Fishery Management Report No. 08-66

Annual Management Report of the 2008 Yakutat Area Commercial Salmon Fisheries

by

Gordon F. Woods

December 2008

Alaska Department of Fish and Game Division of 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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This document should be cited as:
Woods, Gordon F. 2008. Annual Management Report of the 2008 Yakutat Area commercial salmon fisheries. Alaska Department of Fish and Game, Fishery Management Report No. 08-66, Anchorage.

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ABSTRACT

The 2008 Yakutat set gillnet fishery produced a cumulative harvest of 256,000 salmon; this was 23% below the 1998–2007 average. The total harvest included 1,300 Chinook, 35,000 sockeye, 154,000 coho, 65,000 pink, and 500 chum salmon. The salmon harvest was worth an approximate exvessel value of $1,700,000 to 129 active permit holders. The number of active permits was 11% above the recent 10-year average and comprised 72% of the total setnet permits in Yakutat. The 2008 sockeye salmon harvest of 35,000 was 72% below the recent 10-year average. Sockeye salmon harvest was well below average in all fisheries in the Yakutat District. Biological Escapement Goals (BEG) for sockeye salmon were not met in any of the sockeye salmon producing systems in Yakutat. Yakutat Bay, the Situk-Ahrnklin, the Akwe River, and the Alsek River together produced almost all of the area sockeye salmon harvest. The area's total coho salmon harvest of 154,000 was 4% above the recent 10-year average. The Situk-Ahrnklin and the Tsiu River together produced 94% of the area coho salmon harvest. The area's Chinook salmon harvest of 1,300 was 50% below the recent 10-year average of 2,600. The top Chinook salmon producers were the Alsek River and Yakutat Bay. The Situk-Ahrnklin Inlet was not opened to the retention and sale of Chinook salmon due to conservation concerns. The pink salmon harvest of 65,000 fish was 22% above the recent 10-year average, and the chum salmon harvest of 500 was 49% below average. The Situk-Ahrnklin Inlet and Yakutat Bay fisheries produced most of the pink salmon, which were incidental to the sockeye salmon harvest.

Key words: Management, AMR, Annual Management Report, setnet, set gillnet, 2008 season, Chinook, sockeye, pink, chum, coho, salmon, Yakutat, Yakataga, fish ticket, Situk River, Situk-Ahrnklin Inlet, Yakutat Bay, Tsiu River, Alsek River, East River

INTRODUCTION

The Yakutat set gillnet fisheries (Figure 1) are divided into two fishing districts; the Yakutat District, which extends from Cape Fairweather to Icy Cape, and the Yakataga District, which extends from Icy Cape to Cape Suckling. Yakutat District set gillnet fisheries primarily target sockeye and coho salmon although all five species of salmon are harvested. The Yakataga District fisheries only target coho salmon.

While the bulk of the Yakutat salmon harvest is usually reported from four or five major fisheries (the Alsek, Situk-Ahrnklin, and Tsiu Rivers, and Yakutat Bay), upwards of 25 different areas are open to commercial fishing each year. With few exceptions, set gillnetting is confined to the intertidal area inside the mouths of the various rivers and streams, and to the ocean waters immediately adjacent to each. Due to the terminal nature of these fisheries the department has been able to develop escapement goals for most of the major and several of the minor fisheries (Table 1).

Escapement counts performed inseason become the driving force in establishing openings, closures, and fishing times for each fishery. The fisheries are managed to ensure that escapement goals are met. In the case of glacial systems, it is often either difficult to see escapement, or escapement does not become visible until long after the fishery has occurred. Fisheries performance figures, in the form of catch per unit of effort (CPUE), are compared with historical data to estimate run strength for management purposes. Two ocean fisheries, the Manby Shore and the Yakutat Bay fishery, occur within Yakutat Bay. Historical stock analysis of these fisheries indicates that the majority of sockeye salmon harvested, especially during the first six or seven weeks of the season, are of Situk-Ahrnklin origin. These fisheries are managed in accordance with Situk-Ahrnklin escapement goals.

YAKUTAT AREA SUMMARY

OVERVIEW

The Yakutat set gillnet fishery produced a cumulative harvest of 256,000 salmon. This was 23% below the recent 10-year average (Tables 2 and 3), and was the second lowest harvest during that period of time. Of the 179 Yakutat set gillnet permits, 129 were active this season; this was 11% above the recent 10-year average. The average Yakutat permit holder earned $13,100 for the 2008 season, this was 5% above the 10-year average (Table 4). Sockeye salmon harvests were 72% below the ten-year average and comprised 14% of the 2008 harvest. The figures reflect an area-wide failure of the sockeye salmon return in 2008. The sockeye salmon harvest for every system in Yakutat was well below average. The coho salmon harvest was 4% above the recent 10-year average. The Situk-Ahrnklin Inlet accounted for 62% of the coho salmon harvest while the Tsiu River accounted for 32% (Table 5). Almost all of the remote systems, although open to fishing, received very little effort for coho salmon in 2008. A buying station was maintained on the Tsiu River for the fourth time since 2001 and 49,300 coho salmon were harvested from the Tsiu. Coho salmon accounted for 60% of the total Yakutat area salmon harvest. The return of pink salmon to the Situk River was average in 2008. There is little economic incentive to harvest pink salmon so they are harvested incidentally to sockeye and coho salmon. The harvest of 43,000 pink salmon in the Situk-Ahrnklin Inlet was 12% below average. The chum salmon harvest was 49% below the recent average, and the Chinook salmon harvest of 1,300 was 50% below the recent average.

SOCKEYE SALMON

The sockeye salmon harvest of 35,000 was 72% below the recent 10-year average, and was, historically, the lowest harvest on record for the Yakutat area. The 2008 harvest of 10,600 Situk-Ahrnklin sockeye salmon was 80% below the recent 5-year average of 53,800. The Situk-Ahrnklin Inlet accounted for 30% of the area sockeye salmon harvest. The Situk River weir count of 22,500 sockeye salmon was below the escapement goal range of 30,000 to 70,000. The sockeye salmon return to the East Alsek River (East River) was so poor that the river was not opened to commercial fishing during the sockeye salmon season. Even without a commercial fishery the BEG for sockeye salmon in the East River was not met in 2008.

The Alsek River also recorded a below average sockeye salmon harvest . The Alsek harvest of 2,900 was 85% below the recent 5-year average, and was the lowest harvest in the historical record. Yakutat Bay, with a harvest of 15,000, was the peak producer for the area; this harvest accounted for 42% of the total sockeye salmon harvest. The Akwe River harvest of 3,000 sockeye salmon was 72% below the recent average. The Manby Shore and the Dangerous River contributed approximately 3,700 sockeye salmon to the harvest for the area.

COHO SALMON

The coho salmon harvest of 154,000 was 4% above the recent 10-year average of 148,000 fish and was the highest harvest since 2004. Coho salmon returns during the period 1990–2002 were the strongest in the history of the Yakutat Area, and the 2008 harvest of 154,000 fish was well above the long-term average for the fishery. The Situk-Ahrnklin Inlet harvest of 96,000 coho salmon was 22% above the recent average and was the second highest harvest in that period of time. The only other major coho salmon producer in Yakutat in 2008 was the Tsiu River. The presence of a buying station on the river again prompted sustained effort on the Tsiu for the fourth year in a row. The Tsiu River

harvest of 49,000 coho salmon was near the long-term historical average and was almost double the harvest of each of the past three years. The Alsek River, Yakutat Bay, and the Akwe River contributed small numbers of coho salmon to the total harvest.

CHINOOK SALMON

At present there are no directed fisheries for Chinook salmon in the Yakutat Area, Chinook salmon are harvested incidentally in the sockeye salmon fisheries. The principle producers of Chinook salmon are the Situk-Ahrnklin Inlet, the Alsek River, Yakutat Bay, and the Akwe River. The preseason projection for the Situk River was for a below average return. The "non-sale" of Chinook salmon remained in effect in the Situk-Ahrnklin Inlet for most of the season as mandated by 5 AAC 30.365, the Situk-Ahrnklin Inlet and Lost River King Salmon Fisheries Management Plan. The "non-sale" restriction remained in place through the end of the Chinook salmon season. The preseason projection for the Alsek River was for an average to slightly above average Chinook salmon return, but the actual return was well below average. The Alsek River harvest of 600 Chinook salmon was below the recent average of 730 fish. The Yakutat Bay harvest of 500 Chinook salmon was 11% above the recent average for the Bay. The Alsek River and Yakutat Bay accounted for 85% of all Chinook salmon harvested in the Yakutat Area. The total harvest of 1,300 Chinook salmon was one-half of the recent 10-year average.

PINK SALMON

The pink salmon harvest of 65,000 fish was 22% above the recent 10-year average. Pink salmon prices were $0.30 per pound this season, and pink salmon in Yakutat Bay and the Situk-Ahrnklin Inlet were targeted in an attempt to try to salvage something from the poor sockeye salmon season. The two fisheries together accounted for almost all of the pink salmon harvest. The Yakutat Bay harvest of 22,000 pink salmon was 75% above the recent 5-year average. Pink salmon harvested in Yakutat Bay are predominantly of Situk River and Humpback Creek origin. Pink salmon returns to the Yakutat Area were average to below average. Final escapement in the Situk River was approximately 150,000 pink salmon.

CHUM SALMON

Chum salmon are a non-target species in the Yakutat Area due to the combination of low abundance and low price, and the harvest is entirely incidental. The East River had been the only major producer of chum in the Yakutat Area, however the chum salmon run in the East River has been in decline during the past decade, probably due to changes in habitat. The East did not record a chum salmon harvest in 2008. The area-wide harvest of 500 chum salmon was 49% below the recent 10-year average. The Situk-Ahrnklin Inlet and Yakutat Bay accounted for almost all of the harvest.

YAKUTAT DISTRICT FISHERIES

ALSEK RIVER

Alsek River salmon management is conducted in cooperation with the Canadian Department of Fisheries and Oceans (DFO) under the auspices of the Pacific Salmon Commission (PSC). In February, 2005, the PSC reached bilateral agreement to allow directed Chinook salmon fisheries in the Taku and Stikine Rivers to begin in early May. Agreement was not reached to open the Alsek River Chinook salmon fishery until such time as run projections improved. The department was granted permission to conduct a test fishery for Chinook salmon. This test fishery was conducted in

2008 for the fourth year in a row. The goal of the test fishery is to enable the department to develop a method for determining the abundance of Chinook salmon on an inseason basis using test fishery catch per unit of effort (CPUE) as an index of abundance. In 2008 the test fishery commenced on May 18 and continued on a weekly basis through June 28 with a target goal of 500 Chinook salmon. A total of 464 Chinook and 55 sockeye salmon were harvested in the test fishery. These figures have been combined with the common property harvest data to reflect total harvest for the Alsek River. 391 Chinook salmon were sampled for age, size, sex, and genetic baseline information. The department has adopted regulatory language concerning a directed Chinook salmon fishery on the Alsek River pending bilateral agreement by the PSC.

The Chinook salmon harvest of 600 was 19% below the recent 5-year average of 730 fish. It is significant to note that 470 (78%) of those fish were harvested in the Alsek test fishery. The commercial common property fishery only accounted for 22% of the harvest. Most of these fish were harvested during the first three weeks of the season. The Klukshu weir escapement of 450 Chinook salmon was well below the recommended escapement goal range of 1,100 to 2,300. This marked the third year in a row when the bottom end of the BEG range for Chinook salmon was not attained. Recognizing that the Alsek Chinook salmon test fishery impacts Klukshu River escapement levels, the department will recommend to the PSC that the test fishery be discontinued until abundance levels improve.

A total of 20 permit holders harvested 600 Chinook, 2,900 sockeye, and 2,700 coho salmon. Virtually no pink or chum salmon were harvested (Table 6). The Alsek River sockeye salmon harvest was 85% below the recent five-year average, and was the lowest harvest every recorded for the river (Table 7). The previous record low of 3,800 sockeye salmon was recorded in 1943. The Alsek was opened to commercial fishing during stat week 23, the first Sunday in June. Adjustments to weekly fishing periods during the sockeye salmon season rely heavily on fishery performance data; the decision to extend any given period is generally based on CPUE data gathered during that period. Parent-year escapement information is also considered when determining the weekly fishing periods. The preseason forecast for 2008 indicated an average to slightly above average return of sockeye salmon. From the start of the season CPUE indicated a very weak return, and the fishery was maintained at one 24-hour period each week for the first eight weeks. The fishery was then closed from July 27 through August 9 as a conservation measure, along with all other fisheries in the Yakutat Area. The Klukshu River is an important tributary in the upper Alsek River drainage in Canada. The Klukshu River weir count of 2,300 sockeye salmon was well below the recommended escapement goal range of 7,500 to 15,000 and was 84% below the recent 10-year average of 16,700 sockeye salmon (Table 8). Aerial escapement surveys of sockeye salmon are typically conducted on the Tanis River, Cabin, and Basin Creeks. Due to aircraft availability problems, these surveys were not flown in 2008.

The coho salmon harvest of 2,500 was 71% above the recent 5-year average, and was the highest harvest recorded during that period of time. Effort levels in the Alsek generally plummet during coho salmon season, but that was not the case this year. Probably in an attempt to recoup some losses sustained during the sockeye salmon season, more effort was directed toward coho salmon in 2008. The river was fished into the first week in October. It was not fished during the final week of the season. Inclement weather during the fall makes it very difficult to obtain accurate escapement counts in local tributaries. The Klukshu weir escapement of 4,300 coho salmon was well above the recent average. The weir is usually removed prior to the completion of the coho salmon return and does not include fish that migrate after mid-October.

EAST RIVER

The East River experienced a harsh reversal of fortunes in the space of one year. The sockeye salmon harvest of 63,000 in 2007 was almost a return to the glory years of the 1970's and 1980's when the river was the peak sockeye salmon producer in Yakutat. By contrast, the 2008 season was by far and away the poorest on record. Escapement surveys throughout the summer continued to indicate the poor return, and the East River was not open to commercial fishing for sockeye salmon this year. The peak escapement count of 4,000 fish was recorded on August 28. This was well below the BEG range of 13,000 to 26,000 fish. The East River opened initially during the first week of September for coho salmon. Effort remained minimal and the river was only fished for five weeks of the season. A total of 3 permits harvested 1 sockeye and 165 coho salmon (Tables 9 and 10). Although the East River is considered the only major producer of chum salmon in the Yakutat area, chum salmon were not targeted due to transportation costs. No pink salmon were harvested. The East River was not flown for coho salmon in 2008 due to inclement weather. Historical East River sockeye salmon return-per-spawner data is presented in Table 11.

AKWE RIVER

The Akwe River sockeye salmon harvest of 3,100 fish was 72% below the recent 5-year average and was the lowest harvest recorded during that period of time (Table 12). The coho salmon harvest of 2,500 fish was 12% above the recent 5-year average; that average contains one year when the river was not fished for coho salmon for economic reasons. Effort remained minimal during the coho salmon season. A total of eight permits fished the Akwe in 2008. Aerial surveys of the Akwe River are of little value in determining escapement due to the turbidity of the river, and no surveys of the Akwe were flown in 2008. Weekly fishing times are announced at 1.5 days and then adjusted inseason according to fishery performance.

Markers were placed on the Akwe River one-half mile upstream of the mean low tide level to reduce the problem of fishing mixed stocks in the Italio and Akwe confluence. Some milling of all species may occur, and it is probable that some of the New Italio River stocks are intercepted in the Akwe River fishery.

ITALIO RIVERS

Three different rivers comprise the Italio River system: the Old, Middle, and New Italio Rivers. The Old Italio River has always been a separate river flowing into the Gulf of Alaska just east of the mouth of the Dangerous River. Geological changes in the mid-1980s changed the Italio River and created two distinct rivers where only one had existed before. The main river is now called the New Italio, and the original river channel is the Middle Italio. All three systems support coho populations, and the New Italio River also has a small run of sockeye salmon. No sockeye salmon were observed during any surveys of the New Italio, and that river remained closed to commercial fishing all season. A survey flown on August 28 revealed the BEG had been attained for coho salmon in the Old and Middle Italio Rivers. Both rivers were open to commercial fishing for coho in 2008. Fewer than three permits fished, and harvest records are confidential. The Middle Italio was fished for three weeks and the Old Italio for one week during the season. No late fall surveys were flown on these systems due to inclement weather.

DANGEROUS RIVER

The Dangerous River was opened to commercial fishing on June 8. A total of 2,800 sockeye salmon were harvested. Small numbers of Chinook, coho, pink, and chum salmon were harvested

incidentally in the sockeye salmon fishery. The Dangerous River was not fished for coho salmon this year (Table 13). A total of seven permits fished the Dangerous in 2008. Escapement surveys of the Dangerous River are ineffective due to the glacially occluded water. Weekly fishing times are announced at 2.5 days and then adjusted in accordance with fishery performance. Fishing times started at 2.5 days, were then curtailed to 1.5 days for four weeks, before being closed for two weeks as a conservation measure during the sockeye salmon season. Fishing time remained at 3.0 days for the coho salmon season.

SITUK-AHRNKLIN INLET

The Situk-Ahrnklin Inlet fishery recorded below average harvests of Chinook, sockeye, pink and chum salmon, and an above average harvest of coho during the 2008 season (Table 14, Table15). The sale of Chinook salmon was prohibited until the BEG was attained in accordance with 5 AAC 30.365, the Situk-Ahrnklin Inlet and Lost River King Salmon Fisheries Management Plan. The Situk-Ahrnklin fishery generated 64% of the Yakutat area set gillnet income (Table 16, Table 17). The total value of $1,000,000 was 16% above average. The harvest of 10,600 sockeye salmon was 80% below the recent average and was the third lowest harvest on record. In 1984 and again in 1986, fewer than 8,000 sockeye were harvested from the Inlet. Situk-Ahrnklin sockeye accounted for 30% of the area sockeye salmon harvest. The coho harvest of 95,900 was 22% above average, and accounted for 62% of the area's total coho salmon harvest. The pink salmon return to the Situk was average, and the harvest of 43,000 was 12% above average.

The Situk River weir was installed in the lower river for the 21st consecutive year and used for inseason management of the sockeye and Chinook salmon fisheries (Table 18). This was the 15th year that the resistance board or “floating” weir was used. The weir was damaged in a flood during late July and was removed from the river on July 23. Most of the Chinook and sockeye salmon entering the Situk River had passed through the weir by this time. Heavy rains and subsequent flooding are typical of the fall coho season and the weir is not maintained during the coho salmon run.

The Situk-Ahrnklin Inlet fishery opened by regulation on the third Sunday in June. Early fishery performance and weir counts indicated the sockeye salmon run was not strong, and fishing time remained at 2.5 days for the first two weeks of the season. As the run continued developing slowly, fishing time was then reduced to 1.5 days for the next four weeks of the season. By late July indications were that the run was coming to an early end, and the Inlet was closed to commercial fishing from July 27 through August 9 as a conservation measure. This closure was not limited to the Situk-Ahrnklin Inlet, but encompassed all waters of the Yakutat District. The Inlet was then reopened on August 10 for the coho salmon season. A total of 22,500 sockeye salmon passed through the weir prior to removal. Escapement of sockeye did not reach the lower end of the BEG of 30,000 to 70,000. The peak count of 35 permits was recorded during two weeks of the sockeye salmon season. This level of effort was well below the historical average. For most of this season, Yakutat Bay recorded higher levels of effort than the Situk-Ahrnklin Inlet.

Prior to the start of the season the department projected an inriver return of Chinook salmon to the Situk River weir of from 451 to 750 large fish. 5 AAC 30.365(3)(A) directs the department to implement a “non-sale” Chinook salmon season in the Situk-Ahrnklin Inlet and Lost River fisheries under this scenario. The “non-sale” of Chinook salmon was implemented during the first opening of the season, and remained in effect through August 10. A total of 414 large

Chinook salmon were counted through the Situk River weir; this was just below the BEG range of 450–1,050 large Chinook. A total of 90 Chinook salmon were retained in the commercial fishery for personal use and recorded on fish tickets.

The harvest of 95,900 coho salmon was 22% above the recent 5-year average of 78,600. The 14-year period from 1992–2005 was the most productive in the history of the Situk-Ahrnklin Inlet coho salmon fishery, with ten of the fourteen years recording a harvest in excess of 100,000 coho salmon. Seven of those fourteen years recorded harvests in excess of 150,000 fish. There has been a downturn in this level of production since 2003, and the 2008 harvest was the second highest since 2003. The long-term historical record yields a different perspective. During the 30-year period 1961–1991 the average coho salmon harvest in the Situk-Ahrnklin Inlet fishery was 31,500, and only four of those years produced a harvest of over 50,000 coho salmon. Escapement survey conditions remained very poor throughout the 2008 season due to inclement weather and flood conditions. A peak Situk River escapement survey of 385 coho salmon was recorded on August 20. This survey was too early to be an indicator of overall escapement, and subsequent surveys were flooded out. The commercial fishing period remained at three days for three weeks, was extended to four days for five weeks, and to five days for one week of the season. A peak count of 66 permits fished during the first and second weeks of September, and this effort was above average for recent coho salmon seasons. This year continues the recent reversal of historical effort patterns. Prior to 2000 peak effort levels in the Situk-Ahrnklin Inlet were recorded during the sockeye salmon season when as many as 90 permits fished the Inlet. Effort then dropped to about 60 permits during the fall when some effort was removed to some of the more remote coho salmon systems. Now, more effort is remaining in Yakutat Bay during the sockeye salmon season. And with economics limiting the remote coho salmon fisheries, more effort is now being seen in the Inlet during the fall.

The pink salmon harvest of 43,000 was 12% below the recent 5-year average of 49,600 fish. The pink salmon run was not as strong as it has been in recent years, and was somewhat erratic in run timing. Only 1,300 pink salmon passed through the Situk weir, one of the lowest counts on record for the weir. The peak of the pink run occurs between the end of the sockeye season and the onset of the coho salmon season. Effort levels always diminish during this time, as fewer permits are willing to fish for pink salmon because of the comparatively low price. In 2008 the pink salmon price was 30 cents per pound. This price, added to the poor sockeye salmon run, did provide some incentive to target pink salmon in the fishery. Over 70,000 pink salmon were observed in the Situk River on two different coho salmon surveys. It is estimated that pink salmon escapement reached 150,000 fish. The chum salmon harvest of fewer than 200 fish was 73% below the recent 5-year average.

LOST RIVER

Because of the shift of the Lost River in 1999 that resulted in the river changing from discharging directly into the Gulf of Alaska to discharging into the Situk-Ahrnklin estuary, 5AAC 39.220 was implemented to protect Lost River stocks. Beginning in the 1999 season, regulatory markers have been placed in the Situk-Ahrnklin estuary to delineate areas that closed the Lost River to commercial fishing. This closure forced the displacement of some traditional fishing sites and many of these fishermen have elected to transfer their enterprises to either the Situk-Ahrnklin Inlet or to Yakutat Bay.

The Lost River was not opened to commercial set gillnetting in 2008. The peak sockeye salmon escapement count of 200 fish was well below the low end of the BEG range of 1,000–2,300 for the Lost River. The peak coho salmon escapement count of 641 was also below the BEG range of

2,000–6,500. That survey was conducted during inclement weather, and staff felt they were seeing less than 50% of the fish that were actually there. It is assumed that Lost River salmon stocks are harvested in the Situk-Ahrnklin fishery. The lower end of the Situk-Ahrnklin estuary appears highly mutable and the conservation measures enacted from 1999–2008 will continue to be necessary in the future.

YAKUTAT BAY

Yakutat Bay recorded harvests of 500 Chinook, 15,000 sockeye, 2,000 coho, 22,000 pink, and 360 chum salmon in 2008 (Table 19). The sockeye salmon harvest of 15,000 fish was 50% below the recent 5-year average (Table 20). A total of 56 different permits fished Yakutat Bay in 2008, with a peak effort of 43 permits fished during the first week of the season. The southern half of Yakutat Bay opened on June 10, and fishing time remained at 2.5 days for the first three weeks of the season. Fishing time was then curtailed to 1.5 days for the next four weeks of the season as sockeye salmon harvests and escapement levels revealed the weakness of the run. Along with all other waters of the Yakutat District, Yakutat Bay was closed to commercial fishing from July 27 through August 9 as a conservation measure. The bay reopened to fishing for coho salmon on August 10. Chinook salmon are harvested incidentally to the sockeye fishery, and the harvest of 500 Chinook salmon was 11% above the recent 5-year average.

The Yakutat Bay sockeye salmon harvest of 15,000 fish exceeded the Situk-Ahrnklin Inlet harvest by 5,000 fish, making the bay the peak sockeye salmon producer for the area in 2008. The Bay harvested 42% of all sockeye salmon harvested in Yakutat. In a very short period of time the dynamics of the Yakutat Bay fishery have changed and this change is responsible for the high catch figures and for the fact that the Bay fishery is now taking a higher percentage of the total area sockeye salmon production. Historically effort was high in the Bay only during the first week of the season. With the Situk-Ahrnklin Inlet fishery opening one week later, effort then declined in the Bay as permits moved down to the Inlet. Now, effort in Yakutat Bay remains high throughout the sockeye salmon season. For most of the 2008 season more effort was directed in Yakutat Bay than in the Situk-Ahrnklin Inlet. But it is the placement of the gear within the Bay that is the critical factor in this change in fishery dynamics.

Sockeye salmon pass through Yakutat Bay on their journey to all of the river systems east of the bay, the Lost, the Situk-Ahrnklin, the Dangerous, the Italios and the Akwe, and to a lesser extent, to both the Alsek and East Rivers. The migration route carries the fish around Ocean Cape, and from there eastward they stay just outside the outermost breakers all the way down the coast. There is now a proliferation of 75 fathom Yakutat Bay gillnets clustered off Ocean Cape in the middle of that migration route. There is a line that delineates where a 75 fathom net can be fished in the Bay that runs from Ocean Cape to Point Manby, and those nets must be north and east of that line. Now, the nets are crowding the line, and they are now found south and east of the line. The waters east and south of the line are open to fishing as the remainder of the district, and legal gear there is one 15 fathom net, not a 75 fathom net. The department will continue to monitor developments in this fishery around Ocean Cape.

Yakutat Bay has never been a major coho producer, perhaps due to the concentration of effort elsewhere during coho salmon season. The 2008 coho salmon harvest of 2,000 fish was 45% below the recent 5-year average. That average contains three years of very good coho salmon harvests, and the 2008 harvest was only slightly below the long term average. Effort levels always

remain low in Yakutat Bay for coho salmon, and a peak count of seventeen permits fished the Bay during the second week of September.

The Yakutat Bay pink salmon harvest of 22,000 fish was 75% above the recent average. Pink salmon have not been targeted in Yakutat bay in recent years due to the decline of the Humpback Creek fishery. Also, prices paid for pink salmon in recent years have made them an "incidental take" species. Several permits in Yakutat Bay did target pink salmon this year. The poor sockeye season and a decent pink salmon price made them more attractive than they have been in recent years. No aerial surveys of the intertidal area adjacent to the mouth of Humpback Creek were flown due to the unavailability of airplanes. Most of the pink salmon targeted in the Bay were harvested from inside the islands in the vicinity of Humpback Creek.

MANBY FISHERIES

The Manby Shore ocean fishery is located along the western shore of Yakutat Bay. This fishery harvests stocks that are destined for the Situk River and the Manby Shore streams. Historical data is difficult to interpret because, prior to the mid-1980s, harvests from the ocean fishery were combined with harvests from the area's inside waters. Also, before 1950, all the Manby Shore and Manby streams' harvests were recorded with those from Yakutat Bay. It is likely that the ocean fishery for sockeye developed in 1977 since fairly consistent sockeye salmon harvests begin to appear in the record at that time. Weekly fishing periods are usually adjusted according to Situk River escapement needs. Fishing time remained the same as Situk-Ahrnklin Inlet time all season. Fishing time was reduced to 1.5 days for four weeks and then closed for two weeks as a conservation measure. A total of 6 permits harvested 900 sockeye salmon, and this harvest was 89% below the recent average (Table 21). The Manby Shore was only fished for five weeks of the sockeye salmon season in 2000.

The Manby Shore stream fisheries include the waters of Manby Stream, Sudden Stream, Spoon River, and Esker Creek. The fishing history of these systems is imprecise because some, or none, may be fished in any given year. Sudden and Manby Streams produce both sockeye and coho, while the Esker Creek and Spoon River fisheries target only coho salmon. None of the inside waters along the Manby Shore were fished in 2008. Escapement counts are limited due to the glacial nature of most Manby area streams and no surveys of these inside waters were conducted in 2008. Escapement goals have not been formulated for the inside waters along the Manby Shore.

YANA RIVER TO ICY BAY

The Yahtse River was fished for one week by fewer than three permits, and harvest information is confidential. Yana River and Jetty Creek were not fished in 2008.

YAKATAGA DISTRICT FISHERIES

OVERVIEW

The Yakataga District opened on August 10. The Tsiu River sustained a normal commercial fishery for the fourth year in a row. The Kaliakh River was fished in 2008 by fewer than three permits and harvest information is confidential. The Kaliakh was not fished for three of the past five years, and produced confidential information during the other two, and comparisons are not given. Seal Creek, Tashalich River, and Eight Mile Creek were open, but not fished in 2008. Historical harvest and effort data for the Tsiu River is presented in Table 22.

TSIU RIVER

The Tsiu River is remote from processors and fish have been transported from the site in DC-3 or similar aircraft. In 2008 Yakutat Seafoods maintained a buying station on the Tsiu River and flew fish to Yakutat with a DC-3. This marked the fourth time since 2001 that a processor maintained a presence on the Tsiu. A total of ten permits harvested 49,000 coho salmon (Table 22). This was slightly below historical harvest levels, but harvest on the Tsiu is a function of effort and effort levels were well below historical levels. A peak aerial escapement survey on September 24 revealed 25,200 coho salmon. It is probable that the final season's escapement was above the top end of the BEG range of 10,000–29,000 fish.

TABLES AND FIGURES

Table 1.–Summary of Yakutat salmon stock biological escapement goals (BEG) and source documentation.

Species	Stock	Type	BEG	BEG Document
Sockeye	Situk River	Weir-Total Count	30,000–70,000	ADFG-RIR No. 1J95-22
Sockeye	Akwe River	Aerial Survey Index	600–1,500	ADFG-RIR No. 1J95-16
Sockeye	East Alsek River	Aerial Survey Index	13,000–26,000	SPEC-PUB No. 03-04
Sockeye	Italio River	Aerial Survey Index	Not Established	Not Established
Sockeye	Lost River	Aerial Survey Index	1,000–2,300	ADFG-RIR No. 1J95-16
Sockeye	Klukshu River	Weir-Total Count	7,500–15,000	ADFG-RIR No. 1J00-24
Chinook	Klukshu River	Weir-Total Count	1,100–2,300	ADFG-F. Man. No. 98-2
Chinook	Situk River	Weir-Total Count	450–1,050	SPEC-PUB No. 03-01
Pink	Situk-Even Year	Weir	42,000–105,000	ADFG-RIR NO. 1J95-08
Pink	Situk-Odd Year	Weir	54,000–200,000	ADFG-RIR NO. 1J95-08
Pink	Humpy Cr. Even	Aerial Survey Index	3,300–8,000	ADFG-RIR NO. 1J95-08
Pink	Humpy Cr. Odd	Aerial Survey Index	7,000–18,000	ADFG-RIR NO. 1J95-08
Coho	E. Alsek-Doame	Aerial Survey Index	2,500–8,500	ADFG-RIR No. 1J94-14
Coho	Akwe River	Aerial Survey Index	1,800–5,000	ADFG-RIR No. 1J94-14
Coho	Italio River	Aerial Survey Index	1,400–3,600	ADFG-RIR No. 1J94-14
Coho	Situk River	Aerial Survey Index	3,300–9,800	ADFG-RIR No. 1J94-14
Coho	Lost River	Aerial Survey Index	2,200–6,500	ADFG-RIR No. 1J94-14
Coho	Kaliakh River	Aerial Survey Index	4,000–14,000	ADFG-RIR No. 1J94-14
Coho	Tsiu/Tsivat	Aerial Survey Index	10,000–29,000	ADFG-RIR No. 1J94-14

Table 2.–Total salmon harvest by species in the Yakutat area set gillnet fishery by fishing period, 2008.

Week	Ending Date	Chinook	Sockeye	Coho	Pink	Chum	Total
23	6/07	99	11	0	0	0	110
24	6/14	284	1,759	6	0	8	2,057
25	6/21	374	5,975	10	2	60	6,421
26	6/28	162	5,090	13	12	42	5,319
27	7/05	180	7,240	56	36	41	7,553
28	7/12	52	4,616	60	54	37	4,819
29	7/19	31	6,057	67	492	87	6,734
30	7/26	15	2,234	205	800	50	3,304
31	8/02	CLOSED					
32	8/09	CLOSED					
33	8/18	5	1,589	1,216	19,367	69	22,246
34	8/23	9	403	8,645	17,887	97	27,041
35	8/30	2	249	23,691	26,562	33	50,536
36	9/06	1	35	33,417	14	4	33,471
37	9/13	0	15	35,170	0	5	35,190
38	9/20	0	2	18,048	0	4	18,052
39	9/27	1	3	16,038	0	8	16,051
40	10/04	0	0	13,718	0	1	13,719
41	10/11	0	1	1,800	0	0	1,801
Totals		1,309	35,282	153,712	65,227	546	256,076

Note: Totals include Chinook and sockeye salmon harvested in the Alsek River Chinook salmon test fishery prior to statistical week 23.

Table 3.–Ten-year comparison of Yakutat area setnet effort and salmon harvest.

Year	Active Permits	Chinook	Sockeye	Coho	Pink	Chum	Total
1998	144	2,804	77,174	197,663	86,066	1,351	365,058
1999	129	5,105	128,743	187,052	29,554	928	351,382
2000	125	2,460	99,182	170,948	64,349	1,185	338,124
2001	115	2,633	141,534	205,265	32,230	406	328,068
2002	88	2,510	112,656	200,888	15,590	204	331,848
2003	104	3,847	154,441	74,343	48,418	542	281,591
2004	112	2,734	88,282	196,930	23,207	1,555	312,708
2005	115	1,140	79,443	82,887	60,436	525	224,431
2006	105	1,330	138,734	86,085	88,864	1,225	316,218
2007	120	1,879	236,869	76,550	87,997	2,782	406,077
2008	**129**	**1,309**	**35,282**	**153,712**	**65,227**	**546**	**256,076**
1998–2007 Avg.	116	2,644	125,706	147,861	53,671	1,070	331,068
2008 Deviation[a]	+11%	-50%	-72%	+4%	+22%	-49%	-23%

[a] Percentage deviation from 10-year average.

Table 4.–Average earnings from setnet fishing, Yakutat area, 1980–2008.

Year	Yakutat Setnet Income	Active Setnet Permits	Aver. Earning Per Permit	Previous 10-Year-Aver. Income
1980	$1,929,752	150	$12,865	-
1981	$2,333,300	152	$15,351	-
1982	$2,084,140	149	$13,988	-
1983	$1,355,470	131	$10,347	-
1984	$2,375,790	137	$17, 342	-
1985	$3,010,580	149	$20,225	$13,944
1986	$1,981,807	153	$12,953	$15,283
1987	$5,077,589	155	$32,759	$15,607
1988	$8,944,228	160	$55,901	$17,302
1989	$4,174,510	164	$25,454	$21,124
1990	$4,493,681	161	$27,911	$22,018
1991	$2,248,558	162	$13,880	$23,223
1992	$5,238,058	165	$31,745	$23,076
1993	$2,916,782	158	$18,461	$23,852
1994	$3,331,851	151	$22,065	$25,663
1995	$2,968,274	148	$20,055	$26,135
1996	$2,375,047	140	$16,925	$26,118
1997	$2,975,854	142	$20,957	$26,516
1998	$1,350,752	144	$ 9,380	$25,335
1999	$1,960,794	129	$15,200	$24,306
2000	$1,478,049	125	$11,824	$23,171
2001	$1,130,969	115	$9,830	$18,044
2002	$747,218	88	$8,491	$17,636
2003	$1,135,551	104	$10,919	$15,319
2004	$1,606,082	112	$14,340	$14,565
2005	$911,193	115	$7,923	$13,792
2006	$1,695,830	105	$16,150	$12,579
2007	$2,479,100	120	$20,659	$12,501
2008	**$1,693,845**	**129**	**$13,131**	**$12,472**
Average 1998–2007	$1,449,554	116	$12,472	$17,725

Table 5.–Harvest of salmon in the Yakutat area setnet fishery by fishing area, 2008.

Area	Chinook	Sockeye	Coho	Pink	Chum	Total
Alsek[a]	593	2,870	2,668	0	2	6,133
East	0	1	165	0	0	166
Akwe	72	3,120	2,535	1	3	5,731
Italio	Closed					
Middle Italio	b	b	b	b	b	b
Old Italio	b	b	b	b	b	b
Dangerous	21	2,800	24	104	4	2,953
Situk	91	10,625	95,874	43,250	166	150,006
Lost	Closed					
Yakutat Bay	518	14,976	2,072	21,869	362	39,797
Manby Shore	14	885	21	2	6	928
Manby Stream	Not Fished					
Spoon	Not Fished					
Sudden	Not Fished					
Esker	Not Fished	b	b	b	b	b
Yahtse	Not Fished					
Yana	Not Fished					
Jetty Creek	Closed					
Big River	Closed					
Kaliakh	b	b	b	b	b	b
Tsiu	0	2	49,292	1	0	49,295
Seal River	Not Fished					
Tashalich	Not Fished					
Kiklukh	Not Fished					
Totals	1,309	35,287	153,712	65,227	546	256,081

[a] Total includes Chinook and sockeye salmon harvested in the Alsek River Chinook salmon test fishery prior to statistical week 23.

[b] Fewer than 3 permits, all catch figures are confidential.

Table 6.–Harvest of salmon in the Alsek River set gillnet fishery by fishing period, 2008.

Week	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
23[a]	6/07	5	99	11	0	0	0	110	1.0
24	6/14	9	142	83	0	0	0	225	1.0
25	6/21	11	195	229	0	0	0	424	1.0
26	6/28	13	45	238	0	0	0	283	1.0
27	7/05	14	15	761	0	0	0	776	1.0
28	7/12	14	1	521	0	0	0	522	1.0
29	7/19	13	1	785	0	0	0	786	1.0
30	7/26	9	1	107	0	0	0	108	1.0
31–32	8/09	Closed							
33	8/16	3	0	34	11	0	0	48	1.0
34	8/23	6	0	21	351	0	0	372	3.0
35	8/30	6	0	74	428	0	2	504	3.0
36	9/06	6	0	2	582	0	0	584	3.0
37	9/13	4	0	0	590	0	0	590	3.0
38–40	10/4	3	0	1	706	0	0	707	9.0
41	Not	Fished							3.0
Totals		20	593	2,870	2,668	0	2	6,133	33.0

[a] Totals include Chinook and sockeye salmon harvested in the Alsek River Chinook salmon test fishery prior to statistical week 23.

Table 7.–Harvest of salmon in the Alsek River set gillnet fishery, 2008 and 5-year catch comparison.

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
2003	15	942	39,755	47	0	0	40,744	66.0
2004	24	656	18,030	2,475	0	2	21,163	83.0
2005	20	662	7,794	1,196	0	0	9,652	43.0
2006	20	700	10,066	701	2	3	11,437	45.0
2007	21	685	20,057	134	0	1	22,028	47.0
2008	**20**	**593**	**2,870**	**2,668**	**0**	**2**	**6,133**	**33.0**
2003–2007 Average	20	729	19,140	911	0	1	21,005	57.0
2008 Deviation[b]		-19%	-85%	+71%			-71%	-42%

[b] Percentage deviation from 5-year average.

Table 8.–Klukshu River Weir escapement, 1976–2008.

Year	Chinook[a]	Sockeye[b]	Coho
1976	1,278	11,691	1,572
1977	3,144	26,791	2,758
1978	2,976	26,867	30
1979	4,405	12,308	175
1980	2,637	11,739	704
1981	2,113	20,323	1,170
1982	2,369	33,699	189
1983	2,537	20,492	303
1984	1,672	12,727	1,402
1985	1,458	18,620	350
1986	2,708	24,880	62
1987	2,616	10,504	202
1988	2,037	9,341	2,774
1989	2,456	23,542	2,219
1990	1,915	25,995	315
1991	2,489	18,977	8,540
1992	1,366	20,215	1,145
1993	3,302	16,740	788
1994	3,735	15,038	1,232
1995	5,678	22,202	3,650
1996	3,602	8,317	3,465
1997	2,757	11,012	307
1998	1,347	13,580	1,961
1999	2,190	5,069	2,371
2000	1,365	5,551	4,832
2001	1,825	10,290	748
2002	2,240	25,711	9,921
2003	1,671	32,120	3,689
2004	2,525	15,348	750
2005	1,070	3,373	683
2006	568	13,455	420
2007	677	8,956	300
2008	**436**	**2,731**	**4,275**
1998–2007average	2,335	16,734	2,568

[a] Chinook salmon escapement goal range is 1,100 to 2,300 fish.
[b] Sockeye salmon escapement goal range is 7,500 to 15,000 fish.

Table 9.–Harvest of salmon in the East River set gillnet fishery by fishing period, 2008.

Week	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
36–40	10/4	3	0	1	165	0	0	166	15.0
41	10/11	Not	Fished						3.0
Totals		3	0	1	165	0	0	166	18.0

Table 10.–Harvest of salmon in the East River set gillnet fishery, 2008 and 5-year catch comparison.

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
2003	8	0	2,617	1	0	22	2,640	33.0
2004	9	6	4,590	21	0	34	4,651	68.5
2005	13	8	5,099	27	36	0	5,170	52.5
2006	15	4	14,848	316	0	5	15,173	49.5
2007	33	13	63,080	56	203	1,256	64,608	51.0
2008	**3**	**0**	**1**	**165**	**0**	**0**	**166**	**18.0**
2003–2007 Average	16	6	18,047	84	48	263	18,448	50.9
2008 Deviation[a]	-81%		>-99%	+96%			>-99%	-65%

[a] Percentage deviation from 5-year average.

Table 11.–East River return-per-spawner, 1975–2008.

Year	Total Return	Parent-Year Escapement	Return Per Spawner	Rank
1975	44,530	12,000	3.71	10
1976	79,816	10,000	7.98	1
1977	61,309	15,000	4.08	8
1978	56,003	35,000	1.60	24
1979	81,262	22,000	3.69	11
1980	66,530	50,000	1.33	26
1981	82,365	40,000	2.06	20
1982	177,785	25,000	7.11	3
1983	147,204	30,000	4.91	6
1984	68,023	18,000	3.78	9
1985	245,851	35,000	7.02	4
1986	120,355	80,000	1.50	25
1987	167,723	65,000	2.58	18
1988	99,483	29,000	3.43	13
1989	175,516	60,000	2.93	17
1990	203,378	44,000	4.62	7
1991	75,334	34,000	2.22	19
1992	187,300	38,000	4.93	5
1993	234,207	30,000	7.81	2
1994	131,848	42,000	3.14	15
1995	39,772	30,000	1.32	27
1996	83,025	43,000	1.96	21
1997	40,612	45,000	.90	29
1998	38,902	32,400	1.20	28
1999	19,500	28,000	.70	31
2000	21,000	28,000	.75	30
2001	17,000	28,000	.61	32
2002	14,200	30,400	.47	33
2003	33,617	19,500	1.72	22
2004	35,590	21,000	1.69	23
2005	55,499	17,000	3.26	12
2006	44,848	14,200	3.16	14
2007	103,180	34,300	3.01	16
2008	**4,165**	**31,300**	**.13**	**34**

Table 12.–Harvest of salmon in the Akwe River set gillnet fishery, 2008, and 5-year-catch comparison.

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
2003	8	304	8,518	0	1	0	8,831	50.5
2004	6	149	11,860	5,342	0	1	17,352	50.0
2005	6	108	5,529	287	2	2	5,928	40.0
2006	7	256	5,833	3,725	25	34	9,873	51.0
2007	9	238	24,087	1,987	0	10	26,322	45.0
2008	**8**	**72**	**3,120**	**2,535**	**1**	**3**	**5,731**	**36.5**
2003–2007 Average	7	211	11,165	2,270	6	9	13,661	47.3
2008 Deviation[a]		-66%	-72%	+12%	-83%	-67%	-58%	-23%

[a]Percent deviation from 5-year average.

Table 13.–Harvest of salmon in the Dangerous River set gillnet fishery, 2008, and 5-year catch comparison.

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
2003	[a]	[a]	[a]	[a]	[a]	[a]	[a]	56.0
2004	3	2	865	103	0	0	867	67.5
2005	[a]	[a]	[a]	[a]	[a]	[a]	[a]	58.9
2006	3	41	2,352	0	3	0	2,393	53.0
2007	5	4	5,768	18	2	0	5,792	41.5
2008	**7**	**21**	**2,800**	**24**	**104**	**7**	**2,956**	**41.5**
2003–2007 Average	4	16	2,995	40	2	0	3,017	55.4

[a] Fewer than three permits, all catch figures are confidential

Table 14.–Harvest of salmon in the Situk-Ahrnklin Inlet set gillnet fishery by fishing period, 2008.

Week	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
25	6/21	29	20	2,549	3	0	12	2,584	2.5
26	6/28	32	17	1,570	5	5	14	1,611	2.5
27	7/05	34	43	1,724	0	8	0	1,775	1.5
28	7/12	35	6	1,199	0	19	0	1,224	1.5
29	7/19	35	4	2,409	0	326	16	2,755	1.5
30	7/26	20	0	196	0	120	3	319	1.5
31	8/02	Closed							
32	8/09	Closed							
33	8/16	37	0	514	930	9,311	32	10,787	4.0
34	8/23	35	1	256	4,048	8,114	73	12,492	3.0
35	8/30	56	0	161	12,901	25,347	12	38,421	4.0
36	9/06	66	0	30	18,695	0	3	18,728	4.0
37	9/13	66	0	15	28,413	0	0	28,428	5.0
38	9/20	60	0	1	11,892	0	1	11,894	4.0
39	9/27	58	0	0	7,948	0	0	7,948	3.0
40	10/4	54	0	0	10,404	0	0	10,404	4.0
41	10/11	30	0	1	635	0	0	636	3.0
Total		80	91	10,625	95,874	43,250	166	150,006	45.0

Table 15.–Harvest of salmon in the Situk-Ahrnklin Inlet set gillnet fishery, 2008 and 5-year catch comparison.

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
2003	81	2,343	84,248	72,183	43,568	454	202,795	88.25
2004	90	1,222	27,518	178,804	19,842	1,386	228,485	98.0
2005	78	0	32,887	50,933	48,269	336	132,419	72.25
2006	74	6	62,118	49,336	72,139	457	184,056	79.0
2007	77	83	62,059	41,900	61,591	415	166,048	54.5
2008	**80**	**91**	**10,625**	**95,874**	**43,250**	**166**	**150,006**	**45.0**
2003–2007 Average	80	913	53,766	78,631	49,082	610	182,761	78.40
2008 Deviation [a]		-90%	-80%	+22%	-12%	-73%	-18%	-43%

[a] Percentage deviation from 5-year average.

Table 16.–Exvessel value of Situk-Ahrnklin set gillnet fishery relative to the total Yakutat area exvessel set gillnet fishery, 1975–2008.

Year	Yakutat Setnet Income	Situk Setnet Income	Percent Value of Situk
1975	$ 713,860	$ 256,760	36%
1976	1,214,550	485,680	40%
1977	2,065,055	890,630	43%
1978	2,669,791	767,690	29%
1979	3,239,000	715,280	22%
1980	1,929,752	419,070	22%
1981	2,333,300	612,050	26%
1982	2,084,140	372,000	18%
1983	1,355,470	205,750	15%
1984	2,375,790	575,120	24%
1985	3,010,580	524,560	17%
1986	1,981,807	180,677	9%
1987	5,077,589	1,248,984	25%
1988	8,944,228	2,601,441	29%
1989	4,174,510	1,244,788	30%
1990	4,493,681	1,189,260	26%
1991	2,248,558	1,183,752	53%
1992	5,238,058	2,063,143	39%
1993	2,916,782	1,192,148	41%
1994	3,331,851	1,686,803	51%
1995	2,968,274	1,716,842	58%
1996	2,375,047	1,351,005	57%
1997	2,975,854	1,687,084	57%
1998	1,350,752	652,129	48%
1999	1,960,794	1,097,412	56%
2000	1,487,207	740,165	50%
2001	1,130,969	705,325	62%
2002	745,218	601,704	80%
2003	1,135,551	782,143	69%
2004	1,606,082	1,156,074	72%
2005	911,193	488,192	54%
2006	1,695,830	889,519	52%
2007	2,479,100	911,724	37%
2008	**1,693,845**	**1,092,913**	**64%**
1998–2007 Average	1,450,270	802,423	55%
Deviation [a]	+17%	+36%	+16%

[a] Percentage deviation from average.

Table 17.–Dollar value of salmon harvest in the Situk-Ahrnklin set gillnet fishery, 1975–2008.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1975	$ 7,000	$ 128,000	$ 114,560	$ 7,000	$ 4	$ 256,760
1976	24,000	345,300	108,000	8,300	80	485,680
1977	21,000	588,560	255,530	25,230	310	890,630
1978	10,000	333,150	417,270	7,140	126	767,690
1979	29,560	430,350	223,950	31,200	220	715,280
1980	22,540	155,130	218,190	23,100	106	419,070
1981	25,000	237,710	308,270	40,440	625	612,050
1982	5,610	170,940	191,240	3,800	410	372,000
1983	4,830	101,000	96,300	3,300	315	205,750
1984	12,310	50,740	498,530	10,640	2,400	575,120
1985	11,330	122,770	385,000	4,750	710	524,560
1986	3,276	59,771	116,648	688	294	180,677
1987	23,908	755,662	454,035	9,682	5,394	1,248,984
1988	10,350	1,018,060	1,522,176	40,223	10,632	2,601,441
1989	No Sale	899,505	283,090	58,445	3,748	1,244,788
1990	No Sale	816,615	352,937	18,638	1,070	1,189,260
1991	12,071	651,684	518,138	1,399	460	1,183,752
1992	29,404	929,241	1,093,096	9,816	1,586	2,063,143
1993	11,553	503,262	669,648	6,479	1,206	1,192,148
1994	27,336	309,766	1,342,174	7,102	425	1,686,803
1995	168,055	432,684	1,078,470	36,913	720	1,716,842
1996	58,024	578,758	703,278	10,342	603	1,351,005
1997	31,317	166,254	1,436,891	52,282	340	1,687,084
1998	24,845	196,850	390,977	39,163	93	652,129
1999	81,060	488,915	515,785	10,738	474	1,096,972
2000	28,905	222,598	464,086	22,852	584	740,165
2001	17,179	241,597	433,935	12,427	187	705,325
2002	4,832	180,146	413,938	2,751	38	601,704
2003	27,850	441,995	293,676	18,885	249	782,143
2004	22,693	165,665	963,105	3,400	1,211	1,156,074
2005	0	207,988	252,553	27,064	587	488,192
2006	20	432,874	411,629	44,637	386	889,519
2007	0	523,214	336,002	51,167	1,211	911,594
2008	**0**	**87,572**	**949,730**	**55,204**	**407**	**1,092,913**
1998– 2007 Average	20,738	310,184	447,569	23,308	502	802,301

Table 18.–Situk Weir escapement counts, 1988–2008.

Year	Dates of Operation	Chinook[a]	Sockeye[b]	Coho[c]	Pink[d]	Chum
1988	6/7–8/21	885	46,404	1,694	78,754	228
1989	5/31–8/17	637	84,383	0	288,246	0
1990	6/1–7/28	1,274	61,375	0	0	0
1991	6/10–7/27	1,613	67,737	0	4,168	3
1992	4/18– 8/5	1,985	63,877	0	29,278	0
1993	6/10–8/5	4,091	62,110	0	16,285	0
1994	5/21– 8/4	4,416	72,474	4	79,055	4
1995	5/10– 8/3	8,231	42,463	4	66,273	17
1996	5/6–8/6	4,151	61,269	65	157,012	15
1997	5/7–8/8	5,001	42,051	18	466,267	35
1998	5/3–8/5	5,329	50,546	8	97,392	0
1999	5/9–8/6	2,786	61,544	2	27,586	0
2000	5/10–8/8	3,091	41,544	189	332,510	53
2001	5/20–8/8	696	60,330	20	121,267	13
2002	5/10–8/8	1,024	68,743	40	98,190	22
2003	5/8–8/8	2,615	89,720	1	375,333	12
2004	5/8–8/9	798	42,544	184	145,914	111
2005	5/8–7/31	613	66,476	137	279,648	0
2006	5/11–8/13	749	90,383	320	115,079	283
2007	5/11–8/15	677	61,799	39	224,024	18
2008	**5/11–7/23**	**414**	**22,540**	**0**	**1,275**	**6**
1988 to 2007 Average		2,533	61,888	136	158,013	41

Note: In 1992 and from 1994 to the present, the weir has been operated by Sport Fish Division in May and early June to count emigrant steelhead

[a] Chinook salmon weir counts are for large, three ocean or older, fish.
The chinook salmon escapement goal range of 450–1,050 fish is for large fish.

[b] Sockeye salmon escapement goal range is 30,000 to 70,000 fish.

[c] The Situk weir is not operated through the end of the coho salmon return and is not a useful measure of escapement for this species.

[d] This odd-year pink salmon escapement goal range is 59,000 to 200,000 fish.

Table 19.–Harvest of salmon in the Yakutat Bay set gillnet fishery by fishing period, 2008.

Week	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
24	6/14	43	142	1,676	6	0	8	1,832	2.5
25	6/21	38	143	2,510	7	2	46	2,708	2.5
26	6/28	39	75	2,838	2	7	26	2,948	2.5
27	7/05	35	83	3,418	31	28	39	3,599	1.5
28	7/12	36	28	1,713	60	33	36	1,870	1.5
29	7/19	32	19	1,539	66	166	69	1,859	1.5
30	7/26	27	12	1,115	204	679	45	2,055	1.5
31	8/02	Closed							
32	8/09	Closed							
33	8/16	17	5	110	153	9,952	33	10,248	4.0
34	8/23	14	8	42	221	9,773	24	10,068	3.0
35	8/30	5	1	10	406	1,215	18	1,650	3.0
36–41	10/11	4	2	5	916	14	18	955	24.0
Totals		56	518	14,976	2,072	21,869	362	39,797	47.5

Table 20.–Harvest of salmon in the Yakutat Bay set gillnet fishery, 2008, and 5-year-catch comparison.

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
2003	33	238	14,358	578	4,834	63	24,722	65.0
2004	47	690	22,920	3,721	3,339	130	30,800	92.0
2005	41	270	17,844	4,846	11,920	190	35,070	77.75
2006	46	317	35,893	3,254	16,681	725	56,870	60.0
2007	56	788	59,602	6,384	25,808	1,100	93,682	50.5
2008	**56**	**518**	**14,976**	**2,072**	**21,869**	**362**	**39,737**	**47.5**
2003–2007 Average	45	461	30,123	3,757	12,516	442	48,229	69.1
2008 Deviation [a]	+24%	+12%	-50%	-45%	+75%	-18%	-18%	-31%

[a] Percentage deviation from 5-year average.

Table 21.–Harvest of salmon in the Manby Shore Ocean set gillnet fishery, 2008, and 5-year-catch comparison.

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
2003	7	21	2,725	294	14	3	3,057	58.5
2004	8	7	2,494	13	26	0	2,488	65.0
2005	14	82	8,732	169	205	1	9,189	57.5
2006	9	34	5,823	6	14	1	5,878	59.5
2007	8	6	1,014	1	42	1	1,063	51.5
2008	**6**	**14**	**885**	**21**	**2**	**6**	**928**	**37.0**
2003–2007 Average	9	30	4,158	95	60	1	4,335	58.4
Deviation 2008		-53%	-89%	-78%	-97%		-79%	-37%

Table 22.–Harvest of salmon in the Tsiu River, 2003–2008.

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
2003	Not	Fished						22.0
2004	[a]	[a]	[a]	[a]	[a]	[a]	[a]	55.0
2005	8	0	0	25,429	0	0	25,429	25.0
2006	12	0	0	26,438	0	0	26,438	25.0
2007	12	0	5	22,318	0	0	22,823	28.0
2008	**10**	**0**	**2**	**49,292**	**1**	**0**	**49,293**	**23**

Note: For 5-year comparison, days are for coho salmon season only.
[a] Fewer than three permits, all catch figures are confidential.

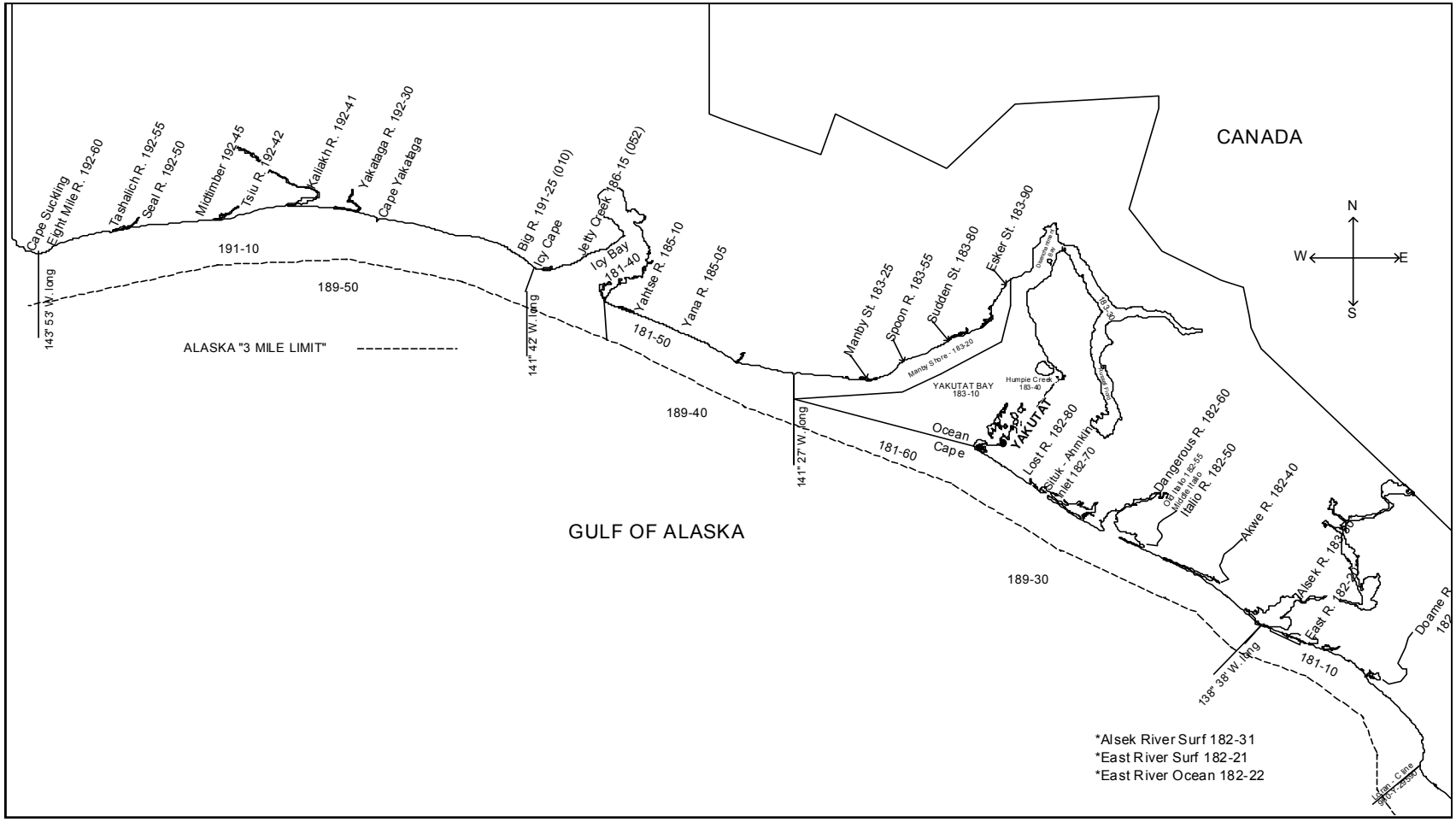

Figure 1.–Yakutat Area map, showing statistical reporting areas.