Fishery Management Report No. 11-51

Annual Management Report of the 2010 Yakutat Area Commercial Salmon Fisheries

by

Gordon F. Woods

and

Nicole L. Zeiser

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

Symbols and Abbreviations

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

Weights and measures (metric)

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

Weights and measures (English)

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

Time and temperature

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

Physics and chemistry

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

General

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

Mathematics, statistics

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

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Gordon F. Woods
and
Nicole L. Zeiser
Alaska Department of Fish and Game, Division of Commercial Fisheries, Yakutat

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

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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.adfg.alaska.gov/sf/publications/. This publication has undergone regional peer review.

Gordon F. Woods
and
Nicole L. Zeiser
Alaska Department of Fish and Game, Division of Commercial Fisheries
P.O. Box 49 Yakutat, Alaska 99689 USA

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ABSTRACT

The 2010 Yakutat set gillnet fishery produced a cumulative harvest of 446,000 salmon; this was 43% above the 2000–2009 average. The total harvest included 500 Chinook, 122,000 sockeye, 161,600 coho, 160,500 pink, and 1,200 chum salmon. The salmon harvest was worth an approximate exvessel value of $2,185,600 to 128 active permit holders. The number of active permits was 12% above the recent 10-year average and comprised 72% of the total setnet permits in Yakutat. The 2010 sockeye salmon harvest of 122,000 was 2% above the recent 10-year average. Sockeye salmon harvest in the Situk-Ahrnklin Inlet, Alsek River, and Manby Shore fisheries was well above average while the rest of the Yakutat District fisheries fell below average. Biological Escapement Goals (BEG) for sockeye salmon were met in all of sockeye salmon producing systems in Yakutat. Yakutat Bay, Situk-Ahrnklin, and Alsek Rivers together produced almost all of the area sockeye salmon harvest. The area's total coho salmon harvest of 161,600 was 17% above the recent 10-year average. The Situk-Ahrnklin and the Tsiu River together produced 92% of the area coho salmon harvest. The area's Chinook salmon harvest of 500 was 77% below the recent 10-year average of 2,100. The top Chinook salmon producers were the Alsek River and Yakutat Bay. The "non-sale" of Chinook salmon was implemented on the Situk-Ahrnklin River during the first opening of the season and remained in effect throughout the sockeye salmon season due to inadequate returns. Dead Chinook salmon could be retained for personal use until July 4 and by August 8 both the sale and retention of Chinook salmon was permitted. The pink salmon harvest of 160,500 fish was well above the recent 10-year average, and the chum salmon harvest of 1,200 was 26% 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, 2009 season, Chinook, sockeye, pink, chum, coho, salmon, Yakutat, Yakataga, fish ticket, Situk River, Situk-Ahrnklin Inlet, Yakutat Bay, Tsiu River, Alsek River, East River, BEG, Biological Escapement Goal, CPUE, catch per unit effort.

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 data, 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 2010 Yakutat set gillnet fishery produced a cumulative harvest of 446,000 salmon. This was 43% above the recent 10-year average (Tables 2 and 3). Of the 179 Yakutat set gillnet permits, 128 were active this season which was 12% above the recent 10-year average. The average Yakutat permit holder earned $17,000 for the 2010 season; this was 35% above the 10-year average (Table 4). Sockeye salmon harvests were 2% above the ten-year average. Sockeye salmon harvest in the Situk-Ahrnklin Inlet, Alsek River, and Manby Shore fisheries was well above average while the rest of the Yakutat District fisheries fell below average. The coho salmon harvest was 17% above the recent 10-year average. The Situk-Ahrnklin Inlet accounted for 44% of the coho salmon harvest while the Tsiu River accounted for 48% (Table 5). Almost all of the remote systems, although open to fishing, received very little effort for coho salmon in 2010. A buying station was maintained on the Tsiu River for the sixth time since 2001 and 77,800 coho salmon were harvested from the Tsiu. Coho salmon accounted for 36% of the total Yakutat area salmon harvest. The return of pink salmon to the Situk River was above average in 2010. There is little economic incentive to harvest pink salmon so they are harvested incidentally to sockeye and coho salmon. The harvest of 143,200 pink salmon in the Situk-Ahrnklin Inlet was well above average. The chum salmon harvest in the Yakutat area was 26% above the recent 10-year average, and the Chinook salmon harvest of 501 was 77% below the recent average.

SOCKEYE SALMON

The sockeye salmon harvest of 122,000 was 2% above the recent 10-year average of 119,200 fish. The 2010 harvest of 72,200 Situk-Ahrnklin sockeye salmon was 67% above the recent 5-year average of 43,300. The Situk-Ahrnklin Inlet was the peak producer for the area and accounted for 59% of the sockeye salmon harvest. The Situk River weir count of 47,900 sockeye salmon was within the Biological Escapement Goal (BEG) range of 30,000 to 70,000. The sockeye salmon return to the East Alsek River (East River) was 12,500 fish. The sockeye salmon return to the Doame River was 7,500 fish. Currently, these two systems are counted as one watershed and share a common BEG range of 13,000 to 26,000 sockeye salmon. Together, the escapement goal was attained, however commercial fishing is not opened in the East River until escapement of 13,000 fish has been observed in the East River. Commercial fishing was not open to sockeye salmon harvest on the East River in 2010. The East and Doame rivers are two separate systems with genetically distinct sockeye salmon populations; run timing for each is completely different. It is recommended that the BEG for both systems be reassessed.

The Alsek River recorded an above average sockeye salmon return in 2010. The Alsek River set gillnet fishery harvested 12,700 sockeye; this was 18% above the recent 5-year average of 10,700 fish (Table 6 and 7). Yakutat Bay, with a harvest of 15,100 sockeye accounted for 12% of the total sockeye salmon harvest. The Akwe River harvest of 6,100 sockeye salmon was 30% below the recent average. The Dangerous River harvest of 4,000 sockeye was only 3% below the recent 5-year average, but was less than half of the 2009 harvest of 8,700 fish. Manby Shore harvested 9,000 sockeye and Sudden Stream harvested 3,000 sockeye salmon.

COHO SALMON

The 2010 coho salmon harvest of 161,600 was 17% above the recent 10-year average of 138,000 fish. Coho salmon returns during the period 1990–2002 were the strongest in the history of the Yakutat Area. Since 2002 coho salmon production for the Yakutat area has fallen back to historical averages. The Situk-Ahrnklin Inlet harvest of 70,700 coho salmon was 15% above the recent average of 61,600 fish. The only other major coho salmon producer in Yakutat in 2010 was the Tsiu River. The presence of a buying station on the river again prompted sustained effort on the Tsiu for the sixth year in a row. The Tsiu River harvest of 77,800 coho salmon was the second largest harvest in the history of the river and was well above the recent 5-year average of 33,400 fish. The Akwe River harvest of 6,400 fish was well above the recent average of 2,900 fish. Minimal effort was recorded on the Yahtse River in 2010 and all catch figures are confidential. The Alsek, East, and Manby Shore, along with Yakutat Bay, all contributed small numbers of coho salmon to the total harvest.

CHINOOK SALMON

With the exception of the troll fisheries, there are no directed fisheries for Chinook salmon in the Yakutat Area, so all Chinook salmon are harvested incidentally in the sockeye salmon set gillnet 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 in 2010. The "non-sale" of Chinook salmon remained in effect in the Situk-Ahrnklin Inlet throughout the season as mandated by 5 AAC 30.365, the Situk-Ahrnklin Inlet and Lost River King Salmon Fisheries Management Plan. The BEG of 450-1,050 large Chinook salmon was not achieved in 2010, and fishermen were not allowed to retain or sell Chinook salmon throughout the end of the Chinook salmon season. The preseason projection for the Alsek River was for an above average Chinook salmon return, and the actual return was above the top end of the BEG. The Alsek River harvest of 270 Chinook salmon was 58% below the recent average of 650 fish. The Yakutat Bay harvest of approximately 90 Chinook salmon was 80% below the recent five-year average for the Bay. The Alsek River and Yakutat Bay accounted for 73% of all Chinook salmon harvested in the Yakutat Area. The total harvest of 500 Chinook salmon was 77% below the recent 10-year average.

PINK SALMON

The pink salmon harvest of 160,500 fish was well above the recent 10-year average of 56,300 fish. Pink salmon prices were $0.30 per pound this season, and pink salmon in Yakutat Bay and the Situk-Ahrnklin Inlet were the top two producers for the area. The two fisheries together accounted for almost all of the pink salmon harvest in the Yakutat area. The Situk-Ahrnklin Inlet harvest of 143,200 pink salmon was well above the recent 5-year average. The Yakutat Bay harvest of 17,200 pink salmon was 1% 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 well above the historical average. The peak float survey count in the Situk River was 776,000 pink salmon, and final estimated escapement based on professional opinion was 1.5 million pink salmon in the Situk River.

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. In 2010, the East River fishery had a small harvest of 200 chum salmon and was below the recent average; however, the area-wide harvest of 1,200 chum salmon was 26% above the recent 10-year average. The Situk River and Yakutat Bay were the biggest chum producers' in the area along with the Akwe River.

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 2005 through 2008 but was discontinued in 2009 due to poor Chinook returns. There was no test fishery conducted in 2010. 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. Biological data was collected during the test fisheries 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.

In 2010, the Chinook salmon harvest of 270 was 58% below the recent 5-year average of 650 fish. The majority of these fish were harvested during the first three weeks of the season. The Klukshu weir escapement of approximately 2,400 Chinook salmon was above average and over the top of the recommended escapement goal range of 1,100 to 2,300. This was 69% above the recent average and was the highest escapement recorded during that period of time.

A total of 20 permit holders on the Alsek River harvested 270 Chinook, 12,700 sockeye, and 2,000 coho salmon in 2010. Virtually no pink or chum salmon were harvested (Table 6 and 7). The sockeye salmon harvest was 18% above the recent five-year average, and nearly equaled the 2009 harvest (Table 7). In 2010, the Alsek was opened to commercial fishing during statistical week 24, the first Sunday in June. Traditionally, 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 Klukshu River is an important tributary in the upper Alsek River drainage in Canada. The BEG for sockeye salmon was not attained at the Klukshu weir in 2008 and 2009. Prior to the start of the 2010 season it was agreed that no matter what CPUE each week revealed, no extension of fishing time would be given in any week during the sockeye salmon season in order to attain the sockeye salmon BEG in 2010. All fishing periods for the first ten weeks of the season remained at one 24 hour period per week. The Klukshu River weir count of approximately 19,000 sockeye salmon was above average and over the top end of the escapement goal range of 7,500 to 15,000. This was 53% above the recent 10-year average of 12,300 sockeye salmon (Table 8). Aerial escapement surveys of sockeye salmon are typically conducted on the Tanis River, Cabin, and

Basin Creeks. Of these systems, Tanis River was surveyed only one time for sockeye with insignificant numbers to report.

The coho salmon harvest of 1,900 was 16% above the recent 5-year average of 1,600 fish. Effort levels in the Alsek generally plummet during coho salmon season, and only 6 or less permits fished during the coho salmon season. The river was fished into the last week in September. The Alsek remained opened open through the second week in October, and the river was not fished during the final two 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 2,400 coho salmon was 9% 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

The East River experienced a harsh reversal of fortunes in 2008, was by far the poorest return on record and was not open to commercial fishing for sockeye salmon. By contrast, the 2009 escapement surveys indicated a strong return and the river opened to commercial fishing. In 2010, the bottom end of the escapement goal for sockeye salmon was not achieved in the East River and the river was not opened to commercial fishing for sockeye salmon. The peak escapement count of 12,500 fish was recorded on August 14. This was close to the BEG range of 13,000 to 26,000 fish and it was assumed the actual sockeye salmon escapement eventually achieved that range. The East River opened initially during the first week of September for coho salmon. Effort remained minimal and the river was only fished for three weeks of the season. A total of five permits harvested 100 sockeye and 700 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, and no pink salmon were harvested There was no pink salmon harvested. The East River was surveyed for coho salmon on August 31 with an escapement count of 700 fish. A final survey was conducted on September 11 with an escapement count of 3,500 coho salmon.

AKWE RIVER

The Akwe River sockeye salmon harvest of 12,800 fish was 11% above the recent 5-year average of 11,500 fish (Table 11). The coho salmon harvest of 6,400 fish was well above the recent 5-year average of 2,900 fish. Effort remained minimal during the coho salmon season. A total of seven permits fished the Akwe in 2010. Aerial surveys of the Akwe River are of little value in determining escapement due to the turbidity of the river. However, a peak escapement count of 1,800 sockeye was recorded on June 20th which was over the top of the BEG range of 600-1,500 fish. 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 terminus of the river 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. Aerial surveys were conducted and a peak count of 1,500 sockeye was recorded on August 1. Coho returns in the Old and Middle Italio Rivers were strong and it was apparent that the BEG of 1,400-3,600 fish would be attained. Both rivers were open to commercial fishing for coho in 2010. Fewer than three permits fished, and harvest records are confidential. The Middle Italio was fished for two 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 13. A total of 3 permits fished the Dangerous in 2010 and 4,000 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 12). Escapement surveys of the Dangerous River are ineffective due to the glacially occluded water. Weekly fishing times are announced at 2.5 days by regulation and then adjusted in accordance with fishery performance. Fishing times started at 2.5 days, were then increased to 3.0 days for four weeks, and fluctuated thereafter. Fishing time remained at 3.0 days throughout the coho salmon season except for the last two weeks.

SITUK-AHRNKLIN INLET

The Situk-Ahrnklin Inlet fishery recorded above average harvests of sockeye, coho, pink and chum salmon, and a below average harvest of Chinook salmon during the 2010 season (Table 13, Table 14). The Situk-Ahrnklin Inlet generated 63% of the Yakutat area set gillnet income (Table 15, Table 16). The total value of approximately $1,372,000 was 67% above the 5-year average. The harvest of 72,200 sockeye salmon was also 67% above the recent average. Situk-Ahrnklin sockeye accounted for 59% of the area sockeye salmon harvest. The coho harvest of 70,700 was 15% above average, and accounted for 44% of the area's total coho salmon harvest. The pink salmon return to the Situk was above average, and the harvest of 143,200 was well above average.

The Situk River weir was installed in the lower river for the 23rd consecutive year and used for inseason management of the sockeye and Chinook salmon fisheries (Table 17). This was the 17th year that the resistance board or “floating” weir was used. 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 below average, and fishing time remained at 2.5 days for the first five weeks of the season. As the run continued developing slowly, fishing time was then increased to 4.5 days for one week, 5.0 days the following two weeks, and for 3.0 days during the last two weeks of the sockeye season. The harvest of 72,200 sockeye salmon was 67% above the 5-year average of 43,300. A total of almost 48,000 sockeye salmon passed through the weir in 2010 and within the BEG range of 30,000 to 70,000.

Prior to the start of the season the department projected an inriver return (point estimate) of 1,000 large Chinook, with a range of 600-1,400 fish. According to 5 AAC 30.365(3)(A) the

department is directed to implement a “non-sale” Chinook salmon season in the Situk-Ahrnklin Inlet and Lost River fisheries if the projection is for less than 730 to 1,050 large fish. The “non-sale” of Chinook salmon was implemented during the first opening of the season on June 20; dead Chinook salmon could be retained for personal use. By July 4 it was obvious that the bottom end of the BEG range would not be attained, and from that point on Chinook salmon could not be sold or retained for personal use. The non-retention and non-sale of Chinook salmon remained in effect through virtually all of the sockeye salmon season in order to maximize Chinook escapement. Effective at 12:01 p.m., August 8 the sale and retention of Chinook salmon was finally permitted. A total of 170 large Chinook salmon were counted through the Situk River weir in 2010 which did not meet the BEG range of 450–1,050 large Chinook. Only 50 Chinook salmon were retained in the commercial fishery for personal use and recorded on fish tickets.

The harvest of 70,700 coho salmon was 15% above the recent 5-year average of 61,600. 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 2010 harvest was the highest since 2004. 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 were fair throughout most of the 2010 season. A peak Situk River escapement survey of approximately 11,200 coho salmon was recorded on September 17, exceeding the top end of the BEG range of 3,300-9,800 fish. The commercial fishing period remained at three days for most of the season, and then extended to five days the next two weeks. The last two weeks of the coho salmon season commercial fishing was open two and four days respectively. A peak count of 64 permits fished during the second and fourth 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 50 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 143,200 was well above the recent 5-year average of 58,400 fish. In 2010, 84,600 pink salmon passed through the Situk weir, achieving the odd-year pink salmon BEG of 59,000-200,000 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 2010 the pink salmon price was 30 cents per pound. Over 776,000 pink salmon were observed in the Situk River on August 19. It is estimated that pink salmon escapement reached 1.5 million fish. The chum salmon harvest of 300 fish was 2% above 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 2010. The peak sockeye salmon escapement count of 11,500 fish was well above the established Sustainable Escapement Goal (SEG) of 1,000 fish for the Lost River. This was a significant improvement in stock production from previous years. The peak coho salmon escapement count of 2,400 was just above the SEG range of 2,000 fish. 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 1999–2010 will continue to be necessary in the future.

YAKUTAT BAY

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. The years 2007 and 2008 saw 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 the southernmost point of Ocean Cape to Point Manby, and those nets must be east and north of that line. Nets began crowding this line, and were then seen south and west of the line. The waters east and south of the line do not open to fishing as the remainder of the district until the fourth Sunday in June, and legal gear there is one 15 fathom net, not a 75 fathom Yakutat Bay net.

During the initial opening for the Bay on the second Sunday in June of 2009, department staff monitored the Ocean Cape fishery from the marker position at the southernmost point of Ocean Cape. A total of 14 nets were observed, and of those 14 nets, 10 were observed to be fishing in closed waters outside the line from the southernmost point of Ocean Cape to Point Manby. The Alaska Wildlife Troopers had no personnel in the Yakutat Area, and this developing fishery had become an illegal fishery. Following the initial fishing period closure, the marker was moved by emergency order from the southernmost point of Ocean Cape to Ocean Cape itself. The new line delineates the waters inside Yakutat Bay, from Ocean Cape to Point Manby, and eliminates waters outside the Bay being fished by 75 fathom Yakutat Bay gillnets. The marker remained in this position for the remainder of the 2009 salmon season and also remained in effect throughout the 2010 season. The Alaska State Trooper post reopened in Yakutat during August of 2010 and is now manned by an Alaska Wildlife Trooper. With enforcement capability in place, the marker will be moved back to the original position at the southernmost point of Ocean Cape, as per regulation, for the 2011 commercial salmon season.

Yakutat Bay recorded harvests of 100 Chinook, 15,000 sockeye, 1,000 coho, 17,200 pink and nearly 400 chum salmon in 2010 (Table 18). The sockeye salmon harvest of 15,000 was 47% below the recent 5-year average (Table 19). The harvest of 15,000 sockeye salmon in Yakutat Bay was second in production only to the Situk-Ahrnklin Inlet in 2010. A total of 46 discreet permits fished Yakutat Bay in 2010, with a peak effort of 22 permits fished during the fourth and fifth weeks of the season. The Yakutat Bay fishery opened on June 12, and fishing time remained at 2.5 days for the first six weeks of the season. Fishing time was then increased to 4.5 days for one week, and then fluctuated from 3.0 to 4.0 days during the coho salmon season. Chinook salmon are

harvested incidentally in the sockeye salmon fishery, and the harvest of 100 Chinook salmon was 80% below the recent 5-year average.

Yakutat Bay has never been a major coho producer, perhaps due to the concentration of effort elsewhere during coho salmon season. The 2010 coho salmon harvest of 1,000 fish was 97% below the recent 5-year average and was the lowest harvest for that period of time. Effort levels always remain low in Yakutat Bay for coho salmon, and a peak count of 7 permits fished the Bay during the last week of August.

The Yakutat Bay pink salmon harvest of 17,200 fish was nearly equal to the recent average of 17,100. 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. An aerial survey of the intertidal area adjacent to the mouth of Humpback Creek was flown on August 20 with a recorded estimate of 7,500 pink salmon. 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 at 2.5 days throughout the six weeks of the sockeye season, and was fished four of those six weeks. A total of 13 permits harvested 9,000 sockeye salmon, and was well above the recent average of 3,900 fish (Table 20).

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. In 2010 Sudden River was fished for sockeye salmon. Fewer than three permits fished, and catch records are confidential. Escapement counts are limited due to the glacial nature of most Manby area streams and no surveys of these inside waters were conducted in 2010. 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 six weeks during the coho salmon season by fewer than three permits, and harvest information is confidential. Yana River and Jetty Creek were not fished in 2010.

YAKATAGA DISTRICT FISHERIES

OVERVIEW

The Yakataga District opened on August 1 in 2010. The Tsiu River sustained a normal commercial fishery for the sixth year in a row. The Kaliakh River was fished one opener in 2010 and small effort in prior years produced confidential information so historical data is not given. Tashalich River, Eight Mile Creek, and Seal Creek were open, but not fished in 2010. Historical harvest and effort data for the Tsiu River is presented in Table 21.

TSIU RIVER

The Tsiu River is remote from processors and fish have been transported from the site in a DC-3 or similar aircraft. In 2010 Yakutat Seafoods maintained a buying station on the Tsiu River and flew fish to Yakutat with a DC-3. This marked the sixth time since 2001 that a processor maintained a presence on the Tsiu. A total of 19 permits fished on the Tsiu River in 2010 which is an increase in effort from recent years. The harvest of 77,800 coho salmon was the second highest on record and was well above the recent five-year average (Table 21).

Prior to the initial opening a survey revealed that approximately 12,000 coho salmon were holding in the lower river just below the upstream regulatory marker due to low water conditions. These fish were turning color and were of no value to the industry. To protect them, the regulatory markers were moved approximately 2.5 miles downstream. The fishery was then opened, with fishermen targeting bright, high quality fish. Weather patterns remained dry through late September, and an aerial survey on September 22 revealed 11,000 fish above the markers. This was within the BEG range of 10,000 to 29,000 fish. By this time approximately 15,000 fish were still holding in the lower river below the original marker position. During the last week of the fishery a low pressure system developed with torrential rain, finally causing the movement of those fish upstream. No further aerial surveys were conducted due to inclement weather, but several people, including a number of permit holders and ADF&G staff on the ground, saw those fish well up in the lake. They were added to the earlier count of 11,000 to give a final escapement of 26,000 coho salmon.

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TABLES AND FIGURES

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

Species	Stock	Type	Escapement Goal	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	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	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

Sources: Clark 1995, Clark et al. 1995a and b, 2003, Clark and Clark 1994, Clark and Etherton 2000; McPherson et al. 1998; 2003.

Note: All escapement goals are Biological Escapement Goals (BEG) except two. The Lost River sockeye and coho escapement goals are considered SEGs (sustainable escapement goal).

Table 2.–Total salmon harvest by species in the Yakutat area set gillnet fishery by fishing period, 2010.

Week	Ending Date	Chinook	Sockeye	Coho	Pink	Chum	Total
24	12-Jun	133	690	0	0	0	823
25	19-Jun	105	3,685	3	1	156	3,950
26	26-Jun	110	9,842	10	2	40	10,004
27	3-Jul	66	20,991	39	6	55	21,157
28	10-Jul	34	21,197	101	14	76	21,422
29	17-Jul	17	19,327	34	354	50	19,782
30	24-Jul	12	16,157	95	4,915	123	21,302
31	31-Jul	2	15,969	165	42,350	318	58,804
32	7-Aug	9	8,571	698	59,759	59	69,096
33	14-Aug	4	2,766	1,030	39,659	34	43,493
34	21-Aug	0	1503	2,519	7,422	28	11,472
35	28-Aug	3	1,016	7,388	4,980	30	13,417
36	4-Sep	0	248	26,365	981	225	27,819
37	11-Sep	6	47	45,696	19	28	45,796
38	18-Sep	0	6	38,548	0	1	38,555
39	25-Sep	0	0	26,683	0	4	26,687
40	2-Oct	0	5	11,473	8	11	11,497
41	9-Oct	0	0	584	0	1	585
42	16-Oct	0	0	153	0	0	153
Totals		501	122,020	161,584	160,470	1,239	445,814

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

Year	Active Permits	Chinook	Sockeye	Coho	Pink	Chum	Total
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
2009	123	1,533	105,825	133,808	76,956	871	318,993
2010	**128**	**501**	**122,020**	**161,584**	**160,470**	**1,239**	**445,814**
2000–2009 Avg.	114	2,138	119,225	138,142	56,327	984	311,413
2010 Deviation[a]	12%	-77%	2%	17%	185%	26%	43%

[a] Percentage deviation from 10-year average.

Table 4.–Average earnings from set gillnet fishing, Yakutat area, 1980–2010.

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
2009	$1,640,016	123	$13,333	$12,847
2010	**$2,185,611**	**128**	**$17,075**	**$12,660**
Average 2000–2009	$1,451,785	114	$12,660	$15,293
2010 Deviation[a]	51%	12%	35%	-17%

[a] Percentage deviation from 10-year average.

Table 5.–Harvest of salmon in the Yakutat area set gillnet fishery by fishing area, 2010.

Area	Chinook	Sockeye	Coho	Pink	Chum	Total
Alsek	273	12,668	1,884	0	9	14,834
East	0	103	680	0	214	997
Akwe	43	6,080	6,351	30	255	12,759
Italio	Closed					
Middle Italio	[a]	[a]	[a]	[a]	[a]	[a]
Old Italio	[a]	[a]	[a]	[a]	[a]	[a]
Dangerous	2	3,997	4	1	0	4,004
Situk	50	72,185	70,727	143,234	310	286,506
Lost	Closed					
Yakutat Bay	92	15,092	1,052	17,200	377	33,813
Manby Shore	33	8,938	52	5	71	9,099
Manby Stream	Not Fished					
Spoon	Not Fished					
Sudden	0	2,954	0	0	0	2,954
Esker	Not Fished					
Yahtse	[a]	[a]	[a]	[a]	[a]	[a]
Yana	Not Fished					
Jetty Creek	Not Fished					
Big River	Not Fished					
Kaliakh	[a]	[a]	[a]	[a]	[a]	[a]
Tsiu	6	3	77,780	0	3	77,792
Seal River	Not Fished					
Tashalich	Not Fished					
Kiklukh	Not Fished					
Totals	501	122,020	161,584	160,470	1,239	445,814

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

Table 6.–Harvest of salmon in the Alsek River set gillnet fishery by fishing period, 2010.

Week	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
24	12-Jun	14	133	690	0	0	0	823	1.0
25	19-Jun	13	79	753	0	0	0	480	1.0
26	26-Jun	14	48	1,103	0	0	0	2,410	1.0
27	3-Jul	13	7	1,303	0	0	0	3,675	1.0
28	10-Jul	13	4	1,696	0	0	0	2,063	1.0
29	17-Jul	12	0	2,269	0	0	0	1,042	1.0
30	24-Jul	12	0	1,522	0	0	1	1,512	1.0
31	31-Jul	12	0	2,336	0	0	2	611	1.0
32	7-Aug	11	0	735	1	0	0	134	1.0
33	14-Aug	5	2	147	1	0	0	222	1.0
34	21-Aug	4	0	64	31	0	0	0	1.0
35	28-Aug	3	0	41	246	0	2	34	1.0
36	4-Sep	[a]	[a]	[a]	[a]	[a]	[a]	[a]	1.0
37	11-Sep	4	0	0	305	0	0	1,583	1.0
38	18-Sep	3	0	0	308	0	0	910	1.0
39	25-Sep	4	0	0	397	0	0	381	1.0
40	2-Oct	4	0	0	340	0	4	236	1.0
Totals		19	273	12,668	1,884	0	9	16,498	17.0

[a] Percentage deviation from 5-year average.

Table 7.–Harvest of salmon in the Alsek River set gillnet fishery, 2010 and 5-year catch comparison.

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
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
2009	17	602	12,906	3,454	0	20	16,982	38.0
2010	**19**	**273**	**12,668**	**1,884**	**0**	**9**	**16,498**	**17.0**
2005–2009 Average	20	648	10,739	1,631	0	5	13,246	41.2
2010 Deviation[a]		-58%	18%	16%	0%	80%	25%	-59%

[a] Percentage deviation from 5-year average.

Table 8.–Klukshu River Weir escapement, 1976–2010.

Year	Chinook[a]	Sockeye[b]	Coho[c]
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
2009	1,568	5,731	424
2010	**2,357**	**18,936**	**2,365**
2000–2009 average	1,395	12,327	2,604

[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.
[c] Coho numbers are an index; weir is removed before run is over.

Table 9.–Harvest of salmon in the East River set gillnet fishery by fishing period, 2010.

Week	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
36	4-Sep	5	0	86	278	0	189	489	3.0
37	11-Sep	3	0	17	182	0	25	502	2.0
38	18-Sep	Not	fished						2.0
39	25-Sep	[a]	[a]	[a]	[a]	[a]	[a]	[a]	2.0
40–42	16-Oct	Not	fished						8.0
Totals		5	0	103	680	0	214	997	17

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

Table 10.–Harvest of salmon in the East River set gillnet fishery, 2010 and 5-year catch comparison.

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
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
2009	22	10	7,388	1,042	4	275	8,719	33.0
2010	**5**	**0**	**103**	**680**	**0**	**214**	**997**	**17.0**
2005–2009 Average	17	7	18,083	321	49	307	18,767	40.8
2009 Deviation[a]	-71%	-100%	-99%	112%	-100%	-30%	-95%	-58

[a] Percentage deviation from 5-year average.

Table 11.–Harvest of salmon in the Akwe River set gillnet fishery, 2010, and 5-year-catch comparison.

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
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
2009	5	90	7,251	2,270	56	15	9,682	32.0
2010	**7**	**43**	**6,080**	**6,351**	**30**	**255**	**12,759**	**34.0**
2005–2009 Average	7	135	8,650	2,859	19	53	11,507	41
2010 Deviation[a]	0%	-68%	-30%	122%	58%	381%	11%	-17%

[a] Percent deviation from 5-year average.

Table 12.–Harvest of salmon in the Dangerous River set gillnet fishery, 2010, and 5-year catch comparison.

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
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
2009	22	44	8,747	256	498	31	9,576	55.0
2010	**3**	**2**	**3,997**	**4**	**1**	**0**	**4,004**	**62.5**
2004–2009 Average[b]	8	22	4,106	80	121	8	4,317	52
2010 Deviation[c]	-63%	-91%	-3%	-95%	-99%	-100%	-7%	20%

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

[b] 2005 not included.

[c] Percent deviation from 5-year average.

Table 13.–Harvest of salmon in the Situk-Ahrnklin Inlet set gillnet fishery by fishing period, 2010.

Week	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
26	26-Jun	54	41	5,940	1	2	0	5,984	2.5
27	3-Jul	60	6	11,958	0	1	1	11,966	2.5
28	10-Jul	54	0	13,372	2	0	6	13,380	2.5
29	17-Jul	59	0	10,941	1	190	6	11,138	2.5
30	24-Jul	62	0	11,154	66	4,874	41	16,135	2.5
31	31-Jul	60	0	10,766	77	40,625	131	51,599	4.5
32	7-Aug	53	3	5,228	660	54,908	20	60,819	5.0
33	14-Aug	47	0	1,395	949	30,393	17	32,754	5.0
34	21-Aug	45	0	810	2379	7,054	25	10,268	3.0
35	28-Aug	52	0	434	6,504	4,231	21	11,190	3.0
36	4-Sep	59	0	148	10,380	935	26	11,489	3.0
37	11-Sep	64	0	28	14,519	13	3	14,563	3.0
38	18-Sep	63	0	6	10,295	0	1	10,302	3.0
39	25-Sep	64	0	0	14,220	0	4	14,224	5.0
40	2-Oct	56	0	5	9,937	8	7	9,957	5.0
41	9-Oct	12	0	0	584	0	1	585	2.0
42	16-Oct	4	0	0	153	0	0	153	4.0
Total		85	50	72,185	70,727	143,234	310	286,506	58

Table 14.–Harvest of salmon in the Situk-Ahrnklin Inlet set gillnet fishery, 2010 and 5-year catch comparison.

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
2005	78	0	32,887	50,933	48,269	336	132,419	72.3
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
2009	84	307	49,016	69,978	66,640	147	186,088	69.3
2010	**85**	**50**	**72,185**	**70,727**	**143,234**	**310**	**286,506**	**58.0**
2005–2009 Average	79	97	43,341	61,604	58,378	304	163,723	64
2010 Deviation [a]	8%	-48%	67%	15%	145%	2%	75%	-9

[a] Percentage deviation from 5-year average.

Table 15.–Exvessel value of Situk-Ahrnklin set gillnet fishery relative to the total Yakutat area exvessel set gillnet fishery, 1975–2010.

Year	Yakutat Setnet Income ($USD)	Situk Setnet Income ($USD)	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%
2009	1,641,423	858,378	52%
2010	**2,185,611**	**1,372,001**	**63%**
2000–2009 Average	1,452,642	822,614	59%
Deviation [a]	50%	67%	7%

[a] Percentage deviation from average.

Table 16.–Dollar value of salmon harvest in the Situk-Ahrnklin set gillnet fishery, 1975–2010.

Year	Chinook (USD)	Sockeye (USD)	Coho (USD)	Pink (USD)	Chum (USD)	Total (USD)
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
2009	2,022	328,357	521,304	6,306	387	858,376
2010	**173**	**645,752**	**544,028**	**180,304**	**1,744**	**1,372,001**
2000–2009 Average	$10,350	$283,201	$503,996	$24,469	$525	$822,601
2010 Deviation[a]	-98%	128%	8%	639%	232%	67%

[a] Percent deviation from 10-year average.

Table 17.–Situk Weir escapement counts, 1988–2010.

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
2009	5/12–8/5	904	83,959	10	62,287	2
2010	**5/11–8/5**	**170**	**47,865**	**2706**	**84,594**	**1**
1989–2009 Average		2,433	61,803	50	142,242	28

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 30,000–70,000 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 59,000–200,000 fish.

Table 18.–Harvest of salmon in the Yakutat Bay set gillnet fishery by fishing period, 2010.

Week	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
24	12-Jun	0	[a]	[a]	[a]	[a]	[a]	[a]	2.5
25	19-Jun	30	26	2,932	3	1	156	3,118	2.5
26	26-Jun	11	10	319	1	0	6	336	2.5
27	3-Jul	14	14	1,441	11	2	25	1,493	2.5
28	10-Jul	22	17	4098	90	13	62	4,280	2.5
29	17-Jul	22	15	4151	30	164	44	4,404	2.5
30	24-Jul	10	1	189	18	34	10	252	2.5
31	31-Jul	14	1	659	87	1700	28	2,475	4.5
32	7-Aug	10	5	627	36	4851	19	5,538	4.0
33	14-Aug	11	2	450	76	9,266	17	9,811	4.0
34	21-Aug	6	0	71	55	368	3	497	3.0
35	28-Aug	7	1	153	188	749	7	1,098	3.0
36	4-Sep	3	0	1	69	46	0	116	3.0
37	11-Sep	[a]	[a]	[a]	[a]	[a]	[a]	[a]	3.0
38	18-Sep				Not Fished				3.0
39	25-Sep	[a]	[a]	[a]	[a]	[a]	[a]	[a]	3.0
40–42	2-Oct				Not Fished				9.0
Totals		46	92	15,092	1,052	17,200	377	33,813	54.5

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

Table 19.–Harvest of salmon in the Yakutat Bay set gillnet fishery, 2010, and 5-year-catch comparison.

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
2005	41	270	17,844	4,846	11,920	190	35,070	77.8
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
2009	56	380	15,367	3,246	9,258	348	28,599	60.5
2010	**46**	**92**	**15,092**	**1,052**	**17,200**	**377**	**33,813**	**54.5**
2005–2009 Average	51	455	28,736	3,960	17,107	545	50,792	59
2009 Deviation [a]	-10%	-80%	-47%	-97%	1%	-31%	-33%	-8.0

[a] Percentage deviation from 5-year average.

Table 20.–Harvest of salmon in the Manby Shore Ocean set gillnet fishery, 2010, and 5-year-catch comparison.

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
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
2009	12	100	2,830	60	378	33	3,401	48.0
2010	**13**	**33**	**8,938**	**52**	**5**	**71**	**9,099**	**48.0**
2005–2009 Average	10	47	3,857	51	128	8	4,092	51
Deviation 2010[a]	30%	-30%	132%	2%	-96%	788%	122%	-6.0

[a] Percent deviation from 5-year average.

Table 21.–Harvest of salmon in the Tsiu River set gillnet fishery, 2010, and 5-year catch comparision.

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
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	23.0
2009	10	0	74	43,723	121	2	43,920	23.2
2010	**19**	**6**	**3**	**77,780**	**0**	**3**	**77,792**	**21.0**
2005-2009 Average	10	0	16	33,440	24	0	33,581	25.0
2010 Deviation[a]	90%		-81%	133%	-100%		132%	-16%

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

[a] Percent deviation from 5-year average.

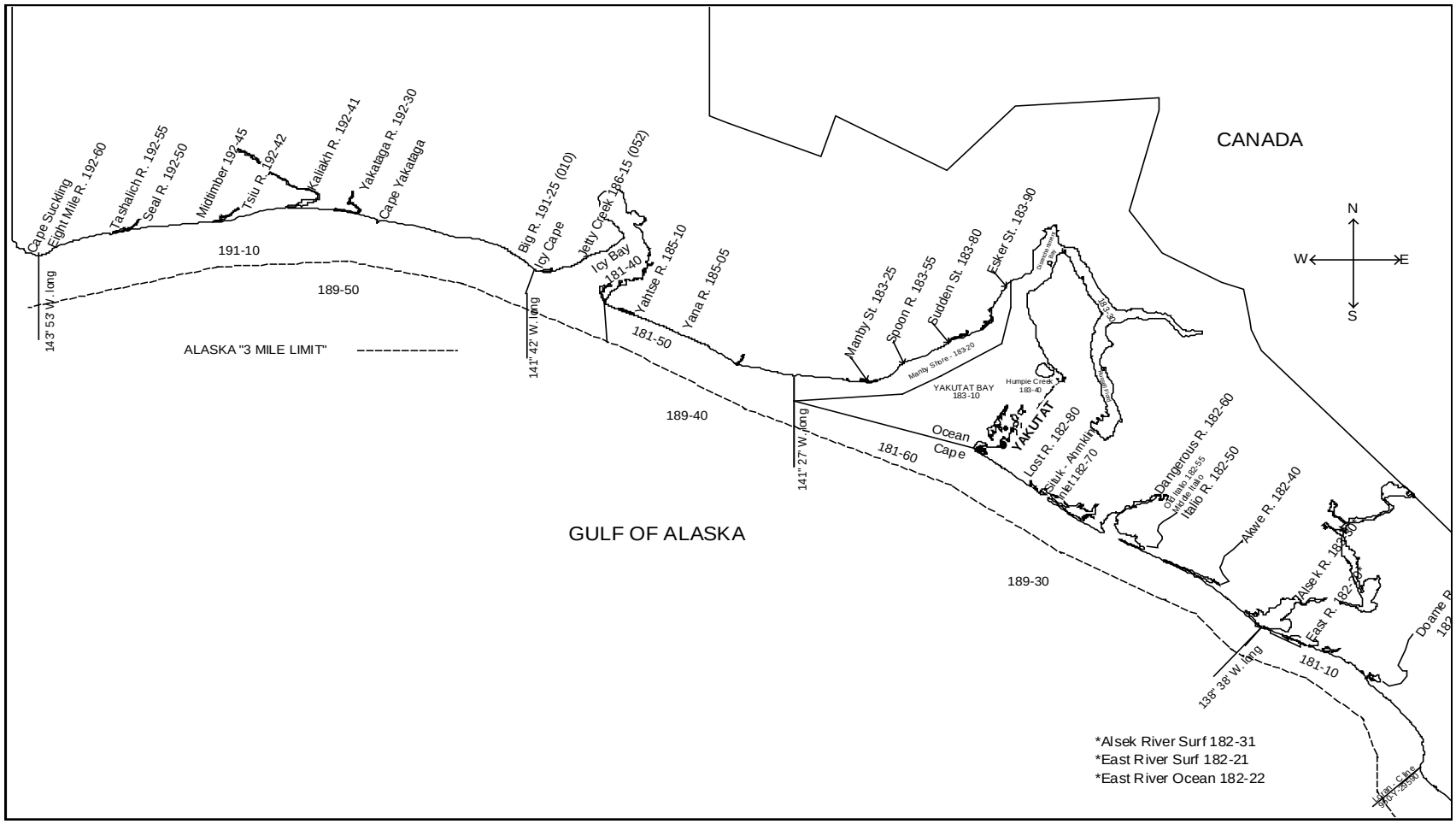

Figure 1.–Yakutat Area map, showing statistical reporting areas.