

## **Regional Information Report 3A13-01**

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# **Salmon Age, Sex, and Length Catalog for the Kuskokwim Area, 2010 and 2011**

Annual Report for Project 10-303  
USFWS Office of Subsistence Management  
Fisheries Resource Monitoring Program

by

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Division of Commercial Fisheries



## Symbols and Abbreviations

The following symbols and abbreviations, and others approved for the *Système International d'Unités* (SI), are used without definition in the following reports by the Divisions of Sport Fish and of Commercial Fisheries: Fishery Manuscripts, Fishery Data Series Reports, Fishery Management Reports, Special Publications and the Division of Commercial Fisheries Regional Reports. 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>Mathematics, statistics</b>	
centimeter	cm	Alaska Administrative Code	AAC	<i>all standard mathematical signs, symbols and abbreviations</i>	
deciliter	dL	all commonly accepted abbreviations	e.g., Mr., Mrs., AM, PM, etc.	alternate hypothesis	H <sub>A</sub>
gram	g	all commonly accepted professional titles	e.g., Dr., Ph.D., R.N., etc.	base of natural logarithm	<i>e</i>
hectare	ha	at	@	catch per unit effort	CPUE
kilogram	kg	compass directions:		coefficient of variation	CV
kilometer	km	east	E	common test statistics	(F, t, $\chi^2$ , etc.)
liter	L	north	N	confidence interval	CI
meter	m	south	S	correlation coefficient	
milliliter	mL	west	W	(multiple)	R
millimeter	mm	copyright	©	correlation coefficient (simple)	r
		corporate suffixes:		covariance	cov
<b>Weights and measures (English)</b>		Company	Co.	degree (angular)	°
cubic feet per second	ft <sup>3</sup> /s	Corporation	Corp.	degrees of freedom	df
foot	ft	Incorporated	Inc.	expected value	<i>E</i>
gallon	gal	Limited	Ltd.	greater than	>
inch	in	District of Columbia	D.C.	greater than or equal to	≥
mile	mi	et alii (and others)	et al.	harvest per unit effort	HPUE
nautical mile	nmi	et cetera (and so forth)	etc.	less than	<
ounce	oz	exempli gratia	e.g.	less than or equal to	≤
pound	lb	(for example)		logarithm (natural)	ln
quart	qt	Federal Information Code	FIC	logarithm (base 10)	log
yard	yd	id est (that is)	i.e.	logarithm (specify base)	log <sub>2</sub> , etc.
		latitude or longitude	lat. or long.	minute (angular)	'
<b>Time and temperature</b>		monetary symbols (U.S.)	\$, ¢	not significant	NS
day	d	months (tables and figures): first three letters	Jan, ..., Dec	null hypothesis	H <sub>0</sub>
degrees Celsius	°C	registered trademark	®	percent	%
degrees Fahrenheit	°F	trademark	™	probability	P
degrees kelvin	K	United States (adjective)	U.S.	probability of a type I error (rejection of the null hypothesis when true)	$\alpha$
hour	h	United States of America (noun)	USA	probability of a type II error (acceptance of the null hypothesis when false)	$\beta$
minute	min	U.S.C.	United States Code	second (angular)	"
second	s	U.S. state	use two-letter abbreviations (e.g., AK, WA)	standard deviation	SD
<b>Physics and chemistry</b>				standard error	SE
all atomic symbols				variance	
alternating current	AC			population sample	Var
ampere	A			sample	var
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				

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by

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## ABSTRACT

Salmon age, sex, and length (ASL) data have been collected from Kuskokwim Area harvests and escapements since 1961. Raw ASL data are archived in the Arctic-Yukon-Kuskokwim salmon Database Management System (AYK DBMS) and summarized data are presented in individual project reports. Since 1995, the salmon age, sex, and length catalog for the Kuskokwim Area has been produced as a means to compile ASL data into historical summaries useful to Kuskokwim Area fishery managers, contributing project leaders, and other interested parties. This report catalogues the collection of ASL data during the 2010 and 2011 seasons. The format for this report differs from previous catalog versions. The purpose of this revised format is to (1) provide an overview of projects that collected ASL information in 2010 and 2011, and highlight those data that were newly added to the AYK DBMS, (2) provide a single source document for project specific data summaries produced in 2010 and 2011, (3) provide a historical summary of ASL data for select long-term monitoring projects, and (4) provide a quick reference guide to the available historical ASL data archived in the AYK DBMS. Funding support required to process, archive, analyze, and summarize Kuskokwim Area ASL data for 2010 and 2011 was from the U.S. Fish and Wildlife Service, Office of Subsistence Management, through the Fisheries Resource Monitoring Program (FRMP). This report serves as an annual report for FRMP 10-303.

Key words: age, sex, length, ASL, Pacific salmon, *Oncorhynchus* spp., Kuskokwim River, age class composition, sex composition, length composition, AYK DBMS, metadata.

## INTRODUCTION

Since 1961, age, sex, and length (ASL) data have been collected from Chinook *Oncorhynchus tshawytscha*, chum *O. keta*, sockeye *O. nerka*, and coho *O. kisutch* salmon returning to the Kuskokwim Management Area (Figure 1; Brannian et al. 2005). Data are available from various discontinuous time series of sample collections from commercial, subsistence, and sport harvests, escapement monitoring projects, test fisheries, mark-recapture studies, and other special projects. A variety of organizations including state, federal, tribal, and non-government groups have jointly funded and participated in the collection of Kuskokwim Area salmon ASL data. Data are archived in raw form in the Arctic-Yukon-Kuskokwim salmon Database Management System (AYK DBMS). The AYK DBMS is an online clearinghouse maintained by the Alaska Department of Fish and Game (ADF&G) and provides a public interface for querying and downloading data. Summarized data have most commonly been reported in agency project reports and fisheries management reports. Since 1995, select data have also been published online in historical summaries prepared by the ADF&G as part of the salmon ASL catalog for the Kuskokwim Area (Molyneaux and DuBois 1996, 1998, 1999; DuBois and Molyneaux 2000; Molyneaux and Folletti 2005, 2006, 2007; Molyneaux et al. 2008, 2009, 2010).

Continuation and expansion of the ASL catalog for the Kuskokwim Area and regular updates to the AYK DBMS are integral parts of the Kuskokwim Area stock biology program's data management process. Since 2004, the U.S. Fish and Wildlife Service (USFWS), Office of Subsistence Management (OSM) has funded the *Kuskokwim salmon age, sex, and length assessment project* through 3 consecutive Fisheries Resource Monitoring Program (FRMP) grants: 04-086, 07-303, and 10-303. The overriding purpose of that project is to standardize and manage the fast growing collection of ASL data. This report serves as the annual report for project 10-303, catalogs salmon ASL collections that occurred throughout the Kuskokwim Area in 2010 and 2011, and presents updated historical summaries for long-term salmon monitoring projects.

## **FORMAT CHANGES TO THE ASL CATALOG**

Earlier versions of the ASL catalog for the Kuskokwim Area published from 2005 to 2010 consisted of 2 parts, a narrative published in the ADF&G Regional Information Report series and a collection of historical summary tables accessible online at the ADF&G website. The narrative portion highlighted general methods used to collect ASL data, and presented selected results and trends, selected data quality issues, and examples of appropriate uses of the historical data. The online historical tables presented stratified summaries of ASL data for select long-term monitoring projects. Regular revisions to the format of the ASL catalog are warranted in order to meet the evolving needs of users of Kuskokwim Area ASL data.

It is our experience that users of the Kuskokwim ASL data are most interested in season summary data or raw data from particular projects for conducting independent analyses. Currently, season summaries are available from the existing online historical tables or individual project reports, and raw data is archived in the AYK DBMS. Reviewing summary data is challenging due to the large size of the historical tables (e.g., the 2009 online summary tables were 1,198 pages in length) and the many volumes of individual project reports. Although the AYK DBMS is user friendly, users must have prior knowledge about the range of projects that collected ASL data in specific years in order to successfully and efficiently query data. The overriding goal of the revised catalog format was to increase utility for individuals that regularly review project specific ASL summaries and for prospective users of the AYK DBMS.

The 2010 and 2011 version of the Kuskokwim Area ASL catalog differs from earlier published versions in several key ways. Most notably the associated online historical tables have not been continued. Instead we provide detailed annual summaries for current project years only. We continue the historical perspective of long-term projects by presenting season estimates of ASL composition in a time series along with corresponding abundance information for each year. We attempt to complement the AYK DBMS by providing a quick reference guide to the archived raw data by species, project type (e.g., harvest or escapement), project name, and year. Finally, we do not provide detailed descriptions of the methods used to collect or analyze ASL data, interpret results, or assess trends in ASL data – that information is available by reviewing individual project reports.

Rationale for the revised structure and content of the 2010 and 2011 ASL catalog was based on input from Kuskokwim Area staff that regularly uses or references the ASL catalog. A review of recently published Kuskokwim Area project reports highlighted that most authors referenced the ASL catalog for ASL collection methods, common trends seen in ASL data, or for raw data presented in the online historical tables. The overriding consensus among Kuskokwim Area staff was that the descriptions of ASL data collection and analysis methods presented in the catalog were overly general, and a separate report documenting ASL methodology was needed. Similarly, staff agreed that analysis of ASL trends should be focused and when appropriate presented as separate reports with well developed hypotheses. All staff agreed that a quick reference guide to the range of projects that collected ASL data and the types of data collected in a given year would be valuable. Project leaders specifically requested feedback regarding the quality of the ASL data collected. Research and management staff requested a compilation of annual season summaries for projects that operated during the report year. In addition, research and management staff requested that data used to develop brood tables be compiled into an

accessible format. The revised catalog presented here attempts to balance those perspectives while not losing site of the value of earlier catalog versions.

## **OBJECTIVES**

The overriding objective of this project was to process, compile, and analyze salmon scale, sex, and length samples collected in 2010 and 2011 from Kuskokwim Region subsistence and commercial fisheries, escapement, and other projects.

Specific objectives of this report were to:

1. Provide an overview of projects that collected ASL information in 2010 and 2011, and highlight those data that were added to the AYK DBMS in 2010 and 2011;
2. Provide a single source document for detailed project data summaries produced in 2010 and 2011;
3. Provide a historical summary of ASL data for select long-term monitoring projects; and
4. Provide a quick reference guide to the available historical ASL data archived in the AYK DBMS.

## **METHODS AND RESULTS**

### **2010 AND 2011**

ASL samples were collected from 15 projects in 2010 and 16 projects in 2011 (Table 1). Detailed information regarding project specific methods can be found by reviewing individual project reports (Table 2 and 3). Project methods that are not documented in a published annual report followed standardized approaches similar to those described by Molyneaux et al. 2010. General methods used to collect ASL data for each species by project are shown in Tables 4–11. The structure of those tables is intended to highlight similarities and differences in methods used to collect ASL data between projects and species.

Sampling during the 2010 and 2011 seasons resulted in 51,312 salmon sampled for age, sex, or length – 26,387 fish in 2010 and 24,925 fish in 2011. In 2010, chum salmon made up 42% of the samples collected followed by sockeye salmon (22%), Chinook salmon (20%) and coho salmon (16%; Tables 12–15). In 2011, chum salmon again made up 42% of the samples collected followed by Chinook salmon (20%), coho salmon (20%) and sockeye salmon (17%; Tables 16–19). Sex and length data are available for nearly all fish sampled, but not all fish could be aged (Tables 12–19).

The number of scale samples that were not aged for at least 1 of 7 different reasons is shown by species and project in Tables 20–27. Overall, the percentage of Chinook, chum, sockeye, and coho salmon scales collected in 2010 that were not successfully aged was 16%, 5%, 22%, and 11% respectively (Tables 20–23). In 2011, the percentage of age errors were 23%, 9%, 24%, and 11% for Chinook, chum, sockeye, and coho salmon (Tables 24–27). In both years, collection of regenerated scales (i.e., scales that fell off and were regrown but missing adequate information for estimating freshwater age) was the most common reason why Chinook, chum, and coho salmon scales were not aged. Sockeye salmon age errors were mostly attributed to collection of reabsorbed scales (i.e., deterioration of the outer edge of the scale preventing adequate estimation of saltwater age), although scale regeneration was also prolific. Presentation of age errors was

intended as feedback to project leaders but may also be useful when considering sample sizes needed to achieve desired statistical accuracy and precision.

The ASL data collected in 2010 and 2011 were summarized by project for each salmon species sampled. Many, but not all, of these summary tables have been or will be published in individual annual project reports (Tables 2 and 3). To assist in review of the 2010 and 2011 ASL summaries, they have been combined into a single collection representing the full range of projects that collected ASL data (Table 1). Chinook salmon summaries include commercial harvest composition for one Kuskokwim River (Tables 28 and 29) and 2 Kuskokwim Bay subdistricts (Tables 30–33), one test fishery operated near Bethel (Table 34), subsistence harvest composition from the lower Kuskokwim River (Tables 35 and 36), 2 escapement monitoring weirs operated in tributaries that drain into Kuskokwim Bay (Tables 37–40), and 6 escapement monitoring weirs operated in tributaries throughout the lower, middle, and upper Kuskokwim River (Tables 41–52). Chum salmon summaries include commercial harvest composition for one Kuskokwim River (Tables 53 and 54) and 2 Kuskokwim Bay subdistricts (Tables 55–58), 2 escapement monitoring weirs operated in tributaries that drain into Kuskokwim Bay (Tables 59–62), 6 escapement monitoring weirs operated in tributaries throughout the lower, middle, and upper Kuskokwim River (Tables 63–74), and one tributary sonar project (Tables 75 and 76). Sockeye salmon summaries include commercial harvest composition for one Kuskokwim River (Tables 77 and 78) and 2 Kuskokwim Bay subdistricts (Tables 79–82), 2 escapement monitoring weirs operated in tributaries that drain into Kuskokwim Bay (Tables 83–86), and 4 escapement monitoring weirs operated in tributaries throughout the lower, middle, and upper Kuskokwim River (Tables 87–94). Coho salmon summaries include commercial harvest composition for one Kuskokwim River (Tables 95 and 96) and 2 Kuskokwim Bay subdistricts (Tables 97–100), one escapement monitoring weir operated in a tributary that drains into Kuskokwim Bay (Tables 101 and 102), and 6 escapement monitoring weirs operated in tributaries throughout the lower, middle, and upper Kuskokwim River (Tables 103–114). Each table consists of 2 parts. The top portion of the table presents an estimate of the percent and number of fish by age and sex class and when appropriate the composition has been applied to abundance. The bottom portion of the table presents length (mm, mid-eye to tail fork MEF) summaries by age and sex class. When applicable, source documentation and comments regarding data use is provided as table notes. For details regarding analysis of ASL data including sample design, sample size requirements, and sample stratification refer to the individual project reports (Tables 2 and 3).

## **HISTORICAL DATA SUMMARIES**

Historical ASL data summaries were produced for select projects as a convenient way to provide foundational data needed to assess changes in ASL composition over time or develop brood tables for a particular project or for broader geographic areas (e.g., Kuskokwim River Chinook salmon). Each summary table presents total abundance, percent by age and sex, and mean length (mm MEF) for each project year. Annual estimates of ASL composition prior to 2010 were from Molyneaux et al. 2010, with the exception of Chinook salmon subsistence harvest compositions which were recalculated based on data archived in the AYK DBMS. Abundance information was from multiple sources: commercial harvest was from Bavilla et al. (2010); subsistence harvest was from Hamazaki (2011); and escapement data was from the *Kuskokwim Area Master Escapement File maintained by ADF&G Division of Commercial Fisheries*. Historical ASL data summaries for Chinook salmon include commercial harvest composition from one Kuskokwim River (Table 115) and 2 Kuskokwim Bay (Tables 116 and 117) subdistricts, subsistence harvest

composition from the lower Kuskokwim River (Table 118), 2 escapement monitoring weir projects located on tributaries that drain into Kuskokwim Bay (Tables 119 and 120), and 6 escapement monitoring weirs operated in tributaries throughout the lower, middle, and upper Kuskokwim River (Tables 121–126). Historical ASL summaries for chum salmon include commercial harvest composition from one Kuskokwim River (Table 127) and 2 Kuskokwim Bay (Tables 128 and 129) subdistricts, 2 escapement monitoring weir projects located on tributaries that drain into Kuskokwim Bay (Tables 130 and 131), 6 escapement monitoring weirs operated in tributaries throughout the lower, middle, and upper Kuskokwim River (Tables 132–137), and one tributary sonar project (Table 138). Historical ASL summaries for sockeye salmon include commercial harvest composition from one Kuskokwim River (Table 139) and 2 Kuskokwim Bay (Tables 140 and 141) subdistricts, 2 escapement monitoring weir projects located on tributaries that drain into Kuskokwim Bay (Tables 142 and 143), 2 escapement monitoring weirs operated in lower Kuskokwim River tributaries (Tables 144 and 145). Historical ASL summaries for coho salmon include commercial harvest composition from one Kuskokwim River (Table 146) and 2 Kuskokwim Bay (Tables 147 and 148) subdistricts, one escapement monitoring weir project located on a tributary that drains into Kuskokwim Bay (Tables 149), and 5 escapement monitoring weirs operated in tributaries throughout the lower, middle, and upper Kuskokwim River (Tables 150–154). Historical summaries were not produced for short-term special projects (e.g., tagging studies) or long-term projects with inconsistent sampling (e.g., test fisheries).

## **KUSKOKWIM AREA ASL DATA IN THE AYK DBMS**

The goal of the AYK DBMS is to provide managers, researchers, and the public involved in fisheries in the AYK Region with a system to enter and process new data, as well as to retrieve historical data. The AYK DBMS provides access to Kuskokwim Area project descriptions and raw biological measurements of salmon age, sex, and length. For each salmon species, we provided a comprehensive list of all Kuskokwim Area projects that have collected salmon ASL data and highlight the years for which at least some data is available. Tables were developed by querying data directly from the AYK DBMS. Overview tables provide a quick reference for agency staff and members of the public who may be interested in Kuskokwim Area ASL data for independent research but are unfamiliar with the scope of the data available. The AYK DBMS contains Chinook salmon ASL data collected from 27 different projects (Table 155), chum salmon data from 24 projects (Table 156), sockeye salmon data from 23 projects (Table 157), and coho salmon data from 19 projects (Table 158). For each salmon species, ASL data is available from a range of project types including commercial catch, subsistence catch, escapement monitoring, mark–recapture experiments, and test fisheries. The length and continuity of the time series of available data varies considerably within and between project types (Tables 155–158).

The AYK DBMS public interface is located at the following web site: [www.adfg.alaska.gov/CommFishR3/WebSite/AYKDBMSWebsite/Default.aspx](http://www.adfg.alaska.gov/CommFishR3/WebSite/AYKDBMSWebsite/Default.aspx). By following the “Search” link on the main database page, users are directed to a series of data filters that allow for focused searches by management area, data type, project type, and method type. An alphabetical list of all projects and associated date ranges that meet the user defined search criteria is available by selecting the “Go to Projects” link. Selection of a specific project yields a general project description and annual year notes that provide context (i.e. metadata) regarding the type, quality, quantity, and utility of the data available. ASL data for a specific project is available by selecting the “ASL” link and selecting from the range of years of available data. A

report is generated with all associated data for each fish sampled including information about data collection (e.g., date of sample, location, method of capture, method of sex determination, etc.), archival references (i.e., scale card number and fish number) and raw biological data such as fresh water age, saltwater age, sex, and length.

## **DISCUSSION**

### **SOURCES OF BIAS**

Users of Kuskokwim Area ASL data are responsible for ensuring that all data used are appropriate for the intended purpose. Since 1961, numerous changes have occurred regarding how fisheries and fisheries monitoring projects are executed, including how ASL data are collected, processed, and analyzed. Examples of differences between project types or between years at the same project include: (1) changes in harvest regulation including time, area, and gear restrictions; (2) changes in capture methods including weir picket spacing and gillnet dimensions and mesh sizes; (3) differences in length measurement methods including cloth tape, hard rulers, fish cradles, and calipers; (4) changes in method used to sex fish including using internal or external characteristics; (5) changes in staff responsible for collection and processing ASL samples; and (6) changes in study design including assumptions and sample size requirements. Prospective users are encouraged to review the original reports or other sources to understand the methods used for specific ASL data collections including any changes in methodology. Previous versions of the Kuskokwim Area ASL catalog also provide some examples of bias and data quality concerns (e.g., Molyneaux et al. 2010).

### **DATA QUALITY, AYK DBMS**

The AYK DBMS was populated with data archived in a variety of formats including paper data forms, digital scan forms, spreadsheets, and other database programs. Considerable care was taken to reduce transcription errors during the data upload process. However, most of the Kuskokwim Area ASL data in the AYK DBMS has not been reviewed for errors. As such, we acknowledge that some unknown level of data transcription errors, incorrect labeling, and erroneous data may exist in the database. ADF&G stock biologists, who regularly use the database, generally agree that fewer errors exist for data collected after 2000. Earlier data should be used with caution, and if a data quality concern exists, users are encouraged to contact agency staff for assistance.

The AYK DBMS provides project leaders with tools for archiving metadata. To date, the level of metadata available for database users is not sufficient. Kuskokwim Area ADF&G staff is working to update project descriptions, methods, and project year notes in the AYK DBMS. In the interim, users of the database should review annual project reports or consult ADF&G staff for information regarding data collection and limitations.

## **ACKNOWLEDGEMENTS**

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## **TABLES**

Table 1.–Projects and salmon species for which age, sex, and length data were collected in 2010 and 2011.

Project Type	Location	rkm	Salmon Species and Year							
			Chinook		Sockeye		Chum		Coho	
			2010	2011	2010	2011	2010	2011	2010	2011
Commercial Catch	W1A (Above Bethel)	- <sup>ab</sup>	X	X	X	X	X	X	X	X
	W1B (Below Bethel)	- <sup>ac</sup>	X	X	X	X	X	X	X	X
	W4 (Subdistrict 4)	- <sup>d</sup>	X	X	X	X	X	X	X	X
	W5 (Goodnews Bay Subdistrict)	- <sup>e</sup>	X	X	X	X	X	X	X	X
Subsistence Catch	Lower Kuskokwim River	- <sup>f</sup>	X	X						
Escapement	Goodnews River (Middle Fork)	- <sup>g</sup>	X	X	X	X	X	X	X	X
	Kanektok River	- <sup>h</sup>	X	X	X	X	X	X		
	Kwethluk River	216	X	X	X	X	X	X	X	X
	Tuluksak River	248	X	X	X	X	X	X	X	X
	Aniak River	323					X	X		
	George River	453	X	X			X	X	X	X
	Tatlawiksuk River	568	X	X			X	X	X	X
	Kogrukluk River	710	X	X	X	X	X	X	X	X
	Telaquana River	772			X	X				
	Takotna River	835	X	X			X	X	X	X
Test Fishery	W1A (Above Bethel)	- <sup>i</sup>		X						

Note: "X" designates that samples were collected. All escapement projects were weirs except Aniak River which used beach seines to apportion sonar counts. Harvest and test fisheries used gillnets of variable mesh size.

<sup>a</sup> District 1 is located in the lower Kuskokwim River and extends from the southernmost tip of Eek Island to the Bogus Creek, a distance of 203 rkm.

<sup>b</sup> Subdistrict 1-A (above Bethel) extends from the downstream end of Steamboat Slough (near Bethel) to Bogus Creek, a distance of 97 rkm.

<sup>c</sup> Subdistrict 1-B (below Bethel) extends from the southernmost tip of Eek Island to the downstream end of Steamboat Slough (near Bethel), a distance of 106 rkm.

<sup>d</sup> District W4 consists of Kuskokwim Bay between the mouth of Weelung Creek and the Arolik River. The Kanektok River flows in to District W4.

<sup>e</sup> District 5 consists of Goodnews Bay. The Goodnews River drains into District W5.

<sup>f</sup> The lower Kuskokwim river consists of all waters between the Kuskokwim Bay and the Village of Tuluksak and approximates District W1.

<sup>g</sup> Flows into Goodnews Bay.

<sup>h</sup> Flows into Kuskokwim Bay and District W4.

<sup>i</sup> The Bethel test fishery operates at approximately rkm 111 (5 rkm upriver from Bethel).

Table 2.—Reporting status and citations for salmon monitoring projects that collected ASL data from the Kuskokwim Area in 2010.

Project Type and Location	Report Status	Full or "In Prep" Citation <sup>a</sup>
Commercial Catch <sup>b</sup>		
W1A (Above Bethel)	No report <sup>c</sup>	
W1B (Below Bethel)	No report <sup>c</sup>	
W4 (Subdistrict 4)	No report <sup>c</sup>	
W5 (Goodnews Bay Subdistrict)	No report <sup>c</sup>	
Subsistence Catch		
Lower Kuskokwim River	In prep	Liller, Z. W., A. R. Brodersen, T. R. Hansen, D. B. Molyneaux, E. Patton, and G. Rocsicka. In prep. Age, sex, and length composition of Chinook salmon in the 2008–2011 Lower Kuskokwim River subsistence harvest. Alaska Department of Fish and Game, Fishery Data Series, Anchorage.
Escapement		
Goodnews River (Middle Fork)	Published	Elison, T. B. and D. V. Taylor. 2011. Goodnews River salmon monitoring and assessment, 2010. Alaska Department of Fish and Game, Fishery Data Series No. 11-68, Anchorage.
Kanektok River	Published	Elison, T. B. and D. V. Taylor. 2012 a. Kanektok River salmon monitoring and assessment, 2010. Alaska Department of Fish and Game, Fishery Data Series No. 12-24, Anchorage.
Kwethluk River	Published	Miller, S. J., and K. C. Harper. 2011. Abundance and run timing of adult Pacific salmon in the Kwethluk River, Yukon Delta National Wildlife Refuge, Alaska, 2010. U.S. Fish and Wildlife Service, Kenai Fish and Wildlife Field Office. Alaska Fisheries Data Series No. 2011-3, Kenai, Alaska.
Tuluksak River	Published	Miller, S. J., and K. C. Harper. 2011a. Abundance and run timing of adult Pacific salmon in the Tuluksak River, Yukon Delta National Wildlife Refuge, Alaska, 2010. U.S. Fish and Wildlife Service, Kenai Fish and Wildlife Field Office. Alaska Fisheries Data Series No. 2011-4, Kenai, Alaska.
Aniak River	In prep	McEwen, M. S. In prep. Sonar estimation of chum salmon passage in the Aniak River, 2010. Alaska Department of Fish and Game, Fishery Data Series, Anchorage.
George River	Published	Smith, M. L., and C. A. Shelden. 2011. George River salmon studies, 2010. Alaska Department of Fish and Game, Fishery Data Series No. 11-36, Anchorage.
Tatlawiksuk River	Published	Clark, J. N., J. M. Thalhauser, and C. A. Shelden. 2011. Tatlawiksuk River salmon studies, 2010. Alaska Department of Fish and Game, Fishery Data Series No. 11-47, Anchorage.
Kogruklu River	Published	Williams, D. L., and C. A. Shelden. 2011. Kogruklu River salmon studies, 2010. Alaska Department of Fish and Game, Fishery Data Series No. 11-49, Anchorage.
Telaquana River	No report <sup>c</sup>	
Takotna River	Published	Hansen, T. R., and C. A. Shelden. 2011. Takotna River salmon studies, 2010. Alaska Department of Fish and Game, Fishery Data Series No. 11-28, Anchorage.

*Note:* Summary tables are provided within this report but for more detailed information or source data, please see relevant project reports.

<sup>a</sup> In prep draft reports are on file ADF&G, Division of Commercial Fisheries, Anchorage.

<sup>b</sup> General details related to the collection of ASL data from commercial harvests can be found in annual management reports and earlier versions of the Kuskokwim Area ASL Catalog (e.g., Molyneaux et al. 2010).

<sup>c</sup> No annual report has been designated for documenting the methods used for collection of ASL data. Methods followed guidelines presented in earlier versions of the Kuskokwim Area ASL Catalog (e.g., Molyneaux et al. 2010).

Table 3.–Reporting status and citations for salmon monitoring projects that collected ASL data from the Kuskokwim Area in 2011.

Project Type and Location	Report Status	Full or "In Prep" Citation <sup>a</sup>
Commercial Catch <sup>b</sup>		
W1A (Above Bethel)	No report <sup>c</sup>	
W1B (Below Bethel)	No report <sup>c</sup>	
W4 (Subdistrict 4)	No report <sup>c</sup>	
W5 (Goodnews Bay Subdistrict)	No report <sup>c</sup>	
Subsistence Catch		
Lower Kuskokwim River	In prep	Liller , Z. W., A. R. Brodersen, T. R. Hansen, D. B. Molyneaux, E. Patton, and G. Rocsicka. In prep. Age, sex, and length composition of Chinook salmon in the 2008–2011 Lower Kuskokwim River subsistence harvest. Alaska Department of Fish and Game, Fishery Data Series, Anchorage.
Escapement		
Goodnews River (Middle Fork)	Published	Elison, T. B. and D. V. Taylor. 2012. Goodnews River salmon monitoring and assessment, 2011. Alaska Department of Fish and Game, Fishery Data Series No. 12-66, Anchorage.
Kanektok River	Published	Elison, T. B. and D. V. Taylor. 2012b. Kanektok River salmon monitoring and assessment, 2011. Alaska Department of Fish and Game, Fishery Data Series No. 12-64, Anchorage.
Kwethluk River	In prep	Miller, S. J., and K. C. Harper. 2012. Abundance and run timing of adult Pacific salmon in the Kwethluk River, Yukon Delta National Wildlife Refuge, Alaska, 2011. U.S. Fish and Wildlife Service, Kenai Fish and Wildlife Field Office. Alaska Fisheries Data Series No. 2012-3, Kenai, Alaska.
Tuluksak River	In prep	Miller, S. J., and K. C. Harper. 2012. Abundance and run timing of adult Pacific salmon in the Tuluksak River, Yukon Delta National Wildlife Refuge, Alaska, 2011. U.S. Fish and Wildlife Service, Kenai Fish and Wildlife Field Office. Alaska Fisheries Data Series No. 2012-2, Kenai, Alaska.
Aniak River	In prep	McEwen, M. S. In prep. Sonar estimation of chum salmon passage in the Aniak River, 2011. Alaska Department of Fish and Game, Fishery Data Series, Anchorage.
George River	Published	Clark, J. C., and B. Blain. 2012. George River salmon studies, 2011. Alaska Department of Fish and Game, Fishery Data Series No. 12-71, Anchorage.
Tatlawiksuk River	In prep	Robbins, L. and B. Blain. In prep. Tatlawiksuk River salmon studies, 2011. Alaska Department of Fish and Game, Fishery Data Series, Anchorage.
Kogruklu River	In prep	Hansen, T. R., and B. Blain. In prep. Kogruklu River salmon studies, 2011. Alaska Department of Fish and Game, Fishery Data Series, Anchorage.
Telaquana River	No report <sup>c</sup>	
Takotna River	Published	Williams, D. L., and B. Blain. 2013. Takotna River salmon studies, 2011. Alaska Department of Fish and Game, Fishery Data Series No. 13-01, Anchorage.
Test Fishery		
W1A (Above Bethel)	No report <sup>c</sup>	

*Note:* Summary tables are provided within this report but for more detailed information or source data, please see relevant project reports.

<sup>a</sup> In prep draft reports are on file ADF&G, Division of Commercial Fisheries, Anchorage.

<sup>b</sup> General details related to the collection of ASL data from commercial harvests can be found in annual management reports and earlier versions of the Kuskokwim Area ASL Catalog (e.g., Molyneaux et al. 2010).

<sup>c</sup> No annual report has been designated for documenting the methods used for collection of ASL data. Methods followed guidelines presented in earlier versions of the Kuskokwim Area ASL Catalog (e.g., Molyneaux et al. 2010).

Table 4.–Summary of Chinook salmon age, sex, and length sampling methods by project, 2010.

Project Type	Location	Capture Gear		Sample Design				Length Measurement		Sexing	
		Gillnet <sup>a</sup>	Weir	Daily <sup>b</sup>	Pulse <sup>c</sup>	Grab <sup>d</sup>	Opportunistic <sup>e</sup>	Caliper	Straight Edge <sup>f</sup>	External <sup>g</sup>	Internal <sup>h</sup>
Commercial Catch	W1A (Above Bethel)	X				X		X			X
	W1B (Below Bethel)	X				X		X			X
	W4 (Sub district 4)	X				X		X			X
	W5 (Goodnews Bay Sub district)	X				X		X			X
Subsistence Catch	Lower Kuskokwim River	X					X	X			X
Escapement	George River		X	X				X		X	
	Goodnews River (Middle Fork)		X	X				X		X	
	Kanektok River		X	X				X		X	
	Kogruklu River		X	X				X		X	
	Kwethluk River		X		X			X		X	
	Takotna River		X	X				X		X	
	Tatlawiksuk River		X	X				X		X	
	Tuluksak River		X		X			X		X	

Note: "X" designates the primary method used.

<sup>a</sup> Includes a range of mesh sizes. Commercial harvests were from ≤6 inch mesh. Mesh sizes for subsistence harvest was unrestricted. Test fish harvests from 5 3/8 inch and 8 inch mesh.

<sup>b</sup> Season sampling goal was stratified such that small numbers of samples were collected daily in proportion to historic run timing.

<sup>c</sup> Target sample goals were collected systematically over a short period of time throughout the duration of the migration (e.g., a sample of 200 fish from the early, middle, and late portion of the run).

<sup>d</sup> Target sample goals were collected opportunistically over a short period of time throughout the duration of the migration (e.g., a sample of 200 fish from the early, middle, and late portion of the run).

<sup>e</sup> Samples were collected by self-selected subsistence fishermen who sampled opportunistically from their own harvest or the harvest of others.

<sup>f</sup> Includes a variety of straight-edge measuring devices such as fish cradles, meter sticks, and fish measuring boards.

<sup>g</sup> Based on external sexual characteristics such as kype and tooth development, roundness of belly, and egg or milt secretion.

<sup>h</sup> Abdominal cavity was cut and visually inspected for gonads.

Table 5.–Summary of Chinook salmon age, sex, and length sampling methods by project, 2011.

Project Type	Location	Capture Gear		Sample Design					Length Measurement		Sexing	
		Gillnet <sup>a</sup>	Weir	Daily <sup>b</sup>	Pulse <sup>c</sup>	Grab <sup>d</sup>	Opportunistic <sup>e</sup>	Proportional <sup>f</sup>	Caliper	Straight Edge <sup>g</sup>	External <sup>h</sup>	Internal <sup>i</sup>
Commercial Catch	W1A (Above Bethel)	X				X			X			X
	W1B (Below Bethel)	X				X			X			X
	W4 (Subdistrict 4)	X				X			X			X
	W5 (Goodnews Bay Subdistrict)	X				X			X			X
Subsistence Catch Escapement	Lower Kuskokwim River	X					X			X		X
	George River		X	X						X	X	
	Goodnews River (Middle Fork)		X					X		X	X	
	Kanektok River		X					X		X	X	
	Kogruklu River		X	X						X	X	
	Kwethluk River		X		X					X	X	
	Takotna River		X	X						X	X	
	Tatlawiksuk River		X	X						X	X	
Test Fishing	Tuluksak River		X		X					X	X	
	W1A (Above Bethel)	X				X			X			X

Note: "X" designates the primary method used.

<sup>a</sup> Includes a range of mesh sizes. Commercial harvests were from ≤6 inch mesh. Mesh sizes for subsistence harvest was unrestricted. Test fish harvests from 5 3/8 inch and 8 inch mesh.

<sup>b</sup> Season sampling goal was stratified such that small numbers of samples were collected daily in proportion to historic run timing.

<sup>c</sup> Target sample goals were collected systematically over a short period of time throughout the duration of the migration (e.g., a sample of 200 fish from the early, middle, and late portion of the run).

<sup>d</sup> Target sample goals were collected opportunistically over a short period of time throughout the duration of the migration (e.g., a sample of 200 fish from the early, middle, and late portion of the run).

<sup>e</sup> Samples were collected by self-selected subsistence fishermen who sampled opportunistically from their own harvest or the harvest of others.

<sup>f</sup> Daily sample goals were based on a proportion of the previous days abundance. Proportion sampled was such that the season total achieved a minimum target sample goal.

<sup>g</sup> Includes a variety of straight-edge measuring devices such as fish cradles, meter sticks, and fish measuring boards.

<sup>h</sup> Based on external sexual characteristics such as kype and tooth development, roundness of belly, and egg or milt secretion.

<sup>i</sup> Abdominal cavity was cut and visually inspected for gonads.

Table 6.–Summary of chum salmon age, sex, and length sampling methods by project, 2010.

Project Type	Location	Capture Gear			Sampling Type			Length Measurement		Sexing	
		Gillnet <sup>a</sup>	Beach Seine	Weir	Daily <sup>b</sup>	Pulse <sup>c</sup>	Grab <sup>d</sup>	Caliper	Straight Edge <sup>e</sup>	External <sup>f</sup>	Internal <sup>g</sup>
Commercial Catch	W1A (Above Bethel)	X					X	X			X
	W1B (Below Bethel)	X					X	X			X
	W4 (Subdistrict 4)	X					X	X			X
	W5 (Goodnews Bay Subdistrict)	X					X	X			X
Escapement	Aniak River		X			X			X	X	
	George River			X		X			X	X	
	Goodnews River (Middle Fork)			X		X			X	X	
	Kanektok River			X		X			X	X	
	Kogruklu River			X		X			X	X	
	Kwethluk River			X		X			X	X	
	Takotna River			X		X			X	X	
	Tatlawiksuk River			X		X			X	X	
	Tuluksak River			X		X			X	X	

Note: "X" designates the primary method used.

<sup>a</sup> Includes a range of mesh sizes. Commercial harvests were from  $\leq 6$  inch mesh. Mesh sizes for subsistence harvest was unrestricted. Test fish harvests from 5 3/8 inch and 8 inch mesh.

<sup>b</sup> Season sampling goal was stratified such that small numbers of samples were collected daily in proportion to historic run timing.

<sup>c</sup> Target sample goals were collected systematically over a short period of time throughout the duration of the migration (e.g., a sample of 200 fish from the early, middle, and late portion of the run).

<sup>d</sup> Target sample goals were collected opportunistically over a short period of time throughout the duration of the migration (e.g., a sample of 200 fish from the early, middle, and late portion of the run).

<sup>e</sup> Includes a variety of straight-edge measuring devices such as fish cradles, meter sticks, and fish measuring boards.

<sup>f</sup> Based on external sexual characteristics such as kype and tooth development, roundness of belly, and egg or milt secretion.

<sup>g</sup> Abdominal cavity was cut and visually inspected for gonads.

Table 7.–Summary of chum salmon age, sex, and length sampling methods by project, 2011.

Project Type	Location	Capture Gear			Sampling Type				Length Measurement		Sexing	
		Gillnet <sup>a</sup>	Beach Seine	Weir	Daily <sup>b</sup>	Pulse <sup>c</sup>	Grab <sup>d</sup>	Proportional <sup>e</sup>	Caliper	Straight Edge <sup>f</sup>	External <sup>g</sup>	Internal <sup>h</sup>
Commercial Catch	W1A (Above Bethel)	X						X				X
	W1B (Below Bethel)	X						X				X
	W4 (Subdistrict 4)	X						X				X
	W5 (Goodnews Bay Subdistrict)	X						X				X
Escapement	Aniak River		X		X					X	X	
	George River			X	X					X	X	
	Goodnews River (Middle Fork)			X			X			X	X	
	Kanektok River			X			X			X	X	
	Kogruklu River			X	X					X	X	
	Kwethluk River			X	X					X	X	
	Takotna River			X	X					X	X	
	Tatlawiksuk River			X	X					X	X	
	Tuluksak River			X	X					X	X	

Note: "X" designates the primary method used.

<sup>a</sup> Includes a range of mesh sizes. Commercial harvests were from ≤6 inch mesh. Mesh sizes for subsistence harvest was unrestricted. Test fish harvests from 5 3/8 inch and 8 inch mesh.

<sup>b</sup> Season sampling goal was stratified such that small numbers of samples were collected daily in proportion to historic run timing.

<sup>c</sup> Target sample goals were collected systematically over a short period of time throughout the duration of the migration (e.g., a sample of 200 fish from the early, middle, and late portion of the run).

<sup>d</sup> Target sample goals were collected opportunistically over a short period of time throughout the duration of the migration (e.g., a sample of 200 fish from the early, middle, and late portion of the run).

<sup>e</sup> Daily sample goals were based on a proportion of the previous days abundance. Proportion sampled was such that the season total achieved a minimum target sample goal.

<sup>f</sup> Includes a variety of straight-edge measuring devices such as fish cradles, meter sticks, and fish measuring boards.

<sup>g</sup> Based on external sexual characteristics such as kype and tooth development, roundness of belly, and egg or milt secretion.

<sup>h</sup> Abdominal cavity was cut and visually inspected for gonads.

Table 8.–Summary of sockeye salmon age, sex, and length sampling methods by project, 2010.

Project Type	Location	Capture Gear		Sample Design			Length Measurement		Sexing	
		Gillnet <sup>a</sup>	Weir	Daily <sup>b</sup>	Pulse <sup>c</sup>	Grab <sup>d</sup>	Caliper	Straight Edge <sup>e</sup>	External <sup>f</sup>	Internal <sup>g</sup>
Commercial Catch	W1A (Above Bethel)	X				X	X			X
	W1B (Below Bethel)	X				X	X			X
	W4 (Subdistrict 4)	X				X	X			X
	W5 (Goodnews Bay Subdistrict)	X				X	X			X
Escapement	Goodnews River (Middle Fork)		X		X			X	X	
	Kanektok River		X		X			X	X	
	Kogruklu River		X	X				X	X	
	Kwethluk River		X		X			X	X	
	Telaquana River		X		X			X	X	
	Tulusak River		X		X			X	X	

Note: "X" designates the primary method used.

<sup>a</sup> Includes a range of mesh sizes. Commercial harvests were from ≤6 inch mesh. Mesh sizes for subsistence harvest was unrestricted. Test fish harvests from 5 3/8 inch and 8 inch mesh.

<sup>b</sup> Season sampling goal was stratified such that small numbers of samples were collected daily in proportion to historic run timing.

<sup>c</sup> Target sample goals were collected systematically over a short period of time throughout the duration of the migration (e.g., a sample of 200 fish from the early, middle, and late portion of the run).

<sup>d</sup> Target sample goals were collected opportunistically over a short period of time throughout the duration of the migration (e.g., a sample of 200 fish from the early, middle, and late portion of the run).

<sup>e</sup> Includes a variety of straight-edge measuring devices such as fish cradles, meter sticks, and fish measuring boards.

<sup>f</sup> Based on external sexual characteristics such as kype and tooth development, roundness of belly, and egg or milt secretion.

<sup>g</sup> Abdominal cavity was cut and visually inspected for gonads.

Table 9.–Summary of sockeye salmon age, sex, and length sampling methods by project, 2011.

Project Type	Location	Capture Gear		Sample Design				Length Measurement		Sexing	
		Gillnet <sup>a</sup>	Weir	Daily <sup>b</sup>	Pulse <sup>c</sup>	Grab <sup>d</sup>	Proportional <sup>e</sup>	Caliper	Straight Edge <sup>f</sup>	External <sup>g</sup>	Internal <sup>h</sup>
Commercial Catch	W1A (Above Bethel)	X				X		X			X
	W1B (Below Bethel)	X				X		X			X
	W4 (Subdistrict 4)	X				X		X			X
	W5 (Goodnews Bay Subdistrict)	X				X		X			X
Escapement	Goodnews River (Middle Fork)		X				X		X	X	
	Kanektok River		X				X		X	X	
	Kogruklu River		X	X					X	X	
	Kwethluk River		X		X				X	X	
	Telaquana River		X		X				X	X	
	Tulusak River		X		X				X	X	

Note: "X" designates the primary method used.

<sup>a</sup> Includes a range of mesh sizes. Commercial harvests were from ≤6 inch mesh. Mesh sizes for subsistence harvest was unrestricted. Test fish harvests from 5 3/8 inch and 8 inch mesh.

<sup>b</sup> Season sampling goal was stratified such that small numbers of samples were collected daily in proportion to historic run timing.

<sup>c</sup> Target sample goals were collected systematically over a short period of time throughout the duration of the migration (e.g., a sample of 200 fish from the early, middle, and late portion of the run).

<sup>d</sup> Target sample goals were collected opportunistically over a short period of time throughout the duration of the migration (e.g., a sample of 200 fish from the early, middle, and late portion of the run).

<sup>e</sup> Daily sample goals were based on a proportion of the previous days abundance. Proportion sampled was such that the season total achieved a minimum target sample goal.

<sup>f</sup> Includes a variety of straight-edge measuring devices such as fish cradles, meter sticks, and fish measuring boards.

<sup>g</sup> Based on external sexual characteristics such as kype and tooth development, roundness of belly, and egg or milt secretion.

<sup>h</sup> Abdominal cavity was cut and visually inspected for gonads.

Table 10.–Summary of coho salmon age, sex, and length sampling methods by project, 2010.

Project Type	Location	Capture Gear		Sample Design			Length Measurement		Sexing	
		Gillnet <sup>a</sup>	Weir	Daily <sup>b</sup>	Pulse <sup>c</sup>	Grab <sup>d</sup>	Caliper	Straight Edge <sup>e</sup>	External <sup>f</sup>	Internal <sup>g</sup>
Commercial Catch	W1A (Above Bethel)	X				X	X			X
	W1B (Below Bethel)	X				X	X			X
	W4 (Subdistrict 4)	X				X	X			X
	W5 (Goodnews Bay Subdistrict)	X				X	X			X
Escapement	George River		X	X				X	X	
	Goodnews River (Middle Fork)		X	X				X	X	
	Kogruklu River		X	X				X	X	
	Kwethluk River		X	X				X	X	
	Takotna River		X	X				X	X	
	Tatlawiksuk River		X	X				X	X	
	Tuluksak River		X	X				X	X	

Note: "X" designates the primary method used.

<sup>a</sup> Includes a range of mesh sizes. Commercial harvests were from ≤6 inch mesh. Mesh sizes for subsistence harvest was unrestricted. Test fish harvests from 5 3/8 inch and 8 inch mesh.

<sup>b</sup> Season sampling goal was stratified such that small numbers of samples were collected daily in proportion to historic run timing.

<sup>c</sup> Target sample goals were collected systematically over a short period of time throughout the duration of the migration (e.g., a sample of 200 fish from the early, middle, and late portion of the run).

<sup>d</sup> Target sample goals were collected opportunistically over a short period of time throughout the duration of the migration (e.g., a sample of 200 fish from the early, middle, and late portion of the run).

<sup>e</sup> Includes a variety of straight-edge measuring devices such as fish cradles, meter sticks, and fish measuring boards.

<sup>f</sup> Based on external sexual characteristics such as kype and tooth development, roundness of belly, and egg or milt secretion.

<sup>g</sup> Abdominal cavity was cut and visually inspected for gonads.

Table 11.–Summary of coho salmon age, sex, and length sampling methods by project, 2011.

Project Type	Location	Capture Gear		Sample Design				Length Measurement		Sexing	
		Gillnet <sup>a</sup>	Weir	Daily <sup>b</sup>	Pulse <sup>c</sup>	Grab <sup>d</sup>	Proportional <sup>e</sup>	Caliper	Straight Edge <sup>f</sup>	External <sup>g</sup>	Internal <sup>h</sup>
Commercial Catch	W1A (Above Bethel)	X				X		X			X
	W1B (Below Bethel)	X				X		X			X
	W4 (Subdistrict 4)	X				X		X			X
	W5 (Goodnews Bay Subdistrict)	X				X		X			X
Escapement	George River		X		X				X	X	
	Goodnews River (Middle Fork)		X				X		X	X	
	Kogrukluk River		X		X				X	X	
	Kwethluk River		X		X				X	X	
	Takotna River		X		X				X	X	
	Tatlawiksuk River		X		X				X	X	
	Tuluksak River		X		X				X	X	

Note: "X" designates the primary method used.

<sup>a</sup> Includes a range of mesh sizes. Commercial harvests were from ≤6 inch mesh. Mesh sizes for subsistence harvest was unrestricted. Test fish harvests from 5 3/8 inch and 8 inch mesh.

<sup>b</sup> Season sampling goal was stratified such that small numbers of samples were collected daily in proportion to historic run timing.

<sup>c</sup> Target sample goals were collected systematically over a short period of time throughout the duration of the migration (e.g., a sample of 200 fish from the early, middle, and late portion of the run).

<sup>d</sup> Target sample goals were collected opportunistically over a short period of time throughout the duration of the migration (e.g., a sample of 200 fish from the early, middle, and late portion of the run).

<sup>e</sup> Daily sample goals were based on a proportion of the previous days abundance. Proportion sampled was such that the season total achieved a minimum target sample goal.

<sup>f</sup> Includes a variety of straight-edge measuring devices such as fish cradles, meter sticks, and fish measuring boards.

<sup>g</sup> Based on external sexual characteristics such as kype and tooth development, roundness of belly, and egg or milt secretion.

<sup>h</sup> Abdominal cavity was cut and visually inspected for gonads.

Table 12.–Summary of Chinook salmon ASL samples collected from Kuskokwim Area projects in 2010.

Project Type	Location	Number Sampled	Number Aged	Number Sexed	Number Lengths
Commercial Catch	W1A (Above Bethel)	203	166	203	203
	W1B (Below Bethel)	149	124	149	149
	W4 (Subdistrict 4)	544	479	544	544
	W5 (Goodnews Bay Subdistrict)	697	623	695	697
Subsistence Catch	Lower Kuskokwim River	2,062	1,729	2,016	2,028
Escapement	George River	184	163	184	184
	Goodnews River (Middle Fork)	81	65	81	81
	Kanektok River	272	224	272	272
	Kogrukluk River	387	298	387	387
	Kwethluk River	428	334	428	428
	Takotna River	93	76	92	92
	Tatlawiksuk River	106	80	106	106
	Tuluksak River	114	85	114	114
	Totals		5,320	4,446	5,271

Table 13.–Summary of chum salmon ASL samples collected from Kuskokwim Area projects in 2010.

Project Type	Location	Number Sampled	Number Aged	Number Sexed	Number Lengths
Commercial Catch	W1A (Above Bethel)	698	690	698	698
	W1B (Below Bethel)	610	605	610	580
	W4 (Subdistrict 4)	1,192	1,184	1,182	1,182
	W5 (Goodnews Bay Subdistrict)	757	752	757	757
Escapement	Aniak River	615	553	615	615
	George River	1,112	1,067	1,112	1,112
	Goodnews River (Middle Fork)	202	189	202	202
	Kanektok River	679	663	679	679
	Kogrukluk River	884	746	884	884
	Kwethluk River	997	909	997	997
	Takotna River	1,055	1,024	1,053	1,051
	Tatlawiksuk River	1,140	1,085	1,137	1,140
	Tuluksak River	1,029	930	1,029	1,028
Totals		10,970	10,397	10,955	10,925

Table 14.–Summary of sockeye salmon ASL samples collected from Kuskokwim Area projects in 2010.

Project Type	Location	Number Sampled	Number Aged	Number Sexed	Number Lengths
Commercial Catch	W1A (Above Bethel)	556	485	546	556
	W1B (Below Bethel)	752	647	751	752
	W4 (Subdistrict 4)	942	845	942	942
	W5 (Goodnews Bay Subdistrict)	775	684	775	775
Escapement	Goodnews River (Middle Fork)	332	307	332	332
	Kanektok River	943	819	943	943
	Kogrukluk River <sup>a</sup>	185	144	185	185
	Kwethluk River	581	495	581	581
	Telaquana River <sup>a</sup>	764	413	764	764
	Tuluksak River	71	54	71	71
Totals		5,901	4,893	5,890	5,901

<sup>a</sup> Total age for sockeye salmon sampled in either the Kogrukluk or Telaquana Rivers are biased due to the high amount of scale reabsorption observed in the salt water annuli.

Table 15.–Summary of coho salmon ASL samples collected from Kuskokwim Area projects in 2010.

Project Type	Location	Number Sampled	Number Aged	Number Sexed	Number Lengths
Commercial Catch	W1A (Above Bethel)	460	425	460	460
	W4 (Subdistrict 4)	240	199	240	230
	W5 (Goodnews Bay Subdistrict)	685	600	685	685
Escapement	George River	600	559	600	600
	Goodnews River (Middle Fork)	529	438	529	529
	Kogrukluk River	606	549	606	606
	Kwethluk River	64	55	64	64
	Takotna River	600	517	598	598
	Tatlawiksuk River	410	372	410	410
	Tuluksak River	2	2	2	2
Totals		4,196	3,716	4,194	4,184

Table 16.–Summary of Chinook salmon ASL samples collected from Kuskokwim Area projects in 2011.

Project Type	Location	Number Sampled	Number Aged	Number Sexed	Number Lengths	
Commercial Catch	W1A (Above Bethel)	18	13	18	18	
	W4 (Subdistrict 4)	877	750	877	877	
	W5 (Subdistrict 5)	637	541	637	637	
Subsistence Catch	Lower Kuskokwim River	1,393	987	1,366	1,391	
Escapement	George River	223	179	209	223	
	Goodnews River	63	44	63	63	
	Kanektok River	186	159	186	186	
	Kogrukluk River	339	268	339	339	
	Kwethluk River	795	581	795	795	
	Takotna River	81	56	81	81	
	Tatlawiksuk River	169	123	169	169	
	Tuluksak River	30	19	30	30	
	Test Fishery	W1A (Above Bethel)	276	216	276	274
		Totals	5,087	3,936	5,046	5,083

Table 17.–Summary of chum salmon ASL samples collected from Kuskokwim Area projects in 2011.

Project Type	Location	Number Sampled	Number Aged	Number Sexed	Number Lengths
Commercial Catch	W1A (Above Bethel)	463	452	463	463
	W1B (Below Bethel)	472	451	472	472
	W4 (Subdistrict 4)	936	903	936	936
	W5 (Subdistrict 5)	690	644	690	690
Escapement	Aniak River	431	379	431	431
	George River	1,120	1,024	1,120	1,119
	Goodnews River (Middle Fork)	491	447	491	491
	Kanektok River	965	937	965	965
	Kogrukluk River	899	789	898	899
	Kwethluk River	1,020	910	1,020	1,020
	Takotna River	1,164	983	1,164	1,161
	Tatlawiksuk River	1,076	939	1,075	1,075
	Tuluksak River	755	672	755	755
	Totals	10,482	9,530	10,480	10,477

Table 18.–Summary of sockeye salmon ASL samples collected from Kuskokwim Area projects in 2011.

Project Type	Location	Number Sampled	Number Aged	Number Sexed	Number Lengths
Commercial Catch	W1A (Above Bethel)	489	420	489	489
	W1B (Below Bethel)	315	263	315	315
	W4 (Subdistrict 4)	700	602	700	700
	W5 (Subdistrict 5)	694	607	694	694
Escapement	Goodnews River (Middle Fork)	474	441	474	473
	Kanektok River	843	697	843	843
	Kogrukluk River <sup>a</sup>	134	126	134	134
	Kwethluk River	127	100	127	127
	Telaquana River <sup>a</sup>	494	291	494	494
	Tuluksak River	18	16	18	18
Totals		4,288	3,563	4,288	4,287

<sup>a</sup> Total age for sockeye salmon sampled in either the Kogrukluk or Telaquana Rivers are biased due to the high amount of scale reabsorption observed in the salt water annuli.

Table 19.–Summary of coho salmon ASL samples collected from Kuskokwim Area projects in 2011.

Project Type	Location	Number Sampled	Number Aged	Number Sexed	Number Lengths
Commercial Catch	W1A (Above Bethel)	200	182	200	200
	W1B (Below Bethel)	545	485	545	545
	W4 (Subdistrict 4)	540	482	540	540
	W5 (Subdistrict 5)	630	558	630	630
Escapement	George River	601	552	601	601
	Goodnews River (Middle Fork)	308	251	308	308
	Kogrukluk River	593	535	593	593
	Kwethluk River	648	574	648	648
	Takotna River	600	531	600	600
	Tatlawiksuk River	402	359	402	402
Tuluksak River	1	1	1	1	
Totals		5,068	4,510	5,068	5,068

Table 20.—Aging errors for Chinook salmon scale samples collected in the Kuskokwim Management Area, 2010.

Project Type	Location	Number Sampled	Number		Illegible <sup>a</sup>	Inverted <sup>b</sup>	Missing <sup>c</sup>	Reabsorbed <sup>d</sup>	Regenerated <sup>e</sup>	Wrong Species <sup>f</sup>
			Age Errors	% Age Errors						
Commercial Catch	W1A (Above Bethel)	203	37	18%	1		1		35	
	W1B (Below Bethel)	149	25	17%					25	
	W4 (Subdistrict 4)	544	69	13%					69	
	W5 (Goodnews Bay Subdistrict)	697	73	10%		1			72	
Subsistence Catch	Lower River	2,062	333	16%	13	5	4		309	2
Escapement	George River	184	21	11%				3	18	
	Goodnews River (Middle Fork)	81	16	20%	1	1			14	
	Kanektok River	272	48	18%	1			1	46	
	Kogrukluk River	387	89	23%	1			5	83	
	Kwethluk River	428	94	22%	4		2	17	71	
	Takotna River	93	17	18%			1	3	13	
	Tatlawiksuk River	106	26	25%	7			2	17	
Tuluksak River	114	29	25%					29		
		5,320	877	16%	28	7	8	31	801	2

Note: More than one age error may apply to a single scale.

<sup>a</sup> Illegible scales have debris or scratches on the gummed card or acetate that obscure the circuli.

<sup>b</sup> Inverted scales are mounted on the gummed card so that their circuli are facing the gummed paper, and an impression cannot be made.

<sup>c</sup> Missing scales were collected, but fell off of the gummed card before an impression was made.

<sup>d</sup> Reabsorbed scales have an excessive number of missing circuli on the outer edge.

<sup>e</sup> Regenerated scales have a missing number of circuli outside of the focus >10 mm in width.

<sup>f</sup> Wrong Species, are scales collected from another species other than what was labeled on the gummed card.

Table 21.—Aging errors for chum salmon scale samples collected in the Kuskokwim Management Area, 2010.

Project Type	Location	Number			Illegible <sup>a</sup>	Inverted <sup>b</sup>	Missing <sup>c</sup>	Not Preferred <sup>d</sup>	Reabsorbed <sup>e</sup>	Regenerated <sup>f</sup>	Wrong species <sup>g</sup>
		Number Sampled	Age Errors	% Age Errors							
Commercial Catch	W1A (Above Bethel)	698	7	1%				1		5	1
	W1B (Below Bethel)	610	5	1%	1					4	
	W4 (Subdistrict 4)	1,192	8	1%	2	1	1			3	1
	W5 (Goodnews Bay Subdistrict)	757	5	1%		2	1			2	
Escapement	Aniak River	615	62	10%	21		9			32	
	George River	1,112	45	4%	3	1	1		27	13	
	Goodnews River (Middle Fork)	202	14	7%		7	2			5	
	Kanektok River	679	16	2%		2	1			13	
	Kogruklu River	884	137	15%	1	1	1		93	41	
	Kwethluk River	997	88	9%	3	10	9	1	3	62	
	Takotna River	1,055	30	3%	1		13		1	15	
	Tatlawiksuk River	1,140	55	5%	1	6	11	1	1	35	
	Tuluksak River	1,029	99	10%	5	17	19		18	40	
			10,970	571	5%	38	47	69	2	143	270

Note: More than one age error may apply to a single scale.

<sup>a</sup> Illegible scales have debris or scratches on the gummed card or acetate that obscure the circuli.

<sup>b</sup> Inverted scales are mounted on the gummed card so that their circuli are facing the gummed paper, and an impression cannot be made.

<sup>c</sup> Missing scales were collected, but fell off of the gummed card before an impression was made.

<sup>d</sup> Not Preferred are scales were taken from outside of the preferred area (INPFC 1963) on the fish.

<sup>e</sup> Reabsorbed scales have an excessive number of missing circuli on the outer edge.

<sup>f</sup> Regenerated scales have a missing number of circuli outside of the focus >10 mm in width.

<sup>g</sup> Wrong Species, are scales collected from another species other than what was labeled on the gummed card.

Table 22.—Aging errors for sockeye salmon scale samples collected in the Kuskokwim Management Area, 2010.

Project Type	Location	Number Sampled	Number Age Errors	% Age Errors	Illegible <sup>a</sup>	Inverted <sup>b</sup>	Missing <sup>c</sup>	Reabsorbed <sup>d</sup>	Regenerated <sup>e</sup>	Wrong species <sup>f</sup>
Commercial Catch	W1A (Above Bethel)	556	71	13%	2		10	3	49	7
	W1B (Below Bethel)	752	109	14%	6	2	2	17	74	8
	W4 (Subdistrict 4)	942	97	10%	5				82	10
	W5 (Goodnews Bay Subdistrict)	775	91	12%	3		3	4	73	8
Escapement	Goodnews River (Middle Fork)	332	25	8%		1	2	2	19	1
	Kanektok River	943	124	13%	2	5		16	95	6
	Kogrukluk River	185	185	100%				185		
	Kwethluk River	581	87	15%	1		2	47	35	2
	Telaquana River <sup>g</sup>	429	429	100%	2			429		
	Tuluksak River	71	17	24%	2			4	11	
		5,566	1,235	22%	23	8	19	707	438	42

Note: More than one age error may apply to a single scale.

<sup>a</sup> Illegible scales have debris or scratches on the gummed card or acetate that obscure the circuli.

<sup>b</sup> Inverted scales are mounted on the gummed card so that their circuli are facing the gummed paper, and an impression cannot be made.

<sup>c</sup> Missing scales were collected, but fell off of the gummed card before an impression was made.

<sup>d</sup> Reabsorbed scales have an excessive number of missing circuli on the outer edge.

<sup>e</sup> Regenerated scales have a missing number of circuli outside of the focus >10 mm in width.

<sup>f</sup> Wrong Species, are scales collected from another species other than what was labeled on the gummed card.

<sup>g</sup> Paired sex-length data were collected from 764 sockeye salmon at the Telaquana River weir in 2010 and a subset of 429 fish were also sampled for age.

Table 23.—Aging errors for coho salmon scale samples collected in the Kuskokwim Management Area, 2010.

Project Type	Location	Number Sampled	Number Age Errors	% Age Errors	Illegible <sup>a</sup>	Missing <sup>b</sup>	Regenerated <sup>c</sup>
Commercial Catch	W1A (Above Bethel)	460	35	8%			35
	W4 (Subdistrict 4)	240	41	17%		20	21
	W5 (Goodnews Bay Subdistrict)	685	85	12%	3		82
Escapement	George River	600	41	7%			41
	Goodnews River (Middle Fork)	529	91	17%			91
	Kogrukluk River	606	57	9%	2		55
	Kwethluk River	64	9	14%			9
	Takotna River	600	83	14%		5	78
	Tatlawiksuk River	410	38	9%			38
	Tuluksak River	2	0	0%			
		4,196	480	11%	5	25	450

*Note:* More than one age error may apply to a single scale.

<sup>a</sup> Illegible scales have debris or scratches on the gummed card or acetate that obscure the circuli.

<sup>b</sup> Missing scales were collected, but fell off of the gummed card before an impression was made.

<sup>c</sup> Regenerated scales have a missing number of circuli outside of the focus >10 mm in width.

Table 24.—Aging errors for Chinook salmon scale samples collected in the Kuskokwim Management Area, 2011.

Project Type	Location	Number Sampled	Number Age Errors	% Age Errors	Illegible <sup>a</sup>	Inverted <sup>b</sup>	Missing <sup>c</sup>	Not Preferred <sup>d</sup>	Reabsorbed <sup>e</sup>	Regenerated <sup>f</sup>	Wrong Species <sup>g</sup>
Commercial Catch	W1A (Above Bethel)	18	5	28%						5	
	W4 (Subdistrict 4)	877	127	14%	5		1			121	
	W5 (Goodnews Bay Subdistrict)	637	96	15%	2					94	
Subsistence Catch	Lower River	1,393	406	29%	35	9	8			351	3
Escapement	George River	223	44	20%	2	1	7		1	33	
	Goodnews River (Middle Fork)	63	19	30%					1	18	
	Kanektok River	186	27	15%					4	23	
	Kogruklu River	339	71	21%			1		9	61	
	Kwethluk River	795	214	27%	18		11	2	37	144	2
	Takotna River	81	25	31%	1	1			5	17	1
	Tatlawiksuk River	169	46	27%	4				2	40	
	Tuluksak River	30	11	37%						11	
Test Fishing	W1A (Above Bethel)	276	60	22%	6		3			51	
		5,087	1,151	23%	73	11	31	2	59	969	6

Note: More than one age error may apply to a single scale.

<sup>a</sup> Illegible scales have debris or scratches on the gummed card or acetate that obscure the circuli.

<sup>b</sup> Inverted scales are mounted on the gummed card so that their circuli are facing the gummed paper, and an impression cannot be made.

<sup>c</sup> Missing scales were collected, but fell off of the gummed card before an impression was made.

<sup>d</sup> Not Preferred are scales were taken from outside of the Preferred area (INPFC 1963) on the fish.

<sup>e</sup> Reabsorbed scales have an excessive number of missing circuli on the outer edge.

<sup>f</sup> Regenerated scales have a missing number of circuli outside of the focus >10 mm in width.

<sup>g</sup> Wrong Species, are scales collected from another species other than what was labeled on the gummed card.

Table 25.—Aging errors for chum salmon scale samples collected in the Kuskokwim Management Area, 2011.

Project Type	Location	Number			Illegible <sup>a</sup>	Inverted <sup>b</sup>	Missing <sup>c</sup>	Not Preferred <sup>d</sup>	Reabsorbed <sup>e</sup>	Regenerated <sup>f</sup>	Wrong species <sup>g</sup>
		Number Sampled	Age Errors	% Age Errors							
Commercial Catch	W1A (Above Bethel)	463	11	2%	4	1				4	2
	W1B (Below Bethel)	472	21	4%		1				18	2
	W4 (Subdistrict 4)	936	33	4%	1	2	4			26	
	W5 (Goodnews Bay Subdistrict)	690	46	7%			3			42	1
Escapement	Aniak River	431	52	12%	7		1		19	25	
	George River	1,120	96	9%	4	4	8		23	57	
	Goodnews River (Middle Fork)	491	44	9%	2	19	2		2	19	
	Kanektok River	965	28	3%	9					19	
	Kogruklu River	899	110	12%	4		1		76	29	
	Kwethluk River	1,020	109	11%	2		10		27	69	1
	Takotna River	1,164	181	16%	4	1	4		137	35	
	Tatlawiksuk River	1,076	137	13%	6	3	1	2	88	37	
	Tuluksak River	755	83	11%	1	3	11	8	34	26	
			10,482	951	9%	44	34	45	10	406	406

Note: More than one age error may apply to a single scale.

<sup>a</sup> Illegible scales have debris or scratches on the gummed card or acetate that obscure the circuli.

<sup>b</sup> Inverted scales are mounted on the gummed card so that their circuli are facing the gummed paper, and an impression cannot be made.

<sup>c</sup> Missing scales were collected, but fell off of the gummed card before an impression was made.

<sup>d</sup> Not Preferred are scales were taken from outside of the Preferred area (INPFC 1963) on the fish.

<sup>e</sup> Reabsorbed scales have an excessive number of missing circuli on the outer edge.

<sup>f</sup> Regenerated scales have a missing number of circuli outside of the focus >10 mm in width.

<sup>g</sup> Wrong Species, are scales collected from another species other than what was labeled on the gummed card.

Table 26.—Aging errors for sockeye salmon scale samples collected in the Kuskokwim Management Area, 2011.

Project Type	Location	Number Sampled	Number Age Errors	% Age Errors	Illegible <sup>a</sup>	Inverted <sup>b</sup>	Missing <sup>c</sup>	Reabsorbed <sup>d</sup>	Regenerated <sup>e</sup>	Wrong species <sup>f</sup>
Commercial Catch	W1A (Above Bethel)	489	69	14%	1			10	52	6
	W1B (Below Bethel)	315	52	17%	6	2	4	7	25	8
	W4 (Subdistrict 4)	700	98	14%	2	5	10	1	75	5
	W5 (Goodnews Bay Subdistrict)	694	87	13%			1	7	76	3
Escapement	Goodnews River (Middle Fork)	474	33	7%	4		1	1	27	
	Kanektok River	843	146	17%		3	7	40	94	2
	Kogrukluk River	134	134	100%				134		
	Kwethluk River	127	27	21%				24	3	
	Telaquana River <sup>g</sup>	324	324	100%				324		
	Tuluksak River	18	2	11%				1	1	
			4,118	972	24%	13	10	23	549	353

Note: More than one age error may apply to a single scale.

<sup>a</sup> Illegible scales have debris or scratches on the gummed card or acetate that obscure the circuli.

<sup>b</sup> Inverted scales are mounted on the gummed card so that their circuli are facing the gummed paper, and an impression cannot be made.

<sup>c</sup> Missing scales were collected, but fell off of the gummed card before an impression was made.

<sup>d</sup> Reabsorbed scales have an excessive number of missing circuli on the outer edge.

<sup>e</sup> Regenerated scales have a missing number of circuli outside of the focus >10 mm in width.

<sup>f</sup> Wrong Species, are scales collected from another species other than what was labeled on the gummed card.

<sup>g</sup> Paired sex-length data were collected from 494 sockeye salmon at the Telaquana River weir in 2010 and a subset of 324 fish were also sampled for age.

Table 27.—Aging errors for coho salmon scale samples collected in the Kuskokwim Management Area, 2011.

Project Type	Location	Number Sampled	Number Age Errors	% Age Errors	Illegible <sup>a</sup>	Inverted <sup>b</sup>	Missing <sup>c</sup>	Regenerated <sup>d</sup>	Wrong species <sup>e</sup>
Commercial Catch	W1A (Above Bethel)	200	18	9%	2			15	1
	W1B (Below Bethel)	545	60	11%	4			55	1
	W4 (Subdistrict 4)	540	57	11%				57	
	W5 (Goodnews Bay Subdistrict)	630	72	11%	1	1		70	
Escapement	George River	601	49	8%			1	48	
	Goodnews River (Middle Fork)	308	57	19%				56	1
	Kogruklu River	593	58	10%	2			56	
	Kwethluk River	648	74	11%	6			67	1
	Takotna River	600	69	12%	1		1	64	3
	Tatlawiksuk River	402	43	11%	2		2	39	
	Tuluksak River	1	0	0%					
			5,068	557	11%	18	1	4	527

Note: More than one age error may apply to a single scale.

<sup>a</sup> Illegible scales have debris or scratches on the gummed card or acetate that obscure the circuli.

<sup>b</sup> Inverted scales are mounted on the gummed card so that their circuli are facing the gummed paper, and an impression cannot be made.

<sup>c</sup> Missing scales were collected, but fell off of the gummed card before an impression was made.

<sup>d</sup> Regenerated scales have a missing number of circuli outside of the focus >10 mm in width.

<sup>e</sup> Wrong Species, are scales collected from another species other than what was labeled on the gummed card.

Table 28.—Age-sex composition and mean length (mm) of Kuskokwim Area Chinook salmon harvested in the District W1 restricted mesh ( $\leq 6$  inch) commercial gillnet fishery, 2010.

Sample Dates	Sample Size		Brood Year (Age)										Total	
			2006		2005		2004		2003		2003			
			(1.2)	(1.3)	(1.4)	(1.5)	(2.4)	N	%	N	%	N	%	N
6/25, 6/28, 7/06, 7/09	290	Male	969	35.5	755	27.6	216	7.9	0	0.0	0	0.0	1,940	71.0
		Female	4	0.2	302	11.1	464	17.0	9	0.3	12	0.4	791	29.0
		Total	973	35.6	1,057	38.7	680	24.9	9	0.3	12	0.4	2,731	100.0
		95% C.I. (%)		$\pm 5.5$		$\pm 6.0$		$\pm 5.5$		$\pm 0.4$		$\pm 0.8$		
		Male Mean Length	550		677		774		-		-			
		SE	6		10		24		-		-			
		Range	442-651		483-876		575-1055		-		-			
		n	123		82		19		-		-			
		Female Mean Length	522		789		831		845		749			
		SE	-		12		8		3		-			
		Range	-		626-870		719-915		842-847		-			
		n	1		23		39		2		1			

*Note:* Samples were used to estimate total number and percent of harvest by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 29.—Age-sex composition and mean length (mm) of Kuskokwim Area Chinook salmon harvested in the District W1 restricted mesh ( $\leq 6$  inch) commercial gillnet fishery, 2011.

Sample Dates	Sample Size		Brood Year (Age)						Total	
			2007		2006		2005			
			(1.2)	(1.3)	(1.4)					N
7/9	13	Male	10	76.9	1	7.7	0	0.0	11	84.6
		Female	0	0.0	0	0.0	2	15.4	2	15.4
		Total	10	76.9	1	7.7	2	15.4	13	100.0
		Male Mean Length	550		597		-			
		SE	15		-		-			
		Range	482-620		597-597		-			
		n	10		1		-			
		Female Mean Length	-		-		731			
		SE	-		-		36.00			
		Range	-		-		695-767			
		n	-		-		2			

*Note:* Samples were not applied to the harvest. Statistics shown represent the number, mean length, and percent composition of the samples by age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 30.—Age-sex composition and mean length (mm) of Kuskokwim Area Chinook salmon harvested in the District W4 restricted mesh ( $\leq 6$  inch) commercial gillnet fishery, 2010.

Sample Dates	Sample Size		Brood Year (Age)										Total	
			2007		2006		2005		2004		2003			
			(1.1)	(1.2)	(1.3)	(1.4)	(1.5)	N	%	N	%	N	%	N
6/15, 6/25, 7/02	479	Male	292	2.0	3,292	22.6	5,355	36.8	1,476	10.1	0	0.0	10,416	71.6
		Female	0	0.0	9	0.1	1,964	13.5	2,086	14.3	80	0.5	4,139	28.4
		Total	292	2.0	3,301	22.7	7,320	50.3	3,562	24.5	80	0.5	14,555	100.0
		95% C.I. (%)		$\pm 1.4$		$\pm 4.3$		$\pm 6.1$		$\pm 5.4$		$\pm 1.1$		
		Male Mean Length	371		579		707		791		-			
SE	15		8		7		15		-					
Range	300-424		406-665		526-844		667-958		-					
n	9		128		197		39		-					
Female Mean Length	-		501		787		831		886					
SE	-		20		6		7		-					
Range	-		445-552		647-860		685-939		-					
n	-		6		48		51		1					

*Note:* Samples were used to estimate total number and percent of harvest by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 31.—Age-sex composition and mean length (mm) of Kuskokwim Area Chinook salmon harvested in the District W4 restricted mesh ( $\leq 6$  inch) commercial gillnet fishery, 2011.

Sample Dates	Sample Size		Brood Year (Age)																Total	
			2008		2007		2006		2006		2005		2005		2004		2004			
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	N	%	N	%	N	%	N	%	N	%
6/20, 6/22, 6/30, 7/06	749	Male	217	1.4	6,437	41.8	4,249	27.6	74	0.5	1,213	7.9	46	0.3	36	0.2	28	0.2	12,298	79.9
		Female	0	0.0	18	0.1	785	5.1	0	0.0	2,186	14.2	18	0.1	81	0.5	0	0.0	3,088	20.1
		Total	217	1.4	6,455	42.0	5,033	32.7	74	0.5	3,399	22.1	64	0.4	117	0.8	28	0.2	15,386	100.0
		95% C.I. (%)	±0.7		±2.6		±2.5		±0.3		±2.4		±0.3		±0.5		±0.1			
		Male Mean Length	382		539		678		648		784		638		768		936			
		SE	16.11		3		5		41		11		-		92		-			
		Range	330-580		399-843		504-884		559-675		473-1022		597-710		676-860		936-936			
		n	11		303		203		3		64		2		2		1			
		Female Mean Length	-		928		770		-		843		777		856		-			
		SE	-		-		12		-		4		-		26		-			
		Range	-		928-928		631-871		-		670-949		777-777		792-880		-			
		n	-		1		40		-		114		1		4		-			

Note: Samples were used to estimate total number and percent of harvest by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 32.—Age-sex composition and mean length (mm) of Kuskokwim Area Chinook salmon harvested in the District W5 (Goodnews Bay Subdistrict) restricted mesh ( $\leq 6$  inch) commercial gillnet fishery, 2010.

Sample Dates	Sample Size		Brood Year (Age)												Total	
			2007		2006		2005		2005		2004		2003			
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(1.5)	N	%	N	%	N	%	N	%
6/28, 7/01, 7/05	621	Male	39	2.2	566	32.3	638	36.4	3	0.2	89	5.1	4	0.2	1,339	76.4
		Female	0	0.0	0	0.0	252	14.4	0	0.0	150	8.5	11	0.6	413	23.6
		Total	39	2.2	566	32.3	890	50.8	3	0.2	239	13.7	15	0.9	1,752	100.0
		95% C.I. (%)		$\pm 1.2$		$\pm 3.5$		$\pm 3.7$		$\pm 0.2$		$\pm 2.7$		$\pm 0.6$		
		Male Mean Length		390		527		705		470		818		870		
		SE		7		4		6		32		12		-		
		Range		341-426		416-668		527-842		438-502		654-910		846-914		
		n		10		204		239		2		33		2		
		Female Mean Length		-		-		782		-		813		871		
		SE		-		-		5		-		7		3		
Range		-		-		649-930		-		728-908		803-892				
n		-		-		84		-		43		4				

*Note:* Samples were used to estimate total number and percent of harvest by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 33.—Age-sex composition and mean length (mm) of Kuskokwim Area Chinook salmon harvested in the District W5 (Goodnews Bay Subdistrict) restricted mesh ( $\leq 6$  inch) commercial gillnet fishery, 2011.

Sample Dates	Sample Size		Brood Year (Age)												Total	
			2008		2007		2006		2006		2005		2004			
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(1.5)	N	%	N	%	N	%	N	%
6/27, 6/30, 7/06, 7/07	540	Male	4	0.2	1,287	61.5	389	18.6	7	0.3	146	7.0	4	0.2	1,838	87.9
		Female	0	0.0	21	1.0	59	2.8	0	0.0	169	8.1	4	0.2	253	12.1
		Total	4	0.2	1,308	62.6	448	21.4	7	0.3	315	15.1	8	0.4	2,091	100.0
		95% C.I. (%)		$\pm 0.4$		$\pm 3.5$		$\pm 3.0$		$\pm 0.4$		$\pm 2.6$		$\pm 0.5$		
		Male Mean Length	383		539		657		538		837		864			
		SE	-		2		7		43		15		-			
		Range	383-383		399-638		531-833		495-581		619-992		864-864			
		n	1		337		99		2		36		1			
		Female Mean Length	-		553		767		-		831		805			
		SE	-		40		16		-		8		-			
		Range	-		485-658		573-843		-		716-977		805-805			
		n	-		5		15		-		43		1			

*Note:* Samples were used to estimate total number and percent of harvest by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 34.--Age-sex composition and mean length (mm) of Kuskokwim Area Chinook salmon harvested in the Bethel test fishery, 2011.

Sample Dates	Sample Size		Brood Year (Age)								Total	
			2007		2006		2005		2004			
			(1.2)	(1.3)	(1.4)	(1.5)	N	%	N	%	N	%
5.4" Mesh (6/1- 8/13)	114	Male	116	69.3	31	18.4	1	0.9	0	0.0	148	88.6
		Female	0	0.0	7	4.4	12	7.0	0	0.0	19	11.4
		Total	116	69.3	38	22.8	13	7.9	0	0.0	167	100.0
		Male Mean Length	560		664		795		-			
		SE	5		13		-		-			
		Range	469-666		515-736		795-795		-			
		n	77		21		1		-			
		Female Mean Length	-		775		828		-			
		SE	-		39		18		-			
		Range	-		655-882		750-892		-			
		n	-		5		8		-			
8.0" Mesh (6/1- 8/13)	102	Male	13	7.8	52	31.4	21	12.7	2	1.0	88	52.9
		Female	0	0.0	10	5.9	64	38.2	5	2.9	79	47.1
		Total	13	7.8	62	37.3	85	51.0	7	3.9	167	100.0
		Male Mean Length	581		730		789		816			
		SE	18		10		20		-			
		Range	512-647		646-846		673-891		816-816			
		n	8		32		13		1			
		Female Mean Length	-		825		854		869			
		SE	-		15		9		4			
		Range	-		761-862		756-955		865-877			
		n	-		6		39		3			
Total All Mesh Combined	216	Male	129	38.6	83	24.9	23	6.8	2	0.5	236	70.8
		Female	0	0.0	17	5.1	76	22.6	5	1.5	98	29.2
		Total	129	38.6	100	30.0	98	29.4	7	2.0	334	100.0
		Male Mean Length	570		697		792		816			
		SE	9		8		20		-			
		Range	469-666		515-846		673-891		816-816			
		n	85		53		14		1			
		Female Mean Length	-		800		841		869			
		SE	-		21		10		4			
		Range	-		655-882		750-955		865-877			

Note: Samples were collected in the Bethel test fishery. ASL Samples were applied to the harvest. Statistics shown represent the number, mean length, and percent composition of the samples by age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 35.—Age-sex composition and mean length (mm) of Kuskokwim Area Chinook salmon harvested in the lower Kuskokwim River unrestricted mesh subsistence gillnet fishery, 2010.

Sample Dates	Sample Size		Brood Year (Age)												Total	
			2007		2006		2005		2004		2004		2003			
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(1.5)	N	%	N	%	N	%	N	%
6/02- 07/11	1,693	Male	2	0.1	126	7.4	577	34.1	1	0.1	255	15.1	16	0.9	977	57.7
		Female	0	0.0	6	0.4	257	15.2	0	0.0	418	24.7	35	2.1	716	42.3
		Total	2	0.1	132	7.8	834	49.3	1	0.1	673	39.8	51	3.0	1,693	100.0
		Male Mean Length	407		582		735		650		788		839			
		SE	17		6		3		-		5		25			
		Range	390-424		426-840		431-980		650-650		360-1001		580-954			
		n	2		126		577		1		255		16			
		Female Mean Length	-		778		802		-		847		868			
		SE	-		51		4		-		3		10			
		Range	-		560-925		580-1041		-		625-1010		760-1060			
		n	-		6		257		-		418		35			

*Note:* Samples were collected by subsistence fishermen who sampled their own harvests or the harvests of others. ASL Samples were not applied to the harvest. Statistics shown represent the number, mean length, and percent composition of the samples by age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 36.—Age-sex composition and mean length (mm) of Kuskokwim Area Chinook salmon harvested in the lower Kuskokwim River unrestricted mesh subsistence gillnet fishery, 2011.

Sample Dates	Sample Size	Brood Year (Age)														Total		
		2007		2006		2005		2004		2004		2003		2003				
		(1.1)	(1.2)	(1.3)	(1.4)	(2.3)	(1.5)	(1.6)	N	%	N	%	N	%	N	%	N	%
06/02 - 07/17	962	Male	1	0.1	119	12.4	364	37.8	138	14.3	1	0.1	7	0.7	0	0.0	630	65.5
		Female	0	0.0	9	0.9	98	10.2	212	22.0	1	0.1	11	1.1	1	0.1	332	34.5
		Total	1	0.1	128	13.3	462	48.0	350	36.4	2	0.2	18	1.9	1	0.1	962	100.0
		Male Mean Length	335		570		724		800		750		824		-			
		SE	-		4		3		6		-		25		-			
		Range	335-335		395-700		310-950		510-980		750-750		687-880		-			
		n	1		119		364		138		1		7		-			
		Female Mean Length	-		579		778		837		764		871		844			
		SE	-		11		5		4		-		13		-			
		Range	-		530-620		670-885		330-990		764-764		810-960		-			
		n	-		9		98		212		1		11		1			

*Note:* Samples were collected by subsistence fishermen who sampled their own harvests or the harvests of others. ASL Samples were not applied to the harvest. Statistics shown represent the number, mean length, and percent composition of the samples by age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 37.--Age-sex composition and mean length (mm) of Kuskokwim Area chum salmon that escaped past the Middle Fork Goodnews River weir, 2010.

Sample Dates	Sample Size		Brood Year (Age)												Total	
			2007		2006		2005		2004		2004		2003			
			(1.1)	(1.2)	(1.3)	(1.4)	(2.3)	(1.5)	N	%	N	%	N	%	N	%
6/29, 7/01, 7/03-7/05, 7/07, 7/08, 7/14, 7/17, 7/20, 7/24, 7/26	65	Male	9	13.8	19	29.2	14	21.5	2	3.1	0	0.0	0	0.0	44	67.7
		Female	0	0.0	0	0.0	12	18.5	7	10.8	1	1.5	1	1.5	21	32.3
		Total	9	13.8	19	29.2	26	40.0	9	13.8	1	1.5	1	1.5	65	100.0
			Male Mean Length	387		532		722		792		-		-		
			SE	10		17		14		26		-		-		
			Range	333-427		386-677		635-786		766-818		-		-		
			n	9		19		14		2		-		-		
			Female Mean Length	-		-		784		853		800		862		
			SE	-		-		17		19		-		-		
			Range	-		-		690-875		775-911		-		-		
			n	-		-		12		7		1		1		

Note: Samples were not applied to the escapement. Statistics shown represent the number, mean length, and percent composition of the samples by age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 38.—Age-sex composition and mean length (mm) of Kuskokwim Area Chinook salmon that escaped past the Goodnews River (Middle Fork) weir, 2011.

Sample Dates	Sample Size	Brood Year (Age)						Total		
		2007		2006		2005				
		(1.2)	(1.3)	(1.4)	N	%	N	%	N	%
7/01, 7/07, 7/08, 7/10, 7/15-7/17, 7/26, 7/28, 7/29, 8/04, 8/06, 8/08, 8/12	44	Male	14	31.8	14	31.8	1	2.3	29	65.9
		Female	0	0.0	2	4.5	13	29.5	15	34.1
		Total	14	31.8	16	36.4	14	31.8	44	100.0
	Male Mean Length	578		717		678				
	SE	15		11		-				
	Range	485-676		659-797		678-678				
	n	14		14		1				
	Female Mean Length	-		721		835				
	SE	-		50		9				
	Range	-		671-770		783-896				
n	-		2		13					

*Note:* Samples were not applied to the escapement. Statistics shown represent the number, mean length, and percent composition of the samples by age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 39.—Age-sex composition and mean length (mm) of Kuskokwim Area Chinook salmon that escaped past the Kanektok River weir, 2010.

Sample Dates	Sample Size		Brood Year (Age)												Total	
			2007		2006		2005		2005		2004		2004			
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(1.5)	N	%	N	%	N	%	N	%
7/04, 7/05, 7/07, 7/09, 7/12, 7/13, 7/15-7/26	224	Male	50	0.9	2,043	35.2	1,947	33.6	21	0.4	365	6.3	0	0.0	4,425	76.3
		Female	0	0.0	0	0.0	602	10.4	0	0.0	741	12.8	31	0.5	1,374	23.7
		Total	50	0.9	2,043	35.2	2,549	44.0	21	0.4	1,106	19.1	31	0.5	5,799	100.0
		95% C.I. (%)		± 1.2		± 6.1		± 6.5		±0.7		±5.0		± 1.0		
		Male Mean Length		377		517		702		583		821		-		
SE		-		6		9		-		29		-				
Range		360-394		419-671		454-860		-		697-925		-				
n		2		81		74		1		13		-				
Female Mean Length		-		-		748		-		817		810				
SE		-		-		21		-		10		-				
Range		-		-		550-871		-		720-938		-				
n		-		-		23		-		29		1				

Note: Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 40.—Age-sex composition and mean length (mm) of Kuskokwim Area Chinook salmon that escaped past the Kanektok River weir, 2011.

Sample Dates	Sample Size		Brood Year (Age)						Total	
			2007		2006		2005			
			(1.2)	(1.3)	(1.4)	N	%	N	%	N
7/04-7/07, 7/09-7/11, 7/13, 7/14, 7/16-7/18, 7/22-7/30, 8/01-8/04	159	Male	2,607	51.8	1,217	24.2	100	2.0	3,924	78.0
		Female	374	7.4	186	3.7	548	10.9	1,108	22.0
		Total	2,981	59.2	1,403	27.9	648	12.9	5,032	100.0
		95% C.I. (%)		±7.8		±7.1		±5.1		
		Male Mean Length	523		676		867			
		SE	5		13		24			
		Range	439-649		511-877		838-917			
		n	83		37		3			
		Female Mean Length	544		769		865			
		SE	21		21		14			
Range	434-598		710-828		782-938					
n	11		6		19					

*Note:* Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 41.—Age-sex composition and mean length (mm) of Kuskokwim Area Chinook salmon that escaped past the Kwethluk River weir, 2010.

Sample Dates	Sample Size		Brood Year (Age)								Total	
			2006		2005		2004		2005			
			(1.2)	(1.3)	(1.4)	(1.5)	N	%	N	%	N	%
6/28, 6/29, 7/01- 7/04, 7/06-7/28, 7/30	334	Male	244	14.4	480	28.4	116.9	6.9	0	0.0	841	49.7
		Female	41	2.4	253	15.0	489.9	28.9	68	4.0	852	50.3
		Total	284	16.8	734	43.3	606.8	35.8	68	4.0	1,693	100.0
		95% C.I. (%)		±3.6		±4.8		±4.6		±1.9		
		Male Mean Length	563		739		791		-			
		SE	10		7		12		-			
		Range	440-735		545-890		620-895		-			
		n	45		93		22		-			
		Female Mean Length	563		770		847		883			
		SE	37		11		9		9			
		Range	445-865		525-900		695-1070		770-930			
		n	7		50		103		14			

*Note:* Kwethluk weir is operated by USFWS. Summary was produced by ADF&G and may differ from estimates reported by USFWS. Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 42.—Age-sex composition and mean length (mm) of Kuskokwim Area Chinook salmon that escaped past the Kwethluk River weir, 2011.

Sample Dates	Sample Size		Brood Year (Age)												Total	
			2007		2006		2006		2005		2005		2004			
			1.2		1.3		2.2		1.4		2.3		1.5		N	%
7/05, 7/06, 7/09, 7/10, 7/11, 7/17, 7/18, 7/24, 7/25, 7/26, 7/27, 7/28, 7/31, 8/07	582	Male	1,139	27.9	928	22.8	8	0.2	599	14.7	6	0.2	6	0.2	2,687	65.9
		Female	13	0.3	126	3.1	0	0.0	1,180	28.9	6	0.2	67	1.6	1,392	34.1
		Total	1,151	28.2	1,054	25.8	8	0.2	1,780	43.6	13	0.3	73	1.8	4,079	100.0
		95% C.I. (%)		±3.4		±3.3		±0.3		±3.7		±0.4		±1.0		
		Male Mean Length	576		688		530		815		735		995			
		SE	4		6		-		11		-		-			
		Range	400-860		530-890		530-530		560-1005		735-735		995-995			
		n	164		129		1		84		1		1			
		Female Mean Length	650		794		-		873		820		897			
		SE	35		9		-		5		-		8			
	Range	615-685		740-850		-		740-980		820-820		825-945				
	n	2		18		-		171		1		10				

Note: The Kwethluk weir is operated by USFWS. Summary was produced by ADF&G and may differ from estimates reported by USFWS. Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 43.—Age-sex composition and mean length (mm) of Kuskokwim Area Chinook salmon that escaped past the Tuluksak River weir, 2010.

Sample Dates	Sample Size		Brood Year (Age)								Total	
			2006		2005		2004		2003			
			1.2		1.3		1.4		1.5		N	%
7/05-7/21, 7/25	85	Male	115	48.2	51	21.2	3	1.2	0	0.0	169	70.6
		Female	11	4.7	34	14.1	22	9.4	3	1.2	70	29.4
		Total	127	52.9	84	35.3	25	10.6	3	1.2	239	100.0
		95% C.I. (%)		±8.6		±8.2		±5.3		±1.9		
		Male Mean Length	540		682		760		-			
SE	8		21		-		-					
Range	420-657		571-900		-		-					
n	41		18		1		-					
		Female Mean Length	577		749		838		855			
		SE	21		19		17		-			
		Range	516-615		651-889		781-920		-			
		n	4		12		8		1			

*Note:* The Tuluksak River weir is operated by USFWS. Summary was produced by ADF&G and may differ from estimates reported by USFWS. Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 44.—Age-sex composition and mean length (mm) of Kuskokwim Area Chinook salmon that escaped past the Tuluksak River weir, 2011.

Sample Dates	Sample Size		Brood Year (Age)						Total	
			2007		2006		2005			
			(1.2)	(1.3)	(1.4)					N
7/03, 7/04, 7/14, 7/15, 7/17, 7/18, 7/19, 7/24, 8/01	19	Male	3	15.8	6	31.6	4	21.1	13	68.4
		Female	1	5.3	1	5.3	4	21.1	6	31.6
		Subtotal	4	21.1	7	36.8	8	42.1	19	100.0
		95% C.I. (%)		±18.2		±21.5		±22.1		
			Male Mean Length	554		711		838		
			SE	14		44		60		
			Range	527-576		622-910		700-990		
			n	3		6		4		
			Female Mean Length	476		770		888		
			SE	-		-		45		
		Range	476-476		770-770		780-994			
		n	1		1		4			

*Note:* The Tuluksak weir is operated by USFWS. Summary was produced by ADF&G and may differ from estimates reported by USFWS. Samples were not applied to the escapement. Statistics shown represent the number, mean length, and percent composition of the samples by age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 45.—Age-sex composition and mean length (mm) of Kuskokwim Area Chinook salmon that escaped past the George River weir, 2010.

Sample Dates	Sample Size		Brood Year (Age)										Total	
			2007		2006		2005		2004		2003			
			(1.1)	(1.2)	(1.3)	(1.4)	(1.5)	N	%	N	%	N	%	N
6/26, 6/29-7/1, 7/4-7/11, 7/13- 7/19, 7/21, 7/22, 7/24- 7/27	163	Male	16	1.1	538	35.8	326	21.7	141	9.4	20	1.3	1,041	69.4
		Female	0	0.0	0	0.0	92	6.1	307	20.5	60	4.0	459	30.6
		Total	16	1.1	538	35.8	418	27.9	449	29.9	79	5.3	1,500	100.0
		95% C.I. (%)		±1.4		± 6.4		± 6.6		± 6.7		±3.6		
		Male Mean Length		415		509		633		737		919		
		SE		-		11		13		26		-		
		Range		380-447		367-667		497-876		488-914		892-942		
		n		2		63		36		15		2		
		Female Mean Length		-		-		770		826		869		
		SE		-		-		16		13		13		
Range		-		-		624-823		665-935		826-892				
n		-		-		10		30		5				

Note: Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 46.—Age-sex composition and mean length (mm) of Kuskokwim Area Chinook salmon that escaped past the George River weir, 2011.

Sample Dates	Sample Size		Brood Year (Age)														Total	
			2008		2007		2006		2005		2005		2004		2004			
			(1.1)	(1.2)	(1.3)	(1.4)	(2.3)	(1.5)	(2.4)	N	%	N	%	N	%	N	%	N
6/28, 7/01-7/12, 7/14, 7/17-7/26, 7/28-8/02	167	Male	18	1.2	517	32.9	329	20.9	98	6.2	7	0.4	13	0.8	0	0.0	982	62.5
		Female	0	0.0	35	2.2	198	12.6	337	21.4	0	0.0	13	0.8	7	0.4	589	37.5
		Total	18	1.2	552	35.2	527	33.5	434	27.7	7	0.4	26	1.7	7	0.4	1,571	100.0
		95% C.I. (%)		±1.6		±7.1		±7.1		±6.2		±0.8		±1.5		±0.8		
		Male Mean																
		Length		387		530		691		773		670		856		-		
		SE		-		7		11		24		-		60		-		
		Range		368-430		433-635		568-823		480-848		670-670		796-915		0-0		
		n		2		50		33		11		1		2		-		
		Female Mean																
Length		-		582		740		825		-		805		829				
SE		-		18		14		13		-		46		-				
Range		-		546-604		613-863		733-935		-		759-850		829-829				
n		-		3		20		42		-		2		1				

Note: Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 47.—Age-sex composition and mean length (mm) of Kuskokwim Area Chinook salmon that escaped past the Tatlawiksuk River weir, 2010.

Sample Dates	Sample Size	Brood Year (Age)												Total		
		2007		2006		2005		2004		2003		2003				
		(1.1)	(1.2)	(1.3)	(1.4)	(1.5)	(2.4)	N	%	N	%	N	%	N	%	
7/3 - 7/21, 7/26-7/30	80	Male	6	1.0	167	29.4	149	26.3	22	3.9	0	0.0	0	0.0	344	60.6
		Female	0	0.0	0	0.0	96	16.9	110	19.4	12	2.0	6	1.1	223	39.4
		Total	6	1.0	167	29.4	245	43.2	132	23.3	12	2.0	6	1.1	567	100.0
		95% C.I. (%)	±1.8		±10.0		±10.6		±8.3		±2.6		±1.9			
		Male Mean Length	368		578		685		796		-		-			
		SE	-		7		12		-		-		-			
		Range	-		494-645		597-793		718-925		-		-			
		n	1		23		18		3		-		-			
		Female Mean Length	-		-		783		816		807		806			
		SE	-		-		11		15		-		-			
Range	-		-		644-852		698-939		764-841		-					
n	-		-		14		18		2		1					

Note: Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 48.—Age-sex composition and mean length (mm) of Kuskokwim Area Chinook salmon that escaped past the Tatlawiksuk River weir, 2011.

Sample Dates	Sample Size		Brood Year (Age)										Total	
			2007		2006		2005		2004		2004			
			(1.2)	(1.3)	(1.4)	(1.5)	(2.4)	N	%	N	%	N	%	
7/1, 7/3 - 7/7, 7/9 - 7/13, 7/15, 7/17, 7/18, 7/20, 7/22, 7/24	123	Male	469	46.3	181	17.9	99	9.8	0	0.0	8	0.8	757	74.8
		Female	0	0.0	123	12.2	115	11.4	16	1.6	0	0.0	255	25.2
		Total	469	46.3	304	30.1	214	21.1	16	1.6	8	0.8	1,012	100.0
		95% C.I. (%)		±8.4		±7.8		±7.0		±2.3		±1.5		
		Male Mean Length	589		668		736		-		710			
SE	6		13		20		-		-					
Range	497-679		594-841		667-879		-		710-710					
n	57		22		12		-		1					
Female Mean Length	-		727		782		893		-					
SE	-		18		23		3		-					
Range	-		590-835		628-921		890-896		-					
n	-		15		14		2		-					

*Note:* Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 49.—Age-sex composition and mean length (mm) of Kuskokwim Area Chinook salmon that escaped past the Kogrukuk River weir, 2010.

Sample Dates	Sample Size		Brood Year (Age)								Total	
			2006		2005		2004		2003			
			(1.2)		(1.3)		(1.4)		(1.5)		N	%
7/05-7/17, 7/18-7/129	298	Male	2,504	44.0	1,314	23.1	356	6.3	24	0.4	4,198	73.8
		Female	0	0.0	327	5.7	1,103	19.4	62	1.1	1,492	26.2
		Total	2,504	44.0	1,641	28.8	1,459	25.6	86	1.5	5,690	100.0
		Male Mean Length	551		704		773		878			
		SE	5		10		23		-			
		Range	413-700		516-864		546-917		-			
		n	139		69		18		1			
		Female Mean Length	-		819		856		873			
		SE	-		14		10		28			
		Range	-		669-904		648-969		844-899			
		n	-		16		52		3			

*Note:* Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 50.—Age-sex composition and mean length (mm) of Kuskokwim Area Chinook salmon that escaped past the Kogruklu River weir, 2011.

Sample Dates	Sample Size		Brood Year (Age)										Total	
			2007		2006		2006		2005		2005			
			(1.2)		(1.3)		(2.2)		(1.4)		(2.3)		N	%
7/01-7/12, 7/14-7/18, 7/20-8/02	268	Male	3,254	47.2	1,822	26.4	22	0.3	385	5.6	22	0.3	5,506	79.9
		Female	0	0.0	424	6.2	0	0.0	962	14.0	0	0.0	1,385	20.1
		Total	3,254	47.2	2,246	32.6	22	0.3	1,347	19.5	22	0.3	6,891	100.0
		95% C.I. (%)		±5.8		±5.4		±0.6		±4.7		±0.6		
		Male Mean Length	551		720		620		827		691			
		SE	4		9		-		28		-			
		Range	445-682		591-876		620-620		680-1006		691-691			
		n	123		75		1		16		1			
		Female Mean Length	-		816		-		861		-			
		SE	-		9		-		9		-			
		Range	-		717-869		-		760-974		-			
		n	-		16		-		36		-			

Note: Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 51.—Age-sex composition and mean length (mm) of Kuskokwim Area Chinook salmon that escaped past the Takotna River weir, 2010.

Sample Dates	Sample Size		Brood Year (Age)										Total	
			2007		2007		2006		2006		2005			
			(1.1)	(1.1)	(1.2)	(1.2)	(1.3)	(1.3)	(2.2)	(2.2)	(1.4)	(1.4)	N	%
7/03-7/04,	76	Male	1	1.7	50	65.5	11	14.7	1	1.2	2	2.6	65	85.7
7/06-7/15,		Female	1	1.3	3	3.6	1	1.3	0	0.0	6	8.1	11	14.3
7/17-7/19,		Total	2	3.0	52	69.1	12	16.0	1	1.2	8	10.8	76	100.0
7/21-7/23,		Male Mean Length	374		538		678		496		778			
7/25, 8/01,		SE	-		6		12		-		28			
8/03-8/04,		Range	-		455-633		592-804		-		750-805			
8/07, 8/12-8/14		n	1		50		11		1		2			
		Female Mean Length	387		541		594		-		858			
		SE	-		7		-		-		23			
		Range	-		527-549		-		-		801-910			
		n	1		3		1		-		6			

Note: Samples were not applied to the escapement. Statistics shown represent the number, mean length, and percent composition of the samples by age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 52.—Age-sex composition and mean length (mm) of Kuskokwim Area Chinook salmon that escaped past the Takotna River weir, 2011.

Sample Dates	Sample Size		Brood Year (Age)						Total	
			2007		2006		2005			
			(1.2)		(1.3)		(1.4)		N	%
7/10-7/15, 7/19-8/01	56	Male	50	34.1	41	27.6	6	4.3	98	65.9
		Female	11	7.1	20	13.4	20	13.4	50	34.1
		Total	61	41.4	61	40.9	26	17.7	148	100.0
		95% C.I. (%)		±9.7		±10.3		±8.3		
		Male Mean Length	577		695		764			
		SE	17		11		36			
		Range	501-692		603-771		728-800			
		n	21		14		2			
		Female Mean Length	495		754		818			
		SE	16		19		34			
		Range	480-565		640-814		746-925			
		n	5		7		7			

*Note:* Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 53.—Age-sex composition and mean length (mm) of Kuskokwim Area chum salmon harvested in the District W1A restricted mesh ( $\leq 6$  inch) commercial gillnet fishery, 2010.

Sample Dates	Sample Size		Brood Year (Age)								Total	
			2007		2006		2005		2004			
			(0.2)		(0.3)		(0.4)		(0.5)		N	%
6/25, 6/28, 7/06, 7/14, 7/21, 7/26	1,265	Male	1,243	1.3	37,738	40.5	12,060	12.9	434	0.5	51,474	55.3
		Female	1,328	1.4	29,910	32.1	9,842	10.6	594	0.6	41,674	44.7
		Total	2,571	2.8	67,648	72.6	21,901	23.5	1,028	1.1	93,148	100.0
		95% C.I. (%)		$\pm 0.9$		$\pm 2.8$		$\pm 2.7$		$\pm 0.7$		
		Male Mean Length	524		555		576		566			
SE	13		1		3		8					
Range	501-560		467-640		498-661		549-590					
n	22		510		176		6					
Female Mean Length	521		541		551		554					
SE	11		1		2		7					
Range	460-562		463-606		478-602		539-572					
n	21		399		124		7					

*Note:* Samples were used to estimate total number and percent of harvest by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 54.—Age-sex composition and mean length (mm) of Kuskokwim Area chum salmon harvested in the District W1A restricted mesh ( $\leq 6$  inch) commercial gillnet fishery, 2011.

Sample Dates	Sample Size		Brood Year (Age)								Total	
			2008		2007		2006		2005			
			(0.2)		(0.3)		(0.4)		(0.5)		N	%
7/07, 7/11, 7/13, 7/18	903	Male	131	0.1	43,500	36.8	22,929	19.4	655	0.6	67,216	56.8
		Female	262	0.2	32,101	27.1	18,475	15.6	262	0.2	51,100	43.2
		Total	393	0.3	75,602	63.9	41,404	35.0	917	0.8	118,316	100.0
		95% C.I. (%)		$\pm 0.4$		$\pm 3.1$		$\pm 3.1$		$\pm 0.6$		
		Male Mean Length	548		558		564		566			
		SE	-		1		2		11			
		Range	548-548		489-624		500-641		525-590			
		n	1		332		175		5			
		Female Mean Length	506		542		546		554			
		SE	10		1		2		18			
		Range	496-515		477-591		486-603		536-572			
		n	2		245		141		2			

*Note:* Samples were used to estimate total number and percent of harvest by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 55.—Age-sex composition and mean length (mm) of Kuskokwim Area chum salmon harvested in the District W4 (Subdistrict 4) restricted mesh ( $\leq 6$  inch) commercial gillnet fishery, 2010.

Sample Dates	Sample Size		Brood Year (Age)								Total	
			2007		2006		2005		2004			
			(0.2)		(0.3)		(0.4)		(0.5)		N	%
6/25, 7/07, 7/09, 7/12, 7/19	1,174	Male	423	0.4	36,517	34.3	18,830	17.7	812	0.8	56,582	53.1
		Female	654	0.6	34,699	32.5	14,248	13.4	427	0.4	50,028	46.9
		Total	1,078	1.0	71,215	66.8	33,078	31.0	1,239	1.2	106,610	100.0
		95% C.I. (%)		$\pm 0.5$		$\pm 2.7$		$\pm 2.6$		$\pm 0.6$		
		Male Mean Length	552		572		587		603			
SE	18		1		2		7					
Range	504-594		488-660		518-661		547-635					
n	5		404		194		9					
Female Mean Length	543		551		563		552					
SE	14		1		2		9					
Range	506-582		485-608		509-628		542-583					
n	8		395		155		4					

*Note:* Samples were used to estimate total number and percent of harvest by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 56.—Age-sex composition and mean length (mm) of Kuskokwim Area chum salmon harvested in the District W4 (Subdistrict 4) restricted mesh ( $\leq 6$  inch) commercial gillnet fishery, 2011.

Sample Dates	Sample Size		Brood Year (Age)								Total	
			2008		2007		2006		2005			
			(0.2)		(0.3)		(0.4)		(0.5)		N	%
6/20, 6/22, 6/30, 7/04, 7/08, 7/13	903	Male	835	0.9	28,693	30.6	16,539	17.6	581	0.6	46,647	49.8
		Female	653	0.7	28,654	30.6	17,455	18.6	351	0.4	47,113	50.2
		Total	1,488	1.6	57,347	61.2	33,994	36.3	932	1.0	93,760	100.0
		95% C.I. (%)		$\pm 1.2$		$\pm 4.0$		$\pm 3.9$		$\pm 0.7$		
		Male Mean Length	517		575		588		589			
		SE	7		2		3		21			
		Range	510-535		512-654		518-670		550-642			
		n	4		227		231		18			
		Female Mean Length	534		545		555		546			
		SE	7		2		2		-			
		Range	523-546		480-604		490-636		534-612			
		n	4		212		204		3			

*Note:* Samples were used to estimate total number and percent of harvest by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 57.—Age-sex composition and mean length (mm) of Kuskokwim Area chum salmon harvested in the District W5 (Goodnews Bay Subdistrict) restricted mesh ( $\leq 6$  inch) commercial gillnet fishery, 2010.

Sample Dates	Sample Size		Brood Year (Age)								Total	
			2007		2006		2005		2004			
			(0.2)		(0.3)		(0.4)		(0.5)		N	%
6/25, 6/28, 7/06, 7/14, 7/21, 7/26	1,265	Male	1,243	1.3	37,738	40.5	12,060	12.9	434	0.5	51,474	55.3
		Female	1,328	1.4	29,910	32.1	9,842	10.6	594	0.6	41,674	44.7
		Total	2,571	2.8	67,648	72.6	21,901	23.5	1,028	1.1	93,148	100.0
		95% C.I. (%)		$\pm 0.9$		$\pm 2.8$		$\pm 2.7$		$\pm 0.7$		
		Male Mean Length	524		555		576		566			
SE	13		1		3		8					
Range	501-560		467-640		498-661		549-590					
n	22		510		176		6					
Female Mean Length	521		541		551		554					
SE	11		1		2		7					
Range	460-562		463-606		478-602		539-572					
n	21		399		124		7					

*Note:* Samples were used to estimate total number and percent of harvest by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 58.—Age-sex composition and mean length (mm) of Kuskokwim Area chum salmon harvested in the District W5 (Goodnews Bay Subdistrict) restricted mesh ( $\leq 6$  inch) commercial gillnet fishery, 2011.

Sample Dates	Sample Size		Brood Year (Age)								Total	
			2008		2007		2006		2005			
			(0.2)		(0.3)		(0.4)		(0.5)		N	%
6/27, 6/30, 7/07, 7/13	644	Male	23	0.2	3,843	29.1	4,831	36.6	133	1.0	8,830	66.9
		Female	0	0.0	1,916	14.5	2,444	18.5	0	0.0	4,360	33.1
		Total	23	0.2	5,759	43.7	7,275	55.2	133	1.0	13,190	100.0
		95% C.I. (%)		$\pm 0.3$		$\pm 3.7$		$\pm 3.7$		$\pm 0.7$		
		Male Mean Length		495		567		577		585		
	SE		-		2		2		7			
	Range		495-495		504-637		504-665		567-609			
	n		1		182		248		7			
	Female Mean Length		-		554		555		-			
	SE		-		3		2		-			
	Range		-		499-608		495-609		-			
	n		-		87		119		-			

*Note:* Samples were used to estimate total number and percent of harvest by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 59.—Age-sex composition and mean length (mm) of Kuskokwim Area chum salmon that escaped past the Goodnews River (Middle Fork) weir, 2010.

Sample Dates	Sample Size		Brood Year (Age)								Total	
			2007		2006		2005		2004			
			(0.2)		(0.3)		(0.4)		(0.5)		N	%
7/07, 7/11, 7/14, 7/17	189	Male	374	1.4	7,259	27.2	2,933	11.0	187	0.7	10,754	40.3
		Female	187	0.7	12,622	47.3	3,124	11.7	0	0.0	15,933	59.7
		Total	562	2.1	19,881	74.5	6,057	22.7	187	0.7	26,687	100.0
		95% C.I. (%)		± 2.0		± 6.4		± 6.0		± 1.4		
		Male Mean Length	563		574		581		673			
	SE	10		4		6		-				
	Range	553-572		517-628		530-613		-				
	n	2		51		23		1				
	Female Mean Length	525		553		563		-				
	SE	-		3		5		-				
	Range	-		491-659		521-661		-				
	n	1		86		25		-				

Note: Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 60.—Age-sex composition and mean length (mm) of Kuskokwim Area chum salmon that escaped past the Goodnews River (Middle Fork) weir, 2011.

Sample Dates	Sample Size		Brood Year (Age)								Total	
			2008		2007		2006		2005			
			(0.2)	(0.3)	(0.4)	(0.5)	N	%	N	%	N	%
7/04, 7/06, 7/07, 7/09, 7/10, 7/25, 7/27-7/29	447	Male	123	0.6	4,835	24.2	6,068	30.4	351	1.8	11,377	57.0
		Female	0	0.0	3,993	20.0	4,445	22.3	159	0.8	8,597	43.0
		Total	123	0.6	8,828	44.2	10,513	52.6	510	2.6	19,974	100.0
		95% C.I. (%)		±0.7		±4.6		±4.7		±1.8		
		Male Mean Length	563		585		592		547			
SE	10		3		2		22					
Range	549-583		515-642		533-650		532-649					
n	3		111		134		5					
Female Mean Length	-		547		556		546					
SE	-		5		3		6					
Range	-		440-620		499-644		539-551					
n	-		94		97		3					

*Note:* Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 61.—Age-sex composition and mean length (mm) of Kuskokwim Area chum salmon that escaped past the Kanektok River weir, 2010.

Sample Dates	Sample Size	Brood Year (Age)								Total		
		2007		2006		2005		2004				
		(0.2)	(0.3)	(0.4)	(0.5)	N	%	N	%	N	%	
7/04, 7/05, 7/07, 7/08, 7/15-7/18, 7/20, 7/22, 7/23, 7/27, 7/31, 8/01, 8/03-8/05	663	Male	91	0.1	18,863	30.1	10,827	17.3	561	0.9	30,342	48.5
		Female	647	1.0	21,880	35.0	9,398	15.0	300	0.5	32,225	51.5
	Total	738	1.2	40,743	65.1	20,225	32.3	861	1.4	62,567	100.0	
	95% C.I. (%)		± 0.8		± 3.6		± 3.6		± 0.9			
	Male Mean Length	582		581		600		618				
	SE	-		2		3		6				
	Range	-		503-639		500-670		603-652				
	n	1		200		115		6				
	Female Mean Length	528		556		568		559				
	SE	11		2		3		4				
Range	506-574		498-688		497-662		526-590					
n	7		232		99		3					

*Note:* Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 62.—Age-sex composition and mean length (mm) of Kuskokwim Area chum salmon that escaped past the Kanektok River weir, 2011.

Sample Dates	Sample Size		Brood Year (Age)								Total	
			2008		2007		2006		2005			
			(0.2)	(0.3)	(0.4)	(0.5)	N	%	N	%	N	%
7/03-7/06, 7/08-7/10, 7/13-7/18, 7/22-8/01, 8/04, 8/06, 8/07	936	Male	44	0.1	10,904	21.4	13,208	25.9	329	0.6	24,485	48.1
		Female	44	0.1	11,838	23.3	14,204	27.9	337	0.7	26,423	51.9
		Total	88	0.2	22,742	44.7	27,412	53.8	666	1.3	50,908	100.0
		95% C.I. (%)		±0.3		±3.1		±3.1		±0.7		
			Male Mean Length	522		583		593		579		
			SE	-		2		2		12		
			Range	522-522		451-695		466-671		534-629		
			n	1		203		234		6		
			Female Mean Length	475		548		560		562		
			SE	-		2		2		5		
		Range	475-475		447-613		471-647		516-585			
		n	1		229		255		7			

Note: Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 63.—Age-sex composition and mean length (mm) of Kuskokwim Area chum salmon that escaped past the Kwethluk River weir, 2010.

Sample Dates	Sample Size		Brood Year (Age)								Total	
			2007		2006		2005		2004			
			(0.2)	(0.3)	(0.4)	(0.5)	N	%	N	%	N	%
6/28-7/08, 7/11,7/12, 7/18, 7/25, 7/26, 8/04, 8/05, 8/15, 8/29	909	Male	300	1.6	6,816	35.4	4,193	21.8	91	0.5	11,400	59.2
		Female	243	1.3	5,393	28.0	2,169	11.3	37	0.2	7,842	40.8
		Total	543	2.8	12,209	63.5	6,362	33.1	128	0.7	19,242	100.0
		95% C.I. (%)		±1.1		±3.1		±3.0		±0.5		
		Male Mean Length	538		581		595		615			
		SE	7		2		3		10			
		Range	520-635		460-735		490-685		585-645			
		n	11		313		218		6			
		Female Mean Length	546		545		548		565			
		SE	8		2		3		8			
Range	485-590		445-760		500-625		550-575					
n	9		234		115		3					

Note: Kwethluk weir is operated by USFWS. Summary was produced by ADF&G and may differ from estimates reported by USFWS. Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 64.—Age-sex composition and mean length (mm) of Kuskokwim Area chum salmon that escaped past the Kwethluk River weir, 2011.

Sample Dates	Sample Size		Brood Year (Age)								Total	
			2008		2007		2006		2005			
			(0.2)	(0.3)	(0.4)	(0.5)	N	%	N	%	N	%
7/05, 7/10, 7/17, 7/24, 7/31, 8/01, 8/07, 8/08,	910	Male	24	0.1	4,632	25.3	6,529	35.6	265	1.4	11,450	62.5
		Female	24	0.1	3,061	16.7	3,688	20.1	105	0.6	6,879	37.5
		Total	48	0.3	7,693	42.0	10,217	55.7	370	2.0	18,329	100.0
		95% C.I. (%)		±0.2		±3.3		±3.4		±1.0		
		Male Mean Length	550		569		575		576			
		SE	20		2		2		7			
		Range	530-570		495-635		485-665		505-640			
		n	2		220		311		13			
		Female Mean Length	533		550		550		539			
		SE	3		2		2		3			
		Range	530-535		485-615		465-635		525-570			
		n	2		172		185		5			

*Note:* Kwethluk weir is operated by USFWS. Summary was produced by ADF&G and may differ from estimates reported by USFWS. Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 65.—Age-sex composition and mean length (mm) of Kuskokwim Area chum salmon that escaped past the Tuluksak River weir, 2010.

Sample Dates	Sample Size		Brood Year (Age)										Total	
			2007		2006		2005		2004		2003			
			(0.2)		(0.3)		(0.4)		(0.5)		(0.6)		N	%
6/30-7/03, 7/05, 7/11, 7/12, 7/18, 7/19, 7/25, 7/26, 8/03- 8/07	930	Male	271	2.1	5,930	45.3	2,677	20.4	56.6	0.4	0	0.0	8,934	68.2
		Female	94	0.7	3,018	23.0	1,035	7.9	0.0	0.0	11	0.1	4,158	31.8
		Total	365	2.8	8,947	68.3	3,711	28.3	56.6	0.4	11	0.1	13,092	100.0
		95% C.I. (%)		±1.9		±2.0		±2.8		±0.4		±0.2		
		Male Mean Length	537		560		577		563		-			
		SE	8		2		3		20		-			
		Range	500-585		450-664		480-690		525-619		-			
		n	16		420		205		5		-			
		Female Mean Length	501		532		541		-		520			
		SE	18		2		5		-		-			
Range	478-581		445-654		475-598		-		-					
n	7		194		82		-		1					

Note: Tuluksak weir is operated by USFWS. Summary was produced by ADF&G and may differ from estimates reported by USFWS. Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 66.—Age-sex composition and mean length (mm) of Kuskokwim Area chum salmon that escaped past the Tuluksak River weir, 2011.

Sample Dates	Sample Size		Brood Year (Age)								Total	
			2008		2007		2006		2005			
			(0.2)	(0.3)	(0.4)	(0.5)	N	%	N	%	N	%
7/03, 7/04, 7/10, 7/11, 7/17, 7/18, 7/19, 7/20, 7/24, 7/25, 7/31, 8/01	672	Male	20	0.2	3,266	32.2	3,167	31.3	55	0.5	6,507	64.2
		Female	20	0.2	1,973	19.5	1,592	15.7	39	0.4	3,624	35.8
		Total	39	0.4	5,239	51.7	4,759	47.0	94	0.9	10,131	100.0
		95% C.I. (%)		±0.5		±3.9		±3.9		±0.7		
		Male Mean Length	520		551		555		573			
	SE	-		2		3		20				
	Range	520-520		460-717		446-650		550-630				
	n	1		205		241		5				
	Female Mean Length	570		527		528		543				
	SE	-		3		3		13				
Range	570-570		412-590		465-620		530-555					
n	1		115		102		2					

*Note:* Tuluksak weir is operated by USFWS. Summary was produced by ADF&G and may differ from estimates reported by USFWS. Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 67.—Age-sex composition and mean length (mm) of Kuskokwim Area chum salmon that escaped past the George River weir, 2010.

Sample Dates	Sample Size		Brood Year (Age)										Total	
			2007		2006		2005		2004		2003			
			(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	N	%	N	%	N	%	N
6/28-6/30, 7/3, 7/5-7/11, 7/14, 7/16, 7/18, 7/19, 7/21-7/24, 7/26-7/27, 7/31, 8/1, 8/2	1,067	Male	408	1.6	11,109	42.5	1,040	4.0	76	0.3	19	0.1	12,653	48.4
		Female	613	2.3	11,845	45.3	925	3.5	118	0.5	0	0.0	13,501	51.6
		Total	1,022	3.9	22,954	87.8	1,965	7.5	194	0.7	19	0.1	26,154	100.0
		95% C.I. (%)		±1.2		±1.9		±1.5		±0.5		±0.1		
			Male Mean Length	512		545		558		571		565		
			SE	7		1		6		-		-		
			Range	465-572		441-625		498-616		558-592		-		
			n	16		443		41		3		1		
			Female Mean Length	503		518		538		546		-		
			SE	5		1		4		7		-		
		Range	465-572		419-612		454-604		536-570		-			
		n	25		491		42		5		-			

Note: Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 68.—Age-sex composition and mean length (mm) of Kuskokwim Area chum salmon that escaped past the George River weir, 2011.

Sample Dates	Sample Size		Brood Year (Age)								Total	
			2008		2007		2006		2005			
			(0.2)	(0.3)	(0.4)	(0.5)	N	%	N	%	N	%
7/02-7/04, 7/09, 7/10, 7/16-7/18, 7/24-7/26, 7/31-8/02	1,024	Male	47	0.1	10,854	24.3	12,056	27.0	176	0.4	23,133	51.8
		Female	315	0.7	11,476	25.7	9,716	21.8	0	0.0	21,507	48.2
		Total	362	0.8	22,331	50.0	21,772	48.8	176	0.4	44,640	100.0
		95% C.I. (%)		±1.1		±3.1		±3.1		±1.0		
		Male Mean Length	487		555		567		549			
		SE	-		2		2		13			
		Range	487-487		470-668		495-646		535-605			
		n	1		239		267		4			
		Female Mean Length	512		531		536		-			
		SE	16		2		2		-			
		Range	471-540		451-636		465-618		-			
		n	6		276		230		-			

*Note:* Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 69.—Age-sex composition and mean length (mm) of Kuskokwim Area chum salmon that escaped past the Tatlawiksuk River weir, 2010.

Sample Dates	Sample Size		Brood Year (Age)								Total	
			2007		2006		2005		2004			
			(0.2)	(0.3)	(0.4)	(0.5)	N	%	N	%	N	%
6/30, 7/01, 7/10, 7/18, 7/19, 7/25- 7/27, 8/04-8/06	1082	Male	1,186	3.2	14,680	40.0	1,765	4.8	150	0.4	17,780	48.4
		Female	2,073	5.6	15,669	42.7	1,147	3.1	32	0.1	18,921	51.6
		Total	3,259	8.9	30,349	82.7	2,911	7.9	182	0.5	36,701	100.0
		95% C.I. (%)		±1.8		±2.4		±1.7		±0.4		
		Male Mean Length	556		566		582		587			
SE	6		1		5		16					
Range	498-642		485-657		517-644		569-640					
n	33		414		53		4					
		Female Mean Length	531		537		544		572			
		SE	3		1		8		-			
		Range	448-582		460-600		463-590		-			
		n	59		483		35		1			

Note: Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 70.—Age-sex composition and mean length (mm) of Kuskokwim Area chum salmon that escaped past the Tatlawiksuk River weir, 2011.

Sample Dates	Sample Size		Brood Year (Age)								Total	
			2008		2007		2006		2005			
			(0.2)		(0.3)		(0.4)		(0.5)		N	%
7/02, 7/03, 7/08, 7/09, 7/16, 7/23, 7/29	938	Male	0	0.0	25,622	30.4	14,170	16.8	224	0.3	40,016	47.5
		Female	459	0.5	31,545	37.5	12,183	14.5	0	0.0	44,187	52.5
		Total	459	0.5	57,166	67.9	26,353	31.3	224	0.3	84,203	100.0
		95% C.I. (%)		±0.5		±3.0		±3.0		±0.3		
		Male Mean Length	-		564		574		579			
SE	-		2		3		14					
Range	-		475-645		516-644		566-607					
n	-		291		172		3					
Female Mean Length		507		538		546		-				
SE		8		1		2		-				
Range		486-525		455-639		471-607		-				
n		5		326		141		-				

Note: Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 71.—Age-sex composition and mean length (mm) of Kuskokwim Area chum salmon that escaped past the Kogruklu River weir, 2010.

Sample Dates	Sample Size		Brood Year (Age)								Total	
			2007		2006		2005		2004			
			(0.2)		(0.3)		(0.4)		(0.5)		N	%
7/5-7/7, 7/10-7/12, 7/17-7/19, 7/22-7/24	746	Male	885	1.4	20,993	33.0	12,514	19.7	361	0.6	34,753	54.7
		Female	901	1.4	18,564	29.2	9,192	14.5	173	0.3	28,830	45.3
		Total	1,785	2.8	39,557	62.2	21,706	34.1	534	0.8	63,583	100.0
		95% C.I. (%)		±1.8		±4.6		±4.4		±0.8		
		Male Mean Length	542		557		575		597			
	SE	11		3		4		11				
	Range	513-565		480-667		485-688		561-615				
	n	6		231		209		5				
	Female Mean Length	523		528		540		547				
	SE	13		2		4		22				
	Range	484-552		478-586		490-620		510-603				
	n	7		162		120		6				

Note: Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 72.—Age-sex composition and mean length (mm) of Kuskokwim Area chum salmon that escaped past the Kogruklu River weir, 2011.

Sample Dates	Sample Size		Brood Year (Age)								Total	
			2008		2007		2006		2005			
			(0.2)		(0.3)		(0.4)		(0.5)		N	%
7/05-7/10, 7/14-7/16, 7/20-7/22, 7/30, 7/31, 8/01, 8/02,	788	Male	757	1.0	27,158	35.6	15,946	20.9	436	0.6	44,296	58.0
		Female	621	0.8	21,916	28.7	9,065	11.9	486	0.6	32,088	42.0
		Total	1,378	1.8	49,074	64.2	25,010	32.7	922	1.2	76,384	100.0
		95% C.I. (%)		±1.1		±3.5		±3.4		±0.6		
			Male Mean Length	538		562		567		555		
			SE	12		2		3		11		
			Range	467-560		480-644		473-636		529-603		
			n	6		272		191		7		
			Female Mean Length	527		534		536		548		
			SE	11		2		4		13		
		Range	477-588		471-608		495-601		514-570			
		n	5		198		104		5			

*Note:* Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 73.—Age-sex composition and mean length (mm) of Kuskokwim Area chum salmon that escaped past the Takotna River weir, 2010.

Sample Dates	Sample Size		Brood Year (Age Class)								Total	
			2007		2006		2005		2004			
			(0.2)	(0.3)	(0.4)	(0.5)	N	%	N	%	N	%
7/02-7/26, 8/01-8/08, 8/10-8/15, 8/17, 8/18	1,023	Male	150	3.7	1,409	34.7	259	6.4	11	0.3	1,828	45.0
		Female	272	6.7	1,824	44.9	130	3.2	9	0.2	2,234	55.0
		Total	421	10.4	3,233	79.6	388	9.6	20	0.5	4,062	100.0
		95% C.I. (%)		±1.6		±2.1		±1.6		±0.4		
		Male Mean Length	538		561		584		566			
		SE	4		1		4		-			
		Range	494-617		495-664		504-664		532-588			
		n	39		358		68		3			
		Female Mean Length	528		531		541		546			
		SE	3		1		6		-			
		Range	483-592		455-622		471-592		536-555			
		n	68		454		31		2			

*Note:* Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 74.—Age-sex composition and mean length (mm) of Kuskokwim Area chum salmon that escaped past the Takotna River weir, 2011.

Sample	Sample		Brood Year (Age Class)								Total	
			2008		2007		2006		2005			
			(0.2)	(0.3)	(0.4)	(0.5)	N	%	N	%	N	%
7/1-7/7, 7/13, 7/14, 7/18, 7/19, 7/24, 7/25, 7/29-7/31	980	Male	17	0.2	2,227	26.5	1,500	17.8	26	0.3	3,770	44.8
		Female	146	1.7	2,878	34.2	1,612	19.2	8	0.1	4,643	55.2
		Total	163	1.9	5,105	60.7	3,111	37.0	33	0.4	8,413	100.0
		95% C.I. (%)		±0.8		±2.9		±2.8		±0.4		
		Male Mean Length	555		557		566		562			
		SE	-		2		2		-			
		Range	493-605		485-678		490-640		544-605			
		n	2		258		173		3			
		Female Mean Length	526		530		537		517			
		SE	6		2		2		-			
Range	465-576		420-693		448-592		517-517					
n	17		338		188		1					

*Note:* Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 75.—Age-sex composition and mean length (mm) of Kuskokwim Area chum salmon that escaped past the Aniak River sonar and sampled with a beach seine, 2010.

Sample Dates	Sample Size		Brood Year (Age)								Total	
			2007		2006		2005		2004			
			N	%	N	%	N	%	N	%	N	%
7/05, 7/07, 7/09, 7/13, 7/15, 7/17, 7/19, 7/21, 7/23, 7/25	553	Male	11	2.0	186	33.6	58	10.5	0	0.0	255	46.1
		Female	36	6.5	200	36.2	61	11.0	1	0.2	298	53.9
		Subtotal	47	8.5	386	69.8	119	21.5	1	0.2	553	100.0
	Male Mean Length	566		576		600		-				
	SE	13		2		5		-				
	Range	510-650		495-650		495-680		-				
	n	11		186		58		-				
	Female Mean Length	553		546		556		595				
	SE	8		2		3		-				
	Range	480-790		460-635		495-625		595-595				
n	36		200		61		1					

*Note:* Samples were not applied to the escapement. Statistics shown represent the number, mean length, and percent composition of the samples by age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 76.—Age-sex composition and mean length (mm) of Kuskokwim Area chum salmon that escaped past the Aniak River sonar and sampled with a beach seine, 2011.

Sample Dates	Sample Size	2008		2007		2006		2005		Total		
		N	%	N	%	N	%	N	%	N	%	
7/16, 7/17, 7/20, 7/21, 7/24, 7/27,	379	Male	1	0.3	109	28.8	83	21.9	0	0.0	193	50.9
		Female	10	2.6	100	26.4	73	19.3	3	0.8	186	49.1
		Subtotal	11	2.9	209	55.1	156	41.2	3	0.8	379	100.0
		Male Mean Length	540		582		596		-			
		SE	-		3		3		-			
		Range	540-540		510-660		515-680		-			
		n	1		109		83		-			
		Female Mean Length	531		547		552		528			
		SE	10		3		3		7			
		Range	455-565		490-610		510-615		515-540			
		n	10		100		73		3			

*Note:* Samples were not applied to the escapement. Statistics shown represent the number, mean length, and percent composition of the samples by age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 77.—Age-sex composition and mean length (mm) of Kuskokwim Area sockeye salmon harvested in the District W1 restricted mesh ( $\leq 6$  inch) commercial gillnet fishery, 2010.

Sample Dates	Sample Size		Brood Year (Age)														Total	
			2006		2006		2005		2005		2005		2004		2004			
			(0.3)	(1.2)	(0.4)	(1.3)	(2.2)	(1.4)	(2.3)	N	%	N	%	N	%	N	%	N
6/25, 6/28, 7/06, 7/09, 7/14, 7/16	1120	Male	360	1.6	2,460	11.0	228	1.0	6,458	28.8	38	0.2	989	4.4	89	0.4	10,650	47.5
		Female	490	2.2	1,421	6.3	207	0.9	8,412	37.5	28	0.1	1,016	4.5	205	0.9	11,778	52.5
		Total	850	3.8	3,881	17.3	435	1.9	14,871	66.3	66	0.3	2,004	8.9	294	1.3	22,428	100.0
		95% C.I. (%)	±1.1		±2.4		±0.9		±2.9		±0.3		±1.7		±0.7			
		Male Mean Length	562		579		595		581		591		596		563			
		SE	9		7		6		2		-		3		8			
		Range	474-594		407-662		553-633		475-645		577-597		532-634		543-604			
		n	20		121		10		333		2		54		6			
		Female Mean Length	537		553		552		545		561		558		544			
		SE	2		4		3		1		-		3		5			
		Range	512-569		447-611		535-600		471-624		-		496-601		513-590			
		n	25		65		10		413		1		49		10			

Note: Samples were used to estimate total number and percent of harvest by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 78.—Age-sex composition and mean length (mm) of Kuskokwim Area sockeye salmon harvested in the District W1 restricted mesh ( $\leq 6$  inch) commercial gillnet fishery, 2011.

Sample Dates	Sample Size		Brood Year (Age)																		Total	
			2007		2007		2006		2006		2006		2005		2005		2005		2004			
			(0.3)	(1.2)	(0.4)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	N	%	N	%	N	%	N	%	N	%	N
7/05, 7/07, 7/11, 7/13, 7/18,	682	Male	817	6.1	185	1.4	160	1.2	4,017	29.8	31	0.2	759	5.6	123	0.9	16	0.1	0	0.0	6,108	45.3
		Female	981	7.3	154	1.1	191	1.4	4,705	34.9	51	0.4	1,009	7.5	256	1.9	0	0.0	41	0.3	7,389	54.7
		Total	1,799	13.3	339	2.5	351	2.6	8,722	64.6	82	0.6	1,769	13.1	379	2.8	16	0.1	41	0.3	13,497	100.0
		95% C.I. (%)		$\pm 2.5$	$\pm 1.1$	$\pm 1.1$	$\pm 3.6$	$\pm 0.6$		$\pm 2.6$	$\pm 1.3$	$\pm 0.2$	$\pm 0.4$									
		Male Mean Length	571		509		595		578		518		599		581		582		-			
		SE	4		19		11		1		4		3		4		-		-			
		Range	495-615		424-618		500-629		511-623		514-522		561-640		561-594		582-582		0-0			
		n	43		10		9		208		2		38		6		1		-			
		Female Mean Length	544		513		566		545		528		569		554		-		566			
		SE	2		9		6		1		5		3		8		-		-			
		Range	507-573		475-543		543-585		505-596		523-532		534-684		509-617		-		558-572			
		n	51		8		11		230		2		49		12		-		2			

Note: Samples were used to estimate total number and percent of harvest by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 79.—Age-sex composition and mean length (mm) of Kuskokwim Area sockeye salmon harvested in the District W4 (Subdistrict 4) restricted mesh ( $\leq 6$  inch) commercial gillnet fishery, 2010.

Sample Dates	Sample Size	Brood Year (Age)																Total			
		2007		2006		2006		2005		2005		2005		2004		2004					
		(0.2)	(0.3)	(1.2)	(0.4)	(1.3)	(2.2)	(1.4)	(2.3)	N	%	N	%	N	%	N	%	N	%		
6/25, 7/07, 7/12, 7/19	844	Male	45	0.0	1,100	0.8	12,306	8.9	962	0.7	54,323	39.3	309	0.2	1,131	0.8	449	0.3	70,626	51.0	
		Female	0	0.0	2,738	2.0	7,701	5.6	679	0.5	54,623	39.5	0	0.0	1,609	1.2	384	0.3	67,736	49.0	
		Subtotal	45	0.0	3,839	2.8	20,008	14.5	1,642	1.2	108,947	78.7	309	0.2	2,740	2.0	834	0.6	138,362	100.0	
		95% C.I. (%)		$\pm 0.1$		$\pm 1.2$		$\pm 2.8$		$\pm 0.9$		$\pm 3.2$		$\pm 0.3$		$\pm 1.0$		$\pm 0.6$			
		Male Mean Length	402		572		509		598		570		517		578		571				
		SE	-		11		4		6		2		10		7		-				
		Range	-		540-606		389-581		589-611		459-673		507-526		569-634		555-580				
		n	1		9		59		5		333		2		9		2				
		Female Mean Length	-		544		488		555		542		-		558		535				
		SE	-		3		5		3		1		-		4		1				
Range	-		527-560		438-549		547-562		486-595		-		524-572		534-542						
n	-		13		45		4		350		-		9		3						

Note: Samples were used to estimate total number and percent of harvest by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 80.—Age-sex composition and mean length (mm) of Kuskokwim Area sockeye salmon harvested in the District W4 (Subdistrict 4) restricted mesh ( $\leq 6$  inch) commercial gillnet fishery, 2011.

Sample Dates	Sample Size	Brood Year (Age)																				Total		
		2008		2007		2007		2006		2006		2006		2005		2005		2005		2004				
		(0.2)	(0.3)	(1.2)	(0.4)	(1.3)	(2.2)	(1.4)	(2.3)	(3.2)	(2.4)	N	%	N	%	N	%	N	%	N	%	N	%	
6/30, 7/04, 7/11, 7/18	602	Male	112	0.3	720	1.9	6,760	17.5	244	0.6	9,629	25.0	892	2.3	741	1.9	518	1.3	0	0.0	81	0.2	19,698	51.1
		Female	0	0.0	1,341	3.5	4,548	11.8	356	0.9	9,689	25.1	1,145	3.0	874	2.3	823	2.1	60	0.2	0	0.0	18,837	48.9
		Total	112	0.3	2,061	5.3	11,308	29.3	600	1.6	19,319	50.1	2,037	5.3	1,615	4.2	1,341	3.5	60	0.2	81	0.2	38,535	100.0
		95% C.I. (%)		±0.5		±1.9		±3.8		±1.1		±4.2		±1.8		±1.7		±1.6		±0.2		±0.4		
		Male Mean Length	507		566		523		585		573		534		596		585		-		579			
		SE	-		5		2		13		2		7		12		5		-		-			
		Range	485-511		472-584		441-593		568-610		505-622		495-567		510-636		569-600		-		579-579			
		n	2		12		107		3		141		16		11		7		-		1			
		Female Mean Length	-		544		498		559		542		507		563		537		531		-			
		SE	-		5		2		10		2		7		7		7		17		-			
		Range	-		506-576		418-573		525-581		459-584		447-574		518-598		493-572		514-548		-			
		n	-		19		88		5		143		21		12		12		2		-			

Note: Samples were used to estimate total number and percent of harvest by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 81.—Age-sex composition and mean length (mm) of Kuskokwim Area sockeye salmon harvested in the District W5 (Goodnews Bay Subdistrict) restricted mesh ( $\leq 6$  inch) commercial gillnet fishery, 2010.

Sample Dates	Sample Size	Brood Year (Age)														Total		
		2006		2006		2005		2005		2005		2004		2004				
		(0.3)	(1.2)	(0.4)	(1.3)	(2.2)	(1.4)	(2.3)	N	%	N	%	N	%	N	%	N	%
7/07, 7/09, 7/12, 7/19	685	Male	524	1.3	4,872	11.9	188	0.5	19,041	46.4	290	0.7	812	2.0	196	0.5	25,923	63.1
		Female	362	0.9	555	1.4	250	0.6	13,657	33.2	48	0.1	142	0.3	137	0.3	15,151	36.9
		Total	886	2.2	5,426	13.2	438	1.1	32,698	79.6	338	0.8	954	2.3	334	0.8	41,074	100.0
		95% C.I. (%)		$\pm 1.1$		$\pm 2.3$		$\pm 0.8$		$\pm 2.9$		$\pm 0.6$		$\pm 1.2$		$\pm 0.8$		
		Male Mean Length	561		520		602		565		534		569		559			
		SE	5		6		8		1		4		6		-			
		Range	532-599		382-609		595-624		459-622		518-549		496-607		546-583			
		n	9		93		4		316		6		13		4			
		Female Mean Length	535		526		567		539		516		550		542			
		SE	8		9		16		1		-		23		-			
		Range	492-553		469-567		552-591		490-606		-		526-571		537-565			
		n	8		12		3		211		1		3		2			

*Note:* Samples were used to estimate total number and percent of harvest by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 82.—Age-sex composition and mean length (mm) of Kuskokwim Area sockeye salmon harvested in the District W5 (Goodnews Bay Subdistrict) restricted mesh ( $\leq 6$  inch) commercial gillnet fishery, 2011.

Sample Dates	Sample Size		Brood Year (Age)																Total	
			2008		2007		2007		2006		2006		2006		2005		2005			
			(0.2)	(0.3)	(1.2)	(0.4)	(1.3)	(2.2)	(1.4)	(2.3)	N	%	N	%	N	%	N	%	N	%
7/04, 7/11, 8/10	607	Male	63	0.3	395	1.6	2,298	9.4	148	0.6	10,198	41.7	521	2.1	179	0.7	305	1.2	14,109	57.7
		Female	0	0.0	395	1.6	953	3.9	58	0.2	7,916	32.4	395	1.6	238	1.0	400	1.6	10,354	42.3
		Total	63	0.3	790	3.2	3,251	13.3	206	0.8	18,114	74.0	916	3.7	417	1.7	705	2.9	24,463	100.0
		95% C.I. (%)	±0.4		±1.4		±2.8		±0.8		±3.6		±1.5		±1.1		±1.3			
		Male Mean Length	528		563		526		605		571		529		574		552			
		SE	40		11		2		4		2		9		16		13			
		Range	488-568		535-607		486-571		599-615		475-621		492-568		537-596		505-597			
		n	2		10		56		3		261		14		4		8			
		Female Mean Length	-		541		500		568		546		530		545		539			
		SE	-		5		6		-		1		11		14		4			
		Range	-		523-565		440-597		568-568		503-596		473-593		520-588		515-575			
		n	-		10		26		1		186		10		5		11			

Note: Samples were used to estimate total number and percent of harvest by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 83.—Age-sex composition and mean length (mm) of Kuskokwim Area sockeye salmon that escaped past the Kanektok River weir, 2010.

Sample Dates	Sample Size		Brood Year (Age)														Total		
			2006		2006		2005		2005		2005		2004		2004				
			(0.3)	(1.2)	(0.4)	(1.3)	(2.2)	(1.4)	(2.3)	N	%	N	%	N	%	N	%	N	%
7/04, 7/05, 7/07, 7/08, 7/10, 7/15- 7/18, 7/20- 7/24, 7/26- 7/28, 7/30, 7/31	819	Male	1,189	0.6	8,291	4.1	279	0.1	97,598	48.2	127	0.1	2,339	1.2	0	0.0	109,822	54.2	
		Female	533	0.3	8,869	4.4	510	0.3	80,408	39.7	279	0.1	2,094	1.0	127	0.1	92,821	45.8	
		Total	1,722	0.8	17,160	8.5	789	0.4	178,006	87.8	406	0.2	4,433	2.2	127	0.1	202,643	100.0	
		95% C.I. (%)	± 0.7		± 1.9		± 0.4		± 2.3		± 0.2		± 1.1		± 0.1				
	Male Mean Length	592		544		598		587		536		580		-					
	SE	26		6		-		1		-		15		-					
	Range	557-626		430-625		569-632		477-686		-		540-630		-					
	n	4		38		2		381		1		9		-					
	Female Mean Length	531		512		572		545		540		541		467					
	SE	14		6		-		2		-		15		-					
Range	496-544		439-576		570-573		395-606		498-576		488-590		-						
n	4		44		2		322		2		9		1						

Note: Samples were used to estimate total number and percent of harvest by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 84.—Age-sex composition and mean length (mm) of Kuskokwim Area sockeye salmon that escaped past the Kanektok River weir, 2011.

Sample Dates	Sample Size	Brood Year (Age)																		Total			
		2008		2007		2007		2006		2006		2006		2005		2005		2004					
		(0.2)	(0.3)	(1.2)	(0.4)	(1.3)	(2.2)	(1.4)	(2.3)	(3.3)	N	%	N	%	N	%	N	%	N	%	N	%	
7/01, 7/03- 7/11, 7/13- 7/18, 7/22- 8/06	697	Male	790	0.9	1,348	1.6	17,302	20.4	0	0.0	20,234	23.9	1,287	1.5	248	0.3	468	0.6	73	0.1	41,752	49.2	
		Female	0	0.0	1,947	2.3	16,622	19.6	147	0.2	20,508	24.2	2,163	2.6	1,169	1.4	497	0.6	0	0.0	43,053	50.8	
		Total	790	0.9	3,296	3.9	33,924	40.0	147	0.2	40,742	48.0	3,450	4.1	1,417	1.7	965	1.1	73	0.1	84,805	100.0	
		95% C.I. (%)		±0.7		±1.3		±3.9		±0.2		±4.0		±1.6		±1.0		±0.8		±0.2			
		Male Mean Length	573		577		534		-		583		538		614		550		538				
SE	13		9		2		-		2		12		-		21		-						
Range	555-594		494-658		422-607		-		423-643		514-586		603-638		532-642		538-538						
n	8		17		136		-		151		12		2		5		1						
Female Mean Length	-		549		499		579		550		496		564		555		-						
SE	-		5		2		12		2		6		8		9		-						
Range	-		518-571		426-576		567-590		435-604		456-534		533-601		502-568		-						
n	-		21		142		2		170		17		9		4		-						

Note: Samples were used to estimate total number and percent of harvest by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 85.—Age-sex composition and mean length (mm) of Kuskokwim Area sockeye salmon that escaped past the Goodnews River (Middle Fork) weir, 2010.

Sample Dates	Sample Size		Brood Year (Age)												Total	
			2006		2006		2005		2005		2004		2004			
			(0.3)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	N	%	N	%	N	%	N	%
7/07, 7/11, 7/14, 7/17, 7/20, 7/22- 7/24, 7/26,	307	Male	226	0.6	677	1.9	13,828	38.7	140	0.4	484	1.4	871	2.4	16,225	45.4
		Female	505	1.4	968	2.7	16,849	47.1	226	0.6	452	1.3	538	1.5	19,537	54.6
		Total	731	2.0	1,645	4.6	30,676	85.8	366	1.0	935	2.6	1,409	3.9	35,762	100.0
		95% C.I. (%)		±1.7		± 2.3		± 3.9		±1.2		± 1.7		± 2.2		
		Male Mean Length	569		526		572		548		587		569			
		SE	-		19		2		-		19		10			
		Range	533-586		471-581		483-630		-		541-625		523-624			
		n	2		6		117		1		5		7			
		Female Mean Length	549		483		532		496		561		550			
		SE	9		7		2		-		12		6			
		Range	527-568		458-540		428-580		494-497		508-582		540-580			
		n	4		10		144		2		4		5			

Note: Samples were used to estimate total number and percent of harvest by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 86.—Age-sex composition and mean length (mm) of Kuskokwim Area sockeye salmon that escaped past the Goodnews River (Middle Fork) weir, 2011.

Sample Dates	Sample Size		Brood Year (Age)																Total	
			2007		2007		2006		2006		2006		2005		2005		2004			
			(0.3)	(1.2)	(0.4)	(1.3)	(2.2)	(1.4)	(2.3)	(2.4)	N	%	N	%	N	%	N	%	N	%
6/29, 7/04, 7/06, 7/07, 7/09, 7/10, 7/18, 7/27, 7/28, 7/29,	440	Male	286	1.6	449	2.5	41	0.2	6,730	37.5	0	0.0	204	1.1	122	0.7	41	0.2	7,872	43.9
		Female	245	1.4	693	3.9	0	0.0	8,361	46.6	41	0.2	489	2.7	245	1.4	0	0.0	10,074	56.1
		Total	530	3.0	1,142	6.4	41	0.2	15,091	84.1	41	0.2	693	3.9	367	2.0	41	0.2	17,946	100.0
		95% C.I. (%)		±1.6		±2.3		±1.3		±3.4		±0.4		±1.8		±1.3		±0.4		
	Male Mean Length	578		505		618		573		-		582		555		565				
	SE	9		13		-		1		-		12		9		-				
	Range	552-621		427-571		618-618		505-632		-		558-625		536-566		565-565				
	n	7		11		1		165		-		5		3		1				
	Female Mean Length	549		480		-		538		494		537		540		-				
	SE	7		9		-		1		-		4		8		-				
Range	516-559		432-566		-		467-591		494-494		518-557		511-558		-					
n	6		17		-		205		1		12		6		-					

Note: Samples were used to estimate total number and percent of harvest by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 87.—Age-sex composition and mean length (mm) of Kuskokwim Area sockeye salmon that escaped past the Kwethluk River weir, 2010.

Sample Dates	Sample Size		Brood Year (Age)														Total	
			2006		2006		2005		2005		2005		2004		2004			
			(0.3)	(1.2)	(0.4)	(1.3)	(2.2)	(1.4)	(2.3)	N	%	N	%	N	%	N	%	N
6/28-7/04, 7/06-7/13, 7/18-7/30, 8/04, 8/15	495	Male	54	1.3	501	11.8	27	0.6	1,352	31.7	0	0.0	79	1.8	46	1.1	2,058	48.3
		Female	120	2.8	175	4.1	0	0.0	1,791	42.0	24	0.6	27	0.6	70	1.6	2,206	51.7
		Subtotal	174	4.1	676	15.9	27	0.6	3,143	73.7	24	0.6	106	2.5	116	2.7	4,264	100.0
		95% C.I. (%)		±1.6		±3.0		±0.6		±3.7		±0.6		±1.3		±1.3		
		Male Mean Length		594		580		603		577		-		621		567		
		SE		12		4		3		3		-		14		7		
		Range		530-635		455-635		600-605		480-640		-		575-655		555-595		
		n		8		56		2		177		-		5		6		
		Female Mean Length		536		535		-		529		470		561		526		
		SE		5		6		-		2		-		4		6		
Range		500-555		480-585		-		420-640		-		545-570		500-545				
n		10		19		-		200		1		4		7				

Note: Kwethluk weir is operated by USFWS. Summary was produced by ADF&G and may differ from estimates reported by USFWS. Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 88.—Age-sex composition and mean length (mm) of Kuskokwim Area sockeye salmon that escaped past the Kwethluk River weir, 2011.

Sample Dates	Sample Size	Brood Year (Age)																Total		
		2007		2007		2006		2006		2006		2005		2005		2004				
		(0.3)	(1.2)	(0.4)	(1.3)	(2.2)	(1.4)	(2.3)	(2.4)	N	%	N	%	N	%	N	%	N	%	
7/05, 7/10, 7/17, 7/18, 7/19, 7/24, 7/25, 7/26, 7/27, 7/28,	100	Male	102	5.0	61	3.0	61	3.0	487	24.0	0	0.0	102	5.0	61	3.0	0	0.0	873	43.0
		Female	142	7.0	20	1.0	41	2.0	711	35.0	20	1.0	81	4.0	122	6.0	20	1.0	1,158	57.0
		Subtotal	244	12.0	81	4.0	102	5.0	1,198	59.0	20	1.0	183	9.0	183	9.0	20	1.0	2,031	100.0
		95% C.I. (%)	±6.2		±3.8		±4.2		±9.4		±1.9		±5.5		±5.5		±1.9			
		Male Mean Length	584		537		605		574		-		593		560		-			
		SE	8		12		5		6		-		8		21		-			
		Range	565-610		515-555		600-615		530-650		-		565-615		520-590		-			
		n	5		3		3		24		-		5		3		-			
		Female Mean Length	542		565		555		546		495		576		553		565			
		SE	7		-		5		3		-		5		8		-			
		Range	510-575		565-565		550-560		510-580		495-495		565-590		530-575		565-565			
		n	7		1		2		35		1		4		6		1			

Note: Kwethluk weir is operated by USFWS. Summary was produced by ADF&G and may differ from estimates reported by USFWS. Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 89.—Age-sex composition and mean length (mm) of Kuskokwim Area sockeye salmon that escaped past the Tuluksak River weir, 2010.

Sample Dates	Sample Size		Brood Year (Age)										Total	
			2007		2006		2005		2005		2005			
			0.2	1.2	1.3	1.4	2.3	N	%	N	%	N	%	N
7/5-7/13	54	Male	0	0.0	3	5.6	13	24.1	1	1.9	1	1.9	18	33.3
		Female	1	1.9	0	0.0	23	42.6	4	7.4	8	14.8	36	66.7
		Total	1	1.9	3	5.6	36	66.7	5	9.3	9	16.7	54	100.0
		Male Mean Length	-	558	573	555	567							
		SE	-	9	7	-	-							
		Range	-	541-572	537-613	-	-							
		n	-	3	13	1	1							
		Female Mean Length	531	-	515	527	530							
		SE	-	-	5	12	4							
		Range	-	-	474-555	496-550	515-545							
n	1	-	23	4	8									

*Note:* Tuluksak weir is operated by USFWS. Summary was produced by ADF&G and may differ from estimates reported by USFWS. Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 90.—Age-sex composition and mean length (mm) of Kuskokwim Area sockeye salmon that escaped past the Tuluksak River weir, 2011.

Sample Dates	Sample Size		Brood Year (Age)												Total	
			2008		2007		2007		2006		2006		2006			
			0.2	0.3	1.2	0.4	1.3	2.2	N	%	N	%	N	%	N	%
7/03, 7/15, 7/19, 8/01,	16	Male	1	6.3	0	0.0	1	6.3	0	0.0	4	25.0	1	6.3	7	43.8
		Female	0	0.0	2	12.5	1	6.3	1	6.3	5	31.3	0	0.0	9	56.3
		Total	1	6.3	2	12.5	2	12.5	1	6.3	9	56.3	1	6.3	16	100.0
		Male Mean Length	611		-		573		-		563		600			
		SE	-		-		-		-		8		-			
		Range	611-611		-		573-573		-		542-581		600-600			
		n	1		-		1		-		4		1			
		Female Mean Length	-		541		520		565		533		-			
		SE	-		19		-		-		7		-			
		Range	-		522-559		520-520		565-565		507-553		-			
		n	-		2		1		1		5		-			

Note: Tuluksak weir is operated by USFWS. Summary was produced by ADF&G and may differ from estimates reported by USFWS. Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 91.—Age-sex composition and mean length (mm) of Kuskokwim Area sockeye salmon that escaped past the Kogruklu River weir, 2010.

Sample Dates	Sample Size		Age				Total	
			(1.X)		(2.X)		N	%
			N	%	N	%		
7/07-7/09, 7/11-7/25	143	Male	5,187	37.1	391	2.8	5,578	39.9
		Female	8,221	58.7	196	1.4	8,417	60.1
		Total	13,408	95.8	587	4.2	13,995	100.0
		95% C.I. (%)			±3.3		±3.3	
		Male Mean Length	579		555			
	SE	3		7				
	Range	528-632		534-567				
	n	53		4				
	Female Mean Length	525		533				
	SE	2		10				
	Range	470-574		523-543				
	n	84		2				

*Note:* Total age could not be determined due to high rate of reabsorbed saltwater annuli. Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 92.—Age-sex composition and mean length (mm) of Kuskokwim Area sockeye salmon that escaped past the Kogruklu River weir, 2011.

Sample Dates	Sample Size		Age						Total	
			(0.X)		(1.X)		(2.X)		N	%
			N	%	N	%	N	%		
7/05, 7/07-7/12, 7/14-7/18, 7/20- 7/25	126	Male	258	3.2	2,775	34.1	65	0.8	3,098	38.1
		Female	194	2.4	4,711	57.9	129	1.6	5,034	61.9
		Total	452	5.6	7,487	92.1	194	2.4	8,132	100.0
		95% C.I. (%)		±4.0		±4.7		±2.7		
		Male Mean Length	566		579		599			
		SE	14		3		-			
		Range	525-591		546-635		599-599			
		n	4		43		1			
		Female Mean Length	532		539		562			
		SE	18		3		7			
		Range	508-568		475-611		555-568			
		n	3		73		2			

*Note:* Total age could not be determined due to high rate of reabsorbed saltwater annuli. Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 93.—Age-sex composition and mean length (mm) of Kuskokwim Area sockeye salmon that escaped past the Telaquana River weir, 2010.

Sample Dates	Sample Size		Age				Total	
			(1.X)		(2.X)		N	%
			N	%	N	%		
7/08-7/10, 7/17-7/22, 7/27-7/29, 7/31, 8/03-8/07	427	Male	24,659	34.2	5,148	7.1	29,807	41.4
		Female	32,109	44.6	10,105	14.0	42,214	58.6
		Total	56,768	78.8	15,253	21.2	72,021	100.0
		95% C.I. (%)		±4.1		±4.1		
		Male Mean Length	570		576			
	SE	6		10				
	Range	390-655		419-650				
	n	141		31				
	Female Mean Length	555		550				
	SE	2		3				
	Range	420-615		465-587				
	n	196		59				

*Note:* Total age could not be determined due to high rate of reabsorbed saltwater annuli. Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 94.—Age-sex composition and mean length (mm) of Kuskokwim Area sockeye salmon that escaped past the Telaquana River weir, 2011.

Sample Dates	Sample Size		Age						Total	
			(0.X)		(1.X)		(2.X)		N	%
			N	%	N	%	N	%		
7/12, 7/13, 7/17- 7/21, 7/25-7/27, 7/29-8/02, 8/06,	291	Male	0	0.0	10,993	31.3	5,360	15.3	16,353	46.6
		Female	106	0.3	13,852	39.5	4,794	13.7	18,752	53.4
		Total	106	0.3	24,845	70.8	10,154	28.9	35,105	100.0
		95% C.I. (%)		±0.6		±6.7		±6.6		
		Male Mean Length	-		555		597			
SE	-		10		5					
Range	-		405-655		507-651					
n	-		104		42					
		Female Mean Length	553		540		544			
		SE	-		4		6			
		Range	553-553		465-599		486-610			
		n	1		110		34			

*Note:* Total age could not be determined due to high rate of reabsorbed saltwater annuli. Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 95.—Age-sex composition and mean length (mm) of Kuskokwim Area coho salmon harvested in the District W1 restricted mesh ( $\leq 6$  inch) commercial gillnet fishery, 2010.

Sample Dates	Sample Size		Brood Year (Age)						Total	
			2008		2007		2006			
			(1.1)		(2.1)		(3.1)		N	%
8/04, 8/10	425	Male	1,083	4.8	9,731	43.2	170	0.8	10,983	48.7
		Female	660	2.9	10,339	45.9	551	2.4	11,550	51.3
		Total	1,743	7.7	20,070	89.1	720	3.2	22,533	100.0
		Male Mean Length	528		549		571			
		SE	9		3		7			
		Range	445-600		444-625		543-594			
		n	19		190		3			
		Female Mean Length	527		552		551			
		SE	6		2		10			
		Range	503-574		474-639		510-602			
		n	11		192		10			

*Note:* Samples were used to estimate total number and percent of harvest by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 96.—Age-sex composition and mean length (mm) of Kuskokwim Area coho salmon harvested in the District W1 restricted mesh ( $\leq 6$  inch) commercial gillnet fishery, 2011.

Sample Dates	Sample Size		Brood Year (Age)						Total	
			2008		2007		2006		N	%
			(1.1)		(2.1)		(3.1)			
		N	%	N	%	N	%	N	%	
7/18, 7/25, 8/03, 8/10, 8/17,	667	Male	5,445	7.3	31,116	42.0	1,556	2.1	38,117	51.4
		Female	5,779	7.8	27,671	37.3	2,556	3.4	36,005	48.6
		Total	11,224	15.1	58,786	79.3	4,112	5.5	74,122	100.0
		Male Mean Length	549		553		550			
		SE	5		2		12			
		Range	490-609		428-651		431-613			
		n	49		280		14			
		Female Mean Length	555		558		557			
		SE	4		2		6			
		Range	497-629		479-782		494-602			
		n	52		249		23			

*Note:* Samples were used to estimate total number and percent of harvest by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 97.--Age-sex composition and mean length (mm) of Kuskokwim Area coho salmon harvested in the District W4 (Subdistrict 4) restricted mesh ( $\leq 6$  inch) commercial gillnet fishery, 2010.

Sample Dates	Sample Size		Brood Year (Age)						Total	
			2007		2006		2005		N	%
			(1.1)		(2.1)		(3.1)			
N	%	N	%	N	%	N	%			
8/02, 8/16	189	Male	788	5.8	6,417	46.9	135	1.0	7,340	53.6
		Female	799	5.8	5,325	38.9	225	1.6	6,350	46.4
		Total	1,587	11.6	11,742	85.8	360	2.6	13,690	100.0
		95% C.I. (%)		$\pm 5.1$		$\pm 5.3$		$\pm 1.8$		
		Male Mean Length	554		558		566			
		SE	14		5		19			
		Range	488-614		419-649		533-598			
		n	10		84		3			
		Female Mean Length	568		578		551			
		SE	7		4		6			
		Range	459-626		491-633		534-564			
		n	13		74		5			

*Note:* Samples were used to estimate total number and percent of harvest by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 98.—Age-sex composition and mean length (mm) of Kuskokwim Area coho salmon harvested in the District W4 (Subdistrict 4) restricted mesh ( $\leq 6$  inch) commercial gillnet fishery, 2011.

Sample Dates	Sample Size		Brood Year (Age)						Total	
			2008		2007		2006		N	%
			(1.1)		(2.1)		(3.1)			
N	%	N	%	N	%	N	%			
8/08, 8/12, 8/15, 8/17, 8/19, 8/22	482	Male	4,146	14.9	10,019	36.1	576	2.1	14,741	53.1
		Female	3,282	11.8	9,213	33.2	518	1.9	13,013	46.9
		Total	7,428	26.8	19,232	69.3	1,094	3.9	27,754	100.0
		95% C.I. (%)		$\pm 3.9$		$\pm 4.1$		$\pm 1.7$		
		Male Mean Length	557		571		566			
		SE	5		3		10			
		Range	410-630		429-642		502-620			
		n	72		174		10			
		Female Mean Length	566		574		576			
		SE	4		2		7			
		Range	461-629		477-636		533-600			
		n	57		160		9			

*Note:* Samples were used to estimate total number and percent of harvest by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 99.—Age-sex composition and mean length (mm) of Kuskokwim Area coho salmon harvested in the District W5 (Goodnews Bay Subdistrict) restricted mesh ( $\leq 6$  inch) commercial gillnet fishery, 2010.

Sample Dates	Sample Size		Brood Year (Age)						Total	
			2007		2006		2005			
			(1.1)		(2.1)		(3.1)		N	%
8/02, 8/09, 8/16	600	Male	349	7.1	2,470	50.4	86	1.7	2,904	59.3
		Female	170	3.5	1,806	36.9	20	0.4	1,996	40.7
		Total	519	10.6	4,276	87.3	105	2.2	4,900	100.0
		95% C.I. (%)		$\pm 2.4$		$\pm 2.9$		$\pm 1.2$		
		Male Mean Length	546		570		522			
	SE	7		3		20				
	Range	455-621		409-671		454-667				
	n	39		331		9				
	Female Mean Length	568		584		574				
	SE	12		2		30				
	Range	473-625		481-660		540-642				
	n	18		199		4				

*Note:* Samples were used to estimate total number and percent of harvest by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 100.—Age-sex composition and mean length (mm) of Kuskokwim Area coho salmon harvested in the District W5 (Goodnews Bay Subdistrict) restricted mesh ( $\leq 6$  inch) commercial gillnet fishery, 2011.

Sample Dates	Sample Size		Brood Year (Age)						Total	
			2008		2007		2006			
			(1.1)		(2.1)		(3.1)		N	%
8/08, 8/10, 8/12, 8/15, 8/17, 8/19, 8/22	558	Male	1,397	10.4	5,396	40.0	603	4.5	7,396	54.9
		Female	676	5.0	5,087	37.8	316	2.3	6,079	45.1
		Total	2,073	15.4	10,483	77.8	919	6.8	13,475	100.0
		95% C.I. (%)		$\pm 2.9$		$\pm 3.4$		$\pm 2.1$		
		Male Mean Length	562		573		572			
SE	5		3		9					
Range	457-632		466-641		426-632					
n	58		224		25					
Female Mean Length	573		576		580					
SE	5		2		5					
Range	525-618		502-636		532-631					
n	28		210		13					

*Note:* Samples were used to estimate total number and percent of harvest by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 101.—Age-sex composition and mean length (mm) of Kuskokwim Area coho salmon that escaped past the Goodnews River (Middle Fork) weir, 2010.

Sample Dates	Sample Size		Brood Year (Age)						Total	
			2007		2006		2005			
			(1.1)		(2.1)		(3.1)		N	%
8/27, 8/29, 8/31, 9/03, 9/05, 9/06, 9/09, 9/11, 9/13	438	Male	1,536	6.4	9,133	38.3	401	1.7	11,070	46.4
		Female	1,594	6.7	10,756	45.1	420	1.8	12,769	53.6
		Total	3,129	13.1	19,889	83.4	820	3.4	23,839	100.0
		95% C.I. (%)		± 3.3		± 3.7		± 1.8		
		Male Mean Length	592		601		601			
SE	10		4		15					
Range	440-655		428-697		556-641					
n	28		167		7					
Female Mean Length	598		596		595					
SE	6		3		16					
Range	511-642		444-690		522-652					
n	27		199		10					

*Note:* Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 102.—Age-sex composition and mean length (mm) of Kuskokwim Area coho salmon that escaped past the Goodnews River (Middle Fork) weir, 2011.

Sample Dates	Sample Size		Brood Year (Age)						Total	
			2008		2007		2006			
			(1.1)		(2.1)		(3.1)		N	%
8/20, 9/04, 9/07, 9/08, 9/13	251	Male	2,753	11.6	10,442	43.8	664	2.8	13,859	58.2
		Female	2,278	9.6	6,929	29.1	759	3.2	9,967	41.8
		Total	5,031	21.1	17,371	72.9	1,424	6.0	23,826	100.0
		95% C.I. (%)		±5.0		±5.5		±2.9		
		Male Mean Length	580		597		606			
SE	5		4		10					
Range	527-615		426-684		556-633					
n	29		110		7					
Female Mean Length	584		592		592					
SE	6		4		7					
Range	484-636		480-662		553-621					
n	24		73		8					

*Note:* Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 103.—Age-sex composition and mean length (mm) of Kuskokwim Area coho salmon that escaped past the Kwethluk River weir, 2010.

Sample Dates	Sample Size		Brood Year (Age)						Total	
			2007		2006		2005		N	%
			N	%	N	%	N	%		
7/30, 8/04, 8/15, 8/29, 9/02-9/04,	55	Male	2	3.6	36	65.5	1	1.8	39	70.9
		Female	0	0.0	16	29.1	0	0.0	16	29.1
		Total	2	3.6	52	94.5	1	1.8	55	100.0
		Male Mean Length	528		588		620			
		SE	18		7		-			
		Range	510-545	0-335	480-695	0-335	-			
		n	2		36		1			
		Female Mean Length	-		554		-			
		SE	-		12		-			
		Range	-		445-635		-			
		n	-		12		-			

*Note:* Kwethluk weir is operated by USFWS. Summary was produced by ADF&G and may differ from estimates reported by USFWS. Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors. Sampling dates do not meet criteria for estimating escapement percentages for some or all of the strata; "Season" is not included in the "Grand Total".

Table 104.—Age-sex composition and mean length (mm) of Kuskokwim Area coho salmon that escaped past the Kwethluk River weir, 2011.

Sample Dates	Sample Size		Brood Year (Age)						Total		
			2008		2007		2006				
			1.1		2.1		3.1		N	%	
			N	%	N	%	N	%	N	%	
7/25, 7/26, 7/27, 7/28, 7/31, 8/07, 8/08, 8/12, 8/29, 9/08, 9/09,	574	Male	508	11.3	1,796	40.1	55	1.2	2,358	52.6	
		Female	500	11.1	1,546	34.5	78	1.7	2,124	47.4	
		Subtotal	1,007	22.5	3,342	74.6	133	3.0	4,482	100.0	
		95% C.I. (%)		±3.2		±3.3		±1.3			
		Male Mean Length	561		583		584				
	SE	4		2		8					
	Range	480-625		435-665		560-620					
	n	65		230		7					
	Female Mean Length	561		574		568					
	SE	4		2		10					
	Range	465-610		435-640		515-610					
	n	64		198		10					

*Note:* Kwethluk weir is operated by USFWS. Summary was produced by ADF&G and may differ from estimates reported by USFWS. Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 105.—Age-sex composition and mean length (mm) of Kuskokwim Area coho salmon that escaped past the Tuluksak River weir, 2010.

Sample Dates	Sample Size	Brood Year (Age)		
		2007 (2.1)		
			N	%
8/06, 8/07	2	Male	0	0.0
		Female	2	100.0
		Total	2	100.0
		Female Mean Length	558	
		Range	545-571	
		n	2	

*Note:* Tuluksak weir is operated by USFWS. Summary was produced by ADF&G and may differ from estimates reported by USFWS. Only 2 coho salmon were sampled at Tuluksak weir in 2010. Sample was not applied to the harvest.

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Table 106.—Age-sex composition and mean length (mm) of Kuskokwim Area coho salmon that escaped past the Tuluksak River weir, 2011.

Sample Dates	Sample Size	Brood Year (Age)		
		2007 (2.1)		
			N	%
7/24	1	Male	0	0.0
		Female	1	100.0
		Female Mean Length	540	
		Range	540-540	
		n	1	

*Note:* Tuluksak weir is operated by USFWS. Summary was produced by ADF&G and may differ from estimates reported by USFWS. Only 1 coho salmon was sampled at Tuluksak weir in 2011. Sample was not applied to the harvest.

Table 107.—Age-sex composition and mean length (mm) of Kuskokwim Area coho salmon that escaped past the George River weir, 2010.

Sample Dates	Sample Size		Brood Year (Age)						Total	
			2007		2006		2005			
			(1.1)		(2.1)		(3.1)		N	%
8/22, 8/23, 8/26, 8/28, 8/29-8/31, 9/03-9/05, 9/09, 9/10, 9/12	559	Male	212	1.6	5,654	43.6	419	3.2	6,285	48.5
		Female	135	1.0	5,958	46.0	584	4.5	6,676	51.5
		Total	347	2.7	11,612	89.6	1,003	7.7	12,961	100.0
		95% C.I. (%)		± 1.2		± 2.5		± 2.3		
		Male Mean Length	500		540		540			
	SE	16		3		10				
	Range	438-604		412-652		470-646				
	n	10		241		17				
	Female Mean Length	544		550		560				
	SE	20		2		6				
Range	502-587		426-643		492-611					
n	7		260		24					

*Note:* Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 108.—Age-sex composition and mean length (mm) of Kuskokwim Area coho salmon that escaped past the George River weir, 2011.

Sample Dates	Sample Size		Brood Year (Age)								Total	
			2008		2007		2006		2005			
			(1.1)	(1.1)	(2.1)	(2.1)	(3.1)	(3.1)	(3.2)	(3.2)	N	%
8/28-8/31, 9/04, 9/05, 9/12-9/17	552	Male	704	2.3	13,006	43.3	939	3.1	0	0.0	14,649	48.8
		Female	760	2.5	14,025	46.7	550	1.8	43	0.1	15,379	51.2
		Total	1,464	4.9	27,031	90.0	1,489	5.0	43	0.1	30,028	100.0
		95% C.I. (%)		±2.0		±2.9		±2.1		±0.3		
		Male Mean Length	539		552		571		-			
		SE	15		3		9		-			
		Range	478-608		412-642		519-641		-			
		n	14		214		15		-			
		Female Mean Length	556		551		579		518			
		SE	8		3		5		-			
		Range	504-581		423-619		477-607		518-518			
		n	16		278		14		1			

Note: Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 109.—Age-sex composition and mean length (mm) of Kuskokwim Area coho salmon that escaped past the Tatlawiksuk River weir, 2010.

Sample Dates	Sample Size		Brood Year (Age)						Total	
			2007		2006		2005			
			(1.1)		(2.1)		(3.1)		N	%
8/26-8/28, 9/3-9/06	372	Male	88	2.5	1,331	37.8	76	2.1	1,494	42.4
		Female	75	2.1	1,851	52.6	100	2.9	2,027	57.6
		Total	163	4.6	3,182	90.4	176	5.0	3,521	100.0
		95% C.I. (%)		±2.1		±3.1		±2.4		
		Male Mean Length	508		566		553			
	SE	12		4		11				
	Range	457-566		434-652		519-597				
	n	10		137		6				
	Female Mean Length	548		554		564				
	SE	8		3		8				
	Range	491-572		458-641		525-600				

*Note:* Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 110.—Age-sex composition and mean length (mm) of Kuskokwim Area coho salmon that escaped past the Tatlawiksuk River weir, 2011.

Sample Dates	Sample Size		Brood Year (Age)						Total	
			2008		2007		2006			
			(1.1)		(2.1)		(3.1)		N	%
8/27-8/31, 9/04-9/08	359	Male	252	1.9	5,042	39.0	360	2.8	5,654	43.7
		Female	396	3.1	6,266	48.5	612	4.7	7,274	56.3
		Total	648	5.0	11,307	87.5	972	7.5	12,928	100.0
		95% C.I. (%)		±2.2		±3.4		±2.7		
		Male Mean Length	556		562		567			
	SE	14		3		9				
	Range	506-618		415-655		511-602				
	n	7		140		10				
	Female Mean Length	559		558		561				
	SE	5		2		8				
	Range	526-590		425-651		451-601				
	n	11		174		17				

*Note:* Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 111.—Age-sex composition and mean length (mm) of Kuskokwim Area coho salmon that escaped past the Kogruklu River weir, 2010.

Sample Dates	Sample Size		Brood Year (Age)						Total	
			2007		2006		2005			
			(1.1)	(2.1)	(3.1)	N	%	N	%	N
8/31-9/02, 9/07-9/09, 9/13, 9/14	549	Male	367	2.6	6,249	44.7	497	3.6	7,113	50.9
		Female	291	2.1	5,957	42.6	610	4.4	6,858	49.1
		Total	658	4.7	12,206	87.4	1,107	7.9	13,971	100.0
		95% C.I. (%)		±1.7		±2.8		±2.3		
		Male Mean Length	535		546		561			
		SE	10		3		11			
		Range	415-587		415-653		497-647			
		n	15		241		20			
		Female Mean Length	568		554		567			
		SE	9		2		6			
		Range	488-621		414-631		526-612			
		n	12		238		23			

*Note:* Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 112.—Age-sex composition and mean length (mm) of Kuskokwim Area coho salmon that escaped past the Kogruklu River weir, 2011.

Sample Dates	Sample Size		Brood Year (Age)						Total	
			2008		2007		2006			
			(1.1)		(2.1)		(3.1)		N	%
8/24, 8/26-8/29, 9/03-9/05, 9/07, 9/09, 9/10, 9/12, 9/13	535	Male	498	2.1	10,251	42.4	1,076	4.5	11,826	48.9
		Female	590	2.4	10,857	44.9	901	3.7	12,348	51.1
		Total	1,089	4.5	21,108	87.3	1,977	8.2	24,174	100.0
		95% C.I. (%)		±1.7		±2.8		±2.3		
		Male Mean Length	538		543		544			
SE	10		3		9					
Range	490-590		392-620		452-604					
n	11		225		24					
Female Mean Length	523		547		557					
SE	9		2		6					
Range	464-559		430-602		476-614					
n	13		242		20					

*Note:* Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 113.—Age-sex composition and mean length (mm) of Kuskokwim Area coho salmon that escaped past the Takotna River weir, 2010.

Sample Dates	Sample Size		Brood Year (Age Class)						Total	
			2007		2006		2005			
			(1.1)		(2.1)		(3.1)		N	%
8/11-8/19, 8/21- 8/23, 8/27-9/5, 9/7, 9/10-9/17	517	Male	92	2.9	1,368	42.5	31	1.0	1,491	46.4
		Female	83	2.6	1,620	50.4	23	0.7	1,726	53.6
		Total	175	5.4	2,988	92.9	54	1.7	3,217	100.0
		95% C.I. (%)		±1.9		±2.1		±1.0		
		Male Mean Length	518		529		467			
SE	17		3		31					
Range	412-609		405-775		440-587					
n	17		224		5					
Female Mean Length	536		540		544					
SE	8		2		17					
Range	492-600		411-634		526-560					
n	15		253		3					

*Note:* Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 114.—Age-sex composition and mean length (mm) of Kuskokwim Area coho salmon that escaped past the Takotna River weir, 2011.

Sample Dates	Sample Size		Brood Year (Age)						Total	
			2008		2007		2006		N	%
			(1.1)		(2.1)		(3.1)			
N	%	N	%	N	%	N	%			
8/23-8/25, 8/30, 8/31, 9/06-9/08	531	Male	82	2.0	1,825	44.9	88	2.2	1,995	49.1
		Female	131	3.2	1,793	44.2	142	3.5	2,065	50.9
		Total	213	5.3	3618	89.1	229	5.6	4060	100.0
		95% C.I. (%)		±1.8		±2.6		±1.9		
		Male Mean Length	564		544		544			
SE	13		3		13					
Range	425-618		380-625		463-603					
n	11		245		12					
Female Mean Length	545		555		554					
SE	8		2		8					
Range	491-612		430-609		470-595					
n	17		229		17					

*Note:* Samples were used to estimate total number and percent of escapement by age and sex category. Samples were used to estimate mean length and summary statistics for each age and sex category. Discrepancies in sums or statistics are attributed to rounding errors.

Table 115.—Estimated age and sex composition, mean length, and total number of Kuskokwim Area Chinook salmon harvested in the W1 commercial gillnet fishery, 1964–2011.

Year	Sample Size	Total Harvest	Percent by Age Class												Percent Females	Mean Length (mm)
			(0.2)	(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)		
1964	535	17,149	0.0	0.0	0.5	0.0	19.6	1.0	58.8	4.3	9.0	6.8	0.0	0.0	52.8	911
1965	322	21,989	0.0	0.0	0.0	0.0	43.4	0.0	27.5	5.0	12.8	9.4	0.0	1.9	45.1	884
1966	468	25,545	0.0	0.0	0.2	0.0	12.4	0.0	85.1	0.0	2.3	0.0	0.0	0.0	50.3	911
1967	654	29,986	0.0	0.0	0.1	0.0	8.2	0.0	74.4	0.0	17.3	0.0	0.0	0.0	55.8	880
1968	540	34,278	0.0	0.0	3.9	0.0	25.1	0.0	49.2	2.0	19.0	0.8	0.0	0.0	42.6	848
1969 <sup>a</sup>		43,997														
1970 <sup>a</sup>		39,290														
1971	791	40,274	0.0	0.0	2.9	0.1	23.0	0.0	73.3	0.0	0.7	0.0	0.0	0.0	53.0	865
1972	500	39,454	0.0	0.0	0.0	0.0	20.3	0.0	74.7	0.0	5.0	0.0	0.0	0.0	50.4	877
1973	470	32,838	0.0	0.0	2.3	0.0	25.7	0.0	65.4	0.0	6.6	0.0	0.0	0.0	55.3	857
1974 <sup>b</sup>	42	18,664														
1975 <sup>b</sup>	307	22,135														
1976 <sup>a</sup>		30,735														
1977	234	35,830	0.0	0.0	0.7	0.0	31.2	0.0	65.3	0.0	2.8	0.0	0.0	0.0	36.3	836
1978	289	45,641	0.0	0.0	0.2	0.0	12.8	0.0	82.2	0.0	4.8	0.0	0.0	0.0	58.2	856
1979 <sup>b</sup>	302	38,966														
1980	273	35,881	0.0	0.0	10.9	0.0	65.1	0.0	20.7	0.0	3.2	0.0	0.0	0.0	29.0	759
1981	467	47,663	0.0	0.0	7.7	0.0	40.5	0.0	48.5	0.0	3.3	0.0	0.0	0.0	39.0	794
1982	715	48,234	0.0	0.3	10.4	0.0	23.2	0.0	63.1	0.0	2.8	0.1	0.0	0.0	41.1	791
1983	1,255	33,174	0.0	1.5	21.1	0.0	19.5	0.0	52.2	0.0	5.1	0.6	0.0	0.0	36.8	812
1984	664	31,742	0.0	0.7	12.3	0.1	39.0	0.4	36.7	1.3	8.1	1.4	0.0	0.0	29.9	783
1985	634	37,889	0.0	0.0	34.5	0.0	29.7	0.4	31.8	0.0	3.6	0.0	0.0	0.0	36.2	713
1986	141	19,414	0.0	2.2	12.5	0.0	56.5	0.0	24.2	0.0	4.6	0.0	0.0	0.0	32.0	715
1987	549	36,179	0.0	0.0	47.2	0.0	15.7	0.0	35.7	0.0	1.5	0.0	0.0	0.0	21.9	632
1988	645	55,716	0.0	0.0	30.9	0.0	44.0	0.0	19.1	0.0	6.0	0.0	0.0	0.0	35.5	699
1989	353	43,217	0.0	0.0	33.1	0.0	24.8	3.5	29.7	1.4	5.2	2.2	0.0	0.0	28.2	719

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Year	Sample Size	Total Harvest	Percent by Age Class											Percent Females	Mean Length (mm)	
			(0.2)	(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)			(2.5)
1990	408	53,504	0.0	0.0	41.4	0.0	37.7	0.0	17.4	0.0	3.5	0.0	0.0	0.0	18.0	691
1991	420	37,778	0.2	0.0	33.0	0.0	30.5	1.9	28.4	1.5	2.8	1.3	0.0	0.5	36.0	712
1992	717	46,872	0.0	1.2	45.7	0.0	27.7	0.2	24.0	0.0	1.0	0.1	0.0	0.0	22.6	658
1993	102	8,735	0.0	0.0	61.6	0.0	21.5	0.0	9.6	4.8	0.5	1.0	0.0	1.0	6.3	621
1994	208	16,211	0.0	0.5	17.3	0.0	50.3	1.9	26.0	1.0	2.0	1.0	0.0	0.0	23.7	708
1995	578	30,846	0.0	0.1	34.2	0.0	15.9	0.0	49.0	0.0	0.8	0.0	0.0	0.0	31.2	715
1996	592	7,419	0.0	0.3	27.7	0.0	42.6	0.0	19.9	0.1	9.4	0.0	0.1	0.0	20.6	686
1997	162	10,441	0.0	0.0	52.5	0.0	16.7	0.0	30.2	0.0	0.6	0.0	0.0	0.0	18.5	673
1998	437	17,359	0.0	1.1	23.8	0.0	59.0	0.0	13.9	0.0	2.2	0.0	0.0	0.0	22.0	692
1999	190	4,705	0.0	0.5	29.5	0.0	23.2	0.0	45.8	0.0	1.1	0.0	0.0	0.0	28.4	704
2000 <sup>a</sup>		444														
2001 <sup>b</sup>	20	90														
2002 <sup>b</sup>		72														
2003 <sup>a</sup>		158														
2004	353	2,305	0.0	1.2	58.2	0.0	25.4	0.0	14.6	0.0	0.6	0.0	0.0	0.0	11.6	645
2005	488	4,784	0.0	0.0	36.8	0.0	48.0	0.2	14.8	0.0	0.2	0.0	0.0	0.0	16.0	667
2006 <sup>c</sup>	184	2,777	0.0	1.1	60.9	0.0	27.2	0.0	10.3	0.0	0.5	0.0	0.0	0.0	7.1	617
2007 <sup>b</sup>		179														
2008	455	8,865	0.0	0.0	40.3	0.0	46.6	0.3	10.0	1.3	1.5	0.0	0.0	0.0	10.4	627
2009	388	6,664	0.0	0.0	41.9	0.0	30.0	0.5	26.3	0.0	1.0	0.2	0.0	0.0	20.1	673
2010	290	2,731	0.0	0.0	35.6	0.0	38.7	0.0	24.9	0.0	0.3	0.4	0.0	0.0	29.0	660
2011 <sup>b</sup>	13	49														

Note: From 1964 to 1971 mesh sizes used in the Chinook salmon commercial fishery was not restricted, from 1972 to 1984, both restricted ( $\leq 6$  inch) and unrestricted mesh sizes were used, and since 1985–2011, mesh size has been restricted mesh ( $\leq 6$  inch). Harvest data for years 1964 to 2009 were from Bavilla et al. 2010 and years 2010 and 2011 were from the ADF&G Fish Ticket Database.

<sup>a</sup> ASL data were not collected.

<sup>b</sup> Sampling was not appropriate for estimating ASL composition for the season.

<sup>c</sup> Samples were collected but are currently not archived in AYK DBMS.

Table 116.—Estimated age and sex composition, mean length, and total number of Kuskokwim Area Chinook salmon harvested in the W4 commercial gillnet fishery, 1968–2011.

Year	Sample Size	Total Harvest	Percent by Age Class												Percent Females	Mean Length (mm)
			(0.2)	(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)		
1968 <sup>a</sup>																
1969	204	8,879	0.0	1.7	31.1	0.0	19.3	0.0	39.8	0.0	6.7	1.3	0.0	0.0	39.1	709
1970	259	16,802	0.0	0.0	19.4	0.0	34.6	0.2	34.5	2.4	7.7	1.1	0.0	0.0	30.1	727
1971 <sup>a</sup>		18,269														
1972 <sup>a</sup>		4,185														
1973	213	15,880	0.0	0.0	6.1	0.0	11.0	0.0	70.8	0.0	12.1	0.0	0.0	0.0	53.8	848
1974	150	14,993	0.0	1.4	30.9	0.0	13.6	0.0	25.0	0.0	29.1	0.0	0.0	0.0	32.8	771
1975	198	8,704	0.0	1.1	33.3	0.0	44.6	0.0	16.3	0.0	4.7	0.0	0.0	0.0	26.1	679
1976	349	3,928	0.0	0.0	49.5	0.0	32.2	0.0	17.5	0.0	0.7	0.0	0.0	0.0	23.8	656
1977	480	14,110	0.0	0.0	2.5	0.0	39.0	0.0	56.5	0.0	2.0	0.0	0.0	0.0	49.0	818
1978	234	19,090	0.0	0.0	0.0	0.0	3.0	0.0	91.9	0.0	4.3	0.0	0.8	0.0	52.4	887
1979 <sup>b</sup>	377	12,335														
1980	495	11,144	0.0	4.6	29.6	0.0	40.8	0.2	20.2	0.8	3.6	0.2	0.0	0.0	43.1	705
1981	612	10,387	0.0	0.1	55.1	0.0	23.6	0.0	19.2	0.0	1.9	0.0	0.0	0.0	57.9	667
1982 <sup>b</sup>	715	24,524														
1983	762	22,106	0.0	0.3	26.2	0.0	7.2	0.0	64.0	0.0	2.3	0.0	0.0	0.0	39.1	779
1984	583	46,385	0.0	0.0	12.7	0.0	55.0	0.0	25.1	0.0	7.2	0.0	0.0	0.0	15.2	719
1985	568	33,663	0.0	0.0	19.4	0.0	23.1	0.0	55.3	0.0	2.2	0.0	0.0	0.0	32.3	778
1986	502	30,401	0.0	1.6	5.8	0.0	45.5	0.0	35.1	0.0	12.1	0.0	0.0	0.0	28.8	771
1987	524	22,835	0.0	0.5	27.0	0.0	17.5	0.0	52.5	0.0	2.5	0.0	0.0	0.0	16.3	738
1988	591	26,022	0.0	0.0	24.0	0.0	33.4	0.0	30.5	0.0	12.1	0.0	0.0	0.0	38.6	749
1989	422	13,883	0.0	2.2	20.4	0.0	18.8	0.0	53.3	0.0	5.3	0.0	0.0	0.0	46.0	780
1990	349	20,820	0.0	0.0	21.8	0.0	34.9	0.0	31.2	0.1	10.7	0.3	0.5	0.1	38.8	743
1991	503	27,644	0.0	0.1	18.5	0.0	25.8	0.0	48.4	0.4	6.6	0.0	0.0	0.1	39.5	768
1992	501	9,480	0.0	4.9	31.3	0.0	35.3	0.0	24.7	0.0	3.7	0.0	0.0	0.0	66.1	N/A
1993	337	17,197	0.0	0.0	36.4	0.0	27.9	0.3	30.9	1.0	3.3	0.2	0.0	0.0	38.5	706
1994	326	15,784	0.0	1.1	17.2	0.0	40.3	0.0	36.6	0.0	4.4	0.3	0.0	0.0	45.1	739
1995	603	8,564	0.0	0.0	23.6	0.0	15.8	0.0	60.0	0.0	0.6	0.0	0.0	0.0	44.4	761
1996 <sup>c</sup>	399	38,584														

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Year	Sample Size	Total Harvest	Percent by Age Class												Percent Females	Mean Length (mm)
1997	573	14,165	0.0	1.1	35.2	0.1	12.0	0.0	51.0	0.0	0.6	0.0	0.0	0.0	35.0	710
1998	724	35,510	0.0	3.1	24.1	0.0	51.3	0.0	19.4	0.0	2.1	0.0	0.0	0.0	20.7	692
1999	662	18,426	0.0	0.4	29.8	0.0	22.2	0.1	45.6	0.0	1.6	0.2	0.0	0.0	30.2	718
2000	480	21,229	0.0	0.7	13.3	0.0	43.0	0.0	40.5	0.0	2.4	0.0	0.0	0.0	30.4	734
2001	570	12,775	0.0	0.3	9.6	0.0	13.5	0.0	75.3	0.0	1.2	0.0	0.0	0.0	39.5	791
2002	436	11,480	0.0	1.0	30.8	0.0	27.6	0.0	36.3	0.0	4.3	0.0	0.0	0.0	23.3	687
2003	547	14,444	0.0	2.9	27.6	0.0	34.3	0.0	32.6	0.0	2.5	0.0	0.0	0.0	23.7	681
2004	208	25,465	0.0	0.5	46.6	0.0	29.4	0.0	21.7	0.0	1.9	0.0	0.0	0.0	14.0	677
2005	866	24,195	0.0	0.5	22.1	0.0	49.4	0.0a	27.3	0.0	0.7	0.0	0.0	0.0	25.8	717
2006	658	19,184	0.0	0.2	32.9	0.0	30.9	0.3	33.4	0.0	2.3	0.0	0.0	0.0	26.9	696
2007	615	19,573	0.0	0.4	36.0	0.0	23.2	0.0	38.0	0.2	1.6	0.6	0.0	0.0	26.9	687
2008	529	13,812	0.0	0.0	30.3	0.0	42.4	0.0	25.7	0.0	1.1	0.5	0.0	0.0	24.0	678
2009	567	13,920	0.0	1.5	44.5	0.0	26.9	0.5	26.0	0.1	0.4	0.1	0.0	0.0	17.6	657
2010	479	14,230	0.0	2.0	22.7	0.0	50.3	0.0	24.5	0.0	0.5	0.0	0.0	0.0	28.4	692
2011	749	15,387	0.0	1.4	42.0	0.0	32.7	0.5	22.1	0.4	0.8	0.2	0.0	0.0	20.1	658

Note: From 1968 to 1971 mesh sizes used in the Chinook salmon commercial fishery was not restricted, from 1972 to 1984, both restricted ( $\leq 6$  inch) and unrestricted mesh sizes were used, and since 1985 to 2011, mesh size has been restricted mesh ( $\leq 6$  inch). Harvest data for years 1964 to 2009 were from Bavilla et al. 2010 and years 2010 and 2011 were from the ADF&G Fish Ticket Database. N/A designates years when length data were not available or not summarized in Molyneux et al. 2010.

<sup>a</sup> ASL data were not collected.

<sup>b</sup> Samples were not summaries in Molyneux et al. 2010.

<sup>c</sup> Sampling was not appropriate for estimating ASL composition for the season.

Table 117.—Estimated age and sex composition, mean length, and total number of Kuskokwim Area Chinook salmon harvest in the W5 commercial gillnet fishery, 1990–2011.

Year	Sample Size	Total Harvest	Percent by Age Class												Percent Females	Mean Length (mm)
			(0.2)	(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)		
1990 <sup>a</sup>	148	3,303														
1991	258	912	0.0	0.0	27.9	0.0	41.5	0.2	24.1	0.0	3.6	2.3	0.0	0.4	38.6	N/A
1992	140	3,528	0.0	0.7	29.9	0.0	35.3	1.1	30.5	0.0	1.5	1.1	0.0	0.0	35.2	N/A
1993 <sup>a</sup>	152	2,117														
1994 <sup>a</sup>	150	2,570														
1995 <sup>a</sup>	196	2,922														
1996 <sup>b</sup>		1,375														
1997	471	2,039	0.0	0.9	46.6	0.0	12.3	0.0	38.8	0.0	1.4	0.0	0.0	0.0	32.1	714
1998	404	3,675	0.0	1.5	16.2	0.0	57.6	0.0	22.3	0.0	2.4	0.0	0.0	0.0	25.8	722
1999 <sup>a</sup>	312	1,888														
2000	376	4,442	0.0	0.0	20.4	0.0	58.4	0.0	19.5	0.0	1.7	0.0	0.0	0.0	51.7	705
2001	262	1,519	0.0	0.2	12.5	0.0	22.4	0.0	63.1	0.0	1.8	0.0	0.0	0.0	60.1	775
2002	164	979	0.0	0.8	38.2	0.0	31.4	0.0	27.9	0.0	1.7	0.0	0.0	0.0	22.0	644
2003 <sup>a</sup>	142	1,412														742
2004	129	2,565	0.0	0.0	53.2	0.0	26.1	0.0	16.3	0.0	4.5	0.0	0.0	0.0	N/A	655
2005 <sup>a</sup>	208	2,035														683
2006	182	2,892	0.0	0.0	33.0	0.0	45.1	0.0	20.3	0.0	1.6	0.0	0.0	0.0	17.6	674
2007	369	3,126	0.0	0.0	39.8	0.0	21.9	0.0	35.0	0.6	0.4	2.3	0.0	0.0	27.5	696
2008 <sup>b</sup>		1,281														
2009	515	1,509	0.0	0.3	52.9	0.0	19.2	0.2	26.1	0.8	0.5	0.0	0.0	0.0	21.3	643
2010	621	1,752	0.0	2.2	32.3	0.0	50.8	0.2	13.7	0.0	0.9	0.0	0.0	0.0	23.4	666
2011	540	2,091	0.0	0.2	62.6	0.0	21.4	0.3	15.1	0.0	0.4	0.0	0.0	0.0	12.1	611

Note: From 1985 to 2011 restricted mesh ( $\leq 6$  inch) gillnets were used. Harvest data for years 1990 to 2009 were from Bavilla et al. 2010 and years 2010 and 2011 were from the ADF&G Fish Ticket Database. ASL samples are available discontinuously back to 1973 but summaries have not been produced. N/A designates years when data were not available or not summarized in Molyneux et al. 2010.

<sup>a</sup> Sampling was not appropriate for estimating ASL composition for the season.

<sup>b</sup> ASL data were not collected.

Table 118.—Estimated age and sex composition, mean length, and total number of Chinook salmon harvest in the lower Kuskokwim River subsistence fishery, 2001–2011.

Year	Number of Samplers	Sample Size	Total Harvest	Percent by Age Class											Percent Females	Mean Length (mm)
				(1.1)	(0.3)	(1.2)	(0.4)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)		
2001	18	1,059	76,397	0.0	0.0	4.7	0.0	30.2	0.0	60.6	0.0	4.3	0.1	0.0	33.6	777
2002	24	2,015	79,633	0.0	0.0	7.8	0.0	33.0	0.0 <sup>a</sup>	53.9	0.0	5.2	0.0	0.0 <sup>a</sup>	40.5	769
2003	32	2,035	65,131	0.2	0.0	6.7	0.0	44.2	0.0	42.1	0.0	6.7	0.0	0.0	37.3	781
2004	21	2,032	94,125	0.1	0.0	15.2	0.0	35.9	0.3	45.9	0.0 <sup>a</sup>	2.6	0.0	0.0	33.2	759
2005	30	2,409	83,554	0.0 <sup>a</sup>	0.0	5.4	0.0	49.8	0.0	42.7	0.2	1.8	0.1	0.0	36.7	776
2006	23	1,684	88,356	0.2	0.0	6.3	0.0	35.7	0.1	53.3	0.2	4.1	0.1	0.0	42.3	787
2007	32	1,987	94,171	0.0	0.0	6.5	0.0	37.1	0.0	52.8	0.3	2.6	0.7	0.0	42.2	734
2008	46	2,802	96,435	0.2	0.0	8.2	0.0	53.8	0.0 <sup>a</sup>	34.3	0.6	2.6	0.2	0.0	33.8	752
2009	54	3,606	77,373	0.1	0.0	10.0	0.0	34.7	0.1	53.6	0.1	1.3	0.1	0.0 <sup>a</sup>	38.0	770
2010	35	1,695	64,586	0.1	0.1	7.8	0.1	49.2	0.1	39.7	0.0	3.0	0.0	0.0	42.4	773
2011	20	968	NA <sup>b</sup>	0.3	0.0	13.3	0.0	47.7	0.0	36.5	0.2	1.9	0.0	0.1	34.4	746

Note: Samples were collected by subsistence fishermen who sampled their own harvests or the harvests of others. Estimates of total harvest are from Hamazaki 2011.

<sup>a</sup> Age class was present but represented less than 0.1%

<sup>b</sup> Harvest estimates for 2011 were not available for publication.

Table 119.—Estimated age and sex composition, mean length, and total escapement of Kuskokwim Area Chinook salmon past the Middle Fork Goodnews River weir, 1991–2011.

Year	Sample Size	Total Escapement	Percent by Age Class									Percent Females	Mean Length (mm)
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(2.5)		
1991	279	1,952	0.0	17.3	32.0	0.0	39.1	0.0	11.0	0.3	0.3	44.7	N/A
1992 <sup>a</sup>	70	1,905											
1993 <sup>a</sup>	31	2,349											
1994 <sup>a</sup>	208	3,856											
1995	308	4,836	0.0	17.4	17.5	0.0	64.3	0.0	0.8	0.0	0.0	43.8	798
1996 <sup>a</sup>	42	2,931											
1997	121	2,937	0.6	60.3	9.1	0.0	30.0	0.0	0.0	0.0	0.0	25.0	691
1998 <sup>a</sup>	8	4,584											
1999 <sup>a</sup>	28	3,221										35.7	619
2000	214	2,500	1.1	11.9	63.9	0.0	22.2	0.0	0.9	0.0	0.0	32.0	738
2001 <sup>a</sup>	39	5,351										46.2	794
2002	199	3,085	0.0	31.0	23.7	0.0	41.1	0.0	4.2	0.0	0.0	32.2	713
2003	241	2,389	3.2	13.6	44.1	0.0	34.4	0.0	4.7	0.0	0.0	41.6	742
2004 <sup>a</sup>	174	4,388											
2005 <sup>a</sup>	155	4,633											
2006 <sup>a</sup>	57	4,559											
2007	209	3,852	1.2	33.7	27.2	0.0	34.8	0.3	1.2	1.6	0.0	37.2	713
2008	123	2,161	7.8	17.5	42.0	0.0	26.1	0.0	6.5	0.0	0.0	46.6	718
2009 <sup>a</sup>	57	1,630										47.4	767
2010	76	2,244	3.0	69.1	16.0	1.2	10.8	0.0	0.0	0.0	0.0	14.3	586
2011	44	1,861	0.0	31.8	36.4	0.0	31.8	0.0	0.0	0.0	0.0	34.1	707

*Note:* Escapement data were from the Kuskokwim Area master escapement file maintained by ADF&G Kuskokwim Research Group. N/A designates years when length data were not available or not summarized in Molyneaux et al. 2010.

<sup>a</sup> Sampling was not appropriate for estimating ASL composition for the season.

Table 120.—Estimated age and sex composition, mean length, and total escapement of Kuskokwim Area Chinook salmon past the Kanektok River weir, 1997 and 2001–2011.

Year	Sample Size	Total Escapement	Percent by Age Class						Percent Females	Mean Length (mm)	
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(1.5)			(2.4)
2002	188	5,343	2.3	22.9	25.0	0.0	43.1	6.6	0.0	37.5	712
2003	174	8,231	2.3	23.6	35.3	0.0	36.7	2.0	0.0	32.7	704
2004	428	19,528	0.2	58.3	25.2	0.0	15.6	0.7	0.0	13.6	658
2005 <sup>a</sup>	224	14,331									
2006 <sup>b</sup>											
2007	431	14,120	0.9	32.9	19.1	0.0	44.2	2.7	0.2	34.9	706
2008 <sup>a</sup>	34	6,578									
2009	468	6,841	0.4	26.2	23.2	0.2	49.5	0.2	0.2	37.3	740
2010	224	5,799	0.9	35.2	44.0	0.4	19.1	0.5	0.0	23.7	659
2011	159	5,032	0.0	59.2	27.9	0.0	12.9	0.0	0.0	22.0	617

*Note:* Escapement data were from the Kuskokwim Area master escapement file maintained by ADF&G Kuskokwim Research Group.

<sup>a</sup> Sampling was not appropriate for estimating ASL composition for the season.

<sup>b</sup> Weir did not operate.

Table 121.—Estimated age and sex composition, mean length, and total escapement of Kuskokwim Area Chinook salmon past the Kwethluk River weir, 1992 and 2000–2011.

Year	Sample Size	Total Escapement	Percent by Age Class						Percent Females	Mean Length (mm)		
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)			(1.5)	(2.4)
1992	759	9,675	6.6	37.6	23.8	0.4	30.1	0.1	1.2	0.1	25.0	649
2000	301	3,547	0.0	29.9	36.4	0.0	27.5	0.0	6.2	0.0	21.7	688
2001 <sup>ab</sup>	2	129										
2002	807	8,502	0.0	44.4	33.1	0.0	20.6	0.0	1.9	0.0	20.8	655
2003	1,133	14,474	0.3	30.7	43.3	0.0	23.2	0.0	2.5	0.0	18.3	688
2004	1,151	28,604	0.7	56.1	22.7	0.1	19.9	0.0	0.6	0.0	16.7	672
2005 <sup>c</sup>												
2006	923	17,618	0.3	32.4	22.5	0.0	40.1	0.0	4.6	0.0	39.9	736
2007	836	12,927	0.2	44.8	30.8	0.0	22.6	0.0	1.7	0.0	25.4	665
2008	567	5,275	0.0	19.5	42.3	0.1	34.0	0.7	3.4	0.0	34.5	759
2009	488	5,744	0.0	22.6	27.8	1.0	48.1	0.0	0.5	0.0	42.3	779
2010	334	1,669	0.0	16.8	43.3	0.0	35.8	0.0	4.0	0.0	50.3	759
2011	582	4,079	0.0	28.2	25.8	0.2	43.6	0.3	1.8	0.0	34.1	736

*Note:* Escapement data were from the Kuskokwim Area master escapement file maintained by ADF&G Kuskokwim Research Group. The Kwethluk River weir is operated by USFWS. Summaries were generated by the ADF&G and may not be consistent with published USFWS data.

<sup>a</sup> Weir did not operate for much of the season. Escapement shown is partial.

<sup>b</sup> Sampling was not appropriate for estimating ASL composition for the season.

<sup>c</sup> Weir did not operate.

Table 122.—Estimated age and sex composition, mean length, and total escapement of Kuskokwim Area Chinook salmon past the Tuluksak River weir, 1991–1994 and 2001–2011.

Year	Sample Size	Total Escapement	Percent by Age Class												Percent Females	Mean Length (mm)
			(0.2)	(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)		
1991	346	697	0.0	0.0	16.0	0.0	20.9	10.2	33.2	6.9	8.2	3.0	0.3	1.3	29.1	715
1992	538	1,083	0.0	8.8	38.8	0.0	32.6	2.3	15.4	0.5	1.5	0.0	0.0	0.0	14.7	639
1993	619	2,218	0.0	1.2	52.0	0.0	28.2	0.6	15.9	0.8	0.9	0.3	0.0	0.0	13.8	637
1994	475	2,917	0.2	1.2	18.8	0.4	52.9	1.3	17.9	3.7	0.5	3.0	0.0	0.0	23.1	710
2001 <sup>a</sup>	22	998														
2002	188	1,346	0.0	2.4	38.0	0.0	30.9	0.0	27.5	0.0	2.4	0.0	0.0	0.0	37.8	684
2003	225	1,064	0.0	0.2	33.4	0.0	39.8	0.0	22.4	0.0	4.2	0.0	0.0	0.0	30.5	709
2004	255	1,475	0.0	0.8	24.6	0.0	62.4	0.0	31.2	0.0	1.0	0.0	0.0	0.0	35.6	730
2005	438	2,653	0.0	0.0	31.7	0.0	33.3	0.0	34.4	0.0	0.7	0.0	0.0	0.0	40.8	696
2006	149	1,043	0.0	0.0	36.5	0.0	32.8	0.0	28.3	0.0	2.4	0.0	0.0	0.0	27.7	691
2007	197	374	0.0	1.0	13.1	0.0	27.0	0.0	55.7	0.0	3.1	0.0	0.0	0.0	48.5	757
2008	255	701	0.0	0.0	15.8	0.0	49.3	0.2	30.2	2.0	2.5	0.0	0.0	0.0	51.4	761
2009	220	362	0.0	0.0	20.9	0.0	34.1	0.8	43.1	0.0	1.2	0.0	0.0	0.0	45.9	739
2010	85	201	0.0	0.0	52.9	0.0	35.3	0.0	10.6	0.0	1.2	0.0	0.0	0.0	29.4	636
2011 <sup>a</sup>	19	284														

*Note:* Escapement data were from the Kuskokwim Area master escapement file maintained by ADF&G Kuskokwim Research Group. The Kwethluk River weir is operated by USFWS. Summaries were generated by the ADF&G and may not be consistent with published USFWS data.

<sup>a</sup> Sampling was not appropriate for estimating ASL composition for the season.

Table 123.—Estimated age and sex composition, mean length, and total escapement of Kuskokwim River Chinook salmon past the George River weir, 1996–2011.

Year	Sample Size	Total Escapement	Percent by Age Class								Percent Females	Mean Length (mm)
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)		
1996	191	7,716	0.0	7.1	23.2	0.4	39.8	0.0	29.4	0.0	44.3	816
1997	269	7,823	0.0	34.6	11.7	0.0	53.7	0.0	0.0	0.0	37.4	736
1998 <sup>a</sup>	75	2,505										
1999 <sup>a</sup>	54	3,548										
2000 <sup>a</sup>	72	2,960										
2001	62	3,309	0.0	12.5	30.9	0.0	48.8	0.0	8.1	0.0	33.0	757
2002	315	2,444	0.0	12.6	18.3	0.0	60.9	0.0	8.2	0.0	40.6	759
2003 <sup>a</sup>	23	4,693										
2004	269	5,207	0.5	25.9	21.2	0.0	49.6	0.0	2.7	0.0	37.7	763
2005	471	3,845	0.0	10.6	43.9	0.0	40.7	1.2	3.3	0.3	35.7	756
2006	223	4,357	0.2	24.9	28.2	0.0	35.8	0.0	10.8	0.0	35.1	736
2007 <sup>a</sup>	249	4,883										
2008	288	2,698	0.0	19.8	48.7	0.0	27.3	1.0	3.2	0.0	27.9	699
2009	152	3,663	0.0	21.1	25.0	0.0	52.0	0.0	1.0	0.9	41.9	762
2010	163	1,500	1.1	35.8	27.9	0.0	29.9	0.0	5.3	0.0	30.6	647
2011	167	1,571	1.2	35.2	33.5	0.0	27.7	0.4	1.7	0.4	37.5	686

Note: Escapement data were from the Kuskokwim Area master escapement file maintained by ADF&G Kuskokwim Research Group.

<sup>a</sup> Sampling was not appropriate for estimating ASL composition for the season.

Table 124.—Estimated age and sex composition, mean length, and total escapement of Kuskokwim Area Chinook salmon past the Tatlawiksuk River weir, 1998–2011.

Year	Sample Size	Total Escapement	Percent by Age Class								Percent Females	Mean Length (mm)
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)		
1998 <sup>ab</sup>	15	970										
1999 <sup>b</sup>	7	1,413										
2000 <sup>b</sup>	7	810										
2001 <sup>b</sup>	74	2,010										
2002	279	2,237	0.0	23.2	19.7	0.4	52.9	0.0	3.6	0.0	36.8	716
2003 <sup>ab</sup>	39	601										
2004	301	2,833	0.0	26.5	40.6	0.0	32.9	0.0	0.0	0.0	32.6	716
2005	384	2,918	0.0	13.4	49.5	0.0	35.6	0.0	1.4	0.0	42.6	729
2006	178	1,700	0.0	21.0	44.1	0.0	30.4	0.0	4.6	0.0	41.4	682
2007	275	2,061	0.4	34.7	43.9	0.0	19.7	0.0	1.0	0.4	27.2	653
2008	93	1,071	0.0	10.3	57.4	0.0	32.3	0.0	0.0	0.0	39.0	709
2009	93	1,071	0.0	31.7	40.1	0.0	27.5	0.0	0.0	0.8	40.0	730
2010	80	567	1.0	29.4	43.2	0.0	23.3	0.0	2.0	1.1	39.4	706
2011	123	1,012	0.0	45.5	30.2	0.0	21.7	0.0	1.7	0.8	25.5	664

Note: Escapement data were from the Kuskokwim Area master escapement file maintained by ADF&G Kuskokwim Research Group.

<sup>a</sup> Weir did not operate for most of the season. Escapement shown is partial.

<sup>b</sup> Sampling was not appropriate for estimating ASL composition for the season.

Table 125.—Estimated age and sex composition, mean length, and total escapement of Kuskokwim Area Chinook salmon past the Kogruklu River weir, 1976–2011.

Year	Sample Size	Total Escapement	Percent by Age Class									Percent Females	Mean Length (mm)
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)		
1976	347	5,600	0.0	7.6	40.7	0.4	50.8	0.0	0.4	0.0	0.0	44.7	815
1977 <sup>ab</sup>		1,385											
1978	516	13,667	0.2	17.0	10.5	0.0	55.9	1.4	3.0	12.1	0.0	46.2	849
1979	383	11,338	0.0	66.2	14.4	0.0	16.3	0.0	3.1	0.0	0.0	13.3	691
1980 <sup>ac</sup>	118	843											
1981	797	16,809	0.3	7.4	30.3	0.0	58.2	0.0	3.9	0.0	0.0	44.0	830
1982	392	10,993	0.0	4.1	24.5	0.0	66.3	0.0	5.1	0.0	0.0	51.7	779
1983	448	3,025	0.2	20.0	19.6	0.0	55.9	0.0	4.2	0.0	0.0	30.5	763
1984	1,376	4,928	0.1	22.5	47.5	0.0	26.4	0.0	3.5	0.0	0.1	21.0	701
1985	1,042	4,625	0.0	16.2	35.7	0.0	44.9	0.0	3.2	0.0	0.1	31.5	745
1986	679	5,038	0.4	8.6	50.9	0.0	32.8	0.0	7.2	0.0	0.0	30.4	726
1987 <sup>ac</sup>	141	770											
1988	867	8,520	0.0	8.0	52.7	0.0	31.4	0.0	8.0	0.0	0.0	35.3	728
1989	217	11,940											
1990 <sup>d</sup>	367	10,214										22.2	714
1991	315	7,850	0.0	6.4	29.8	0.3	62.4	0.0	1.1	0.0	0.0	49.3	830
1992 <sup>c</sup>	349	6,755											
1993 <sup>c</sup>	313	12,333											
1994 <sup>c</sup>	232	15,227											
1995	533	18,651	0.0	19.1	25.5	0.0	55.1	0.1	0.2	0.1	0.0	42.9	796
1996	480	14,199	0.0	12.6	54.9	0.0	25.3	0.4	6.8	0.0	0.0	24.0	761
1997	472	13,285	0.0	33.7	20.4	0.0	45.4	0.0	0.4	0.0	0.0	31.4	758
1998 <sup>c</sup>	86	12,107											
1999	305	5,570	0.3	5.4	25.2	0.3	67.3	0.0	1.5	0.0	0.0	53.2	782
2000	98	3,310	0.0	9.9	49.2	0.0	39.1	0.0	1.8	0.0	0.0	41.2	743
2001	397	9,298	0.0	15.3	39.3	0.0	43.8	0.0	1.5	0.0	0.0	28.5	739

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Year	Sample Size	Total Escapement	Percent by Age Class									Percent Females	Mean Length (mm)
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)		
2002	466	10,104	0.0	17.4	50.0	0.0	31.2	0.0	1.4	0.0	0.0	25.5	719
2003	373	11,771	0.0	18.7	42.6	0.0	36.0	0.0	2.8	0.0	0.0	31.3	732
2004	731	19,651	0.0	44.7	36.2	0.0	18.5	0.0	0.6	0.0	0.0	16.4	675
2005	734	22,000	0.3	24.3	46.5	0.0	28.1	0.0	0.9	0.0	0.0	34.7	714
2006	711	19,414	0.5	34.9	30.9	0.0	29.4	0.0	4.3	0.0	0.0	33.4	705
2007	289	13,029	0.0	32.3	33.0	0.0	31.7	0.0	2.9	0.0	0.0	28.4	699
2008	296	9,730	0.5	35.9	43.4	0.0	19.1	0.2	1.0	0.0	0.0	23.2	676
2009	245	9,702	0.0	22.2	52.4	0.7	22.9	0.4	1.4	0.0	0.0	28.2	730
2010	298	5,690	0.0	44.0	28.8	0.0	25.6	0.0	1.5	0.0	0.0	26.2	672
2011	268	6,891	0.0	47.2	32.6	0.3	19.5	0.3	0.0	0.0	0.0	20.1	673

Note: Escapement data were from the Kuskokwim Area master escapement file maintained by ADF&G Kuskokwim Research Group.

<sup>a</sup> Weir inoperable for a majority of the season. Escapement shown is partial.

<sup>b</sup> ASL Samples were not collected.

<sup>c</sup> Sampling was not appropriate for estimating ASL composition for the season.

<sup>d</sup> All 1990 scales need re-aged due to potential errors.

Table 126.—Estimated age and sex composition, mean length, and total escapement of Kuskokwim Area Chinook salmon past the Takotna River weir, 2000–2011.

Year	Sample Size	Total Escapement	Percent by Age Class							Percent Females	Mean Length (mm)
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)		
2000	78	345	1.4	30.7	31.6	0.0	35.7	0.0	0.6	24.6	653
2001 <sup>a</sup>	74	718									
2002	98	316	0.0	22.3	30.4	0.0	46.3	0.0	0.9	30.0	725
2003 <sup>a</sup>	61	354									
2004	69	461									
2005	170	499									
2006	269	537	1.7	42.4	30.2	0.0	23.1	0.0	2.6	23.3	670
2007	269	410	0.0	50.6	33.5	0.0	14.8	0.3	0.8	12.9	620
2008	154	413	0.0	21.8	52.2	0.0	25.2	0.4	0.4	24.6	685
2009	107	311	0.0	28.4	29.7	0.0	41.9	0.0	0.0	41.6	721
2010 <sup>a</sup>	76	178									
2011	56	148	0.0	41.4	40.9	0.0	17.7	0.0	0.0	34.1	668

*Note:* Escapement data were from the Kuskokwim Area master escapement file maintained by ADF&G Kuskokwim Research Group.

<sup>a</sup> Sampling was not appropriate for estimating ASL composition for the season.

Table 127.—Estimated age and sex composition, mean length, and total number of Kuskokwim Area chum salmon harvested in the District W1 commercial gillnet fishery, 1972–2011.

Year	Sample Size	Total Harvest	Percent by Age Class				Percent Females	Mean Length (mm)
			(0.2)	(0.3)	(0.4)	(0.5)		
1972	542	78,619	3.1	39.4	57.5	0.0	54.9	585
1973	534	148,746	0.4	60.8	35.8	2.9	46.5	583
1974	163	171,887	1.3	46.8	47.1	4.9	47.7	553
1975	527	184,171	1.0	85.6	13.0	0.4	53.5	575
1976 <sup>a</sup>	514	177,864						
1977	679	248,721	9.6	83.0	7.3	0.1	56.6	581
1978	877	248,656	6.0	64.8	29.0	0.2	54.5	579
1979 <sup>a</sup>	962	261,874						
1980	507	483,751	0.5	98.1	1.4	0.0	56.8	557
1981	855	418,677	1.8	37.0	61.1	0.1	51.3	580
1982	888	278,306	1.0	67.8	29.7	1.4	53.5	583
1983	1,705	276,698	0.8	47.0	50.8	1.3	52.8	587
1984	1,834	423,718	0.8	89.1	9.7	0.7	60.0	576
1985	1,063	199,478	0.8	36.8	62.0	0.4	54.1	585
1986	1,064	309,213	0.4	76.5	22.6	0.5	53.1	581
1987	1,312	574,336	1.5	52.9	44.8	0.8	57.0	581
1988	2,404	1,381,674	0.8	79.3	19.1	0.8	49.1	577
1989	655	749,182	0.2	36.9	61.8	1.1	52.1	584
1990	558	461,624	0.6	70.6	27.5	1.3	51.8	576
1991	1,630	431,802	2.2	64.9	32.8	0.1	55.6	566
1992	1,677	344,603	0.0	44.5	53.5	2.0	48.9	555
1993	318	43,337	1.4	32.2	60.2	6.2	45.9	554
1994	1,389	271,115	0.7	72.5	24.7	2.0	56.7	546
1995	1,811	605,918	3.6	58.0	37.0	1.4	54.5	557
1996	2,169	207,877	0.3	73.0	24.5	2.2	53.7	565
1997	355	17,026	3.3	52.1	42.2	2.4	47.6	571
1998	1,433	207,809	0.8	87.2	11.8	0.1	57.1	557
1999	268	23,006	0.0	58.0	41.9	0.0	50.7	576
2000	253	11,570	2.4	73.6	23.0	1.0	52.6	566
2001 <sup>b</sup>	118	1,272						
2002 <sup>b</sup>	93	1,900						
2003 <sup>b</sup>	118	2,764						
2004	737	20,150	30.7	42.2	27.1	0.0	47.3	551
2005	779	69,139	0.9	93.1	5.9	0.1	53.4	558
2006 <sup>c</sup>	392	44,070	0.4	49.9	49.7	0.0	45.9	571
2007 <sup>b</sup>	201	10,763						
2008	865	30,516	0.3	20.7	74.3	4.7	41.9	563
2009	1,199	76,790	2.1	66.6	29.1	2.2	42.6	564
2010	1,265	93,148	2.8	72.6	23.5	1.1	44.7	552
2011	903	118,316	0.3	63.9	35.0	0.8	43.2	553

Note: Commercial chum salmon fishery was executed using small mesh ( $\leq 6$  inch) gillnets. Harvest data for years 1972–2009 were from Bavilla et al. 2010 and years 2010 and 2011 were from the ADF&G Fish Ticket Database.

<sup>a</sup> ASL samples were not summarized in Molyneux et al. 2010.

<sup>b</sup> Sampling was not appropriate for estimating ASL composition for the season.

<sup>c</sup> Samples were collected but are currently not archived in AYK DBMS.

Table 128.—Estimated age and sex composition, mean length, and total number of Kuskokwim Area chum salmon harvested in the District W4 commercial gillnet fishery, 1984–2011.

Year	Sample Size	Total Harvest	Percent by Age Class				Percent Females	Mean Length (mm)
			(0.2)	(0.3)	(0.4)	(0.5)		
1984	464	50,422	0.3	75.5	23.6	0.6	54.1	589
1985	457	20,418	0.0	46.2	53.1	0.7	53.5	597
1986	398	29,700	0.0	58.6	41.4	0.0	53.8	584
1987 <sup>a</sup>	241	8,557						
1988	593	29,220	1.3	68.0	29.3	1.4	49.6	583
1989	703	39,395	0.0	49.0	49.7	1.3	53.4	590
1990	618	47,717	0.8	77.3	21.3	0.6	55.0	584
1991	656	54,493	1.0	72.5	26.5	0.0	52.0	565
1992	546	73,383	0.2	35.4	62.9	1.5	52.3	590
1993	398	40,943	0.9	42.2	47.1	9.8	51.1	550
1994 <sup>a</sup>	547	61,301						
1995	598	81,462	7.6	48.5	43.1	0.8	64.1	574
1996 <sup>a</sup>	615	83,005						
1997	1,221	38,445	1.5	37.5	59.9	1.1	54.4	582
1998	857	45,095	0.7	89.0	9.6	0.7	58.5	574
1999	814	38,091	0.2	70.0	29.6	0.2	57.7	583
2000	1,043	30,553	0.5	54.0	44.9	0.6	54.3	595
2001	576	17,209	0.4	49.9	49.5	0.2	59.0	575
2002	449	29,252	4.0	56.9	36.8	2.2	63.8	574
2003	243	27,868	1.1	88.0	9.7	1.3	52.1	562
2004	225	25,820	4.2	40.2	55.0	0.6	44.3	586
2005	958	13,529	0.6	86.0	12.7	0.7	48.0	561
2006 <sup>b</sup>	1,320	39,151	4.6	43.7	51.4	0.4	50.5	559
2007	1,134	61,228	0.0	79.1	19.2	1.8	55.6	549
2008	585	57,033	0.8	34.6	60.5	4.2	47.3	580
2009	1,101	91,158	2.6	69.3	27.1	1.1	55.4	573
2010	1,174	106,610	1.0	66.8	31.0	1.2	46.9	566
2011	903	93,760	1.6	61.2	36.3	1.0	50.2	567

Note: Commercial chum salmon fishery was executed using small mesh ( $\leq 6$  inch) gillnets. Harvest data for years 1984–2009 were from Bavilla et al. 2010 and years 2010 and 2011 were from the ADF&G Fish Ticket Database.

<sup>a</sup> Sampling was not appropriate for estimating ASL composition for the season.

<sup>b</sup> Samples were collected but are currently not archived in AYK DBMS.

Table 129.—Estimated age and sex composition, mean length, and total number of Kuskokwim Area chum salmon harvested in the District W5 commercial gillnet fishery, 1984–2011.

Year	Sample Size	Total Harvest	Percent by Age Class				Percent Females	Mean Length (mm)
			(0.2)	(0.3)	(0.4)	(0.5)		
1984 <sup>a</sup>	459	14,340						
1985 <sup>a</sup>	270	4,784						
1986	353	10,356	0.4	69.3	29.4	1.0	48.5	588
1987	430	20,381	0.0	68.2	31.8	0.0	46.7	589
1988	469	33,059	0.3	17.4	80.5	1.7	54.4	606
1989	543	13,622	0.1	45.2	52.5	2.2	39.4	597
1990	359	13,194	0.4	77.6	21.8	0.2	43.9	583
1991	565	15,892	2.0	79.8	18.2	0.0	52.3	571
1992	418	18,520	0.0	14.5	83.5	2.0	59.4	573
1993 <sup>a</sup>	191	10,657						
1994 <sup>a</sup>	512	28,477						
1995 <sup>a</sup>	355	19,832						
1996 <sup>a</sup>	190	11,093						
1997	805	11,729	0.6	30.0	69.0	0.4	51.9	585
1998	469	14,155	0.5	85.7	13.3	0.5	48.6	576
1999	455	11,562	0.2	77.0	22.5	0.3	55.0	579
2000	598	7,450	0.0	42.5	57.1	0.4	60.4	601
2001	647	3,412	0.2	56.9	42.9	0.0	61.4	583
2002	234	3,799	0.3	50.3	47.9	15.0	56.1	590
2003	296	5,593	0.0	88.0	9.3	2.7	44.1	564
2004 <sup>a</sup>	76	5,965						
2005 <sup>a</sup>	105	2,568						
2006 <sup>ab</sup>	193	11,568						
2007 <sup>a</sup>	543	7,853						
2008 <sup>c</sup>		10,408						
2009	1,268	16,985	2.1	40.1	55.6	2.3	37.9	579
2010	752	26,914	1.8	74.5	21.0	2.6	36.2	564
2011	644	13,190	0.2	43.7	55.2	1.0	33.1	567

Note: Commercial chum salmon fishery was executed using small mesh ( $\leq 6$  inch) gillnets. Harvest data for years 1984–2009 were from Bavilla et al. 2010 and years 2010 and 2011 were from the ADF&G Fish Ticket Database.

<sup>a</sup> Sampling was not appropriate for estimating ASL composition for the season.

<sup>b</sup> Samples were collected but are currently not archived in AYK DBMS.

<sup>c</sup> ASL samples were not collected.

Table 130.—Estimated age and sex composition, mean length, and total escapement of Kuskokwim Area chum salmon past the Middle Fork Goodnews River weir, 1990–2011.

Year	Sample Size	Total Escapement	Percent by Age Class				Percent Females	Mean Length (mm)
			(0.2)	(0.3)	(0.4)	(0.5)		
1990	139	6,410	0.0	67.9	29.8	2.3	39.4	585
1991	291	31,644	0.0	73.1	26.9	0.0	40.5	566
1992 <sup>a</sup>	493	22,023						
1993 <sup>a</sup>	236	14,952						
1994 <sup>a</sup>	207	34,849						
1995 <sup>a</sup>	280	33,699						
1996 <sup>a</sup>	311	40,450						
1997	526	17,369	0.4	31.5	67.8	0.2	44.4	589
1998	705	28,832	0.3	86.1	13.4	0.2	49.9	578
1999	672	19,513	0.0	65.4	34.3	0.3	49.9	587
2000 <sup>a</sup>	418	13,791						
2001	768	26,820	0.7	70.6	28.7	0.1	55.5	587
2002	725	30,300	2.9	37.1	58.6	1.4	55.0	600
2003	556	21,637	0.7	84.5	12.6	2.3	45.6	572
2004	1,220	31,616	4.2	59.3	36.4	0.1	51.8	579
2005	907	26,690	1.5	83.4	15.0	0.1	52.9	571
2006	776	54,699	1.3	69.7	28.6	0.3	23.9	574
2007	865	49,285	0.8	54.1	44.2	0.9	51.4	570
2008	1,241	44,699	0.3	44.9	49.0	5.7	61.5	578
2009 <sup>a</sup>	196	19,715						
2010	189	26,687	2.1	74.5	22.7	0.7	59.7	564
2011	447	19,974	0.6	44.2	52.6	2.6	43.0	572

*Note:* Escapement data were from the Kuskokwim Area master escapement file maintained by ADF&G Kuskokwim Research Group.

<sup>a</sup> Sampling was not appropriate for estimating ASL composition for the season.

Table 131.—Estimated age and sex composition, mean length, and total escapement of Kuskokwim Area chum salmon past the Kanektok River weir, 1997 and 2002–2011.

Year	Sample Size	Total Escapement	Percent by Age Class				Percent Females	Mean Length (mm)
			(0.2)	(0.3)	(0.4)	(0.5)		
1997	1,096	51,180	0.9	34.6	63.0	1.5	41.3	589
2002	738	42,009	2.5	43.1	53.0	1.4	57.5	586
2003	733	40,066	0.8	86.8	10.4	1.9	49.6	566
2004	736	46,444	5.7	49.9	44.2	0.3	48.2	568
2005 <sup>a</sup>	894	53,580						
2006 <sup>b</sup>								
2007	1,121	133,215	0.1	63.3	34.7	2.0	48.4	566
2008 <sup>a</sup>	725	54,024						
2009	631	51,652	0.6	68.0	29.4	2.1	35.9	591
2010	663	62,567	1.2	65.1	32.3	1.4	51.5	573
2011	936	50,908	0.2	44.7	53.8	1.3	51.9	570

*Note:* Escapement data were from the Kuskokwim Area master escapement file maintained by ADF&G Kuskokwim Research Group.

<sup>a</sup> Sampling was not appropriate for estimating ASL composition for the season.

<sup>b</sup> Weir did not operate.

Table 132.—Estimated age and sex composition, mean length, and total escapement of Kuskokwim Area chum salmon past the Kwethluk River weir, 1992 and 2000–2011.

Year	Sample Size	Total Escapement	Percent by Age Class				Percent Females	Mean Length (mm)
			(0.2)	(0.3)	(0.4)	(0.5)		
1992	1,198	30,595	1.8	59.2	36.7	2.3	57.7	537
2000	995	11,691	0.7	62.8	36.0	0.5	49.5	570
2001 <sup>a</sup>	7	353						
2002	1,066	34,681	5.4	71.2	22.1	1.3	47.2	582
2003	1,530	41,812	1.9	85.0	12.1	0.9	45.3	562
2004	1,309	38,646	18.3	40.7	40.9	0.1	42.9	559
2005 <sup>b</sup>								
2006	1,201	47,490	1.5	48.4	49.7	0.4	41.3	567
2007	1,336	57,913	1.8	71.5	23.6	3.2	45.2	558
2008	983	20,030	1.2	22.3	74.4	2.1	43.5	583
2009	1,004	32,191	2.7	79.5	16.2	1.5	47.8	557
2010	909	19,242	2.8	63.5	33.1	0.7	40.8	570
2011	910	18,329	0.3	42.0	55.7	2.0	37.5	563

*Note:* Escapement data were from the Kuskokwim Area master escapement file maintained by ADF&G Kuskokwim Research Group. The Kwethluk River weir is operated by USFWS. Summaries were generated by the ADF&G and may not be consistent with published USFWS data.

<sup>a</sup> Weir did not operate for majority of the season. Sampling was not appropriate for estimating ASL composition for the season. Escapement shown in partial.

<sup>b</sup> Weir did not operate.

Table 133.—Estimated age and sex composition, mean length, and total escapement of Kuskokwim Area chum salmon past the Tuluksak River weir, 1991–1994 and 2001–2011.

Year	Sample Size	Total Escapement	Percent by Age Class					Percent Females	Mean Length (mm)
			(0.2)	(0.3)	(0.4)	(0.5)	(0.6)		
1991	1,083	7,675	4.2	62.0	33.6	0.2	0.0	47.4	541
1992	1,206	11,183	1.0	51.2	45.7	2.1	0.0	51.6	557
1993	1,163	13,804	2.1	36.4	56.5	5.1	0.0	50.1	545
1994	851	15,725	0.6	49.8	44.9	4.7	0.0	51.0	553
2001	808	19,311	0.4	75.1	24.5	0.0	0.0	43.6	564
2002	928	9,958	7.3	53.0	39.1	0.6	0.0	44.3	564
2003	1,103	11,724	2.4	89.5	7.1	1.0	0.0	31.1	556
2004	1,186	11,796	19.4	35.8	44.6	0.3	0.0	42.7	562
2005	1,147	35,696	4.1	93.1	2.6	0.3	0.0	40.3	565
2006	1,056	25,650	3.1	46.3	50.5	0.1	0.0	48.4	551
2007	1,023	17,647	3.0	74.1	20.7	2.1	0.0	32.2	554
2008	1,296	12,550	0.7	16.8	78.1	4.3	0.0	42.7	566
2009	1,122	13,671	3.6	82.4	12.0	2.0	0.0	33.3	548
2010	930	13,042	2.8	68.3	28.3	0.4	0.1	31.8	555
2011	672	10,010	0.4	51.7	47.0	0.9	0.0	35.8	545

*Note:* Escapement data were from the Kuskokwim Area master escapement file maintained by ADF&G Kuskokwim Research Group. The Kwethluk River weir is operated by USFWS. Summaries were generated by the ADF&G and may not be consistent with published USFWS data.

Table 134.—Estimated age and sex composition, mean length, and total escapement of Kuskokwim Area chum salmon past the George River weir, 1996–2011.

Year	Sample Size	Total Escapement	Percent by Age Class					Percent Females	Mean Length (mm)
			(0.2)	(0.3)	(0.4)	(0.5)	(0.6)		
1996	765	19,393	1.6	59.9	36.8	1.7	0.0	46.1	582
1997	641	5,907	0.7	51.4	46.3	1.6	0.0	42.8	562
1998 <sup>ab</sup>	322	6,391							
1999 <sup>a</sup>	611	11,552							
2000	235	3,492	1.4	46.7	50.4	1.6	0.0	43.5	580
2001	782	11,601	0.0	66.3	33.7	0.0	0.0	53.8	556
2002	955	6,543	6.4	46.3	45.8	1.5	0.0	47.3	571
2003	597	33,666	1.5	88.2	10.0	0.3	0.0	49.7	540
2004	923	14,409	9.2	38.6	52.0	0.2	0.0	47.9	555
2005	985	14,828	5.2	89.8	4.5	0.6	0.0	46.8	539
2006	934	41,467	3.5	50.8	45.5	0.2	0.0	57.5	542
2007 <sup>a</sup>	705	55,842							
2008	787	29,978	0.6	17.4	78.8	3.2	0.0	48.4	551
2009	690	7,941	10.6	52.7	30.6	6.1	0.0	50.0	545
2010	1,067	26,154	3.9	87.8	7.5	0.7	0.1	51.6	531
2011	1,023	44,640	0.8	50.0	48.8	0.4	0.0	48.2	547

*Note:* Escapement data were from the Kuskokwim Area master escapement file maintained by ADF&G Kuskokwim Research Group.

<sup>a</sup> Sampling was not appropriate for estimating ASL composition for the season.

<sup>b</sup> Weir did not operate for much of the chum salmon run. Escapement shown is partial.

Table 135.—Estimated age and sex composition, mean length, and total escapement of Kuskokwim Area chum salmon past the Tatlawiksuk River weir, 1998–2011.

Year	Sample Size	Total Escapement	Percent by Age Class				Percent Females	Mean Length (mm)
			(0.2)	(0.3)	(0.4)	(0.5)		
1998 <sup>ab</sup>	330	5,726						
1999	856	9,599	0.1	72.1	27.5	0.3	52.6	575
2000	705	6,965	2.0	57.6	39.9	0.5	48.2	577
2001	847	23,718	0.4	65.7	33.5	0.4	51.0	571
2002	1,346	24,542	6.7	58.6	33.2	1.5	50.3	567
2003 <sup>ab</sup>	57	479						
2004	1,299	21,245	14.6	42.1	43.1	0.2	38.7	565
2005	1,075	55,722	5.2	89.4	5.4	0.0	58.1	557
2006	935	32,301	1.8	55.6	42.3	0.3	42.1	560
2007	920	83,246	3.3	80.2	15.8	0.6	52.3	549
2008	799	30,896	0.5	21.3	76.2	2.0	52.3	559
2009	829	19,975	7.8	64.4	23.9	3.8	51.9	540
2010	1,082	36,701	8.9	82.7	7.9	0.5	51.6	551
2011	938	84,202	0.5	67.9	31.3	0.3	52.5	554

*Note:* Escapement data were from the Kuskokwim Area master escapement file maintained by ADF&G Kuskokwim Research Group.

<sup>a</sup> Sampling was not appropriate for estimating ASL composition for the season.

<sup>b</sup> Weir did not operate for much of the chum salmon run. Escapement shown is partial.

Table 136.—Estimated age and sex composition, mean length, and total escapement of Kuskokwim Area chum salmon past the Kogrukluk River counting tower 1971–1973 and Kogrukluk River weir, 1971–2011.

Year	Sample Size	Total Escapement	Percent by Age Class				Percent Females	Mean Length (mm)
			(0.2)	(0.3)	(0.4)	(0.5)		
1976	219	8,117	0.3	37.8	60.5	1.4	18.7	602
1977 <sup>a</sup>								
1978	322	48,125	0.8	49.9	49.3	0.0	44.2	597
1979 <sup>bc</sup>	59	18,599						
1980	83	6,323	0.0	90.5	9.5	0.0	10.2	572
1981	191	57,374	0.0	15.0	84.4	0.6	40.0	601
1982	259	64,077	0.0	59.9	40.0	0.1	48.8	577
1983 <sup>bd</sup>	484	3,257						
1984	1,252	41,484	0.0	81.4	17.4	1.3	36.3	572
1985	874	15,005	0.2	27.9	71.3	0.5	41.7	574
1986	566	14,693	0.5	71.5	25.7	2.3	39.3	574
1987 <sup>bd</sup>	160	2,365						
1988 <sup>c</sup>	665	39,543						
1989 <sup>bd</sup>	147	15,543						
1990	371	26,765	1.4	65.5	31.7	1.4	20.9	585
1991	293	24,188	0.4	57.9	41.6	0.0	15.8	580
1992	362	34,104	2.7	42.9	53.7	0.8	33.0	582
1993	361	31,901	0.0	34.0	61.0	5.0	18.4	589
1994 <sup>b</sup>	125	46,635						
1995	848	31,265	1.4	45.9	51.8	0.8	13.3	587
1996	827	48,494	1.8	67.8	28.8	1.6	15.4	605
1997	641	7,958	0.4	42.9	56.0	0.6	4.1	603
1998 <sup>bd</sup>	193	13,013						
1999	737	13,820	0.0	49.3	50.4	0.3	8.5	593
2000	583	11,491	1.2	67.4	31.0	0.3	15.3	586
2001	738	30,570	0.5	58.5	41.0	0.0	17.4	583
2002	999	51,570	0.2	75.7	23.1	1.1	15.1	579
2003	1,014	23,413	1.8	65.9	31.7	0.6	8.9	573
2004	1,033	24,201	9.2	59.4	30.9	0.5	9.2	565
2005	1,198	197,723	4.0	90.5	5.6	0.0	45.1	545
2006	1,275	180,594	1.6	62.2	36.0	0.3	38.2	550
2007	640	49,505	2.9	59.2	34.9	3.0	37.6	555
2008	524	44,978	1.5	53.8	42.0	2.6	34.9	560
2009	806	84,940	2.6	74.8	21.8	0.8	44.8	561
2010	746	63,583	2.8	62.2	34.1	0.8	45.3	553
2011	788	76,384	1.8	64.2	32.7	1.2	42.0	552

Note: Escapement data were from the Kuskokwim Area master escapement file maintained by ADF&G Kuskokwim Research Group.

<sup>a</sup> ASL data were not collected. Weir data not sufficient to produce estimate of escapement.

<sup>b</sup> Sampling was not appropriate for estimating ASL composition for the season.

<sup>c</sup> Samples were not summarized in Molyneaux et al. 2010

<sup>d</sup> Weir was inoperable for much of the season. Escapement show in partial.

Table 137.—Estimated age and sex composition, mean length, and total escapement of Kuskokwim Area chum salmon past the Takotna River weir, 2000–2011.

Year	Sample Size	Total Escapement	Percent by Age Class				Percent Females	Mean Length (mm)
			(0.2)	(0.3)	(0.4)	(0.5)		
2000	365	1,265	2.7	61.7	35.2	0.4	57.7	559
2001	573	5,411	0.1	75.1	24.7	0.2	50.3	567
2002	824	4,399	2.5	45.6	50.7	1.2	47.0	579
2003	564	3,388	5.0	83.6	10.9	0.5	47.7	559
2004	343	1,633	14.5	47.5	38.1	0.0	49.9	551
2005	836	6,488	8.6	89.9	1.5	0.0	51.3	551
2006	1,169	12,651	2.2	62.2	35.5	0.1	46.9	555
2007	946	8,873	3.4	60.1	33.7	2.7	47.8	547
2008	601	5,704	0.0	32.4	61.3	6.3	49.7	552
2009	948	2,528	3.6	75.8	18.3	2.4	49.4	556
2010	1,023	4,057	10.4	79.6	9.6	0.5	55.0	546
2011	980	8,414	1.9	60.7	37.0	0.4	55.2	545

*Note:* Escapement data were from the Kuskokwim Area master escapement file maintained by ADF&G Kuskokwim Research Group.

Table 138.—Estimated age and sex composition, mean length, and total escapement of Kuskokwim Area chum salmon migrating past Aniak River sonar project, 1996–2011.

Year	Sample Size	Total Escapement	Percent by Age Class				Percent Females	Mean Length (mm)
			(0.2)	(0.3)	(0.4)	(0.5)		
1996	459	402,195	2.1	66.8	29.7	1.4	56.8	582
1997	853	289,654	1.4	64.3	33.6	0.7	49.2	574
1998	1,044	351,792	0.3	87.4	11.9	0.4	51.9	568
1999	887	214,429	0.1	59.6	39.9	0.3	52.8	574
2000	731	177,384	1.6	72.1	25.7	0.5	54.3	577
2001	937	408,830	0.4	68.6	31.0	0.0	50.9	581
2002	805	472,346	2.7	76.8	20.3	0.1	46.8	583
2003	930	477,544	0.4	79.9	18.7	1.0	50.6	583
2004	1,130	673,445	24.4	43.2	32.1	0.3	44.4	580
2005	943	1,173,155	6.0	90.3	3.6	0.2	47.3	568
2006	746	1,108,626	0.8	61.3	37.9	0.0	40.1	575
2007	669	699,178	2.2	66.6	29.7	1.5	55.6	569
2008	484	427,911	0.0	29.7	65.9	4.4	52.1	574
2009	484	479,531	3.6	71.3	23.7	1.4	52.7	570
2010	553	429,643	7.9	70.7	21.0	0.5	56.6	558
2011 <sup>b</sup>	431	345,630						

*Note:* ASL samples were collected with a beach seine. Escapement data were from the Kuskokwim Area master escapement file maintained by ADF&G Kuskokwim Research Group.

<sup>a</sup> Sampling was not appropriate for estimating ASL composition for the season.

Table 139.—Estimated age and sex composition, mean length, and total number of Kuskokwim Area sockeye salmon harvested in the District W1 commercial gillnet fishery, 1984–2011.

Year	Sample Size	Total Harvest	Percent by Age Class											Percent Females	Mean Length (mm)	
			(0.2)	(1.1)	(0.3)	(1.2)	(0.4)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)			(3.3)
1984	296	48,575	0.3	0.3	6.8	9.4	0.3	56.9	6.8	0.6	18.6	0.0	0.0	0.0	52.6	N/A
1985	893	106,647	0.0	0.0	2.7	5.7	1.1	65.6	10.9	1.1	12.9	0.0	0.0	0.0	55.9	N/A
1986	535	95,433	0.0	0.0	2.4	4.6	1.3	64.4	11.6	1.3	14.5	0.0	0.0	0.0	50.3	N/A
1987	567	136,602	0.0	0.0	1.4	6.7	0.4	75.7	1.3	1.3	13.2	0.0	0.0	0.0	53.0	N/A
1988	453	92,025	0.0	0.0	0.2	1.4	0.0	73.0	1.4	2.2	21.0	0.0	0.4	0.4	56.5	N/A
1989	175	42,747	0.0	0.0	0.0	3.4	0.0	59.0	10.3	4.5	21.1	0.0	1.1	0.6	55.5	590
1990	250	84,870	0.0	0.4	0.4	3.6	0.8	77.2	4.8	2.8	10.0	0.0	0.0	0.0	51.2	576
1991	513	108,946	0.3	0.0	1.6	10.0	0.8	81.1	0.8	2.0	3.5	0.0	0.0	0.0	49.8	N/A
1992	504	92,218	0.0	0.0	2.4	6.1	0.8	69.2	3.2	6.3	12.0	0.0	0.0	0.0	51.1	553
1993	186	27,008	0.0	0.0	1.6	22.1	1.1	55.3	9.1	2.2	8.6	0.0	0.0	0.0	50.0	557
1994	173	49,365	0.0	0.0	0.6	1.8	0.0	72.0	0.6	1.8	22.0	0.0	1.2	0.0	49.7	571
1995	419	92,500	0.0	0.0	1.8	7.8	0.3	81.8	1.7	2.5	4.0	0.0	0.0	0.0	58.3	564
1996	520	33,878	0.2	0.3	6.3	3.5	0.0	82.1	1.5	1.5	4.7	0.0	0.0	0.0	42.9	566
1997	89	21,989	0.0	0.0	0.0	25.8	0.0	50.6	11.2	2.2	10.1	0.0	0.0	0.0	50.6	566
1998	493	60,906	0.0	0.0	1.4	5.9	0.1	62.6	9.4	1.5	18.7	0.0	0.4	0.0	49.6	563
1999	189	16,976	0.0	0.0	0.0	4.2	0.0	65.6	5.8	5.3	19.0	0.0	0.0	0.0	58.7	578
2000	170	4,130	0.0	0.0	2.9	9.4	0.0	60.0	2.4	0.0	25.3	0.0	0.0	0.0	57.1	574
2001 <sup>b</sup>		84														
2002 <sup>b</sup>		84														
2003 <sup>b</sup>		282														
2004 <sup>c</sup>	416	8,532														
2005	551	27,645	0.0	0.0	1.4	8.9	0.0	80.7	0.8	1.2	7.0	0.0	0.0	0.0	54.3	562
2006 <sup>cd</sup>	179	12,618														572
2007 <sup>b</sup>		703														
2008	509	15,601	0.0	0.0	2.5	5.2	0.0	84.5	0.1	4.6	3.0	0.0	0.0	0.0	53.2	550
2009	525	25,673	0.0	0.0	6.9	6.3	0.0	67.4	1.8	12.8	4.8	0.0	0.0	0.0	52.3	557
2010	1,120	22,428	0.0	0.0	3.8	17.3	1.9	66.3	0.3	8.9	1.3	0.0	0.0	0.0	52.5	564
2011	682	13,497	0.0	0.0	13.3	2.5	2.6	64.6	0.6	13.1	2.8	0.1	0.3	0.0	54.7	562

Note: Commercial sockeye salmon fishery was executed using small mesh ( $\leq 6$  inch) gillnets. Harvest data for years 1984–2009 were from Bavilla et al. 2010 and years 2010 and 2011 were from the ADF&G Fish Ticket Database. N/A designates years when length data were not available or not summarized in Molyneaux et al. 2010.

<sup>a</sup> Age class was represented in samples but percent composition was  $<0.05$ .

<sup>b</sup> ASL data were not collected.

<sup>c</sup> Sampling was not appropriate for estimating ASL composition for the season.

<sup>d</sup> Samples were collected but are currently not archived in AYK DBMS.

Table 140.—Estimated age and sex composition, mean length, and total number of Kuskokwim Area sockeye salmon harvested in the District W4 commercial gillnet fishery, 1990–2011.

Year	Sample Size	Total Harvest	Percent by Age Class											Percent Females	Mean Length (mm)	
			(0.2)	(1.1)	(0.3)	(1.2)	(0.4)	(1.3)	(2.2)	(1.4)	(2.3)	(3.2)	(2.4)			(3.3)
1990	573	83,681	0.2	0.1	6.7	49.3	0.3	41.7	0.1	0.3	1.2	0.0	0.0	0.0	44.0	N/A
1991	420	53,657	0.2	0.0	11.0	10.8	0.9	74.2	0.0	2.6	0.2	0.0	0.0	0.0	57.9	N/A
1992 <sup>a</sup>	255	60,929														
1993	535	80,934	0.9	0.0	8.0	24.2	3.5	55.3	1.4	4.8	1.9	0.0	0.0	0.0	42.6	N/A
1994	527	72,314	0.0	0.0	10.0	14.0	0.3	68.4	0.2	4.4	2.6	0.0	0.1	0.0	46.2	N/A
1995	620	68,194	0.7	0.0	0.0	37.6	0.0	49.8	6.3	4.3	1.3	0.0	0.0	0.0	46.8	540
1996	509	57,665	0.2	0.0	5.8	16.6	0.0	68.1	2.5	0.6	5.8	0.0	0.0	0.3	57.0	559
1997	952	69,562	0.2	0.0	3.2	17.9	3.4	55.2	1.3	10.4	8.5	0.0	0.0	0.0	51.1	561
1998	757	41,382	0.3	0.0	4.0	23.4	0.4	65.3	2.4	1.2	2.9	0.0	0.2	0.0	53.0	544
1999	539	41,315	0.0	0.0	1.7	46.2	0.3	45.4	1.1	3.6	1.7	0.0	0.0	0.0	43.6	545
2000	880	68,557	0.0	0.0	0.6	22.5	0.1	74.1	0.5	0.2	1.9	0.0	0.0	0.0	54.8	559
2001	713	33,807	0.0	0.0	1.0	2.7	0.0 <sup>b</sup>	89.8	0.2	1.8	4.5	0.0	0.0	0.0	44.0	568
2002 <sup>b</sup>	307	17,802	2.6	0.0	0.3	49.7	0.3	38.0	3.0	2.1	3.9	0.0	0.0	0.0	46.1	530
2003	365	33,941	0.0	0.0	0.2	26.5	0.0	66.2	2.8	1.8	2.5	0.0	0.0	0.0	45.7	558
2004	217	34,627	0.0	0.0	2.2	30.9	1.1	59.0	0.6	5.6	0.6	0.0	0.0	0.0	47.1	547
2005	937	68,801	0.1	0.0	2.0	28.6	0.0	66.6	0.5	1.0	1.3	0.0	0.0	0.0	45.8	538
2002 <sup>b</sup>	807	106,308	0.1	0.0	0.9	22.9	0.2	73.2	0.2	2.0	0.4	0.0	0.0	0.0	33.1	528
2007	1,005	109,343	0.0 <sup>c</sup>	0.0	4.4	45.7	0.0	45.8	0.1	2.4	1.6	0.0	0.0	0.0	44.6	524
2008	488	69,743	0.0	0.0	2.5	19.6	0.5	74.1	0.3	2.2	0.8	0.0	0.0	0.0	47.0	542
2009	976	112,153	0.0	0.0	2.4	53.8	0.1	40.5	0.5	1.5	1.2	0.0	0.0	0.0	51.7	540
2010	844	138,362	0.0 <sup>c</sup>	0.0	2.8	14.5	1.2	78.7	0.2	2.0	0.6	0.0	0.0	0.0	49.0	549
2011	602	38,535	0.3	0.0	5.3	29.3	1.6	50.1	5.3	4.2	3.5	0.2	0.2	0.0	48.9	541

Note: Commercial sockeye salmon fishery was executed using small mesh ( $\leq 6$  inch) gillnets. Harvest data for years 1990–2009 were from Bavilla et al. 2010 and years 2010 and 2011 were from the ADF&G Fish Ticket Database. N/A designates years when length data were not available or not summarized in Molyneaux et al. 2010.

<sup>a</sup> Sampling was not appropriate for estimating ASL composition for the season.

<sup>b</sup> Samples were collected but are currently not archived in AYK DBMS.

<sup>c</sup> Age class was represented in samples but percent composition was  $<0.05$ .

Table 141.—Estimated age and sex composition, mean length, and total number of Kuskokwim Area sockeye salmon harvested in the District W5 commercial gillnet fishery, 1985–2011.

Year	Sample Size	Total Harvest	Percent by Age Class											Percent Females	Mean Length (mm)
			(0.2)	(1.1)	(0.3)	(1.2)	(0.4)	(1.3)	(2.2)	(1.4)	(2.3)	(2.4)	(3.3)		
1985	485	6,698	0.0	0.0	0.0	25.1	0.0	73.8	1.1	0.0	0.0	0.0	0.0	46.8	570
1986	548	25,112	0.0	0.0	0.0	7.6	0.0	91.8	0.7	0.0	0.0	0.0	0.0	43.5	586
1987	545	27,758	0.0	0.0	0.0	7.0	0.0	93.0	0.0	0.0	0.0	0.0	0.0	51.9	584
1988	738	36,368	0.1	0.0	0.4	3.9	0.4	90.0	0.4	4.5	0.2	0.1	0.0	43.6	597
1989	577	19,299	0.0	0.0	0.0	8.9	0.3	86.0	0.5	2.9	1.4	0.0	0.0	48.2	584
1990	458	35,823	0.0	0.0	5.9	11.2	0.5	63.7	8.0	1.5	9.3	0.0	0.0	33.7	575
1991	564	39,838	0.1	0.0	2.3	3.1	0.9	78.7	4.6	0.9	9.5	0.0	0.0	45.2	564
1992	573	39,194	4.6	0.6	9.1	23.3	1.4	53.4	0.9	3.5	2.5	0.8	0.0	42.6	575
1993	489	59,293	0.2	0.0	6.5	26.8	0.7	53.3	2.5	1.6	8.1	0.4	0.0	54.4	560
1994	485	69,490	0.0	0.0	5.3	1.8	0.2	83.4	0.6	1.8	6.8	0.1	0.0	53.4	567
1995 <sup>a</sup>	369	37,351													
1996 <sup>a</sup>	343	30,717													
1997	833	31,451	0.4	0.0	2.5	13.8	1.4	56.4	3.2	6.8	14.9	0.6	0.0	48.6	563
1998	840	27,161	0.0	0.0	3.1	8.9	0.1	72.9	3.9	0.5	10.4	0.1	0.2	45.7	555
1999	532	22,910	0.0	0.0	1.3	18.5	0.0	68.9	2.2	3.5	5.7	0.0	0.0	41.3	556
2000	715	37,252	0.0	0.0	1.1	7.5	0.0	82.1	5.1	0.0	4.3	0.0	0.0	40.2	575
2001	576	25,654	0.0	0.0	0.4	2.2	0.0	90.3	0.0	2.2	5.0	0.0	0.0	51.0	581
2002	539	6,304	0.0	0.0	2.8	19.4	0.0	51.6	6.5	8.9	10.7	0.3	0.0	46.4	562
2003	329	29,423	0.0	0.0	0.4	7.2	0.0	71.9	2.6	1.4	16.6	0.0	0.0	32.5	579
2004	182	20,523	0.0	0.0	0.0	21.1	0.0	62.6	6.8	1.7	7.9	0.0	0.0	29.8	547
2005 <sup>a</sup>	191	23,933													
2006 <sup>ab</sup>	95	29,857													
2007	705	43,766	0.0	0.0	4.2	10.0	0.0	71.4	2.0	3.6	8.7	0.0	0.0	37.7	549
2008 <sup>c</sup>		27,236													
2009	1,353	32,544	0.1	0.0	3.9	14.0	1.3	64.2	3.4	2.8	10.4	0.0	0.0	41.9	557
2010	685	41,074	0.0	0.0	2.2	13.2	1.1	79.6	0.8	2.3	0.8	0.0	0.0	36.9	550
2011	607	24,463	0.3	0.0	3.2	13.3	0.8	74.0	3.7	1.7	2.9	0.0	0.0	42.3	553

Note: Commercial sockeye salmon fishery was executed using small mesh ( $\leq 6$  inch) gillnets. Harvest data for years 1985–2009 were from Bavilla et al. 2010 and years 2010 and 2011 were from the ADF&G Fish Ticket Database.

<sup>a</sup> Sampling was not appropriate for estimating ASL composition for the season.

<sup>b</sup> Samples were collected but are currently not archived in AYK DBMS.

<sup>c</sup> ASL data were not collected.

Table 142.—Estimated age and sex composition, mean length, and total escapement of Kuskokwim Area sockeye salmon past the Middle Fork Goodnews River weir, 1984–2011.

Year	Sample Size	Total Escapement	Percent by Age Class											Percent Females	Mean Length (mm)	
			(0.2)	(1.1)	(0.3)	(1.2)	(0.4)	(1.3)	(2.2)	(1.4)	(2.3)	(2.4)	(3.3)			
1984 <sup>ab</sup>	47	32,053														
1985 <sup>a</sup>	9	24,131														
1986 <sup>a</sup>	91	51,069														
1987	578	28,871	0.0	0.0	0.0	6.9	0.0	89.1	0.0	4.0	0.0	0.0	0.0	46.7	575	
1988 <sup>a</sup>	314	15,799														
1989 <sup>a</sup>	93	21,186														
1990	117	31,679	0.9	0.8	19.4	12.9	0.0	54.9	1.5	0.4	9.3	0.0	0.0	48.2	551	
1991 <sup>a</sup>	272	47,397														
1992 <sup>a</sup>	204	27,268														
1993 <sup>a</sup>	312	26,452														
1994 <sup>a</sup>	160	50,801														
1995	454	39,009	0.0	0.0	0.2	13.7	0.0	76.8	2.8	2.7	3.8	0.0	0.0	50.4	543	
1996 <sup>a</sup>	246	58,290														
1997	733	35,530	0.2	0.0	1.4	20.9	0.7	63.2	2.4	2.5	8.2	0.4	0.0	54.0	543	
1998 <sup>a</sup>	542	49,513														
1999	789	48,205	0.0	0.0	1.2	11.6	0.2	77.9	2.0	1.7	5.1	0.3	0.0	48.4	548	
2000	607	32,341	0.0	0.0	1.3	2.0	0.0	91.2	1.4	1.4	2.7	0.0	0.0	54.1	560	
2001	432	21,024	0.0	0.0	0.9	2.1	0.0	79.2	0.6	9.6	7.7	0.0	0.0	48.9	572	
2002	485	22,101	0.0	0.0	0.5	54.5	0.2	27.6	8.8	2.6	5.4	0.2	0.1	55.7	520	
2003	657	44,387	0.0	0.0	0.6	8.5	0.0	86.6	0.4	1.7	2.3	0.0	0.0	45.6	575	
2004	806	55,926	0.0	0.0	1.4	31.8	0.0	55.8	2.9	5.6	2.5	0.0	0.0	54.5	540	
2005	955	113,809	0.0 <sup>c</sup>	0.0	0.1	13.5	0.0	79.0	2.7	1.1	3.6	0.0	0.0	54.3	543	
2006	576	126,772	0.0	0.0	2.4	18.7	0.0	70.4	0.7	3.5	4.3	0.0	0.0	57.1	533	
2007	727	72,282	0.6	0.0	8.1	12.2	0.4	70.0	1.6	3.0	4.2	0.0	0.0	50.1	550	
2008	512	50,459	0.0	0.0	4.3	9.0	0.2	78.7	1.0	3.3	3.4	0.0	0.0	56.8	540	
2009 <sup>a</sup>	161	25,465														
2010	307	35,762	0.0	0.0	2.0	4.6	0.0	85.8	1.0	2.6	3.9	0.0	0.0	54.6	539	
2011	440	17,946	0.0	0.0	3.0	6.4	0.2	84.1	0.2	3.9	2.0	0.2	0.0	56.1	550	

Note: Escapement data were from the Kuskokwim Area master escapement file maintained by ADF&G Kuskokwim Research Group.

<sup>a</sup> Sampling was not appropriate for estimating ASL composition for the season.

<sup>b</sup> Samples were collected but are currently not archived in AYK DBMS.

<sup>c</sup> Age class was represented in samples but percent composition was <0.05.

Table 143.—Estimated age and sex composition, mean length, and total escapement of Kuskokwim Area sockeye salmon past the Kanektok River weir, 1997 and 2002–2011.

Year	Sample Size	Total Escapement	Percent by Age Class											Percent Females	Mean Length (mm)
			(0.2)	(1.1)	(0.3)	(1.2)	(0.4)	(1.3)	(2.2)	(1.4)	(2.3)	(2.4)	(3.3)		
1997	740	96,528	0.2	0.3	5.3	24.3	4.0	54.7	0.4	4.2	6.4	0.0	0.0	50.9	554
2002	663	58,326	0.0	0.0	0.5	56.2	0.3	34.7	1.1	2.3	4.1	0.5	0.3	57.7	529
2003	403	127,471	0.0	0.0	0.2	26.6	0.0	69.0	0.2	2.0	2.0	0.0	0.0	50.6	551
2004	470	102,867	0.2	0.0	0.2	48.3	0.0	46.5	3.3	1.0	0.5	0.0	0.0	43.5	530
2005 <sup>a</sup>	688	242,208													
2006 <sup>b</sup>															
2007	793	307,750	0.5	0.0	2.9	45.3	0.0	48.3	0.0	2.2	0.8	0.0	0.0	36.0	542
2008 <sup>a</sup>	307	141,388												36.8	558
2009	585	272,483	0.0	0.0	1.9	62.1	0.0	34.9	0.4	0.1	0.5	0.0	0.0	51.7	538
2010	819	202,643	0.0	0.0	0.8	8.5	0.4	87.8	0.2	2.2	0.1	0.0	0.0	45.8	563
2011	697	84,805	0.9	0.0	3.9	40.0	0.2	48.0	4.1	1.7	1.1	0.0	0.1	50.8	543

Note: Escapement data were from the Kuskokwim Area master escapement file maintained by ADF&G Kuskokwim Research Group.

<sup>a</sup> Sampling was not appropriate for estimating ASL composition for the season.

<sup>b</sup> Weir did not operate.

Table 144.—Estimated age and sex composition, mean length, and total escapement of Kuskokwim Area sockeye salmon past the Kwethluk River weir, 1992 and 2000–2011.

Year	Sample Size	Total Escapement	Percent by Age Class											Percent Females	Mean Length (mm)
			(0.2)	(1.1)	(0.3)	(1.2)	(0.4)	(1.3)	(2.2)	(1.4)	(2.3)	(2.4)	(3.3)		
1992	272	1,316	0.7	0.0	6.2	13.7	1.3	68.3	1.8	4.1	3.9	0.0	0.0	59.6	518
2000 <sup>a</sup>	155	1,049													
2001 <sup>b</sup>															
2002 <sup>c</sup>	36	272													
2003	391	2,928	0.0	0.0	2.3	19.9	0.0	71.7	0.2	2.4	3.6	0.0	0.0	51.9	568
2004 <sup>c</sup>	118	3,491													
2005 <sup>b</sup>															
2006 <sup>c</sup>	118	6,732													
2007	201	5,262	0.0	0.0	0.7	34.4	0.0	60.9	1.5	1.3	1.3	0.0	0.0	49.7	560
2008	78	2,451	0.0	0.0	1.3	20.5	0.0	76.9	0.0	0.0	1.3	0.0	0.0	65.4	546
2009	222	4,230	0.3	0.0	6.5	22.3	0.0	61.7	2.3	2.6	4.2	0.0	0.0	65.9	540
2010	495	4,242	0.0	0.0	4.1	15.9	0.6	73.7	0.6	2.5	2.7	0.0	0.0	51.7	555
2011	100	2,031	0.0	0.0	12.0	4.0	5.0	59.0	1.0	9.0	9.0	1.0	0.0	57.0	560

*Note:* Escapement data were from the Kuskokwim Area master escapement file maintained by ADF&G Kuskokwim Research Group. The Kwethluk River weir is operated by USFWS. Summaries were generated by ADF&G and may not be consistent with published USFWS data.

<sup>a</sup> Samples were not summarized in Molyneaux et al. 2010.

<sup>b</sup> Weir did not operate.

<sup>c</sup> Sampling was not appropriate for estimating ASL composition for the season.

Table 145.—Estimated age and sex composition, mean length, and total escapement of Kuskokwim Area sockeye salmon past the Tuluksak River weir, 1991–1994 and 2001–2011.

Year	Sample Size	Total Escapement	Percent by Age Class											Percent Females	Mean Length (mm)
			(0.2)	(1.1)	(0.3)	(1.2)	(0.4)	(1.3)	(2.2)	(1.4)	(2.3)	(2.4)	(3.3)		
1991	20	34	0.0	0.0	0.0	30.0	0.0	30.0	25.0	5.0	10.0	0.0	0.0	35.0	552
1992	29	129	3.4	0.0	3.4	10.3	0.0	82.8	0.0	0.0	0.0	0.0	0.0	37.9	563
1993	33	88	3.0	0.0	12.2	24.3	0.0	54.6	0.0	0.0	6.1	0.0	0.0	48.5	522
1994	18	82	0.0	0.0	0.0	27.8	0.0	55.6	0.0	0.0	16.7	0.0	0.0	83.3	516
2001 <sup>a</sup>		137													
2002 <sup>b</sup>	9	82													
2003 <sup>b</sup>	43	288													
2004 <sup>a</sup>		136													
2005 <sup>a</sup>		642													
2006 <sup>a</sup>		985													
2007	65	352	0.0	0.0	0.0	21.5	0.0	75.4	0.0	1.5	1.6	0.0	0.0	40.0	560
2008	90	188	0.0	0.0	0.0	15.6	0.0	68.9	1.1	12.2	2.2	0.0	0.0	53.3	553
2009	66	686	0.0	0.0	1.5	32.2	0.0	63.3	1.6	1.5	0.0	0.0	0.0	49.6	554
2010	54	437	1.9	0.0	0.0	5.6	0.0	66.7	0.0	9.3	16.7	0.0	0.0	66.7	537
2011 <sup>b</sup>	16	126													

*Note:* Escapement data were from the Kuskokwim Area master escapement file maintained by ADF&G Kuskokwim Research Group. The Kwethluk River weir is operated by USFWS. Summaries were generated by ADF&G and may not be consistent with published USFWS data.

<sup>a</sup> ASL samples were not collected.

<sup>b</sup> Sampling was not appropriate for estimating ASL composition for the season.

Table 146.—Estimated age and sex composition, mean length, and total number of Kuskokwim Area coho salmon harvested in the District W1 commercial gillnet fishery, 1984–2011.

Year	Sample Size	Total Harvest	Percent by Age Class			Percent Females	Mean Length (mm)
			(1.1)	(2.1)	(3.1)		
1984	1,333	623,447	4.4	92.5	3.1	48.2	N/A
1985	1,119	335,606	8.5	86.8	4.7	45.8	N/A
1986	841	659,988	4.8	92.0	3.2	46.1	N/A
1987	820	399,467	7.2	76.9	15.9	53.1	N/A
1988	1,427	524,296	4.4	94.1	1.5	50.1	N/A
1989	743	479,856	8.9	88.3	2.8	45.5	N/A
1990	389	410,332	4.8	90	5.2	43.1	N/A
1991	573	500,935	4.7	87.4	7.9	33.8	554
1992	804	666,170	13.5	81.6	4.9	50.3	563
1993	540	610,739	5.8	91.2	3.0	48.1	549
1994	826	724,689	6.7	83.7	9.6	39.5	566
1995	565	471,461	12.3	79.3	8.4	44.7	558
1996	666	937,299	4.3	94.4	1.3	48.6	570
1997 <sup>a</sup>	324	130,803					
1998	1,194	210,481	4.9	93.0	2.1	49.5	572
1999	151	23,593	4.6	82.1	13.2	43.7	550
2000	2,616	261,379	3.5	94.4	2.1	53.2	555
2001	422	192,998	6.7	82.6	10.8	56.8	573
2002	428	83,463	1.0	93.2	5.8	51.7	572
2003 <sup>b</sup>		284,064					
2004	662	435,407	1.1	89.1	9.8	48.2	550
2005	412	142,319	7.3	83.5	9.2	50.2	552
2006	411	185,598	14.1	82.2	3.8	50.7	539
2007	448	141,049	5.0	90.5	4.5	53.5	548
2008	493	142,862	5.6	78.3	16.0	50.4	554
2009	669	104,546	5.0	87.4	7.5	50.0	563
2010	425	58,031	7.7	89.1	3.2	51.3	549
2011	667	74,122	15.1	79.3	5.5	48.6	555

*Note:* Commercial coho salmon fishery was executed using small mesh ( $\leq 6$  inch) gillnets. Harvest data for years 1984–2009 were from Bavilla et al. 2010 and years 2010 and 2011 were from the ADF&G Fish Ticket Database. N/A designates years when length data were not available or not summarized in Molyneaux et al. 2010.

<sup>a</sup> Sampling was not appropriate for estimating ASL composition for the season.

<sup>b</sup> ASL data were not collected.

Table 147.—Estimated age and sex composition, mean length, and total number of Kuskokwim Area coho salmon harvested in the District W4 commercial gillnet fishery, 1990–2011.

Year	Sample Size	Total Harvest	Percent by Age Class			Percent Females	Mean Length (mm)
			(1.1)	(2.1)	(3.1)		
1990	607	26,926	5.8	88.4	5.8	42.4	N/A
1991	535	42,571	13.2	74.5	12.3	50.2	N/A
1992	590	86,404	16.9	79.1	4.0	46.6	N/A
1993	300	55,817	3.6	92.5	3.9	45.3	N/A
1994	429	83,912	6.6	89.7	3.7	52.8	N/A
1995	653	66,203	8.6	84.3	7.2	45.0	N/A
1996	556	118,718	6.0	92.5	1.5	43.1	596
1997 <sup>a</sup>	359	32,862					
1998	446	80,183	6.0	93.2	0.9	57.4	601
1999 <sup>b</sup>		6,184					
2000	285	30,529	1.4	97.0	1.6	49.2	580
2001	415	18,531	7.8	85.2	7.0	39.3	596
2002	460	26,695	1.4	89.1	9.6	50.3	599
2003	153	49,833	7.1	82.9	10.1	32.3	582
2004	186	82,398	4.8	94.3	0.9	46.3	573
2005	666	51,708	15.6	79.3	5.1	43.5	564
2006 <sup>c</sup>	377	26,831	13.3	84.8	1.9	48.8	538
2007 <sup>a</sup>	224	34,710					
2008	499	94,257	8.6	87.5	3.9	47.9	568
2009 <sup>a</sup>	198	48,115					
2010	189	13,690	11.6	85.8	2.6	46.4	566
2011	482	27,754	26.8	69.3	3.9	46.9	569

*Note:* Commercial coho salmon fishery was executed using small mesh ( $\leq 6$  inch) gillnets. Harvest data for years 1990–2009 were from Bavilla et al. 2010 and years 2010 and 2011 were from the ADF&G Fish Ticket Database. N/A designates years when length data were not available or not summarized in Molyneaux et al. 2010.

<sup>a</sup> Sampling was not appropriate for estimating ASL composition for the season.

<sup>b</sup> ASL data were not collected.

<sup>c</sup> Samples were collected but are currently not archived in AYK DBMS.

Table 148.—Estimated age and sex composition, mean length, and total number of Kuskokwim Area coho salmon harvested in the District W5 commercial gillnet fishery, 1990–2011.

Year	Sample Size	Total Harvest	Percent by Age Class			Percent Females	Mean Length (mm)
			(1.1)	(2.1)	(3.1)		
1990	250	7,804	5.2	91.6	3.2	42.8	N/A
1991	430	13,312	7.5	85.4	7.2	24.1	N/A
1992	404	19,875	12.0	85.5	2.6	42.7	N/A
1993	429	20,014	2.9	92.5	4.6	52.4	N/A
1994	415	47,499	9.0	86.5	4.5	48.1	N/A
1995	299	17,875	3.1	92.4	4.5	49.6	N/A
1996	457	43,836	6.3	90.2	3.5	52.3	622
1997 <sup>a</sup>	271	2,983					
1998	315	21,246	9.9	87.7	2.5	52.5	611
1999	205	2,474	10.3	84.9	4.8	47.7	592
2000	439	15,531	0.7	97.6	1.8	52.1	598
2001	414	9,275	4.8	89.6	5.5	47.4	619
2002 <sup>b</sup>		3,041					
2003 <sup>a</sup>	109	12,658					
2004 <sup>c</sup>	163	24,089	12.5	84.2	3.3	38.9	584
2005 <sup>a</sup>	69	11,735					
2006 <sup>b</sup>		12,436					
2007 <sup>b</sup>		13,697					
2008 <sup>b</sup>		22,547					
2009 <sup>a</sup>	43	8,406					
2010	600	4,900	10.6	87.3	2.2	40.7	572
2011	558	13,475	15.4	77.8	6.8	45.1	573

*Note:* Commercial coho salmon fishery was executed using small mesh ( $\leq 6$  inch) gillnets. Harvest data for years 1990–2009 were from Bavilla et al. 2010 and years 2010 and 2011 were from the ADF&G Fish Ticket Database. N/A designates years when length data were not available or not summarized in Molyneaux et al. 2010.

<sup>a</sup> Sampling was not appropriate for estimating ASL composition for the season.

<sup>b</sup> ASL data were not collected.

<sup>c</sup> Samples were collected but are currently not archived in AYK DBMS.

Table 149.—Estimated age and sex composition, mean length, and total escapement of Kuskokwim Area coho salmon past the Middle Fork Goodnews River weir, 1991–2011.

Year	Sample Size	Total Escapement	Percent by Age Class			Percent Females	Mean Length (mm)
			(1.1)	(2.1)	(3.1)		
1991 <sup>a</sup>	182	1,978	4.0	86.7	9.3	20.3	549
1992 <sup>ab</sup>		150					
1993 <sup>ab</sup>		1,451					
1994 <sup>ab</sup>		309					
1995	191	5,415	2.5	93.9	3.6	42.0	571
1996	150	10,869	2.0	93.3	4.0	36.7	608
1997 <sup>b</sup>		13,413					
1998	429	36,596	8.4	89.6	2.0	57.9	605
1999	411	11,545	10.0	88.0	2.0	55.8	590
2000	419	13,907	1.5	97.9	0.6	48.1	595
2001	439	19,626	7.1	89.0	3.9	50.6	613
2002 <sup>d</sup>	564	27,364	1.4	92.6	6.0	41.7	620
2003	167	52,810	5.0	87.1	7.9	44.0	608
2004	197	47,916	12.2	84.5	3.4	55.8	579
2005 <sup>c</sup>	328	15,683					586
2006	343	15,969	20.0	78.3	1.7	47.8	563
2007	463	20,975	12.7	83.1	4.3	52.4	582
2008	579	36,630	9.2	85.5	5.3	53.0	543
2009	358	20,000	7.4	87.3	5.2	48.2	606
2010	438	23,839	13.1	83.4	3.4	53.6	598
2011	251	23,826	21.1	72.9	6.0	41.8	592

Note: Escapement data were from the Kuskokwim Area master escapement file maintained by ADF&G Kuskokwim Research Group.

<sup>a</sup> Weir did not operate throughout the entire the coho return. Partial escapement is shown. ASL composition (if shown) applies to the samples only.

<sup>b</sup> ASL data were not collected.

<sup>c</sup> Sampling was not appropriate for estimating ASL composition for the season.

<sup>d</sup> Samples were collected but are currently not archived in AYK DBMS.

Table 150.—Estimated age and sex composition, mean length, and total escapement of Kuskokwim Area coho salmon past the Kwethluk River weir, 1992 and 2000–2011.

Year	Sample Size	Total Escapement	Percent by Age Class			Percent Females	Mean Length (mm)
			(1.1)	(2.1)	(3.1)		
1992 <sup>a</sup>	734	45,605	13.7	83.2	3.1	42.5	562
2000	669	25,610	6.7	92.7	0.6	47.1	558
2001	181	20,723	12.4	85.6	2.0	51.1	597
2002	570	23,298	1.5	92.4	6.1	43.9	594
2003	217	109,163	10.3	88.5	1.1	51.9	586
2004	185	64,216	5.7	92.3	2.0	43.8	559
2005 <sup>b</sup>							
2006	806	34,868	14.2	83.3	2.5	36.9	537
2007	394	20,257	10.7	88.5	0.8	37.0	563
2008	828	49,971	5.7	88.6	5.7	58.0	564
2009	885	21,911	4.8	90.1	5.1	50.6	573
2010 <sup>bc</sup>	55	795					
2011	574	4,482	22.5	74.6	3.0	47.4	575

*Note:* Escapement data were from the Kuskokwim Area master escapement file maintained by ADF&G Kuskokwim Research Group. The Kwethluk River weir is operated by USFWS. Summaries were generated by the ADF&G and may not be consistent with published USFWS data.

<sup>a</sup> Samples were collected but are currently not archived in AYK DBMS.

<sup>b</sup> Weir did not operate through coho salmon season. Escapement, if shown, is partial.

<sup>c</sup> Sampling was not appropriate for estimating ASL composition for the season.

Table 151.—Estimated age and sex composition, mean length, and total escapement of Kuskokwim Area coho salmon past the George River weir, 1997–2011.

Year	Sample Size	Total Escapement	Percent by Age Class				Percent Females	Mean Length (mm)
			(1.1)	(2.1)	(3.1)	(3.2)		
1997	205	9,210	2.2	95.9	1.9	0.0	42.2	557
1998 <sup>a</sup>								
1999	338	8,914	2.7	69.8	27.4	0.0	40.9	547
2000	365	11,262	1.3	97.6	1.1	0.0	43.2	548
2001	371	14,398	0.8	65.6	33.6	0.0	53.3	557
2002 <sup>b</sup>	72	6,759						
2003	171	33,280	0.9	88.0	11.0	0.0	52.7	556
2004	191	12,499	1.3	89.8	8.9	0.0	36.6	538
2005	463	8,200	1.0	80.2	18.8	0.0	48.6	539
2006	440	11,296	4.4	88.0	7.7	0.0	50.5	525
2007 <sup>b</sup>	442	29,317						
2008	429	21,931	0.5	63.4	36.2	0.0	52.3	543
2009	524	12,464	1.6	92.8	5.6	0.0	44.7	553
2010	559	12,961	2.7	89.6	7.7	0.0	51.5	545
2011	552	30,028	4.9	90.0	5.0	0.1	51.2	552

*Note:* Escapement data were from the Kuskokwim Area master escapement file maintained by ADF&G Kuskokwim Research Group.

<sup>a</sup> Weir was inoperable during coho salmon season.

<sup>b</sup> Sampling was not appropriate for estimating ASL composition for the season.

Table 152.—Estimated age and sex composition, mean length, and total escapement of Kuskokwim Area coho salmon past the Tatlawiksuk River weir, 1999–2011.

Year	Sample Size	Total Escapement	Percent by Age Class			Percent Females	Mean Length (mm)
			(1.1)	(2.1)	(3.1)		
1999	287	3,455	8.0	79.1	12.9	43.3	550
2000	188	5,646	0.0	100.0	0.0	39.9	564
2001	518	10,539	2.2	91.2	6.6	52.1	571
2002	596	11,345	1.2	89.3	9.5	38.7	565
2003 <sup>a</sup>							
2004	361	16,410	3.1	94.4	2.5	50.6	544
2005	476	7,495	4.4	89.7	5.9	48.2	557
2006 <sup>b</sup>	155	9,453					
2007 <sup>b</sup>	419	8,685					
2008	485	11,065	3.8	84.3	11.9	52.7	542
2009	508	10,148	6.3	83.9	9.8	47.8	551
2010	517	3,520	5.4	92.9	1.7	53.6	534
2011	359	12,928	5.0	87.5	7.5	56.3	560

*Note:* Escapement data were from the Kuskokwim Area master escapement file maintained by ADF&G Kuskokwim Research Group.

<sup>a</sup> Weir did not operate.

<sup>b</sup> Sampling was not appropriate for estimating ASL composition for the season.

Table 153.—Estimated age and sex composition, mean length, and total escapement of Kuskokwim Area coho salmon past the Kogrukluk River weir, 1989–2011.

Year	Sample Size	Total Escapement	Percent by Age Class			Percent Females	Mean Length (mm)
			(1.1)	(2.1)	(3.1)		
1989 <sup>ab</sup>	75	1,272					
1990 <sup>b</sup>	173	6,132					
1991	377	9,964	1.8	96.0	2.2	42.5	558
1992 <sup>b</sup>	158	26,057					
1993	157	20,517	2.5	94.3	3.1	40.1	564
1994	463	34,695	1.5	90.1	8.3	47.8	581
1995	364	27,862	4.1	88.5	7.0	39.1	557
1996	639	50,555	3.0	94.9	2.1	37.0	594
1997 <sup>c</sup>		12,238					
1998	455	24,348	1.6	94.1	4.2	40.9	580
1999	343	12,609	2.5	88.1	9.4	17.0	563
2000	604	33,135	1.0	96.9	2.1	30.5	568
2001	504	19,387	1.5	91.3	7.2	49.1	577
2002	423	14,516	0.0	86.4	13.6	30.9	561
2003	161	74,604	1.6	81.5	16.8	40.2	566
2004	176	27,041	0.6	87.6	11.7	29.8	547
2005	447	24,116	6.0	84.9	9.1	49.7	543
2006	426	17,011	10.6	86.5	2.8	55.0	514
2007	394	27,033	3.5	90.7	5.8	44.6	542
2008	455	29,661	2.9	81.4	15.7	55.1	536
2009	520	22,981	1.5	90.2	8.2	56.5	541
2010	549	13,971	4.7	87.4	7.9	49.1	551
2011	535	24,174	4.5	87.3	8.2	51.1	545

Note: Escapement data were from the Kuskokwim Area master escapement file maintained by ADF&G Kuskokwim Research Group.

<sup>a</sup> Partial escapement is show, no estimate of missed passage.

<sup>b</sup> Sampling was not appropriate for estimating ASL composition for the season.

<sup>c</sup> ASL Samples were not collected.

Table 154.—Estimated age and sex composition, mean length, and total escapement of Kuskokwim Area coho salmon past the Takotna River weir, 2000–2011.

Year	Sample Size	Total Escapement	Percent by Age Class			Percent Females	Mean Length (mm)
			(1.1)	(2.1)	(3.1)		
2000	395	3,944	0.3	97.7	2.0	51.9	544
2001	305	2,606	0.3	87.9	11.8	41.3	568
2002	349	3,982	0.2	94.3	5.5	39.5	557
2003	183	7,146	0.9	86.4	12.7	52.1	555
2004	380	3,201	0.3	98.1	1.6	40.9	523
2005	546	2,209	0.2	87.7	12.0	48.1	550
2006	435	556	0.4	93.2	3.4	45.0	519
2007	441	2,837	2.2	92.5	5.2	52.3	539
2008	440	2,807	2.2	76.8	21.0	51.4	533
2009	349	2,704	6.2	92.4	1.5	42.6	553
2010	517	3,217	5.4	92.9	1.7	53.6	534
2011	531	4,063	5.3	89.1	5.6	50.9	550

*Note:* Escapement data were from the Kuskokwim Area master escapement file maintained by ADF&G Kuskokwim Research Group.

Table 155.—Historic age-sex-length collection of Chinook salmon from the Kuskokwim Management Area. Gray shading highlights years for which data is archived in the AYK DBMS.

Year	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	
<b>Commercial Catch</b>																					
W1 (Subdistrict 1)																					
W4 (Subdistrict 4)																					
W5 (Goodnews Bay Subdistrict)																					
<b>Subsistence Catch</b>																					
Upper Kuskokwim River																					
Middle Kuskokwim River																					
Lower Kuskokwim River																					
Kuskokwim Bay																					
<b>Escapement</b>																					
Aniak River																					
Eek River																					
George River																					
Goodnews River (Middle Fork)																					
Kanektok River																					
Kipchuk River																					
Kisaralik River																					
Kogrukluk River																					
Kwethluk River																					
NYAC Weir																					
Salmon River (Aniak)																					
Salmon River (Pitka Fork)																					
Takotna River																					
Tatlawiksuk River																					
Tuluksak River																					
<b>Mark/Recapture</b>																					
Kalskag Fish wheel																					
<b>Sport Catch (freshwater)</b>																					
Kanektok River																					
<b>Sport Catch (marine)</b>																					
W5 (Goodnews Bay Subdistrict)																					
<b>Test Fishing</b>																					
Kwegooyuk (Village/City)																					
W1 (Subdistrict 1)																					

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<b>Commercial Catch</b>																				
W1 (Subdistrict 1)																				
W4 (Subdistrict 4)																				
W5 (Goodnews Bay Subdistrict)																				
<b>Subsistence Catch</b>																				
Upper Kuskokwim River																				
Middle Kuskokwim River																				
Lower Kuskokwim River																				
Kuskokwim Bay																				
<b>Escapement</b>																				
Aniak River																				
Eek River																				
George River																				
Goodnews River (Middle Fork)																				
Kanektok River																				
Kipchuk River																				
Kisaralik River																				
Kogruklu River																				
Kwethluk River																				
NYAC Weir																				
Salmon River (Aniak)																				
Salmon River (Pitka Fork)																				
Takotna River																				
Tatlawiksuk River																				
Tuluksak River																				
<b>Mark/Recapture</b>																				
Kalskag Fish wheel																				
<b>Sport Catch (freshwater)</b>																				
Kanektok River																				
<b>Sport Catch (marine)</b>																				
W5 (Goodnews Bay Subdistrict)																				
<b>Test Fishing</b>																				
Kwegooyuk (Village/City)																				
W1 (Subdistrict 1)																				
Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000

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	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>Commercial Catch</b>											
W1 (Subdistrict 1)											
W4 (Subdistrict 4)											
W5 (Goodnews Bay Subdistrict)											
<b>Subsistence Catch</b>											
Upper Kuskokwim River											
Middle Kuskokwim River											
Lower Kuskokwim River											
Kuskokwim Bay											
<b>Escapement</b>											
Aniak River											
Eek River											
George River											
Goodnews River (Middle Fork)											
Kanektok River											
Kipchuk River											
Kisaralik River											
Kogruklu River											
Kwethluk River											
NYAC Weir											
Salmon River (Aniak)											
Salmon River (Pitka Fork)											
Takotna River											
Tatlawiksuk River											
Tuluksak River											
<b>Mark/Recapture</b>											
Kalskag Fish wheel											
<b>Sport Catch (freshwater)</b>											
Kanektok River											
<b>Sport Catch (marine)</b>											
W5 (Goodnews Bay Subdistrict)											
<b>Test Fishing</b>											
Kwegooyuk (Village/City)											
W1 (Subdistrict 1)											
Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011

Table 156.—Historic age-sex-length collection of chum salmon from the Kuskokwim Management Area. Gray shading highlights years for which data is archived in the AYK DBMS.

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
<b>Commercial Catch</b>																				
Aniak River																				
W1 (Subdistrict 1)																				
W4 (Subdistrict 4)																				
W5 (Goodnews Bay Subdistrict)																				
<b>Subsistence Catch</b>																				
Lower Kuskokwim River																				
Upper Kuskokwim River																				
<b>Escapement</b>																				
Aniak River																				
George River																				
Goodnews River (Middle Fork)																				
Kanektok River																				
Kisaralik River																				
Kogruklu River																				
Kwethluk River																				
Nikolai (Village/City)																				
NYAC Weir																				
Salmon River (Aniak)																				
Salmon River (Pitka Fork)																				
Takotna River																				
Tatlawiksuk River																				
Tuluksak River																				
<b>Mark/Recapture</b>																				
Birchtree Crossing																				
Kalskag Fish wheel																				
<b>Test Fishing</b>																				
Kwegooyuk (Village/City)																				
W1 (Subdistrict 1)																				
Year	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980

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<b>Commercial Catch</b>																				
Aniak River																				
W1 (Subdistrict 1)																				
W4 (Subdistrict 4)																				
W5 (Goodnews Bay Subdistrict)																				
<b>Subsistence Catch</b>																				
Lower Kuskokwim River																				
Upper Kuskokwim River																				
<b>Escapement</b>																				
Aniak River																				
George River																				
Goodnews River (Middle Fork)																				
Kanektok River																				
Kisaralik River																				
Kogruklu River																				
Kwethluk River																				
Nikolai (Village/City)																				
NYAC Weir																				
Salmon River (Aniak)																				
Salmon River (Pitka Fork)																				
Takotna River																				
Tatlawiksuk River																				
Tuluksak River																				
<b>Mark/Recapture</b>																				
Birchtree Crossing																				
Kalskag Fish wheel																				
<b>Test Fishing</b>																				
Kwegooyuk (Village/City)																				
W1 (Subdistrict 1)																				
Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000

-continued-

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	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>Commercial Catch</b>											
Aniak River											
W1 (Subdistrict 1)											
W4 (Subdistrict 4)											
W5 (Goodnews Bay Subdistrict)											
<b>Subsistence Catch</b>											
Lower Kuskokwim River											
Upper Kuskokwim River											
<b>Escapement</b>											
Aniak River											
George River											
Goodnews River (Middle Fork)											
Kanektok River											
Kisaralik River											
Kogruklu River											
Kwethluk River											
Nikolai (Village/City)											
NYAC Weir											
Salmon River (Aniak)											
Salmon River (Pitka Fork)											
Takotna River											
Tatlawiksuk River											
Tuluksak River											
<b>Mark/Recapture</b>											
Birchtree Crossing											
Kalskag Fish wheel											
<b>Test Fishing</b>											
Kwegooyuk (Village/City)											
W1 (Subdistrict 1)											
Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011

Table 157.--Historic age-sex-length collection of sockeye salmon from the Kuskokwim Management Area. Gray shading highlights years for which data is archived in the AYK DBMS.

Year	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
<b>Commercial Catch</b>																				
W1 (Subdistrict 1)																				
W4 (Subdistrict 4)																				
W5 (Goodnews Bay Subdistrict)																				
<b>Subsistence Catch</b>																				
Upper Kuskokwim River																				
Kuskokwim Bay																				
<b>Escapement</b>																				
Aniak River																				
George River																				
Goodnews River (Middle Fork)																				
Goodnews River (North Fork)																				
Kanektok River																				
Kisaralik River																				
Kogruklu River																				
Kwethluk River																				
Salmon River (Aniak)																				
Stony River																				
Takotna River																				
Tatlawiksuk River																				
Telaquana River																				
Tuluksak River																				
<b>Mark/Recapture</b>																				
Birchtree Crossing																				
Kalskag Fish wheel																				
<b>Test Fishing</b>																				
W1 (Subdistrict 1)																				
Kwegooyuk (Village/City)																				

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Table 157.-Page 2 of 3.

<b>Commercial Catch</b>																				
W1 (Subdistrict 1)																				
W4 (Subdistrict 4)																				
W5 (Goodnews Bay Subdistrict)																				
<b>Subsistence Catch</b>																				
Upper Kuskokwim River																				
Kuskokwim Bay																				
<b>Escapement</b>																				
Aniak River																				
George River																				
Goodnews River (Middle Fork)																				
Goodnews River (North Fork)																				
Kanektok River																				
Kisaralik River																				
Kogruklu River																				
Kwethluk River																				
Salmon River (Aniak)																				
Stony River																				
Takotna River																				
Tatlawiksuk River																				
Telaquana River																				
Tuluksak River																				
<b>Mark/Recapture</b>																				
Birchtree Crossing																				
Kalskag Fish wheel																				
<b>Test Fishing</b>																				
W1 (Subdistrict 1)																				
Kwegooyuk (Village/City)																				
Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000

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Table 157.–Page 3 of 3.

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>Commercial Catch</b>											
W1 (Subdistrict 1)											
W4 (Subdistrict 4)											
W5 (Goodnews Bay Subdistrict)											
<b>Subsistence Catch</b>											
Upper Kuskokwim River											
Kuskokwim Bay											
<b>Escapement</b>											
Aniak River											
George River											
Goodnews River (Middle Fork)											
Goodnews River (North Fork)											
Kanektok River											
Kisaralik River											
Kogruklu River											
Kwethluk River											
Salmon River (Aniak)											
Stony River											
Takotna River											
Tatlawiksuk River											
Telaquana River											
Tuluksak River											
<b>Mark/Recapture</b>											
Birchtree Crossing											
Kalskag Fish wheel											
<b>Test Fishing</b>											
W1 (Subdistrict 1)											
Kwegooyuk (Village/City)											

Table 158.—Historic age-sex-length collection of coho salmon from the Kuskokwim Management Area. Gray shading highlights years for which data is archived in the AYK DBMS.

<b>Commercial Catch</b>																				
W1 (Subdistrict 1)	■				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
W4 (Subdistrict 4)						■	■	■	■											■
W5 (Goodnews Bay Subdistrict)												■								■
<b>Subsistence Catch</b>																				
Lower Kuskokwim River																				
<b>Escapement</b>																				
Aniak River																				■
George River																				
Goodnews River (Middle Fork)																				
Kanektok River																				
Kisaralik River																				
Kogrukluuk River																				
Kwethluk River																				
Salmon River (Aniak)																				
Takotna River																				
Tatlawiksuk River																				
Tuluksak River																				
<b>Mark/Recapture</b>																				
Kalskag Fish wheel																				
<b>Test Fishing</b>																				
Aniak River																				
Kwegooyuk (Village/City)													■	■	■					
W1 (Subdistrict 1)																				■
Year	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980

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Table 158.—Page 2 of 3.

<b>Commercial Catch</b>																				
W1 (Subdistrict 1)																				
W4 (Subdistrict 4)																				
W5 (Goodnews Bay Subdistrict)																				
<b>Subsistence Catch</b>																				
Lower Kuskokwim River																				
<b>Escapement</b>																				
Aniak River																				
George River																				
Goodnews River (Middle Fork)																				
Kanektok River																				
Kisaralik River																				
Kogruklu River																				
Kwethluk River																				
Salmon River (Aniak)																				
Takotna River																				
Tatlawiksuk River																				
Tuluksak River																				
<b>Mark/Recapture</b>																				
Kalskag Fish wheel																				
<b>Test Fishing</b>																				
Aniak River																				
Kwegooyuk (Village/City)																				
W1 (Subdistrict 1)																				
Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000

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Table 158.–Page 3 of 3.

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>Commercial Catch</b>											
W1 (Subdistrict 1)											
W4 (Subdistrict 4)											
W5 (Goodnews Bay Subdistrict)											
<b>Subsistence Catch</b>											
Lower Kuskokwim River											
<b>Escapement</b>											
Aniak River											
George River											
Goodnews River (Middle Fork)											
Kanektok River											
Kisaralik River											
Kogruklu River											
Kwethluk River											
Salmon River (Aniak)											
Takotna River											
Tatlawiksuk River											
Tuluksak River											
<b>Mark/Recapture</b>											
Kalskag Fish wheel											
<b>Test Fishing</b>											
Aniak River											
Kwegooyuk (Village/City)											
W1 (Subdistrict 1)											