

## **Fishery Management Report 08-54**

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# **Annual Management Report of the 2007 Yakutat Area Commercial Salmon Fisheries**

by

**Gordon F. Woods**

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November 2008

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.

<b>Weights and measures (metric)</b>		<b>General</b>		<b>Measures (fisheries)</b>	
centimeter	cm	Alaska Administrative Code	AAC	fork length	FL
deciliter	dL	all commonly accepted abbreviations	e.g., Mr., Mrs., AM, PM, etc.	mid-eye to fork	MEF
gram	g	all commonly accepted professional titles	e.g., Dr., Ph.D., R.N., etc.	mid-eye to tail fork	METF
hectare	ha	at	@	standard length	SL
kilogram	kg	compass directions:		total length	TL
kilometer	km	east	E		
liter	L	north	N	<b>Mathematics, statistics</b>	
meter	m	south	S	<i>all standard mathematical signs, symbols and abbreviations</i>	
milliliter	mL	west	W	alternate hypothesis	H <sub>A</sub>
millimeter	mm	copyright	©	base of natural logarithm	<i>e</i>
		corporate suffixes:		catch per unit effort	CPUE
<b>Weights and measures (English)</b>		Company	Co.	coefficient of variation	CV
cubic feet per second	ft <sup>3</sup> /s	Corporation	Corp.	common test statistics	(F, t, $\chi^2$ , etc.)
foot	ft	Incorporated	Inc.	confidence interval	CI
gallon	gal	Limited	Ltd.	correlation coefficient (multiple)	R
inch	in	District of Columbia	D.C.	correlation coefficient (simple)	r
mile	mi	et alii (and others)	et al.	covariance	cov
nautical mile	nmi	et cetera (and so forth)	etc.	degree (angular)	°
ounce	oz	exempli gratia	e.g.	degrees of freedom	df
pound	lb	(for example)		expected value	<i>E</i>
quart	qt	Federal Information Code	FIC	greater than	>
yard	yd	id est (that is)	i.e.	greater than or equal to	≥
		latitude or longitude	lat. or long.	harvest per unit effort	HPUE
<b>Time and temperature</b>		monetary symbols (U.S.)	\$, ¢	less than	<
day	d	months (tables and figures): first three letters	Jan, ..., Dec	less than or equal to	≤
degrees Celsius	°C	registered trademark	®	logarithm (natural)	ln
degrees Fahrenheit	°F	trademark	™	logarithm (base 10)	log
degrees kelvin	K	United States (adjective)	U.S.	logarithm (specify base)	log <sub>2</sub> , etc.
hour	h	United States of America (noun)	USA	minute (angular)	'
minute	min	U.S.C.	United States Code	not significant	NS
second	s	U.S. state	use two-letter abbreviations (e.g., AK, WA)	null hypothesis	H <sub>0</sub>
<b>Physics and chemistry</b>				percent	%
all atomic symbols				probability	P
alternating current	AC			probability of a type I error (rejection of the null hypothesis when true)	$\alpha$
ampere	A			probability of a type II error (acceptance of the null hypothesis when false)	$\beta$
calorie	cal			second (angular)	"
direct current	DC			standard deviation	SD
hertz	Hz			standard error	SE
horsepower	hp			variance	
hydrogen ion activity (negative log of)	pH			population	Var
parts per million	ppm			sample	var
parts per thousand	ppt, ‰				
volts	V				
watts	W				

***FISHERY MANAGEMENT REPORT 08-54***

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COMMERCIAL SALMON FISHERIES**

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Gordon F. Woods

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

November 2008

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

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*This document should be cited as:*

*Woods, G. F. 2008. Annual Management Report of the 2007 Yakutat Area Commercial Salmon Fisheries. Alaska Department of Fish and Game, Fishery Management Report No. 08-54, Anchorage.*

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## ABSTRACT

The 2007 Yakutat set gillnet fishery produced a cumulative harvest of 406,000 salmon; this was 20% above the 1997–2006 average. The total harvest included 1,900 Chinook, 237,000 sockeye, 77,000 coho, 88,000 pink, and 2,800 chum salmon. The salmon harvest was worth an approximate exvessel value of \$2,500,000 to 120 active permit holders. The number of active permits was 2% above the recent 10-year average and comprised 68% of the total setnet permits in Yakutat. The 2007 sockeye salmon harvest of 237,000 was 110% above the recent 10-year average. Sockeye salmon harvest was above average in all fisheries in the Yakutat District with the sole exception being the Manby Shore inside waters fishery. The East River, Situk-Ahrnklin, Yakutat Bay, the Dangerous River, 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 76,500 was 56% below the recent 10-year average. The Situk-Ahrnklin and the Tsiu River together produced 73% of the area coho salmon harvest. The area's Chinook salmon harvest of 1,900 was 32% below the recent 10-year average of 2,800. The top Chinook salmon producers were the Alsek River, the Akwe 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 88,000 fish was 62% above the recent 10-year average, and the chum salmon harvest of 1,200 was 219% above 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, 2007 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 406,000 salmon. This was 20% above the recent 10-year average (Tables 2 and 3), and was the highest harvest since 1997. Of the 179 Yakutat set gillnet permits, 120 were active this season; this was 2% above the recent 10-year average. The average Yakutat permit holder earned \$20,659 for the 2007 season, this was 65% above the 10-year average (Table 4). Sockeye salmon harvests were 110% above the ten-year average and comprised 58% of the 2007 harvest. The sockeye salmon harvest on the Situk-Ahrnklin was above average for the second time in the last three years, while the harvest on the East River was the highest since 1994. The coho salmon harvest was 56% below the recent 10-year average. The Situk-Ahrnklin Inlet accounted for 55% of the harvest while the Tsiu River accounted for 29% (Table 5). Almost all of the remote systems, although open to fishing, received very little effort for coho salmon in 2007. A buying station was maintained on the Tsiu River for the third time since 2001 and 22,300 coho salmon were harvested from the Tsiu. Coho salmon accounted for 19% of the total Yakutat area salmon harvest. The return of pink salmon to the Situk River was well above average, but there is little economic incentive to harvest these fish and they are harvested incidentally to sockeye and coho salmon. The harvest of 61,600 pink salmon in the Situk-Ahrnklin Inlet was 56% above average. The chum salmon harvest was 219% above the recent average, and the Chinook salmon harvest of 1,900 was 32% below the recent average.

## **SOCKEYE SALMON**

The sockeye salmon harvest of 237,000 was 110% above the recent 10-year average. The 2007 harvest of 62,000 Situk-Ahrnklin sockeye salmon was 12% above the recent 5-year average of 55,600, and was 14% above the long-term average of 54,600 since statehood. The Situk-Ahrnklin Inlet accounted for 26% of the area sockeye salmon harvest. The Situk River weir count of 61,800 sockeye salmon was within the escapement goal range of 30,000 to 70,000. The Biological Escapement Goal (BEG) for sockeye in the East Alsek River (East River) was met in 2007. With a harvest of 63,000 sockeye salmon, the East River was the peak producer for the Yakutat Area in 2007.

The Alsek River recorded above average sockeye salmon harvests. The Alsek harvest of 20,000 was 8% above the recent 5-year average, and was the second highest harvest in the last five years. Yakutat Bay, with a harvest of 59,600, nearly equaled the Situk-Ahrnklin Inlet harvest of 62,000 fish. It was the highest harvest on record for the Bay, and was 174% above the recent average. The Akwe River harvest of 24,000 sockeye salmon was 239% above the recent average, and was the second highest catch on record, exceeded only by the 1980 harvest of 28,000 fish. The Manby Shore and the Dangerous River contributed approximately 6,800 sockeye salmon to the harvest for the area.

## **COHO SALMON**

The coho salmon harvest of 76,500 was 56% below the recent 10-year average of 172,500 fish and was the second lowest harvest in 10 years. Coho salmon returns during the period 1990–2002 were the strongest in the history of the Yakutat Area, and the 2007 harvest of 76,500 fish is near the long-term average for the fishery. The Situk-Ahrnklin Inlet harvest of 41,900 coho

salmon was less than half the recent average of 108,000. Again, this harvest of 41,900 fish is still near the long-term historical average for the Situk-Ahrnklin fishery. The only other major coho producer in Yakutat in 2006 was the Tsiu River. The presence of a buying station on the river again prompted sustained effort on the Tsiu for the third time in five years. The Tsiu River harvest of 22,300 coho salmon was below the historical average, but effort level remained much lower than historical effort levels. 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. Preseason projections for the Situk and Alsek Rivers were for below average returns. 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. 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 Alsek River harvest of 685 Chinook salmon was slightly below the recent average of 730 fish. The Yakutat Bay harvest of 790 Chinook salmon was 91% above the recent average for the Bay, and accounted for 42% of all Chinook salmon harvested in the Yakutat Area. The total harvest of 1,900 Chinook salmon was 32% below the recent 10-year average.

## **PINK SALMON**

The pink salmon harvest of 88,000 fish was 62% above the recent 10-year average. Pink salmon prices were \$0.19 per pound this season, which relegated this species to incidental harvest. The Situk-Ahrnklin Inlet fishery accounted for 70% of the Yakutat area harvest, while Yakutat Bay yielded nearly all of the remainder. The Yakutat Bay harvest of 25,800 pink salmon was 237% above the 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 very strong. Final escapement in the Situk River was over 800,000 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 recorded an excellent return of sockeye salmon in 2007. The run timing for sockeye salmon in the East is late, and overlaps that of the chum salmon, and the East accounted for 45% of the area harvest. The area-wide harvest of 2,800 chum salmon was 219% above the recent 10-year average. The Situk-Ahrnklin Inlet and Yakutat Bay accounted for 54% of these fish.

# **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 due to poor run projections for 2005, 2006, and 2007. The department was granted permission to conduct a test fishery for Chinook salmon in 2005, 2006, and 2007. 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 2007 the test fishery commenced on May 21 and continued on a weekly basis through June 30 with a target goal of 500 Chinook salmon. A total of 347 Chinook and 367 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. All 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.

A total of 21 permit holders harvested 685 Chinook, 20,000 sockeye, and 130 coho salmon. No pink or chum salmon were harvested (Table 6). The Alsek River sockeye salmon harvest was 8% above the recent five-year average, and was the second highest harvest during that time (Table 7). 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 relied heavily on fishery performance data; the decision to extend any given period was generally based on CPUE data gathered during that period. Parent-year escapement information was also considered when determining the weekly fishing periods, and preseason forecasts indicated a below average return of sockeye salmon. CPUE varied over the course of the sockeye salmon season. During the ten weeks that sockeye salmon were targeted, two were not extended beyond one day, six were extended to two days, and two weeks were extended to three days fishing time. The Klukshu River is an important tributary in the upper Alsek River drainage in Canada. The Klukshu River weir count of 13,450 sockeye salmon was within the recommended escapement goal range of 7,500 to 15,000 and was slightly below the recent 10-year average of 13,550 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 flown too late in the season, and were of little use for inseason management. An estimated 500 sockeye salmon were observed in the Tanis River, while Basin and Cabin Creeks were not flown in 2007.

The Chinook salmon harvest of 685 was 6% below the recent 5-year average of 730 fish. Almost all of these fish were harvested during the first three weeks of the season. The Klukshu weir escapement of 680 Chinook salmon was well below the recommended escapement goal range of 1,100 to 2,300. This marked the second year in a row when the bottom end of the BEG range for Chinook salmon was not attained.

Only 130 coho salmon were harvested, compared to the recent 5-year average harvest of 2,800; this was the second lowest harvest during that period of time. Effort was minimal after the second week of August, and the river was open, but not fished for the last three weeks 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 300 coho salmon was well below 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**

It has become clear that there has been a significant decline in productivity in the East River beginning some time around 1990 and continuing to the present day. With this decline in mind, the department revised the sockeye salmon BEG in June of 2003. The sockeye salmon escapement goal of 26,000 to 57,000 fish was lowered to 13,000 to 26,000 fish. The East River remained closed to commercial fishing through the end of June. An aerial survey conducted on June 28 indicated the BEG would be attained and the East River opened to commercial fishing for sockeye salmon on July 1. A total of 33 permits harvested 13 Chinook, 63,000 sockeye, 60 coho, 200 pink, and 1,260 chum salmon (Table 9). 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. Most of the effort on the East River occurred during the last eight weeks of the sockeye season. The river remained open through the end of the coho salmon season, but was not fished for four of the last six weeks of the season. Weekly fishing periods remained at three days for the first three weeks before going to four days for the remainder of the sockeye salmon season. The harvest for all species was below historical levels, but the 2007 sockeye salmon harvest of 63,000 fish was over 1,000% above the average since the BEG was reduced in 2003, and was the highest harvest since 1994 (Table 10). The peak aerial survey count of 40,000 sockeye salmon was recorded on August 14. The East River was not flown for coho salmon in 2007 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 24,100 fish was 239% above the average of recent years and was the second highest ever recorded for the river (Table 12). The coho salmon harvest of fewer than 2,000 fish was 6% above the recent 5-year average; that average contains two years when the river was not fished for coho salmon for economic reasons. Effort was minimal during the coho salmon season and the river was not fished during the second week of September, normally a peak fishing week. A total of nine permits fished the Akwe in 2007. 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 2007. 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 Italo and Akwe confluence. Some milling of all species may occur, and it is probable that some of the New Italo River stocks are intercepted in the Akwe River fishery.

## **ITALIO RIVERS**

Three different rivers comprise the Italo River system: the Old, Middle, and New Italo Rivers. The Old Italo 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 Italo River and created two distinct rivers where only one had existed before. The main river is now called the New Italo, and the original river channel is the Middle Italo. All three systems support coho populations, and the New Italo River also has a small run of sockeye salmon. A peak sockeye salmon escapement count of 1,750 was average for the New Italo in recent years. Productivity in this system has been in decline for some years, and the New Italo River was not open during the

sockeye salmon season. The New Italo remained closed through the end of the season. No fall aerial surveys were conducted on the Old and Middle Italo Rivers due to inclement weather. None of the Italo systems were open to commercial fishing for coho salmon in 2007.

## **DANGEROUS RIVER**

The Dangerous River was opened to commercial fishing on June 10. A total of 5,800 sockeye salmon were harvested—well above average of 3,300. The Dangerous River was not fished for coho salmon this year (Table 13). 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 remained at 2.5 days during the sockeye salmon season, and at 3.0 days for the coho salmon season.

## **SITUK-AHRNKLIN INLET**

The Situk-Ahrnklin Inlet fishery recorded above average harvests of sockeye and pink salmon, and below average harvests of coho and chum salmon during the 2007 season (Table 14, Table 15). The sale of Chinook salmon was prohibited until the BEG was attained in accordance with 5 AAC 30.365. The Situk-Ahrnklin fishery generated 37% of the Yakutat area set gillnet income (Table 16, Table 17). The total value of \$911,600 was 2% below average. The harvest of 61,600 sockeye salmon was 12% above the recent average and 14% above the average since statehood. Situk-Ahrnklin sockeye accounted for 26% of the area sockeye salmon harvest. The coho harvest of 41,900 was 61% below average, and accounted for 55% of the area's total coho salmon harvest. The pink salmon return to the Situk was very strong, and the harvest of 61,600 was 56% above average.

The Situk River weir was installed in the lower river for the 20th consecutive year and used for inseason management of the sockeye and Chinook salmon fisheries (Table 18). This was the 14th year that the resistance board or “floating” weir was used. The weir was maintained without problems through the end of the sockeye salmon season, and was removed on August 13. Heavy rains and subsequent flooding are typical of the fall coho season and the weir is removed prior to the coho salmon run.

The Situk-Ahrnklin Inlet fishery opened by regulation on the third Sunday in June. Early fishery performance indicated strength to the sockeye salmon run, but weir counts did not follow suit, and fishing time remained at two and one-half days for the first two weeks of the season. By July 1 only 9,400 fish had passed through the weir; the average count for July 1 is 19,400 fish. Fishing time was reduced to one and one-half days for the third week of the season. Fishing time remained at 2.5 days for the next three weeks of the season while weir counts gradually increased. The bottom end of the BEG range of 30,000 to 70,000 sockeye salmon was not attained through the weir until July 19, a full ten days later than the average date of July 9. Both fishery performance and weir counts indicated the late portion of the sockeye salmon return was strong, and as escapement counts climbed, fishing time was added. The fishery was open for three and one-half days during the first week of August, and then went to five, six and one-half, and four and one-half days for the next three weeks of the season. At that time the Situk-Ahrnklin Inlet fishery was returned to the normal fall fishing time of three days for purposes of coho salmon management. The end of the sockeye salmon run remained strong, and sockeye salmon continued to show up in the harvest until September. A total of 61,800 sockeye salmon passed through the weir. A peak count of 41 permits fished for sockeye salmon during the

second week of the season; effort remained well below historical levels for the entire sockeye salmon season.

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 12. A total of 677 large Chinook salmon were counted through the Situk River weir; this was within the BEG range of 450–1,050 large Chinook.

The harvest of 41,900 coho salmon was 61% below the recent 5-year average of 108,000. 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. The 2007 harvest was the lowest since 1990, and the fourth year in the past five with a harvest of fewer than 100,000 fish. The 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 poor throughout the season due to inclement weather and flood conditions. A peak Situk River escapement survey of 3,700 coho salmon was recorded on September 25. This count nudged over the bottom end of the BEG range of 3,300 to 9,800. The commercial fishing period remained at three days per week for the entire coho salmon season. A peak count of 52 permits fished during the second week of September, and this effort was average for recent coho salmon seasons. This marks a 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 71,600 was 56% above the recent 5-year average of 39,600 fish. 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 2007 the pink salmon price was 19 cents per pound, meaning there was little economic incentive to target pink salmon. Approximately 229,000 pink salmon were counted through the Situk River weir, but the weir was removed well before the end of the pink salmon run. This weir count exceeded the top end of the pink salmon escapement goal range. An escapement survey on September 3 revealed 800,000 pink salmon in the Situk River. The chum salmon harvest of 415 was 22% below the recent 5-year average harvest of 530.

## **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 2007. The peak sockeye salmon escapement count of 165 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 1,750 was also below the BEG range of 2,000–6,500. 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 1999–2007 will continue to be necessary in the future.

## **YAKUTAT BAY**

By any standard the 2007 salmon season was a record-breaker for the Yakutat Bay gillnet fishery. Yakutat Bay recorded harvests of 790 Chinook, 59,600 sockeye, 6,400 coho, 25,800 pink, and 1,100 chum salmon in 2007 (Table 19). The harvest of all five salmon species was well above the recent average. The sockeye salmon harvest of 59,600 fish was 174% above the recent 5-year average, and was the highest harvest in the history of the Bay going back to 1930 (Table 20). The previous record catch of 41,800 was recorded twice, in 1990 and in 1999. A total of 57 different permits fished Yakutat Bay in 2007, with a peak effort of 42 permits fished during the third week of the season. The southern half of Yakutat Bay opened on June 10, and fishing time corresponded with the Situk River openings for the first eight weeks of the fishing season. The Yakutat Bay fishery is not extended past five days in any given week to afford some protection to stocks that are not of Situk River origin. Chinook salmon are harvested incidentally to the sockeye fishery, and the harvest of 790 Chinook salmon was 91% above the recent 5-year average.

The Yakutat Bay sockeye salmon harvest of 59,600 fish nearly equaled that of the Situk-Ahrnklin Inlet, which recorded a harvest of 62,600 fish. Never before has the Bay harvest come close to equaling that of the Situk-Ahrnklin, with Bay catches normally being approximately one-half to three-quarters of the Situk-Ahrnklin Inlet catch. 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 the Bay remains high throughout the sockeye salmon season. But it is the placement of the gear within the Bay that is the critical factor in this change in 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. There have been illegal fishing activities, the rewards are high, but enforcement has proven to be extremely difficult. 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 work with Alaska Wildlife Troopers to ensure enforcement of fishing boundary line/gear violations in the vicinity.

Yakutat Bay has never been a major coho producer, perhaps due to the concentration of effort elsewhere during coho salmon season. The 2007 coho salmon harvest of 6,400 fish was 135% above the recent 5-year average. Effort levels always remain low in Yakutat Bay for coho salmon, and a peak count of sixteen permits fished the Bay during the first week of September. Those permits were still targeting sockeye salmon at that time.

The Yakutat Bay pink salmon harvest of 25,800 fish was 237% above the recent average. Pink prices in recent years suggest that the harvest is an incidental consequence of the sockeye salmon fishery. No aerial surveys of the intertidal area adjacent to the mouth of Humpback Creek were flown due to the unavailability of airplanes. It is probable that the majority of the pink salmon harvested were of Situk River and Humpback Creek origin.

## **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. A total of 8 permits harvested 1,000 sockeye salmon, and this harvest was 76% below the recent average (Table 21). The Manby Shore was only fished for four weeks of the sockeye salmon season in 2007.

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. Only Sudden Stream and Esker Creek were fished in 2007. Fewer than three permits fished either stream, and catch records are confidential. Sudden Stream was fished for four weeks during sockeye salmon season, while Esker Creek was fished for one week during coho salmon season. Escapement counts are limited due to the glacial nature of most Manby area streams and no surveys of these inside waters were conducted in 2007. Escapement goals have not been formulated for the inside waters along the Manby Shore.

## **YANA RIVER TO ICY BAY**

Although open, the Yana and Yahtse Rivers and Jetty Creek were not fished in 2007.

## **YAKATAGA DISTRICT FISHERIES**

### **OVERVIEW**

The Yakataga District opened on August 20. The Tsiu River sustained a normal commercial fishery for the third year in a row. The Kaliakh River was fished in 2007 and a total of 3,560 coho salmon were harvested. 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 2007. 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 2007 Yakutat Seafoods maintained a buying station on the Tsiu River and flew fish to Yakutat with a DC-3. This marked the third time since 2001 that a processor maintained a presence on the Tsiu. A total of twelve permits harvested 22,300 coho salmon (Table 22). This was well 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 25 revealed 14,000 coho salmon, within 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, 2007.

Week	Ending Date	Chinook	Sockeye	Coho	Pink	Chum	Total
23	6/09	40	681	0	0	0	721
24	6/16	317	6,600	23	0	48	6,988
25	6/23	356	16,727	50	0	27	17,160
26	6/30	301	30,436	167	48	404	31,356
27	7/07	142	24,700	232	54	13	25,141
28	7/14	136	27,153	601	425	26	28,341
29	7/21	149	23,790	786	1,634	28	26,387
30	7/28	113	38,857	377	5,896	47	45,290
31	8/04	41	23,460	172	11,938	98	35,709
32	8/11	13	20,955	353	23,663	279	45,263
33	8/18	12	11,270	837	22,246	281	34,686
34	8/25	2	8,468	2,116	15,985	716	27,287
35	9/01	5	3,225	5,972	6,448	498	16,148
36	9/08	1	1,021	11,842	1,630	102	14,596
37	9/15	0	166	17,043	119	96	17,424
38	9/22	0	141	20,346	13	24	20,524
39	9/29	2	24	10,815	0	29	10,870
40	10/06	0	1	4,376	1	11	4,389
41	10/13	0	1	451	0	5	457
Totals		1,879	236,869	76,550	87,997	2,782	406,077

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
1997	142	3,264	109,988	322,720	93,658	808	530,438
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
<b>2007</b>	<b>120</b>	<b>1,879</b>	<b>236,869</b>	<b>76,550</b>	<b>87,997</b>	<b>2,782</b>	<b>406,077</b>
1997–2006 Avg.	118	2,783	113,018	172,478	54,237	873	337,987
2007							
Deviation <sup>a</sup>	+2%	-32%	+110%	-56%	+62%	+219%	+20%

<sup>a</sup>Percentage deviation from 10-year average.

Table 4.—Average earnings from setnet fishing, Yakutat area, 1980–2007.

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
<b>2007</b>	<b>\$2,479,100</b>	<b>120</b>	<b>\$20,659</b>	<b>\$12,501</b>

Table 5.–Harvest of salmon in the Yakutat area setnet fishery by fishing area, 2007.

<b>Area</b>	<b>Chinook</b>	<b>Sockeye</b>	<b>Coho</b>	<b>Pink</b>	<b>Chum</b>	<b>Total</b>
Alsek <sup>a</sup>	685	20,057	134	0	0	20,876
East	13	63,080	56	203	1,256	64,608
Akwe	238	24,087	1,987	0	10	26,322
Italio	Closed					
Middle Italio	Closed					
Old Italio	Closed					
Dangerous	4	5,768	18	2	0	5,792
Situk	83	62,059	41,900	61,591	415	166,048
Lost	Closed					
Yakutat Bay	788	59,602	6,384	25,808	1,100	93,682
Manby Shore	6	1,014	1	42	1	1,064
Manby Stream	Not Fished					
Spoon	Not Fished					
Sudden	b					
Esker	b	b	b	b	b	b
Yahtse	Not Fished					
Yana	Not Fished					
Jetty Creek	Closed					
Big River	Closed					
Kaliakh		0	2	3,562	0	0
Tsiu	0	5	22,318	0	0	22,323
Seal River	Not Fished					
Tashalich	Not Fished					
Kiklukh	Not Fished					
<b>Totals</b>	<b>1,879</b>	<b>236,502</b>	<b>76,550</b>	<b>87,997</b>	<b>2,782</b>	<b>406,977</b>

<sup>a</sup>Total includes Chinook and sockeye salmon harvested in the Alsek River Chinook salmon test fishery prior to statistical week 23.

<sup>b</sup>Fewer than 3 permits, all catch figures are confidential.

Table 6.–Harvest of salmon in the Alek River set gillnet fishery by fishing period, 2007.

<b>Week</b>	<b>Ending Date</b>	<b>Boats</b>	<b>Chinook</b>	<b>Sockeye</b>	<b>Coho</b>	<b>Pink</b>	<b>Chum</b>	<b>Total</b>	<b>Days</b>
23 <sup>a</sup>	6/09	10	108	164	0	0	0	272	1.0
24	6/16	10	232	962	0	0	0	1,194	2.0
25	6/23	12	124	5,333	0	0	0	5,457	3.0
26	6/30	13	78	4,484	0	0	0	4,562	2.0
27	7/07	15	14	3,149	0	0	0	3,163	2.0
28	7/14	10	8	2,089	4	0	0	2,101	2.0
29	7/21	9	24	2,339	6	0	0	2,369	2.0
30	7/28	6	1	855	0	0	0	856	1.0
31–33	8/18	5	0	597	2	0	0	599	8.0
34–38	9/22	7	0	61	122	0	0	183	15.0
39–41	10/13	Not	Fished						9.0
<b>Totals</b>		<b>21</b>	<b>685</b>	<b>20,057</b>	<b>134</b>	<b>0</b>	<b>0</b>	<b>20,876</b>	<b>47</b>

<sup>a</sup> Totals include Chinook and sockeye salmon harvested in the Alek River Chinook salmon test fishery prior to statistical week 23.

Table 7.–Harvest of salmon in the Alek River set gillnet fishery, 2007 and 5-year catch comparison.

<b>Year</b>	<b>Boats</b>	<b>Chinook</b>	<b>Sockeye</b>	<b>Coho</b>	<b>Pink</b>	<b>Chum</b>	<b>Total</b>	<b>Days</b>
2002	16	700	16,918	9,525	0	1	27,144	73.0
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
<b>2007</b>	<b>21</b>	<b>685</b>	<b>20,057</b>	<b>134</b>	<b>0</b>	<b>0</b>	<b>20,876</b>	<b>47.0</b>
2002–2006 Average	19	732	18,513	2,789	0	1	22,028	62.0
2007								
Deviation <sup>a</sup>	+11	-6%	+8%	-95%			-5%	-24%

<sup>a</sup> Percentage deviation from 5-year average.

Table 8.–Klukshu River Weir escapement, 1976–2006.

<b>Year</b>	<b>Chinook<sup>a</sup></b>	<b>Sockeye<sup>b</sup></b>	<b>Coho</b>
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
<b>2007</b>	<b>677</b>	<b>13,455</b>	<b>300</b>
1997–2006 Average	1,766	13,551	2,568

<sup>a</sup> Chinook salmon escapement goal range is 1,100 to 2,300 fish.

<sup>b</sup> 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, 2007.

Week	Ending	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
	Date								
27	7/07	5	8	681	1	0	0	689	3.0
28	7/14	7	2	4,306	0	0	0	4,308	3.0
29	7/21	12	0	7,069	0	0	2	7,071	3.0
30	7/28	21	2	22,639	5	1	14	22,661	4.0
31	8/04	25	0	11,814	1	0	20	11,835	4.0
32	8/11	22	0	12,537	4	202	147	12,890	4.0
33	8/18	12	0	1,786	3	0	58	1,847	4.0
34–35	9/01	7	1	2,086	11	0	943	3,041	8.0
36–37	9/15	6	0	162	17	0	72	251	6.0
38–41	10/13	Not	Fished						12.0
Totals		33	13	63,080	56	203	1,256	64,608	51.0

Table 10.—Harvest of salmon in the East River set gillnet fishery, 2007 and 5-year catch comparison.

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
2002	4	0	10	244	0	0	254	46.0
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
<b>2007</b>	<b>33</b>	<b>13</b>	<b>63,080</b>	<b>56</b>	<b>203</b>	<b>1,256</b>	<b>64,608</b>	<b>51.0</b>
2002–2006 Average	10	3	5,433	122	7	12	5,578	49.9
2007								
Deviation <sup>a</sup>	+230%	+333%	+1,061%	+332%	-54%	+10,366	+1,058	+2%

<sup>a</sup> Percentage deviation from 5-year average.

Table 11.—East River return-per-spawner, 1975–2006.

<b>Year</b>	<b>Total Return</b>	<b>Parent-Year Escapement</b>	<b>Return Per Spawner</b>	<b>Rank</b>
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
<b>2007</b>	<b>103,180</b>	<b>34,300</b>	<b>3.01</b>	<b>16</b>
Average	92,502	31,833	2.91	NA

Table 12.—Harvest of salmon in the Akwe River set gillnet fishery, 2007, and 5-year-catch comparison.

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
2002	4	170	3,754	0	1	4	3,929	61.0
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
<b>2007</b>	<b>9</b>	<b>238</b>	<b>24,087</b>	<b>1,987</b>	<b>0</b>	<b>10</b>	<b>26,322</b>	<b>45.0</b>
2002–2006 Average	6	197	7,099	1,871	6	8	9,183	50.4
2007 Deviation <sup>a</sup>		+21%	+239%	+6%		+25%	+187%	-11%

<sup>a</sup> Percent deviation from 5-year average.

Table 13.—Harvest of salmon in the Dangerous River set gillnet fishery, 2007, and 5-year catch comparison.

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
2002	a	a	a	a	a	a	a	81.0
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
<b>2007</b>	<b>5</b>	<b>4</b>	<b>5,768</b>	<b>18</b>	<b>2</b>	<b>0</b>	<b>5,792</b>	<b>41.5</b>
2002–2006 Average	4	3	3,303	52			3,306	64.9

<sup>a</sup> 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, 2007.

Week	Ending		Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
	Date									
25	6/23		38	5	8,681	0	0	27	8,713	2.5
26	6/30		41	0	10,544	3	0	5	10,552	2.5
27	7/07		39	0	6,394	5	5	7	6,411	1.5
28	7/14		40	31	9,098	28	86	4	9,247	2.5
29	7/21		40	23	6,572	46	1,068	5	7,714	2.5
30	7/28		40	13	5,371	5	3,942	10	9,341	2.5
31	8/04		37	9	4,021	9	7,797	27	11,863	3.5
32	8/11		34	2	3,727	84	15,779	60	19,652	5.0
33	8/18		35	0	4,036	461	16,734	119	21,350	6.5
34	8/25		31	0	1,926	1,543	9,670	64	13,203	4.5
35	9/01		39	0	1,188	3,725	5,088	30	10,031	3.0
36	9/08		44	0	391	8,183	1,420	19	10,013	3.0
37	9/15		52	0	96	8,295	2	10	8,403	3.0
38	9/22		48	0	11	8,703	0	11	8,725	3.0
39	9/29		48	0	3	7,055	0	5	7,063	3.0
40	10/6		44	0	0	3,314	0	7	3,321	3.0
41	10/13		19	0	0	441	0	5	446	3.0
Total			77	83	62,059	41,900	61,591	415	166,048	54.5

Table 15.–Harvest of salmon in the Situk-Ahrnklin Inlet set gillnet fishery, 2007 and 5-year catch comparison.

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
2002	69	1,078	71,015	189,789	14,037	34	275,953	96.75
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
<b>2007</b>	<b>77</b>	<b>83</b>	<b>62,059</b>	<b>41,900</b>	<b>61,591</b>	<b>415</b>	<b>166,048</b>	<b>54.5</b>
2002–2006	78	930	55,557	108,209	39,571	533	204,742	86.85
Average 2007								
Deviation <sup>a</sup>	-1%	-91%	+12%	-61%	+56%	-22%	-19%	-27%

<sup>a</sup> 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, 1975–2007.

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%
<b>2007</b>	<b>2,479,100</b>	<b>911,594</b>	<b>37%</b>
1997–2006 Average	1,499,945	926,123	59%
2006			
Deviation <sup>a</sup>	+65%	-2%	-37%

<sup>a</sup> Percentage deviation from average.

Table 17.—Dollar value of salmon harvest in the Situk-Ahrnklin set gillnet fishery, 1975–2006.

<b>Year</b>	<b>Chinook</b>	<b>Sockeye</b>	<b>Coho</b>	<b>Pink</b>	<b>Chum</b>	<b>Total</b>
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
<b>2007</b>	<b>\$0</b>	<b>\$523,214</b>	<b>\$336,002</b>	<b>\$51,167</b>	<b>\$1,211</b>	<b>\$911,594</b>
1997– 2006 Average	\$42,124	\$274,488	\$553,692	\$23,420	\$415	\$879,931

Table 18.—Situk Weir escapement counts, 1988–2007.

<b>Year</b>	<b>Dates of Operation</b>	<b>Chinook<sup>a</sup></b>	<b>Sockeye<sup>b</sup></b>	<b>Coho<sup>c</sup></b>	<b>Pink<sup>d</sup></b>	<b>Chum</b>
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	5/2–8/8	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
<b>2007</b>	<b>5/11–8/15</b>	<b>677</b>	<b>61,799</b>	<b>39</b>	<b>229,024</b>	<b>18</b>
1988 to 2006 Average		2,631	61,893	141	146,224	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

<sup>a</sup> 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.

<sup>b</sup> Sockeye salmon escapement goal range is 30,000 to 70,000 fish.

<sup>c</sup> 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.

<sup>d</sup> 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, 2007.

Week	Ending	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
	Date								
24	6/16	38	175	5,774	23	0	48	6,020	2.5
25	6/23	34	126	2,066	49	0	50	2,291	2.5
26	6/30	42	127	13,057	164	48	399	13,795	2.5
27	7/07	39	52	9,198	208	59	6	9,523	1.5
28	7/14	34	64	5,790	569	338	20	6,781	2.5
29	7/21	26	90	2,155	732	525	20	3,522	2.5
30	7/28	16	96	4,001	367	1,953	23	6,440	2.5
31	8/04	18	28	3,820	153	4,141	51	8,193	3.5
32	8/11	19	11	3,323	265	7,331	71	11,001	5.0
33	8/18	27	11	4,334	371	5,512	104	10,332	4.0
34	8/25	22	2	4,046	567	4,199	149	8,963	4.0
35	9/01	16	3	1,480	533	1,359	28	3,403	3.0
36	9/08	11	1	442	499	210	11	1,163	3.0
37	9/15	8	0	70	794	117	86	1,067	3.0
38	9/22	9	0	30	682	13	13	738	3.0
39	9/29	6	2	14	381	2	17	416	3.0
40-41	10/13	3	0	2	27	1	4	34	6.0
Totals		57	788	59,602	6,384	25,808	1,100	93,682	50.5

Table 20.–Harvest of salmon in the Yakutat Bay set gillnet fishery, 2007, and 5-year-catch comparison.

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
2002	35	548	17,899	1,201	1,552	165	21,365	93.25
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
<b>2007</b>	<b>57</b>	<b>788</b>	<b>59,602</b>	<b>6,384</b>	<b>25,808</b>	<b>1,100</b>	<b>93,682</b>	<b>50.5</b>
2001–2005 Average	40	413	21,783	2,720	7,665	255	33,765	77.6
2007								
Deviation <sup>a</sup>	+43%	+91%	+174%	+135%	+237%	+331%	+177%	-35%

<sup>a</sup> Percentage deviation from 5-year average.

Table 21.–Harvest of salmon in the Manby Shore Ocean set gillnet fishery, 2007, and 5-year-catch comparison.

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
2002	3	14	1,449	0	0	0	1,463	75.0
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
<b>2007</b>	<b>8</b>	<b>6</b>	<b>1,014</b>	<b>1</b>	<b>42</b>	<b>1</b>	<b>1,063</b>	<b>51.5</b>
2002–2006 Average	8	32	4,245	96	52	1	4,415	63.1
Deviation 2007		-81%	-76%	-99%	-19%		-76%	-18%

Table 22.–Harvest of salmon in the Tsiu River, 2002–2007.

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
2002	Not	Fished						50.5
2003	Not	Fished						22.0
2004	<sup>a</sup>	<sup>a</sup>	<sup>a</sup>	<sup>a</sup>	<sup>a</sup>	<sup>a</sup>	<sup>a</sup>	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
<b>2007</b>	<b>12</b>	<b>0</b>	<b>5</b>	<b>22,318</b>	<b>0</b>	<b>0</b>	<b>22,823</b>	<b>28.0</b>

Note: For 5-year comparison, days are for coho salmon season only.

<sup>a</sup> Fewer than three permits, all catch figures are confidential.

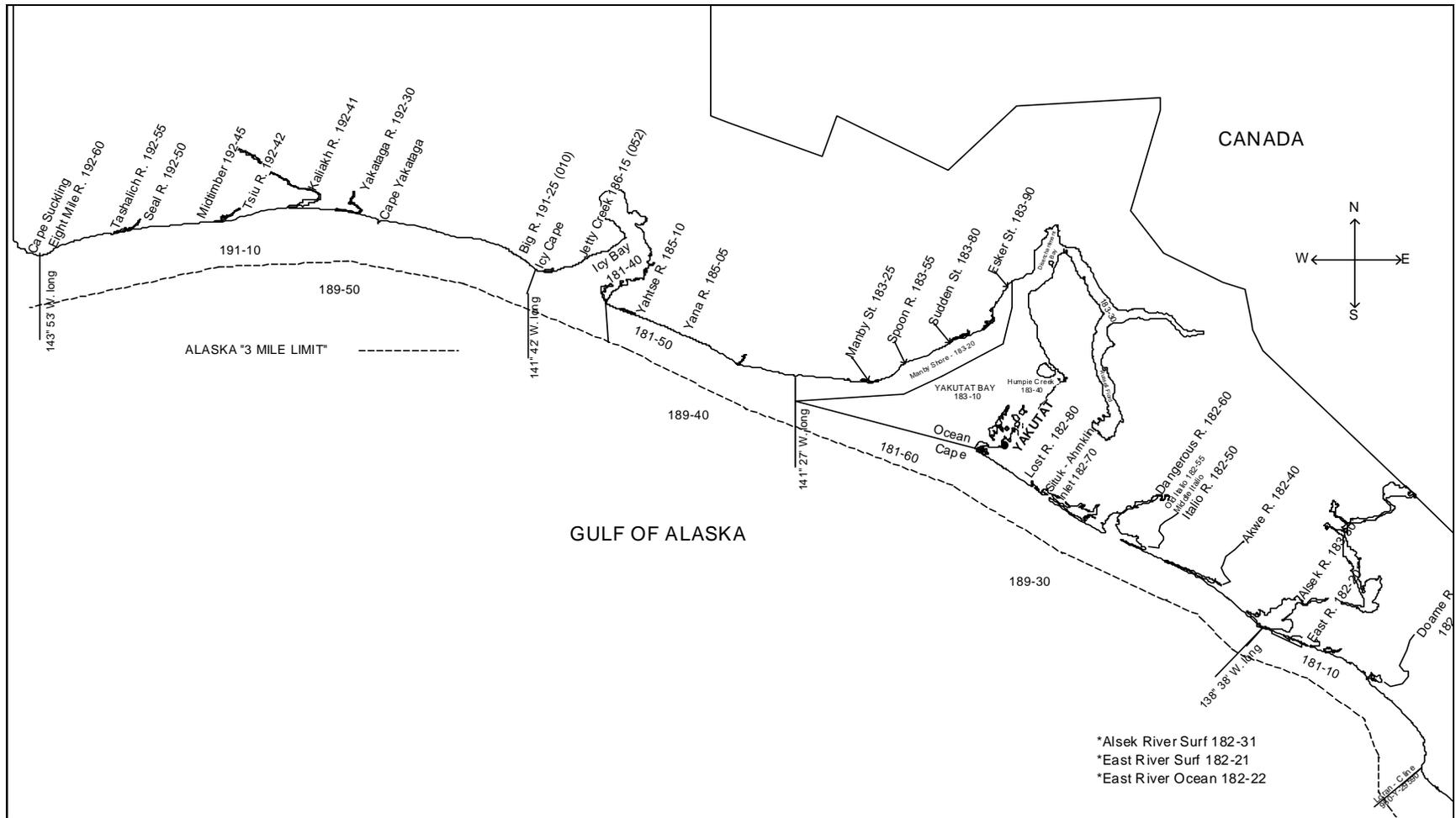


Figure 1.—Yakutat Area map, showing statistical reporting areas.