poor.

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

Appendix D10.–Current year and historical weekly chum salmon escapement performance from index spawning streams, 2005.



Appendix D11.–Aerial survey escapement indices of sockeye salmon from selected systems, 2005.

System Name	Stream Number	Week Ending Date [a] 7/2	7/9	7/16	7/23	7/30	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1
Billy's Hole	218	NS	NS	200	50	0	NS	NS	0	NS	0	0	0	NS	NS
Miner's River	244	NS	0	400	1,600	NS	800	NS	5,000	1,350	3,500	NS	220	NS	0
Red Creek	300	NS	0	0	300	NS	0	NS	20	0	0	NS	0	NS	0
Coghill River	322	NS	2,500	0	0	NS	0	NS	NS	0	0	NS	0	NS	0
Chimevsky Creek	495	NS	0	NS	0	NS	NS	NS	0	0	0	NS	0	NS	0
Shrode Creek	476	NS	0	0	0	NS	0	NS	0	50	120	NS	80	NS	0
Gumboot Creek	507	NS	0	NS	0	NS	NS	NS	0	0	0	NS	24	NS	0
Eshamy River	511	NS	0	NS	0	NS	NS	NS	0	0	0	NS	0	NS	0
Jackpot River	608	NS	NS	0	0	NS	NS	500	500	NS	0	NS	NS	0	NS
Brizgaloff Creek	623	NS	NS	0	0	NS	NS	0	0	NS	0	NS	NS	0	NS
Bainbridge Creek	630	NS	NS	0	0	NS	NS	500	500	NS	0	NS	NS	0	NS
Total		0	2,500	600	1,950	0	800	1,000	6,020	1,400	3,620	0	324	0	0

Note: NS = Not surveyed. Counts contained in this table are obtained in conjunction with the regular pink and chum salmon aerial survey program. Many of these sockeye salmon systems are difficult to survey by air and thus the counts do not necessarily represent total live abundance at a particular time.

Appendix D12.–Temporally stratified age and sex composition of chum salmon harvested in the Prince William Sound commercial common property purse seine fishery, 2005.

		Brood Year and Age Class					
		2003	2002	2001	2000	1999	
		0.1	0.2	0.3	0.4	0.5	Total
Coghill District							
Strata Combined:	06/06 - 10/15						
Sampling dates:	06/15 - 07/06						
Sample size:	1,170						
Female	Percentage of sample	0.0	0.4	53.0	3.3	0.1	56.8
	Number in harvest	0	4,196	613,379	38,374	1,136	657,085
Male	Percentage of sample	0.0	0.2	39.2	3.4	0.0	42.9
	Number in harvest	0	2,603	453,781	39,290	379	496,053
Total	Percentage of sample	0.0	0.6	92.6	6.7	0.1	100.0
	Number in harvest	0	6,799	1,070,773	77,664	1,514	1,156,750
	Standard error	0	3,100	9,111	8,595	754	
Montague District							
Strata Combined:	05/30 - 08/20						
Sampling dates:	06/16 - 07/09						
Sample size:	447						
Female	Percentage of sample	0.4	2.8	37.1	14.6	0.5	55.4
	Number in harvest	847	6,773	88,527	34,735	1,157	132,038
Male	Percentage of sample	0.1	1.1	29.4	12.9	1.1	44.6
	Number in harvest	289	2,540	70,233	30,855	2,561	106,478
Total	Percentage of sample	0.5	3.9	66.6	27.5	1.6	100.0
	Number in harvest	1,136	9,312	158,760	65,590	3,717	238,516
	Standard error	895	2,735	5,879	5,440	1,413	
All Districts Combined							
Stratum dates:	05/30 - 10/15						
Sampling dates:	06/15 - 07/09						
Sample size:	1,617						
Female	Percentage of sample	0.1	1.4	88.9	9.3	0.3	50.9
	Number in harvest	847	10,969	701,906	73,109	2,292	789,123
Male	Percentage of sample	0.0	0.9	87.0	11.6	0.5	49.1
	Number in harvest	289	5,143	524,015	70,145	2,939	602,531
Total	Percentage of sample	0.1	1.2	88.1	10.3	0.4	100.0
	Number in harvest	1,136	16,111	1,225,921	143,254	5,232	1,391,654

Appendix D13.–Summary of periods, dates, duration, and emergency orders issued by district, for the commercial purse seine salmon fishery, 2005.

Eastern (221)			Northern (222)			Coghill (223)			Southwestern (226)			Montague (227)			Southeastern (228)			Unakwik (229)		Emergency
Date	Hours		Date	Hours		Dates	Hours		Date	Hours		Dates	Hours		Date	Hours		Date	Hours	Orders
									5/30-7/17		a	5/30-6/19	468	a						2-F-E-006-05
																		06/13	48	2-F-E-0017-05
																		06/16	48	2-F-E-020-05
												06/20	156	b				06/20	48	2-F-E-026-05, 2-F-E-026-05
																		06/23	48	2-F-E-029-05
												06/27	156	c				06/27	48	2-F-E-033-05, 2-F-E-034-05
06/28	12	a																		2-F-E-034-05
06/29	12	a																		2-F-E-034-05
06/30	12	a																06/30	48	2-F-E-036-05, 2-F-E-039-05
07/01	12	a																		2-F-E-036-05
07/02	12	a																		2-F-E-040-05
07/03	12	b																		2-F-E-040-05, 2-F-E-041-05
07/05	12	b										07/04	156	d				07/04	48	2-F-E-041-05, 2-F-E-044-05
07/06	12	c													07/06	12	a			2-F-E-050-05
07/07	12	c																07/07	48	2-F-E-048-05, 2-F-E-050-05
07/09	12	c				07/09	24	a							07/09	12	a			2-F-E-051-05, 2-F-E-141-05
07/10	12	c													07/10	12	a			2-F-E-059-05
												07/11	156	d				07/11	48	2-F-E-054-05
07/12	12	c	07/12	12	a										07/12	12	a			2-F-E-059-05
07/13	12	d	07/13	12	a	07/13	24	a							07/13	12	a			2-F-E-060-05
07/14	12	e	07/14	12	a										07/14	12	a			2-F-E-061-05
07/15	13	f	07/15	12	a										07/15	12	a			2-F-E-061-05
07/15	13	f	07/15	12	a										07/15	12	a			2-F-E-061-05
07/16	12	f	07/16	12	a	07/16	12	b							07/16	12	a			2-F-E-061-05
07/17	12	g	07/17	12	a										07/17	12	a			2-F-E-065-05
07/18	12	h										07/18	156	d				07/18	48	2-F-E-063-05
07/19	12	i	07/19	12	a										07/19	12	b			2-F-E-066-05
07/20	12	h																		2-F-E-067-05
07/21	16	i	07/21	16	b	07/21	12	c	07/21	16	b				07/21	16	b	07/21	48	2-F-E-067-05, 2-F-E-069-05
07/22	16	h				07/22	12	d												2-F-E-067-05
07/23	16	i	07/23	16	b	07/23	12	e	07/23	16	b				07/23	16	b			2-F-E-067-05

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Eastern (221)			Northern (222)			Coghill (223)			Southwestern (226)			Montague (227)			Southeastern (228)			Unakwik (229)		Emergency
Date	Hours		Date	Hours		Dates	Hours		Date	Hours		Dates	Hours		Date	Hours		Date	Hours	Orders
07/24	16	h																		2-F-E-067-05
07/25	16	i	07/25	16	b	07/25	12	e	07/25	16	e	07/25	16	c	07/25	16	b	07/25	48	2-F-E-072-05, 2-F-E-077-05
07/26	16	j																		2-F-E-077-05
07/27	16	k	07/27	16	b	07/27	16	e	07/27	16	d	07/27	16	c	07/27	16	a			2-F-E-079-05, 2-F-E-077-05
07/28	16	h																07/28	48	2-F-E-077-05
07/29	16	k	07/29	16	b	07/29	16	e	07/29	16	d	07/29	16	c	07/29	16	b			2-F-E-079-05, 2-F-E-080-05
07/30	16	j	07/30	16	c	07/30	16	f	07/30	16	e	07/30	16	c	07/30	16	b			2-F-E-080-05, 2-F-E-081-05
07/31	16	j	07/31	16	c	07/31	16	f	07/31	16	f	07/31	16	c	07/31	16	b			2-F-E-080-05, 2-F-E-081-06
08/01	16	j	08/01	16	c	08/01	16	f	08/01	16	f	08/01	16	c	08/01	16	b	08/01	24	2-F-E-080-05, 2-F-E-081-07
08/02	16	j	08/02	16	c	08/02	16	f	08/02	16	g	08/02	16	c	08/02	16	b			2-F-E-080-05, 2-F-E-081-05, 2-F-E-082-05
08/03	16	j	08/03	16	c	08/03	16	f	08/03	16	g	08/03	16	c	08/03	16	b			2-F-E-080-05, 2-F-E-081-05, 2-F-E-082-05
08/04	16	j	08/04	16	c	08/04	16	f	08/04	16	g	08/04	16	c	08/04	16	b			2-F-E-080-05, 2-F-E-081-05, 2-F-E-082-05
08/05	16	j	08/05	16	c	08/05	16	f	08/05	16	g	08/05	16	c	08/05	16	b			2-F-E-080-05, 2-F-E-081-05, 2-F-E-082-05
08/06	16	j	08/06	16	c	08/06	16	f	08/06	16	g	08/06	16	c	08/06	16	b			2-F-E-080-05, 2-F-E-081-05, 2-F-E-082-05
08/07	16	j	08/07	16	c	08/07	16	g	08/07	16	g	08/07	16	c	08/07	16	b			2-F-E-080-05, 2-F-E-081-05, 2-F-E-090-05
08/08	16	j	08/08	16	c	08/08	16	g	08/08	16	g	08/08	16	c	08/08	16	b			2-F-E-080-05, 2-F-E-081-05, 2-F-E-090-05
08/09	16	j	08/09	16	c	08/09	16	g	08/09	16	g	08/09	16	c	08/09	16	b			2-F-E-080-05, 2-F-E-081-05, 2-F-E-090-05
08/10	16	j	08/10	16	c	08/10	16	g	08/10	16	g	08/10	16	c	08/10	16	b			2-F-E-080-05, 2-F-E-081-05, 2-F-E-090-05
08/11	16	l	08/11	16	c	08/11	16	f	08/11	16	h	08/11	16	c	08/11	16	b			2-F-E-080-05, 2-F-E-081-05, 2-F-E-091-05
08/12	16	l	08/12	16	c	08/12	16	f	08/12	16	h	08/12	16	c	08/12	16	b			2-F-E-080-05, 2-F-E-081-05, 2-F-E-091-05
08/13	16	l	08/13	16	c	08/13	16	f	08/13	16	h	08/13	16	c	08/13	16	b			2-F-E-080-05, 2-F-E-081-05, 2-F-E-091-05
08/14	16	l	08/14	16	c	08/14	16	h	08/14	16	i	08/14	16	c	08/14	16	b			2-F-E-080-05, 2-F-E-081-05, 2-F-E-099-05
08/15	16	l	08/15	16	c	08/15	16	h	08/15	16	i	08/15	16	c	08/15	16	b			2-F-E-080-05, 2-F-E-081-05, 2-F-E-099-05
08/16	16	l	08/16	16	c	08/16	16	h	08/16	16	i	08/16	16	c	08/16	16	b			2-F-E-080-05, 2-F-E-081-05, 2-F-E-099-05
08/17	16	l	08/17	16	c	08/17	16	h	08/17	16	i	08/17	16	c	08/17	16	b			2-F-E-080-05, 2-F-E-081-05, 2-F-E-099-05
08/18	16	l	08/18	16	c	08/18	16	f	08/18	16	i	08/18	16	c	08/18	16	b			2-F-E-080-05, 2-F-E-081-05, 2-F-E-100-05
08/19	16	l	08/19	16	c	08/19	16	f	08/19	16	i	08/19	16	c	08/19	16	b			2-F-E-080-05, 2-F-E-081-05, 2-F-E-100-05
08/20	16	l	08/20	16	c	08/20	16	f	08/20	16	i	08/20	16	c	08/20	16	b			2-F-E-080-05, 2-F-E-081-05, 2-F-E-101-05
08/21	16	l	08/21	16	c	08/21	16	f	08/21	16	i									2-F-E-080-05, 2-F-E-081-05, 2-F-E-101-05
08/22	16	m	08/22	16	c	08/22	16	f	08/22	16	i									2-F-E-102-05
08/23	16	m	08/23	16	c	08/23	16	f	08/23	16	i									2-F-E-102-05

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Eastern (221)			Northern (222)			Coghill (223)			Southwestern (226)			Montague (227)		Southeastern (228)		Unakwik (229)		Emergency
Date	Hours		Date	Hours		Dates	Hours		Date	Hours		Dates	Hours	Date	Hours	Date	Hours	Orders
08/24	16	[m]	08/24	16	[c]	08/24	16	[f]	08/24	16	[i]							2-F-E-102-05
08/25	16	[m]	08/25	16	[c]	08/25	16	[g]	08/25	16	[j]							2-F-E-103-05
08/26	16	[n]	08/26	16	[c]	08/26	16	[g]	08/26	16	[j]							2-F-E-103-05
08/27	16	[n]	08/27	16	[c]	08/27	16	[g]	08/27	16	[j]							2-F-E-103-05
08/28	16	[o]	08/28	16	[c]	08/28	16	[g]	08/28	16	[j]							2-F-E-104-05
08/29	16	[o]	08/29	16	[c]	08/29	16	[g]	08/29	16	[j]							2-F-E-104-05
08/30	16	[o]	08/30	16	[c]	08/30	16	[g]	08/30	16	[j]							2-F-E-104-05
08/31	16	[p]	08/31	16	[c]	08/31	16	[g]	08/31	16	[j]							2-F-E-105-05
09/01	16	[p]	09/01	16	[c]	09/01	16	[g]	09/01	16	[j]							2-F-E-105-05
09/02	16	[p]	09/02	16	[c]	09/02	16	[g]	09/02	16	[j]							2-F-E-105-05
09/03	16	[p]	09/03	16	[c]	09/03	16	[g]	09/03	16	[j]							2-F-E-105-05
09/04	16	[p]	09/04	16	[c]	09/04	16	[g]	09/04	16	[j]							2-F-E-105-05
09/05	16	[p]	09/05	156	[c]	09/05	156	[g]	09/05	156	[j]							2-F-E-105-05, 2-F-E-136-05
09/06	36	[q]																2-F-E-116-05
09/07																		
09/08	60	[r]																2-F-E-117-05
09/09																		
09/10																		
09/11	180	[r]																2-F-E-118-05
			09/12	156	[c]	09/12	48	[g]	09/12	156	[j]							2-F-E-136-05, 2-F-E-119-05
09/19	149	[r]																2-F-E-121-05

Eastern District

[a] Waters of Port Valdez, in the Eastern District, north of a line from Entrance Point to Potato Point were open.

[b] Waters of Port Valdez, in the Eastern District, north of a line from Entrance Point to Potato Point and east of a north-south line at the Red Head lightwere open. Port Fidalgo remained closed.

[c] Waters of Port Valdez, in the Eastern District, north of a line from Entrance Point to Potato Point and east of a north-south line at the Red Head lightwere open. Port Fidalgo remained closed. Waters inside the west brown oil boom container van to the brown oil boom container east of the hatchery were closed.

[d] Waters of Port Valdez, in the Eastern District, north of a line from Entrance Point to Potato Point were open. Waters inside the west brown oil boom container van to the brown oil boom container east of the hatchery were closed.

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[e] Waters the Eastern District, excluding waters north of a line from Entrance Point to Potato Point were open.

[f] Waters of the Eastern District were open. The THA, excluding waters of Port Valdez east of 146° 21.3' W. longitude within 500 yards of the south shore of Port Valdez was open to roe stripping.

[g] Waters in the Eastern District, excluding waters in Port Valdez east of 146° 21.3' W. longitude within 500 yards of the south shore and inside all yellow SHTF markers, were open. The THA was open to roe stripping The THA was open to roe stripping.

[i] Waters in the Eastern District, including waters in Simpson and Nelson Bay north of a line from Salmo Point to Shepard Point were open. Waters in Port Valdez east of 146° 21.3' W. longitude within 500 yards of the south shore and inside all yellow SHTF markers, were closed. The THA was open to roe stripping.

[j] Waters in the Eastern District, including waters in Simpson and Nelson Bay north of a line from Salmo Point to Shepard Point were open. Waters in Port Valdez east of 146° 21.3' W. longitude within 500 yards of the south shore and inside all yellow SHTF markers, were closed. The THA was closed to roe stripping.

[k] Waters in the Eastern District, excluding the THA, were open. The THA was open for roe stripping.

[l] Waters in the Eastern District, excluding the THA, were open. The THA, excluding waters from brown can west of hatchery around yellow bouys and straight to the road, was open for roe stripping.

[m] Waters in the Eastern District, excluding waters north of a linve from Freemantle to Rocky Point, were open. The THA, excluding waters from brown can west of hatchery around yellow bouys and straight to the road, was open for roe stripping.

[n] Waters in the Eastern District, excluding waters north of a linve from Entrance to Potato Point, were open. Waters of Port Valdez east of 146° 20' W. longitude within 1,000 yards of the south shore were open to roe recovery, excluding waters from brown container west of hatchery around yellow buoys and straight to road.

[o] Waters in the Eastern District, excluding waters north of a linve from Tounge to Lowe Point, were open. Waters of Port Valdez east of 146° 20' W. longitude within 1,000 yards of the south shore were open to roe recovery, excluding waters from brown container west of hatchery around yellow buoys and straight to road.

[p] Waters in the Eastern District, excluding waters north of a linve from Tounge to Lowe Point, were open. The roe fishery was closed.

[q] Waters in the Eastern District, excluding waters east of 146° 21.3' W. longitude within 500 yards along south shore, were open.

[r] Waters in the Eastern District, excluding waters from brown container around bouys to east container, were open.

Northern District

[a] The Northern District east of Unakwik Point was open.

[b] Waters of Unakwik Inlet south of the Siwash Bay, 60° 57.40' N Latitude and east of Point Pellew were open.

[c] Waters of the Northern District, excluding the THA and SHA, were open.

Coghill District

[a] In the Coghill District, the Esther Subdistrict east of 148° 7' W. longitude, west of 147° 56' W. longitude, and within one nautical mile of Esther Island, including the WNH THA and SHA, were open.

[b] The Esther Subdistrict east of 148° 7' W. longitude, west of 147° 56' W. longitude, and within one nautical mile of Esther Island, and up to a line of buoys in front of the barrier seine, were open.

[c] The Coghill District, excluding waters behind the line of buoys infrom of the barrier siene were open.

[d] The Esther Subdistrict THA and SHA up to a line of buoys in front of the barrier seine, was open.

[e] The Coghill District, excluding the THA and SHA, was open.

[f] The Coghill District, excluding the SHA, was open.

[g] The Coghill District, up to a line of bouys in front of the barrier seine in the SHA, was open.

[h] The Coghill District, excluding waters of the WNH SHA north of 60° 47.810' N. Lat., was open.

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Southwestern District

[a] Waters of the AFK SHA were open from 05/30 to 07/17.

[b] Waters in the Port San Juan Subdistrict, including the SHA and THA, were open.

[c] Waters of the Southwestern District, excluding waters northwest of Point Helenand, the Elrington Subdistrict and AFK Hatchery THA and SHA, were open.

[d] Waters of the Southwestern District, excluding waters northwest of Point Helenand and AFK Hatchery THA and SHA, were open.

[e] Waters of the Southwestern District excluding waters on the west side of Knight Island north of the latitude of Point Helen and excluding the AFK Hatchery SHA, were open.

[f] Waters of the Southwestern District excluding waters on the west side of Knight Island north of the latitude of Sober Point and excluding the AFK Hatchery SHA, were open.

[g] Waters of the Southwestern District excluding waters on the west side of Knight Island north of the latitude of Squire Point and excluding the AFK Hatchery SHA, were open.

[h] Waters of the Southwestern District, excluding the AFK Hatchery SHA, were open.

[i] Waters of the Southwestern District, excluding waters of the AFK SHA south of a line from 60° 03.255'N. Lat., 148° 03.593'W. Long. and 60° 02.949"N. Lat., 148° 02.602'W. Long., were open.

[j] The Southwestern District, up to a line of bouys in front of the barrier seine in the SHA, was open.

Montague District

[a] In the Montague District, only the Port Chalmers Subdistrict was open. Anadromous stream closures and regulatory closed waters in the Port Chambers Subdistrict were not in effect.

[b] The waters of the Montague District the north limit of the open area was an east west line at 60° 16.97' N Lat. from Montague Island to the west edge of the Montague District line and the southern limit was an east west line at 60° 12.56' N Lat. from Montague Island to the west edge of the Montague District line.

[c] The water of Port Chalmers will be restricted a line east of Gilmour Point to the east end of Wilby Island. On June 29 that area was modified to open area of Port Chalmers within one half nautical mile offshore of Montague Island.

[d] Waters of the Port Chalmers Subdistrict south of 60° 17.40' N. latitude within one half nautical mile of Montague Island.

[e] The waters of the Montague District were open.

Southeastern District

[a] Waters of the Southeastern District were open.

[b] Waters of the Southeastern District including waters in Simpson and Nelson Bay north of a line from Salmo Point to Shepard Point were open.

Unakwik District

[a] Waters of the Unakwik District were open.

APPENDIX E. HATCHERY RETURNS

Appendix E1.–Daily salmon sales harvests and sex ratios at the Wally Noerenberg Hatchery, 2005.

Date	Pink Salmon % Female	Pink	Chum
06/08		0	5,141
06/09		0	18,845
06/10		0	26,574
06/11		0	32,718
06/12		0	41,036
06/13		0	22,088
06/14		0	16,119
06/15		0	14,809
06/16		0	25,554
06/17		0	16,565
06/18		0	26,909
06/19		14,331	11,327
06/20		0	48,589
06/21		0	12,687
06/22		0	32,244
06/23		0	10,172
06/24		0	979
06/25		0	13,311
06/27		0	6,638
07/04		0	8,607
07/05		0	3,839
07/08		847	9,674
07/18	14.3%	125,232	26,364
07/19	10.4%	60,644	33,978
07/20	19.7%	67,081	11,352
07/23	26.6%	41,926	1,858
07/24	23.7%	297,967	35,326
07/25	29.1%	30,795	1,007
07/26	22.9%	211,267	15,074
07/28	32.0%	217,779	2,729
07/30	37.8%	281,667	469
08/01	42.6%	135,658	1,139
08/03	40.8%	101,905	1,413
08/04	38%	58,046	639
08/05	45%	220,915	0
08/06	43%	347,213	0
08/10	50%	195,151	0
08/11	54%	186,622	0
08/12	58%	174,222	0
08/13	56%	157,364	0
08/14	53%	230,077	0
08/18		116,916	0
08/19		170,307	0
08/20		40,578	0
08/22		107,496	0
08/31		27,164	0
Totals		3,619,170	535,773

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Sales Summary		
	Pink	**Chum**
Pounds Sold	10,881,551	4,306,409
Average Weights	3.01	8.04

Broodstock Summary		
	Pink	**Chum**
Fish spawned at hatchery	469,840	182,116
Green/bad/excess	718,981	103,225
Roe Fish	573,896 [a]	98,695 [b]
Eggtake mortality	184,588	25,737
Total available broodstock	1,043,736	280,811
Estimated unharvested return		
Estimated return to hatchery	1,043,736	280,811

[a] 235,589 female pink salmon of the573,896 fish were roe stripped.

[b] 59,675 female chum salmon of the 98,695 fish were roe stripped.

Appendix E2.–Daily salmon sales harvests and sex ratios at the Armin F. Koernig Hatchery, 2005.

Date	% Female	Pink
07/20	17.2%	54,407
07/22	20.8%	199,982
07/24	23.9%	181,989
07/25	26.4%	92,932
07/26	27.4%	141,122
07/27	31.4%	133,725
07/28	38.1%	218,983
07/29	33.5%	70,501
07/30	37.2%	226,027
07/31	43.5%	120,309
08/01	41.7%	231,298
08/02	30.2%	101,917
08/03	40.5%	355,786
08/04	40.4%	241,101
08/05	43.2%	136,110
08/06	44.0%	100,098
08/07	45.2%	131,473
08/08	50.8%	61,192
08/09		48,946
08/11	53.3%	50,407
Total		2,898,305
Sales Summary		
Pounds Sold		8,687,069
Average Weight		3.00
Pink Broodstock Summary		
Spawned at hatchery		462,620
Excessed/green/bad		381,572
Roe Fish		330,428 [a]
Fishway/system mortality		184,109
Total available broodstock		793,048
Estimated unharvested return		
Estimated return to hatchery		793,048

[a] 135,036 female pink salmon of the 330,428 fish were roe stripped.

Appendix E3.–Daily pink salmon sales harvests and sex ratios at the Solomon Gulch Hatchery, 2005.

Date	Pink
06/19	36,077
06/20	133,662
06/21	168,984
06/22	224,961
06/23	296,540
06/24	274,706
06/25	350,868
06/27	265,280
06/29	3,146
06/30	48,166
07/01	2,874
07/02	4,401
07/03	4,778
07/04	440,269
07/05	4,826
07/06	4,965
07/08	434,692
07/09	5,286
07/11	394,201
07/13	44,226
07/14	124,679
07/15	74,683
07/16	40,652
07/18	67,446
07/19	9,500
07/20	8,800
07/21	8,500
08/24	22,986
08/25	15,811
08/26	8,444
08/29	10,530
Totals	3,534,939

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Sales Summary	
Total Pounds Sold	14,011,787
Average Weight	3.96
Pink Broodstock Summary	
Spawned at hatchery	224,969
Green/bad/excess	232,822
Roe Sales[a]	122,697
System mortalities	8,617
Total available broodstock	589,105
Estimated creek spawners	118,788
Estimated unharvested return	250,000
Estimated return to hatchery	957,893
Coho Broodstock Summary	
Spawned at hatchery	1,048
Green/bad/excess	228
Roe Sales[a]	30,686
System mortalities	149
Total available broodstock	32,111
Estimated creek/bay spawners	227
Estimated unharvested return	
Estimated return to hatchery	32,338

[a] Salmon (male and female) harvested for roe as reported in the 2005 VFDA Disposal Log.

Appendix E4.–Daily pink salmon sales harvests and sex ratios at the Cannery Creek Hatchery, 2005.

Date	% Female	Pink
07/24	17.3%	33,326
07/26	17.9%	160,280
07/28	26.3%	166,183
07/29	26.6%	25,617
07/30	28.1%	144,773
07/31	28.3%	161,412
08/01	28.2%	105,342
08/02	32.3%	143,402
08/03	34.8%	180,088
08/04	40.8%	240,326
08/05	37.5%	128,828
08/06	40.4%	154,001
08/07	44.9%	193,984
08/08	42.7%	275,936
08/09	40.6%	101,039
08/13	48.8%	147,809
08/23		7,458
08/24		66,800
Totals		2,436,604

Sales Summary	
Pounds Sold	7,655,682
Average Weight	3.14

Pink Broodstock Summary		
Spawned at hatchery	261,209	
Green/bad/excess	326,175	
Roe fish	329,350	[a]
Mortality	92,003	
Total available broodstock	590,559	
Estimated unharvested return	--	
Estimated return to hatchery	590,559	

[a] 117,108 female pink salmon of the 329,350 fish were roe stripped.

Appendix E5.–Daily salmon sales harvests at the Main Bay Hatchery, 2005.

Date	Sockeye
06/16	6,074
06/19	3,861
06/21	12,863
07/01	6,416
07/03	9,157
07/06	12,986
07/08	17,481
07/10	8,641
07/12	11,543
07/13	6,987
07/16	9,383
08/06	6,834
08/07	5,920
08/08	10,081
08/10	7,928
08/13	10,237
08/14	6,246
08/16	8,653
08/20	6,467
08/24	12,549
08/27	11,851
08/31	10,966
09/08	4,481
Totals	207,605

Sales Summary	
Pounds Sold	1,307,258
Average Weight	6.30

Main Bay Sockeye Broodstock Summary	
Main Bay Late Stock/Eshamy Lake	
Spawned at hatchery	44,436
Green/bad/excess	36,438
System mortalities	1,971
Estimated return to Hatchery	44,436

Appendix E6.–Sales harvests of salmon by species from private nonprofit hatcheries as reported on fish tickets, 1977–2005.

		Harvest by Species [a]				
Year	**Hatchery [b]**	**Sockeye**	**Coho**	**Pink**	**Chum**	**Total**
1977	AFK			15545		15545
1978	AFK			114,188		114,188
1979	AFK			223,748		223,748
1980	AFK, N			346,728	6	346,734
1981	AFK			707,037	118	707,155
1982	AFK			1,354,732		1,354,732
1983	AFK			616,963		616,963
1984	AFK, SG			415,393	4,886	420,279
1985	AFK, SG			1,209,960	3,840	1,213,800
1986	AFK, SG		2,156	905,464	20,683	928,303
1987 [c]	AFK, SG, E, CC		7,015	2,691,190	2,549	2,700,754
1988	AFK, SG, E		6,110	1,632,701	42,694	1,681,505
1989 [d]	AFK, SG, WNH, CC, MB		52,307	7,812,373	131,362	7,996,042
1990	AFK, SG, WNH, CC		14,199	8,732,658	24,554	8,771,411
1991	AFK, SG, WNH, CC		52,625	5,955,561	13,471	6,021,657
1992	AFK, SG, WNH, CC, MB	163,086	73,530	3,049,394	57,392	3,343,402
1993	AFK, SG, WNH, CC, MB	113,738	3,259	2,212,403	475,148	2,804,548
1994	AFK, SG, WNH, CC, MB	79,541	22,454	10,521,439	380,365	11,003,799
1995	AFK, SG, WNH, CC, MB	63,326	13,248	5,100,819	231,539	5,408,932
1996 [e]	AFK, SG, WNH, CC, MB	86,911	38,945	8,291,205	1,066,683	9,483,744
1997	AFK, SG, WNH, CC, MB,GH	266,335	2,933	9,854,675	811,179	10,935,122
1998	AFK, SG, WNH, CC, MB,GH	148,288	20,199	8,825,226	519,215	9,512,928
1999	AFK, SG, WNH, CC, GH	28,777	0	13,130,211	777,180	13,936,168
2000	AFK, SG, WNH, CC, MB	218	1	11,125,819	1,729,876	12,855,914
2001	AFK, SG, WNH, CC, MB	43,073	21,781	12,914,314	936,028	13,915,196
2002	AFK, SG, WNH, CC, MB	93,722	1	10,787,752	2,580,926	13,462,402
2003 [f]	AFK, SG, WNH, CC, MB	366,770	0	12,426,375	1,540,227	14,333,372
2004	AFK, SG, WNH, CC, MB	279,902	0	11,825,224	528,676	12,633,802
2005 [g]	AFK, SG, WNH, CC, MB	207,605	27,417	12,529,283	535,783	13,300,088
Average (1995-2005)		144,084	11,320	10,619,173	1,023,392	11,797,970

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

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

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

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

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

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

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

Appendix E7.–Summary of pink and chum salmon runs to Prince William Sound hatcheries, 2005.

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

Hatchery	2004 Fry Release	2005 Forecast Run [b]	Estimated Total Run	Marine Survival	Estimated CPF Contribution	Estimated Sales Harvest Contribution [c]	Broodstock Escapement [d]	Eggs Collected (millions)
Solomon Gulch	215,000,000	11,590,000	18,435,109	8.6%	13,713,349	3,534,939	1,186,821	230,082,169
Armin F. Koernig	174,200,000	7,612,000	10,121,228	5.8%	6,429,875	2,898,305	1,377,172	197,293,471
Wally Noerenberg	110,000,000	3,653,000	9,178,385	8.3%	4,515,479	3,619,170	1,440,986	94,526,832
Cannery Creek	139,400,000	4,285,000	13,479,739	9.7%	10,452,306	2,436,604	1,008,737	152,203,043
Total Pink Salmon	**638,600,000**	**27,140,000**	**51,214,461**		**35,111,009**	**12,489,018**	**5,013,716**	**674,105,515**

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

Hatchery or release site [e]	2004 Fry Release	2005 Forecast Run [b]	Estimated Total Run	Marine Survival	Estimated CPF Contribution	Estimated Sales Harvest Contribution [c]	Broodstock Escapement [d]	Eggs Collected (millions)
Armin F. Koernig	15,600,000	18,400	0	0.0%				
Wally Noerenberg [f]	75,900,000	1,470,000	1,968,212	2.6%	1,162,344	535,773	280,811	170,759,620
Port Chalmers	40,800,000	468,000	231,659	0.6%	220,943			
Total Chum Salmon	**132,300,000**	**1,956,400**	**2,199,870**		**1,383,287**	**535,773**	**280,811**	**170,759,620**

[a] Contribution estimates of pink and chum salmon from PWS hatcheries are based on analysis of otolith recoveries and location of harvest as reported on fish tickets.

[b] The 2005 forecasts of hatchery runs were completed by Prince William Sound Aquaculture and Valdez development Association.

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

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

[e] All returning chum salmon were reared at WNH. The AFK and Port Chalmers runs were remote releases of fish reared at WNH.

[f] The WNH total chum salmon run was calculated as the sum of CPF harvests in the Eshamy and Coghill Districts minus the average 1970–1986 wild chum salmon harvests in the Eshamy and Coghill Districts plus the WNH cost recovery harvest and broodstock escapement.

Appendix E8.–Historical harvest contributions, thermally marked otolith releases, and total returns of pink salmon to Prince William Sound hatcheries, 1995–2005.

Brood Year	Return Year	Fry Release	Hatchery Contribution to Broodstock Esc. [a]	Total Cost Recovery Harvest	Hatchery Contribution to CR Harvest	Hatchery Contribution to the CCPF [b]	Total Hatchery Return	Estimated Marine Survival
Solomon Gulch Hatchery								
1995	1997	233,088,327	728,923	2,431,007	2,428,010	4,005,264	7,162,197	3.07%
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%
Armin F. Koernig Hatchery								
1995	1997	108,636,976	0	3,206,683	3,139,053	3,815,265	6,954,318	6.40%
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%

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Appendix E8.–Page 2 of 2.

Brood Year	Return Year	Fry Release	Hatchery Contribution to Broodstock Esc. [a]	Total Cost Recovery Harvest	Hatchery Contribution to CR Harvest	Hatchery Contribution to the CCPF [b]	Total Hatchery Return	Estimated Marine Survival
Wally Noerenberg Hatchery								
1995	1997	176,431,919	409,455	2,280,868	2,321,255	3,464,254	6,194,964	3.51%
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%
Cannery Creek Hatchery								
1995	1997	140,441,131	577,736	1,897,259	1,852,317	3,608,272	6,038,325	4.30%
1996	1998	136,838,852	904,945	1,324,307	1,305,144	4,869,014	7,079,103	5.17%
1997	1999	137,571,564	1,293,460	2,076,361	2,014,448	5,414,942	8,722,850	6.34%
1998	2000	131,195,588	280,811	1,538,039	1,575,341	4,688,206	6,544,358	4.99%
1999	2001	132,236,317	428,859	1,089,998	1,103,072	589,171	2,121,102	1.60%
2000	2002	139,226,716	345,082	601,191	616,354	627,065	1,588,501	1.14%
2001	2003	138,626,713	551,247	2,400,133	2,400,133	5,390,008	8,341,388	6.02%
2002	2004	135,584,680	540,129	2,265,538	2,265,538	135,021	2,940,688	2.17%
2003	2005	139,400,000	590,559	2,436,874	2,436,874	10,452,306	13,479,739	9.67%

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

[b] Commercial common property fisheries (CCPF).

Appendix E9.–Historical hatchery fry releases, harvest contributions, and total returns of pink salmon to all hatcheries combined, Prince William Sound, 1997–2005.

Brood Year	Return Year	Fry Release [a]	CWT/Otolith Applied to Fry Release [a]	Total Broodstock Esc [a, b]	Total CR Harvest [c]	Hatchery contributions [d]					Estimated Marine Survival
						Brood esc	CR Harvests	Other [e]	CPF	Total	
1995	1997	641,675,469 [f]	1,079,354	1,977,463	9,854,675	1,974,521	9,780,451	226	14,893,055	26,648,253	4.15%
1996	1998	483,704,011 [f]	All	3,011,186	8,825,226	3,008,251	8,666,960	6,931	16,145,999	27,828,141	5.75%
1997	1999	542,383,070 [f]	All	4,531,560	13,130,211	4,529,055	12,988,616	237,318	24,838,848	42,593,837	7.85%
1998	2000	602,128,903 [f]	All	1,293,409	11,125,819	1,293,409	11,055,419	728	22,099,196	34,448,752	5.72%
1999	2001	586,607,038 [f]	All	1,647,425	12,914,314	1,647,425	12,765,960	1,204	15,625,341	30,039,930	5.12%
2000	2002	621,062,096 [f]	All	1,497,115	10,787,752	1,497,115	10,703,126	992	7,926,335	20,127,568	3.24%
2001	2003	603,412,393 [f]	All	4,306,418	12,426,375	4,306,418	12,422,544	606	34,315,227	51,044,795	8.46%
2002	2004	607,943,252 [f]	All	1,359,062	11,825,224	1,951,671	11,825,224	0	8,835,385	22,612,280	3.72%
2003	2005	638,600,000 [f]	All	5,013,716	12,529,283	5,013,716	12,529,283	0	35,111,009	52,654,008	8.25%

Note: Acronyms used in this table: Coded Wire Tag (CWT); Hatchery Cost Recovery (CR) Common Property Fishery (CPF), Escapements (Esc).

[a] Data from Prince William Sound Aquaculture and Valdez Fisheries Development Association annual reports and tagging reports.

[b] Brood escapements include all fish not sold in the commercial common property or cost recovery fisheries, i.e., fish used for brood, excess to brood, and remaining in the bays after all fisheries and brood collections.

[c] Data from ADF&G fish ticket database.

[d] 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%). The other harvests and commercial common property contributions are from all fishing districts in Prince William Sound (221-229) excluding the Bering and Copper River District harvests.

[e] Includes donated, discarded, test fisheries, and all other miscellaneous harvests. Data from ADF&G fish ticket and special project data summaries.

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

Appendix E10.–Historical harvest contributions, coded wire tag (CWT) and thermally marked otolith releases, and total returns of pink salmon to all hatcheries combined, 1977–2005.

Brood Year (BY)	Return Year	Fry Release [a]	CWT/Otolith Applied to Fry Release [b]	Total Cost Recovery Harvest [c]	Hatchery Contributions					Estimated Marine Survival
					Hatchery cost Recovery Harvests [b]	Commercial Common Property Harvests [a]	Other Harvests [d]	Broodstock Escapements [a, e]	Total Return	
1975	1977	1,000,000	0	15,545	7,745	4,000	0	16,112	27,857	2.79%
1976	1978	11,010,577	0	114,188	114,188	0	0	40,432	154,620	1.40%
1977	1979	16,950,784	0	223,748	223,748	275,000	0	54,207	552,955	3.26%
1978	1980	25,600,739	0	346,728	346,728	1,092,048	0	145,061	1,583,837	6.19%
1979	1981	24,194,000	0	707,037	707,037	1,430,747	0	268,501	2,406,285	9.95%
1980	1982	91,076,000	0	1,354,732	1,354,732	4,303,900	0	239,945	5,898,577	6.48%
1981	1983	91,951,000	0	686,963	686,963	3,338,366	0	258,062	4,283,391	4.66%
1982	1984	115,107,533	0	415,393	415,393	3,313,423	0	341,259	4,070,075	3.54%
1983	1985	116,336,000	0	1,209,960	1,209,960	6,259,923	0	640,340	8,110,223	6.97%
1984	1986	191,306,265	0	905,464	905,464	5,662,315	0	466,471	7,034,250	3.68%
1985	1987	231,538,713	646,561	2,691,190	2,691,190	14,197,065	0	1,158,908	18,047,163	7.79%
1986	1988	218,830,647	568,688	1,632,701	1,632,701	8,748,000	0	824,302	11,205,003	5.12%
1987	1989	532,045,966	939,498	7,853,419	5,767,911	10,561,099	0	856,927	19,052,529 [f]	3.58%
1988	1990	507,688,297	1,074,099	8,732,658	6,691,160	24,379,475	0	749,910	33,315,579 [f]	6.56%
1989	1991	615,139,948	1,128,899	6,119,141	5,201,860	20,900,355	3,573,805	1,324,255	32,750,955 [f]	5.32%
1990	1992	603,519,636	1,091,403	3,049,394	2,626,248	4,345,805	30,290	789,880	8,579,332 [f]	1.42%
1991	1993	495,700,200	823,128	2,639,982	1,544,727	2,392,162	14,648	921,073	6,177,575 [f]	1.25%
1992	1994	567,320,470	950,976	10,308,169	7,613,582	21,173,273	56,396	1,422,306	35,100,601 [f]	6.19%
1993	1995	488,575,978	941,811	5,057,418	4,703,457	9,072,469	78,020	1,154,635	14,475,842 [f]	2.96%
1994	1996	613,158,229	1,017,782	8,285,166	5,363,551	14,502,198	0	544,531	24,284,522 [f]	3.96%
1995	1997	651,675,427 [g]	1,079,354	9,854,675	9,780,451	14,893,055	226	1,974,521	26,648,253	4.09%
1996	1998	484,525,934 [g]	484,525,934	8,825,226	8,666,960	16,145,999	6,931	3,008,251	27,828,141	5.74%
1997	1999	542,356,070 [g]	542,356,934	13,130,211	12,988,616	24,838,848	237,318	4,529,055	42,593,837	7.85%
1998	2000	602,128,903 [g]	602,128,903	11,125,819	11,055,419	22,099,196	728	1,293,409	34,448,752	5.72%
1999	2001	586,607,038 [g]	586,607,038	12,914,314	12,765,960	15,625,341	1,204	1,647,425	30,039,930	5.12%
2000	2002	621,063,728 [g]	621,063,728	10,787,752	10,703,126	7,926,335	992	1,497,115	20,127,568	3.24%
2001	2003	603,412,393 [g]	603,412,393	12,426,990	12,422,544	34,177,600	606	4,306,418	50,907,168	8.44%
2002	2004	607,943,252	607,943,252	11,825,224	11,825,224	8,835,385	0	1,951,671	22,612,280	3.72%
2003	2005	638,600,000	638,600,000	12,529,283	12,529,283	35,111,009	0	5,013,716	52,654,008	8.25%

[a] Data for BY 1985 and 1987 - 1995 provided by the ADF&G CWT project. Prince William Sound Aquaculture (PWSAC) provided data for all other years. Beginning in 1994, broodstock numbers include fish processed for roe and reported by PWSAC. The hatchery contribution to broodstock escapements includes all fish not harvested in CPF or sales harvests.

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

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

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

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

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

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

Appendix E11.–Hatchery contributions to the common property pink salmon purse seine fishery in the Eastern District, 2005.

Period	Harvest Date(s)	SGH	%	CCH	%	WNH	%	AFK	%	Wild	%	Total
1	06/26 - 06/26	1,485,489	96.7	0	0.0	0	0.0	0	0.0	51,224	3.3	1,536,713
2	06/28 - 06/28	1,174,042	98.4	0	0.0	0	0.0	0	0.0	18,936	1.6	1,192,978
3	06/29 - 06/29	973,228	95.8	0	0.0	0	0.0	0	0.0	42,314	4.2	1,015,542
4	06/30 - 06/30	680,453	95.8	0	0.0	0	0.0	0	0.0	29,585	4.2	710,038
5	07/01 - 07/01	1,089,328	100.0	0	0.0	0	0.0	0	0.0	0	0.0	1,089,328
6	07/02 - 07/02	792,812	99.0	0	0.0	0	0.0	0	0.0	8,345	1.0	801,157
7	07/03 - 07/03	859,606	99.0	0	0.0	0	0.0	0	0.0	9,048	1.0	868,654
8	07/05 - 07/05	0	0.0	0	0.0	0	0.0	0	0.0	1,124,520	100.0	1,124,520
9	07/06 - 07/06	812,264	94.8	0	0.0	0	0.0	8,926	1.0	35,704	4.2	856,894
10	07/07 - 07/07	807,570	94.8	8,874	1.0	0	0.0	8,874	1.0	26,623	3.1	851,942
11	07/09 - 07/09	427,754	55.2	0	0.0	0	0.0	0	0.0	347,046	44.8	774,800
12	07/10 - 07/10	414,067	55.2	0	0.0	0	0.0	0	0.0	335,942	44.8	750,009
13	07/12 - 07/12	551,260	83.3	0	0.0	0	0.0	0	0.0	110,252	16.7	661,512
14	07/13 - 07/13	11,973	2.1	0	0.0	0	0.0	0	0.0	562,740	97.9	574,713
15	07/14 - 07/14	172,922	37.5	0	0.0	0	0.0	0	0.0	288,204	62.5	461,126
16	07/15 - 07/15	573,471	98.9	0	0.0	0	0.0	0	0.0	6,101	1.1	579,572
17	07/16 - 07/16	335,830	47.9	14,601	2.1	21,902	3.1	7,301	1.0	321,229	45.8	700,863
18	07/17 - 07/17	174,912	20.8	8,746	1.0	8,746	1.0	8,746	1.0	638,429	76.0	839,578
19	07/18 - 07/18	178,664	29.2	0	0.0	0	0.0	0	0.0	433,898	70.8	612,562
20	07/19 - 07/19	206,266	29.2	0	0.0	0	0.0	0	0.0	500,932	70.8	707,198
21	07/20 - 07/20	533,051	95.8	0	0.0	0	0.0	0	0.0	23,176	4.2	556,227
22	07/21 - 07/21	62,011	21.2	10,335	3.5	0	0.0	0	0.0	220,482	75.3	292,828
23	07/22 - 07/22	407,115	100.0	0	0.0	0	0.0	0	0.0	0	0.0	407,115
24	07/23 - 07/23	200,658	25.0	8,361	1.0	16,721	2.1	0	0.0	576,891	71.9	802,631
25	07/24 - 07/24	80,719	25.0	3,363	1.0	6,727	2.1	0	0.0	232,066	71.9	322,874
26	07/25 - 07/25	14,739	8.4	3,685	2.1	0	0.0	0	0.0	156,601	89.5	175,025
27	07/27 - 07/27	13,057	3.1	8,705	2.1	4,352	1.0	0	0.0	391,714	93.8	417,828
28	07/29 - 07/29	23,372	6.3	19,476	5.2	3,895	1.0	0	0.0	327,205	87.5	373,948
29	07/31 - 07/31	0	0.0	8,835	6.4	0	0.0	0	0.0	129,581	93.6	138,416
30	08/01 - 08/01	103	1.0	103	1.0	103	1.0	103	1.0	9,464	95.8	9,875
31	08/02 - 08/02	48	1.0	48	1.0	48	1.0	48	1.0	4,384	95.8	4,575
32	08/03 - 08/03	123	1.0	123	1.0	123	1.0	123	1.0	11,330	95.8	11,823
33	08/04 - 08/04									0		0

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Period	Harvest Date(s)	SGH	%	CCH	%	WNH	%	AFK	%	Wild	%	Total
34	08/05 - 08/05									0		0
35	08/06 - 08/06									0		0
36	08/07 - 08/07	269	1.0	269	1.0	269	1.0	269	1.0	24,706	95.8	25,780
37	08/08 - 08/08									0		0
38	08/09 - 08/09	20	1.0	20	1.0	20	0.0	20	0.0	1,854	95.8	1,935
39	08/10 - 08/10									0		0
40	08/11 - 08/11	0	0.0	146	1.1	0	0.0	0	0.0	13,679	98.9	13,825
41	08/12 - 08/12									0		0
42	08/13 - 08/13	0	0.0	0	0.0	0	0.0	124	1.0	11,779	99.0	11,903
43	08/14 - 08/14	0	0.0	0	0.0	0	0.0	480	1.0	45,620	99.0	46,100
44	08/15 - 08/15	0	0.0	0	0.0	0	0.0	370	1.0	35,105	99.0	35,475
45	08/16 - 08/16	0	0.0	0	0.0	0	0.0	330	1.0	31,343	99.0	31,673
46	08/17 - 08/17	0	0.0	0	0.0	0	0.0	215	1.0	20,455	99.0	20,670
47	08/18 - 08/18									0		0
48	08/19 - 08/19	0	0.0	321	1.0	643	2.1	1,285	4.2	28,600	92.7	30,849
49	08/20 - 08/20									0		0
50	08/21 - 08/21	0	0.0	162	5.3	0	0.0	0	0.0	2,912	94.7	3,074
51	08/22 - 08/22	0	0.0	99	5.3	0	0.0	0	0.0	1,787	94.7	1,886
52	08/23 - 08/23									0		0
53	08/24 - 08/24									0		0
54	08/25 - 08/25	190	1.6	2,286	19.4	190	1.6	0	0.0	9,142	77.4	11,809
55	08/26 - 08/26	256	1.8	2,820	19.6	513	3.6	0	0.0	10,768	75.0	14,357
56	08/27 - 08/27	255	1.8	2,801	19.6	509	3.6	0	0.0	10,694	75.0	14,258
57	08/28 - 08/28	0	0.0	3,954	37.5	0	0.0	0	0.0	6,591	62.5	10,545
58	08/29 - 08/29	0	0.0	2,284	37.5	0	0.0	0	0.0	3,807	62.5	6,091
59	08/30 - 08/30	0	0.0	786	13.2	157	2.6	0	0.0	5,032	84.2	5,975
60	08/31 - 08/31	0	0.0	175	13.2	35	2.6	0	0.0	1,121	84.2	1,331
61	09/01 - 09/01	0	0.0	397	13.2	79	2.6	0	0.0	2,542	84.2	3,019
62	09/02 - 09/02	0	0.0	125	13.2	25	2.6	0	0.0	798	84.2	948
63	09/03 - 09/03	0	0.0	186	13.2	37	2.6	0	0.0	1,192	84.2	1,415
64	09/04 - 09/04	0	0.0	43	13.2	9	2.6	0	0.0	277	84.2	329
65	09/05 - 09/05	0	0.0	30	13.2	6	2.6	0	0.0	193	84.2	229
66	09/06 - 09/07	0	0.0	2	13.2	0	2.6	0	0.0	13	84.2	16
67	09/08 - 09/10									0		0
68	09/11 - 09/18									0		0
69	09/19 - 09/25									0		0
Totals		13,057,89	63.6	112,162	0.5	65,110	0.3	37,213	0.2	7,243,975	35.3	20,516,356

Note: Acronyms used in this table: Solomon Gulch Hatchery (SGH), Cannery Creek Hatchery (CCN), and Wally Noerenberg Hatchery (WNH).

Appendix E12.–Hatchery contributions to the common property pink salmon drift gillnet and purse seine fisheries in the Northern District, 2005.

Period	Harvest Date	SGH	%	CCH	%	WNH	%	AFK	%	Wild	%	Total
1	07/13 - 07/13									0		0
2	07/14 - 07/14									0		0
3	07/15 - 07/15									0		0
4	07/16 - 07/16									0		0
5	07/17 - 07/17	3,203	9.4	16,013	47.2	641	1.9	0	0.0	14,091	41.5	33,947
6	07/19 - 07/19	6,705	9.4	33,527	47.2	1,341	1.9	0	0.0	29,504	41.5	71,077
7	07/21 - 07/21	0	0.0	276,999	62.1	30,778	6.9	7,694	1.7	130,805	29.3	446,276
8	07/23 - 07/23	0	0.0	88,862	34.5	60,800	23.6	4,677	1.8	102,893	40.0	257,232
9	07/25 - 07/25	13,038	3.8	221,641	64.6	26,075	7.6	0	0.0	82,572	24.1	343,326
10	07/27 - 07/27	0	0.0	151,692	55.4	53,538	19.6	5,949	2.2	62,462	22.8	273,641
11	07/29 - 07/29	0	0.0	166,025	57.3	19,532	6.7	0	0.0	104,173	36.0	289,730
12	07/31 - 07/31	7,237	3.5	168,859	82.4	4,825	2.4	0	0.0	24,123	11.8	205,043
13	08/01 - 08/01	0	0.0	90,394	85.4	1,102	1.0	0	0.0	14,331	13.5	105,827
14	08/02 - 08/02	0	0.0	196,011	73.4	17,044	6.4	34,089	12.8	19,885	7.4	267,029
15	08/03 - 08/03	961	1.0	73,969	80.2	6,724	7.3	0	0.0	10,567	11.5	92,221
16	08/04 - 08/04	0	0.0	97,635	87.5	0	0.0	0	0.0	13,948	12.5	111,583
17	08/05 - 08/05	131	1.0	10,711	85.4	261	2.1	0	0.0	1,437	11.5	12,540
18	08/06 - 08/06	0	0.0	75,886	82.3	961	1.0	961	1.0	14,409	15.6	92,216
19	08/07 - 08/07	0	0.0	379,831	87.5	31,653	7.3	9,044	2.1	13,565	3.1	434,092
20	08/08 - 08/08									0		0
21	08/09 - 08/09	0	0.0	354,429	89.6	8,243	2.1	0	0.0	32,970	8.3	395,642
22	08/10 - 08/10	0	0.0	252,109	90.6	14,489	5.2	0	0.0	11,591	4.2	278,189
23	08/11 - 08/11	0	0.0	263,773	84.4	19,539	6.3	0	0.0	29,308	9.4	312,620
24	08/12 - 08/12	0	0.0	260,715	90.6	8,990	3.1	0	0.0	17,980	6.3	287,686
25	08/13 - 08/13	0	0.0	132,963	84.4	8,208	5.2	0	0.0	16,415	10.4	157,586
26	08/14 - 08/14	0	0.0	154,897	83.3	11,617	6.3	0	0.0	19,362	10.4	185,876
27	08/15 - 08/15	0	0.0	253,169	83.3	18,988	6.3	0	0.0	31,646	10.4	303,803
28	08/16 - 08/16	0	0.0	270,045	93.8	0	0.0	0	0.0	18,003	6.3	288,048
29	08/17 - 08/17	0	0.0	231,070	87.5	2,751	1.0	0	0.0	30,259	11.5	264,080
30	08/18 - 08/18	0	0.0	469,581	93.7	5,276	1.1	0	0.0	26,381	5.3	501,238
31	08/19 - 08/19	0	0.0	421,858	94.8	4,636	1.0	0	0.0	18,543	4.2	445,037
32	08/20 - 08/20	0	0.0	523,027	93.8	5,811	1.0	0	0.0	29,057	5.2	557,895
33	08/21 - 08/21	0	0.0	543,545	95.8	0	0.0	0	0.0	23,632	4.2	567,177

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Period	Harvest Date	SGH	%	CCH	%	WNH	%	AFK	%	Wild	%	Total
34	08/22 - 08/22	0	0.0	500,528	93.8	5,561	1.0	0	0.0	27,807	5.2	533,897
35	08/23 - 08/23	0	0.0	418,811	96.9	0	0.0	0	0.0	13,510	3.1	432,321
36	08/24 - 08/24	0	0.0	611,875	94.8	13,448	2.1	0	0.0	20,172	3.1	645,494
37	08/25 - 08/25	0	0.0	102,026	92.7	2,293	2.1	0	0.0	5,732	5.2	110,050
38	08/26 - 08/26	0	0.0	319,082	92.7	7,170	2.1	0	0.0	17,926	5.2	344,178
39	08/27 - 08/27	0	0.0	139,319	92.7	3,131	2.1	0		7,827	5.2	150,277
40	08/28 - 08/28	0	0.0	53,153	97.9	0	0.0	0	0.0	1,131	2.1	54,284
41	08/29 - 08/29	0	0.0	36,500	100.0	0	0.0	0	0.0	0	0.0	36,500
42	08/30 - 08/30	0	0.0	48,549	94.8	0	0.0	0	0.0	2,668	5.2	51,216
43	08/31 - 08/31	0	0.0	13,337	94.8	0	0.0	0	0.0	733	5.2	14,070
44	09/01 - 09/01	0	0.0	33,860	94.8	0	0.0	0	0.0	1,860	5.2	35,720
45	09/02 - 09/02	0	0.0	16,352	94.8	0	0.0	0	0.0	898	5.2	17,250
46	09/03 - 09/03	0	0.0	50,018	94.8	0	0.0	0	0.0	2,748	5.2	52,766
47	09/04 - 09/04	0	0.0	34,632	94.8	0	0.0	0	0.0	1,903	5.2	36,535
48	09/05 - 09/11	0	0.0	76,373	94.8	0	0.0	0	0.0	4,196	5.2	80,569
49	09/12 - 09/18									0		0
Total		31,274	0.3	8,633,648	84.8	395,426	3.9	62,413	0.6	1,053,023	10.3	10,175,784

Note: Acronyms used in this table: Solomon Gulch Hatchery (SGH), Cannery Creek Hatchery (CCN), and Wally Noerenberg Hatchery (WNH).

Appendix E13.–Hatchery contributions to the common property pink salmon drift and set gillnet fisheries in the Coghill District, 2005.

Period	Harvest Dates	SGH	%	CCH	%	WNH	%	AFK	%	Wild	%	Total
1	06/06 - 06/07									0		0
2	06/09 - 06/10									0		0
3	06/13 - 06/15									0		0
4	06/16 - 06/18									0		0
5	06/20 - 06/22	0	0.0	0	0.0	0	0.0	0	0.0	4	100.0	4
6	06/23 - 06/25	0	0.0	0	0.0	0	0.0	0	0.0	54	100.0	54
7	06/27 - 06/29	0	0.0	0	0.0	0	0.0	0	0.0	443	100.0	443
8	06/30 - 07/02	0	0.0	0	0.0	0	0.0	0	0.0	842	100.0	842
9	07/04 - 07/06	0	0.0	0	0.0	0	0.0	0	0.0	2,120	100.0	2,120
10	07/07 - 07/10	1,122	2.2	0	0.0	10,102	20.2	1,122	2.2	37,601	75.3	49,947
11	07/11 - 07/13	0	0.0	0	0.0	3,666	24.1	0	0.0	11,547	75.9	15,213
12	07/13 - 07/14	281	1.7	1,126	6.7	7,316	43.3	0	0.0	8,160	48.3	16,883
13	07/14 - 07/16	348	1.7	1,393	6.7	9,055	43.3	0	0.0	10,100	48.3	20,897
14	07/16 - 07/16	0	0.0	1,116	1.1	91,484	92.1	0	0.0	6,694	6.7	99,294
15	07/17 - 07/17	0		0		0		0		0		0
16	07/18 - 07/21	493	2.3	2,958	13.8	13,313	62.1	0	0.0	4,684	21.8	21,448
17	07/21 - 07/21	2,322	2.3	13,931	13.8	62,690	62.1	0	0.0	22,057	21.8	101,000
18	07/22 - 07/22	0	0.0	0	0.0	106,479	100.0	0	0.0	0	0.0	106,479
19	07/23 - 07/23	0	0.0	40,644	13.8	213,379	72.4	0	0.0	40,644	13.8	294,666
20	07/25 - 07/25	0	0.0	13,039	9.8	35,857	26.8	16,298	12.2	68,453	51.2	133,647
21	07/27 - 07/27	0	0.0	4,773	3.1	119,325	78.1	6,364	4.2	22,274	14.6	152,736
22	07/29 - 07/29	0	0.0	5,049	3.1	126,228	78.1	6,732	4.2	23,563	14.6	161,572
23	07/31 - 07/31									0		0
24	08/01 - 08/01	0	0.0	1,013	3.1	25,324	78.1	1,351	4.2	4,727	14.6	32,415
25	08/02 - 08/02	0	0.0	705	3.1	17,613	78.1	939	4.2	3,288	14.6	22,545
26	08/03 - 08/03	0	0.0	1,701	3.1	42,513	78.1	2,267	4.2	7,936	14.6	54,417
27	08/04 - 08/04	0	0.0	1,305	3.1	32,632	78.1	1,740	4.2	6,091	14.6	41,769
28	08/05 - 08/05	0	0.0	2,623	3.1	65,585	78.1	3,498	4.2	12,243	14.6	83,949
29	08/06 - 08/06									0		0
30	08/07 - 08/07	0	0.0	1,399	3.1	34,973	78.1	1,865	4.2	6,528	14.6	44,766
31	08/08 - 08/08	0	0.0	3,421	3.1	85,529	78.1	4,562	4.2	15,965	14.6	109,477
32	08/09 - 08/09	0	0.0	2,431	3.1	60,773	78.1	3,241	4.2	11,344	14.6	77,790
33	08/10 - 08/10	0	0.0	1,242	3.1	31,041	78.1	1,656	4.2	5,794	14.6	39,732

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Period	Harvest Dates	SGH	%	CCH	%	WNH	%	AFK	%	Wild	%	Total
34	08/11 - 08/11	0	0.0	2,809	3.1	70,213	78.1	3,745	4.2	13,106	14.6	89,872
35	08/12 - 08/12	0	0.0	1,195	3.1	29,883	78.1	1,594	4.2	5,578	14.6	38,250
36	08/13 - 08/13	0	0.0	3,393	3.1	84,835	78.1	4,525	4.2	15,836	14.6	108,589
37	08/14 - 08/14	0	0.0	3,253	3.1	81,324	78.1	4,337	4.2	15,181	14.6	104,095
38	08/15 - 08/15	0	0.0	14,146	3.1	353,660	78.1	18,862	4.2	66,017	14.6	452,685
39	08/16 - 08/16	0	0.0	6,741	3.1	168,515	78.1	8,987	4.2	31,456	14.6	215,699
40	08/17 - 08/17	0	0.0	9,219	3.1	230,464	78.1	12,291	4.2	43,020	14.6	294,994
41	08/18 - 08/18	0	0.0	3,659	3.1	91,465	78.1	4,878	4.2	17,073	14.6	117,075
42	08/19 - 08/19	0	0.0	724	3.1	18,111	78.1	966	4.2	3,381	14.6	23,182
43	08/20 - 08/20	0	0.0	1,907	3.1	47,679	78.1	2,543	4.2	8,900	14.6	61,029
44	08/21 - 08/21	0	0.0	683	3.1	17,087	78.1	911	4.2	3,190	14.6	21,871
45	08/22 - 08/22	0	0.0	2,565	3.1	64,130	78.1	3,420	4.2	11,971	14.6	82,086
46-55	08/23 - 09/01									0		0
56	09/02 - 09/02	0	0.0	792	3.1	19,799	78.1	1,056	4.2	3,696	14.6	25,343
57-65	09/03 - 10/09									0		0
Totals		4,567	0.1	150,954	4.5	2,472,041	74.5	119,752	3.6	571,561	17.2	3,318,875

Note: Acronyms used in this table: Solomon Gulch Hatchery (SGH), Cannery Creek Hatchery (CCN), and Wally Noerenberg Hatchery (WNH).

Appendix E14.–Hatchery contributions to the commercial common property pink salmon purse seine fishery in the Eshamy District, 2005.

Period	Harvest Dates	SGH	%	CCH	%	WNH	%	AFK	%	Wild	%	Total
1	07/18 - 07/19	560	1.4	560	1.43	11,201	28.6	7,841	20.0	19,042	48.6	39,204
2	07/21 - 07/22	0	0.0	1,375	5.00	9,282	33.8	4,469	16.3	12,375	45.0	27,501
3	07/25 - 07/26	0	0.0	999	5.43	4,596	25.0	3,397	18.5	9,392	51.1	18,384
4	07/28 - 07/29	0	0.0	1,386	5.43	6,377	25.0	4,713	18.5	13,030	51.1	25,506
5	08/01 - 08/02	0	0.0	1,244	5.43	5,722	25.0	4,229	18.5	11,693	51.1	22,888
6	08/04 - 08/05	290	1.4	2,030	10.14	6,380	31.9	2,900	14.5	8,410	42.0	20,011
7	08/08 - 08/09	0	0.0	1,721	6.00	10,325	36.0	6,310	22.0	10,325	36.0	28,681
8	08/11 - 08/12	307	1.0	920	3.13	14,725	50.0	3,988	13.5	9,510	32.3	29,450
9	08/15 - 08/16	215	1.0	645	3.13	10,322	50.0	2,795	13.5	6,666	32.3	20,643
10	08/18 - 08/19	45	1.0	136	3.13	2,183	50.0	591	13.5	1,410	32.3	4,366
11	08/22 - 08/23									0		0
12	08/25 - 08/26									0		0
13	08/29 - 08/30									0		0
14	09/01 - 09/02									0		0
15	09/05 - 09/07									0		0
16	09/12 - 09/14									0		0
Totals		1,417	0.6	11,017	4.66	81,112	34.3	41,234	17.4	101,854	43.0	236,634

Note: Acronyms used in this table: Solomon Gulch Hatchery (SGH), Cannery Creek Hatchery (CCN), and Wally Noerenberg Hatchery (WNH).

Appendix E15.–Hatchery contributions to the commercial common property pink salmon purse seine fishery in the Southwestern District, 2005.

Period	Harvest Dates	SGH	%	CCH	%	WNH	%	AFK	%	Wild	%	Total
1-5	05/30 - 07/03									0		0
6	07/04 - 07/10	0	0.0	0	0.0	0	0.0	8,190	96.9	264	3.1	8,454
7	07/11 - 07/17	0	0.0	0	0.0	0	0.0	255,203	96.9	8,232	3.1	263,435
8	07/21 - 07/21	1,669	3.1	3,337	6.3	3,337	6.3	35,597	66.7	9,456	17.7	53,396
9	07/23 - 07/23	0	0.0	0	0.0	6,399	4.2	131,172	85.4	15,997	10.4	153,567
10	07/25 - 07/25	0	0.0	9,139	3.9	24,372	10.4	158,417	67.5	42,651	18.2	234,579
11	07/27 - 07/27	0	0.0	44,508	9.4	49,454	10.4	271,996	57.3	108,798	22.9	474,757
12	07/29 - 07/29	0	0.0	6,835	2.4	30,757	10.6	160,621	55.3	92,271	31.8	290,484
13	07/30 - 07/30	3,101	1.1	15,503	5.7	27,906	10.2	145,730	53.4	80,617	29.5	272,857
14	07/31 - 07/31	5,971	2.1	38,811	13.5	56,724	19.8	125,391	43.8	59,710	20.8	286,607
15	08/01 - 08/01	3,820	2.1	7,641	4.2	26,743	14.6	112,703	61.5	32,474	17.7	183,381
16	08/02 - 08/02	4,013	1.0	40,130	10.4	56,182	14.6	180,586	46.9	104,339	27.1	385,251
17	08/03 - 08/03	12,530	4.2	15,662	5.2	53,251	17.7	166,017	55.2	53,251	17.7	300,710
18	08/04 - 08/04	3,438	2.1	20,625	12.6	30,938	18.9	67,032	41.1	41,251	25.3	163,284
19	08/05 - 08/05	0	0.0	18,263	13.7	9,834	7.4	64,624	48.4	40,741	30.5	133,463
20	08/06 - 08/06	3,884	1.2	27,189	8.3	69,914	21.4	124,292	38.1	100,987	31.0	326,266
21	08/07 - 08/07	1,804	1.0	12,630	7.3	19,847	11.5	111,866	64.6	27,064	15.6	173,212
22	08/08 - 08/08	0	0.0	0	0.0	0	0.0	229,188	95.8	9,965	4.2	239,153
23	08/09 - 08/09	3,210	2.1	25,681	16.8	24,076	15.8	51,363	33.7	48,153	31.6	152,483
24	08/10 - 08/10	2,934	1.0	44,008	15.6	44,008	15.6	137,891	49.0	52,809	18.8	281,650
25	08/11 - 08/11	0	0.0	71,361	18.8	43,610	11.5	186,332	49.0	79,290	20.8	380,594
26	08/12 - 08/12	0	0.0	57,843	24.0	30,179	12.5	95,566	39.6	57,843	24.0	241,431
27	08/13 - 08/13	0	0.0	47,994	22.9	28,360	13.5	80,717	38.5	52,357	25.0	209,427
28	08/14 - 08/14	4,015	1.8	44,161	19.3	52,190	22.8	128,468	56.1	0	0.0	228,833
29	08/15 - 08/15	3,568	1.0	39,249	11.5	39,249	11.5	171,271	50.0	89,203	26.0	342,541
30	08/16 - 08/16	0	0.0	23,536	13.5	32,588	18.8	74,228	42.7	43,451	25.0	173,802
31	08/17 - 08/17	0	0.0	29,753	9.1	44,630	13.6	126,452	38.6	126,452	38.6	327,287
32	08/18 - 08/18	0	0.0	50,684	16.8	38,013	12.6	123,542	41.1	88,697	29.5	300,935
33	08/19 - 08/19	0	0.0	31,903	7.8	53,172	13.0	271,176	66.2	53,172	13.0	409,423
34	08/20 - 08/20	7,370	2.4	29,481	9.8	51,591	17.1	151,088	50.0	62,646	20.7	302,176
35	08/21 - 08/21	0	0.0	102,790	28.4	44,691	12.3	116,198	32.1	98,321	27.2	362,001
36	08/22 - 08/22	0	0.0	39,821	16.7	5,689	2.4	153,593	64.3	39,821	16.7	238,923
37	08/23 - 08/23	0	0.0	58,196	10.6	17,459	3.2	436,474	79.8	34,918	6.4	547,047

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Period	Harvest Dates	SGH	%	CCH	%	WNH	%	AFK	%	Wild	%	Total
38	08/24 - 08/24	5,785	1.3	34,709	7.7	52,063	11.5	329,731	73.1	28,924	6.4	451,211
39	08/25 - 08/25	0	0.0	178,357	32.7	89,178	16.3	234,093	42.9	44,589	8.2	546,218
40	08/26 - 08/26	0	0.0	112,908	22.0	133,437	26.0	153,966	30.0	112,908	22.0	513,219
41	08/27 - 08/27	0	0.0	101,049	16.7	82,102	13.5	296,831	49.0	126,311	20.8	606,293
42	08/28 - 08/28	0	0.0	20,074	16.7	16,310	13.5	58,967	49.0	25,093	20.8	120,444
43	08/29 - 08/29	0	0.0	35,006	16.7	28,443	13.5	102,831	49.0	43,758	20.8	210,037
44	08/30 - 08/30	0	0.0	27,215	16.7	22,112	13.5	79,943	49.0	34,018	20.8	163,288
45	08/31 - 08/31	0	0.0	33,166	16.7	26,947	13.5	97,425	49.0	41,457	20.8	198,995
46	09/01 - 09/01	0	0.0	19,751	16.7	16,048	13.5	58,018	49.0	24,689	20.8	118,505
47	09/02 - 09/02									0		0
48	09/03 - 09/03	0	0.0	1,149	16.7	934	13.5	3,375	49.0	1,436	20.8	6,894
49-51	09/02 - 09/18									0		0
Totals		67,111	0.6	1,520,120	13.4	1,482,737	13.0	6,068,164	53.3	2,238,382	19.7	11,376,513

Note: Acronyms used in this table: Solomon Gulch Hatchery (SGH), Cannery Creek Hatchery (CCN), and Wally Noerenberg Hatchery (WNH).

Appendix E16.–Hatchery contributions to the commercial common property pink salmon purse seine fishery in the Montague District, 2005.

Period	Harvest Dates	SGH	%	CCH	%	WNH	%	AFK	%	Wild	%	Total
1	05/30 - 06/05	1	22.0	0	0.0	0	0.0	0	0.0	2	78.0	3
2	06/06 - 06/12	11	22.0	0	0.0	0	0.0	0	0.0	37	78.0	48
3	06/13 - 06/19	119,063	65.6	0	0.0	0	0.0	0	0.0	62,366	34.4	181,429
4	06/20 - 06/26	405,106	90.2	0	0.0	0	0.0	0	0.0	43,927	9.8	449,033
5	06/27 - 07/03	3,305	25.3	0	0.0	300	2.3	2,103	16.1	7,361	56.3	13,069
6	07/04 - 07/10	3,223	25.3	0	0.0	293	2.3	2,051	16.1	7,178	56.3	12,745
7	07/11 - 07/17	0	0.0	0	0.0	2,507	71.3	0	0.0	1,010	28.7	3,517
8	07/18 - 07/24	0	0.0	0	0.0	0	0.0	358	4.6	7,427	95.4	7,785
9	07/25 - 07/25	0	0.0	682	9.0	4,776	62.8	195	2.6	1,949	25.6	7,602
10	07/27 - 07/27	0	0.0	0	0.0	0	0.0	2,186	13.5	13,955	86.5	16,141
11	07/29 - 07/29									0		0
12	07/30 - 07/30	0	0.0	1,723	8.3	1,507	7.3	12,705	61.5	4,737	22.9	20,672
13	07/31 - 07/31									0		0
14	08/01 - 08/01									0		0
15	08/02 - 08/02	0	0.0	927	8.3	811	7.3	6,835	61.5	2,549	22.9	11,121
16	08/03 - 08/03	0	0.0	500	8.3	438	7.3	3,688	61.5	1,375	22.9	6,000
17	08/04 - 08/04									0		0
18	08/05 - 08/05	0	0.0	9,624	8.3	8,421	7.3	70,980	61.5	26,467	22.9	115,493
19-33	08/06 - 08/20									0		0
Totals		530,708	62.8	13,456	1.6	19,053	2.3	101,100	12.0	180,342	21.4	844,658

Note: Acronyms used in this table: Solomon Gulch Hatchery (SGH), Cannery Creek Hatchery (CCN), and Wally Noerenberg Hatchery (WNH).

Appendix E17.–Hatchery contributions to the commercial common property pink salmon drift gillnet and seine fisheries in the Southeastern District, 2005.

Period	Harvest Dates	SGH	%	CCH	%	WNH	%	AFK	%	Wild	%	Total
1	07/06 - 07/06									0		0
2	07/09 - 07/09									0		0
3	07/10 - 07/10									0		0
4	07/12 - 07/12									0		0
5	07/13 - 07/13	0	0.0	0	0.0	0	0.0	0	0.0	70,329	100.0	70,329
6	07/14 - 07/14	0	0.0	0	0.0	0	0.0	0	0.0	216,251	100.0	216,251
7	07/15 - 07/15	0	0.0	0	0.0	0	0.0	0	0.0	28,581	100.0	28,581
8	07/16 - 07/16	0	0.0	0	0.0	0	0.0	0	0.0	39,737	100.0	39,737
9	07/17 - 07/17	0	0.0	0	0.0	0	0.0	0	0.0	65,727	100.0	65,727
10	07/19 - 07/19	0	0.0	0	0.0	0	0.0	0	0.0	8,008	100.0	8,008
11	07/21 - 07/21	0	0.0	0	0.0	0	0.0	0	0.0	68,988	100.0	68,988
12	07/23 - 07/23	0	0.0	0	0.0	0	0.0	0	0.0	52,294	100.0	52,294
13	07/25 - 07/25	0	0.0	0	0.0	0	0.0	0	0.0	67,360	100.0	67,360
14	07/27 - 07/27	0	0.0	6,695	7.1	0	0.0	0	0.0	87,041	92.9	93,736
15	07/29 - 07/29	0	0.0	3,818	7.1	0	0.0	0	0.0	49,631	92.9	53,449
16	07/31 - 07/31									0		0
17	08/01 - 08/01	0	0.0	436	7.1	0	0.0	0	0.0	5,674	92.9	6,110
18	08/02 - 08/02									0		0
19-36	08/03 - 08/20									0		0
Totals		0	0.0	10,950	1.4	0	0.0	0	0.0	759,620	98.6	770,570

Note: Acronyms used in this table: Solomon Gulch Hatchery (SGH), Cannery Creek Hatchery (CCN), and Wally Noerenberg Hatchery (WNH).

Appendix E18.–Hatchery contributions to the commercial common property pink salmon drift gillnet and purse seine fisheries in the Unakwik District, 2005.

Period	Harvest Dates	SGH	%	CCH	%	WNH	%	AFK	%	Wild	%	Total
1	06/14 - 06/15			0								0
2	06/17 - 06/18			0								0
3	06/21 - 06/22			0								0
4	06/24 - 06/26			0								0
5	06/28 - 06/30			0								0
6	07/01 - 07/03			0								0
7	07/05 - 07/07			0								0
08	07/08 - 07/10	0	0.0	16	100	0	0.0	0	0.0	0	0.0	0
09	07/12 - 07/14	0	0.0	250	100	0	0.0	0	0.0	0	0.0	0
10	07/15 - 07/17	0	0.0	0	0	0	0.0	0	0.0	0	0.0	0
11	07/19 - 07/21	0	0.0	618	100	0	0.0	0	0.0	0	0.0	0
12	07/22 - 07/24	0	0.0	32,218	100	0	0.0	0	0.0	0	0.0	31,562
13	07/28 - 07/30	0	0.0	36,969	100	0	0.0	0	0.0	0	0.0	36,969
14	08/01 - 08/02	0	0.0	13,327	100	0	0.0	0	0.0	0	0.0	13,327
15	08/05 - 08/05	0	0.0	0	0	0	0.0	0	0.0	0	0.0	0
Totals		0	0.0%	83,398	0.0%		0.0%	0	0.0%	0	0.0%	81,858

Note: Acronyms used in this table: Solomon Gulch Hatchery (SGH), Cannery Creek Hatchery (CCN), and Wally Noerenberg Hatchery (WNH).

Appendix E19.–Chum salmon hatchery and wild stock contributions to the Montague District commercial common property fishery by period, 2005.

Dates	Period	Hours	Origin							
			Wally Noerenberg		Port Chalmers		Hatchery	Wild		
			Number	Percent	Number	Percent	Total	Number	Percent	Total
05/30 - 06/05	1 [a]	156	78	8.3	858	91.7	936	0	0.0	936
06/06 - 06/12	2	156	211	8.3	2,319	91.7	2,530	0	0.0	2,530
06/13 - 06/19	3	156	3,224	11.5	24,916	88.5	28,140	0	0.0	28,140
06/20 - 06/26	4	156	15,795	38.5	24,332	59.4	40,127	854	2.1	40,981
06/27 - 07/03	5	156	0	0.0	72,005	96.8	72,005	2,348	3.2	74,353
07/04 - 07/10	6	156	5,259	6.4	77,134	93.6	82,393	0	0.0	82,393
07/11 - 07/17	7 [b]	156	482	6.4	7,063	93.6	7,545	0	0.0	7,545
07/18 - 07/24	8 [b]	156	29	6.4	418	93.6	447	0	0.0	447
07/25 - 07/25	9 [b]	16	12	6.4	179	93.6	191	0	0.0	191
07/27 - 07/27	10 [b]	16	54	6.4	794	93.6	848	0	0.0	848
07/29 - 08/20	11-33 [c]	368					0	152		152
Total			25,144	10.54165893	210,019	88.1	235,162	3,354	1.4	238,516

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

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

[c] No chum salmon were harvested.

Appendix E20.–Chum salmon hatchery and wild stock contributions to the Coghill District hatchery cost recovery fishery by statistical week, 2005.

Dates	Period	Hours	Origin							
			Wally Noerenberg		Port Chalmers		Hatchery	Wild		
			Number	Percent	Number	Percent	Total	Number	Percent	Total
06/05- 06/11	1[a]	24	81,612	98.0	1,666	2.0	83,278	0	0.0	81,614
06/12- 06/18	2	24	159,818	98.0	3,262	2.0	163,080	0	0.0	159,820
06/19- 06/25	3	24	126,723	98.0	2,586	2.0	129,309	0	0.0	126,725
06/26- 07/02	4	24	6,505	98.0	133	2.0	6,638	0	0.0	6,507
07/03- 07/09	5	24	21,678	98.0	442	2.0	22,120	0	0.0	21,680
07/10- 07/16	6	24					0	0		0
07/17- 07/23	7	48	72,081	98.0	1,471	2.0	73,552	0	0.0	72,083
07/24- 07/30	8	48	53,513	98.0	1,092	2.0	54,605	0	0.0	53,515
07/31- 08/06	9	72	3,127	98.0	64	2.0	3,191	0	0.0	3,129
Total			525,057	98.0	10,716	2.0	535,773	0	0.0	525,073

APPENDIX F. SUBSISTENCE AND PERSONAL USE FISHERIES

Appendix F1.–Subsistence and personal use salmon harvest by species and gear type, Prince William Sound and Upper Copper River, 2005.

	Permits Issued	Permits Fished	Gear Type	Chinook [a]	Sockeye [a]	Coho [a]	Pink [a]	Chum [a]	Other [b]	Total
State subsistence harvests										
Prince William Sound general district	13	1	Gillnet, purse seine	0	4	0	0	0	0	4
Eastern (Tatitlek) District	16	14	Drift gillnet, purse seine, and dip net	0	98	286	200	16	0	600
Southwestern (Chenega) District	13	12	Drift gillnet, purse seine, and dip net	10	516	84	124	174	0	908
Copper River District	237	134	Drift gillnet	260	830	15	1	0	0	1,106
Glennallen Subdistrict	961	NA	Dip net and fish wheel	2,080	60,966	97	0	0	0	63,143
Batzulnetas	1	1	Dip net and spear	0	0	0	0	0	0	0
State personal use harvest										
Chitina Subdistrict	8,230	NA	Dip net	1,773	106,797	1,562	0	0	426	110,558
Federal subsistence harvests										
Chitina Subdistrict	75	NA	Dip net	10	746	0	0	0	0	756
PWS/Chugach National Forest	46	22	Dip net, spear, rod and reel	0	109	141	0	0	0	250
Glennallen Subdistrict	249	NA	Dip net and fish wheel	265	14,446	70	0	0	1	14,782
Total	9,841	184		4,398	184,512	2,255	325	190	427	192,107

[a] Reported harvest only.

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

Appendix F2.–Salmon harvest and effort in the state managed Prince William Sound subsistence fishery, 1965–2006.

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

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

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

Appendix F3.–Salmon harvest and effort in the state managed Copper River District subsistence drift gillnet fishery, 1965–2005.

		Permits Issued						
	Total		Not	Not	Harvest[a]			
Year	Issued	Fished	Fished[b]	Returned	Chinook	Sockeye	Coho	Total
1965	31	15	5	11	12	459	85	556
1966	45	21	10	14	47	175	0	222
1967	61	37	19	5	83	153	0	236
1968	17	7	8	2	11	36	0	47
1969	49	20	13	16	16	63	85	164
1970	32	24	3	5	66	179	0	245
1971	29	17	9	3	10	32	4	46
1972	104	75	5	24	149	569	53	771
1973	94	89	N/A	5	153	326	180	659
1974	9	3	2	4	5	4	2	11
1975	2	2	N/A	0	0	5	0	5
1976	27	14	N/A	13	1	10	0	11
1977	23	22	N/A	1	10	71	0	81
1978	34	9	19	6	37	18	12	67
1979	49	21	20	8	45	26	17	88
1980	39	18	17	4	19	27	17	63
1981	72	30	21	21	48	145	104	297
1982	108	48	42	18	60	634	106	800
1983	87	31	42	14	79	107	57	243
1984	118	57	47	14	68	324	135	527
1985	94	67	27	0	88	261	83	432
1986	88	57	28	3	86	348	47	481
1987	95	39	50	6	49	359	14	422
1988	114	57	40	17	59	226	42	327
1989	75	32	32	11	56	339	51	446
1990	88	40	39	12	60	469	82	611
1991	129	71	44	14	136	830	38	1,004
1992	126	67	47	12	142	785	42	969
1993	111	50	43	18	120	428	29	577
1994	101	60	37	4	164	474	67	705
1995	126	72	41	13	154	692	31	877
1996	176	101	57	18	276	969	47	1,292
1997	269	165	78	26	200	1,001	1,777	2,978
1998	245	144	87	14	295	850	680	1,825
1999	294	175	100	19	353	1,330	682	2,365
2000	416	293	107	16	689	4,360	44	5,093
2001	468	288	151	29	826	3,072	70	3,968
2002	355	199	132	24	549	3,067	28	3,644
2003	384	225	140	19	710	1,607	36	2,353
2004	511	321	161	29	1,106	1,822	46	2,974
2005	237	121	103	13	260	830	15	1,105

[a] Reported harvest only.

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

Appendix F4.–Salmon harvest and effort in the state managed Eastern District (Tatitlek) and Southwestern District (Chenega) subsistence fisheries, 1988–2005.

	Permits				Harvest [a]						
Year	Issued	Returned	Fished	Not fished[b]	Chinook	Sockeye	Coho	Pink	Chum	Unknown	Total
Eastern (Tatitlek)											
1988	17	13	9	4	2	210	211	143	245	0	811
1989	14	10	7	3	1	107	653	33	43	0	837
1990	13	6	3	3	0	5	241	10	4	0	260
1991	17	10	7	3	0	107	984	320	28	0	1,439
1992	16	7	5	2	2	441	369	30	49	0	891
1993	18	11	7	4	2	512	305	144	74	180	1,217
1994	14	5	4	1	0	50	143	50	70	0	313
1995	15	3	0	3							
1996	6	3	1	2	0	0	38	0	0	0	38
1997	6	4	3	1	0	107	45	0	54	0	206
1998	11	4	3	1	0	2	321	4	28	0	355
1999	17	10	8	2	0	344	541	31	31	0	947
2000	12	3	3	0	0	140	468	40	40	0	688
2001	14	9	8	1	0	114	230	60	12	0	416
2002	19	6	5	1	0	375	136	28	36	0	575
2003	15	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
Southwestern (Chenega)											
1988	10	6	5	1	1	50	8	251	294	0	604
1989	8	7	7	0	0	322	0	554	180	0	1,056
1990	7	4	2	2	1	36	5	20	2	0	64
1991	12	7	4	3	3	345	42	195	53	0	638
1992	14	6	6	0	1	526	23	313	99	0	962
1993	22	19	17	2	2	875	60	232	124	0	1,293
1994	16	10	8	2	5	192	77	402	161	0	837
1995	10	7	5	2	2	152	67	67	41	0	329
1996	7	6	4	2	0	135	9	125	46	0	315
1997	5	4	4	0	44	193	30	110	272	0	649
1998	4	3	3	0	13	114	20	65	119	0	331
1999	14	10	7	3	57	499	62	168	101	0	887
2000	12	8	6	2	24	39	229	211	143	0	646
2001	16	9	8	1	2	119	92	95	146	0	454
2002	10	5	4	1	10	142	123	83	60	0	418
2003	13	7	5	2	6	219	156	149	147	0	677
2004	8	5	4	1	3	535	44	56	84	0	722
2005	13	8	6	2	10	516	84	124	174	0	908

[a] Reported harvest only.

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

Appendix F5.–Salmon harvest by species and numbers of permits by gear type for the state managed upper Copper River subsistence and personal use fisheries, 1981–2005.

		Number Permits Issued			Reported Harvest [a]			Reported Harvest by Species			Total Salmon Harvest	
	Fishery		Fish			% Fish						
Year	or Subdistrict	Dip Net	Wheel	Total	% Dip Net	Wheel	Total	Chinook	Sockeye	Coho	Reported	Estimated [b]
1981	Subsistence	3,555	523	4,078	52%	48%	55,796	1,913	53,008	849	55,770	68,654
1982	Subsistence	5,475	615	6,090	62%	38%	100,734	2,532	96,799	1,246	100,577	109,557
1983	Subsistence	6,911	630	7,541	67%	33%	108,228	5,421	100,995	1,690	108,106	118,599
1984	Subsistence	104	458	562	6%	94%	20,597	366	20,101	120	20,587	28,715
	Personal use	5,311	17	5,328	100%		47,306	1,641	44,977	669	47,287	50,734
	Total	5,415	475	5,890	70%	30%	67,903	2,007	65,078	789	67,874	79,449
1985	Subsistence	4,153	533	5,686	57%	43%	52,733	1,673	50,488	544	52,705	64,164
1986	Subsistence [c]	39	366	405	3%	97%	25,781	622	24,890	264	25,776	28,423
	Personal use	3,966	65	4,031	98%	2%	42,695	2,294	39,794	521	42,609	44,047
	Total	4,005	431	4,436	62%	38%	68,476	2,916	64,684	785	68,385	72,470
1987	Subsistence [c]	59	372	431	4%	96%	25,271	531	21,615	105	22,251	34,142
	Personal use	4,186	73	4,259	99%	1%	43,449	2,749	40,285	393	43,427	46,908
	Total	4,245	445	4,690	64%	36%	68,720	3,280	61,900	498	65,678	81,050
1988	Subsistence	70	339	409	9%	91%	21,481	693	20,391	260	21,344	30,755
	Personal use	4,205	46	4,251	97%	3%	41,721	2,724	38,514	456	41,694	45,855
	Total	4,275	385	4,660	68%	32%	63,202	3,417	58,905	716	63,038	76,610
1989	Subsistence	78	308	386	8%	92%	27,732	745	26,835	65	27,645	29,308
	Personal use	4,447	137	4,584	94%	6%	56,769	2,168	53,722	825	56,715	58,941
	Total	4,525	445	4,970	66%	34%	84,501	2,913	80,557	890	84,360	88,249
1990	Subsistence	95	311	406	9%	91%	30,663	610	29,947	87	30,644	32,524
	Personal use	5,631	58	5,689	99%	1%	68,277	2,611	64,054	1,457	68,122	70,812
	Total	5,726	369	6,095	71%	29%	98,940	3,221	94,001	1,544	98,766	103,336
1991	Subsistence	293	418	711	16%	84%	37,761	1,217	36,289	213	37,719	41,205
	Personal use	6,222	NA	6,222	100%		82,767	3,947	75,499	3,264	82,710	85,059
	Total	6,515	418	6,933	74%	26%	120,528	5,164	111,788	3,477	120,429	126,264
1992	Subsistence	151	504	655	10%	90%	44,448	1,368	42,689	330	44,387	47,095
	Personal use	6,387	NA	6,387	100%		89,840	3,337	84,981	1,487	89,805	91,683
	Total	6,538	504	7,042	70%	30%	134,288	4,705	127,670	1,817	134,192	138,778
1993	Subsistence	14	759	773	1%	99%	50,044	1,308	48,582	70	49,960	54,854
	Personal use	7,914	NA	7,914	100%		93,747	2,729	89,629	1,358	93,716	97,767
	Total	7,928	759	8,687	65%	35%	143,791	4,037	138,211	1,428	143,676	152,621
1994	Subsistence	267	703	970	10%	90%	64,658	1,827	62,717	55	64,599	70,391
	Personal use	7,061	NA	7,061	100%		95,903	3,596	90,332	1,903	95,831	99,822
	Total	7,328	703	8,031	64%	36%	160,561	5,423	153,049	1,958	160,430	170,213
1995	Subsistence	191	665	856	7%	93%	51,517	1,762	48,903	821	51,486	55,323
	Personal use	6,760	NA	6,760	100%		85,997	4,568	76,670	4,726	85,964	88,617
	Total	6,951	667	7,616	65%	35%	137,514	6,330	125,573	5,547	137,450	143,940
1996	Subsistence	219	631	850	11%	89%	50,843	1,388	48,747	522	50,657	54,290
	Personal use	7,198	NA	7,198	100%		99,511	3,493	92,590	3,295	99,378	102,108
	Total	7,417	631	8,048	70%	30%	150,354	4,881	141,337	3,817	150,035	156,398

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Appedix F5.–Page 2 of 2.

		Number Permits Issued			Reported Harvest [a]			Reported Harvest			Total Salmon	
	Fishery		Fish			% Fish		by Species			Harvest	
Year	or Subdistrict	Dip Net	Wheel	Total	% Dip Net	Wheel	Total	Chinook	Sockeye	Coho	Reported	Estimated [b]
1997	Subsistence	286	847	1,133	10%	90%	80,961	2,439	78,188	177	80,804	85,744
	Personal use	9,086	NA	9,086	100%		151,842	5,359	146,311	157	151,827	154,349
	Total	9,372	847	10,219	69%	31%	232,803	7,798	224,499	334	232,631	240,093
1998	Subsistence	272	738	1,010	13%	87%	63,633	1,751	61,268	507	63,526	66,951
	Personal use	10,006	NA	10,006	100%		143,027	6,583	134,299	2,100	142,982	146,075
	Total	10,278	738	11,016	73%	27%	206,660	8,334	195,567	2,607	206,508	213,026
1999	Subsistence	336	766	1,104	12%	88%	76,391	3,058	72,901	292	76,251	82,119
	Personal use	9,943	NA	9,943	100%		145,853	5,758	137,945	2,117	145,820	149,779
	Total	10,279	766	11,047	70%	30%	222,244	8,816	210,846	2,409	222,071	231,898
2000	Glennallen Subdistrict	464	787	1,251	14%	86%	63,739	4,782	58,241	511	63,534	64,885
	Chitina Subdistrict [d]	8,151	NA	8,151	100%		110,095	3,037	103,329	3,540	109,906	114,681
	Total	8,615	787	9,402	69%	31%	173,834	7,819	161,570	4,051	173,440	179,566
2001	Glennallen Subdistrict	408	832	1,240	11%	89%	83,668	3,373	79,117	1,101	83,591	88,578
	Chitina Subdistrict [d]	9,462	NA	9,462	100%		126,866	2,803	121,304	2,385	126,492	138,425
	Total	9,870	832	10,702	64%	36%	210,534	6,176	200,421	3,486	210,083	227,003
2002	Glennallen Subdistrict	460	662	1,122	14%	86%	51,866	3,424	47,892	524	51,840	55,059
	Chitina Subdistrict [d]	6,805	NA	6,805	100%		79,472	1,745	75,747	1,712	79,204	90,241
	Total	7,265	662	7,927	66%	34%	131,338	5,169	123,639	2,236	131,044	145,300
2003	Glennallen Subdistrict	399	613	1,012	14%	86%	47,054	2,585	47,719	487	50,791	50,892
	Chitina Subdistrict [e]	6,418	NA	6,418	100%	0%	84,686	1,870	80,134	2,409	84,413	84,686
	Total	6,817	613	7,430	67%	33%	131,740	4,455	127,853	2,896	135,204	135,578
2004	Glennallen Subdistrict	330	626	956	9%	91%	122,318	3,166	52,130	76	55,372	59,497
	Chitina Subdistrict [e]	8,153	NA	8,153	100%	0%	159,950	2,108	93,182	2,304	97,594	113,163
	Total	8,483	626	9,109			282,268	5,274	145,312	2,380	152,966	172,660
2005	Glennallen Subdistrict	363	598	961	10%	90%	63,143	2,080	60,966	97	63,143	66,615
	Chitina Subdistrict [e]	8,230	NA	8,230	100%	0%	110,132	1,773	106,797	1,562	110,132	123,925
	Total	8,593	598	9,191			173,275	3,853	167,763	1,659	173,275	190,540

[a] Includes all reported species.

[b] Estimated harvests are the reported harvests expanded for permits not returned.

[c] Subsistence dip net catch estimated.

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

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

Appendix F6.–"Home Pack" salmon harvest by district, species, and gear type, Prince William Sound Management Area, 2005.

District	Permits	Landings	Gear Type	Chinook [a]	Sockeye	Coho	Pink	Chum
Copper River	228	427	Drift gillnet	760	1,785	119	21	7
Bering River	6	6	Drift gillnet	6	52	0	0	0
PWS [b]	6	7	Drift and set gillnet, purse seine	1	60	107	0	20
Total	240	440		767	1,897	226	21	27

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

[b] Coghill, Eshamy, and Southwestern Districts.

Appendix F7.–Salmon harvest and effort in the PWS and Copper River federal subsistence harvests, 2002–2005.

	Permits				Reported Harvest[a]			
Year	Issued	Returned	Fished	Not fished[b]	Chinook	Sockeye	Coho	Total
Chitina Subdistrict								
2002	122	89			33	575	0	608
2003	120	82			18	717	70	805
2004	109	81			9	1,550	18	1,577
2005	75	51			10	746	0	756
Glennallen Subdistrict								
2002	201	162			564	7,950	81	8,595
2003	221	182			554	13,616	152	14,322
2004	262	205			634	17,609	152	18,395
2005	249	140			265	14,446	70	14,781
PWS/Chugach Subdistrict[c]								
2005	46	45	22	23	0	109[d]	141[d]	250
Total federal subsistence harvests								
2002	323	251	0	0	597	8,525	81	9,203
2003	341	264	0	0	572	14,333	222	15,127
2004	371	286	0	0	643	19,159	170	19,972
2005	370	236	22	23	275	15,192	70	15,787

[a] Reported harvest only.

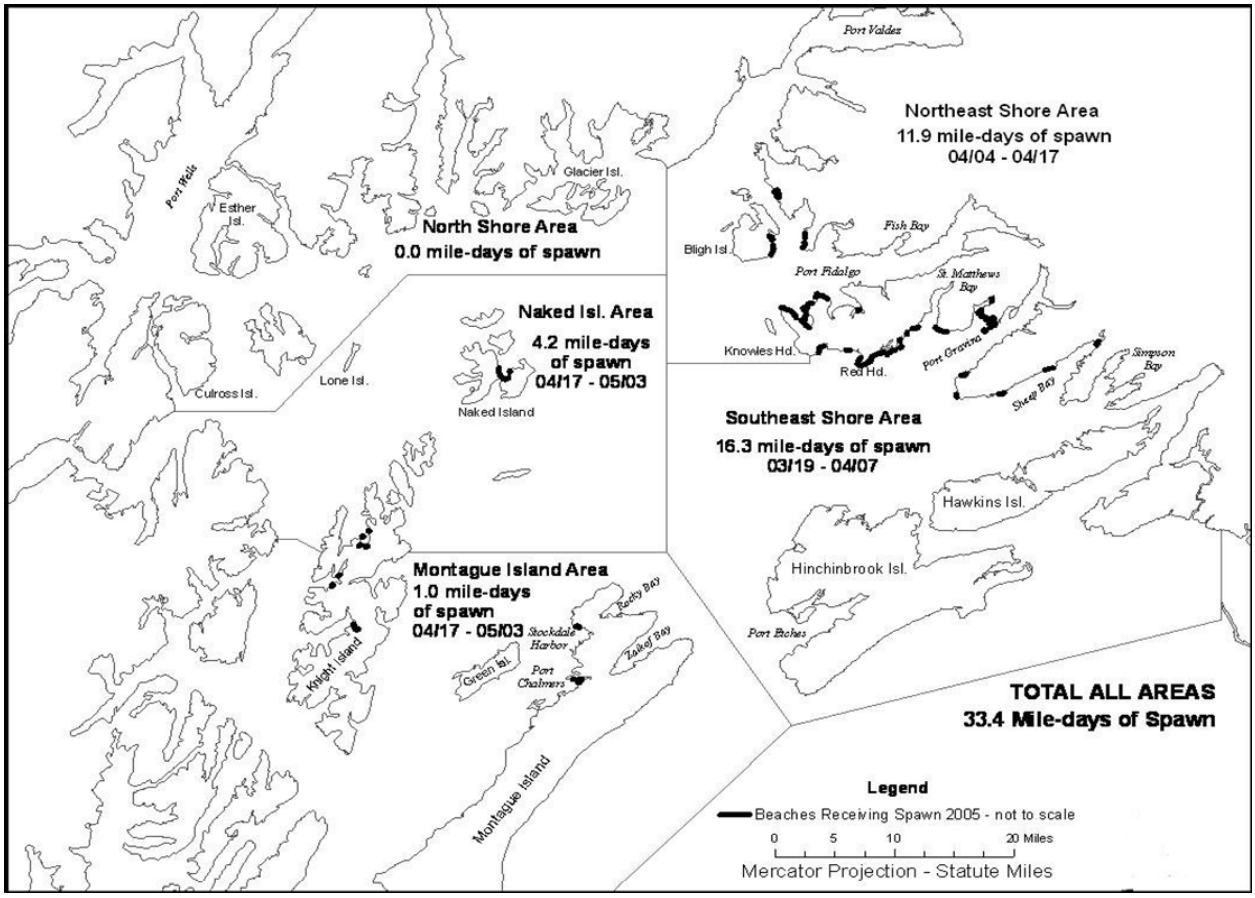
[b] As reported 'Not Fished' on returned permits.

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

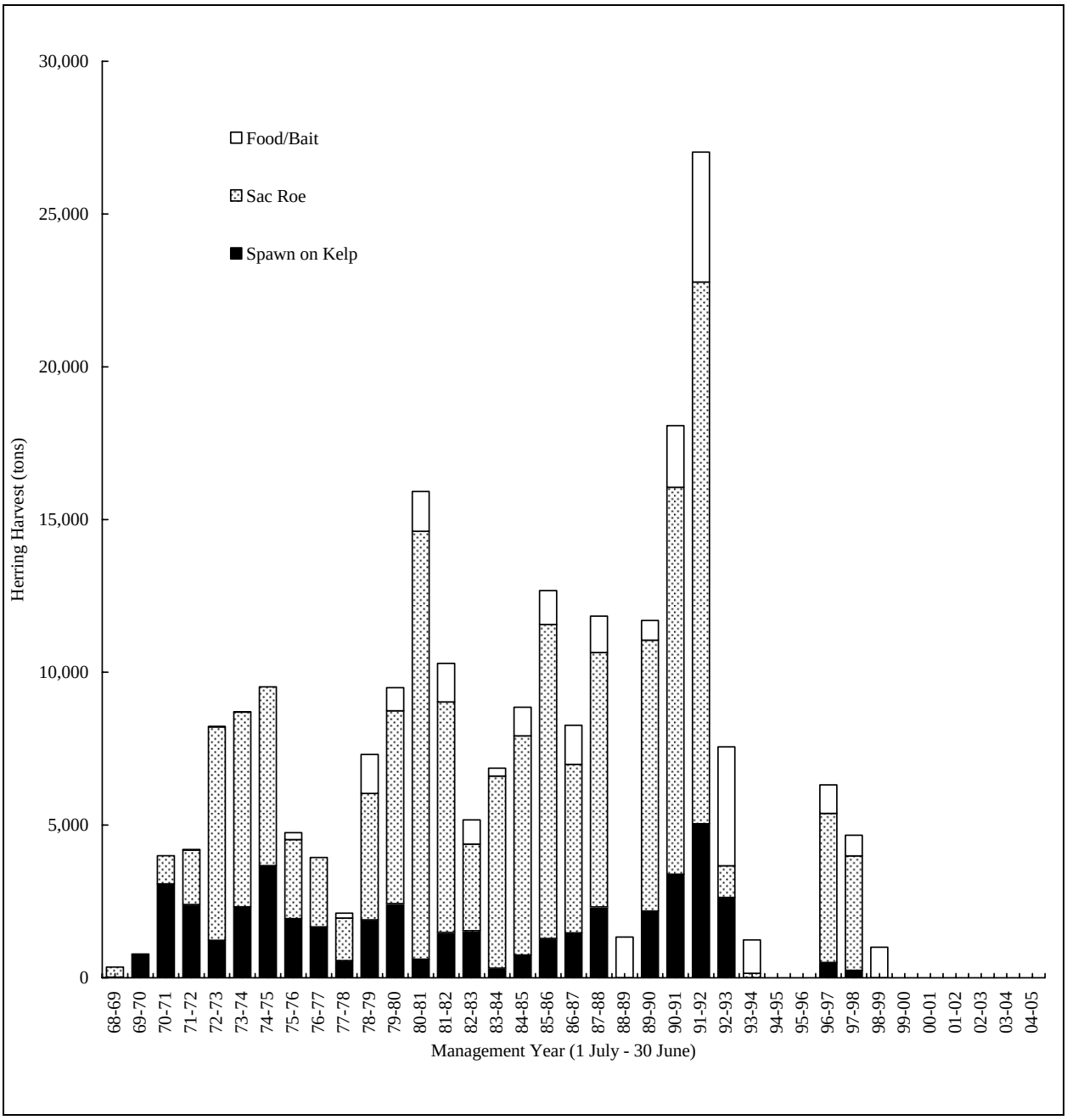
[d] 15 coho and 6 sockeye salmon harvested in PWS.

APPENDIX G. HERRING FISHERIES

Appendix G1.–Location of spawning herring and miles of spawn observed during aerial surveys in Prince William Sound, 2005.



Appendix G2.–Prince William Sound commercial Pacific herring harvest by management year and fishery, 1968–2005.



Appendix G3.–Pacific herring sac roe purse seine and drift gillnet fishery effort, anticipated harvest, and actual harvest, 1969–2005.

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

[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.

-continued-

[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.

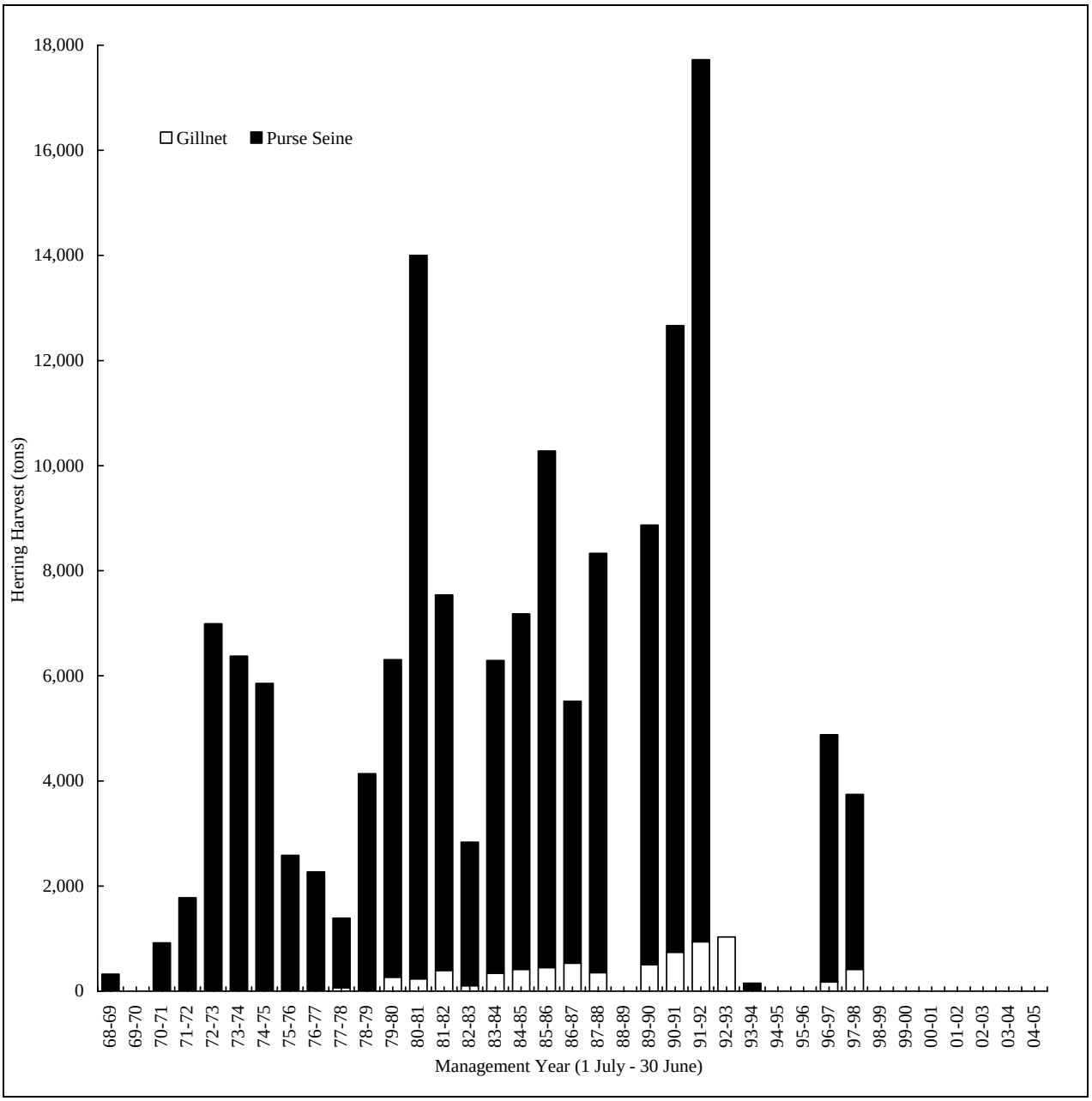
[h] Total for 1991 includes a 92.2 ton test fishing set made by ADF&G for aerial survey calibration.

[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 G4.–Prince William Sound commercial Pacific herring sac roe purse seine and gillnet harvest by management year, 1968–2005.



Appendix G5.–Pacific herring spawn-on-kelp harvests from natural spawning, 1969–2005.

Calendar Year	Fishery Dates	Hours	Effort (Nr. of Divers)	Guideline Harvest (tons)	Harvest by Kelp Species and Grounds Price ($/lb)								Spawn-on-Kelp Harvest		Herring Utilized [a]
					Ribbon		Sieve		Fucus		Other				
					Percent	Price	Percent	Price	Percent	Price	Percent	Price	lbs.	tons	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 AJ	Season Closed [g]														
1997	04/25 & 04/26	26.4	45	56.4					100%				52,800	26.4	211.2
1998	04/22 - 04/27	62	35	464	16%	$0.80			84%	$0.50			34,695	17.3	138.8
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]														

[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 remained closed due to low herring abundance.

Appendix G6.–Pacific herring spawn-on-kelp harvest produced in pounds, 1979–2005.

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	Spawn-on-Kelp Harvest (tons): Macrocystis	Spawn-on-Kelp Harvest (tons): 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]											

[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.

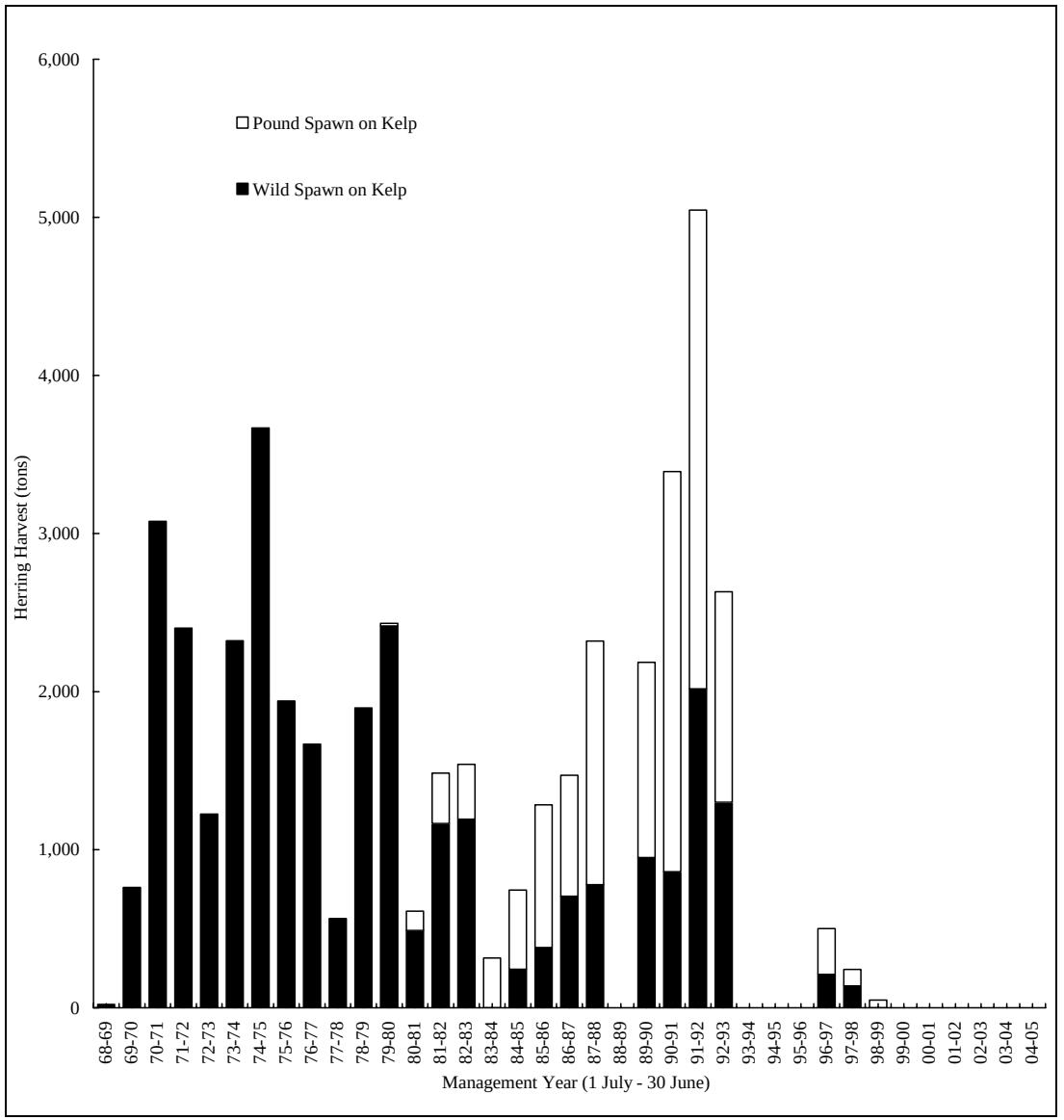
[h] All herring commercial fisheries in Prince William Sound were closed spring 1989 because of the potential for contamination from the *T/V Exxon Valdez* oil spill.

[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 G7.–Prince William Sound commercial spawn-on-kelp Pacific herring usage by management year, 1968–2005.



Appendix G8.–Prince William Sound commercial Pacific herring food/bait fishery effort and harvests, management years 1969–2005.

Harvest	Fishing			Purse Seine		Pair Trawl		Mid-Water Trawl		Otter Trawl		Total
Management	Dates		Guideline	Effort	Harvest	Effort	Harvest	Effort	Harvest	Effort	Harvest	Harvest
Year	Opened	Closed	Harvest	(Boats)	(tons)	(Boats)	(tons)	(Boats)	(tons)	(Boats)	(tons)	(tons)
1969-1970	10/01/69	06/30/70 [a]		-	14.0							14.0
1970-1971	10/01/70	06/30/71 [a]										0
1971-1972	10/01/71	06/30/72 [a]		-	20.0							20.0
1972-1973	10/01/72	05/09/73 [a]		-	9.0							9.0
1973-1974	08/27/73	04/17/74 [a]	[b]	-	8.5							8.5
1974-1975	07/15/74	03/10/75	[b]									0
1975-1976	06/01/75	06/25/75 [c]	[b]	4	226.7							226.7
1976-1977	02/01/77	03/09/77	[b]									0
1977-1978	10/01/77	02/28/78	[b]	-	17.0	-	145.3					162.3
1978-1979	10/16/78	? [d]	[b]	-	195.4	7	988.7	-	9.4	-	81.0	1,274.4
1979-1980	09/16/79	02/28/80 [e]	1,400	-	510.8	4	145.1	-	103.2	-	2.6	761.7
1980-1981	09/15/80	11/07/80	1,400	-	1,030.4	6	275.7					1,306.1
1980-1982	09/15/81	09/30/81	1,400	7	1,189.4	-	73.1					1,262.5
1982-1983	09/15/82	01/31/83	1,400	6	797.3							797.3
1983-1984	09/15/83	01/31/84	1,400	-	257.6							257.6
1984-1985	09/15/84	01/31/85	1,400	-	936.2							936.2
1985-1986	09/01/85	02/15/86	1,400	6	1,118.1							1,118.1
1986-1987	09/01/86	10/24/86	1,400	6	1,276.2							1,276.2
1987-1988	09/02/87	11/12/87 [f]	1,400	7	1,189.4							1,189.4
1988-1989	11/01/88	11/05/88	1,400	8	1,335.3							1,335.3
1989-1990	11/01/89	01/31/90	1,694	-	646.1							646.1
1990-1991	09/21/90	11/24/90 [g]	3,151	5	1,955.0			-	60.8			2,015.9
1991-1992	10/01/91	10/14/91	3,956	14	4,258.5							4,258.5
1992-1993	10/01/92	10/22/92	3,416 [h]	17	3,900.3							3,900.3
1993-1994	10/07/93	10/10/93	978 [i]	8	1,087.0							1,087.0
1994-1995	Season Closed [j]											0
1995-1996	Season Closed [j]											0
1996-1997	11/01/96	11/03/96	825	6	933.9							933.9
1997-1998 [k]	11/1/97, 02/19/98 -	02/28/98	945	12	679.7							679.7
1998-1999	11/02/98,	11/04/98, 11/06/98	967	11 [l]	1,003.3	-	-					1,003.3
1999-2000	Append	Season Closed [j]										0
2000-2001	Season Closed [j]											0
2001-2002	Season Closed [j]											0
2002-2003	Season Closed [j]											0
2003-2004	Season Closed [j]											0
2004-2005	Season Closed [j]											0

-continued-

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

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

[c] Harvest from special June food-and-bait fishery opening. Although this harvest actually occured at the end of the 1975 management year, it is included in the 1976 harvest management year to be consistent with other food-and-bait harvests that occur after spring sac roe fisheries.

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

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

[f] Fishing season opened by regulation on September 1, 1987 in the District. The north-shore and east-shore herring districts opened on September 23. The season was closed by emergency order on October 6 for a period of 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 quideline harvest based on age-structured analysis was issued in January 1993 and was 4,373 tons.

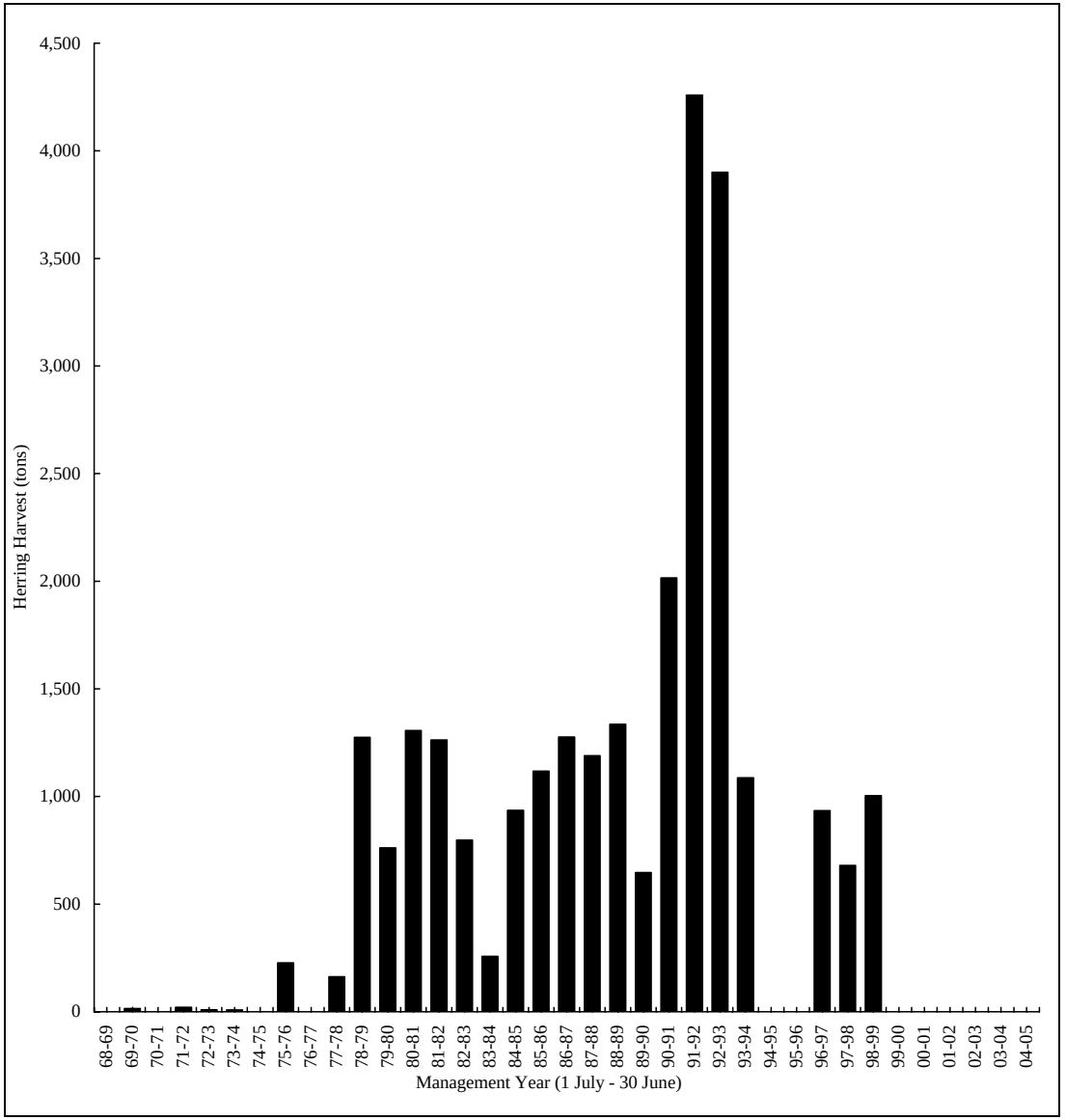
[i] Preseason guideline harvest level based on preliminary aerial survey biomass estimate of 40,000 tons.

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

[k] Season reopened in spring 1998 based on final age structured assessment modelling. Of the total harvest, 578.1 tons were taken in November 1997 and 101.6 tons were taken in February 1998.

[l] Includes sale from ADF&G test fishing near Knowles Head, 31 October 1998.

Appendix G9.–Prince William Sound commercial food/bait Pacific herring harvest, management years 1968–2005.



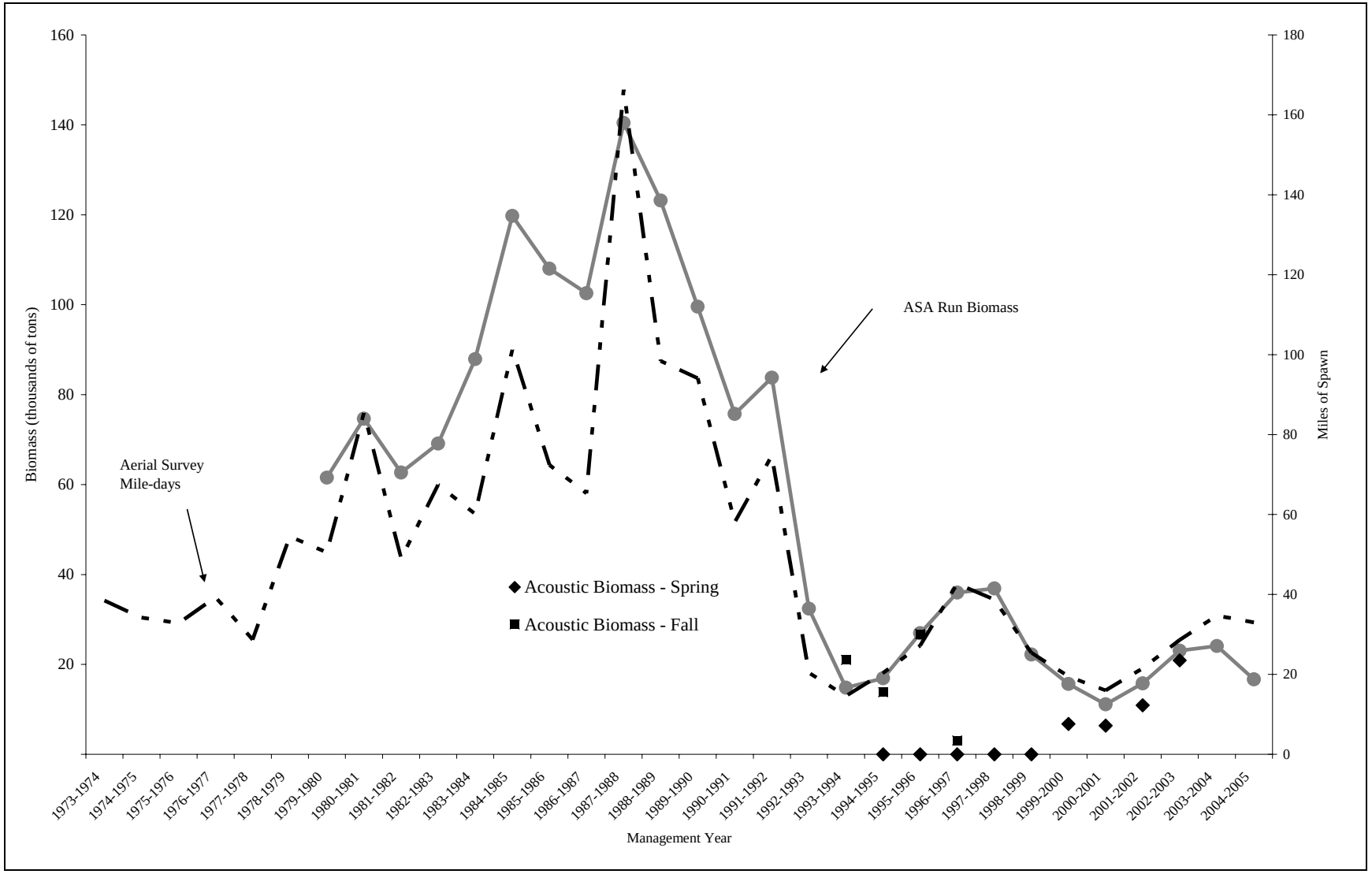
Appendix G10.–Annual Pacific herring biomass indices for harvest management years 1973–2005.

Harvest Management Year	Total Spring Use and Harvest Mortality [a] (tons)	Aerial Survey Estimates: Peak Biomass Estimate [b] (tons)	Aerial Survey Estimates: Maximum Possible Observed Biomass [c] (tons)	Aerial Survey Estimates: Miles of Spawn [d]	Aerial Survey Estimates: Mile Days of Spawn [e]	Unexploitated Esc. Biomass Age Structured Analysis [g] (tons)	Pre-Fishery Run Biomass Age Structured Analysis [g] (tons)	Observed Peak Acoustic Biomass Estimates: Fall (tons)	Observed Peak Acoustic Biomass Estimates: Spring (tons)	Prior Year Forecast (tons)
1973-1974	6,375	41,080	107,290	38.5	75.2					
1974-1975	5,854			34.2	42.4					
1975-1976	2,584	7,330	25,247	32.8	33.7					
1976-1977	2,267	16,830	17,460	39.3	73.5					
1977-1978	1,391	13,410	36,540	28.7	36.3					
1978-1979	4,138	42,100	107,390	54.5	73.2					
1979-1980	6,323	62,110	122,050	50.5	73.9	56,106	61,519			
1980-1981	14,124	77,810	161,690	85.4	140.1	61,035	74,652			
1981-1982	7,861	68,790	97,620	49.0	65.1	55,073	62,675			
1982-1983	3,181	41,850	107,710	67.4	99.8 [h]	66,310	69,133			
1983-1984	6,604	58,870	158,760	60.1	86.8	81,873	87,900			
1984-1985	7,679	20,830	60,954	101.2	149.5	112,432	119,734			
1985-1986	11,180	15,180	54,820	72.4	152.3	97,236	107,989			
1986-1987	6,281	26,530	52,192	65.3	155.9	97,172	102,552			
1987-1988	9,871	34,270	67,175	166.3	236.9	130,833	140,428			43,992
1988-1989	[i]	56,915	186,708	98.4	185.8	123,172	123,172			54,899
1989-1990	10,103	57,900	145,013	94.1	144.4	89,351	99,550			51,692
1990-1991	15,196	42,765	141,375	58.0	64.8	61,559	75,727			96,666
1991-1992	20,752	53,835	130,569	74.7	99.5	64,242	83,759			121,342
1992-1993	2,360	20,725	109,865	20.4	40.8	30,266	32,406			134,133
1993-1994	151	19,640	154,008	14.6	20.0	14,818	14,818	20,998		29,787
1994-1995	0	7,113	20,868	20.4	32.3	16,910	16,910	13,840	14,639	19,009
1995-1996	0	10,691	37,771	27.2	39.1	26,952	26,952	26,776	25,346	24,332
1996-1997	5,170	10,858	57,114	42.7	56.0	31,350	35,977	3,086	44,082	37,599
1997-1998	3,849	13,817	50,124	38.7	48.5	33,126	36,894		19,456	38,640
1998-1999	49	6,366	10,872	25.4	37.8	22,134	22,189		22,397	39,557
1999-2000	0	1,610	2,889	19.5	24.6	15,646	15,646		8,024	23,987
2000-2001	0	587	1,075	16.0	16.8	11,137	11,137		7,035	NA
2001-2002	0	646	1,433	21.5	23.0	15,804	15,804		11,791	NA
2002-2003	0	5,600	8,951	25.2	28.6	23,050	23,050		29,864	NA
2003-2004	0	12,305	17,650	29.7	34.7	24,077	24,077		21,046	NA
2004-2005	0	4,773	5,230	29.9	33.0	16,685	16,685		NA	21,064

-continued-

[a] Represents the common property seine and gillnet sac roe harvest, and equivalent use of herring in closed pound SOK fisheries.
[b] Largest single day aerial estimate of herring biomass in short tons.
[c] The sum of all daily aerial biomass estimates for a given year.
[d] Total linear miles of spawn.
[e] The sum of the daily observed linear miles of herring spawn.
[f] Estimates are made from underwater surveys of spawn deposition.
[g] Unexploited escapement and run biomass estimates from age structured analysis, September 2004.
[h] Partial estimate of spawning biomass from feasibility study.
[i] All herring commercial fisheries in PWS were closed spring 1989 because of the potential for the contamination of catches from the *T/V Exxon Valdez* oil spill.

Appendix G11.–Prince William Sound annual Pacific herring biomass indices by management year, 1973–2005, and forecast run biomass from 2000 run of the ASA model.



Appendix G12.–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, 1978–2005.

	Sac Roe Fisheries				Spawn on Kelp Fisheries				Food-and-Bait Fishery		
	Purse Seine		Drift Gillnet		Wild Spawn on Kelp		Pounds		Mixed Gear		
Calendar Year	Price per ton	Total Value	Price per ton	Total Value	Price per lb	Total Value	Price per lb [a]	Total Value	Price per ton	Total Value	**TOTAL VALUE**
1978	$ 720	$ 956,800			$ 1.25	$ 175,000			$ 380	$ 489,820	$ 1,621,700
1979	$ 1,260	$ 5,213,880			$ 1.74	$ 821,280			$ 300	$ 196,800	$ 6,231,960
1980	$ 320	$ 1,933,760			$ 1.09	$ 667,080			$ 300	$ 424,800	$ 3,025,640
1981	$ 400	$ 5,508,000	$ 580	$ 135,720	$ 1.00	$ 122,000			$ 260	$ 328,120	$ 6,093,840
1982	$ 380	$ 2,716,240	$ 640	$ 251,520	$ 1.29	$ 397,320			$ 220	$ 194,260	$ 3,559,340
1983	$ 600	$ 1,634,400	$ 1,040	$ 109,200	$ 2.10	$ 634,200			$ 260	$ 70,980	$ 2,448,780
1984	$ 760	$ 4,435,360	$ 640	$ 218,880	NO HARVEST		$ 3.50	$ 176,439	$ 260	$ 265,460	$ 5,096,139
1985	$ 760	$ 5,380,800	$ 900	$ 371,700	$ 0.48	$ 19,200	$ 7.09	$ 569,058	$ 250	$ 279,500	$ 6,620,258
1986	$ 820	$ 8,058,960	$ 920	$ 412,160	$ 1.70	$ 159,800	$ 8.00	$ 1,155,200	$ 180	$ 229,680	$ 10,015,800
1987	$ 1,100	$ 5,480,200	$ 960	$ 511,680	$ 1.70	$ 299,200	$ 15.00	$ 1,836,000	$ 300	$ 356,700	$ 8,483,780
1988	$ 840	$ 6,600,000	$ 1,400	$ 537,000	$ 1.20	$ 232,000	$ 18.00	$ 4,500,000	$ 300	$ 400,590	$ 12,236,500
1989	SEASON CLOSED								$ 300	$ 193,830	$ 193,830
1990	$ 640	$ 5,351,744	$ 640	$ 323,456	$ 0.90	$ 213,840	$ 11.40	$ 2,305,080	$ 300	$ 605,130	$ 8,799,250
1991	$ 600	$ 7,153,800	$ 600	$ 445,200	$ 0.80	$ 172,160	$ 9.00	$ 2,880,000	$ 250	$ 1,064,625	$ 11,715,785
1992	$ 400	$ 6,713,680	$ 800	$ 752,480	$ 0.46	$ 232,116	$ 8.00	$ 3,875,200	$ 200	$ 780,060	$ 12,353,536
1993	NO HARVEST		$ 400	$ 411,960	$ 0.55	$ 178,860	$ 10.00	$ 2,000,000	$ 200	$ 217,400	$ 2,808,220
1994	SEASON CLOSED								SEASON CLOSED		
1995	SEASON CLOSED								SEASON CLOSED		
1996	SEASON CLOSED								$ 200	$ 187,000	$ 187,000
1997	$ 200	$ 940,600	$ 80	$ 14,080	$ 0.61	$ 32,000	$ 8.00	$ 426,816	$ 250	$ 170,000	$ 1,583,496
1998	$ 300	$ 999,000	$ 375	$ 156,000	$ 0.65	$ 23,000	$ 5.00	$ 107,000	$ 295	$ 296,000	$ 1,581,000
1999	SEASON CLOSED						$ 8.00	$ 99,000	SEASON CLOSED		
2000	SEASON CLOSED								SEASON CLOSED		
2001	SEASON CLOSED								SEASON CLOSED		
2002	SEASON CLOSED								SEASON CLOSED		
2004	SEASON CLOSED								SEASON CLOSED		
2005	Appendix G1. Location of spawning herring and miles of spawn observed during aerial surveys in Prince William Sound, 2005.								SEASON CLOSED		

[a] The price per pound for spawn on kelp in pounds is based on the final product weight, not harvest weight.

Appendix G13.–Pacific herring percentage contribution by weight of each age group to the spring run biomass, 1982–2005.