

Fishery Data Series No. 14-58

**Salmon Age and Sex Composition and Mean Lengths
for the Yukon River Area, 2012**

by

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December 2014

Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



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Weights and measures (metric)		General		Mathematics, statistics	
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_A
gram	g	all commonly accepted professional titles	e.g., Dr., Ph.D., R.N., etc.	base of natural logarithm	e
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, χ^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	
		corporate suffixes:		(simple)	r
		Company	Co.	covariance	cov
Weights and measures (English)		Corporation	Corp.	degree (angular)	$^\circ$
cubic feet per second	ft ³ /s	Incorporated	Inc.	degrees of freedom	df
foot	ft	Limited	Ltd.	expected value	E
gallon	gal	District of Columbia	D.C.	greater than	>
inch	in	et alii (and others)	et al.	greater than or equal to	≥
mile	mi	et cetera (and so forth)	etc.	harvest per unit effort	HPUE
nautical mile	nmi	exempli gratia		less than	<
ounce	oz	(for example)	e.g.	less than or equal to	≤
pound	lb	Federal Information Code	FIC	logarithm (natural)	ln
quart	qt	id est (that is)	i.e.	logarithm (base 10)	log
yard	yd	latitude or longitude	lat. or long.	logarithm (specify base)	log ₂ etc.
		monetary symbols		minute (angular)	'
		(U.S.)	\$, ¢	not significant	NS
Time and temperature		months (tables and figures): first three letters	Jan, ..., Dec	null hypothesis	H_0
day	d	registered trademark	®	percent	%
degrees Celsius	°C	trademark	™	probability	P
degrees Fahrenheit	°F	United States (adjective)	U.S.	probability of a type I error	
degrees kelvin	K	United States of America (noun)	USA	(rejection of the null hypothesis when true)	α
hour	h	U.S.C.	United States Code	probability of a type II error	
minute	min	U.S. state	use two-letter abbreviations (e.g., AK, WA)	(acceptance of the null hypothesis when false)	β
second	s			second (angular)	"
				standard deviation	SD
Physics and chemistry				standard error	SE
all atomic symbols				variance	
alternating current	AC			population	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				

FISHERY DATA SERIES NO. 14-58

**SALMON AGE AND SEX COMPOSITION AND MEAN LENGTHS FOR
THE YUKON RIVER AREA, 2012**

by
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TABLE OF CONTENTS

	Page
LIST OF TABLES	ii
LIST OF FIGURES	ii
LIST OF APPENDICES.....	ii
ABSTRACT.....	1
INTRODUCTION.....	1
BACKGROUND.....	2
Commercial Fisheries	2
Subsistence Fisheries	3
Test Fisheries	3
Dall Point Test Fishery	3
Lower Yukon Test Fishery.....	3
Mountain Village Test Fishery.....	4
Pilot Station Sonar	4
Eagle Sonar	4
Escapement Projects.....	4
East Fork Andreafsky River Weir	5
Anvik River Sonar	5
Chena River Tower.....	5
Delta River Carcass Survey.....	5
Gisasa River Weir.....	5
Henshaw Creek Weir	5
Salcha River Tower	6
Sheenjek River Sonar.....	6
Toklat River Carcass Survey.....	6
Acoustic Tagging	6
Genetic Sampling	6
OBJECTIVE	6
METHODS	7
General Sampling Procedures.....	7
Sample Collection	7
Commercial Harvest Sampling.....	7
Subsistence Harvest Sampling	8
Test Fishery Sampling	8
Escapement Sampling.....	9
Acoustic Tag Sampling.....	9
Genetic Sampling	9
Age Determination	9
Data Analysis	10
Estimation of proportion by age and sex	10
Estimation of mean length by age and sex.....	11
RESULTS	12
Chinook Salmon.....	12
Summer Chum Salmon.....	13

TABLE OF CONTENTS (Continued)

	Page
Fall Chum Salmon.....	13
Coho Salmon.....	14
DISCUSSION.....	15
ACKNOWLEDGEMENTS.....	16
REFERENCES CITED.....	17
TABLES AND FIGURES.....	19
APPENDIX A: CHINOOK SALMON.....	43
APPENDIX B: SUMMER CHUM SALMON.....	97
APPENDIX C: FALL CHUM SALMON.....	119
APPENDIX D: COHO SALMON.....	147

LIST OF TABLES

Table	Page
1 Projects and salmon species for which age, sex, and length data were collected in 2012 from the Yukon area... 20	
2 Yukon River Chinook salmon age and female percentages from commercial, subsistence, test fishery, escapement, and genetic sampling projects, 2012.....	21
3 Chinook salmon age and female percentages from the Lower Yukon River test fishery 8.5 in mesh set gillnet, 1985–2012.....	23
4 Yukon River Chinook salmon age and female percentages, from selected escapement projects, 1985–2012.	24
5 Yukon River Chinook salmon mean length by sex, project, gear and age, 2012.	28
6 Yukon River chum salmon age and female percentages, from commercial, subsistence, test fishery, and escapement projects, 2012.....	30
7 Yukon River summer and fall chum salmon commercial harvest, age and sex composition, by district, 2012. ..	32
8 Summer chum salmon age and female percentages from the Lower Yukon River test fishery 5.5 in mesh gillnet, 1985–2012.....	33
9 Yukon River summer and fall chum salmon mean length by sex, project, gear, and age, 2012.	34
10 Yukon River fall chum salmon age and female percentages, from selected escapement projects, 1986–2012....	36
11 Yukon River coho salmon age and female percentages, from commercial and test fishery projects, 2012.	40
12 Yukon River coho salmon mean length (mm) by sex, project, gear, and age, 2012.....	40

LIST OF FIGURES

Figure	Page
1 Yukon River drainage in Alaska and Canada.....	41
2 Yukon River district and subdistrict map.....	42

LIST OF APPENDICES

Appendix	Page
A1 Yukon River District 1 Chinook salmon incidental commercial gillnet harvest, age and sex composition, and mean length 2012.....	44
A2 Yukon River District 2 Chinook salmon incidental commercial gillnet harvest, age and sex composition, and mean length 2012.....	45
A3 Yukon River District 1 (Kotlik) Chinook salmon subsistence gillnet harvest, age and sex composition, and mean length 2012.....	46
A4 Yukon River District 1 (Alakanuk) Chinook salmon subsistence gillnet harvest, age and sex composition, and mean length 2012.....	48

LIST OF APPENDICES (Continued)

Appendix	Page
A5 Yukon River District 1 (Emmonak) Chinook salmon subsistence gillnet harvest, age and sex composition, and mean length 2012.	50
A6 Yukon River District 2 (Mountain Village) Chinook salmon subsistence gillnet harvest, age and sex composition, and mean length 2012.	54
A7 Yukon River District 2 (St. Mary's) Chinook salmon subsistence gillnet harvest, age and sex composition, and mean length 2012.	56
A8 Yukon River District 2 (Marshall) Chinook salmon subsistence gillnet harvest, age and sex composition, and mean length 2012.	58
A9 Yukon River Subdistrict 4–A (Anvik) Chinook salmon subsistence gillnet harvest, age and sex composition, and mean length 2012.	59
A10 Yukon River Subdistrict 4–A (Kaltag) Chinook salmon subsistence 7.5 in mesh drift gillnet harvest, age and sex composition, and mean length 2012.	62
A11 Yukon River Subdistricts 4–B and 4–C (Galena) Chinook salmon subsistence gillnet harvest, age and sex composition, and mean length 2012.	63
A12 Yukon River Subdistricts 4–B and 4–C (Ruby) Chinook salmon subsistence 7.5 in mesh set gillnet harvest, age and sex composition, and mean length 2012.	64
A13 Yukon River Subdistrict 5–B (Rampart Rapids) Chinook salmon subsistence harvest, sex composition, and mean length 2012.	65
A14 Yukon River Subdistrict 5–D (Fort Yukon) Chinook salmon subsistence fish wheel harvest, age and sex composition, and mean length 2012.	67
A15 Lower Yukon River test fishery (Big Eddy site) Chinook salmon 8.25 in mesh drift gillnet, age and sex composition, and mean length 2012.	68
A16 Lower Yukon River test fishery (Big Eddy site) Chinook salmon 8.5 in mesh set gillnet, age and sex composition, and mean length 2012.	70
A17 Lower Yukon River test fishery (Middle Mouth site) Chinook salmon 8.5 in mesh set gillnet, age and sex composition, and mean length 2012.	72
A18 Lower Yukon River test fishery (combined Big Eddy and Middle Mouth sites) Chinook salmon 8.5 in mesh set gillnet, age and sex composition, and mean length 2012.	74
A19 Yukon River Mountain Village test fishery Chinook salmon 7.5 in mesh drift gillnet, age and sex composition, and mean length 2012.	76
A20 Yukon River Pilot Station sonar test fishery Chinook salmon variable mesh drift gillnet, age and sex composition, and mean length 2012.	78
A21 Yukon River Eagle sonar test fishery Chinook salmon variable mesh drift gillnet, age and sex composition, and mean length 2012.	81
A22 Andreafsky River (East Fork) weir Chinook salmon escapement, age and sex composition, and mean length 2012.	83
A23 Anvik River Chinook salmon escapement, age and sex composition, and mean length 2012.	85
A24 Chena River carcass survey Chinook salmon, age and sex composition, and mean length 2012.	86
A25 Gisasa River weir Chinook salmon escapement, age and sex composition, and mean length 2012.	87
A26 Henshaw Creek weir Chinook salmon escapement, age and sex composition, and mean length 2012.	89
A27 Salcha River carcass survey Chinook salmon escapement, age and sex composition, and mean length 2012.	91
A28 Yukon River Pilot Station acoustic tagging Chinook salmon, age and sex composition, and mean length 2012.	92
A29 Nulato River genetic sampling Chinook salmon, age and sex composition, and mean length 2012.	94
B1 Yukon River District 1 summer chum salmon commercial gillnet harvest, age and sex composition, and mean length 2012.	98
B2 Yukon River District 2 summer chum salmon commercial gillnet harvest, age and sex composition, 2012.	100
B3 Yukon River Subdistrict 4-A summer chum salmon commercial fish wheel harvest, age and sex composition, and mean length 2012.	101
B4 Yukon River District 6 summer chum salmon commercial fish wheel harvest, age and sex composition, and mean length 2012.	102
B5 Coastal District Dall Point test fishery summer chum salmon 5.5 in mesh drift gillnet, age and sex composition, and mean length 2012.	103

LIST OF APPENDICES (Continued)

Appendix	Page
B6 Lower Yukon River test fishery (Big Eddy site) summer chum salmon 5.5 in mesh drift gillnet, age and sex composition, and mean length 2012.	104
B7 Lower Yukon River test fishery (Middle Mouth site) summer chum salmon 5.5 in mesh drift gillnet, age and sex composition, and mean length 2012.	106
B8 Lower Yukon River test fishery (combined Big Eddy and Middle Mouth sites) summer chum salmon 5.5 in mesh drift gillnet, age and sex composition, and mean length 2012.	108
B9 Andreafsky River (East Fork) weir summer chum salmon escapement, age and sex composition, and mean length 2012.	110
B10 Anvik River sonar summer chum salmon escapement, age and sex composition, and mean length 2012.	112
B11 Gisasa River weir summer chum salmon escapement, age and sex composition, and mean length 2012.	113
B12 Henshaw Creek weir summer chum salmon escapement, age and sex composition, and mean length 2012.	115
B13 Salcha River carcass survey summer chum salmon escapement, age and sex composition, and mean length 2012.	117
C1 Yukon River District 1 fall chum salmon commercial gillnet harvest, age and sex composition, and mean length 2012.	120
C2 Yukon River District 2 fall chum salmon commercial gillnet harvest, age and sex composition, 2012.	122
C3 Yukon River Subdistrict 4-A fall chum salmon commercial fish wheel harvest, age and sex composition, and mean length 2012.	124
C4 Yukon River Subdistrict 5-C (Rampart) fall chum salmon subsistence fish wheel harvest, age and sex composition, and mean length 2012.	125
C5 Lower Yukon River test fishery (Big Eddy site) fall chum salmon 6.0 in mesh drift gillnet, age and sex composition, and mean length 2012.	126
C6 Lower Yukon River test fishery (Middle Mouth site) fall chum salmon 6.0 in mesh drift gillnet, age and sex composition, and mean length 2012.	128
C7 Lower Yukon River test fishery (combined Big Eddy and Middle Mouth sites) fall chum salmon 6.0 in mesh drift gillnet, age and sex composition, and mean length 2012.	130
C8 Yukon River Mountain Village test fishery fall chum salmon 5 7/8 in mesh drift gillnet, age and sex composition, and mean length (mm) 2012.	132
C9 Yukon River Eagle sonar test fishery fall chum salmon variable mesh drift gillnet, age and sex composition, and mean length 2012.	134
C10 Delta River carcass survey fall chum salmon escapement, age and sex composition, and mean length 2012. ...	135
C11 Sheenjek River sonar fall chum salmon beach seine, age and sex composition, and mean length 2012.	136
C12 Toklat River carcass survey fall chum salmon escapement, age and sex composition, and mean length 2012.	137
C13 Yukon River fall chum salmon mean length (mm) by project, sex, year, and age, 1973–2012.	138
D1 Yukon River District 1 coho salmon commercial gillnet harvest, age and sex composition, and mean length 2012.	148
D2 Lower Yukon River test fishery (Big Eddy site) coho salmon 6.0 in mesh drift gillnet, age and sex composition, and mean length 2012.	149
D3 Lower Yukon River test fishery (Middle Mouth site) coho salmon 6.0 in mesh drift gillnet, age and sex composition, and mean length 2012.	151
D4 Lower Yukon River test fishery (combined Big Eddy and Middle Mouth sites) coho salmon 6.0 in mesh drift gillnet, age and sex composition, and mean length 2012.	153
D5 Yukon River Mountain Village test fishery coho salmon 5 7/8 in mesh drift gillnet, age and sex composition, and mean length 2012.	155

ABSTRACT

Biological data were collected from Chinook (*Oncorhynchus tshawytscha*), summer chum (*O. keta*), fall chum (*O. keta*), and coho (*O. kisutch*) salmon at 34 locations along the United States portion of the Yukon River drainage in 2012. Age, sex, and length (ASL) data were obtained from 6,410 Chinook, 5,733 summer chum, 3,532 fall chum, and 966 coho salmon from commercial and subsistence harvests, as well as test fisheries, escapement, and tagging projects. Samples were collected from salmon caught with gillnets, fish wheels, beach seines, weir traps, rod and reel, dip nets, and from hand-picked carcasses. Where available, escapement estimates from sonar and weir projects were separated into temporal segments (strata) and commercial harvests were separated by fishing periods. The ASL data collected during the stratum or period was applied to the corresponding commercial harvest or escapement estimate. At test fishery projects, data were stratified by quartiles based on catch per unit of effort, sample size, or gear. Subsistence harvest data were stratified by gear.

In 2012, age-1.3 Chinook salmon predominated the incidental harvest in the summer chum salmon commercial fishery and subsistence samples, as well as most escapement project samples. Age-1.4 Chinook salmon predominated most of the test fishery samples. At many long standing projects 5-year-old (age-1.3 and age-2.2) Chinook salmon percentages were at or above the 5-year average. Both summer and fall chum salmon commercial, test fishery, and escapement samples were primarily composed of age-0.3 fish. Age-2.1 coho salmon predominated in the commercial and test fishery samples.

Key words: Chinook, *Oncorhynchus tshawytscha*, summer and fall chum *O. keta*, coho, *O. kisutch*, age, sex, length (ASL), escapement, weir, test fish, subsistence, commercial, Yukon River.

INTRODUCTION

The Yukon River drainage encompasses coastal waters from Canal Point light, near Cape Stephens, southward to the Naskonat Peninsula (Estensen et al. 2012), and upstream to the headwaters near Whitehorse, Canada (Figure 1). The drainage supports major runs of Chinook (*Oncorhynchus tshawytscha*) summer chum (*O. keta*), fall chum (*O. keta*), and coho (*O. kisutch*) salmon. All 3 of these salmon species are harvested in commercial, subsistence, personal use, test, and sport fisheries in Alaska. Harvests also occur in the Canadian portion of the drainage by commercial, subsistence, aboriginal, sport, and domestic fishermen (JTC 2013). Pink (*O. gorbuscha*) and sockeye (*O. nerka*) salmon are also indigenous to the drainage; however, neither species are harvested by fishermen to any significant extent.

Adult Chinook and summer chum salmon runs typically enter the mouth of the Yukon River during late May or early June to begin their upstream migration. These runs are followed by fall chum salmon, which enter the Yukon River from mid-July through early September. Summer chum salmon are genetically distinct from fall chum salmon and can be distinguished from their fall counterparts by their smaller size, lower oil content, and different spawning locations. Summer chum salmon spawn in the lower and middle portion of the drainage, whereas fall chum salmon spawn in the upper portion of the drainage (Crane et al. 2001; Estensen et al. 2012). Coho salmon enter the Yukon River from late July through September.

For management purposes, the Alaska portion of the drainage is divided into 7 districts and 10 subdistricts (Figure 2). The Lower Yukon area consists of the Coastal District and Districts 1, 2, and 3. The Upper Yukon area consists of Districts 4, 5, and 6.

In order to characterize annual spawning runs of each species, by specific location and for the drainage as a whole, by age, sex, and size, sampling must be conducted to adequately represent fisheries (subsistence and commercial) and escapement. Age composition estimates are necessary in order to estimate the total returns of salmon from each parent brood year; this

information is used for inseason management, preseason outlooks, run reconstructions and analysis of escapement goals.

Yukon River drainage salmon age, sex, and length (ASL) data have been collected since 1960. Data were historically recorded using handwritten forms, then on computerized mark-sense forms, electronic data loggers, and most recently, with Microsoft Excel¹ files. Annual ASL data summaries have been reported in various formats. From 1962 through 1968 these data were reported in Annual Management Reports or Arctic Anadromous Fishery Investigation Reports. From 1969 through 1981 data were reported in Salmon Age, Sex, and Size Composition, an Alaska Department of Fish and Game (ADF&G) special report series. From 1982 through 1988 data were published in the Technical Fisheries Report series (e.g., Buklis 1987). For the years 1989, 1990–2003 data were published in the Regional Information Report series (e.g., Menard 1996). In 2004, ADF&G Division of Commercial Fisheries (CF) began using the Fishery Data Series to report annual Yukon River area ASL data (e.g., Schumann and DuBois 2011). Individual salmon ASL data records collected in the Yukon River area are available from the Arctic, Yukon, and Kuskokwim (AYK) Salmon Database Management System <http://www.adfg.alaska.gov/CommFishR3/WebSite/AYKDBMSWebsite/Default.aspx>.

The purpose of this report is to provide a summary of the 2012 Yukon River drainage salmon ASL data collected from various commercial and subsistence harvests, test fisheries, and escapement, tagging, and genetic sampling projects (Table 1). ASL data and summaries provide the basis for a variety of analyses including preseason run outlooks, assessment of females and older-aged fish in escapements, and spawner-recruit models.

BACKGROUND

COMMERCIAL FISHERIES

Commercial fishing occurs throughout the mainstem Yukon River and in the lower 224 river miles (rm) of the Tanana River. A directed Chinook salmon commercial harvest has not occurred since 2007 because of decreased run abundance. Fall chum and coho salmon were typically harvested in Districts 1, 2, 5, and 6. Samples were typically collected from districts with large harvests that were most accessible for sampling crews: Districts 1 and 2 from the Emmonak-based crew and Districts 5 and 6 from the Fairbanks-based crew. The majority of the commercially caught Chinook and summer chum salmon were harvested from Districts 1 and 2, with smaller harvests occurring in the other districts.

In 2012, set and drift gillnets were the only legal commercial and subsistence fishing gear in the Lower Yukon area (Districts 1, 2, and 3; Figure 2). In 2012, set gillnets and fish wheels were the only legal gear in the Upper Yukon area (Districts 4, 5, and 6; Figure 2), except for District 4 where drift gillnets were allowed (ADF&G 2010–2013).

In 2012, summer chum commercial fishing occurred from June 29 to July 15 in District 1, July 2 through July 18 in District 2, July 1 through July 30 in Subdistrict 4-A, and July 20 through August 15 in District 6. The sale of incidentally harvested Chinook salmon was not allowed due to low abundance. In Districts 1 and 2 gillnets were restricted to 6 in or smaller mesh sizes and in Subdistrict 4-A and in District 6 all harvest were from fish wheels (Hayes and Newland 2012).

¹ All product names used in this report are included for scientific completeness and do not constitute a product endorsement.

Summer chum salmon were sampled from selected periods in Districts 1, 6, and Subdistrict 4-A. Most of the incidentally harvested Chinook salmon samples were from the District 1 harvest.

In 2012, commercial fishing for fall chum and coho salmon occurred in District 1 from July 16 through August 30, District 2 from July 22 through August 31, and in Subdistrict 4-A from August 9 through September 30. Coho salmon were incidentally harvested and sold during fall chum salmon directed commercial fishing periods (Estensen and Borba 2012). Commercially-caught fall chum were sampled in 2012 from selected periods in District 1 and Subdistrict 4-A. Coho salmon were sampled from the District 1 harvest.

SUBSISTENCE FISHERIES

Subsistence fishing occurs throughout the Yukon River drainage, with most of the effort concentrated in the mainstem. Chinook, summer chum, fall chum, and coho salmon are the principal species utilized by subsistence fishermen. The primary gear used to harvest subsistence salmon in Districts 1 and 2 were set and drift gillnets; a mixture of gillnets and fish wheels were used in Districts 4 and 5 (Jallen et al. 2012). The main species sampled for ASL data from subsistence harvests was Chinook salmon because U.S. subsistence harvests comprised most of the Canadian stock harvest in 2012 and age composition was needed to update the brood table for this stock. Because of low Chinook salmon abundance, sampling was not directed by specific gear types or mesh sizes; instead, any fish available were sampled. Fall chum salmon subsistence harvests typically were not sampled in the drainage; however, samples were collected from a fish wheel in Subdistrict 4-A in 2012.

Since 2001, the summer season subsistence salmon fishery has been on a regulatory “windowed” schedule consistent with Chinook salmon migratory timing as the run progresses upstream (JTC 2013). To provide further protection of Chinook salmon, some subsistence fishing periods were cancelled, some periods were reduced, and mesh sizes were restricted to 6 in or less (Hayes and Newland 2012). For fall chum salmon, beginning July 16 in District 1, subsistence fishing was open 7 days a week; 24 hours a day and with 7.5 in or less mesh gillnets.

TEST FISHERIES

Test fishery projects provided assessments of run strength, timing, and ASL composition. Test fishery projects in 2012 operated in marine waters and in the mainstem Yukon River. Data from these test fisheries were included in the ASL sampling program to supplement information on inseason run strength and timing indices.

Dall Point Test Fishery

In 2012, in cooperation with the Yukon Delta Fisheries Development Association (YDFDA), a drift gillnet test fishery operated offshore of Dall Point, in the vicinity of Hooper Bay (Figure 2). The purpose of this project was to evaluate the feasibility of estimating run timing and relative abundance of salmon before they enter the Yukon River. Test fishing was conducted during the summer season using gillnets with 5.5 in mesh for summer chum salmon. ASL data were collected from summer chum salmon in 2012.

Lower Yukon Test Fishery

The Big Eddy and Middle Mouth test fishery sites, located in District 1 near river mile 24, are referred to as the Lower Yukon test fishery (LYTF). Since 1979, the LYTF has utilized set and

drift gillnets to estimate run timing and relative abundance of Chinook, summer chum, fall chum, and coho salmon returning to the Yukon River. The Big Eddy test fishery site is located on Kwikluak Pass (South Mouth) near the village of Emmonak (Figure 1). The Middle Mouth test fishery site is located on Kwikpak Pass, upstream of Kawanak Pass (Middle Mouth) and Apoon Pass (North Mouth, Figure 1; Estensen and Padilla 2012).

During the summer season (ending July 15) in 2012, 8.5 in mesh set gillnets and 8.25 in mesh drift gillnets were used to target Chinook salmon, and 5.5 in mesh drift gillnets were used to target summer chum salmon (Newland and Hayes 2008). During the fall season (July 16–August 31) in 2012, 6.0 in mesh drift gillnets were used to target fall chum and coho salmon (Estensen and Padilla 2012). ASL data were collected from Chinook, summer chum, fall chum, and coho salmon in 2012.

Mountain Village Test Fishery

The Mountain Village drift gillnet test fishery operated during the fall season in District 2 from 1995 to 2012 in cooperation with Asa'carsarmiut Traditional Council, and for the summer season from 2010 to 2012 with assistance from YDFDA. The objectives were to estimate the relative abundance and migratory timing of Chinook, fall chum, and coho salmon in the Yukon River near Mountain Village (rm 87, Figure 1). In 2012, the Mountain Village test fishery operated from mid-June to mid-July for the summer season using 7.5 in mesh drift gillnets to target Chinook salmon, and from mid-July to mid-September for the fall season in using 5 7/8 in mesh drift gillnets to target fall chum and coho salmon. ASL data were collected from Chinook, fall chum, and coho salmon in 2012.

Pilot Station Sonar

Located in District 2 (rm 123, Figure 1), Pilot Station sonar uses hydroacoustic equipment to generate daily Chinook, summer chum, fall chum, and coho salmon abundance estimates. Pilot Station sonar has been in operation since 1986, and multiple styles of equipment have been used to estimate fish passage. In 2012, the Pilot Station sonar project used a combination of fixed-location split-beam sonar and dual frequency identification sonar (DIDSON).

Test fishing was conducted in order to apportion the passage estimates by species; a suite of gillnets of various mesh sizes were drifted through the sonar site (Carroll and McIntosh 2011). Sonar equipment and fishing gear were operated at regular intervals within a 24 hour period. Chinook salmon were sampled for ASL data from early June to mid-July in 2012.

Eagle Sonar

Located in District 5, the Eagle sonar project (rm 1,206, Figure 1) estimates run timing and passage estimates for Chinook and fall chum salmon. To apportion the passage estimates by species, a test fishery is conducted in which a suite of gillnets of various mesh sizes are drifted through the sonar site. Chinook salmon were sampled from test fishery catches from early July to mid-August and fall chum salmon were sampled from mid-August to early October (Smith and Dunbar 2012).

ESCAPEMENT PROJECTS

Annual assessments of spawning escapements are monitored in Yukon River tributaries by means of weirs, counting towers, sonar projects, and carcass and aerial surveys (Estensen et al. 2012). The ground based weir, tower, and sonar projects typically include an ASL sampling program,

whereby samples are collected by capturing salmon with a trap built into a weir (see Tobin 1994 for an example of weir sampling and operation methods), fishing a beach seine, or hand-picking carcasses on the spawning grounds. In 2012, ASL samples were collected from Chinook and summer chum salmon on 4 long-standing escapement projects in the drainage, located on the East Fork Andreafsky, Anvik, Chena, and Salcha rivers. Additional ASL sampling was conducted on the Gisasa River and Henshaw Creek, both tributaries of the Koyukuk River.

East Fork Andreafsky River Weir

The Andreafsky River joins the Yukon River near the village of Saint Mary's (rm 104, Figure 1). A weir has operated to estimate Chinook and summer chum salmon escapements in the East Fork Andreafsky River since 1994 (Mears 2011). The weir typically operates from mid-June to late July. A weir trap was used to collect samples from Chinook and summer chum salmon in 2012.

Anvik River Sonar

The Anvik River flows for 124 river miles before joining the Yukon River near the community of Anvik (rm 318, Figure 1). Summer chum salmon escapements to the Anvik River have been monitored since 1979 using sonar (McEwen 2011). The sonar typically operates from late June to late July. ASL data were collected from Chinook salmon in 2012 from hand-picked carcasses and from summer chum salmon caught with a beach seine.

Chena River Tower

The Chena River (rm 920) is a tributary of the Tanana River, located 225 rm upriver from the confluence of the Tanana and Yukon rivers (Figure 1). A counting tower has operated to estimate Chinook and summer chum salmon escapements in the Chena River since 1993. ASL data from Chinook salmon were collected in 2012 from hand-picked carcasses.

Delta River Carcass Survey

The Delta River is a tributary of the Tanana River, located 336 rm upriver from the confluence of the Tanana and Yukon rivers (Figure 1). Carcass surveys have been used to monitor Delta River fall chum salmon escapements since 1972 (JTC 2013). These surveys are typically conducted from late October to late November, contingent on run timing. ASL data using vertebrae were collected from fall chum salmon in 2012. Vertebrae were collected for age determination from chum salmon from projects further from the Yukon River mouth due to high amounts of scale absorption.

Gisasa River Weir

The Gisasa River flows into the Koyukuk River 56 rm upstream from the confluence of the Koyukuk and Yukon rivers (rm 508, Figure 1). A resistance board weir has operated on the Gisasa River since 1994 to estimate Chinook and summer chum salmon escapements and run timing. The weir typically operates from late June through late July and is located 2.5 rm upriver from the confluence with the Koyukuk River (Melegari 2012). Chinook and summer chum salmon were captured for sampling using a weir trap in 2012.

Henshaw Creek Weir

Henshaw Creek is located in the upper Koyukuk River drainage 468 rm from the confluence of the Koyukuk and Yukon rivers (Figure 1). A resistance board weir, located about 1 mile up from

the confluence with the Koyukuk River, has operated on Henshaw Creek since 2000. The weir typically operates from late June to early August and provides escapement and run timing estimates for Chinook and summer chum salmon. ASL data were collected in 2012 from Chinook and summer chum salmon using a weir trap.

Salcha River Tower

The Salcha River (rm 965) is a tributary of the Tanana River, located 270 rm upriver from the confluence of the Tanana and Yukon rivers (Figure 1). Salcha River Chinook and summer chum salmon escapements have been monitored by a counting tower located near the Richardson Highway Bridge since 1993 (Savereide 2012). Counting is conducted from late June to early September. ASL data were collected from Chinook and summer chum salmon carcasses in 2012.

Sheenjek River Sonar

The Sheenjek River sonar project is located 6 rm upstream from the confluence with the Porcupine River (Figure 1). The Porcupine River flows another 52 rm before its confluence with the mainstem Yukon River (rm 1,002). Fall chum salmon escapement in the Sheenjek River was monitored using sonar technology from 1981 through 2012, generally from early August to late September (Dunbar 2012). ASL data (from vertebrae) were collected from fall chum salmon caught in a beach seine in 2012.

Toklat River Carcass Survey

The Toklat River flows into the Kantishna River 45 rm upstream of the confluence of the Tanana and Yukon rivers (695 rm Figure 1). ASL data (from vertebrae) were collected from fall chum salmon carcasses in 2012.

ACOUSTIC TAGGING

The purpose of this project was to determine the physical distribution of adult salmon as they migrated in the Yukon River past the sonar project at Pilot Station. The project objective was to acoustically tag 150 Chinook salmon and 150 summer chum salmon during each of 2 operational seasons beginning in 2011. Chinook and summer chum salmon were caught using a suite of gillnets of various mesh sizes near Pitkas Point (rm 103, Figure 2). Once caught, the fish were outfitted with an acoustic tag and released. In 2012, ASL data were collected from Chinook salmon (Bruce McIntosh, Commercial Fisheries Biologist, ADF&G, Fairbanks; personal communication).

GENETIC SAMPLING

The Nulato River joins the Yukon River below the village of Nulato (rm 484, Figure 2). The purpose of Nulato River genetic sampling in 2012 was to collect tissue samples from 200 adult Chinook salmon to add to the genetic stock identification (GSI) baseline. ASL data were also collected from most fish (P. Drobny, Fish Biologist, Spearfish Research; personal communication).

OBJECTIVE

The objective of the Yukon River ASL project in 2012 was to summarize age, sex, and length data by fishery and location or by project from Chinook, summer chum, fall chum, and coho salmon collected throughout the Alaska portion of the Yukon River drainage.

METHODS

Various state, federal, non-governmental agencies and consultants collected ASL samples and data. Methods described are those procedures recommended by ADF&G; other organizations may have collected and recorded data using slightly different procedures.

GENERAL SAMPLING PROCEDURES

Scales were removed from the preferred area of the fish and mounted on gum cards for age determination by ADF&G staff (INPFC 1963). The preferred area is located on the left side of the fish, 2 rows of scales above the lateral line along a line from the posterior insertion of the dorsal fin to the anterior insertion of the anal fin. One scale was removed from each chum salmon and a minimum of 3 scales were removed from each Chinook and coho salmon. Scale regeneration, or scale loss and rapid replacement, contributes to aging uncertainties primarily in the freshwater growth area. Chinook and coho salmon usually rear in freshwater for 1 year or longer, hence 3 scales were removed from these fish to increase the chance of selecting a scale that could be aged (Bales and DuBois 2007). In some tributaries, vertebrae were used to age summer chum and fall chum salmon when scale absorption makes aging scales difficult. Vertebrae were removed from fish collected during carcass sampling and beach seining projects.

Sex was determined by examining internal reproductive organs or external characteristics such as kype development and presence of reproductive organs at the vent. The Dall Point test fishery, LYTF, and carcass sampling surveys were the only projects where internal organs were examined; hence, these projects have accurate sex composition. Other test fishery projects conducted by non-ADF&G staff were instructed to examine internal organs; however, this protocol may not have been followed in all projects. Internal organs were not examined from commercial and some subsistence harvests and some non-ADF&G staffed test fisheries, because cutting fish would decrease fish value to commercial buyers and subsistence fishermen prefer to cut their fish immediately before processing.

Lengths were determined by measuring each fish from mid-eye to fork-of-tail with a caliper, meter stick, flexible cloth tape, fish board or fish cradle and were recorded to the nearest 1 mm increment. Field data were recorded in Rite in the Rain books, entered into MS Excel files, and uploaded into an inseason MS Access database.

SAMPLE COLLECTION

Commercial Harvest Sampling

ADF&G Division of Commercial Fisheries crews conducted commercial harvest sampling for summer and fall chum salmon, and coho salmon in Districts 1 and 6 and Subdistrict 4-A. Chinook salmon incidentally harvested during summer chum salmon directed commercial fishing periods and retained for subsistence use were sampled in District 1 by ADF&G crews and subsistence samplers, and in District 2 by subsistence samplers (Table 1). Sample goals were 200 Chinook, 160 (each) summer and fall chum, and 140 coho salmon by period or week and district (Bromaghin 1993). District 1 samples were collected from a fish processor in Emmonak. Subdistrict 4-A summer and fall chum salmon samples were collected from a processor in Kaltag. District 6 summer chum salmon samples were collected from a processor in North Pole near Fairbanks.

Off-loading crews placed each chum or coho salmon in a species-specific tote or bin. When excess fish were not available, crews sampled all available fish until the sample goal was attained. When excess fish were available, sampling crews selected a tote of fish and sampled every fish in the tote. Sampling crews worked quickly to attain sampling goals in the short time between fish delivery and processing.

The majority of Chinook salmon incidentally caught during summer chum salmon directed commercial fishing periods in District 1 were sampled at the dock while the fishermen were signing their fish tickets. As each boat arrived at the dock a member of the ADF&G crew asked the captain of each boat for permission to sample any Chinook salmon they had harvested. If permission was granted, any Chinook salmon in the boat were laid out in the bottom of the boat or fish tote and sampled. Due to the circumstances and conditions in which these fish were sampled, the length measurements were not collected in an ideal manner (i.e., completely flat on a level surface), and are therefore considered not as accurate as those collected under better circumstances (e.g., LYTF). In addition to samples collected by the ADF&G crew, subsistence samplers contracted through Association of Village Council Presidents (AVCP) sampled Chinook salmon incidentally caught during summer chum salmon directed commercial periods in Districts 1 and 2 and retained for subsistence use.

Subsistence Harvest Sampling

Subsistence harvests of Chinook and fall chum salmon were sampled during subsistence fishing openings or shortly after the closure. Sex, length, gear type, and mesh size data were collected in most samples. The sample design for Chinook salmon subsistence harvests was to collect samples from selected villages in each district along the Yukon River mainstem. The resulting age composition estimates were later combined for a drainage-wide estimate (e.g., Leba and DuBois 2011). ADF&G selected villages for sampling based on past success and data gaps among districts. Collecting subsistence harvest samples from each selected village was opportunistic and depended on timing, availability, and willingness of fishermen to participate. Assuming consistent effort by samplers, more fish were sampled when more fish are available which tends to self-weight the samples by gear, area, and time period collected.

Numerous agencies employed technicians to sample Chinook salmon from local subsistence harvests. AVCP technicians conducted sampling in Alakanuk, Emmonak, Kotlik, Marshall, Mountain Village, and Saint Mary's. Tanana Chiefs Conference (TCC) technicians conducted sampling in Anvik, Fort Yukon, Galena, and Ruby. Technicians from the City of Kaltag sampled harvests near Kaltag. Stan Zuray and a crew from the Rapids Research Center (RRC) sampled harvests near Rampart Rapids. Samples were collected from fall chum salmon by an ADF&G commercial fisheries crew near Rampart (Table 1).

Test Fishery Sampling

The test fishery sampling goals were up to 30 (each) Chinook, summer chum, and fall chum salmon daily; and up to 20 coho salmon daily. The Dall Point test fishery crew (ADF&G) sampled summer chum salmon from 5.5 in mesh drift gillnets. The ADF&G crew sampled Chinook salmon at the Big Eddy and Middle Mouth test fishing sites from 8.5 in mesh set gillnets and 8.25 in mesh drift gillnets, summer chum salmon from 5.5 in drift gillnets, and fall chum and coho salmon from 6.0 in mesh drift gillnets. For fish sampled from the Dall Point and the LYTF projects sex was determined by examination of internal reproductive organs for accurate sex determination. Test fishery crews in Mountain Village (YDFDA and Asa'carsarmiut Traditional Council) sampled

Chinook salmon from 7.5 in mesh drift gillnets, and fall chum and coho salmon from 5 7/8 in mesh drift gillnets. The Pilot Station sonar crew (ADF&G) sampled Chinook salmon caught in a suite of drift gillnets of various mesh sizes (2.75 in, 4.0 in, 5.0 in, 5.25 in, 5.75 in, 6.5 in, 7.5 in, and 8.5 in). The Eagle sonar crew (ADF&G) also used a suite of drift gillnets of various mesh sizes to sample Chinook (5.25 in, 6.5 in, 7.5 in, and 8.5 in) and fall chum salmon (5.25 in and 7.5 in). Test fishery crews sampled every fish harvested until their daily sample goal was reached.

Escapement Sampling

Several organizations that operated weirs, sonar projects, counting towers, and other ground-based surveys conducted escapement sampling (Table 1). Sampling goals varied among projects, but generally were 160 Chinook, and 160 summer or fall chum salmon per event. An event may have been weekly sampling, quartiles based upon run timing, or a single sample goal for the season. Suggested sample goals, specific project objectives, fish abundance, historical fish passage, run timing, water levels, personnel, and budget were some of the issues considered by project leaders when assessing sample goals. The U.S. Fish and Wildlife Service (USFWS) collected samples at the East Fork Andreafsky and Gisasa rivers. Samples collected from Henshaw Creek were collected by TCC. Samples collected from the Anvik, Delta, Sheenjek, and Toklat rivers were collected by ADF&G. Samples from the Chena River were collected by ADF&G Division of Sport Fish. Samples from the Salcha River were collected by Bering Sea Fisherman's Association (BSFA).

Chinook and summer chum salmon were live-sampled using a trap built into the weirs at the East Fork Andreafsky and Gisasa rivers and Henshaw Creek (see Sundlov et al. 2003 for an example of weir sampling and operation methods). Summer chum salmon were live-sampled using a beach seine in the Anvik River. Ground based surveys were used to sample Chinook salmon carcasses at the Anvik, East Fork Andreafsky, Chena, and Salcha rivers (Savereide 2012).

Acoustic Tag Sampling

The ADF&G tagging crew collected ASL samples from Chinook salmon caught in 5.25 in, 6.0 in, 7.25 in, and 8.5 in mesh drift gillnets.

Genetic Sampling

Chinook salmon were caught using hook and line or dip nets and a small number of samples were obtained from carcasses. The genetic samples and ASL data were collected by Spearfish Research.

AGE DETERMINATION

Scales or vertebrae were used to determine age. The scales, which are mounted on gum cards, were impressed in cellulose acetate using methods described by Clutter and Whitesel (1956). Scale impressions were magnified and examined using a Microfiche reader. Age was determined by counting the number of freshwater and marine annuli. Annuli are the regions of the scale where the circuli, or rings, are tightly spaced representing slower growth rates associated with winter conditions (Mosher 1969). Ages were recorded using European notation, the number of freshwater annuli separated by a decimal from the number of marine annuli. Total age from the brood year is the sum of freshwater and marine annuli plus 1 to account for time spent in the gravel before hatching. Vertebrae samples were frozen, cleaned, and dried; ages were also

determined by visually counting annuli. Ages were entered into MS Access, or into an MS Excel file depending upon the format in which sex and length data were originally recorded.

DATA ANALYSIS

As observed from a given location, the ASL composition of a returning salmon population often changes over the course of the season (Molyneaux et al. 2006); therefore, to better estimate a total harvest or escapement, a stratified random sampling design was used. Samples were divided into time strata, ASL composition from the samples in each stratum were applied to the harvest or escapement for that stratum, and stratum estimates were summed to obtain the season total ASL composition estimate. This design was intended to minimize effects of disproportionate sampling due to changes in ASL composition through the season. Strata were assigned to fishing periods for commercial harvests and to date ranges for escapement estimates. Strata were adjusted depending on the number and distribution of samples collected. An attempt was made to include sufficient sample sizes within each stratum to estimate the proportion of each major age class to obtain a 95% confidence interval width no greater than of 10% of the estimate (Bromaghin 1993). The escapement or harvest for each stratum was provided by project leaders or ADF&G fish ticket harvest reports. Sample ASL compositions were applied to most commercial harvests and escapement estimates at the East Fork Andreafsky, Gisasa, and Henshaw weirs and the Anvik River sonar.

Estimation of proportion by age and sex

Proportion of fish of age class a of sex s during the stratified period i was estimated as:

$$\hat{p}_{a,s,i} = \frac{n_{a,s,i}}{n_i}, \quad (1)$$

Where,

$n_{a,s,i}$ = number of samples for age class a of sex s in stratified period i , and

n_i = number of samples in stratified period i .

Within a given fishery, location, or project, the number of fish of specific age class a and sex s during a stratified period i was estimated as:

$$\hat{N}_{a,s,i} = \frac{n_{a,s,i}}{n_i} N_i, \quad (2)$$

Where,

$n_{a,s,i}$ = number of samples for age class a of sex s in stratified period i ,

n_i = number of samples in stratified period i , and

N_i = number of fish during the stratified period i .

When data for all strata were available, the seasonwide proportion and number of fish of specific age a and sex s was estimated as:

$$\hat{p}_{a,s} = \frac{1}{N} \sum_i N_i \hat{p}_{a,s,i}, \quad N = \sum_i N_i, \quad (3)$$

$$\hat{N}_{a,s} = \sum_i \hat{N}_{a,s,i}.$$

Seasonwide age proportion was estimated as:

$$\hat{p}_a = \frac{1}{N} \sum_i \sum_s N_i \hat{p}_{a,s,i} . \quad (4)$$

Seasonwide female proportion was estimated as:

$$\hat{p}_{s=f} = \frac{1}{N} \sum_i \sum_a N_i \hat{p}_{a,s,i} . \quad (5)$$

Estimation of mean length by age and sex

For the length, mean length and standard error for fish of age a and sex s in stratified period i was estimated as:

$$\bar{y}_{a,s,i} = \frac{\sum_j y_{a,s,i,j}}{n_{a,s,i}} \quad (6)$$

$$se = \sqrt{\frac{s_{a,s,i}^2}{n_{a,s,i}}} .$$

Where:

$y_{a,s,i,j}$ = length of j -th fish of age a and sex s , sampled during period i , and

$$s_{a,s,i}^2 = \frac{\sum_j (y_{a,s,i,j} - \bar{y}_{a,s,i})^2}{n_{a,s,i} - 1} . \quad (7)$$

When data for all strata were available, seasonwide mean length and standard error for fish of age a and sex s were estimated as:

$$\bar{y}_{a,s} = \frac{1}{N_{a,s}} \sum_i N_{a,s,i} \bar{y}_{a,s,i} \quad (8)$$

$$se = \sqrt{\hat{V}(\bar{y}_{a,s})} .$$

Where:

$$\hat{V}(\bar{y}_{a,s}) = \frac{1}{N_{a,s}^2} \sum_i N_{a,s,i}^2 \hat{V}(\bar{y}_{a,s,i}) \quad (9)$$

$$\hat{V}(\bar{y}_{a,s,i}) = \left(\frac{s_{a,s,i}^2}{n_{a,s,i}} \right) .$$

Samples from other projects (test fisheries and subsistence harvests) were summarized by sample size only, without applying them to harvest numbers or run strength indices. Some of these samples were also be summarized by mesh size, gear type, location, or date ranges.

RESULTS

CHINOOK SALMON

In 2012, a total of 6,410 Chinook salmon were sampled for ASL data from the United States portion of the Yukon River drainage (Tables 2–5; Appendices A1–A29).

Age, sex, and length samples were collected from 627 Chinook salmon incidentally harvested during summer chum salmon directed commercial fishing periods. Most samples ($n = 621$) were from Chinook salmon harvested in District 1 (Appendix A1). The samples collected from District 1 were considered sufficient to represent the entire District 1 harvest. The samples collected from District 2 ($n = 6$) were not adequate to represent the District 2 harvest due to the small sample size (Appendix A2). District 1 samples were assumed to be representative of the District 2 harvest. Age-1.3 fish predominated the District 1 harvest and females comprised 29.8% of the harvest (Table 2 and Appendix A1).

Age, sex and length samples were collected from 1,273 subsistence-harvested Chinook salmon (Table 2; Appendices A3–A14). Chinook salmon harvested from Rampart Rapids ($n = 444$) were sampled for length and sex only (Table 2; Appendix A13). Age-1.3 fish predominated from all other subsistence locations (Table 2; Appendices A3–A14). Female percentages in the subsistence harvest ranged from 12.5% in the Ruby gillnet harvest to 35.0% in the Anvik gillnet harvest (Table 2; Appendices A12 and A9).

Age, sex and length samples were collected from a total of 2,062 Chinook salmon at 5 test fishery locations (Tables 2 and 3; Appendices A15–A21). Age-1.4 fish predominated from all locations, with the exception of the Pilot Station sonar which had 47.8% age-1.3 fish. The LYTF Big Eddy site 8.5 in mesh set gillnet and the Big Eddy site 8.25 in mesh drift gillnet had the highest percentage of age-1.4 fish with 71.4% and 64.4% respectively (Table 2; Appendices A16 and A15). In the test fishery samples, female percentages ranged from 43.1% at Pilot Station sonar to 64.6% at the LYTF Middle Mouth site 8.5 in mesh set gillnet (Table 2; Appendices A17 and A20).

Age, sex, and length samples were collected from a total of 2,248 Chinook salmon at 6 escapement projects (Tables 2 and 4; Appendices A22–A27). Age-1.3 Chinook salmon predominated from most escapement projects, with the exception of the Chena and Salcha River carcass surveys which had 49.0% and 59.3% age-1.4 fish, respectively (Table 2; Appendices A24 and A27). Female percentages ranged from 28.2% in the East Fork Andreafsky River weir samples to 59.8% from the Salcha River carcass survey (Table 2; Appendices A22 and A27).

The Pilot Station Chinook salmon acoustic tagging project collected age, sex, and length samples from a total of 150 Chinook salmon during operation in 2012. Age-1.4 Chinook salmon predominated and females comprised 64.0% of fish sampled (Table 2; Appendix A28).

The Nulato River Chinook salmon genetic sampling project collected age, sex, and length samples from a total of 50 Chinook salmon. The ASL samples were incidental to the genetic collection and not applied to an escapement estimate. Age-1.3 Chinook salmon predominated and females comprised 36.0% of fish sampled (Table 2; Appendix A29).

The male mean length by age from all projects was: 563 mm for age-1.2, 707 mm for age-1.3, and 806 mm for age-1.4 fish. The female mean length by age from all projects was: 583 mm for age-1.2, 761 mm for age-1.3, and 831 mm for age-1.4 fish (Table 5).

SUMMER CHUM SALMON

A total of 5,733 summer chum salmon were sampled for ASL data from the Alaska portion of Yukon River drainage in 2012 (Tables 6–9; Appendices B1–B13).

Age, sex, and length samples were collected from 1,374 commercially-harvested summer chum salmon (Tables 6 and 7; Appendices B1–B4). Age-0.3 fish predominated from the commercial harvests in all districts (Tables 6 and 7). Females represented 47.6% of the District 1, 49.2% of the District 2, 98.4% of the Subdistrict 4-A, and 64.9% of the District 6 commercial harvest (Tables 6 and 7). No samples were collected from summer chum salmon harvested during District 2 commercial periods. The overall age and sex composition for the District 2 harvest was estimated by applying the age and sex composition of District 1 periods to unsampled District 2 periods. The high female percentage in the Subdistrict 4-A commercial harvest is because females only were sold during some periods.

Age, sex, and length samples from 2,007 summer chum salmon were collected from the Dall Point test fishery and the LYTF projects combined (Tables 6 and 8; Appendices B5–B8). Similar to the commercial harvest in the lower river, age-0.3 fish was the most common age class. Females made up 38.3% of summer chum salmon sampled at Dall Point, 55.5% at the Big Eddy site, and 58.5% at the Middle Mouth site. Compared with the LYTF historical average (1987–1988, 1990–2006, 2009–2012), the 2012 LYTF summer chum salmon age-0.3 and age-0.5 percentages were above average and female percentages were slightly below average (Table 8).

Age, sex, and length samples from 2,352 summer chum salmon were collected from 5 escapement projects in tributaries of the Yukon River. Similar to the commercial harvest, age-0.3 fish predominated from all escapement projects (Table 6; Appendices B9–B13). The average percentage of females from all escapement projects was 54.8%. The Salcha River carcass samples had the highest percentage of females at 65.4% and the East Fork Andreafsky River weir had the lowest at 47.6% (Table 6; Appendices B13 and B9).

The mean length for male summer chum salmon by age was: 527 mm for age-0.2, 562 mm for age-0.3, 589 mm for age-0.4, and 593 mm for age-0.5. The female mean length by age was: 496 mm for age-0.2, 537 mm for age-0.3, 556 mm for age-0.4, and 563 mm for age-0.5 fish (Table 9). Length comparisons between males and females at all projects for summer chum salmon showed that males were larger than females of equal age.

FALL CHUM SALMON

A total of 3,532 fall chum salmon were sampled for ASL data from the Alaska portion of the Yukon River drainage in 2012 (Tables 6, 7, 9 and 10; Appendices C1–C13).

Age, sex, and length samples were collected from 1,126 commercially-harvested fall chum salmon. Age-0.3 fish predominated in all districts and subdistricts. Females represented 54.7% of the District 1, 52.8% of the District 2, and 50.5% of the Subdistrict 4-A commercial harvest (Tables 6 and 7; Appendices C1–C3). No samples were collected from the fall chum salmon harvested in the District 2 commercial periods. The overall age and sex composition for the

District 2 harvest was estimated by applying the age and sex composition of District 1 periods to unsampled District 2 periods.

Age, sex, and length samples were collected from 49 fall chum salmon in the Subdistrict 5-C subsistence harvest. Irrespective of the small sample size, the age composition was consistent with that of the commercial harvest in District 1 with 81.6% age-0.3 fish. Females comprised 49.0% of the samples (Table 6; Appendix C4).

Age, sex, and length samples were collected from 1,817 fall chum salmon harvested in 4 test fisheries (Table 6; Appendices C5–C9). Overall, the test fishery samples were predominated by age-0.3 fish (75.0%) and females composed 51.9% of fish sampled (Table 6).

Vertebrae samples from 510 fall chum salmon were collected at 3 escapement sites in Yukon River tributaries: the Delta, Sheenjek, and Toklat rivers (Tables 6, 9, and 10; Appendices C10–C13). Overall, the samples were predominated by age-0.3 fish (69.0%), which was less than the age-0.3 percentage from most other fall chum salmon projects. Overall, the fish sampled from the escapement projects were composed of 50.4% females, ranging from 65.0% from Toklat River carcass samples to 32.8% from Delta River carcass samples (Table 6; Appendix C10 and C12). The Toklat River samples consisted of 150 aged fish and 180 fish with sex and length; the ages were not collected with the corresponding sex and length (Appendix C12).

The mean length for male fall chum salmon by age was: 553 mm for age-0.2, 583 mm for age-0.3, 600 mm for age-0.4, and 617 mm for age-0.5 fish. The female mean length by age was: 561 mm for age-0.2, 566 mm for age-0.3, 577 mm for age-0.4, and 581 mm for age-0.5 fish (Table 9). Similar to summer chum salmon, length comparisons between males and females for fall chum salmon showed that males were larger than females of equal age, with the exception of age-0.2 females being slightly larger than males (Table 9).

COHO SALMON

A total of 966 coho salmon were sampled for ASL data from the Yukon River drainage in 2012 (Tables 11 and 12; Appendices D1–D5).

Age, sex, and length samples were collected from 458 commercially-harvested coho salmon from District 1. Age-2.1 fish predominated the District 1 commercial harvest. Females comprised 49.2% of the District 1 commercial harvest (Table 11; Appendix D1).

Age, sex, and length samples were collected from 508 coho salmon at 3 test fishery projects, (Table 11; Appendices D2–D5). Overall, the test fishery samples were predominated by age-2.1 fish (59.0%) followed by age-1.1 fish (33.9%). Females comprised 45.7% of the test fishery samples (Table 11).

The male mean length by age was: 552 mm for age-1.1 and age-2.1, and 548 mm for age-3.1 fish. The female mean length by age was: 551 mm for age-1.1, 552 mm for age-2.1, and 553 mm for age-3.1 fish (Table 12).

In 2012, age-2.1 coho salmon predominated; this is typically the most common age of coho salmon that return to the drainage (Table 11). The percentage of female coho salmon was below 50% at all test fish projects with the exception of the LYTF Middle Mouth site (Table 11). The LYTF Middle Mouth site harvest had the highest percentage of female fish; the sex of these fish was determined from internal characteristics (51.5%, Table 11). In 2012, there was little

difference in mean length by sex with the exception of the age-3.1 females being larger than males (Table 12).

DISCUSSION

Age, sex, and length data have been collected from Yukon River salmon species since the 1960s. This information aids in fishery management decisions and allows researchers to develop brood tables for run reconstruction and spawner-recruit analysis. It also provides data to evaluate annual and historical changes in the ASL composition of salmon throughout the Yukon River drainage. Yukon River ASL sampling projects were designed to account for temporal and spatial variability that exists within salmon populations, but there is potential for some biases caused by small sample sizes, scale absorption, and collection methods. Age, sex, and length data users are cautioned to be aware of these inherent biases when interpreting data.

One possible bias, due to scale absorption, exists in samples collected from carcasses as well as those taken on or near the spawning grounds. This potential bias is caused by the margin of the scale being absorbed as an energy reserve in the last few weeks of a salmon's life (Clutter and Whitesel 1956). Scale absorption normally becomes more pronounced the farther upriver the samples are collected and may lead to under aging because little evidence of the outermost annulus remains. For these reasons, vertebrae were collected for aging Salcha River summer chum carcasses, and all fall chum salmon carcasses.

A bias often results from inherent size selectivity in sample collection methods. This bias is most apparent with Chinook salmon, because of the large range in fish size, where males and younger aged fish predominate in the smaller size fish. Gillnets are size selective based on mesh size, and fish wheels tend to be biased towards smaller sized fish that migrate near shore in lower water velocities (Meehan 1961). In spawning ground carcass recoveries, Kissner and Hubartt (1986) indicated that Chinook salmon males tend to drift downstream while females tend to remain near their redds; during periods of increased water velocities, smaller fish have a greater potential to be carried downstream and out of the study area. Zhou (2002) indicated that fish size and stream flow affect carcass recovery rates. This nonrandom dispersal of carcasses could bias ASL data towards females and larger older-aged fish, although proper sampling designs have been shown to reduce this (Evenson 1991; Skaugstad 1990). Many scientists also believe a bias may exist in weir sampling towards smaller fish when larger fish are more reluctant, or "trap shy", to enter a confined weir trap structure and be available for live sampling. Though trap shyness has yet to be scientifically evaluated, users of these data should be aware that this potential bias exists. Sampling biases are described in greater detail by Molyneaux et al. (2006).

Historically, Chinook salmon caught in the LYTF with 8.5 in mesh have been close to 50% female (Table 3). Females made up 62.6% of the 2012 samples from the LYTF, which was above the historical average (Table 3). This above average percentage of females may be attributed to the slightly above average percentage of 6-year-old fish, which are predominantly females. Samples collected from individual projects and locations can vary in sex composition, which is often related to the gear used to capture the fish and the relative percentage of smaller age-1.2 fish which are usually male. A relatively low percentage of females can be attributable to the selectivity of small mesh gillnets or fish wheels, where smaller and typically male fish are caught (Meehan 1961; Molyneaux et al. 2005). In 2012, low percentages of females were found in the District 1 commercial harvest, as well as all of the subsistence harvest sampling projects (Table 2). The low percentage of females in the District 1 commercial harvests is most likely due

to the commercial periods targeting summer chum salmon with 6.0 in or less mesh gillnets that harvested smaller, usually male, Chinook salmon. The percentage of females from the East Fork Andreafsky River weir and the Anvik River were below average, but the percentage of females from the Chena and Salcha rivers were above average (Table 4).

At the LYTF projects where sex was determined through internal examination of reproductive organs, and is therefore more accurate than other projects using external characteristics for sex determination, Chinook salmon males were smaller on average than females, which is consistent with recent analyses. Karpovich and DuBois (2007) found that males were smaller than females with the exception of the age-1.5 fish. Molyneaux et al. (2006) also reported male Chinook salmon had a smaller mean length than females on the Kuskokwim River.

At the LYTF project locations, Chinook salmon age distribution was different by sex, where the majority of the younger fish (age-1.2 and age-1.3) were male and more of the older fish (age-1.4, age-1.5, and age-2.4) were female. This relationship between Chinook salmon age and sex is typical and has been reported previously from the Yukon and Kuskokwim rivers (Horne-Brine et al. 2009; Molyneaux et al. 2006).

In 2012, overall the percentage of 5-year-old Chinook salmon (age-1.3 and age-2.2) was at or above the historical average (Tables 3 and 4). The above average percentage of 5-year-old Chinook salmon is attributed to the 2007 brood year. Above average percentages of Chinook salmon returning from the 2007 brood year were also observed from all escapement projects in 2011, where 4-year-old fish (age-1.2 and age-2.1) comprised as many as 22.4 percentage points more than average (Table 4). The 2012 percentages of 5-year-old (age-1.3 and age-2.2) Chinook salmon from LYTF, East Fork Andreafsky River, Anvik River, Chena River, and Salcha River were at, or significantly above, the 5-year averages (Tables 3 and 4). Other escapement projects with high percentages of 5-year-old fish were the Gisasa River and Henshaw Creek weirs (Table 2). 5-year-old Chinook salmon also predominated in the subsistence harvest, regardless of gear.

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TABLES AND FIGURES

Table 1.–Projects and salmon species for which age, sex, and length data were collected in 2012 from the Yukon area.

Project Type	Location	Salmon Species (ASL Summaries Present = X)			
		Chinook	Summer	Fall Chum	Coho
Commercial	District 1 ^a	X ^b	X	X	X
	District 2 ^a	X ^b			
	Subdistrict 4-A ^a		X	X	
	District 6 ^a		X		
Subsistence	District 1 Alakanuk ^c	X			
	District 1 Emmonak ^c	X			
	District 1 Kotlik ^c	X			
	District 2 Marshall ^c	X			
	District 2 Mountain Village ^c	X			
	District 2 St. Mary's ^c	X			
	Subdistrict 4-A Anvik ^d	X			
	Subdistrict 4-A Kaltag ^e	X			
	Subdistricts 4-A, 4-B, 4-C Galena ^d	X			
	Subdistricts 4-B, 4-C Ruby ^d	X			
	Subdistrict 5-B Rampart Rapids ^f	X ^g			
	Subdistrict 5-C Rampart ^a			X	
Subdistrict 5-D Fort Yukon ^d	X				
Test Fishery	Dall Point ^a		X		
	Big Eddy ^a	X	X	X	X
	Middle Mouth ^a	X	X	X	X
	Mountain Village ^h	X		X	X
	Pilot Station Sonar ^a	X			
	Eagle Sonar ^a	X		X	X
Escapement	Andreafsky River, East Fork ⁱ	X	X		
	Anvik River ^a	X	X		
	Chena River ^j	X			
	Delta River ^a			X	
	Gisasa River ⁱ	X	X		
	Henshaw Creek ^d	X	X		
	Salcha River ^k	X	X		
	Sheenjok River Sonar ^a			X	
Toklat River ^a			X		
Acoustic	Pilot Station ^a	X			
Genetic	Nulato River ^l	X			

^a Project was operated by the Alaska Department of Fish and Game, Division of Commercial Fisheries.

^b Incidental harvest from the commercial summer chum salmon fishery.

^c Project was operated by Association of Village Council Presidents.

^d Project was operated by the Tanana Chiefs Conference.

^e Project was operated by the City of Kaltag.

^f Project was operated by the Rapids Research Center and Stan Zuray.

^g Only sex and length data were collected by this project.

^h Project was operated by the Asa'carsarmiut Traditional Council.

ⁱ Project was operated by the United States Fish and Wildlife Service.

^j Project was operated by the Alaska Department of Fish and Game, Division of Sport Fish.

^k Project was operated by the Bering Sea Fishermen's Association.

^l Project was operated by Spearfish Research.

Table 2.—Yukon River Chinook salmon age and female percentages from commercial, subsistence, test fishery, escapement, and genetic sampling projects, 2012.

Project Type Location and (gear)	Sample Size	Percent (%)											
		Brood Year (Age)										Female	
		2009 (1.1)	2008 (1.2) (2.1)		2007 (1.3) (2.2)		2006 (1.4) (2.3)		2005 (1.5) (2.4)		2004 (1.6) (2.5)		
Commercial													
District 1 (≤ 6" mesh gillnet) ^a	621	0.0	18.8	0.0	50.2	0.2	30.0	0.2	0.5	0.2	0.0	0.0	29.8
District 2 (≤ 6" mesh gillnet) ^{a, b}	6	0.0	33.3	0.0	50.0	0.0	16.7	0.0	0.0	0.0	0.0	0.0	50.0
Subsistence													
District 1 Alakanuk (gillnet)	58	0.0	12.1	0.0	55.2	0.0	27.6	3.4	1.7	0.0	0.0	0.0	24.1
District 1 Kotlik (gillnet)	13	0.0	5.9	0.0	69.2	0.0	30.8	0.0	0.0	0.0	0.0	0.0	23.1
District 1 Emmonak (gillnet)	46	0.0	6.5	0.0	63.0	0.0	28.3	0.0	0.0	2.2	0.0	0.0	23.9
District 2 Mountain Village (gillnet)	72	0.0	0.0	0.0	58.3	0.0	40.3	0.0	1.4	0.0	0.0	0.0	31.9
District 2 St. Mary's (gillnet)	218	0.0	3.7	0.0	53.9	0.5	40.2	0.5	1.4	0.0	0.0	0.0	26.6
District 2 Marshall (gillnet)	103	0.0	4.9	0.0	58.3	0.0	34.0	1.0	1.0	1.0	0.0	0.0	16.5
Subdistrict 4-A Anvik (gillnet)	60	0.0	5.0	0.0	60.0	0.0	30.0	5.0	0.0	0.0	0.0	0.0	35.0
Subdistrict 4-A Kaltag (7.5" mesh drift gillnet)	45	0.0	2.2	0.0	64.4	0.0	33.3	0.0	0.0	0.0	0.0	0.0	26.7
Subdistricts 4-B, 4-C Galena (set gillnet)	22	0.0	0.0	0.0	77.3	0.0	22.7	0.0	0.0	0.0	0.0	0.0	22.7
Subdistricts 4-B, 4-C Ruby (7.5" set gillnet)	32	0.0	18.8	0.0	65.6	0.0	12.5	0.0	0.0	3.1	0.0	0.0	12.5
Subdistrict 5-B Rampart Rapids (gillnet, fish wheel) ^c	444	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.4
Subdistrict 5-D Fort Yukon (fish wheel)	160	0.6	9.4	0.0	50.6	0.6	33.8	3.1	0.6	1.3	0.0	0.0	30.0
Test Fishery													
Big Eddy (8.25" mesh drift gillnet)	219	0.0	1.8	0.0	31.5	0.5	64.4	0.0	0.0	1.8	0.0	0.0	61.2
Big Eddy (8.5" mesh set gillnet)	346	0.0	1.4	0.0	24.3	0.0	71.4	0.0	2.0	0.9	0.0	0.0	59.8
Middle Mouth (8.5" mesh set gillnet)	461	0.0	1.1	0.0	34.1	0.0	63.1	0.0	0.7	1.1	0.0	0.0	64.6
Mountain Village (7.5" mesh drift gillnet)	405	0.0	1.7	0.0	44.7	0.2	49.1	0.0	1.2	2.7	0.0	0.2	44.2
Pilot Station Sonar (2.75" to 8.5" mesh drift gillnet)	385	0.8	5.7	0.0	47.8	0.0	42.9	0.5	0.8	1.6	0.0	0.0	43.1
Eagle Sonar (5.25" to 8.5" mesh drift gillnet)	246	0.4	6.1	0.0	29.3	0.4	56.9	2.4	1.2	3.3	0.0	0.0	49.6

-continued-

Table 2.–Page 2 of 2.

Project Type Location and (gear)	Sample Size	Percent (%)											Female
		Brood Year (Age)											
		2009 (1.1)	2008 (1.2) (2.1)		2007 (1.3) (2.2)		2006 (1.4) (2.3)		2005 (1.5) (2.4)		2004 (1.6) (2.5)		
Escapement													
Andreafsky River, East Fork (weir trap)	572	0.2	11.1	0.0	64.6	0.0	23.7	0.0	0.3	0.0	0.0	0.0	28.2
Anvik River (hook and line, carcass) ^d	246	0.0	14.6	0.0	53.7	0.0	31.3	0.0	0.0	0.4	0.0	0.0	30.1
Chena River (carcass)	198	0.5	5.1	0.0	45.5	0.0	49.0	0.0	0.0	0.0	0.0	0.0	55.6
Gisasa River (weir trap)	523	0.0	11.4	0.0	60.6	0.3	26.9	0.0	0.4	0.3	0.0	0.0	33.4
Henshaw Creek (weir trap)	289	0.0	15.1	0.0	49.0	0.0	35.5	0.0	0.4	0.0	0.0	0.0	42.0
Salcha River (carcass)	420	0.2	6.0	0.0	32.9	0.0	59.3	0.0	1.7	0.0	0.0	0.0	59.8
Acoustic Tagging													
Pilot Station (5.25" to 8.5" mesh drift gillnet)	150	0.0	0.0	0.0	34.7	0.0	60.7	0.7	2.0	2.0	0.0	0.0	64.0
Genetic Sampling													
Nulato River (hook and line, dip net, carcass)	50	0.0	6.0	0.0	62.0	0.0	32.0	0.0	0.0	0.0	0.0	0.0	36.0
Total Chinook	6,410												

^a Incidental harvest from the summer chum salmon commercial fishery.

^b Only sampled fish from Periods 1, 2, and 3. Not representative of harvest.

^c Project only collected sex and length data.

^d Only males were harvested in the sport fishery.

Table 3.–Chinook salmon age and female percentages from the Lower Yukon River test fishery (combined Big Eddy and Middle Mouth sites) 8.5 in mesh set gillnet, 1985–2012.

Year	Sample Size	Number of Days	Percent (%)						Female
			Age						
			3 yr (1.1)	4 yr (1.2, 2.1)	5 yr (1.3, 2.2)	6 yr (1.4, 2.3)	7 yr (1.5, 2.4)	8 yr (1.6, 2.5)	
1985	309	18	0.0	3.9	8.4	79.3	8.1	0.3	53.7
1986	533	25	0.3	0.9	22.7	52.9	23.1	0.2	46.3
1987	465	20	0.3	0.9	3.0	78.5	17.0	0.4	62.8
1988	262	30	0.0	2.3	15.3	43.9	37.8	0.8	56.1
1989	381	29	0.0	0.8	17.8	67.2	13.9	0.5	53.0
1990	227	23	0.0	3.5	11.0	76.7	8.8	0.0	56.4
1991	356	27	0.0	1.4	42.1	48.9	7.0	0.6	49.2
1992	359	19	0.0	1.1	10.6	82.7	5.0	0.6	56.5
1993	472	25	0.0	0.8	25.8	63.8	9.3	0.2	50.8
1994	653	41	0.2	1.4	41.3	51.8	5.5	0.0	47.3
1995	445	19	0.0	0.9	11.2	81.6	6.3	0.0	50.8
1996	355	13	0.0	1.1	61.4	21.4	16.3	0.0	53.0
1997	302	12	0.0	1.7	9.6	86.4	2.6	0.0	51.3
1998	928	39	0.0	1.3	43.4	45.3	9.9	0.1	50.2
1999	942	35	0.0	0.7	9.1	87.0	3.1	0.0	61.4
2000	950	42	0.2	0.7	19.2	71.1	9.1	0.0	53.4
2001	1,020	37	0.0	0.5	11.0	80.6	8.0	0.0	56.9
2002	1,050	43	0.0	2.5	20.5	64.9	12.1	0.0	52.2
2003	1,400	50	0.0	0.6	24.1	68.0	7.3	0.1	52.5
2004	865	48	0.1	4.3	18.5	74.5	2.7	0.0	58.2
2005	994	43	0.0	1.5	40.9	55.0	2.5	0.0	48.9
2006	987	38	0.0	2.2	50.6	45.0	2.2	0.0	48.5
2007	1,030	42	0.0	4.7	14.4	80.2	0.8	0.0	52.5
2008	1,271	43	0.0	1.2	44.4	51.0	3.5	0.0	46.3
2009	1,035	42	0.0	3.4	9.1	85.5	2.0	0.0	60.3
2010	1,328	37	0.2	4.1	59.6	33.6	2.6	0.0	47.8
2011	998	42	0.0	1.4	31.7	62.8	4.0	0.1	52.4
2012	807	34	0.0	1.2	29.9	66.7	2.2	0.0	62.6
Average ^a (1994, 1998-2011)	1,030	41	0.0	2.0	29.2	63.7	5.0	0.0	52.6
5 yr Average (2008-2011)	1,132	41	0.0	2.9	31.8	62.6	2.6	0.0	51.9

Note: The Lower Yukon River test fishery was conducted from the end of May through July 15. Before 1998, this test fishery was often discontinuous or was not conducted throughout the season. The “Number of Days” refers only to those days that scale samples were collected from Chinook salmon and aged.

^a The averages only include years when samples were collected throughout the season and years with a 35 day season minimum. Averages were not weighted by number of fish sampled each year.

Table 4.—Yukon River Chinook salmon age and female percentages, from selected escapement projects, 1985–2012.

Project	Year	Sample Size	Percent (%)						Female
			Age						
			3 yr (1.1)	4 yr (1.2, 2.1)	5 yr (1.3, 2.2)	6 yr (1.4, 2.3)	7 yr (1.5, 2.4)	8 yr (1.6, 2.5)	
Andreafsky River,	1985 ^a	445	0.0	39.6	12.8	43.6	4.0	0.0	33.2
East Fork	1986 ^b	275	0.0	2.2	69.8	21.8	6.2	0.0	23.3
	1987 ^b	383	0.3	4.7	8.9	83.7	2.4	0.0	56.1
	1988 ^b	403	0.2	27.8	29.5	26.8	15.6	0.0	38.7
	1989	227	0.0	5.3	71.8	21.2	1.7	0.0	13.6
	1990	583	0.6	31.8	28.7	37.9	0.9	0.0	41.6
	1991	424	0.0	10.3	56.9	30.5	2.3	0.0	33.9
	1992	367	0.0	23.1	48.1	25.0	3.8	0.0	21.2
	1993	406	0.4	16.9	38.7	41.8	2.3	0.0	29.9
	1994 ^c	440	0.0	8.0	53.0	34.5	4.3	0.2	35.5
	1995 ^c	340	0.0	35.0	15.7	47.5	1.7	0.0	43.7
	1996 ^c	332	1.2	6.6	74.1	13.9	4.2	0.0	41.9
	1997 ^c	410	0.0	52.7	15.6	31.7	0.0	0.0	36.8
	1998 ^c	370	0.0	16.8	71.4	11.1	0.8	0.0	29.0
	1999 ^c	357	0.3	34.5	32.2	32.5	0.6	0.0	28.6
	2000 ^c	175	0.0	12.6	49.1	38.3	0.0	0.0	54.3
	2001 ^{c,d}	124	0.0	14.5	18.5	64.5	2.4	0.0	63.7
	2002 ^c	436	0.0	30.5	48.2	20.0	1.4	0.0	21.1
	2003 ^c	510	0.5	16.0	51.9	30.7	0.8	0.0	46.2
	2004 ^c	508	0.0	39.9	42.6	17.1	0.4	0.0	37.3
	2005 ^c	389	0.0	15.0	64.3	20.2	0.5	0.0	50.2
	2006 ^c	454	0.0	17.0	54.9	28.1	0.0	0.0	42.6
	2007 ^{c,e}	631	0.0	41.7	25.7	32.0	0.6	0.0	—
	2008 ^c	466	0.0	3.8	74.5	20.1	1.5	0.0	34.8
	2009 ^c	2,312	0.1	25.0	15.5	58.7	0.5	0.0	46.0
	2010 ^c	624	0.3	41.3	46.8	10.5	1.0	0.1	48.6
	2011 ^c	542	0.0	45.6	39.6	14.6	0.2	0.0	19.9
	2012 ^c	572	0.2	11.1	64.6	23.7	0.3	0.0	28.2
Average ^f (1985–2011)			0.1	23.2	43.9	30.5	2.2	0.0	36.3
5 yr Average ^f (2007–2011)			0.1	31.5	40.4	27.2	0.8	0.0	37.3

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Table 4.–Page 2 of 4.

Project	Year	Sample Size	Percent (%)						Female
			Age						
			3 yr (1.1)	4 yr (1.2, 2.1)	5 yr (1.3, 2.2)	6 yr (1.4, 2.3)	7 yr (1.5, 2.4)	8 yr (1.6, 2.5)	
Anvik	1985 ^{a,g}	33	0.0	30.3	39.4	30.3	0.0	0.0	24.2
River	1986 ^a	142	0.0	0.7	50.0	38.0	11.3	0.0	67.2
	1987 ^a	238	0.0	9.5	13.1	73.9	3.7	0.0	58.7
	1988 ^a	246	0.0	30.5	38.2	27.2	4.1	0.0	29.7
	1989 ^a	381	0.3	4.2	49.1	43.5	2.9	0.0	40.7
	1990 ^a	407	0.3	26.3	26.0	43.8	3.8	0.0	37.0
	1991 ^a	378	0.0	10.3	55.0	31.7	2.9	0.0	41.0
	1992 ^a	315	0.0	9.5	38.1	50.8	1.6	0.0	41.3
	1993 ^a	340	0.0	13.8	38.5	45.6	2.1	0.0	42.1
	1994 ^a	405	0.0	3.0	51.9	39.8	5.4	0.0	42.0
	1995 ^a	315	0.0	9.5	38.1	50.8	1.6	0.0	41.3
	1996 ^a	262	0.0	9.9	55.4	24.4	9.9	0.4	35.1
	1997 ^a	304	0.0	25.0	30.6	44.1	0.3	0.0	36.8
	1998 ^a	327	0.3	14.7	59.9	23.9	1.2	0.0	32.7
	1999 ^a	343	0.0	9.3	42.5	48.1	0.0	0.0	37.9
	2000 ^a	203	0.0	4.9	41.9	52.7	0.5	0.0	40.9
	2001 ^a	332	0.0	11.1	30.1	53.0	5.7	0.0	38.3
	2002 ^a	313	0.0	19.5	43.1	34.2	3.2	0.0	28.8
	2003 ^a	428	0.2	8.9	54.7	33.2	3.0	0.0	37.6
	2004 ^a	332	0.6	32.2	40.7	25.6	0.9	0.0	27.6
	2005 ^a	227	0.0	8.8	61.2	27.7	2.2	0.0	51.1
	2006 ^a	169	0.0	10.7	47.9	41.4	0.0	0.0	43.2
	2007 ^{a,h}	–	–	–	–	–	–	–	–
	2008 ^a	223	0.0	7.6	69.5	22.0	0.9	0.0	18.8
	2009 ^a	220	0.0	17.3	16.4	65.0	1.4	0.0	52.3
	2010 ^a	90	14.3	42.9	28.6	14.3	0.0	0.0	28.6
	2011 ^a	236	0.0	16.9	56.8	25.8	0.4	0.0	25.8
	2012 ^a	229	0.0	14.8	51.5	33.2	0.4	0.0	32.3
Average ^f (1985–2011)			0.6	14.3	43.1	39.2	2.8	0.0	39.1
5 yr Average ^f (2006, 2008–2011)			2.9	19.1	43.8	33.7	0.5	0.0	33.7

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Table 4.–Page 3 of 4.

Project	Year	Sample Size	Percent (%)						Female
			Age						
			3 yr (1.1)	4 yr (1.2, 2.1)	5 yr (1.3, 2.2)	6 yr (1.4, 2.3)	7 yr (1.5, 2.4)	8 yr (1.6, 2.5)	
Chena River	1985 ⁱ	513	0.0	12.1	21.7	59.2	7.0	0.0	52.5
	1986 ⁱ	729	0.1	9.3	51.2	29.9	9.3	0.1	25.4
	1987 ⁱ	560	0.0	2.9	13.1	75.6	8.4	0.0	58.0
	1988 ⁱ	468	0.6	10.5	17.5	46.4	24.6	0.4	60.9
	1989 ⁱ	288	0.3	4.2	30.2	54.9	10.4	0.0	64.9
	1990 ⁱ	522	0.0	23.8	25.7	46.7	3.8	0.0	46.2
	1991 ⁱ	337	0.0	8.3	55.8	28.5	7.4	0.0	31.5
	1992 ⁱ	464	1.9	40.7	16.4	40.5	0.4	0.0	37.7
	1993 ^b	187	0.5	29.4	41.2	27.8	1.1	0.0	16.6
	1994 ^b	512	0.0	2.9	43.6	51.2	2.3	0.0	45.1
	1995 ^b	464	0.0	4.4	20.9	70.9	3.8	0.0	66.0
	1996 ^b	514	2.1	6.2	44.2	23.5	23.9	0.0	44.0
	1997 ^b	702	0.3	37.2	13.4	48.0	1.1	0.0	39.6
	1998 ^b	228	0.0	4.4	72.4	18.4	4.8	0.0	41.2
	1999 ^b	318	0.9	7.9	25.2	65.4	0.6	0.0	58.8
	2000 ^b	149	0.0	20.1	35.6	35.6	8.7	0.0	34.9
	2001 ^b	521	0.6	9.6	33.6	51.2	5.0	0.0	44.0
	2002 ^b	373	0.1	29.0	29.8	38.5	2.7	0.0	31.7
	2003 ^b	370	0.0	5.1	46.5	41.6	6.8	0.0	44.9
	2004 ^b	158	0.0	8.9	17.7	71.5	1.9	0.0	66.5
	2005 ^b	553	0.0	6.5	49.9	39.5	4.1	0.0	42.4
	2006 ^b	362	0.0	12.7	45.6	40.6	1.1	0.0	45.9
	2007 ^{b, g}	53	–	–	–	–	–	–	–
	2008 ^{b, g}	36	0.0	27.8	61.1	11.1	0.0	0.0	44.4
	2009 ^b	442	0.0	14.5	17.0	67.8	0.7	0.0	55.1
	2010 ^b	80	0.0	13.6	51.9	32.1	2.5	0.0	30.9
	2011 ^b	425	0.2	22.6	46.8	28.7	1.6	0.0	31.8
	2012 ^b	198	0.5	5.1	45.5	49.0	0.0	0.0	55.6
	Average ^f (1985–2011)		0.3	13.9	34.7	45.4	5.8	0.0	44.7
	5 yr Average ^f (2005–2006, 2009–2011)		0.0	14.0	42.2	41.7	2.0	0.0	41.2

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Table 4.–Page 4 of 4.

Project	Year	Sample Size	Percent (%)						Female
			Age						
			3 yr (1.1)	4 yr (1.2, 2.1)	5 yr (1.3, 2.2)	6 yr (1.4, 2.3)	7 yr (1.5, 2.4)	8 yr (1.6, 2.5)	
Salcha River	1985 ⁱ	511	0.0	12.3	17.6	64.8	5.3	0.0	48.5
	1986 ⁱ	586	0.2	11.8	43.7	29.5	14.8	0.0	35.8
	1987 ⁱ	551	0.2	6.0	12.6	73.5	7.8	0.0	62.8
	1988 ⁱ	497	0.4	20.3	22.5	42.1	14.7	0.0	39.6
	1989 ⁱ	222	0.5	4.1	28.9	57.8	8.8	0.0	62.2
	1990 ⁱ	498	0.2	17.6	24.9	48.9	8.3	0.0	48.9
	1991 ⁱ	515	0.2	8.2	44.3	41.4	5.8	0.2	47.2
	1992 ⁱ	646	1.2	30.8	28.6	38.2	1.1	0.0	34.4
	1993 ^b	453	0.9	28.0	39.1	31.1	0.9	0.0	27.6
	1994 ^b	524	0.6	2.7	39.1	52.9	4.8	0.0	44.5
	1995 ^b	646	0.0	13.6	20.6	62.8	3.1	0.0	56.0
	1996 ^b	406	2.7	6.2	38.4	28.6	24.1	0.0	50.8
	1997 ^b	180	0.0	14.4	14.4	69.4	1.7	0.0	50.0
	1998 ^b	352	2.4	4.9	72.4	17.9	2.4	0.0	30.0
	1999 ^b	307	0.0	9.1	24.1	66.4	0.3	0.0	54.7
	2000 ^{b, g}	41	0.0	22.0	48.8	24.4	4.9	0.0	43.9
	2001 ^b	192	0.5	10.4	33.9	52.1	3.1	0.0	37.5
	2002 ^b	282	0.0	36.2	13.8	38.7	11.3	0.0	34.8
	2003 ^b	151	0.7	7.3	42.4	42.4	7.3	0.0	42.4
	2004 ^b	229	0.0	9.2	8.3	81.7	0.9	0.0	62.9
	2005 ^b	602	0.0	9.3	41.5	46.2	3.0	0.0	54.3
	2006 ^b	509	0.0	5.7	49.3	43.0	2.0	0.0	43.4
	2007 ^b	308	0.0	22.4	26.9	50.3	0.3	0.0	35.7
	2008 ^b	303	0.7	9.9	51.8	36.0	1.7	0.0	39.3
	2009 ^b	458	0.0	31.7	21.4	46.7	0.2	0.0	39.1
	2010 ^b	410	0.5	25.5	58.0	14.8	1.2	0.0	30.3
	2011 ^b	527	0.2	14.6	35.5	48.2	1.5	0.0	42.1
	2012 ^b	420	0.2	6.0	32.9	59.3	1.7	0.0	59.8
	Average ^f (1985–2011)		0.5	14.3	32.9	47.1	5.2	0.0	44.4
	5 yr Average ^f (2007–2011)		0.3	20.8	38.7	39.2	1.0	0.0	37.3

^a Project was operated as sonar.

^b Project was operated as a counting tower.

^c Project was operated as weir.

^d Sampling dates may not represent run, 2001 E.F. Andreafsky River is not included in average.

^e Percent female data not available.

^f Averages were not weighted by number of fish sampled each year.

^g Small sample size, not included in average.

^h Chinook salmon samples were not collected.

ⁱ Samples were from mark–recapture project.

Table 5.–Yukon River Chinook salmon mean length (mm) by sex, project, gear and age, 2012.

Sex	Project Location	Project Type and (Gear)	Brood Year (Age)										
			2009 (1.1)	2008 (1.2)	(2.1)	2007 (1.3)	(2.2)	2006 (1.4)	(2.3)	2005 (1.5)	(2.4)	2004 (1.6)	(2.5)
Male	District 1 ^a	Com (≤6" GN)	–	568	–	684	557	802	637	–	–	–	–
	District 2 ^{a, b}	Com (≤6" GN)	–	551	–	735	–	–	–	–	–	–	–
	District 1, Alakanuk	Sub (DGN, SGN)	–	568	–	681	–	768	664	910	–	–	–
	District 1, Kotlik	Sub (DGN, SGN)	–	–	–	691	–	792	–	–	–	–	–
	District 1, Emmonak	Sub (DGN, SGN)	–	596	–	677	–	777	–	–	810	–	–
	District 2, Mountain Village	Sub (DGN)	–	–	–	711	–	798	–	–	–	–	–
	District 2, St. Mary's	Sub (DGN)	–	548	–	716	633	807	680	1000	–	–	–
	District 2, Marshall	Sub (DGN)	–	571	–	701	–	800	695	–	727	–	–
	Subdistrict 4–A, Anvik	Sub (DGN, SGN)	–	558	–	704	–	809	705	–	–	–	–
	Subdistrict 4–A, Kaltag	Sub (7.5" DGN)	–	552	–	724	–	853	–	–	–	–	–
	Subdistricts 4–B, 4–C Galena	Sub (SGN)	–	–	–	708	–	830	–	–	–	–	–
	Subdistricts 4–B, 4–C Ruby	Sub (7.5" SGN)	–	611	–	694	–	797	–	–	730	–	–
	Subdistrict 5–D, Fort Yukon	Sub (FW)	370	546	–	703	660	823	690	–	720	–	–
	Big Eddy	TF (8.25" DGN)	–	571	–	716	569	815	–	–	818	–	–
	Big Eddy	TF (8.5" SGN)	–	573	–	745	–	823	–	822	–	–	–
	Middle Mouth	TF (8.5" SGN)	–	534	–	765	–	810	–	947	830	–	–
	Mountain Village	TF (7.5" DGN)	–	584	–	720	607	809	–	984	824	–	–
	Pilot Station	TF (DGN)	364	569	–	702	–	812	609	890	804	–	–
	Eagle Sonar	TF (DGN)	313	583	–	701	612	832	697	–	793	–	–
	Andreafsky, E.F.	Esc (WR)	355	541	–	672	–	799	–	–	–	–	–
	Anvik	Esc (CR)	–	561	–	685	–	794	–	–	–	–	–
	Anvik ^c	Esc (HL)	–	541	–	713	–	755	–	–	–	–	–
	Chena	Esc (CR)	340	538	–	707	–	815	–	–	–	–	–
	Gisasa	Esc (WR)	–	538	–	687	500	786	–	–	–	–	–
	Henshaw	Esc (WR)	–	557	–	699	–	807	–	–	–	–	–
	Salcha	Esc (CR)	366	569	–	711	–	822	–	–	–	–	–
	Pilot Station	Tag (DGN)	–	–	–	734	–	822	727	–	–	–	–
	Nulato	GS (HL, DP, CR)	–	576	–	699	–	806	–	–	–	–	–
		Average Male Mean Length ^d	351	563	–	707	591	806	678	926	784	–	–
		SE ^d	9	4	–	4	20	4	12	27	15	–	–

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Table 5.–Page 2 of 2.

Sex	Project Location	Project Type and (Gear)	Brood Year (Age)										
			2009 (1.1)	2008 (1.2) (2.1)		2007 (1.3) (2.2)		2006 (1.4) (2.3)		2005 (1.5) (2.4)		2004 (1.6) (2.5)	
Female	District 1 ^a	Com (≤6" GN)	–	534	–	760	–	832	–	866	765	–	–
	District 2 ^{a, b}	Com (≤6" GN)	–	–	–	725	–	800	–	–	–	–	–
	District 1, Alakanuk	Sub (DGN, SGN)	–	–	–	850	–	834	–	–	–	–	–
	District 1, Kotlik	Sub (DGN, SGN)	–	–	–	770	–	806	–	–	–	–	–
	District 1, Emmonak	Sub (DGN, SGN)	–	–	–	754	–	833	–	–	–	–	–
	District 2, Mountain Village	Sub (DGN)	–	–	–	796	–	833	–	859	–	–	–
	District 2, St. Mary's	Sub (DGN)	–	–	–	771	–	830	–	828	–	–	–
	District 2, Marshall	Sub (DGN)	–	–	–	800	–	840	–	903	–	–	–
	Subdistrict 4–A, Anvik	Sub (DGN, SGN)	–	–	–	738	–	862	760	–	–	–	–
	Subdistrict 4–A, Kaltag	Sub (7.5" DGN)	–	–	–	–	–	839	–	–	–	–	–
	Subdistricts 4–B, 4–C Galena	Sub (SGN)	–	–	–	740	–	833	–	–	–	–	–
	Subdistricts 4–B, 4–C Ruby	Sub (7.5" SGN)	–	–	–	750	–	813	–	–	–	–	–
	Subdistrict 5–D, Fort Yukon	Sub (FW)	–	640	–	700	–	850	–	900	950	–	–
	Big Eddy	TF (8.25" DGN)	–	–	–	791	–	833	–	–	816	–	–
	Big Eddy	TF (8.5" SGN)	–	–	–	794	–	842	–	887	779	–	–
	Middle Mouth	TF (8.5" SGN)	–	–	–	799	–	840	–	924	849	–	–
	Mountain Village	TF (7.5" DGN)	–	–	–	780	–	836	–	913	809	–	864
	Pilot Station	TF (DGN)	–	–	–	762	–	825	747	855	797	–	–
	Eagle Sonar	TF (DGN)	–	–	–	770	–	838	–	929	830	–	–
	Andreafsky, E.F.	Esc (WR)	–	610	–	735	–	811	–	851	–	–	–
	Anvik	Esc (CR)	–	–	–	775	–	828	–	–	799	–	–
	Chena	Esc (CR)	–	–	–	741	–	820	–	–	–	–	–
	Gisasa	Esc (WR)	–	573	–	688	–	826	–	784	760	–	–
	Henshaw	Esc (WR)	–	558	–	744	–	830	–	915	–	–	–
	Salcha	Esc (CR)	–	–	–	766	–	832	–	890	–	–	–
	Pilot Station	Tag (DGN)	–	–	–	734	–	833	–	890	795	–	–
	Nulato	GS (HL, DP, CR)	–	–	–	756	–	829	–	–	–	–	–
		Average Female Mean Length ^d	–	583	–	761	–	831	754	880	814	–	864
		SE ^d	–	19	–	7	–	2	7	10	16	–	–

Note: Com is commercial, Sub is subsistence, TF is test fishery, Esc is escapement, Tag is acoustic tagging, GS is genetics sampling, GN is gillnet preceded by mesh size, SGN is set gillnet, DGN is drift gillnet, FW is fish wheel, WR is weir, CR is carcass, HL is hook and line, and DP is dip net.

^a Incidental harvest from the summer chum salmon commercial fishery.

^b Only fish from Periods 1, 2, and 3 were sampled. Not representative of entire harvest.

^c Only males were harvested by hook and line in the sport fishery.

^d Calculated from the actual number of fish sampled at all projects combined.

Table 6.–Yukon River chum salmon age and female percentages, from commercial, subsistence, test fishery, and escapement projects, 2012.

Project Type Location and (gear)	Sample Size	Percent (%)					Female
		Brood Year (Age)					
		2009 (0.2)	2008 (0.3)	2007 (0.4)	2006 (0.5)	2005 (0.6)	
Commercial - Summer Chum							
District 1 (≤ 6" gillnet)	787	0.0	72.2	22.4	5.4	0.0	47.6
District 2 (≤ 6" gillnet) ^a	–	0.1	70.8	23.8	5.3	0.0	49.2
Subdistrict 4-A (fish wheel) ^b	375	0.4	81.7	15.4	2.6	0.0	98.4
District 6 (fish wheel)	212	1.9	73.6	23.3	1.2	0.0	64.9
Commercial Summer Chum Average ^c		0.6	74.6	21.2	3.6	0.0	65.0
Commercial - Fall Chum							
District 1 (≤ 6" gillnet)	1,021	0.5	79.8	17.5	2.2	0.0	54.7
District 2 (≤ 7.5" gillnet) ^a	–	0.9	81.7	15.5	2.0	0.0	52.8
Subdistrict 4-A (fish wheel) ^d	105	3.8	87.6	8.6	0.0	0.0	50.5
Commercial Fall Chum Average ^c		1.7	83.0	13.9	1.4	0.0	52.7
Subsistence - Fall Chum							
Subdistrict 5-C, Rampart (fish wheel)	49	4.1	81.6	14.3	0.0	0.0	49.0
Test Fishery - Summer Chum							
Dall Point (5.5" drift gillnet)	431	0.0	61.5	32.0	6.5	0.0	38.3
Big Eddy (5.5" drift gillnet)	959	0.0	67.2	27.1	5.7	0.0	55.5
Middle Mouth (5.5" drift gillnet)	617	0.0	71.2	24.0	4.9	0.0	58.5
Test Fishery Summer Chum Average ^c		0.0	66.6	27.7	5.7	0.0	50.8
Test Fishery - Fall Chum							
Big Eddy (6.0" drift gillnet)	595	0.8	73.1	23.0	3.0	0.0	55.5
Middle Mouth (6.0" drift gillnet)	600	1.3	81.2	14.7	2.8	0.0	55.8
Mountain Village (5 7/8" drift gillnet)	149	0.0	75.8	21.5	2.7	0.0	52.3
Eagle Sonar (5.25" and 7.5" mesh drift gillnet)	473	1.1	69.8	28.3	0.8	0.0	44.0
Test Fishery Fall Chum Average ^c		0.8	75.0	21.9	2.3	0.0	51.9

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Table 6.–Page 2 of 2.

Project Type Location and (gear)	Sample Size	Percent (%)					Female
		Brood Year (Age)					
		2009 (0.2)	2008 (0.3)	2007 (0.4)	2006 (0.5)	2005 (0.6)	
Escapement - Summer Chum							
Andreafsky River, East Fork (weir trap)	606	0.6	69.1	26.3	4.0	0.0	47.6
Anvik River (beach seine)	422	0.7	66.6	29.3	3.4	0.0	55.8
Gisasa River (weir trap)	687	0.2	78.6	19.4	1.8	0.0	52.8
Henshaw Creek (weir trap)	478	0.9	84.1	13.3	1.8	0.0	52.3
Salcha River (carcass) ^e	159	1.3	64.2	29.6	5.0	0.0	65.4
Escapement Summer Chum Average ^c		0.7	72.5	23.6	3.2	0.0	54.8
Escapement - Fall Chum							
Delta River (carcass) ^e	180	1.7	71.1	26.7	0.6	0.0	32.8
Sheenjak River (beach seine) ^e	180	0.0	56.7	38.9	4.4	0.0	53.3
Toklat River (carcass) ^{e, f}	180	2.0	79.3	18.0	0.7	0.0	65.0
Escapement Fall Chum Average ^c		1.2	69.0	27.9	1.9	0.0	50.4
Total Summer Chum		5,733					
Total Fall Chum		3,532					

^a Estimates based on District 1 harvest.

^b Only females were bought during Periods 8 to 13.

^c Averages were not weighted by sample sizes.

^d Samples were only taken from fish harvested during Period 4. Not representative of entire harvest.

^e Vertebrae were used for age determination.

^f Age composition is based on 150 vertebrae samples. Female percentage is based on 180 fish sampled.

Table 7.—Yukon River summer and fall chum salmon commercial harvest, age and sex composition, by district, 2012.

Season District	Sample Size		Brood Year (Age)										Total	
			2009		2008		2007		2006		2005			
			(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	No.	%	No.	%	No.	%	No.
Summer Chum Salmon														
District 1 ^a	787	Male	0	0.0	57,956	38.4	17,479	11.6	3,534	2.3	0	0.0	78,969	52.4
		Female	69	0.0	50,872	33.7	16,350	10.8	4,541	3.0	0	0.0	71,831	47.6
		Total	69	0.0	108,827	72.2	33,829	22.4	8,075	5.4	0	0.0	150,800	100.0
District 2 ^{a,b}	—	Male	0	0.0	20,659	36.2	6,741	11.8	1,595	2.8	0	0.0	28,996	50.8
		Female	72	0.1	19,717	34.6	6,814	11.9	1,450	2.5	0	0.0	28,053	49.2
		Total	72	0.1	40,376	70.8	13,555	23.8	3,045	5.3	0	0.0	57,049	100.0
Subdistrict 4-A ^{c,d}	375	Male	0	0.0	1,332	1.2	444	0.4	0	0.0	0	0.0	1,776	1.6
		Female	386	0.4	87,069	80.5	16,225	15.0	2,767	2.6	0	0.0	106,446	98.4
		Total	386	0.4	88,401	81.7	16,669	15.4	2,767	2.6	0	0.0	108,222	100.0
District 6 ^c	212	Male	0	0.0	926	26.4	294	8.4	9	0.3	0	0.0	1,230	35.1
		Female	68	1.9	1,653	47.2	521	14.9	32	0.9	0	0.0	2,274	64.9
		Total	68	1.9	2,579	73.6	816	23.3	41	1.2	0	0.0	3,504	100.0
Fall Chum Salmon														
District 1 ^a	1,021	Male	217	0.2	51,039	36.5	10,472	7.5	1,599	1.1	0	0.0	63,327	45.3
		Female	536	0.4	60,493	43.3	13,954	10.0	1,531	1.1	0	0.0	76,515	54.7
		Total	753	0.5	111,533	79.8	24,426	17.5	3,130	2.2	0	0.0	139,842	100.0
District 2 ^{b,e}	-	Male	380	0.3	50,143	38.8	9,244	7.1	1,266	1.0	0	0.0	61,033	47.2
		Female	760	0.6	55,462	42.9	10,763	8.3	1,266	1.0	0	0.0	68,251	52.8
		Total	1,140	0.9	105,605	81.7	20,007	15.5	2,532	2.0	0	0.0	129,284	100.0
Subdistrict 4-A ^c	105	Male	11	2.9	149	40.0	25	6.7	0	0.0	0	0.0	184	49.5
		Female	4	1.0	177	47.6	7	1.9	0	0.0	0	0.0	188	50.5
		Total	15	3.9	326	87.6	32	8.6	0	0.0	0	0.0	372	100.0

^a All commercial fishing periods were restricted to 6.0 in or smaller mesh gillnets.

^b Age and sex composition based on estimates using District 1 commercial samples.

^c Commercial fishing gear was fish wheels.

^d Only females were bought during Periods 8-13.

^e All commercial fishing periods were restricted to 7.5 in or smaller mesh gillnets.

Table 8.—Summer chum salmon age and female percentages from the Lower Yukon River test fishery (combined Big Eddy and Middle Mouth sites) 5.5 in mesh gillnet, 1985–2012.

Year	Sample Size	Number of Days ^a	Percent (%)					Female
			Age					
			0.2	0.3	0.4	0.5	0.6	
1985	954	19	0.0	62.4	37.1	0.5	0.0	51.6
1986	1,125	27	0.1	26.2	73.2	0.4	0.0	55.1
1987	1,169	34	0.6	48.8	43.7	6.8	0.0	56.8
1988	804	30	0.1	50.5	48.4	1.0	0.0	59.5
1989	1,074	29	0.0	39.9	59.5	0.6	0.0	62.2
1990	1,328	42	0.8	46.1	50.1	3.1	0.0	66.0
1991	1,495	41	0.0	45.4	53.6	0.9	0.0	55.2
1992	1,089	32	0.0	22.0	71.8	6.2	0.0	61.4
1993	1,757	46	0.1	38.2	57.4	4.4	0.0	50.4
1994	2,385	49	0.0	35.6	61.9	2.6	0.0	62.5
1995	1,839	38	0.5	40.2	53.2	6.1	0.0	56.2
1996	1,936	47	0.1	42.3	52.4	5.2	0.0	63.7
1997	1,947	46	0.0	24.1	71.5	4.4	0.0	61.0
1998	1,649	47	0.0	62.5	33.5	4.0	0.0	52.5
1999	1,227	33	1.1	48.1	47.4	3.4	0.0	50.0
2000	950	38	0.2	52.5	45.8	1.5	0.0	63.8
2001	724	33	0.0	25.0	73.8	1.2	0.0	64.6
2002	792	45	0.5	57.3	40.4	1.8	0.0	63.3
2003	822	42	0.4	78.7	18.7	2.2	0.0	54.4
2004	521	45	3.1	40.1	56.8	0.0	0.0	66.0
2005	754	32	0.1	89.8	9.9	0.1	0.0	54.5
2006	860	30	0.3	27.3	72.2	0.1	0.0	59.0
2007 ^b	91	16	0.0	42.9	47.3	9.9	0.0	65.9
2008 ^c	784	24	0.0	41.2	53.7	5.1	0.0	55.4
2009	1,042	33	1.2	48.8	47.9	1.8	0.2	54.3
2010	1,211	31	4.0	64.7	29.8	1.5	0.0	56.6
2011	1,493	41	0.1	44.1	55.5	0.4	0.0	63.2
2012	1,576	35	0.0	68.7	25.9	5.4	0.0	56.7
Average ^d (1987-1988, 1990-2006, 2009-2012)	1,277	39	0.6	47.9	48.8	2.8	0.0	58.8
5 yr average ^d (2006, 2009-2012)	1,236	34	1.1	50.7	46.3	1.8	0.0	58.0

^a The Lower Yukon River test fishery was conducted from the end of May through July 15. Prior to 1990 this project was often discontinuous within the season or was not conducted throughout the season. The “Number of Days” refers only to those days that scale samples were collected from summer chum salmon and aged.

^b One set gillnet was operated at Big Eddy site only.

^c Two drift gillnets were operated at Big Eddy and 1 drift gillnet was operated at Middle Mouth.

^d The averages only include years when samples were collected throughout the season and years with a 30 day season minimum. Averages were not weighted by number of fish sampled each year.

Table 9.–Yukon River summer and fall chum salmon mean length (mm) by sex, project, gear, and age, 2012.

Sex and Season	Project Location	Project Type and (Gear)	Brood Year (Age)				
			2009 (0.2)	2008 (0.3)	2007 (0.4)	2006 (0.5)	2005 (0.6)
Male Summer Chum							
	District 1	Com (≤ 6 " GN)	–	563	580	575	–
	Subdistrict 4–A ^a	Com (FW)	–	563	600	–	–
	District 6	Com (FW)	–	568	613	592	–
	Dall Point	TF (5.5" DGN)	–	565	592	591	–
	Big Eddy	TF (5.5" DGN)	–	559	588	582	–
	Middle Mouth	TF (5.5" DGN)	–	559	583	575	–
	Andreafsky, E.F. River	Esc (WR)	539	554	578	592	–
	Anvik River	Esc (SN)	540	577	594	605	–
	Gisasa River	Esc (WR)	–	562	582	595	–
	Henshaw Creek	Esc (WR)	503	560	575	588	–
	Salcha River ^b	Esc (CR)	–	547	590	634	–
	Male Summer Chum Average ^c		527	562	589	593	–
Female Summer Chum							
	District 1	Com (≤ 6 " GN)	496	545	561	558	–
	Subdistrict 4–A ^a	Com (FW)	497	524	537	546	–
	District 6	Com (FW)	508	544	563	557	–
	Dall Point	TF (5.5" DGN)	–	551	572	569	–
	Big Eddy	TF (5.5" DGN)	–	541	558	560	–
	Middle Mouth	TF (5.5" DGN)	–	544	565	576	–
	Andreafsky, E.F. River	Esc (WR)	479	520	541	553	–
	Anvik River	Esc (SN)	508	537	557	542	–
	Gisasa River	Esc (WR)	460	529	549	572	–
	Henshaw Creek	Esc (WR)	512	542	546	572	–
	Salcha River ^b	Esc (CR)	510	528	562	588	–
	Female Summer Chum Average ^c		496	537	556	563	–

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Table 9.–Page 2 of 2.

Sex and Season	Project Location	Project Type and (Gear)	Brood Year (Age)				
			2008 (0.2)	2007 (0.3)	2006 (0.4)	2005 (0.5)	2004 (0.6)
Male Fall Chum							
	District 1	Com (≤ 6 " GN)	542	568	579	598	–
	Subdistrict 4–A	Com (FW)	569	592	604	–	–
	Subdistrict 5–C	Sub (FW)	–	596	610	–	–
	Big Eddy	TF (6.0" DGN)	546	577	604	609	–
	Middle Mouth	TF (6.0" DGN)	563	574	586	594	–
	Mt. Village	TF (5 $\frac{7}{8}$ " DGN)	–	571	601	617	–
	Eagle Sonar	TF (DGN)	552	594	609	632	–
	Delta River ^b	Esc (CR)	546	582	592	606	–
	Sheenjek River ^b	Esc (SN)	–	594	614	661	–
	Male Fall Chum Average ^c		553	583	600	617	–
Female Fall Chum							
	District 1	Com (≤ 6 " GN)	536	557	565	569	–
	Subdistricts 4–A	Com (FW)	581	573	577	–	–
	Subdistrict 5–C	Sub (FW)	544	555	549	–	–
	Big Eddy	TF (6.0" DGN)	605	570	585	573	–
	Middle Mouth	TF (6.0" DGN)	567	571	581	567	–
	Mt. Village	TF (5 $\frac{7}{8}$ " DGN)	–	566	588	578	–
	Eagle Sonar	TF (DGN)	552	569	579	–	–
	Delta River ^b	Esc (CR)	542	556	568	–	–
	Sheenjek River ^b	Esc (SN)	–	573	604	619	–
	Female Fall Chum Average ^c		561	566	577	581	–

Note: Com is commercial, Sub is subsistence, TF is test fishery, Esc is escapement, GN is gillnet preceded by mesh size, DGN is drift gillnet, FW is fish wheel, WR is weir, SN is seine net, and CR is carcass.

^a Males only bought during Period 7.

^b Ages were obtained from vertebrae.

^c Average was not weighted by number of fish sampled in each project.

Table 10.—Yukon River fall chum salmon age and female percentages, from selected escapement projects, 1986–2012.

Project	Year	Sample Size ^a	Percent (%)					Female ^b
			Age					
			3 yr (0.2)	4 yr (0.3)	5 yr (0.4)	6 yr (0.5)	7 yr (0.6)	
Chandalar River	1986 ^c	75	0.0	65.0	35.0	0.0	0.0	32.0
	1987 ^c	134	0.0	55.0	42.0	3.0	0.0	24.3
	1988 ^d	73	1.0	44.0	54.0	1.0	0.0	26.0
	1989 ^e	149	4.1	70.5	20.5	4.8	0.1	51.8
	1990 ^f	153	0.7	56.2	39.2	3.9	0.0	66.9
	1991 ^g	—	—	—	—	—	—	—
	1992 ^g	—	—	—	—	—	—	—
	1993 ^g	—	—	—	—	—	—	—
	1994 ^g	—	—	—	—	—	—	—
	1995 ^{e, g}	—	—	—	—	—	—	20.5
	1996 ^e	144	2.1	36.6	53.5	7.8	0.0	32.8
	1997 ^g	—	—	—	—	—	—	—
	1998 ^g	—	—	—	—	—	—	—
	1999 ^g	—	—	—	—	—	—	—
	2000 ^g	—	—	—	—	—	—	—
	2001 ^g	—	—	—	—	—	—	—
	2002 ^g	—	—	—	—	—	—	—
	2003 ^g	—	—	—	—	—	—	—
	2004 ^g	—	—	—	—	—	—	—
	2005 ^{f, h}	172	0.0	91.3	8.1	0.6	0.0	48.4
	2006 ^{f, h}	179	3.9	25.1	62.0	9.0	0.0	47.8
	2007 ^{f, h}	175	6.9	66.3	25.1	1.7	0.0	41.7
	2008 ^{f, h}	178	3.4	41.0	46.6	7.3	1.7	56.2
	2009 ^{f, h}	180	8.9	62.8	25.6	2.2	0.6	42.2
	2010 ^{f, h}	180	20.6	57.8	17.8	3.3	0.6	68.9
	2011 ^{f, h}	531	1.3	52.2	41.1	5.5	0.0	51.0
	2012 ^g	—	—	—	—	—	—	—
	Average ⁱ (1986–2011)		4.1	55.7	36.2	3.9	0.2	43.6
	5 yr Average ⁱ (2007–2011)		8.2	56.0	31.2	4.0	0.6	52.0
	Odd Year Average ⁱ		3.5	66.4	27.1	3.0	0.1	40.0
	Even Year Average ⁱ		4.0	46.5	44.0	4.6	0.3	47.2

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Table 10.–Page 2 of 4.

Project	Year	Sample Size ^a	Percent (%)					Female ^b
			Age					
			3 yr (0.2)	4 yr (0.3)	5 yr (0.4)	6 yr (0.5)	7 yr (0.6)	
Delta River ^f	1986	442	7.7	77.1	14.9	0.2	0.1	51.8
	1987	282	1.4	68.4	29.1	1.1	0.0	42.0
	1988	150	2.0	59.3	38.0	0.7	0.0	–
	1989	150	4.7	76.7	17.3	1.3	0.0	36.7
	1990	160	6.9	65.0	25.0	3.1	0.0	39.4
	1991	155	2.6	84.5	12.3	0.6	0.0	46.9
	1992	145	0.0	34.5	62.1	3.4	0.0	40.0
	1993	192	0.5	54.7	42.2	2.6	0.0	53.0
	1994	144	1.4	36.8	60.4	1.4	0.0	44.7
	1995	144	0.7	51.4	42.4	5.6	0.0	48.0
	1996	170	1.8	46.5	47.1	4.7	0.0	26.1
	1997	172	1.2	59.3	37.8	1.7	0.0	43.9
	1998	158	4.4	70.9	22.8	1.9	0.0	44.1
	1999	186	2.2	86.0	11.3	0.5	0.0	47.0
	2000	160	1.9	57.5	40.0	0.6	0.0	45.5
	2001	169	1.8	63.3	34.3	0.6	0.0	44.4
	2002	167	11.4	79.0	9.0	0.6	0.0	52.2
	2003	172	2.3	87.2	9.9	0.6	0.0	56.1
	2004	169	19.5	60.4	19.5	0.6	0.0	52.2
	2005	173	0.6	90.8	8.7	0.0	0.0	47.2
	2006	179	10.6	47.5	40.2	1.7	0.0	53.6
	2007	179	2.2	73.2	22.9	1.7	0.0	40.0
	2008	179	1.7	35.2	53.1	9.5	0.6	45.6
	2009	180	11.1	48.3	33.3	6.7	0.6	45.6
	2010	165	17.6	49.1	24.9	6.7	1.8	42.4
	2011	177	1.7	66.1	26.0	6.2	0.0	40.1
	2012	180	1.7	71.1	26.7	0.6	0.0	32.8
	Average ⁱ (1986–2011)		4.6	62.6	30.2	2.5	0.1	45.1
	5 yr Average ⁱ (2007–2011)		6.9	54.4	32.0	6.2	0.6	42.7
	Odd Year Average ⁱ		2.5	70.0	25.2	2.3	0.0	45.5
	Even Year Average ⁱ		6.7	51.3	32.6	2.7	0.2	44.8

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Table 10.–Page 3 of 4.

Project	Year	Sample Size ^a	Percent (%)					Female ^b
			Age					
			3 yr (0.2)	4 yr (0.3)	5 yr (0.4)	6 yr (0.5)	7 yr (0.6)	
Sheenjek River ^{f,j}	1986	442	8.1	41.2	50.0	0.7	0.0	55.3
	1987	430	2.1	89.8	7.2	0.9	0.0	65.6
	1988	120	2.5	68.3	29.2	0.0	0.0	82.0
	1989	231	3.5	82.7	13.0	0.9	0.0	59.1
	1990	143	2.8	70.6	25.2	1.4	0.0	–
	1991	147	0.0	59.2	39.5	1.4	0.0	46.1
	1992	134	0.0	17.9	80.6	1.5	0.0	53.6
	1993 ^k	192	0.5	64.1	33.9	1.6	0.0	44.3
	1994	173	1.2	56.1	40.5	2.3	0.0	50.8
	1995	118	0.8	51.7	39.8	7.6	0.0	51.4
	1996	191	1.6	33.0	61.8	3.7	0.0	44.5
	1997 ^g	–	–	–	–	–	–	–
	1998 ^g	–	–	–	–	–	–	–
	1999 ^g	–	–	–	–	–	–	–
	2000 ^g	–	–	–	–	–	–	–
	2001	71	0.0	36.6	63.4	0.0	0.0	46.6
	2002	31	0.0	61.3	38.7	0.0	0.0	37.1
	2003	84	1.2	82.1	15.5	1.2	0.0	45.6
	2004	104	0.0	11.5	61.5	25.0	1.9	38.3
	2005	194	0.0	92.3	6.7	1.0	0.0	46.3
	2006	179	1.1	23.0	73.2	2.7	0.0	53.8
	2007	76	0.0	52.6	35.5	11.8	0.1	41.7
	2008	192	0.5	46.9	45.3	6.8	0.5	45.1
	2009 ^g	–	–	–	–	–	–	–
2010	64	17.2	60.9	17.2	3.1	1.6	53.1	
2011	179	2.8	58.1	36.3	2.8	0.0	51.4	
2012	180	0.0	56.7	38.9	4.4	0.0	53.3	
Average ⁱ (1986–2011)			2.2	55.2	38.8	3.6	0.2	50.6
5 yr Average ⁱ (2006–2008,2010–2011)			4.3	48.3	41.5	5.4	0.4	49.0
Odd Year Average ⁱ			1.1	66.9	29.1	2.9	0.0	49.8
Even Year Average ⁱ			3.2	44.6	47.6	4.3	0.4	51.4

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Table 10.–Page 4 of 4.

Project	Year	Sample Size ^a	Percent (%)					Female ^b
			Age					
			3 yr (0.2)	4 yr (0.3)	5 yr (0.4)	6 yr (0.5)	7 yr (0.6)	
Toklat River ^f	1986	445	2.9	79.8	16.4	0.9	0.0	46.8
	1987	284	4.9	77.1	17.6	0.4	0.0	39.0
	1988	195	3.6	49.7	45.6	1.0	0.1	55.0
	1989	150	3.3	79.3	16.0	1.3	0.1	55.3
	1990	160	6.3	71.9	19.4	2.5	0.0	46.7
	1991	153	4.6	66.0	29.4	0.0	0.0	50.0
	1992	187	3.2	44.4	51.3	1.1	0.0	36.4
	1993	94	3.2	60.6	31.9	4.3	0.0	42.0
	1994	193	1.6	71.0	25.9	1.6	0.0	100.0
	1995	144	1.4	38.9	54.9	4.9	0.0	58.7
	1996	172	0.6	56.4	37.8	5.2	0.0	46.7
	1997	171	3.5	60.8	34.5	1.2	0.0	53.3
	1998	176	1.1	74.4	23.3	1.1	0.0	62.6
	1999	72	0.0	73.6	26.4	0.0	0.0	46.3
	2000	13	0.0	76.9	23.1	0.0	0.0	15.4
	2001	168	2.4	74.4	22.6	0.6	0.0	47.8
	2002	170	4.7	82.9	12.4	0.0	0.0	41.1
	2003	160	5.0	83.1	11.3	0.6	0.0	59.4
	2004	174	10.9	72.4	16.1	0.6	0.0	36.2
	2005	171	1.2	90.6	8.2	0.0	0.0	22.8
	2006	57	0.0	54.4	33.3	12.3	0.0	75.5
	2007 ^l	179	0.6	71.0	22.3	5.6	0.4	35.6
	2008 ^g	–	–	–	–	–	–	–
	2009	150	14.0	62.7	16.0	6.0	1.3	60.0
	2010 ^g	–	–	–	–	–	–	–
	2011 ^g	–	–	–	–	–	–	–
	2012 ^m	150	2.0	79.3	18.0	0.7	0.0	65.0
	Average ⁱ (1986–2011)		3.4	68.4	25.9	2.2	0.1	49.2
	5 yr Average ⁱ (2004–2007,2009)		5.3	70.2	19.2	4.9	0.3	46.0
	Odd Year Average ⁱ		3.7	69.8	24.3	2.1	0.1	47.5
	Even Year Average ⁱ		3.2	66.8	27.7	2.4	0.0	51.1

^a Total samples aged.

^b Sex ratio is from total sample which includes unaged fish.

^c Age determination from otoliths.

^d Age determination from scales.

^e Sample bias because collected at sonar site using gillnet (1995 and 1996 used 114 mm and 149 mm mesh).

^f Age determination from vertebrae.

^g No samples collected.

^h Carcass samples collected on the spawning grounds.

ⁱ Averages not weighted by sample size.

^j Escapement samples taken with beach seine.

^k Escapement samples predominantly taken late in run.

^l Collections taken at the mouth of the Kantishna River of which the Toklat is a tributary. Samples collected from subsistence fish.

^m Sex composition based on a sample size of 180 fish.

Table 11.–Yukon River coho salmon age and female percentages, from commercial and test fishery projects, 2012.

Project Type Location (gear)	Sample Size	Percent (%)			Female
		Brood Year (Age)			
		2009 (1.1)	2008 (2.1)	2007 (3.1)	
Commercial					
District 1 (gillnet) ^a	458	25.1	68.5	6.4	49.2
Test Fishery					
Big Eddy (6.0" drift gillnet)	122	32.8	63.1	4.1	41.8
Middle Mouth (6.0" drift gillnet)	272	29.4	61.4	9.2	51.5
Mountain Village (5 7/8" drift gillnet)	114	39.5	52.6	7.9	43.9
Test Fishery Average ^b		33.9	59.0	7.1	45.7
Total		966			

^a All commercial fishing periods were restricted to 6.0 in or smaller mesh gillnets.

^b Averages are not weighted by sample size.

Table 12.–Yukon River coho salmon mean length (mm) by sex, project, gear, and age, 2012.

Sex	Project Location	Project Type and (Gear)	Brood Year (Age)		
			2009 (1.1)	2008 (2.1)	2007 (3.1)
Male	District 1 ^a	Com (≤6" GN)	554	541	556
	Big Eddy	TF (6.0" DGN)	558	557	549
	Middle Mouth	TF (6.0" DGN)	559	554	555
	Mt. Village	TF (5 7/8" DGN)	535	555	530
	Male Average ^b			552	552
Female	District 1 ^a	Com (≤6" GN)	540	542	531
	Big Eddy	TF (6.0" DGN)	558	561	573
	Middle Mouth	TF (6.0" DGN)	556	554	558
	Mt. Village	TF (5 7/8" DGN)	551	552	549
	Female Average ^b			551	552

Note: Com is commercial, and TF is test fish. GN is gillnet, DGN is drift gillnet preceded by mesh size.

^a Commercial fishing gear was restricted to 6.0 in or smaller mesh gillnets.

^b Averages were not weighted by sample size.

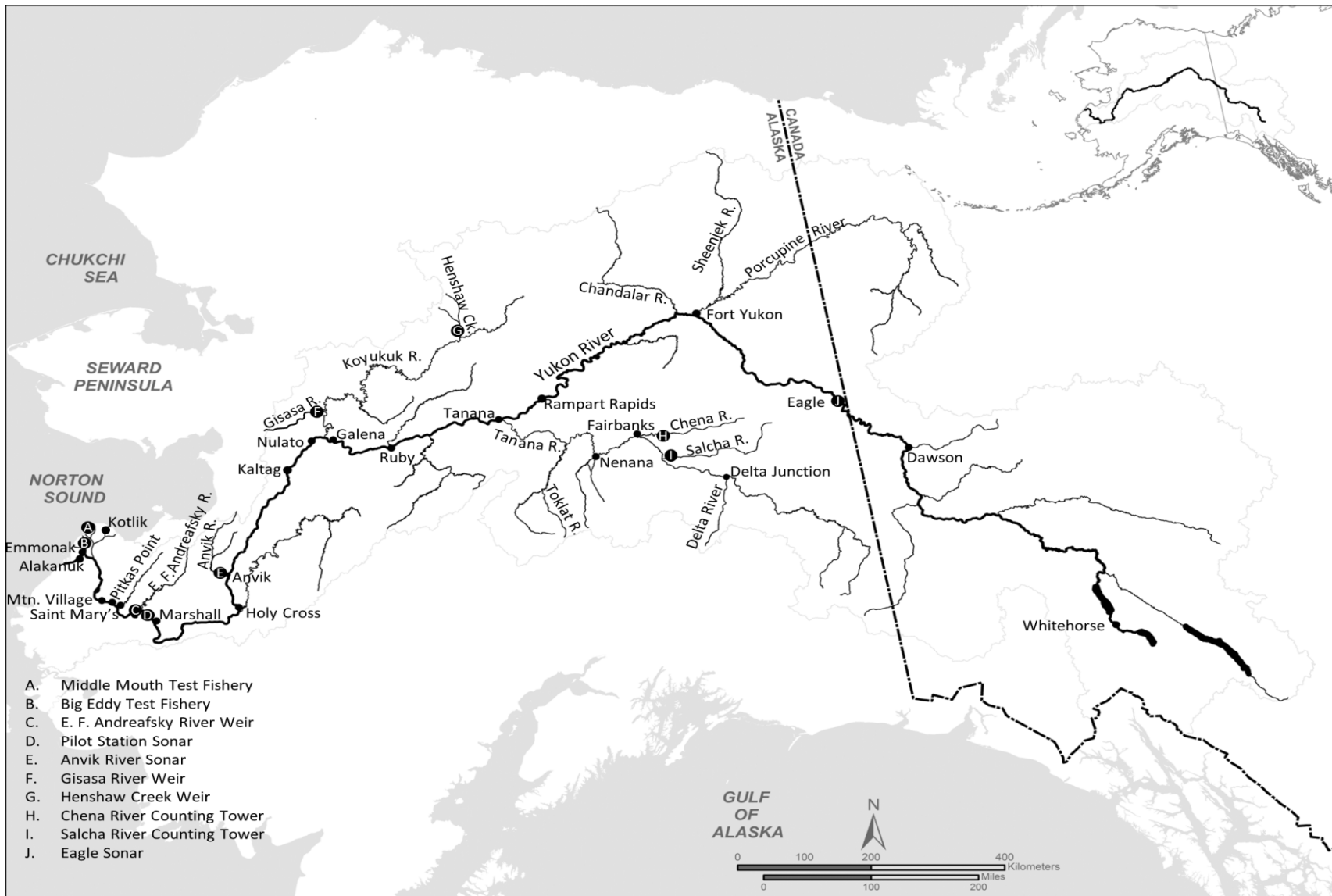


Figure 1.—Yukon River drainage in Alaska and Canada.

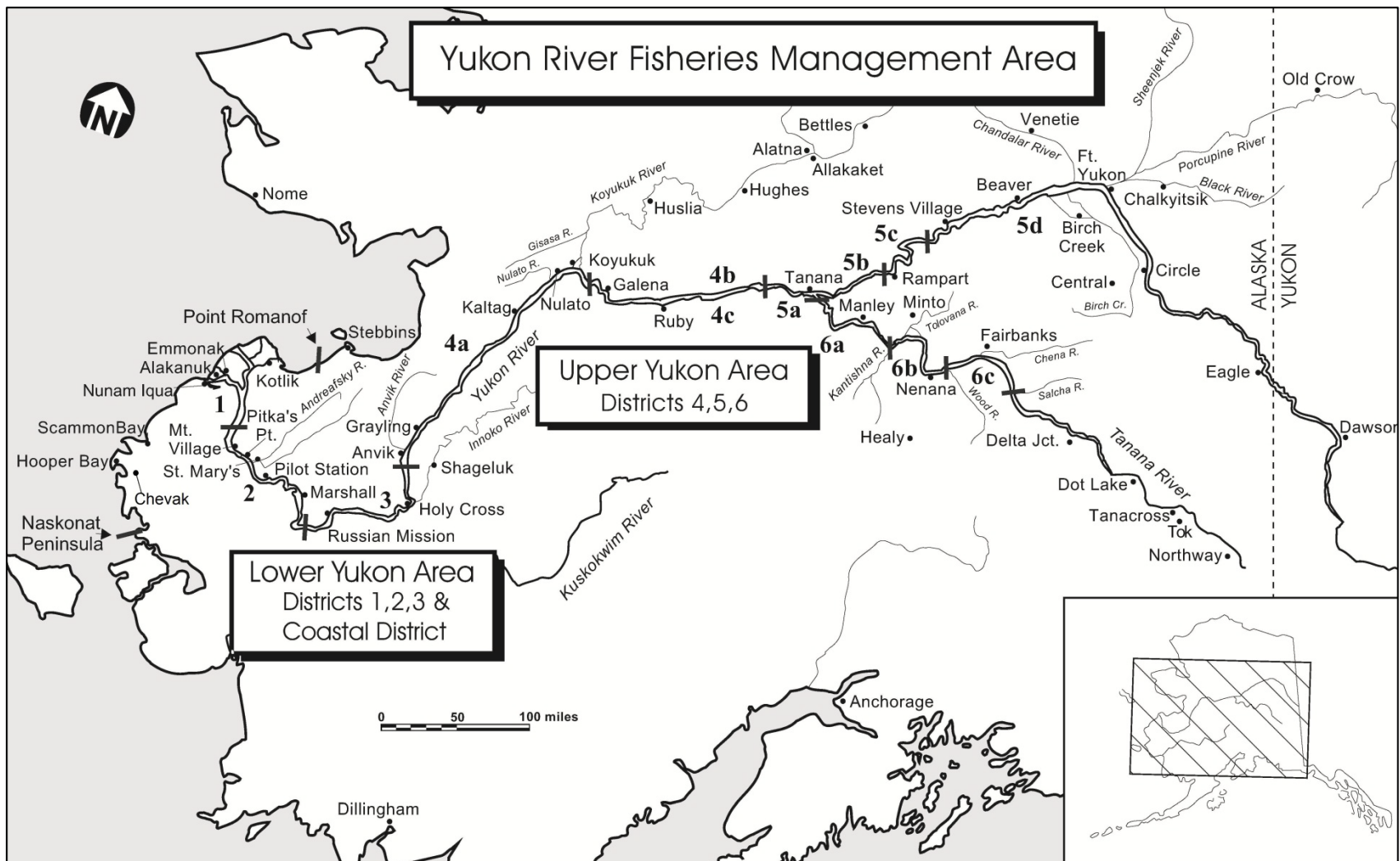


Figure 2.—Yukon River district and subdistrict map.

APPENDIX A: CHINOOK SALMON

Appendix A1.–Yukon River District 1 Chinook salmon incidental commercial gillnet harvest, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size	Brood Year (Age)																Total									
		2009		2008		2007		2006		2005		2004															
		(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%													
6/29; 7/1–3, 5–7, 9–10, 13	621	Male	0	0.0	338	18.5	0	0.0	780	42.7	3	0.2	159	8.7	3	0.2	0	0.0	0	0.0	0	0.0	0	0.0	1,283	70.2	
		Female	0	0.0	6	0.3	0	0.0	138	7.6	0	0.0	388	21.3	0	0.0	9	0.5	3	0.2	0	0.0	0	0.0	544	29.8	
		Total	0	0.0	344	18.8	0	0.0	918	50.2	3	0.2	547	30.0	3	0.2	9	0.5	3	0.2	0	0.0	0	0.0	1,827	100.0	
Season	621	Male Mean Length	–	568	–	684	557	802	637	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		SE	–	4	–	4	–	10	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Range	–	486–669	–	484–845	–	605–950	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		n	–	115	–	265	1	53	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		Female Mean Length	–	534	–	760	–	832	–	866	765	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		SE	–	–	–	7	–	4	–	36	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		Range	–	534–534	–	603–843	–	708–944	–	819–937	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
n	–	2	–	47	–	132	–	3	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		

Note: All commercial fishing periods were restricted to 6 .0 in or smaller mesh gillnets.

Appendix A2.–Yukon River District 2 Chinook salmon incidental commercial gillnet harvest, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size	Brood Year (Age)																Total				
		2009		2008		2007		2006		2005		2004										
		(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%								
7/2, 8, 11 ^a	6	Male	0	0.0	2	33.3	0	0.0	1	16.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	50.0
		Female	0	0.0	0	0.0	0	0.0	2	33.3	0	0.0	1	16.7	0	0.0	0	0.0	0	0.0	3	50.0
		Total	0	0.0	2	33.3	0	0.0	3	50.0	0	0.0	1	16.7	0	0.0	0	0.0	0	0.0	6	100.0
		Male Mean Length	–	551	–	735	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		SE	–	17	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		Range	–	534–568	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		n	–	2	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		Female Mean Length	–	–	–	725	–	800	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		SE	–	–	–	49	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		Range	–	–	–	676–774	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	n	–	–	–	2	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	

Note: All commercial fishing periods were restricted to 6.0 in or smaller mesh gillnets.

^a Only fish from Periods 1, 2, and 3 were sampled. Not representative of entire harvest.

Appendix A3.–Yukon River District 1 (Kotlik) Chinook salmon subsistence gillnet harvest, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)																Total			
			2009		2008		2007		2006		2005		2004									
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%							
6/19, 30 6" Mesh Drift Gillnet	6	Male	0	0.0	0	0.0	0	0.0	4	66.7	0	0.0	0	0.0	0	0.0	0	0.0	4	66.7		
		Female	0	0.0	0	0.0	0	0.0	2	33.3	0	0.0	0	0.0	0	0.0	0	0.0	2	33.3		
		Subtotal	0	0.0	0	0.0	0	0.0	4	66.7	0	0.0	2	33.3	0	0.0	0	0.0	6	100.0		
		Male Mean Length	-	-	-	-	694	-	-	-	-	-	-	-	-	-	-	-	-	-		
		SE	-	-	-	-	30	-	-	-	-	-	-	-	-	-	-	-	-	-		
		Range	-	-	-	-	604–732	-	-	-	-	-	-	-	-	-	-	-	-	-		
		n	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-		
		Female Mean Length	-	-	-	-	-	-	806	-	-	-	-	-	-	-	-	-	-	-		
		SE	-	-	-	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-		
		Range	-	-	-	-	-	-	790–821	-	-	-	-	-	-	-	-	-	-	-		
		n	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-		
		7/7–8, 10–11 6" Mesh Set Gillnet	6	Male	0	0.0	0	0.0	0	0.0	4	66.7	0	0.0	1	16.7	0	0.0	0	0.0	0	0.0
Female	0			0.0	0	0.0	0	0.0	1	16.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	16.7
Subtotal	0			0.0	0	0.0	0	0.0	5	83.3	0	0.0	1	16.7	0	0.0	0	0.0	0	0.0	6	100.0
Male Mean Length	-			-	-	-	688	-	730	-	-	-	-	-	-	-	-	-	-	-		
SE	-			-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-	-		
Range	-			-	-	-	660–710	-	-	-	-	-	-	-	-	-	-	-	-	-		
n	-			-	-	-	4	-	1	-	-	-	-	-	-	-	-	-	-	-		
Female Mean Length	-			-	-	-	770	-	-	-	-	-	-	-	-	-	-	-	-	-		
SE	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Range	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
n	-			-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-		
Total 6" Mesh	12			Male	0	0.0	0	0.0	0	0.0	8	66.7	0	0.0	1	8.3	0	0.0	0	0.0	0	0.0
		Female	0	0.0	0	0.0	0	0.0	1	8.3	0	0.0	2	16.7	0	0.0	0	0.0	0	0.0	3	25.0
		Subtotal	0	0.0	0	0.0	0	0.0	9	75.0	0	0.0	3	25.0	0	0.0	0	0.0	0	0.0	12	100.0
		Male Mean Length	-	-	-	-	691	-	730	-	-	-	-	-	-	-	-	-	-	-		
		SE	-	-	-	-	15	-	-	-	-	-	-	-	-	-	-	-	-	-		
		Range	-	-	-	-	604–732	-	-	-	-	-	-	-	-	-	-	-	-	-		
		n	-	-	-	-	8	-	1	-	-	-	-	-	-	-	-	-	-	-		
		Female Mean Length	-	-	-	-	770	-	806	-	-	-	-	-	-	-	-	-	-	-		
		SE	-	-	-	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-		
		Range	-	-	-	-	-	-	790–821	-	-	-	-	-	-	-	-	-	-	-		
		n	-	-	-	-	1	-	2	-	-	-	-	-	-	-	-	-	-	-		

-continued-

Appendix A3.–Page 2 of 2.

Sample Dates	Sample Size		Brood Year (Age)												Total					
			2009		2008		2007		2006		2005		2004							
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%					
6/18 7.5" Mesh Set Gillnet	1	Male	0	0.0	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	1	100.0		
		Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0		
		Subtotal	0	0.0	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	1	100.0		
		Male Mean Length	-	-	-	-	-	-	854	-	-	-	-	-	-	-	-	-		
		SE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		Range	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		n	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-		
		Female Mean Length	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		SE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		Range	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		n	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		All Gear	13	Male	0	0.0	0	0.0	8	61.5	2	15.4	0	0.0	0	0.0	0	0.0	10	76.9
				Female	0	0.0	0	0.0	1	7.7	2	15.4	0	0.0	0	0.0	0	0.0	3	23.1
Subtotal	0			0.0	0	0.0	9	69.2	4	30.8	0	0.0	0	0.0	0	0.0	13	100.0		
Male Mean Length	-			-	-	-	691	-	792	-	-	-	-	-	-	-	-	-		
SE	-			-	-	-	15	-	62.00	-	-	-	-	-	-	-	-	-		
Range	-			-	-	-	604-732	-	730-854	-	-	-	-	-	-	-	-	-		
n	-			-	-	-	8	-	2	-	-	-	-	-	-	-	-	-		
Female Mean Length	-			-	-	-	770	-	806	-	-	-	-	-	-	-	-	-		
SE	-			-	-	-	-	-	16	-	-	-	-	-	-	-	-	-		
Range	-			-	-	-	-	-	790-821	-	-	-	-	-	-	-	-	-		
n	-			-	-	-	1	-	2	-	-	-	-	-	-	-	-	-		

Appendix A4.–Yukon River District 1 (Alakanuk) Chinook salmon subsistence gillnet harvest, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)														Total							
			2009		2008		2007		2006		2005		2004											
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%									
6/12, 14–15, 6" Mesh Drift Gillnet	15	Male	0	0.0	4	26.7	0	0.0	10	66.7	0	0.0	0	0.0	0	0.0	0	0.0	14	93.3				
		Female	0	0.0	0	0.0	0	0.0	0	0.0	1	6.7	0	0.0	0	0.0	0	0.0	1	6.7				
		Subtotal	0	0.0	4	26.7	0	0.0	10	66.7	1	6.7	0	0.0	0	0.0	0	0.0	15	100.0				
		Male Mean Length	–	–	544	–	–	–	686	–	–	–	–	–	–	–	–	–	–	–	–			
		SE	–	–	13	–	–	–	21	–	–	–	–	–	–	–	–	–	–	–	–			
		Range	–	–	522–580	–	–	–	603–851	–	–	–	–	–	–	–	–	–	–	–	–			
		n	–	–	4	–	–	–	10	–	–	–	–	–	–	–	–	–	–	–	–			
		Female Mean Length	–	–	–	–	–	–	–	–	745	–	–	–	–	–	–	–	–	–	–			
		SE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
		Range	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
		n	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–			
		6/6, 15 7.5" Mesh Drift Gillnet	15	Male	0	0.0	1	6.7	0	0.0	6	40.0	0	0.0	2	13.3	1	6.7	0	0.0	0	0.0	10	66.7
				Female	0	0.0	0	0.0	0	0.0	1	6.7	0	0.0	4	26.7	0	0.0	0	0.0	0	0.0	5	33.3
Subtotal	0			0.0	1	6.7	0	0.0	7	46.7	0	0.0	6	40.0	1	6.7	0	0.0	0	0.0	15	100.0		
Male Mean Length	–			–	558	–	–	–	677	–	–	790	658	–	–	–	–	–	–	–	–			
SE	–			–	–	–	–	–	14	–	–	106	–	–	–	–	–	–	–	–	–			
Range	–			–	–	–	–	–	625–710	–	–	684–896	–	–	–	–	–	–	–	–	–			
n	–			–	1	–	–	–	6	–	–	2	1	–	–	–	–	–	–	–	–			
Female Mean Length	–			–	–	–	–	–	860	–	–	853	–	–	–	–	–	–	–	–	–			
SE	–			–	–	–	–	–	–	–	–	27	–	–	–	–	–	–	–	–	–			
Range	–			–	–	–	–	–	–	–	–	775–893	–	–	–	–	–	–	–	–	–			
n	–			–	–	–	–	–	1	–	–	4	–	–	–	–	–	–	–	–	–			
6/13 7.5" Mesh Set Gillnet	28			Male	0	0.0	2	7.1	0	0.0	14	50.0	0	0.0	2	7.1	1	3.6	1	3.6	0	0.0	20	71.4
				Female	0	0.0	0	0.0	0	0.0	1	3.6	0	0.0	7	25.0	0	0.0	0	0.0	0	0.0	8	28.6
		Subtotal	0	0.0	2	7.1	0	0.0	15	53.6	0	0.0	9	32.1	1	3.6	1	3.6	0	0.0	28	100.0		
		Male Mean Length	–	–	620	–	–	–	679	–	–	745	670	910	–	–	–	–	–	–	–			
		SE	–	–	70	–	–	–	14	–	–	25	–	–	–	–	–	–	–	–	–			
		Range	–	–	550–690	–	–	–	590–800	–	–	720–770	–	–	–	–	–	–	–	–	–			
		n	–	–	2	–	–	–	14	–	–	2	1	1	–	–	–	–	–	–	–			
		Female Mean Length	–	–	–	–	–	–	840	–	–	836	–	–	–	–	–	–	–	–	–			
		SE	–	–	–	–	–	–	–	–	–	21	–	–	–	–	–	–	–	–	–			
		Range	–	–	–	–	–	–	–	–	–	770–920	–	–	–	–	–	–	–	–	–			
		n	–	–	–	–	–	–	1	–	–	7	–	–	–	–	–	–	–	–	–			

-continued-

Appendix A4.–Page 2 of 2.

Sample Dates	Sample Size		Brood Year (Age)														Total											
			2009		2008		2007		2006		2005		2004															
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%													
Total 7.5" Mesh	43	Male	0	0.0	3	7.0	0	0.0	20	46.5	0	0.0	4	9.3	2	4.7	1	2.3	0	0.0	0	0.0	0	0.0	30	69.8		
		Female	0	0.0	0	0.0	0	0.0	2	4.7	0	0.0	11	25.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	13	30.2		
		Total	0	0.0	3	7.0	0	0.0	22	51.2	0	0.0	15	34.9	2	4.7	1	2.3	0	0.0	0	0.0	0	0.0	43	100.0		
		Male Mean Length	–	–	599	–	–	678	–	–	768	664	910	–	–	–	–	–	–	–	–	–	–	–	–	–		
		SE	–	–	45	–	–	11	–	–	46	6	–	–	–	–	–	–	–	–	–	–	–	–	–			
		Range	–	–	550–690	–	–	590–800	–	–	684–896	658–670	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		n	–	–	3	–	–	20	–	–	4	2	1	–	–	–	–	–	–	–	–	–	–	–	–	–		
		Female Mean Length	–	–	–	–	–	850	–	–	842	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		SE	–	–	–	–	–	10	–	–	16	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		Range	–	–	–	–	–	840–860	–	–	770–920	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		n	–	–	–	–	–	2	–	–	11	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		All Gear	58	Male	0	0.0	7	12.1	0	0.0	30	51.7	0	0.0	4	6.9	2	3.4	1	1.7	0	0.0	0	0.0	0	0.0	44	75.9
				Female	0	0.0	0	0.0	0	0.0	2	3.4	0	0.0	12	20.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	14	24.1
Total	0			0.0	7	12.1	0	0.0	32	55.2	0	0.0	16	27.6	2	3.4	1	1.7	0	0.0	0	0.0	0	0.0	58	100.0		
Male Mean Length	–			–	568	–	–	681	–	–	768	664	910	–	–	–	–	–	–	–	–	–	–	–	–	–		
SE	–			–	22	–	–	10	–	–	46	6	–	–	–	–	–	–	–	–	–	–	–	–	–			
Range	–			–	522–690	–	–	590–851	–	–	684–896	658–670	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
n	–			–	7	–	–	30	–	–	4	2	1	–	–	–	–	–	–	–	–	–	–	–	–	–		
Female Mean Length	–			–	–	–	–	850	–	–	834	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
SE	–			–	–	–	–	10	–	–	17	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
Range	–			–	–	–	–	840–860	–	–	745–920	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
n	–			–	–	–	–	2	–	–	12	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		

Appendix A5.—Yukon River District 1 (Emmonak) Chinook salmon subsistence gillnet harvest, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)														Total							
			2009		2008		2007		2006		2005		2004											
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%									
6/30 5.5" Mesh Drift Gillnet	2	Male	0	0.0	0	0.0	0	0.0	1	50.0	0	0.0	0	0.0	0	0.0	0	0.0	1	50.0				
		Female	0	0.0	0	0.0	0	0.0	0	0.0	1	50.0	0	0.0	0	0.0	0	0.0	1	50.0				
		Subtotal	0	0.0	0	0.0	0	0.0	1	50.0	1	50.0	0	0.0	0	0.0	0	0.0	2	100.0				
		Male Mean Length	—	—	—	620	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
		SE	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
		Range	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
		n	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
		Female Mean Length	—	—	—	—	—	836	—	—	—	—	—	—	—	—	—	—	—	—	—			
		SE	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
		Range	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
		n	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—			
		6/19; 7/6 5.5" Mesh Set Gillnet	6	Male	0	0.0	1	16.7	0	0.0	4	66.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	5	83.3
				Female	0	0.0	0	0.0	0	0.0	0	0.0	1	16.7	0	0.0	0	0.0	0	0.0	0	0.0	1	16.7
Subtotal	0			0.0	1	16.7	0	0.0	4	66.7	1	16.7	0	0.0	0	0.0	0	0.0	0	0.0	6	100.0		
Male Mean Length	—			602	—	670	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
SE	—			—	—	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Range	—			—	—	655–685	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
n	—			1	—	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Female Mean Length	—			—	—	—	—	819	—	—	—	—	—	—	—	—	—	—	—	—	—			
SE	—			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Range	—			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
n	—			—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—			
Total 5.5" Mesh	8			Male	0	0.0	1	12.5	0	0.0	5	62.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6	75.0
				Female	0	0.0	0	0.0	0	0.0	0	0.0	2	25.0	0	0.0	0	0.0	0	0.0	0	0.0	2	25.0
		Total	0	0.0	1	12.5	0	0.0	5	62.5	2	25.0	0	0.0	0	0.0	0	0.0	0	0.0	8	100.0		
		Male Mean Length	—	602	—	660	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
		SE	—	—	—	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
		Range	—	—	—	620–685	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
		n	—	1	—	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
		Female Mean Length	—	—	—	—	—	828	—	—	—	—	—	—	—	—	—	—	—	—	—			
		SE	—	—	—	—	—	9	—	—	—	—	—	—	—	—	—	—	—	—	—			
		Range	—	—	—	—	—	819–836	—	—	—	—	—	—	—	—	—	—	—	—	—			
		n	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—			

-continued-

Sample Dates	Sample Size		Brood Year (Age)												Total							
			2009		2008		2007		2006		2005		2004									
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%							
6/18 6" Mesh Drift Gillnet	2	Male	0	0.0	1	50.0	0	0.0	0	0.0	1	50.0	0	0.0	0	0.0	0	0.0	2	100.0		
		Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0		
		Subtotal	0	0.0	1	50.0	0	0.0	0	0.0	1	50.0	0	0.0	0	0.0	0	0.0	2	100.0		
			Male Mean Length	–	–	606	–	–	–	714	–	–	–	–	–	–	–	–	–	–	–	
			SE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			Range	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			n	–	–	1	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	
			Female Mean Length	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			SE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			Range	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			n	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	6/19 6" Mesh Set Gillnet	8	Male	0	0.0	1	12.5	0	0.0	6	75.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	7
Female			0	0.0	0	0.0	0	0.0	0	0.0	1	12.5	0	0.0	0	0.0	0	0.0	0	0.0	1	12.5
Subtotal			0	0.0	1	12.5	0	0.0	6	75.0	1	12.5	0	0.0	0	0.0	0	0.0	8	100.0		
			Male Mean Length	–	–	581	–	652	–	–	–	–	–	–	–	–	–	–	–	–	–	
			SE	–	–	–	–	16	–	–	–	–	–	–	–	–	–	–	–	–	–	
			Range	–	–	–	–	610–710	–	–	–	–	–	–	–	–	–	–	–	–	–	
			n	–	–	1	–	6	–	–	–	–	–	–	–	–	–	–	–	–	–	
			Female Mean Length	–	–	–	–	–	–	824	–	–	–	–	–	–	–	–	–	–	–	
			SE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			Range	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			n	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	
Total 6" Mesh		10	Male	0	0.0	2	20.0	0	0.0	6	60.0	1	10.0	0	0.0	0	0.0	0	0.0	0	0.0	9
	Female		0	0.0	0	0.0	0	0.0	0	0.0	1	10.0	0	0.0	0	0.0	0	0.0	1	10.0		
	Total		0	0.0	2	20.0	0	0.0	6	60.0	2	20.0	0	0.0	0	0.0	0	0.0	10	100.0		
			Male Mean Length	–	–	594	–	652	–	714	–	–	–	–	–	–	–	–	–	–	–	
			SE	–	–	13	–	16	–	–	–	–	–	–	–	–	–	–	–	–	–	
			Range	–	–	581–606	–	610–710	–	–	–	–	–	–	–	–	–	–	–	–	–	
			n	–	–	2	–	6	–	1	–	–	–	–	–	–	–	–	–	–	–	
			Female Mean Length	–	–	–	–	–	–	824	–	–	–	–	–	–	–	–	–	–	–	
			SE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			Range	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			n	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	

-continued-

Sample Dates	Sample Size		Brood Year (Age)												Total							
			2009		2008		2007		2006		2005		2004									
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%							
6/13–15 7.5" Mesh Drift Gillnet	14	Male	0	0.0	0	0.0	0	0.0	10	71.4	0	0.0	0	0.0	0	0.0	0	0.0	10	71.4		
		Female	0	0.0	0	0.0	2	14.3	0	0.0	2	14.3	0	0.0	0	0.0	0	0.0	4	28.6		
		Subtotal	0	0.0	0	0.0	12	85.7	0	0.0	2	14.3	0	0.0	0	0.0	0	0.0	14	100.0		
		Male Mean Length	–	–	–	–	703	–	–	–	–	–	–	–	–	–	–	–	–	–		
		SE	–	–	–	–	13	–	–	–	–	–	–	–	–	–	–	–	–	–		
		Range	–	–	–	–	667–794	–	–	–	–	–	–	–	–	–	–	–	–	–		
		n	–	–	–	–	10	–	–	–	–	–	–	–	–	–	–	–	–	–		
		Female Mean Length	–	–	–	–	787	–	810	–	–	–	–	–	–	–	–	–	–	–		
		SE	–	–	–	–	11	–	25	–	–	–	–	–	–	–	–	–	–	–		
		Range	–	–	–	–	776–797	–	785–834	–	–	–	–	–	–	–	–	–	–	–		
		n	–	–	–	–	2	–	2	–	–	–	–	–	–	–	–	–	–	–		
		6/11, 14 7.5" Mesh Set Gillnet	14	Male	0	0.0	0	0.0	3	21.4	0	0.0	6	42.9	0	0.0	0	0.0	1	7.1	0	0.0
Female	0			0.0	0	0.0	3	21.4	0	0.0	1	7.1	0	0.0	0	0.0	0	0.0	0	0.0	4	28.6
Subtotal	0			0.0	0	0.0	6	42.9	0	0.0	7	50.0	0	0.0	0	0.0	1	7.1	0	0.0	14	100.0
Male Mean Length	–			–	–	–	666	–	788	–	–	810	–	–	–	–	–	–	–	–		
SE	–			–	–	–	41	–	31	–	–	–	–	–	–	–	–	–	–	–		
Range	–			–	–	–	601–742	–	700–900	–	–	–	–	–	–	–	–	–	–	–		
n	–			–	–	–	3	–	6	–	–	1	–	–	–	–	–	–	–	–		
Female Mean Length	–			–	–	–	732	–	900	–	–	–	–	–	–	–	–	–	–	–		
SE	–			–	–	–	27	–	–	–	–	–	–	–	–	–	–	–	–	–		
Range	–			–	–	–	703–785	–	–	–	–	–	–	–	–	–	–	–	–	–		
n	–			–	–	–	3	–	1	–	–	–	–	–	–	–	–	–	–	–		
Total 7.5" Mesh	28			Male	0	0.0	0	0.0	13	46.4	0	0.0	6	21.4	0	0.0	0	0.0	1	3.6	0	0.0
		Female	0	0.0	0	0.0	5	17.9	0	0.0	3	10.7	0	0.0	0	0.0	0	0.0	8	28.6		
		Total	0	0.0	0	0.0	18	64.3	0	0.0	9	32.1	0	0.0	0	0.0	1	3.6	0	0.0	28	100.0
		Male Mean Length	–	–	–	–	694	–	788	–	–	810	–	–	–	–	–	–	–	–		
		SE	–	–	–	–	13	–	31	–	–	–	–	–	–	–	–	–	–	–		
		Range	–	–	–	–	601–794	–	700–900	–	–	–	–	–	–	–	–	–	–	–		
		n	–	–	–	–	13	–	6	–	–	1	–	–	–	–	–	–	–	–		
		Female Mean Length	–	–	–	–	754	–	840	–	–	–	–	–	–	–	–	–	–	–		
		SE	–	–	–	–	20	–	33	–	–	–	–	–	–	–	–	–	–	–		
		Range	–	–	–	–	703–797	–	785–900	–	–	–	–	–	–	–	–	–	–	–		
		n	–	–	–	–	5	–	3	–	–	–	–	–	–	–	–	–	–	–		

-continued-

Sample Dates	Sample Size	Brood Year (Age)																								
		2009		2008		2007		2006		2005		2004		Total												
		(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%												
		N	%	N	%	N	%	N	%	N	%	N	%	N	%											
All Gear	46	Male	0	0.0	3	6.5	0	0.0	24	52.2	0	0.0	7	15.2	0	0.0	0	0.0	1	2.2	0	0.0	0	0.0	35	76.1
		Female	0	0.0	0	0.0	0	0.0	5	10.9	0	0.0	6	13.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	11	23.9
		Total	0	0.0	3	6.5	0	0.0	29	63.0	0	0.0	13	28.3	0	0.0	0	0.0	1	2.2	0	0.0	0	0.0	46	100.0
		Male Mean Length	–	596	–	677	–	777	–	810	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		SE	–	8	–	9	–	29	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Range	–	581–606	–	601–794	–	700–900	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		n	–	3	–	24	–	7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Female Mean Length	–	–	–	754	–	833	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		SE	–	–	–	20	–	15	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Range	–	–	–	703–797	–	785–900	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		n	–	–	–	5	–	6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	

Appendix A6.—Yukon River District 2 (Mountain Village) Chinook salmon subsistence gillnet harvest, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)												Total									
			2009		2008		2007		2006		2005		2004											
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%									
6/20 6" Mesh Drift Gillnet	6	Male	0	0.0	0	0.0	0	0.0	3	50.0	0	0.0	2	33.3	0	0.0	0	0.0	0	0.0	5	83.3		
		Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	16.7	0	0.0	0	0.0	0	0.0	1	16.7		
		Subtotal	0	0.0	0	0.0	0	0.0	3	50.0	0	0.0	3	50.0	0	0.0	0	0.0	0	0.0	6	100.0		
		Male Mean Length	-	-	-	-	680	-	779	-	-	-	-	-	-	-	-	-	-	-	-	-		
		SE	-	-	-	-	14	-	11	-	-	-	-	-	-	-	-	-	-	-	-	-		
		Range	-	-	-	-	665-707	-	768-789	-	-	-	-	-	-	-	-	-	-	-	-	-		
		n	-	-	-	-	3	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-		
		Female Mean Length	-	-	-	-	-	-	759	-	-	-	-	-	-	-	-	-	-	-	-	-		
		SE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		Range	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		n	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-		
6/19 7" Mesh Drift Gillnet	12	Male	0	0.0	0	0.0	0	0.0	5	41.7	0	0.0	4	33.3	0	0.0	0	0.0	0	0.0	0	0.0	9	75.0
		Female	0	0.0	0	0.0	0	0.0	2	16.7	0	0.0	1	8.3	0	0.0	0	0.0	0	0.0	0	0.0	3	25.0
		Subtotal	0	0.0	0	0.0	0	0.0	7	58.3	0	0.0	5	41.7	0	0.0	0	0.0	0	0.0	0	0.0	12	100.0
		Male Mean Length	-	-	-	-	731	-	811	-	-	-	-	-	-	-	-	-	-	-	-	-		
		SE	-	-	-	-	24	-	14	-	-	-	-	-	-	-	-	-	-	-	-	-		
		Range	-	-	-	-	689-807	-	776-842	-	-	-	-	-	-	-	-	-	-	-	-	-		
		n	-	-	-	-	5	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-		
		Female Mean Length	-	-	-	-	791	-	700	-	-	-	-	-	-	-	-	-	-	-	-	-		
		SE	-	-	-	-	74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		Range	-	-	-	-	717-864	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		n	-	-	-	-	2	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-		
6/13-14, 16-17, 7.5" Mesh Drift Gillnet	50	Male	0	0.0	0	0.0	0	0.0	27	54.0	0	0.0	6	12.0	0	0.0	0	0.0	0	0.0	0	0.0	33	66.0
		Female	0	0.0	0	0.0	0	0.0	4	8.0	0	0.0	12	24.0	0	0.0	1	2.0	0	0.0	0	0.0	17	34.0
		Subtotal	0	0.0	0	0.0	0	0.0	31	62.0	0	0.0	18	36.0	0	0.0	1	2.0	0	0.0	0	0.0	50	100.0
		Male Mean Length	-	-	-	-	708	-	789	-	-	-	-	-	-	-	-	-	-	-	-	-		
		SE	-	-	-	-	5	-	29	-	-	-	-	-	-	-	-	-	-	-	-	-		
		Range	-	-	-	-	660-763	-	703-905	-	-	-	-	-	-	-	-	-	-	-	-	-		
		n	-	-	-	-	27	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-		
		Female Mean Length	-	-	-	-	799	-	849	-	859	-	-	-	-	-	-	-	-	-	-	-		
		SE	-	-	-	-	11	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-		
		Range	-	-	-	-	777-823	-	795-909	-	-	-	-	-	-	-	-	-	-	-	-	-		
		n	-	-	-	-	4	-	12	-	1	-	-	-	1	-	-	-	-	-	-	-		

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Appendix A6.–Page 2 of 2.

Sample Dates	Sample Size		Brood Year (Age)												Total							
			2009		2008		2007		2006		2005		2004									
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%							
6/14 8.5" Mesh Drift Gillnet ^a	4	Male	0	0.0	0	0.0	0	0.0	1	25.0	0	0.0	1	25.0	0	0.0	0	0.0	0	0.0	2	50.0
		Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	50.0	0	0.0	0	0.0	0	0.0	2	50.0
		Subtotal	0	0.0	0	0.0	0	0.0	1	25.0	0	0.0	3	75.0	0	0.0	0	0.0	0	0.0	4	100.0
		Male Mean Length	-	-	-	-	769	-	846	-	-	-	-	-	-	-	-	-	-	-	-	-
		SE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Range	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		n	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
		Female Mean Length	-	-	-	-	-	-	844	-	-	-	-	-	-	-	-	-	-	-	-	-
		SE	-	-	-	-	-	-	34	-	-	-	-	-	-	-	-	-	-	-	-	-
		Range	-	-	-	-	-	-	810-878	-	-	-	-	-	-	-	-	-	-	-	-	-
		n	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-
		All Gear	72	Male	0	0.0	0	0.0	0	0.0	36	50.0	0	0.0	13	18.1	0	0.0	0	0.0	0	0.0
Female	0			0.0	0	0.0	0	0.0	6	8.3	0	0.0	16	22.2	0	0.0	1	1.4	0	0.0	23	31.9
Total	0			0.0	0	0.0	0	0.0	42	58.3	0	0.0	29	40.3	0	0.0	1	1.4	0	0.0	72	100.0
Male Mean Length	-			-	-	-	711	-	798	-	-	-	-	-	-	-	-	-	-	-	-	-
SE	-			-	-	-	6	-	14	-	-	-	-	-	-	-	-	-	-	-	-	-
Range	-			-	-	-	660-807	-	703-905	-	-	-	-	-	-	-	-	-	-	-	-	-
n	-			-	-	-	36	-	13	-	-	-	-	-	-	-	-	-	-	-	-	-
Female Mean Length	-			-	-	-	796	-	833	-	859	-	-	-	-	-	-	-	-	-	-	-
SE	-			-	-	-	20	-	13	-	-	-	-	-	-	-	-	-	-	-	-	-
Range	-			-	-	-	717-864	-	700-909	-	-	-	-	-	-	-	-	-	-	-	-	-
n	-			-	-	-	6	-	16	-	1	-	-	-	-	-	-	-	-	-	-	-

^a These samples were from fish confiscated due to use of illegal gear.

Appendix A7.—Yukon River District 2 (St. Mary's) Chinook salmon subsistence gillnet harvest, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)														Total							
			2009		2008		2007		2006		2005		2004											
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%									
6/20 5.5" Mesh Drift Gillnet	2	Male	0	0.0	1	50.0	0	0.0	1	50.0	0	0.0	0	0.0	0	0.0	0	0.0	2	100.0				
		Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0				
		Subtotal	0	0.0	1	50.0	0	0.0	1	50.0	0	0.0	0	0.0	0	0.0	0	0.0	2	100.0				
		Male Mean Length	—	—	540	—	—	—	731	—	—	—	—	—	—	—	—	—	—	—				
		SE	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
		Range	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
		n	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—				
		Female Mean Length	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
		SE	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
		Range	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
		n	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
		6/13–14, 17; 6" Mesh Drift Gillnet	18	Male	0	0.0	6	33.3	0	0.0	10	55.6	0	0.0	1	5.6	0	0.0	0	0.0	0	0.0	17	94.4
				Female	0	0.0	0	0.0	0	0.0	1	5.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	5.6
Subtotal	0			0.0	6	33.3	0	0.0	11	61.1	0	0.0	1	5.6	0	0.0	0	0.0	0	0.0	18	100.0		
Male Mean Length	—			—	545	—	—	—	712	—	—	730	—	—	—	—	—	—	—	—				
SE	—			—	14	—	—	—	14	—	—	—	—	—	—	—	—	—	—	—				
Range	—			—	493–572	—	—	—	650–778	—	—	—	—	—	—	—	—	—	—	—				
n	—			—	6	—	—	—	10	—	—	1	—	—	—	—	—	—	—	—				
Female Mean Length	—			—	—	—	—	—	755	—	—	—	—	—	—	—	—	—	—	—				
SE	—			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
Range	—			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
n	—			—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—				
6/10–11, 13– 15, 17–18 7.5" Mesh Drift Gillnet	198			Male	0	0.0	1	0.5	0	0.0	98	49.5	1	0.5	39	19.6	1	0.5	1	0.5	0	0.0	141	71.2
				Female	0	0.0	0	0.0	0	0.0	7	3.5	0	0.0	48	24.1	0	0.0	2	1.0	0	0.0	57	28.8
		Subtotal	0	0.0	1	0.5	0	0.0	106	53.0	1	0.5	87	43.7	1	0.5	3	1.5	0	0.0	198	100.0		
		Male Mean Length	—	—	578	—	—	—	716	633	—	—	809	680	1000	—	—	—	—					
		SE	—	—	—	—	—	—	5	—	—	—	8	—	—	—	—	—	—					
		Range	—	—	—	—	—	—	618–898	—	—	708–905	—	—	—	—	—	—	—					
		n	—	—	1	—	—	—	98	1	—	39	1	—	1	—	—	—	—					
		Female Mean Length	—	—	—	—	—	—	773	—	—	830	—	—	828	—	—	—	—					
		SE	—	—	—	—	—	—	12	—	—	5	—	—	4	—	—	—	—					
		Range	—	—	—	—	—	—	709–810	—	—	744–946	—	—	824–831	—	—	—	—					
		n	—	—	—	—	—	—	7	—	—	48	—	—	2	—	—	—	—					

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Appendix A7.–Page 2 of 2.

Sample Dates	Sample Size	Brood Year (Age)														Total										
		2009		2008		2007		2006		2005		2004														
		(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%												
All Gear	218	Male	0	0.0	8	3.7	0	0.0	109	50.0	1	0.5	40	18.3	1	0.5	1	0.5	0	0.0	0	0.0	0	0.0	160	73.4
		Female	0	0.0	0	0.0	0	0.0	8	3.7	0	0.0	48	21.9	0	0.0	2	0.9	0	0.0	0	0.0	0	0.0	58	26.6
		Total	0	0.0	8	3.7	0	0.0	118	53.9	1	0.5	88	40.2	1	0.5	3	1.4	0	0.0	0	0.0	0	0.0	218	100.0
			Male Mean Length	–	548	–	716	633	807	680	1000	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SE	–	11	–	5	–	8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			Range	–	493–578	–	618–898	–	708–905	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			n	–	8	–	109	1	40	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			Female Mean Length	–	–	–	771	–	830	–	828	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			SE	–	–	–	11	–	5	–	4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			Range	–	–	–	709–810	–	744–946	–	824–831	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		n	–	–	–	8	–	48	–	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–		

Appendix A8.–Yukon River District 2 (Marshall) Chinook salmon subsistence gillnet harvest, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)														Total							
			2009		2008		2007		2006		2005		2004											
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%									
6/20 5.25" Mesh Drift Gillnet	7	Male	0	0.0	3	42.9	0	0.0	4	57.1	0	0.0	0	0.0	0	0.0	0	0.0	7	100.0				
		Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0				
		Subtotal	0	0.0	3	42.9	0	0.0	4	57.1	0	0.0	0	0.0	0	0.0	0	0.0	7	100.0				
		Male Mean Length	–		560	–		606	–		–	–	–	–	–	–	–	–	–	–				
		SE	–		4	–		29	–		–	–	–	–	–	–	–	–	–	–				
		Range	–		555–568	–		544–683	–		–	–	–	–	–	–	–	–	–	–				
		n	–		3	–		4	–		–	–	–	–	–	–	–	–	–	–				
		Female Mean Length	–		–	–		–	–		–	–	–	–	–	–	–	–	–	–				
		SE	–		–	–		–	–		–	–	–	–	–	–	–	–	–	–				
		Range	–		–	–		–	–		–	–	–	–	–	–	–	–	–	–				
		n	–		–	–		–	–		–	–	–	–	–	–	–	–	–	–				
		6/17–19 7.5" Mesh Drift Gillnet	96	Male	0	0.0	2	2.1	0	0.0	55	57.3	0	0.0	20	20.8	1	1.0	0	0.0	1	1.0	0	0.0
Female	0			0.0	0	0.0	0	0.0	1	1.0	0	0.0	15	15.6	0	0.0	1	1.0	0	0.0	0	0.0	17	17.7
Subtotal	0			0.0	2	2.1	0	0.0	56	58.3	0	0.0	35	36.5	1	1.0	1	1.0	1	1.0	0	0.0	96	100.0
Male Mean Length	–				589	–		708	–		800	695	–		727	–		–	–	–				
SE	–				28	–		7	–		14	–	–		–	–	–	–	–					
Range	–				561–617	–		583–816	–		687–903	–	–		–	–	–	–	–					
n	–				2	–		55	–		20	1	–		1	–	–	–	–					
Female Mean Length	–				–	–		800	–		840	–	903	–	–	–	–	–	–					
SE	–				–	–		–	–		9	–	–	–	–	–	–	–	–					
Range	–				–	–		–	–		774–911	–	–	–	–	–	–	–	–					
n	–				–	–		1	–		15	–	1	–	–	–	–	–	–					
All Gear	103			Male	0	0.0	5	4.9	0	0.0	59	57.3	0	0.0	20	19.4	1	1.0	0	0.0	1	1.0	0	0.0
		Female	0	0.0	0	0.0	0	0.0	1	1.0	0	0.0	15	14.6	0	0.0	1	1.0	0	0.0	0	0.0	17	16.5
		Total	0	0.0	5	4.9	0	0.0	60	58.3	0	0.0	35	34.0	1	1.0	1	1.0	1	1.0	0	0.0	103	100.0
		Male Mean Length	–		571	–		701	–		800	695	–		727	–		–	–					
		SE	–		12	–		7	–		14	–	–		–	–	–	–						
		Range	–		555–617	–		544–816	–		687–903	–	–		–	–	–	–						
		n	–		5	–		59	–		20	1	–		1	–	–	–						
		Female Mean Length	–		–	–		800	–		840	–	903	–	–	–	–	–						
		SE	–		–	–		–	–		9	–	–	–	–	–	–	–						
		Range	–		–	–		–	–		774–911	–	–	–	–	–	–	–						
		n	–		–	–		1	–		15	–	1	–	–	–	–	–						

Appendix A9.–Yukon River Subdistrict 4–A (Anvik) Chinook salmon subsistence gillnet harvest, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)														Total									
			2009		2008		2007		2006		2005		2004													
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%											
6/27–28 6" Mesh Drift Gillnet	8	Male	0	0.0	0	0.0	0	0.0	6	75.0	0	0.0	0	0.0	1	12.5	0	0.0	0	0.0	0	0.0	7	87.5		
		Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	12.5	0	0.0	0	0.0	0	0.0	0	0.0	1	12.5		
		Subtotal	0	0.0	0	0.0	0	0.0	6	75.0	0	0.0	1	12.5	1	12.5	0	0.0	0	0.0	0	0.0	8	100.0		
		Male Mean Length	–	–	–	–	670	–	–	–	680	–	–	–	–	–	–	–	–	–	–	–	–	–		
		SE	–	–	–	–	36	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		Range	–	–	–	–	535–770	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		n	–	–	–	–	6	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–		
		Female Mean Length	–	–	–	–	–	–	–	–	810	–	–	–	–	–	–	–	–	–	–	–	–	–		
		SE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		Range	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		n	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–		
6/28; 7/10 6" Mesh Set Gillnet	9	Male	0	0.0	3	33.3	0	0.0	3	33.3	0	0.0	0	0.0	1	11.1	0	0.0	0	0.0	0	0.0	0	0.0	7	77.8
		Female	0	0.0	0	0.0	0	0.0	1	11.1	0	0.0	1	11.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	22.2
		Subtotal	0	0.0	3	33.3	0	0.0	4	44.4	0	0.0	1	11.1	1	11.1	0	0.0	0	0.0	0	0.0	0	0.0	9	100.0
		Male Mean Length	–	–	558	–	–	–	703	–	–	–	–	–	730	–	–	–	–	–	–	–	–	–	–	–
		SE	–	–	2	–	–	–	24	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		Range	–	–	555–560	–	–	–	670–750	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		n	–	–	3	–	–	–	3	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–
		Female Mean Length	–	–	–	–	–	–	721	–	–	–	830	–	–	–	–	–	–	–	–	–	–	–	–	–
		SE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		Range	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		n	–	–	–	–	–	–	1	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–
Total 6" Mesh	17	Male	0	0.0	3	17.6	0	0.0	9	52.9	0	0.0	0	0.0	2	11.8	0	0.0	0	0.0	0	0.0	0	0.0	14	82.4
		Female	0	0.0	0	0.0	0	0.0	1	5.9	0	0.0	2	11.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	17.6
		Total	0	0.0	3	17.6	0	0.0	10	58.8	0	0.0	2	11.8	2	11.8	0	0.0	0	0.0	0	0.0	0	0.0	17	100.0
		Male Mean Length	–	–	558	–	–	–	681	–	–	–	–	–	705	–	–	–	–	–	–	–	–	–	–	–
		SE	–	–	2	–	–	–	25	–	–	–	–	–	25	–	–	–	–	–	–	–	–	–	–	–
		Range	–	–	555–560	–	–	–	535–770	–	–	–	–	–	680–730	–	–	–	–	–	–	–	–	–	–	–
		n	–	–	3	–	–	–	9	–	–	–	–	–	2	–	–	–	–	–	–	–	–	–	–	–
		Female Mean Length	–	–	–	–	–	–	721	–	–	–	820	–	–	–	–	–	–	–	–	–	–	–	–	–
		SE	–	–	–	–	–	–	–	–	–	–	10	–	–	–	–	–	–	–	–	–	–	–	–	–
		Range	–	–	–	–	–	–	–	–	–	–	810–830	–	–	–	–	–	–	–	–	–	–	–	–	–
		n	–	–	–	–	–	–	1	–	–	–	2	–	–	–	–	–	–	–	–	–	–	–	–	–

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Appendix A9.–Page 2 of 3.

Sample Dates	Sample Size		Brood Year (Age)												Total							
			2009		2008		2007		2006		2005		2004									
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%							
6/25–26 7.5" Mesh Drift Gillnet	8	Male	0	0.0	0	0.0	0	0.0	6	75.0	0	0.0	0	0.0	0	0.0	0	0.0	6	75.0		
		Female	0	0.0	0	0.0	0	0.0	0	0.0	2	25.0	0	0.0	0	0.0	0	0.0	2	25.0		
		Subtotal	0	0.0	0	0.0	0	0.0	6	75.0	0	0.0	2	25.0	0	0.0	0	0.0	8	100.0		
			Male Mean Length	–	–	–	–	703	–	–	–	–	–	–	–	–	–	–	–	–	–	
			SE	–	–	–	–	16	–	–	–	–	–	–	–	–	–	–	–	–	–	
			Range	–	–	–	–	630–740	–	–	–	–	–	–	–	–	–	–	–	–	–	
			n	–	–	–	–	6	–	–	–	–	–	–	–	–	–	–	–	–	–	
			Female Mean Length	–	–	–	–	–	–	820	–	–	–	–	–	–	–	–	–	–	–	
			SE	–	–	–	–	–	–	30	–	–	–	–	–	–	–	–	–	–	–	
			Range	–	–	–	–	–	–	790–850	–	–	–	–	–	–	–	–	–	–	–	
			n	–	–	–	–	–	–	2	–	–	–	–	–	–	–	–	–	–	–	
6/25–26 7.5" Mesh Set Gillnet	35	Male	0	0.0	0	0.0	0	0.0	12	34.3	0	0.0	7	20.0	0	0.0	0	0.0	0	0.0	19	54.3
		Female	0	0.0	0	0.0	0	0.0	8	22.9	0	0.0	7	20.0	1	2.9	0	0.0	0	0.0	16	45.7
		Subtotal	0	0.0	0	0.0	0	0.0	20	57.1	0	0.0	14	40.0	1	2.9	0	0.0	0	0.0	35	100.0
			Male Mean Length	–	–	–	–	722	–	809	–	–	–	–	–	–	–	–	–	–	–	
			SE	–	–	–	–	8	–	14	–	–	–	–	–	–	–	–	–	–	–	
			Range	–	–	–	–	680–770	–	750–870	–	–	–	–	–	–	–	–	–	–	–	
			n	–	–	–	–	12	–	7	–	–	–	–	–	–	–	–	–	–	–	
			Female Mean Length	–	–	–	–	740	–	886	760	–	–	–	–	–	–	–	–	–	–	
			SE	–	–	–	–	8	–	23	–	–	–	–	–	–	–	–	–	–	–	
			Range	–	–	–	–	710–780	–	780–970	–	–	–	–	–	–	–	–	–	–	–	
			n	–	–	–	–	8	–	7	1	–	–	–	–	–	–	–	–	–	–	
Total 7.5" Mesh	43	Male	0	0.0	0	0.0	0	0.0	18	41.9	0	0.0	7	16.3	0	0.0	0	0.0	0	0.0	25	58.1
		Female	0	0.0	0	0.0	0	0.0	8	18.6	0	0.0	9	20.9	1	2.3	0	0.0	0	0.0	18	41.9
		Total	0	0.0	0	0.0	0	0.0	26	60.5	0	0.0	16	37.2	1	2.3	0	0.0	0	0.0	43	100.0
			Male Mean Length	–	–	–	–	715	–	809	–	–	–	–	–	–	–	–	–	–	–	
			SE	–	–	–	–	8	–	14	–	–	–	–	–	–	–	–	–	–	–	
			Range	–	–	–	–	630–770	–	750–870	–	–	–	–	–	–	–	–	–	–	–	
			n	–	–	–	–	18	–	7	–	–	–	–	–	–	–	–	–	–	–	
			Female Mean Length	–	–	–	–	740	–	871	760	–	–	–	–	–	–	–	–	–	–	
			SE	–	–	–	–	8	–	21	–	–	–	–	–	–	–	–	–	–	–	
			Range	–	–	–	–	710–780	–	780–970	–	–	–	–	–	–	–	–	–	–	–	
			n	–	–	–	–	8	–	9	1	–	–	–	–	–	–	–	–	–	–	

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Appendix A9.–Page 3 of 3.

Sample Dates	Sample Size	Brood Year (Age)																Total								
		2009		2008		2007		2006		2005		2004														
		(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%												
All Gear	60	Male	0	0.0	3	5.0	0	0.0	27	45.0	0	0.0	7	11.7	2	3.3	0	0.0	0	0.0	0	0.0	0	0.0	39	65.0
		Female	0	0.0	0	0.0	0	0.0	9	15.0	0	0.0	11	18.3	1	1.7	0	0.0	0	0.0	0	0.0	0	0.0	21	35.0
		Total	0	0.0	3	5.0	0	0.0	36	60.0	0	0.0	18	30.0	3	5.0	0	0.0	0	0.0	0	0.0	0	0.0	60	100.0
		Male Mean Length	–		558	–		704	–		809	705	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		SE	–		2	–		10	–		14	25	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Range	–		555–560	–		535–770	–		750–870	680–730	–	–	–	–	–	–	–	–	–	–	–	–	–	
		n	–		3	–		27	–		7	2	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Female Mean Length	–		–	–		738	–		862	760	–	–	–	–	–	–	–	–	–	–	–	–	–	
		SE	–		–	–		7	–		18	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Range	–		–	–		710–780	–		780–970	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	n	–		–	–		9	–		11	1	–	–	–	–	–	–	–	–	–	–	–	–	–		

Appendix A10.–Yukon River Subdistrict 4–A (Kaltag) Chinook salmon subsistence 7.5 in mesh drift gillnet harvest, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size	Brood Year (Age)																Total						
		2009		2008		2007		2006		2005		2004												
		(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%										
Total	45	Male	0	0.0	1	2.2	0	0.0	29	64.4	0	0.0	3	6.7	0	0.0	0	0.0	0	0.0	0	0.0	33	73.3
		Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	12	26.7	0	0.0	0	0.0	0	0.0	0	0.0	12	26.7
		Total	0	0.0	1	2.2	0	0.0	29	64.4	0	0.0	15	33.3	0	0.0	0	0.0	0	0.0	0	0.0	45	100.0
		Male Mean Length	–		552	–		724	–		853	–		–	–	–	–	–	–	–	–	–	–	–
		SE	–		–	–		7	–		22	–		–	–	–	–	–	–	–	–	–	–	–
		Range	–		–	–		660–832	–		822–896	–		–	–	–	–	–	–	–	–	–	–	–
		n	–		1	–		29	–		3	–		–	–	–	–	–	–	–	–	–	–	–
		Female Mean Length	–		–	–		–	–		839	–		–	–	–	–	–	–	–	–	–	–	–
		SE	–		–	–		–	–		15	–		–	–	–	–	–	–	–	–	–	–	–
		Range	–		–	–		–	–		758–937	–		–	–	–	–	–	–	–	–	–	–	–
		n	–		–	–		–	–		12	–		–	–	–	–	–	–	–	–	–	–	–

Appendix A11.–Yukon River Subdistricts 4–B and 4–C (Galena) Chinook salmon subsistence gillnet harvest, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)														Total							
			2009		2008		2007		2006		2005		2004											
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%									
7/2 6" Mesh Set Gillnet	1	Male	0	0.0	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	1	100.0				
		Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0				
		Subtotal	0	0.0	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	1	100.0				
		Male Mean Length	–	–	–	–	730	–	–	–	–	–	–	–	–	–	–	–	–	–				
		SE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–				
		Range	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–				
		n	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–				
		Female Mean Length	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–				
		SE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–				
		Range	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–				
		n	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–				
		6/26; 7/2–3 7.5" Mesh Set Gillnet	21	Male	0	0.0	0	0.0	0	0.0	14	66.7	0	0.0	2	9.5	0	0.0	0	0.0	0	0.0	16	76.2
				Female	0	0.0	0	0.0	0	0.0	2	9.5	0	0.0	3	14.3	0	0.0	0	0.0	0	0.0	5	23.8
Subtotal	0			0.0	0	0.0	0	0.0	16	76.2	0	0.0	5	23.8	0	0.0	0	0.0	0	0.0	21	100.0		
Male Mean Length	–			–	–	–	706	–	830	–	–	–	–	–	–	–	–	–	–	–				
SE	–			–	–	–	12	–	20	–	–	–	–	–	–	–	–	–	–	–				
Range	–			–	–	–	610–760	–	810–850	–	–	–	–	–	–	–	–	–	–	–				
n	–			–	–	–	14	–	2	–	–	–	–	–	–	–	–	–	–	–				
Female Mean Length	–			–	–	–	740	–	833	–	–	–	–	–	–	–	–	–	–	–				
SE	–			–	–	–	10	–	63	–	–	–	–	–	–	–	–	–	–	–				
Range	–			–	–	–	730–750	–	770–960	–	–	–	–	–	–	–	–	–	–	–				
n	–			–	–	–	2	–	3	–	–	–	–	–	–	–	–	–	–	–				
All Gear	22			Male	0	0.0	0	0.0	0	0.0	15	68.2	0	0.0	2	9.1	0	0.0	0	0.0	0	0.0	17	77.3
				Female	0	0.0	0	0.0	0	0.0	2	9.1	0	0.0	3	13.6	0	0.0	0	0.0	0	0.0	5	22.7
		Total	0	0.0	0	0.0	0	0.0	17	77.3	0	0.0	5	22.7	0	0.0	0	0.0	0	0.0	22	100.0		
		Male Mean Length	–	–	–	–	708	–	830	–	–	–	–	–	–	–	–	–	–	–				
		SE	–	–	–	–	11	–	20	–	–	–	–	–	–	–	–	–	–	–				
		Range	–	–	–	–	610–760	–	810–850	–	–	–	–	–	–	–	–	–	–	–				
		n	–	–	–	–	15	–	2	–	–	–	–	–	–	–	–	–	–	–				
		Female Mean Length	–	–	–	–	740	–	833	–	–	–	–	–	–	–	–	–	–	–				
		SE	–	–	–	–	10	–	63	–	–	–	–	–	–	–	–	–	–	–				
		Range	–	–	–	–	730–750	–	770–960	–	–	–	–	–	–	–	–	–	–	–				
		n	–	–	–	–	2	–	3	–	–	–	–	–	–	–	–	–	–	–				

Appendix A12.—Yukon River Subdistricts 4–B and 4–C (Ruby) Chinook salmon subsistence 7.5 in mesh set gillnet harvest, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size	Brood Year (Age)																Total								
		2009		2008		2007		2006		2005		2004														
		(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%												
Total	32	Male	0	0.0	6	18.8	0	0.0	20	62.5	0	0.0	1	3.1	0	0.0	0	0.0	1	3.1	0	0.0	0	0.0	28	87.5
		Female	0	0.0	0	0.0	0	0.0	1	3.1	0	0.0	3	9.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	12.5
		Total	0	0.0	6	18.8	0	0.0	21	65.6	0	0.0	4	12.5	0	0.0	0	0.0	1	3.1	0	0.0	0	0.0	32	100.0
		Male Mean Length	–		611			694			797			730												
		SE	–		17			7			–			–												
		Range	–		550–655			620–740			–			–												
		n	–		6			20			1			1												
		Female Mean Length	–		–			750			813			–												
		SE	–		–			–			14			–												
		Range	–		–			–			790–839			–												
		n	–		–			1			3			–												

Appendix A13.—Yukon River Subdistrict 5–B (Rampart Rapids)
Chinook salmon subsistence harvest, sex composition, and mean length
(mm), 2012.

Sample Dates	Sample Size		N	%
4" Mesh Set Gillnet	7	Male	5	71.4
		Female	2	28.6
		Subtotal	7	100.0
		Male Mean	538	
		SE	26	
		Range	470–605	
		n	5	
		Female Mean	815	
		SE	35	
		Range	780–850	
		n	2	
5" Mesh Set Gillnet	17	Male	14	82.4
		Female	3	17.6
		Subtotal	17	100.0
		Male Mean	559	
		SE	13	
		Range	425–630	
		n	14	
		Female Mean	788	
		SE	40	
		Range	710–845	
		n	3	
7" Mesh Set Gillnet	26	Male	16	61.5
		Female	10	38.5
		Subtotal	26	100.0
		Male Mean	748	
		SE	18	
		Range	595–940	
		n	16	
		Female Mean	803	
		SE	21	
		Range	730–930	
		n	10	
7.5" Mesh Set Gillnet	38	Male	22	57.9
		Female	16	42.1
		Subtotal	38	100.0
		Male Mean	754	
		SE	16	
		Range	560–900	
		n	22	
		Female Mean	834	
		SE	11	
		Range	755–920	

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Appendix A13.–Page 2 of 2.

Sample Dates	Sample Size		N	%
6/27–7/2, 4–6, 19–20, 28–29; 8/3–5 Fish Wheel	356	Male	243	68.3
		Female	113	31.7
		Subtotal	356	100.0
		Male Mean		
		Length	712	
		SE	7	
		Range	360–990	
		n	243	
		Female Mean		
		Length	852	
SE	5			
Range	690–1,035			
n	113			
All Gear	444	Male	300	67.6
		Female	144	32.4
		Total	444	100.0
		Male Mean		
		Length	707	
		SE	6	
		Range	360–990	
		n	300	
		Female Mean		
		Length	845	
SE	5			
Range	690–1,035			
n	144			

Appendix A14.–Yukon River Subdistrict 5–D (Fort Yukon) Chinook salmon subsistence fish wheel harvest, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size	Brood Year (Age)																Total								
		2009		2008		2007		2006		2005		2004														
		(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%												
Total	160	Male	1	0.6	14	8.8	0	0.0	70	43.8	1	0.6	20	12.5	5	3.1	0	0.0	1	0.6	0	0.0	0	0.0	112	70.0
		Female	0	0.0	1	0.6	0	0.0	11	6.9	0	0.0	34	21.3	0	0.0	1	0.6	1	0.6	0	0.0	0	0.0	48	30.0
		Total	1	0.6	15	9.4	0	0.0	81	50.6	1	0.6	54	33.8	5	3.1	1	0.6	2	1.3	0	0.0	0	0.0	160	100.0
		Male Mean Length	370		546		–	703		660		–	823		690		–	720		–		–				
		SE	–		12		–	7		–		–	12		51		–	–		–	–					
		Range	–		445–620		–	540–930		–		–	740–945		570–880		–	–		–	–					
		n	1		14		–	70		1		–	20		5		–	1		–	–					
		Female Mean Length	–		640		–	700		–		–	850		–		900	950		–	–					
		SE	–		–		–	15		–		–	6		–		–	–		–	–					
		Range	–		–		–	630–770		–		–	780–920		–		–	–		–	–					
		n	–		1		–	11		–		–	34		–		1	1		–	–					

Appendix A15.–Lower Yukon River test fishery (Big Eddy site) Chinook salmon 8.25 in mesh drift gillnet, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)														Total									
			2009		2008		2007		2006		2005		2004													
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%											
6/13–20 stratum 1	85	Male	0	0.0	2	2.4	0	0.0	26	30.6	1	1.2	13	15.3	0	0.0	0	0.0	2	2.4	0	0.0	0	0.0	44	51.8
		Female	0	0.0	0	0.0	0	0.0	7	8.2	0	0.0	33	38.8	0	0.0	0	0.0	1	1.2	0	0.0	0	0.0	41	48.2
		Subtotal	0	0.0	2	2.4	0	0.0	33	38.8	1	1.2	46	54.1	0	0.0	0	0.0	3	3.5	0	0.0	0	0.0	85	100.0
		Male Mean Length	–	–	564	–	–	713	569	–	–	805	–	–	–	–	–	–	818	–	–	–	–	–	–	–
		SE	–	–	3	–	–	9	–	–	11	–	–	–	–	–	–	–	23	–	–	–	–	–	–	
		Range	–	–	561–566	–	–	639–797	–	–	759–880	–	–	–	–	–	–	–	795–841	–	–	–	–	–	–	–
		n	–	–	2	–	–	26	1	–	13	–	–	–	–	–	–	–	2	–	–	–	–	–	–	–
		Female Mean Length	–	–	–	–	–	786	–	–	836	–	–	–	–	–	–	–	814	–	–	–	–	–	–	–
		SE	–	–	–	–	–	16	–	–	8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		Range	–	–	–	–	–	706–837	–	–	761–935	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		n	–	–	–	–	–	7	–	–	33	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–
		6/21–26 stratum 2	64	Male	0	0.0	2	3.1	0	0.0	14	21.9	0	0.0	7	10.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Female	0			0.0	0	0.0	0	0.0	5	7.8	0	0.0	35	54.7	0	0.0	0	0.0	1	1.6	0	0.0	0	0.0	41	64.1
Subtotal	0			0.0	2	3.1	0	0.0	19	29.7	0	0.0	42	65.6	0	0.0	0	0.0	1	1.6	0	0.0	0	0.0	64	100.0
Male Mean Length	–			–	578	–	–	704	–	–	807	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
SE	–			–	3	–	–	14	–	–	25	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Range	–			–	575–581	–	–	606–769	–	–	688–879	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
n	–			–	2	–	–	14	–	–	7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Female Mean Length	–			–	–	–	–	802	–	–	823	–	–	–	–	–	–	–	818	–	–	–	–	–	–	
SE	–			–	–	–	–	15	–	–	8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Range	–			–	–	–	–	747–824	–	–	753–899	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
n	–			–	–	–	–	5	–	–	35	–	–	–	–	–	–	–	1	–	–	–	–	–	–	

-continued-

Sample Dates	Sample Size		Brood Year (Age)														Total									
			2009		2008		2007		2006		2005		2004													
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%											
6/27–7/6, 8, 10–13 stratum 3	70	Male	0	0.0	0	0.0	0	0.0	12	17.1	0	0.0	6	8.6	0	0.0	0	0.0	0	0.0	18	25.7				
		Female	0	0.0	0	0.0	0	0.0	5	7.1	0	0.0	47	67.1	0	0.0	0	0.0	0	0.0	52	74.3				
		Subtotal	0	0.0	0	0.0	0	0.0	17	24.3	0	0.0	53	75.7	0	0.0	0	0.0	0	0.0	70	100.0				
		Male Mean Length	–	–	–	–	735	–	846	–	–	–	–	–	–	–	–	–	–	–	–	–				
		SE	–	–	–	–	19	–	11	–	–	–	–	–	–	–	–	–	–	–	–	–				
		Range	–	–	–	–	618–850	–	799–871	–	–	–	–	–	–	–	–	–	–	–	–	–				
		n	–	–	–	–	12	–	6	–	–	–	–	–	–	–	–	–	–	–	–	–				
		Female Mean Length	–	–	–	–	787	–	839	–	–	–	–	–	–	–	–	–	–	–	–	–				
		SE	–	–	–	–	11	–	6	–	–	–	–	–	–	–	–	–	–	–	–	–				
		Range	–	–	–	–	755–816	–	757–943	–	–	–	–	–	–	–	–	–	–	–	–	–				
		n	–	–	–	–	5	–	47	–	–	–	–	–	–	–	–	–	–	–	–	–				
		Total	219	Male	0	0.0	4	1.8	0	0.0	52	23.7	1	0.5	26	11.9	0	0.0	0	0.0	2	0.9	0	0.0	85	38.8
				Female	0	0.0	0	0.0	0	0.0	17	7.8	0	0.0	115	52.5	0	0.0	2	0.9	0	0.0	0	0.0	134	61.2
Total	0			0.0	4	1.8	0	0.0	69	31.5	1	0.5	141	64.4	0	0.0	4	1.8	0	0.0	0	0.0	219	100.0		
Male Mean Length	–			–	571	–	716	569	815	–	–	–	818	–	–	–	–	–	–	–	–	–				
SE	–			–	4	–	7	–	9	–	–	–	23	–	–	–	–	–	–	–	–	–				
Range	–			–	561–581	–	606–850	–	688–880	–	–	–	795–841	–	–	–	–	–	–	–	–	–				
n	–			–	4	–	52	1	26	–	–	–	2	–	–	–	–	–	–	–	–	–				
Female Mean Length	–			–	–	–	791	–	833	–	–	–	816	–	–	–	–	–	–	–	–	–				
SE	–			–	–	–	8	–	4	–	–	–	2	–	–	–	–	–	–	–	–	–				
Range	–			–	–	–	706–837	–	753–943	–	–	–	814–818	–	–	–	–	–	–	–	–	–				
n	–			–	–	–	17	–	115	–	–	–	2	–	–	–	–	–	–	–	–	–				

Appendix A16.–Lower Yukon River test fishery (Big Eddy site) Chinook salmon 8.5 in mesh set gillnet, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)														Total									
			2009		2008		2007		2006		2005		2004													
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%											
6/11, 13–25 Quartile 1	195	Male	0	0.0	4	2.1	0	0.0	37	19.0	0	0.0	41	21.0	0	0.0	1	0.5	0	0.0	0	0.0	83	42.6		
		Female	0	0.0	0	0.0	0	0.0	7	3.6	0	0.0	102	52.3	0	0.0	2	1.0	1	0.5	0	0.0	112	57.4		
		Subtotal	0	0.0	4	2.1	0	0.0	44	22.6	0	0.0	143	73.3	0	0.0	3	1.5	1	0.5	0	0.0	195	100.0		
		Male Mean Length	–		567	–	732	–	821	–	822	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		SE	–		19	–	10	–	8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		Range	–		511–595	–	597–816	–	735–996	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		n	–		4	–	37	–	41	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Female Mean Length	–		–	–	785	–	841	–	907	827	–	–	–	–	–	–	–	–	–	–	–	–	–	
		SE	–		–	–	7	–	4	–	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Range	–		–	–	757–812	–	772–949	–	905–909	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		n	–		–	–	7	–	102	–	2	1	–	–	–	–	–	–	–	–	–	–	–	–	–	
		6/26–7/1 Quartile 2	147	Male	0	0.0	1	0.7	0	0.0	29	19.7	0	0.0	25	17.0	0	0.0	0	0.0	0	0.0	0	0.0	55	37.4
				Female	0	0.0	0	0.0	0	0.0	9	6.1	0	0.0	77	52.4	0	0.0	4	2.7	2	1.4	0	0.0	92	62.6
Subtotal	0			0.0	1	0.7	0	0.0	38	25.9	0	0.0	102	69.4	0	0.0	4	2.7	2	1.4	0	0.0	147	100.0		
Male Mean Length	–				597	–	764	–	826	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
SE	–				–	–	8	–	9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
Range	–				–	–	672–868	–	745–902	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
n	–				1	–	29	–	25	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Female Mean Length	–				–	–	803	–	843	–	877	755	–	–	–	–	–	–	–	–	–	–	–	–	–	
SE	–				–	–	8	–	4	–	9	4	–	–	–	–	–	–	–	–	–	–	–	–	–	
Range	–				–	–	771–847	–	749–928	–	854–900	751–759	–	–	–	–	–	–	–	–	–	–	–	–	–	
n	–				–	–	9	–	77	–	4	2	–	–	–	–	–	–	–	–	–	–	–	–	–	
7/2, 4 Quartile 3	2			Male	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
				Female	0	0.0	0	0.0	0	0.0	0	0.0	2	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	100.0
		Subtotal	0	0.0	0	0.0	0	0.0	0	0.0	2	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	100.0		
		Male Mean Length	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		SE	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		Range	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		n	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		Female Mean Length	–		–	–	–	–	814	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		SE	–		–	–	–	–	64	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
		Range	–		–	–	–	–	750–877	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
		n	–		–	–	–	–	2	–	–	–	–	–	–	–	–	–	–	–	–	–				

-continued-

Appendix A16.–Page 2 of 2.

Sample Dates	Sample Size		Brood Year (Age)														Total							
			2009		2008			2007			2006			2005		2004								
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%	N	%							
7/8–9 Quartile 4	2	Male	0	0.0	0	0.0	0	0.0	1	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	50.0		
		Female	0	0.0	0	0.0	0	0.0	1	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	50.0		
		Subtotal	0	0.0	0	0.0	0	0.0	2	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	100.0		
		Male Mean Length	–	–	–	679	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		SE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		Range	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		n	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		Female Mean Length	–	–	–	777	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		SE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		Range	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
n	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–				
Total	346	Male	0	0.0	5	1.4	0	0.0	67	19.4	0	0.0	66	19.1	0	0.0	1	0.3	0	0.0	0	0.0	139	40.2
		Female	0	0.0	0	0.0	0	0.0	17	4.9	0	0.0	181	52.3	0	0.0	6	1.7	3	0.9	0	0.0	207	59.8
		Total	0	0.0	5	1.4	0	0.0	84	24.3	0	0.0	247	71.4	0	0.0	7	2.0	3	0.9	0	0.0	346	100.0
		Male Mean Length	–	573	–	745	–	823	–	822	–	–	–	–	–	–	–	–	–	–	–	–		
		SE	–	16	–	7	–	6	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		Range	–	511–597	–	597–868	–	735–996	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		n	–	5	–	67	–	66	–	1	–	–	–	–	–	–	–	–	–	–	–	–		
		Female Mean Length	–	–	–	794	–	842	–	887	779	–	–	–	–	–	–	–	–	–	–	–		
		SE	–	–	–	6	–	3	–	9	24	–	–	–	–	–	–	–	–	–	–			
		Range	–	–	–	757–847	–	749–949	–	854–909	751–827	–	–	–	–	–	–	–	–	–	–			
n	–	–	–	17	–	181	–	6	3	–	–	–	–	–	–	–	–	–	–					

Appendix A17.–Lower Yukon River test fishery (Middle Mouth site) Chinook salmon 8.5 in mesh set gillnet, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)														Total							
			2009		2008		2007		2006		2005		2004											
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%									
6/13–14, 16– Quartile 1	101	Male	0	0.0	2	2.0	0	0.0	27	26.7	0	0.0	20	19.8	0	0.0	0	0.0	0	0.0	49	48.5		
		Female	0	0.0	0	0.0	0	0.0	5	5.0	0	0.0	46	45.5	0	0.0	0	0.0	1	1.0	52	51.5		
		Subtotal	0	0.0	2	2.0	0	0.0	32	31.7	0	0.0	66	65.3	0	0.0	1	1.0	0	0.0	101	100.0		
		Male Mean Length	–	–	559	–	–	–	750	–	–	–	–	808	–	–	–	–	–	–	–	–	–	
		SE	–	–	8	–	–	–	13	–	–	–	–	8	–	–	–	–	–	–	–	–	–	
		Range	–	–	551–567	–	–	–	610–852	–	–	–	–	740–878	–	–	–	–	–	–	–	–	–	
		n	–	–	2	–	–	–	27	–	–	–	–	20	–	–	–	–	–	–	–	–	–	
		Female Mean Length	–	–	–	–	–	–	788	–	–	–	–	834	–	–	–	834	–	–	–	–	–	
		SE	–	–	–	–	–	–	9	–	–	–	–	5	–	–	–	–	–	–	–	–	–	
		Range	–	–	–	–	–	–	759–815	–	–	–	–	773–896	–	–	–	–	–	–	–	–	–	
		n	–	–	–	–	–	–	5	–	–	–	–	46	–	–	–	1	–	–	–	–	–	
		6/26–7/1 Quartile 2	114	Male	0	0.0	1	0.9	0	0.0	19	16.7	0	0.0	18	15.8	0	0.0	1	0.9	0	0.0	0	0.0
Female	0			0.0	0	0.0	0	0.0	16	14.0	0	0.0	57	50.0	0	0.0	0	0.0	2	1.8	0	0.0	75	65.8
Subtotal	0			0.0	1	0.9	0	0.0	35	30.7	0	0.0	75	65.8	0	0.0	1	0.9	2	1.8	0	0.0	114	100.0
Male Mean Length	–			–	548	–	–	–	753	–	–	–	–	807	–	–	–	949	–	–	–	–	–	
SE	–			–	–	–	–	–	12	–	–	–	–	11	–	–	–	–	–	–	–	–	–	
Range	–			–	–	–	–	–	626–864	–	–	–	–	762–900	–	–	–	–	–	–	–	–	–	
n	–			–	1	–	–	–	19	–	–	–	–	18	–	–	1	–	–	–	–	–	–	
Female Mean Length	–			–	–	–	–	–	793	–	–	–	–	843	–	–	–	–	855	–	–	–	–	
SE	–			–	–	–	–	–	11	–	–	–	–	4	–	–	–	–	2	–	–	–	–	
Range	–			–	–	–	–	–	656–846	–	–	–	–	770–905	–	–	–	–	853–857	–	–	–	–	
n	–			–	–	–	–	–	16	–	–	–	–	57	–	–	–	–	2	–	–	–	–	
7/2–6 Quartile 3	123			Male	0	0.0	2	1.6	0	0.0	28	22.8	0	0.0	12	9.8	0	0.0	1	0.8	1	0.8	0	0.0
		Female	0	0.0	0	0.0	0	0.0	16	13.0	0	0.0	63	51.2	0	0.0	0	0.0	0	0.0	0	0.0	79	64.2
		Subtotal	0	0.0	2	1.6	0	0.0	44	35.8	0	0.0	75	61.0	0	0.0	1	0.8	1	0.8	0	0.0	123	100.0
		Male Mean Length	–	–	501	–	–	–	759	–	–	–	–	808	–	–	–	945	830	–	–	–	–	
		SE	–	–	50	–	–	–	11	–	–	–	–	17	–	–	–	–	–	–	–	–	–	
		Range	–	–	451–551	–	–	–	619–883	–	–	–	–	736–925	–	–	–	–	–	–	–	–	–	
		n	–	–	2	–	–	–	28	–	–	–	–	12	–	–	1	1	–	–	–	–	–	
		Female Mean Length	–	–	–	–	–	–	807	–	–	–	–	838	–	–	–	–	–	–	–	–	–	
		SE	–	–	–	–	–	–	7	–	–	–	–	5	–	–	–	–	–	–	–	–	–	
		Range	–	–	–	–	–	–	759–855	–	–	–	–	751–929	–	–	–	–	–	–	–	–	–	
		n	–	–	–	–	–	–	16	–	–	–	–	63	–	–	–	–	–	–	–	–	–	

-continued-

Sample Dates	Sample Size		Brood Year (Age)												Total											
			2009		2008		2007		2006		2005		2004													
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%											
7/7–15 Quartile 4	123	Male	0	0.0	0	0.0	0	0.0	20	16.3	0	0.0	11	8.9	0	0.0	0	0.0	0	0.0	0	0.0	31	25.2		
		Female	0	0.0	0	0.0	0	0.0	26	21.1	0	0.0	64	52.0	0	0.0	1	0.8	1	0.8	0	0.0	0	0.0	92	74.8
		Subtotal	0	0.0	0	0.0	0	0.0	46	37.4	0	0.0	75	61.0	0	0.0	1	0.8	1	0.8	0	0.0	0	0.0	123	100.0
		Male Mean Length	–	–	–	803	–	–	824	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		SE	–	–	–	9	–	–	14	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		Range	–	–	–	714–872	–	–	770–930	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		n	–	–	–	20	–	–	11	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Female Mean Length	–	–	–	800	–	–	845	–	924	853	–	–	–	–	–	–	–	–	–	–	–	–	–	
		SE	–	–	–	5	–	–	4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Range	–	–	–	753–845	–	–	764–923	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
n	–	–	–	26	–	–	64	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–			
Total	461	Male	0	0.0	5	1.1	0	0.0	94	20.4	0	0.0	61	13.2	0	0.0	2	0.4	1	0.2	0	0.0	0	0.0	163	35.4
		Female	0	0.0	0	0.0	0	0.0	63	13.7	0	0.0	230	49.9	0	0.0	1	0.2	4	0.9	0	0.0	0	0.0	298	64.6
		Total	0	0.0	5	1.1	0	0.0	157	34.1	0	0.0	291	63.1	0	0.0	3	0.7	5	1.1	0	0.0	0	0.0	461	100.0
		Male Mean Length	–	534	–	765	–	–	810	–	947	830	–	–	–	–	–	–	–	–	–	–	–	–	–	
		SE	–	21	–	6	–	–	6	–	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Range	–	451–567	–	610–883	–	–	736–930	–	945–949	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		n	–	5	–	94	–	–	61	–	2	1	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Female Mean Length	–	–	–	799	–	–	840	–	924	849	–	–	–	–	–	–	–	–	–	–	–	–	–	
		SE	–	–	–	4	–	–	2	–	–	5	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Range	–	–	–	656–855	–	–	751–929	–	–	834–857	–	–	–	–	–	–	–	–	–	–	–	–	–	
n	–	–	–	63	–	–	230	–	1	4	–	–	–	–	–	–	–	–	–	–	–	–	–			

Appendix A18.–Lower Yukon River test fishery (combined Big Eddy and Middle Mouth sites) Chinook salmon 8.5 in mesh set gillnet, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)														Total											
			2009		2008		2007		2006		2005		2004															
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%													
6/11, 13–25 Quartile 1	296	Male	0	0.0	6	2.0	0	0.0	64	21.6	0	0.0	61	20.6	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	132	44.6		
		Female	0	0.0	0	0.0	0	0.0	12	4.1	0	0.0	148	50.0	0	0.0	2	0.7	2	0.7	0	0.0	0	0.0	164	55.4		
		Subtotal	0	0.0	6	2.0	0	0.0	76	25.7	0	0.0	209	70.6	0	0.0	3	1.0	2	0.7	0	0.0	0	0.0	296	100.0		
		Male Mean Length	–		565	–	740	–	816	–	822	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		SE	–		13	–	8	–	6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		Range	–		511–595	–	597–852	–	735–996	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		n	–		6	–	64	–	61	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		Female Mean Length	–		–	–	786	–	839	–	907	831	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		SE	–		–	–	6	–	3	–	2	4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Range	–		–	–	757–815	–	772–949	–	905–909	827–834	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		n	–		–	–	12	–	148	–	2	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		6/26–7/1 Quartile 2	261	Male	0	0.0	2	0.8	0	0.0	48	18.4	0	0.0	43	16.5	0	0.0	1	0.4	0	0.0	0	0.0	0	0.0	94	36.0
				Female	0	0.0	0	0.0	0	0.0	25	9.6	0	0.0	134	51.3	0	0.0	4	1.5	4	1.5	0	0.0	0	0.0	167	64.0
				Subtotal	0	0.0	2	0.8	0	0.0	73	28.0	0	0.0	177	67.8	0	0.0	5	1.9	4	1.5	0	0.0	0	0.0	261	100.0
Male Mean Length	–				573	–	759	–	818	–	949	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
SE	–				25	–	7	–	7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
Range	–				548–597	–	626–868	–	745–902	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
n	–				2	–	48	–	43	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
Female Mean Length	–				–	–	797	–	843	–	877	805	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
SE	–				–	–	7	–	3	–	9	29	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Range	–				–	–	656–847	–	749–928	–	854–900	751–857	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
n	–				–	–	25	–	134	–	4	4	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
7/2–6 Quartile 3	125			Male	0	0.0	2	1.6	0	0.0	28	22.4	0	0.0	12	9.6	0	0.0	1	0.8	1	0.8	0	0.0	0	0.0	44	35.2
				Female	0	0.0	0	0.0	0	0.0	16	12.8	0	0.0	65	52.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	81	64.8
				Subtotal	0	0.0	2	1.6	0	0.0	44	35.2	0	0.0	77	61.6	0	0.0	1	0.8	1	0.8	0	0.0	0	0.0	125	100.0
		Male Mean Length	–		501	–	759	–	808	–	945	830	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		SE	–		50	–	11	–	17	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		Range	–		451–551	–	619–883	–	736–925	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		n	–		2	–	28	–	12	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
		Female Mean Length	–		–	–	807	–	837	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		SE	–		–	–	7	–	5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Range	–		–	–	759–855	–	750–929	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		n	–		–	–	16	–	65	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	

-continued-

Appendix A18.–Page 2 of 2.

Sample Dates	Sample Size	Brood Year (Age)														Total											
		2009		2008			2007			2006			2005		2004												
		(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%													
		N	%	N	%	N	%	N	%	N	%	N	%	N	%												
7/7–15 Quartile 4	125	Male	0	0.0	0	0.0	0	0.0	21	16.8	0	0.0	11	8.8	0	0.0	0	0.0	0	0.0	0	0.0	32	25.6			
		Female	0	0.0	0	0.0	0	0.0	27	21.6	0	0.0	64	51.2	0	0.0	1	0.8	1	0.8	0	0.0	0	0.0	93	74.4	
		Subtotal	0	0.0	0	0.0	0	0.0	48	38.4	0	0.0	75	60.0	0	0.0	1	0.8	1	0.8	0	0.0	0	0.0	125	100.0	
			Male Mean Length		–	–	–	797	–	824	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
			SE		–	–	–	11	–	14	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
			Range		–	–	–	679–872	–	770–930	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
			n		–	–	–	21	–	11	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
			Female Mean Length		–	–	–	799	–	845	–	924	853	–	–	–	–	–	–	–	–	–	–	–			
			SE		–	–	–	5	–	4	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
			Range		–	–	–	753–845	–	764–923	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
			n		–	–	–	27	–	64	–	1	1	–	–	–	–	–	–	–	–	–	–	–			
	Total	807	Male	0	0.0	10	1.2	0	0.0	161	20.0	0	0.0	127	15.7	0	0.0	3	0.4	1	0.1	0	0.0	0	0.0	302	37.4
			Female	0	0.0	0	0.0	0	0.0	80	9.9	0	0.0	411	50.9	0	0.0	7	0.9	7	0.9	0	0.0	0	0.0	505	62.6
Total			0	0.0	10	1.2	0	0.0	241	29.9	0	0.0	538	66.7	0	0.0	10	1.2	8	1.0	0	0.0	0	0.0	807	100.0	
			Male Mean Length		–	553	–	756	–	817	–	905	830	–	–	–	–	–	–	–	–	–	–	–	–		
			SE		–	14	–	5	–	4	–	42	–	–	–	–	–	–	–	–	–	–	–	–			
			Range		–	451–597	–	597–883	–	735–996	–	822–949	–	–	–	–	–	–	–	–	–	–	–	–			
			n		–	10	–	161	–	127	–	3	1	–	–	–	–	–	–	–	–	–	–	–			
			Female Mean Length		–	–	–	798	–	841	–	892	819	–	–	–	–	–	–	–	–	–	–	–			
			SE		–	–	–	3	–	2	–	9	17	–	–	–	–	–	–	–	–	–	–	–			
			Range		–	–	–	656–855	–	749–949	–	854–924	751–857	–	–	–	–	–	–	–	–	–	–	–			
			n		–	–	–	80	–	411	–	7	7	–	–	–	–	–	–	–	–	–	–	–			

Appendix A19.–Yukon River Mountain Village test fishery Chinook salmon 7.5 in mesh drift gillnet, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)												Total											
			2009		2008		2007		2006		2005		2004													
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%											
6/10–11, 13, 15–21 Quartile 1	99	Male	0	0.0	2	2.0	0	0.0	43	43.4	0	0.0	16	16.2	0	0.0	1	1.0	2	2.0	0	0.0	0	0.0	64	64.6
		Female	0	0.0	0	0.0	0	0.0	6	6.1	0	0.0	26	26.3	0	0.0	0	0.0	2	2.0	0	0.0	1	1.0	35	35.4
		Subtotal	0	0.0	2	2.0	0	0.0	49	49.5	0	0.0	42	42.4	0	0.0	1	1.0	4	4.0	0	0.0	1	1.0	99	100.0
		Male Mean Length	–	–	600	–	–	–	707	–	791	–	–	–	984	–	–	–	801	–	–	–	–	–	–	–
		SE	–	–	11	–	–	–	5	–	7	–	–	–	–	–	–	–	46	–	–	–	–	–	–	–
		Range	–	–	589–610	–	–	–	590–761	–	730–835	–	–	–	–	–	–	–	755–847	–	–	–	–	–	–	–
		n	–	–	2	–	–	–	43	–	16	–	–	–	1	–	–	–	2	–	–	–	–	–	–	–
		Female Mean Length	–	–	–	–	–	–	781	–	836	–	–	–	–	–	–	–	793	–	–	–	–	–	864	–
		SE	–	–	–	–	–	–	26	–	9	–	–	–	–	–	–	–	11	–	–	–	–	–	–	–
		Range	–	–	–	–	–	–	702–850	–	750–909	–	–	–	–	–	–	–	782–804	–	–	–	–	–	–	–
		n	–	–	–	–	–	–	6	–	26	–	–	–	–	–	–	–	2	–	–	–	–	–	1	–
		6/22–26 Quartile 2	92	Male	0	0.0	0	0.0	0	0.0	41	44.6	0	0.0	20	21.7	0	0.0	0	0.0	1	1.1	0	0.0	0	0.0
Female	0			0.0	0	0.0	0	0.0	4	4.3	0	0.0	25	27.2	0	0.0	0	0.0	1	1.1	0	0.0	0	0.0	30	32.6
Subtotal	0			0.0	0	0.0	0	0.0	45	48.9	0	0.0	45	48.9	0	0.0	0	0.0	2	2.2	0	0.0	0	0.0	92	100.0
Male Mean Length	–			–	–	–	–	–	719	–	819	–	–	–	–	–	–	–	818	–	–	–	–	–	–	–
SE	–			–	–	–	–	–	8	–	15	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Range	–			–	–	–	–	–	637–873	–	732–939	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
n	–			–	–	–	–	–	41	–	20	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–
Female Mean Length	–			–	–	–	–	–	815	–	837	–	–	–	–	–	–	–	821	–	–	–	–	–	–	–
SE	–			–	–	–	–	–	15	–	8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Range	–			–	–	–	–	–	776–847	–	756–897	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
n	–			–	–	–	–	–	4	–	25	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–
6/27–30 Quartile 3	97			Male	0	0.0	2	2.1	0	0.0	31	32.0	0	0.0	15	15.5	0	0.0	0	0.0	1	1.0	0	0.0	0	0.0
		Female	0	0.0	0	0.0	0	0.0	11	11.3	0	0.0	34	35.1	0	0.0	2	2.1	1	1.0	0	0.0	0	0.0	48	49.5
		Subtotal	0	0.0	2	2.1	0	0.0	42	43.3	0	0.0	49	50.5	0	0.0	2	2.1	2	2.1	0	0.0	0	0.0	97	100.0
		Male Mean Length	–	–	608	–	–	–	730	–	805	–	–	–	–	–	–	–	875	–	–	–	–	–	–	–
		SE	–	–	4	–	–	–	7	–	21	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		Range	–	–	604–611	–	–	–	684–822	–	686–994	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		n	–	–	2	–	–	–	31	–	15	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–
		Female Mean Length	–	–	–	–	–	–	762	–	834	–	–	–	905	–	832	–	–	–	–	–	–	–	–	–
		SE	–	–	–	–	–	–	10	–	8	–	–	–	13	–	–	–	–	–	–	–	–	–	–	–
		Range	–	–	–	–	–	–	700–819	–	725–925	–	–	–	892–917	–	–	–	–	–	–	–	–	–	–	–
		n	–	–	–	–	–	–	11	–	34	–	–	–	2	–	1	–	–	–	–	–	–	–	–	–

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Appendix A19.–Page 2 of 2.

Sample Dates	Sample Size	Brood Year (Age)																Total									
		2009		2008		2007		2006		2005		2004															
		(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%													
7/1–11 Quartile 4	117	Male	0	0.0	3	2.6	0	0.0	33	28.2	1	0.9	14	12.0	0	0.0	0	0.0	0	0.0	51	43.6					
		Female	0	0.0	0	0.0	0	0.0	12	10.3	0	0.0	49	41.9	0	0.0	2	1.7	3	2.6	0	0.0	66	56.4			
		Subtotal	0	0.0	3	2.6	0	0.0	45	38.5	1	0.9	63	53.8	0	0.0	2	1.7	3	2.6	0	0.0	117	100.0			
			Male Mean Length	–	–	559	–	–	–	728	607	–	–	821	–	–	–	–	–	–	–	–	–				
			SE	–	–	12	–	–	–	9	–	–	–	17	–	–	–	–	–	–	–	–	–				
			Range	–	–	537–578	–	–	–	645–846	–	–	–	672–934	–	–	–	–	–	–	–	–	–				
			n	–	–	3	–	–	–	33	1	–	–	14	–	–	–	–	–	–	–	–	–				
			Female Mean Length	–	–	–	–	–	–	783	–	–	–	838	–	922	808	–	–	–	–	–	–				
			SE	–	–	–	–	–	–	11	–	–	–	5	–	8	16	–	–	–	–	–	–				
			Range	–	–	–	–	–	–	733–841	–	–	–	749–909	–	914–930	780–835	–	–	–	–	–	–				
			n	–	–	–	–	–	–	12	–	–	–	49	–	2	3	–	–	–	–	–	–				
	Total	405	Male	0	0.0	7	1.7	0	0.0	148	36.5	1	0.2	65	16.0	0	0.0	1	0.2	4	1.0	0	0.0	0	0.0	226	55.8
			Female	0	0.0	0	0.0	0	0.0	33	8.1	0	0.0	134	33.1	0	0.0	4	1.0	7	1.7	0	0.0	1	0.2	179	44.2
Total			0	0.0	7	1.7	0	0.0	181	44.7	1	0.2	199	49.1	0	0.0	5	1.2	11	2.7	0	0.0	1	0.2	405	100.0	
			Male Mean Length	–	–	584	–	–	–	720	607	–	–	809	–	984	824	–	–	–	–	–	–	–	–		
			SE	–	–	10	–	–	–	4	–	–	–	8	–	–	26	–	–	–	–	–	–	–	–		
			Range	–	–	537–611	–	–	–	590–873	–	–	–	672–994	–	–	755–875	–	–	–	–	–	–	–	–		
			n	–	–	7	–	–	–	148	1	–	–	65	–	1	4	–	–	–	–	–	–	–	–		
			Female Mean Length	–	–	–	–	–	–	780	–	–	–	836	–	913	809	–	–	–	–	–	–	864	–		
			SE	–	–	–	–	–	–	8	–	–	–	3	–	8	8	–	–	–	–	–	–	–	–		
			Range	–	–	–	–	–	–	700–850	–	–	–	725–925	–	892–930	780–835	–	–	–	–	–	–	–	–		
			n	–	–	–	–	–	–	33	–	–	–	134	–	4	7	–	–	–	–	–	–	1	–		

Appendix A20.–Yukon River Pilot Station sonar test fishery Chinook salmon variable mesh drift gillnet, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)														Total			
			2009		2008		2007		2006		2005		2004							
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%					
6/24, 28 2.75" Mesh	2	Male	0	0.0	0	0.0	0	0.0	2	100.0	0	0.0	0	0.0	0	0.0	2	100.0		
		Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0		
		Subtotal	0	0.0	0	0.0	0	0.0	2	100.0	0	0.0	0	0.0	0	0.0	2	100.0		
		Male Mean Length	-	-	-	-	-	-	828	-	-	-	-	-	-	-	-	-		
		SE	-	-	-	-	-	-	9	-	-	-	-	-	-	-	-	-		
		Range	-	-	-	-	-	-	819–836	-	-	-	-	-	-	-	-	-		
		n	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-		
		Female Mean Length	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		SE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		Range	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		n	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		6/15–17, 19–20, 22– 23, 27, 29; 7/4, 6, 9, 4" Mesh	17	Male	3	17.6	4	23.5	0	0.0	4	23.5	0	0.0	1	5.9	0	0.0	0	0.0
Female	0			0.0	0	0.0	0	0.0	2	11.8	0	0.0	3	17.6	0	0.0	0	0.0	5	29.4
Subtotal	3			17.6	4	23.5	0	0.0	6	35.3	0	0.0	4	23.5	0	0.0	0	0.0	17	100.0
Male Mean Length	364			584	-	661	-	891	-	-	-	-	-	-	-	-	-	-	-	
SE	7			25	-	16	-	-	-	-	-	-	-	-	-	-	-	-	-	
Range	355–379			517–635	-	624–693	-	-	-	-	-	-	-	-	-	-	-	-	-	
n	3			4	-	4	-	1	-	-	-	-	-	-	-	-	-	-	-	
Female Mean Length	-			-	-	755	-	860	-	-	-	-	-	-	-	-	-	-	-	
SE	-			-	-	15	-	30	-	-	-	-	-	-	-	-	-	-	-	
Range	-			-	-	740–770	-	802–900	-	-	-	-	-	-	-	-	-	-	-	
n	-			-	-	2	-	3	-	-	-	-	-	-	-	-	-	-	-	
6/17–18, 25–7/4, 7, 9–10, 12, 17 5.25" Mesh	23			Male	0	0.0	5	21.7	0	0.0	10	43.5	0	0.0	2	8.7	0	0.0	0	0.0
		Female	0	0.0	0	0.0	0	0.0	2	8.7	0	0.0	3	13.0	1	4.3	0	0.0	6	26.1
		Subtotal	0	0.0	5	21.7	0	0.0	12	52.2	0	0.0	5	21.7	1	4.3	0	0.0	23	100.0
		Male Mean Length	-	548	-	687	-	914	-	-	-	-	-	-	-	-	-	-	-	
		SE	-	15	-	11	-	104	-	-	-	-	-	-	-	-	-	-	-	
		Range	-	518–600	-	641–754	-	810–1017	-	-	-	-	-	-	-	-	-	-	-	
		n	-	5	-	10	-	2	-	-	-	-	-	-	-	-	-	-	-	
		Female Mean Length	-	-	-	775	-	836	747	-	-	-	-	-	-	-	-	-	-	
		SE	-	-	-	55	-	10	-	-	-	-	-	-	-	-	-	-	-	
		Range	-	-	-	720–830	-	817–852	-	-	-	-	-	-	-	-	-	-	-	
		n	-	-	-	2	-	3	1	-	-	-	-	-	-	-	-	-	-	

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Sample Dates	Sample Size		Brood Year (Age)												Total									
			2009		2008		2007		2006		2005		2004											
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%									
7/22 5.75" Mesh	1	Male	0	0.0	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	1	100.0						
		Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0						
		Subtotal	0	0.0	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	1	100.0						
		Male Mean Length	-	-	-	-	-	-	790	-	-	-	-	-	-	-	-	-						
		SE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
		Range	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
		n	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-						
		Female Mean Length	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
		SE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
		Range	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
		n	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
		6/13, 16-21, 23-7/8, 10-11, 13-14, 18-21 6.5" Mesh	85	Male	0	0.0	5	5.9	0	0.0	30	35.3	0	0.0	11	12.9	1	1.2	0	0.0	48	56.5		
				Female	0	0.0	0	0.0	0	0.0	10	11.8	0	0.0	25	29.4	0	0.0	1	1.2	0	0.0	37	43.5
Subtotal	0			0.0	5	5.9	0	0.0	40	47.1	0	0.0	36	42.4	1	1.2	1	1.2	2	2.4	85	100.0		
Male Mean Length	-			-	561	-	693	-	811	609	-	-	804	-	-	-	-	-	-	-				
SE	-			-	10	-	10	-	20	-	-	-	-	-	-	-	-	-	-	-				
Range	-			-	531-590	-	605-800	-	702-900	-	-	-	-	-	-	-	-	-	-	-				
n	-			-	5	-	30	-	11	1	-	-	1	-	-	-	-	-	-	-				
Female Mean Length	-			-	-	-	745	-	813	-	789	786	-	-	-	-	-	-	-	-				
SE	-			-	-	-	14	-	7	-	-	-	-	-	-	-	-	-	-	-				
Range	-			-	-	-	664-788	-	743-887	-	-	-	-	-	-	-	-	-	-	-				
n	-			-	-	-	10	-	25	-	1	1	-	-	-	-	-	-	-	-				
6/13-14, 16-7/8, 10- 17, 20-21, 27, 29 7.5" Mesh	168			Male	0	0.0	3	1.8	0	0.0	81	48.2	0	0.0	25	14.9	0	0.0	0	0.0	0	0.0	109	64.9
				Female	0	0.0	0	0.0	0	0.0	18	10.7	0	0.0	39	23.2	0	0.0	2	1.2	0	0.0	59	35.1
		Subtotal	0	0.0	3	1.8	0	0.0	99	58.9	0	0.0	64	38.1	0	0.0	2	1.2	0	0.0	168	100.0		
		Male Mean Length	-	-	606	-	705	-	795	-	-	-	-	-	-	-	-	-	-	-				
		SE	-	-	27	-	5	-	9	-	-	-	-	-	-	-	-	-	-	-				
		Range	-	-	568-659	-	587-808	-	694-900	-	-	-	-	-	-	-	-	-	-	-				
		n	-	-	3	-	81	-	25	-	-	-	-	-	-	-	-	-	-	-				
		Female Mean Length	-	-	-	-	751	-	821	-	-	-	788	-	-	-	-	-	-	-				
		SE	-	-	-	-	11	-	8	-	-	-	28	-	-	-	-	-	-	-				
		Range	-	-	-	-	682-827	-	700-892	-	-	-	760-815	-	-	-	-	-	-	-				
		n	-	-	-	-	18	-	39	-	-	-	2	-	-	-	-	-	-	-				

-continued-

Sample Dates	Sample Size		Brood Year (Age)																Total								
			2009		2008			2007			2006			2005		2004											
			(1.1)		(1.2)	(2.1)			(1.3)	(2.2)			(1.4)	(2.3)			(1.5)	(2.4)	(1.6)	(2.5)	N	%					
N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%						
6/10, 13, 16, 20–21, 23–7/10, 12, 14–15,18 8.5" Mesh	89	Male	0	0.0	5	5.6	0	0.0	14	15.7	0	0.0	10	11.2	0	0.0	1	1.1	0	0.0	0	0.0	0	0.0	30	33.7	
		Female	0	0.0	0	0.0	0	0.0	13	14.6	0	0.0	43	48.3	0	0.0	1	1.1	2	2.2	0	0.0	0	0.0	59	66.3	
		Subtotal	0	0.0	5	5.6	0	0.0	27	30.3	0	0.0	53	59.6	0	0.0	2	2.2	2	2.2	0	0.0	0	0.0	89	100.0	
			Male Mean Length	–	565	–	729	–	828	–	890	–	890	–	–	–	–	–	–	–	–	–	–	–	–		
			SE	–	16	–	10	–	17	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
			Range	–	508–595	–	680–802	–	764–934	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–			
			n	–	5	–	14	–	10	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–			
			Female Mean Length	–	–	–	790	–	831	–	920	813	–	–	–	–	–	–	–	–	–	–	–	–			
			SE	–	–	–	10	–	5	–	–	23	–	–	–	–	–	–	–	–	–	–	–	–			
			Range	–	–	–	742–873	–	740–900	–	–	790–836	–	–	–	–	–	–	–	–	–	–	–	–			
			n	–	–	–	13	–	43	–	1	2	–	–	–	–	–	–	–	–	–	–	–	–			
	Total	385	Male	3	0.8	22	5.7	0	0.0	139	36.1	0	0.0	52	13.5	1	0.3	1	0.3	1	0.3	0	0.0	0	0.0	219	56.9
			Female	0	0.0	0	0.0	0	0.0	45	11.7	0	0.0	113	29.4	1	0.3	2	0.5	5	1.3	0	0.0	0	0.0	166	43.1
Total			3	0.8	22	5.7	0	0.0	184	47.8	0	0.0	165	42.9	2	0.5	3	0.8	6	1.6	0	0.0	0	0.0	385	100.0	
		Male Mean Length	364	569	–	702	–	812	609	890	804	–	–	–	–	–	–	–	–	–	–	–	–				
		SE	7	8	–	4	–	8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–				
		Range	355–379	508–659	–	587–808	–	694–1017	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–				
		n	3	22	–	139	–	52	1	1	1	–	–	–	–	–	–	–	–	–	–	–	–				
		Female Mean Length	–	–	–	762	–	825	747	855	797	–	–	–	–	–	–	–	–	–	–	–	–				
		SE	–	–	–	7	–	4	–	66	13	–	–	–	–	–	–	–	–	–	–	–	–				
		Range	–	–	–	664–873	–	700–900	–	789–920	760–836	–	–	–	–	–	–	–	–	–	–	–	–				
		n	–	–	–	45	–	113	1	2	5	–	–	–	–	–	–	–	–	–	–	–	–				

Appendix A21.–Yukon River Eagle sonar test fishery Chinook salmon variable mesh drift gillnet, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size	Brood Year (Age)																Total	
		2009		2008		2007		2006		2005		2004							
		(1.1) N %	(1.2) N %	(2.1) N %	(1.3) N %	(2.2) N %	(1.4) N %	(2.3) N %	(1.5) N %	(2.4) N %	(1.6) N %	(2.5) N %							
7/17, 19–21 ,24–25, 27–29, 31; 8/1–6 5.25" Mesh	75	Male	1 1.3	6 8.0	0 0.0	22 29.3	1 1.3	15 20.0	2 2.7	0 0.0	1 1.3	0 0.0	0 0.0	0 0.0	0 0.0	48 64.0			
		Female	0 0.0	0 0.0	0 0.0	4 5.3	0 0.0	22 29.3	0 0.0	0 0.0	1 1.3	0 0.0	0 0.0	0 0.0	27 36.0				
		Subtotal	1 1.3	6 8.0	0 0.0	26 34.7	1 1.3	37 49.3	2 2.7	0 0.0	2 2.7	0 0.0	0 0.0	0 0.0	75 100.0				
		Male Mean Length	313	581	–	684	612	832	638	–	795	–	–	–	–				
		SE	–	9	–	11	–	22	41	–	–	–	–	–	–				
		Range	–	547–608	–	599–835	–	722–1035	597–679	–	–	–	–	–	–				
		n	1	6	–	22	1	15	2	–	1	–	–	–	–				
		Female Mean Length	–	–	–	741	–	842	–	–	835	–	–	–	–				
		SE	–	–	–	22	–	9	–	–	–	–	–	–	–				
		Range	–	–	–	682–785	–	768–910	–	–	–	–	–	–	–				
n	–	–	–	4	–	22	–	–	1	–	–	–	–						
7/14, 17, 19, 21–22, 25–28, 30–31; 8/2– 6.5" Mesh	45	Male	0 0.0	5 11.1	0 0.0	12 26.7	0 0.0	6 13.3	3 6.7	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	26 57.8				
		Female	0 0.0	0 0.0	0 0.0	2 4.4	0 0.0	15 33.3	0 0.0	0 0.0	2 4.4	0 0.0	0 0.0	19 42.2					
		Subtotal	0 0.0	5 11.1	0 0.0	14 31.1	0 0.0	21 46.7	3 6.7	0 0.0	2 4.4	0 0.0	0 0.0	45 100.0					
		Male Mean Length	–	602	–	702	–	836	701	–	–	–	–	–					
		SE	–	18	–	12	–	23	67	–	–	–	–	–					
		Range	–	557–652	–	625–766	–	740–900	588–820	–	–	–	–	–					
		n	–	5	–	12	–	6	3	–	–	–	–	–					
		Female Mean Length	–	–	–	761	–	822	–	–	830	–	–	–					
		SE	–	–	–	28	–	11	–	–	10	–	–	–					
		Range	–	–	–	733–788	–	757–905	–	–	820–840	–	–	–					
n	–	–	–	2	–	15	–	–	2	–	–	–							
7/15, 20–26, 28–30; 8/1–14, 17, 19 7.5" Mesh	98	Male	0 0.0	4 4.1	0 0.0	21 21.4	0 0.0	14 14.3	1 1.0	0 0.0	1 1.0	0 0.0	0 0.0	41 41.8					
		Female	0 0.0	0 0.0	0 0.0	9 9.2	0 0.0	43 43.9	0 0.0	2 2.0	3 3.1	0 0.0	0 0.0	57 58.2					
		Subtotal	0 0.0	4 4.1	0 0.0	30 30.6	0 0.0	57 58.2	1 1.0	2 2.0	4 4.1	0 0.0	0 0.0	98 100.0					
		Male Mean Length	–	562	–	719	–	828	804	–	790	–	–	–					
		SE	–	12	–	7	–	16	–	–	–	–	–	–					
		Range	–	533–590	–	625–786	–	710–920	–	–	–	–	–	–					
		n	–	4	–	21	–	14	1	–	1	–	–	–					
		Female Mean Length	–	–	–	785	–	836	–	954	828	–	–	–					
		SE	–	–	–	8	–	7	–	6	26	–	–	–					
		Range	–	–	–	755–823	–	744–935	–	948–960	800–880	–	–	–					
n	–	–	–	9	–	43	–	2	3	–	–	–							

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Sample Dates	Sample Size		Brood Year (Age)												Total										
			2009		2008		2007		2006		2005		2004												
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%										
7/18, 20, 22–24, 26–27, 29–8/1, 3– 5, 7–9 8.5" Mesh	28	Male	0	0.0	0	0.0	0	0.0	2	7.1	0	0.0	7	25.0	0	0.0	0	0.0	0	0.0	9	32.1			
		Female	0	0.0	0	0.0	0	0.0	0	0.0	18	64.3	0	0.0	1	3.6	0	0.0	0	0.0	19	67.9			
		Subtotal	0	0.0	0	0.0	0	0.0	2	7.1	0	0.0	25	89.3	0	0.0	1	3.6	0	0.0	28	100.0			
			Male Mean Length	–	–	–	–	682	–	835	–	–	–	–	–	–	–	–	–	–	–				
			SE	–	–	–	–	4	–	26	–	–	–	–	–	–	–	–	–	–	–				
			Range	–	–	–	–	678–686	–	735–911	–	–	–	–	–	–	–	–	–	–	–				
			n	–	–	–	–	2	–	7	–	–	–	–	–	–	–	–	–	–	–				
			Female Mean Length	–	–	–	–	–	–	851	–	880	–	–	–	–	–	–	–	–	–				
			SE	–	–	–	–	–	–	10	–	–	–	–	–	–	–	–	–	–	–				
			Range	–	–	–	–	–	–	776–969	–	–	–	–	–	–	–	–	–	–	–				
			n	–	–	–	–	–	–	18	–	1	–	–	–	–	–	–	–	–	–				
	Total	246	Male	1	0.4	15	6.1	0	0.0	57	23.2	1	0.4	42	17.1	6	2.4	0	0.0	2	0.8	0	0.0	124	50.4
			Female	0	0.0	0	0.0	0	0.0	15	6.1	0	0.0	98	39.8	0	0.0	3	1.2	6	2.4	0	0.0	122	49.6
Total			1	0.4	15	6.1	0	0.0	72	29.3	1	0.4	140	56.9	6	2.4	3	1.2	8	3.3	0	0.0	246	100.0	
			Male Mean Length	313	–	583	–	701	612	832	697	–	–	–	793	–	–	–	–	–	–				
			SE	–	–	8	–	6	–	11	40	–	–	–	3	–	–	–	–	–	–				
			Range	–	–	533–652	–	599–835	–	710–1035	588–820	–	–	–	790–795	–	–	–	–	–	–				
			n	1	–	15	–	57	1	42	6	–	–	–	2	–	–	–	–	–	–				
			Female Mean Length	–	–	–	–	770	–	838	–	929	830	–	–	–	–	–	–	–	–				
			SE	–	–	–	–	9	–	5	–	25	12	–	–	–	–	–	–	–	–				
			Range	–	–	–	–	682–823	–	744–969	–	880–960	800–880	–	–	–	–	–	–	–	–				
		n	–	–	–	–	15	–	98	–	3	6	–	–	–	–	–	–	–	–					

Appendix A22.–Andreafsky River (East Fork) weir Chinook salmon escapement, age and sex composition, and mean length (mm), 2012.

Sample Dates (Strata Dates)	Sample Size	Brood Year (Age)												Total										
		2009			2008			2007		2006		2005				2004								
		(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%										
7/1–8 (6/30–7/8)	131	Male	2	0.8	64	20.6	0	0.0	164	52.7	0	0.0	14	4.6	0	0.0	0	0.0	0	0.0	0	0.0	245	78.6
		Female	0	0.0	2	0.8	0	0.0	31	9.9	0	0.0	33	10.7	0	0.0	0	0.0	0	0.0	0	0.0	67	21.4
		Subtotal	2	0.8	67	21.4	0	0.0	195	62.6	0	0.0	48	15.3	0	0.0	0	0.0	0	0.0	0	0.0	312	100.0
		Male Mean Length	377		512		–		644		–		798		–		–	–	–	–	–	–		
		SE	–		7		–		6		–		28		–		–	–	–	–	–	–		
		Range	–		430–615		–		539–749		–		728–930		–		–	–	–	–	–	–		
		n	1		27		–		69		–		6		–		–	–	–	–	–	–		
		Female Mean Length	–		592		–		677		–		807		–		–	–	–	–	–	–		
		SE	–		–		–		15		–		16		–		–	–	–	–	–	–		
		Range	–		–		–		603–779		–		730–895		–		–	–	–	–	–	–		
		n	–		1		–		13		–		14		–		–	–	–	–	–	–		
7/9–15 (7/9–15)	140	Male	4	0.7	51	10.0	0	0.0	290	56.4	0	0.0	48	9.3	0	0.0	0	0.0	0	0.0	0	0.0	393	76.4
		Female	0	0.0	4	0.7	0	0.0	40	7.9	0	0.0	77	15.0	0	0.0	0	0.0	0	0.0	0	0.0	121	23.6
		Subtotal	4	0.7	55	10.7	0	0.0	330	64.3	0	0.0	125	24.3	0	0.0	0	0.0	0	0.0	0	0.0	514	100.0
		Male Mean Length	342		524		–		666		–		785		–		–	–	–	–	–	–		
		SE	–		15		–		6		–		18		–		–	–	–	–	–	–		
		Range	–		441–614		–		513–810		–		714–926		–		–	–	–	–	–	–		
		n	1		14		–		79		–		13		–		–	–	–	–	–	–		
		Female Mean Length	–		598		–		694		–		817		–		–	–	–	–	–	–		
		SE	–		–		–		19		–		12		–		–	–	–	–	–	–		
		Range	–		–		–		605–789		–		713–937		–		–	–	–	–	–	–		
		n	–		1		–		11		–		21		–		–	–	–	–	–	–		
7/16–20, 22 (7/16–22)	150	Male	0	0.0	94	8.7	0	0.0	606	56.0	0	0.0	79	7.3	0	0.0	0	0.0	0	0.0	0	0.0	779	72.0
		Female	0	0.0	7	0.7	0	0.0	108	10.0	0	0.0	180	16.7	0	0.0	7	0.7	0	0.0	0	0.0	303	28.0
		Subtotal	0	0.0	101	9.3	0	0.0	714	66.0	0	0.0	260	24.0	0	0.0	7	0.7	0	0.0	0	0.0	1,082	100.0
		Male Mean Length	–		545		–		672		–		817		–		–	–	–	–	–	–		
		SE	–		9		–		5		–		19		–		–	–	–	–	–	–		
		Range	–		499–591		–		571–800		–		719–889		–		–	–	–	–	–	–		
		n	–		13		–		84		–		11		–		–	–	–	–	–	–		
		Female Mean Length	–		621		–		755		–		810		851		–	–	–	–	–	–		
		SE	–		–		–		7		–		9		–		–	–	–	–	–	–		
		Range	–		–		–		691–800		–		730–871		–		–	–	–	–	–	–		
		n	–		1		–		15		–		25		1		–	–	–	–	–	–		

-continued-

Appendix A22.–Page 2 of 2.

Sample Dates (Strata Dates)	Sample Size	Brood Year (Age)																Total					
		2009		2008		2007		2006		2005		2004											
		(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%									
7/23–29 (7/23–8/1)	151	Male	0	0.0	56	9.3	0	0.0	307	50.3	0	0.0	28	4.6	0	0.0	0	0.0	0	0.0	391	64.2	
		Female	0	0.0	0	0.0	0	0.0	81	13.2	0	0.0	137	22.5	0	0.0	0	0.0	0	0.0	218	35.8	
		Subtotal	0	0.0	56	9.3	0	0.0	387	63.6	0	0.0	165	27.2	0	0.0	0	0.0	0	0.0	609	100.0	
			Male Mean Length	–	–	561	–	693	–	781	–	–	–	–	–	–	–	–	–	–	–		
			SE	–	–	12	–	7	–	8	–	–	–	–	–	–	–	–	–	–	–		
			Range	–	–	486–632	–	573–811	–	741–807	–	–	–	–	–	–	–	–	–	–	–		
			n	–	–	14	–	76	–	7	–	–	–	–	–	–	–	–	–	–	–		
			Female Mean Length	–	–	–	–	765	–	809	–	–	–	–	–	–	–	–	–	–	–		
			SE	–	–	–	–	8	–	8	–	–	–	–	–	–	–	–	–	–	–		
			Range	–	–	–	–	693–831	–	731–905	–	–	–	–	–	–	–	–	–	–	–		
			n	–	–	–	–	20	–	34	–	–	–	–	–	–	–	–	–	–	–		
	Season	572	Male	6	0.2	266	10.6	0	0.0	1,367	54.3	0	0.0	170	6.7	0	0.0	0	0.0	0	0.0	1,808	71.8
			Female	0	0.0	13	0.5	0	0.0	260	10.3	0	0.0	428	17.0	0	0.0	7	0.3	0	0.0	709	28.2
Total			6	0.2	279	11.1	0	0.0	1,627	64.6	0	0.0	597	23.7	0	0.0	7	0.3	0	0.0	2,517	100.0	
			Male Mean Length	355	–	541	–	672	–	799	–	–	–	–	–	–	–	–	–	–	–		
			SE	–	–	6	–	3	–	10	–	–	–	–	–	–	–	–	–	–	–		
			Range	–	–	430–632	–	513–811	–	714–930	–	–	–	–	–	–	–	–	–	–	–		
			n	2	–	68	–	308	–	37	–	–	–	–	–	–	–	–	–	–	–		
			Female Mean Length	–	–	610	–	735	–	811	–	851	–	–	–	–	–	–	–	–	–		
			SE	–	–	–	–	6	–	5	–	–	–	–	–	–	–	–	–	–	–		
			Range	–	–	592–621	–	603–831	–	713–937	–	–	–	–	–	–	–	–	–	–	–		
			n	–	–	3	–	59	–	94	–	1	–	–	–	–	–	–	–	–	–		

Appendix A23.–Anvik River Chinook salmon escapement, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)												Total									
			2009		2008		2007		2006		2005		2004											
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%									
8/7–13 Carcass	229	Male	0	0.0	34	14.8	0	0.0	106	46.3	0	0.0	15	6.6	0	0.0	0	0.0	0	0.0	155	67.7		
		Female	0	0.0	0	0.0	0	0.0	12	5.2	0	0.0	61	26.6	0	0.0	0	0.0	1	0.4	74	32.3		
		Subtotal	0	0.0	34	14.8	0	0.0	118	51.5	0	0.0	76	33.2	0	0.0	1	0.4	0	0.0	229	100.0		
		Male Mean Length	–	561	–	685	–	794	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		SE	–	9	–	5	–	17	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Range	–	466–651	–	543–829	–	702–943	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		n	–	34	–	106	–	15	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Female Mean Length	–	–	–	775	–	828	–	–	799	–	–	–	–	–	–	–	–	–	–	–	–	
		SE	–	–	–	10	–	7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Range	–	–	–	690–815	–	680–945	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		n	–	–	–	12	–	61	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	
		8/7–10 Hook & Line ^a	17	Male	0	0.0	2	11.8	0	0.0	14	82.4	0	0.0	1	5.9	0	0.0	0	0.0	0	0.0	17	100.0
				Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Subtotal	0			0.0	2	11.8	0	0.0	14	82.4	0	0.0	1	5.9	0	0.0	0	0.0	0	0.0	17	100.0		
Male Mean Length	–			541	–	713	–	755	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
SE	–			41	–	13	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
Range	–			500–582	–	655–838	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
n	–			2	–	14	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
Female Mean Length	–			–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
SE	–			–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
Range	–			–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
n	–			–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
All Gear	246			Male	0	0.0	36	14.6	0	0.0	120	48.8	0	0.0	16	6.5	0	0.0	0	0.0	0	0.0	172	69.9
				Female	0	0.0	0	0.0	0	0.0	12	4.9	0	0.0	61	24.8	0	0.0	1	0.4	0	0.0	74	30.1
		Total	0	0.0	36	14.6	0	0.0	132	53.7	0	0.0	77	31.3	0	0.0	1	0.4	0	0.0	246	100.0		
		Male Mean Length	–	560	–	688	–	792	–	–	–	–	–	–	–	–	–	–	–	–	–			
		SE	–	9	–	5	–	16	–	–	–	–	–	–	–	–	–	–	–	–	–			
		Range	–	466–651	–	543–838	–	702–943	–	–	–	–	–	–	–	–	–	–	–	–	–			
		n	–	36	–	120	–	16	–	–	–	–	–	–	–	–	–	–	–	–	–			
		Female Mean Length	–	–	–	775	–	828	–	–	799	–	–	–	–	–	–	–	–	–	–			
		SE	–	–	–	10	–	7	–	–	–	–	–	–	–	–	–	–	–	–	–			
		Range	–	–	–	690–815	–	680–945	–	–	–	–	–	–	–	–	–	–	–	–	–			
		n	–	–	–	12	–	61	–	–	1	–	–	–	–	–	–	–	–	–	–			

^a Only male Chinook salmon were harvested in the sport fishery.

Appendix A24.–Chena River carcass survey Chinook salmon, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)																Total					
			2009		2008		2007		2006		2005		2004											
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%									
8/8–10, 13–14	198	Male	1	0.5	10	5.1	0	0.0	56	28.3	0	0.0	21	10.6	0	0.0	0	0.0	0	0.0	0	0.0	88	44.4
		Female	0	0.0	0	0.0	0	0.0	34	17.2	0	0.0	76	38.4	0	0.0	0	0.0	0	0.0	0	0.0	110	55.6
		Subtotal	1	0.5	10	5.1	0	0.0	90	45.5	0	0.0	97	49.0	0	0.0	0	0.0	0	0.0	0	0.0	198	100.0
		Male Mean Length	340		538		–		707		–		815		–		–		–		–		–	
		SE	–		16		–		7		–		14		–		–		–		–		–	
		Range	–		425–600		–		570–835		–		690–950		–		–		–		–		–	
		n	1		10		–		56		–		21		–		–		–		–		–	
		Female Mean Length	–		–		–		741		–		820		–		–		–		–		–	
		SE	–		–		–		7		–		5		–		–		–		–		–	
		Range	–		–		–		645–800		–		745–955		–		–		–		–		–	
		n	–		–		–		34		–		76		–		–		–		–		–	

Appendix A25.–Gisasa River weir Chinook salmon escapement, age and sex composition, and mean length (mm), 2012.

Sample Dates (Strata Dates)	Sample Size		Brood Year (Age)												Total									
			2009			2008			2007		2006			2005			2004							
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%									
7/2–9 (6/26–7/9)	123	Male	0	0.0	8	5.7	0	0.0	39	26.8	0	0.0	4	2.4	0	0.0	0	0.0	0	0.0	50	35.0		
		Female	0	0.0	2	1.6	0	0.0	74	51.2	0	0.0	16	11.4	0	0.0	1	0.8	0	0.0	94	65.0		
		Subtotal	0	0.0	11	7.3	0	0.0	112	78.0	0	0.0	20	13.8	0	0.0	1	0.8	0	0.0	144	100.0		
		Male Mean Length	–		536	–	682	–	757	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		SE	–		10	–	10	–	17	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Range	–		500–575	–	585–820	–	735–790	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		n	–		7	–	33	–	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Female Mean Length	–		573	–	678	–	786	–	800	–	–	–	–	–	–	–	–	–	–	–	–	
		SE	–		18	–	6	–	25	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Range	–		555–590	–	590–800	–	605–1020	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		n	–		2	–	63	–	14	–	1	–	–	–	–	–	–	–	–	–	–	–	–	
		7/10–11, 15–17 (7/10–17)	125	Male	0	0.0	60	11.2	0	0.0	272	50.4	4	0.8	39	7.2	0	0.0	0	0.0	0	0.0	376	69.6
Female	0			0.0	0	0.0	0	0.0	73	13.6	0	0.0	82	15.2	0	0.0	4	0.8	4	0.8	0	0.0	164	30.4
Subtotal	0			0.0	60	11.2	0	0.0	346	64.0	4	0.8	121	22.4	0	0.0	4	0.8	4	0.8	0	0.0	540	100.0
Male Mean Length	–				537	–	691	500	791	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
SE	–				14	–	8	–	17	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Range	–				430–620	–	550–860	–	715–870	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
n	–				14	–	63	1	9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Female Mean Length	–				–	–	672	–	838	–	780	760	–	–	–	–	–	–	–	–	–	–	–	
SE	–				–	–	15	–	14	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Range	–				–	–	600–810	–	760–990	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
n	–				–	–	17	–	19	–	1	1	–	–	–	–	–	–	–	–	–	–	–	
7/18–20, 21 (7/18–22)	122			Male	0	0.0	46	13.9	0	0.0	196	59.0	0	0.0	30	9.0	0	0.0	0	0.0	0	0.0	272	82.0
		Female	0	0.0	0	0.0	0	0.0	11	3.3	0	0.0	49	14.8	0	0.0	0	0.0	0	0.0	60	18.0		
		Subtotal	0	0.0	46	13.9	0	0.0	207	62.3	0	0.0	79	23.8	0	0.0	0	0.0	0	0.0	332	100.0		
		Male Mean Length	–		526	–	681	–	793	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		SE	–		9	–	6	–	9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Range	–		455–585	–	570–780	–	740–825	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		n	–		17	–	72	–	11	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Female Mean Length	–		–	–	665	–	831	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		SE	–		–	–	41	–	10	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Range	–		–	–	590–740	–	760–910	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		n	–		–	–	4	–	18	–	–	–	–	–	–	–	–	–	–	–	–	–	–	

-continued-

Appendix A25.–Page 2 of 2.

Sample Dates (Strata Dates)	Sample Size	Brood Year (Age)														Total											
		2009		2008		2007		2006		2005		2004															
		(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%													
7/23–26, 29–30 (7/23–30)	153	Male	0	0.0	34	11.1	0	0.0	114	37.3	0	0.0	34	11.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	183	59.5	
		Female	0	0.0	0	0.0	0	0.0	22	7.2	0	0.0	102	33.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	124	40.5	
		Subtotal	0	0.0	34	11.1	0	0.0	136	44.4	0	0.0	136	44.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	307	100.0	
			Male Mean Length	–	553	–	688	–	783	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
			SE	–	14	–	8	–	11	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			Range	–	430–655	–	550–815	–	700–870	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			n	–	17	–	57	–	17	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			Female Mean Length	–	–	–	748	–	819	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			SE	–	–	–	9	–	7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			Range	–	–	–	695–805	–	720–985	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			n	–	–	–	11	–	51	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
	Season	523	Male	0	0.0	149	11.3	0	0.0	621	46.9	4	0.3	106	8.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	881	66.6
			Female	0	0.0	2	0.2	0	0.0	180	13.6	0	0.0	250	18.9	0	0.0	5	0.4	4	0.3	0	0.0	0	0.0	442	33.4
Total			0	0.0	151	11.4	0	0.0	801	60.6	4	0.3	356	26.9	0	0.0	5	0.4	4	0.3	0	0.0	0	0.0	1,323	100.0	
			Male Mean Length	–	538	–	687	500	786	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			SE	–	7	–	4	–	8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
			Range	–	430–655	–	550–860	–	700–870	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			n	–	55	–	225	1	40	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
			Female Mean Length	–	573	–	688	–	826	–	784	760	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			SE	–	18	–	12	–	7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
			Range	–	555–590	–	590–810	–	605–1020	–	780–800	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
			n	–	2	–	95	–	102	–	2	1	–	–	–	–	–	–	–	–	–	–	–	–	–		

Appendix A26.—Henshaw Creek weir Chinook salmon escapement, age and sex composition, and mean length (mm), 2012.

Sample Dates (Strata Dates)	Sample Size		Brood Year (Age)												Total							
			2009		2008		2007		2006		2005		2004									
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%							
7/6–8, 11–14 (6/24–7/14)	41	Male	0	0.0	16	7.3	0	0.0	126	58.5	0	0.0	21	9.8	0	0.0	0	0.0	0	0.0	163	75.6
		Female	0	0.0	0	0.0	0	0.0	26	12.2	0	0.0	26	12.2	0	0.0	0	0.0	0	0.0	52	24.4
		Subtotal	0	0.0	16	7.3	0	0.0	152	70.7	0	0.0	47	22.0	0	0.0	0	0.0	0	0.0	215	100.0
		Male Mean Length	–		569	–	679	–	784	–	–	–	–	–	–	–	–	–	–	–	–	–
		SE	–		15	–	9	–	34	–	–	–	–	–	–	–	–	–	–	–	–	–
		Range	–		542–594	–	583–764	–	744–885	–	–	–	–	–	–	–	–	–	–	–	–	–
		n	–		3	–	24	–	4	–	–	–	–	–	–	–	–	–	–	–	–	–
		Female Mean Length	–		–	–	691	–	842	–	–	–	–	–	–	–	–	–	–	–	–	–
		SE	–		–	–	39	–	18	–	–	–	–	–	–	–	–	–	–	–	–	–
		Range	–		–	–	554–791	–	790–887	–	–	–	–	–	–	–	–	–	–	–	–	–
		n	–		–	–	5	–	5	–	–	–	–	–	–	–	–	–	–	–	–	–
		7/15–19 (7/15–19)	94	Male	0	0.0	54	26.6	0	0.0	67	33.0	0	0.0	7	3.2	0	0.0	0	0.0	0	0.0
Female	0			0.0	4	2.1	0	0.0	30	14.9	0	0.0	41	20.2	0	0.0	0	0.0	0	0.0	76	37.2
Subtotal	0			0.0	59	28.7	0	0.0	98	47.9	0	0.0	48	23.4	0	0.0	0	0.0	0	0.0	204	100.0
Male Mean Length	–				562	–	687	–	820	–	–	–	–	–	–	–	–	–	–	–	–	
SE	–				10	–	9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Range	–				492–690	–	556–791	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
n	–				25	–	31	–	1	–	–	–	–	–	–	–	–	–	–	–	–	
Female Mean Length	–				558	–	738	–	814	–	–	–	–	–	–	–	–	–	–	–	–	
SE	–				2	–	21	–	13	–	–	–	–	–	–	–	–	–	–	–	–	
Range	–				556–560	–	568–852	–	717–925	–	–	–	–	–	–	–	–	–	–	–	–	
n	–				2	–	14	–	19	–	–	–	–	–	–	–	–	–	–	–	–	
7/20–23 (7/20–23)	82			Male	0	0.0	55	20.7	0	0.0	87	32.9	0	0.0	16	6.1	0	0.0	0	0.0	0	0.0
		Female	0	0.0	0	0.0	0	0.0	29	11.0	0	0.0	74	28.0	0	0.0	3	1.2	0	0.0	107	40.2
		Subtotal	0	0.0	55	20.7	0	0.0	116	43.9	0	0.0	90	34.1	0	0.0	3	1.2	0	0.0	265	100.0
		Male Mean Length	–		557	–	709	–	826	–	–	–	–	–	–	–	–	–	–	–	–	
		SE	–		7	–	11	–	31	–	–	–	–	–	–	–	–	–	–	–	–	
		Range	–		491–620	–	565–809	–	755–930	–	–	–	–	–	–	–	–	–	–	–	–	
		n	–		17	–	27	–	5	–	–	–	–	–	–	–	–	–	–	–	–	
		Female Mean Length	–		–	–	777	–	822	–	915	–	–	–	–	–	–	–	–	–	–	
		SE	–		–	–	11	–	9	–	–	–	–	–	–	–	–	–	–	–	–	
		Range	–		–	–	729–850	–	747–902	–	–	–	–	–	–	–	–	–	–	–	–	
		n	–		–	–	9	–	23	–	1	–	–	–	–	–	–	–	–	–	–	

-continued-

Appendix A26.–Page 2 of 2.

Sample Dates (Strata Dates)	Sample Size	Brood Year (Age)																				
		2009		2008			2007			2006			2005		2004		Total					
		(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%	N	%						
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%					
7/24–8/2 (7/24–8/4)	72	Male	0	0.0	10	4.2	0	0.0	53	22.2	0	0.0	23	9.7	0	0.0	0	0.0	0	0.0	86	36.1
		Female	0	0.0	0	0.0	0	0.0	33	13.9	0	0.0	119	50.0	0	0.0	0	0.0	0	0.0	152	63.9
		Subtotal	0	0.0	10	4.2	0	0.0	86	36.1	0	0.0	142	59.7	0	0.0	0	0.0	0	0.0	238	100.0
		Male Mean Length	–		542	–		717	–		796	–		–	–	–	–	–	–	–	–	–
		SE	–		26	–		10	–		15	–		–	–	–	–	–	–	–	–	–
		Range	–		493–580	–		628–790	–		745–835	–		–	–	–	–	–	–	–	–	–
		n	–		3	–		16	–		6	–		–	–	–	–	–	–	–	–	–
		Female Mean Length	–		–	–		758	–		843	–		–	–	–	–	–	–	–	–	–
		SE	–		–	–		25	–		7	–		–	–	–	–	–	–	–	–	–
		Range	–		–	–		572–863	–		739–975	–		–	–	–	–	–	–	–	–	–
		n	–		–	–		10	–		36	–		–	–	–	–	–	–	–	–	–
Season	289	Male	0	0.0	135	14.6	0	0.0	333	36.1	0	0.0	67	7.2	0	0.0	0	0.0	0	0.0	535	58.0
		Female	0	0.0	4	0.5	0	0.0	119	12.9	0	0.0	261	28.3	0	0.0	3	0.4	0	0.0	387	42.0
		Total	0	0.0	139	15.1	0	0.0	452	49.0	0	0.0	328	35.5	0	0.0	3	0.4	0	0.0	922	100.0
		Male Mean Length	–		557	–		699	–		807	–		–	–	–	–	–	–	–	–	–
		SE	–		8	–		5	–		16	–		–	–	–	–	–	–	–	–	–
		Range	–		491–690	–		556–809	–		744–930	–		–	–	–	–	–	–	–	–	–
		n	–		48	–		98	–		16	–		–	–	–	–	–	–	–	–	–
		Female Mean Length	–		558	–		744	–		830	–		915	–	–	–	–	–	–	–	–
		SE	–		2	–		12	–		6	–		–	–	–	–	–	–	–	–	–
		Range	–		556–560	–		554–863	–		717–975	–		–	–	–	–	–	–	–	–	–
		n	–		2	–		38	–		83	–		1	–	–	–	–	–	–	–	–

Appendix A27.–Salcha River carcass survey Chinook salmon escapement, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)												Total									
			2009		2008		2007		2006		2005		2004											
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%									
8/6–9 stratum 1	265	Male	1	0.4	21	7.9	0	0.0	66	24.9	0	0.0	42	15.8	0	0.0	0	0.0	0	0.0	130	49.1		
		Female	0	0.0	0	0.0	0	0.0	25	9.4	0	0.0	105	39.6	0	0.0	5	1.9	0	0.0	0	0.0	135	50.9
		Subtotal	1	0.4	21	7.9	0	0.0	91	34.3	0	0.0	147	55.5	0	0.0	5	1.9	0	0.0	0	0.0	265	100.0
		Male Mean Length	366		568		–		706		–		810		–		–	–	–	–	–	–	–	–
		SE	–		7		–		6		–		8		–		–	–	–	–	–	–	–	–
		Range	–		500–628		–		619–830		–		703–907		–		–	–	–	–	–	–	–	–
		n	1		21		–		66		–		41		–		–	–	–	–	–	–	–	–
		Female Mean Length	–		–		–		762		–		832		–		897		–	–	–	–	–	–
		SE	–		–		–		8		–		4		–		18		–	–	–	–	–	–
		Range	–		–		–		650–821		–		740–940		–		833–930		–	–	–	–	–	–
		n	–		–		–		25		–		105		–		5		–	–	–	–	–	–
		8/14–15, 17 stratum 2	155	Male	0	0.0	4	2.6	0	0.0	20	12.9	0	0.0	15	9.7	0	0.0	0	0.0	0	0.0	0	0.0
Female	0			0.0	0	0.0	0	0.0	27	17.4	0	0.0	87	56.1	0	0.0	2	1.3	0	0.0	0	0.0	116	74.8
Subtotal	0			0.0	4	2.6	0	0.0	47	30.3	0	0.0	102	65.8	0	0.0	2	1.3	0	0.0	0	0.0	155	100.0
Male Mean Length	–				574		–		725		–		857		–		–	–	–	–	–	–	–	–
SE	–				24		–		15		–		18		–		–	–	–	–	–	–	–	–
Range	–				511–624		–		597–849		–		715–990		–		–	–	–	–	–	–	–	–
n	–				4		–		20		–		15		–		–	–	–	–	–	–	–	–
Female Mean Length	–				–		–		770		–		831		–		873		–	–	–	–	–	–
SE	–				–		–		6		–		5		–		4		–	–	–	–	–	–
Range	–				–		–		709–841		–		724–930		–		869–876		–	–	–	–	–	–
n	–				–		–		27		–		86		–		2		–	–	–	–	–	–
Total	420			Male	1	0.2	25	6.0	0	0.0	86	20.5	0	0.0	57	13.6	0	0.0	0	0.0	0	0.0	0	0.0
		Female	0	0.0	0	0.0	0	0.0	52	12.4	0	0.0	192	45.7	0	0.0	7	1.7	0	0.0	0	0.0	251	59.8
		Total	1	0.2	25	6.0	0	0.0	138	32.9	0	0.0	249	59.3	0	0.0	7	1.7	0	0.0	0	0.0	420	100.0
		Male Mean Length	366		569		–		711		–		822		–		–	–	–	–	–	–	–	–
		SE	–		7		–		6		–		8		–		–	–	–	–	–	–	–	–
		Range	–		500–628		–		597–849		–		703–990		–		–	–	–	–	–	–	–	–
		n	1		25		–		86		–		56		–		–	–	–	–	–	–	–	–
		Female Mean Length	–		–		–		766		–		832		–		890		–	–	–	–	–	–
		SE	–		–		–		5		–		3		–		13		–	–	–	–	–	–
		Range	–		–		–		650–841		–		724–940		–		833–930		–	–	–	–	–	–
		n	–		–		–		52		–		191		–		7		–	–	–	–	–	–

Appendix A28.–Yukon River Pilot Station acoustic tagging Chinook salmon, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)												Total			
			2009		2008		2007		2006		2005		2004					
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%			
7/10 5.25" Mesh	1	Male	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
		Female	0	0.0	0	0.0	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0
		Subtotal	0	0.0	0	0.0	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0	1	100.0
		Male Mean Length	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		SE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		Range	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		n	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		Female Mean Length	–	–	–	–	–	–	–	915	–	–	–	–	–	–	–	–
		SE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		Range	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		n	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–
		6/20, 27 7.25" Mesh	3	Male	0	0.0	0	0.0	1	33.3	0	0.0	0	0.0	0	0.0	0	0.0
Female	0			0.0	0	0.0	0	0.0	0	0.0	2	66.7	0	0.0	0	0.0	0	0.0
Subtotal	0			0.0	0	0.0	1	33.3	0	0.0	2	66.7	0	0.0	0	0.0	3	100.0
Male Mean Length	–			–	–	725	–	–	–	–	–	–	–	–	–	–	–	
SE	–			–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Range	–			–	–	–	–	–	–	–	–	–	–	–	–	–	–	
n	–			–	–	1	–	–	–	–	–	–	–	–	–	–	–	
Female Mean Length	–			–	–	–	–	–	–	832	–	–	–	–	–	–	–	
SE	–			–	–	–	–	–	–	4	–	–	–	–	–	–	–	
Range	–			–	–	–	–	–	–	828–835	–	–	–	–	–	–	–	
n	–			–	–	–	–	–	–	2	–	–	–	–	–	–	–	
6/20–25, 27–29; 7/1, 3–7 8.5" Mesh	146			Male	0	0.0	0	0.0	31	21.2	0	0.0	21	14.4	1	0.7	0	0.0
		Female	0	0.0	0	0.0	20	13.7	0	0.0	67	45.9	0	0.0	3	2.1	3	2.1
		Subtotal	0	0.0	0	0.0	52	34.9	0	0.0	87	60.3	1	0.7	3	2.1	3	2.1
		Male Mean Length	–	–	–	735	–	–	–	822	727	–	–	–	–	–		
		SE	–	–	–	8	–	–	–	10	–	–	–	–	–			
		Range	–	–	–	625–806	–	–	–	726–889	–	–	–	–	–			
		n	–	–	–	31	–	–	–	21	1	–	–	–	–			
		Female Mean Length	–	–	–	734	–	–	–	831	–	890	795	–	–			
		SE	–	–	–	13	–	–	–	5	–	18	22	–	–			
		Range	–	–	–	609–836	–	–	–	742–939	–	868–926	772–839	–	–			
		n	–	–	–	20	–	–	–	67	–	3	3	–	–			

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Appendix A28.–Page 2 of 2.

Sample Dates	Sample Size	Brood Year (Age)														Total													
		2009		2008		2007		2006		2005		2004																	
		(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%															
Total	150	Male	0	0.0	0	0.0	0	0.0	32	21.3	0	0.0	21	14.0	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	54	36.0	
		Female	0	0.0	0	0.0	0	0.0	20	13.3	0	0.0	70	46.7	0	0.0	3	2.0	3	2.0	0	0.0	0	0.0	0	0.0	96	64.0	
		Total	0	0.0	0	0.0	0	0.0	53	34.7	0	0.0	91	60.7	1	0.7	3	2.0	3	2.0	0	0.0	0	0.0	0	0.0	150	100.0	
		Male Mean Length	-	-	-	-	-	-	734	-	-	-	822	727	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		SE	-	-	-	-	-	-	8	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Range	-	-	-	-	-	-	625-806	-	-	-	726-889	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		n	-	-	-	-	-	-	32	-	-	-	21	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Female Mean Length	-	-	-	-	-	-	734	-	-	-	833	-	-	-	890	795	-	-	-	-	-	-	-	-	-	-	
		SE	-	-	-	-	-	-	13	-	-	-	5	-	-	18	22	-	-	-	-	-	-	-	-	-	-	-	
		Range	-	-	-	-	-	-	609-836	-	-	-	742-939	-	-	868-926	772-839	-	-	-	-	-	-	-	-	-	-	-	-
		n	-	-	-	-	-	-	20	-	-	-	70	-	-	3	3	-	-	-	-	-	-	-	-	-	-	-	

Appendix A29.–Nulato River genetic sampling Chinook salmon, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)												Total							
			2009		2008		2007		2006		2005		2004									
			(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%							
Hook and Line	35	Male	0	0.0	2	5.7	0	0.0	20	57.1	0	0.0	1	2.9	0	0.0	0	0.0	0	0.0	23	65.7
		Female	0	0.0	0	0.0	0	0.0	3	8.6	0	0.0	9	25.7	0	0.0	0	0.0	0	0.0	12	34.3
		Subtotal	0	0.0	2	5.7	0	0.0	23	65.7	0	0.0	10	28.6	0	0.0	0	0.0	0	0.0	35	100.0
		Male Mean Length	–	–	586	–	–	705	–	–	840	–	–	–	–	–	–	–	–	–	–	–
		SE	–	–	32	–	–	12	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		Range	–	–	554–618	–	–	645–813	–	–	–	–	–	–	–	–	–	–	–	–	–	–
		n	–	–	2	–	–	20	–	–	1	–	–	–	–	–	–	–	–	–	–	–
		Female Mean Length	–	–	–	–	–	757	–	–	837	–	–	–	–	–	–	–	–	–	–	–
		SE	–	–	–	–	–	17	–	–	11	–	–	–	–	–	–	–	–	–	–	–
		Range	–	–	–	–	–	732–790	–	–	801–898	–	–	–	–	–	–	–	–	–	–	–
		n	–	–	–	–	–	3	–	–	9	–	–	–	–	–	–	–	–	–	–	–
		8/5–8 Carcass	13	Male	0	0.0	1	7.7	0	0.0	6	46.2	0	0.0	2	15.4	0	0.0	0	0.0	0	0.0
Female	0			0.0	0	0.0	0	0.0	1	7.7	0	0.0	3	23.1	0	0.0	0	0.0	0	0.0	4	30.8
Subtotal	0			0.0	1	7.7	0	0.0	7	53.8	0	0.0	5	38.5	0	0.0	0	0.0	0	0.0	13	100.0
Male Mean Length	–			–	556	–	–	680	–	–	789	–	–	–	–	–	–	–	–	–	–	
SE	–			–	–	–	–	27	–	–	22	–	–	–	–	–	–	–	–	–	–	
Range	–			–	–	–	–	585–770	–	–	767–810	–	–	–	–	–	–	–	–	–	–	
n	–			–	1	–	–	6	–	–	2	–	–	–	–	–	–	–	–	–	–	
Female Mean Length	–			–	–	–	–	716	–	–	792	–	–	–	–	–	–	–	–	–	–	
SE	–			–	–	–	–	–	–	–	29	–	–	–	–	–	–	–	–	–	–	
Range	–			–	–	–	–	–	–	–	762–850	–	–	–	–	–	–	–	–	–	–	
n	–			–	–	–	–	1	–	–	3	–	–	–	–	–	–	–	–	–	–	
8/6, 8 Dip Net	2			Male	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
		Female	0	0.0	0	0.0	0	0.0	1	50.0	0	0.0	1	50.0	0	0.0	0	0.0	0	0.0	2	100.0
		Subtotal	0	0.0	0	0.0	0	0.0	1	50.0	0	0.0	1	50.0	0	0.0	0	0.0	0	0.0	2	100.0
		Male Mean Length	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		SE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Range	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		n	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Female Mean Length	–	–	–	–	–	793	–	–	860	–	–	–	–	–	–	–	–	–	–	
		SE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		Range	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
		n	–	–	–	–	–	1	–	–	1	–	–	–	–	–	–	–	–	–	–	

-continued-

Sample Dates	Sample Size	Brood Year (Age)														Total										
		2009		2008		2007		2006		2005		2004														
		(1.1)	(1.2)	(2.1)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	N	%												
Total	50	Male	0	0.0	3	6.0	0	0.0	26	52.0	0	0.0	3	6.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	32	64.0
		Female	0	0.0	0	0.0	0	0.0	5	10.0	0	0.0	13	26.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	18	36.0
		Total	0	0.0	3	6.0	0	0.0	31	62.0	0	0.0	16	32.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	50	100.0
		Male Mean Length	–		576	–		699	–		806	–		–	–	–	–	–	–	–	–	–	–	–	–	–
		SE	–		21	–		11	–		21	–		–	–	–	–	–	–	–	–	–	–	–	–	
		Range	–		554–618	–		585–813	–		767–840	–		–	–	–	–	–	–	–	–	–	–	–	–	
		n	–		3	–		26	–		3	–		–	–	–	–	–	–	–	–	–	–	–	–	
		Female Mean Length	–		–	–		756	–		829	–		–	–	–	–	–	–	–	–	–	–	–	–	
		SE	–		–	–		15	–		11	–		–	–	–	–	–	–	–	–	–	–	–	–	
		Range	–		–	–		716–793	–		762–898	–		–	–	–	–	–	–	–	–	–	–	–	–	
	n	–		–	–		5	–		13	–		–	–	–	–	–	–	–	–	–	–	–	–		

APPENDIX B: SUMMER CHUM SALMON

Appendix B1.–Yukon River District 1 summer chum salmon commercial gillnet harvest, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)											
			2009		2008		2007		2006		2005		Total	
			(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	N	%	N	%	N	%	
6/29 Period 1	156	Male	0	0.0	5,988	37.2	2,374	14.7	723	4.5	0	0.0	9,085	56.4
		Female	0	0.0	4,646	28.8	1,858	11.5	516	3.2	0	0.0	7,020	43.6
		Subtotal	0	0.0	10,633	66.0	4,233	26.3	1,239	7.7	0	0.0	16,105	100.0
		Male Mean Length	–		566		585		593		–			
		SE	–		3		6		10		–			
		Range	–		527–618		523–619		541–622		–			
		n	–		58		23		7		–			
		Female Mean Length	–		556		563		557		–			
		SE	–		3		5		8		–			
		Range	–		503–598		524–609		535–574		–			
n	–		45		18		5		–					
7/1 Periods 2, 3	160	Male	0	0.0	10,390	36.3	2,866	10.0	717	2.5	0	0.0	13,972	48.8
		Female	0	0.0	9,673	33.8	4,299	15.0	717	2.5	0	0.0	14,689	51.3
		Subtotal	0	0.0	20,063	70.0	7,165	25.0	1,433	5.0	0	0.0	28,661	100.0
		Male Mean Length	–		562		569		589		–			
		SE	–		3		6		10		–			
		Range	–		517–644		543–627		567–611		–			
		n	–		58		16		4		–			
		Female Mean Length	–		537		556		556		–			
		SE	–		3		4		13		–			
		Range	–		495–582		492–586		530–584		–			
n	–		54		24		4		–					
7/3, 5 Periods 4, 5	157	Male	0	0.0	18,698	44.6	5,610	13.4	1,068	2.5	0	0.0	25,376	60.5
		Female	0	0.0	12,288	29.3	2,671	6.4	1,603	3.8	0	0.0	16,562	39.5
		Subtotal	0	0.0	30,986	73.9	8,281	19.7	2,671	6.4	0	0.0	41,938	100.0
		Male Mean Length	–		555		583		557		–			
		SE	–		2		7		12		–			
		Range	–		496–600		533–655		525–579		–			
		n	–		70		21		4		–			
		Female Mean Length	–		540		564		557		–			
		SE	–		3		7		8		–			
		Range	–		492–605		538–603		524–576		–			
n	–		46		10		6		–					
7/7, 9 Periods 6, 7, 8	156	Male	0	0.0	20,123	37.8	5,457	10.3	682	1.3	0	0.0	26,262	49.4
		Female	0	0.0	19,441	36.5	5,798	10.9	1,705	3.2	0	0.0	26,944	50.6
		Subtotal	0	0.0	39,563	74.4	11,255	21.2	2,387	4.5	0	0.0	53,206	100.0
		Male Mean Length	–		569		584		581		–			
		SE	–		3		6		4		–			
		Range	–		524–622		548–618		577–584		–			
		n	–		59		16		2		–			
		Female Mean Length	–		552		561		562		–			
		SE	–		3		8		19		–			
		Range	–		513–607		488–617		492–599		–			
n	–		57		17		5		–					

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Appendix B1.–Page 2 of 2.

Sample Dates	Sample Size		Brood Year (Age)													
			2009		2008		2007		2006		2005		Total			
			(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	N	%	N	%	N	%			
7/10, 13 Periods 9, 10	158	Male	0	0.0	2,757	25.3	1,172	10.8	345	3.2	0	0.0	4,273	39.2		
		Female	69	0.6	4,825	44.3	1,723	15.8	0	0.0	0	0.0	6,617	60.8		
		Subtotal	69	0.6	7,582	69.6	2,895	26.6	345	3.2	0	0.0	10,890	100.0		
		Male Mean Length	–		554		574		560		–					
		SE	–		4		5		15		–					
		Range	–		519–604		531–611		517–596		–					
		n	–		40		17		5		–					
		Female Mean Length	496		538		559		–		–					
		SE	–		2		5		–		–					
		Range	–		498–590		511–622		–		–					
		n	1		70		25		–		–					
		Season	787	Male	0	0.0	57,956	38.4	17,479	11.6	3,534	2.3	0	0.0	78,969	52.4
				Female	69	0.0	50,872	33.7	16,350	10.8	4,541	3.0	0	0.0	71,831	47.6
Total	69			0.0	108,827	72.2	33,829	22.4	8,075	5.4	0	0.0	150,800	100.0		
Male Mean Length	–				563		580		575		–					
SE	–				1		3		4		–					
Range	–				496–644		523–655		517–622		–					
n	–				285		93		22		–					
Female Mean Length	496				545		561		558		–					
SE	–				2		3		8		–					
Range	–				492–607		488–622		492–599		–					
n	1				272		94		20		–					

Note: All commercial fishing periods were restricted to 6.0 in or smaller mesh gillnets .

Appendix B2.–Yukon River District 2 summer chum salmon commercial gillnet harvest, age and sex composition, 2012.

Sample Dates		Brood Year (Age)										Total	
		2009		2008		2007		2006		2005			
		(0.2)		(0.3)		(0.4)		(0.5)		(0.6)		N	%
		N	%	N	%	N	%	N	%	N	%	N	%
Period 1 ^a	Male	0	0.0	2,731	37.2	1,083	14.7	330	4.5	0	0.0	4,144	56.4
	Female	0	0.0	2,119	28.8	848	11.5	235	3.2	0	0.0	3,202	43.6
	Subtotal	0	0.0	4,850	66.0	1,931	26.3	565	7.7	0	0.0	7,346	100.0
Period 2 ^b	Male	0	0.0	3,396	46.8	872	12.0	92	1.3	0	0.0	4,360	60.1
	Female	0	0.0	2,157	29.7	642	8.9	92	1.3	0	0.0	2,891	39.9
	Subtotal	0	0.0	5,553	76.6	1,514	20.9	184	2.5	0	0.0	7,251	100.0
Period 3 ^c	Male	0	0.0	5,026	37.8	1,363	10.3	170	1.3	0	0.0	6,559	49.4
	Female	0	0.0	4,855	36.5	1,448	10.9	426	3.2	0	0.0	6,729	50.6
	Subtotal	0	0.0	9,881	74.4	2,811	21.2	596	4.5	0	0.0	13,288	100.0
Period 4 ^d	Male	0	0.0	2,990	25.9	1,240	10.8	365	3.2	0	0.0	4,594	39.9
	Female	73	0.6	5,105	44.3	1,458	12.7	292	2.5	0	0.0	6,928	60.1
	Subtotal	73	0.6	8,095	70.3	2,698	23.4	656	5.7	0	0.0	11,522	100.0
Period 5 ^e	Male	0	0.0	1,496	25.3	636	10.8	187	3.2	0	0.0	2,320	39.2
	Female	37	0.6	2,619	44.3	935	15.8	0	0.0	0	0.0	3,591	60.8
	Subtotal	37	0.6	4,115	69.6	1,571	26.6	187	3.2	0	0.0	5,911	100.0
Total ^f	Male	0	0.0	20,659	36.2	6,741	11.8	1,595	2.8	0	0.0	28,996	50.8
	Female	72	0.1	19,717	34.6	6,814	11.9	1,450	2.5	0	0.0	28,053	49.2
	Subtotal	72	0.1	40,376	70.8	13,555	23.8	3,045	5.3	0	0.0	57,049	100.0

Note: All commercial fishing periods were restricted to 6.0 in or smaller mesh gillnets.

- ^a Age and sex proportions from District 1 Period 1 samples were applied to the harvest of this period to estimate composition.
- ^b Age and sex proportions from District 1 Periods 5 and 7 samples were applied to the harvest of this period to estimate composition.
- ^c Age and sex proportions from District 1 Periods 7 and 8 samples were applied to the harvest of this period to estimate composition.
- ^d Age and sex proportions from District 1 Periods 8 and 9 samples were applied to the harvest of this period to estimate composition.
- ^e Age and sex proportions from District 1 Periods 9 and 10 samples were applied to the harvest of this period to estimate composition.
- ^f Age and sex proportions from all District 1 samples were applied to the total harvest to estimate composition.

Appendix B3.–Yukon River Subdistrict 4-A summer chum salmon commercial fish wheel harvest, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)											
			2009		2008		2007		2006		2005		Total	
			(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	N	%	N	%	N	%	
7/8–10 Periods 7, 8, 9	77	Male	0	0.0	1,332	11.7	444	3.9	0	0.0	0	0.0	1,776	15.6
		Female	0	0.0	7,547	66.2	1,776	15.6	296	2.6	0	0.0	9,618	84.4
		Subtotal	0	0.0	8,878	77.9	2,220	19.5	296	2.6	0	0.0	11,394	100.0
		Male Mean Length	–		563		600		–		–			
		SE	–		9		11		–		–			
		Range	–		511–613		578–616		–		–			
		n	–		9		3		–		–			
		Female Mean Length	–		535		537		544		–			
		SE	–		4		9		5		–			
		Range	–		481–633		502–606		539–549		–			
		n	–		51		12		2		–			
7/11–13 Periods 10, 11, 12	79	Male	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
		Female	0	0.0	10,478	84.8	1,720	13.9	156	1.3	0	0.0	12,355	100.0
		Subtotal	0	0.0	10,478	84.8	1,720	13.9	156	1.3	0	0.0	12,355	100.0
		Male Mean Length	–		–		–		–		–			
		SE	–		–		–		–		–			
		Range	–		–		–		–		–			
		n	–		–		–		–		–			
		Female Mean Length	–		522		538		519		–			
		SE	–		3		7		–		–			
		Range	–		475–581		507–572		–		–			
		n	–		67		11		1		–			
7/14–16, 18–20, 22–24 Period 13	219	Male	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
		Female	386	0.5	69,044	81.7	12,729	15.1	2,314	2.7	0	0.0	84,473	100.0
		Subtotal	386	0.5	69,044	81.7	12,729	15.1	2,314	2.7	0	0.0	84,473	100.0
		Male Mean Length	–		–		–		–		–			
		SE	–		–		–		–		–			
		Range	–		–		–		–		–			
		n	–		–		–		–		–			
		Female Mean Length	497		522		537		550		–			
		SE	–		2		5		10		–			
		Range	–		444–582		472–588		519–581		–			
		n	1		179		33		6		–			
Season	375	Male	0	0.0	1,332	1.2	444	0.4	0	0.0	0	0.0	1,776	1.6
		Female	386	0.4	87,069	80.5	16,225	15.0	2,767	2.6	0	0.0	106,446	98.4
		Total	386	0.4	88,401	81.7	16,669	15.4	2,767	2.6	0	0.0	108,222	100.0
		Male Mean Length	–		563		600		–		–			
		SE	–		9		11		–		–			
		Range	–		511–613		578–616		–		–			
		n	–		9		3		–		–			
		Female Mean Length	497		524		537		546		–			
		SE	–		1		4		8		–			
		Range	–		444–633		472–606		519–581		–			
		n	1		297		56		9		–			

Note: Period 7 is only period that males were bought.

Appendix B4.–Yukon River District 6 summer chum salmon commercial fish wheel harvest, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)										Total	
			2009		2008		2007		2006		2005			
			(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	N	%	N	%	N	%	N
7/24 Periods 1, 2	96	Male	0	0.0	198	22.9	135	15.6	9	1.0	0	0.0	342	39.6
		Female	0	0.0	333	38.5	180	20.8	9	1.0	0	0.0	521	60.4
		Subtotal	0	0.0	530	61.5	315	36.5	18	2.1	0	0.0	863	100.0
		Male Mean Length	–		570		595		592		–			
		SE	–		6		6		–		–			
		Range	–		525–623		558–644		–		–			
		n	–		22		15		1		–			
		Female Mean Length	–		560		576		550		–			
		SE	–		4		5		–		–			
		Range	–		492–611		548–622		–		–			
		n	–		37		20		1		–			
		8/4, 12 Periods 4, 6	116	Male	0	0.0	729	27.6	159	6.0	0	0.0	0	0.0
Female	68			2.6	1,321	50.0	342	12.9	23	0.9	0	0.0	1,753	66.4
Subtotal	68			2.6	2,049	77.6	501	19.0	23	0.9	0	0.0	2,641	100.0
Male Mean Length	–				567		618		–		–			
SE	–				7		14		–		–			
Range	–				495–681		587–693		–		–			
n	–				32		7		–		–			
Female Mean Length	508				538		559		559		–			
SE	18				3		7		–		–			
Range	474–534				491–587		517–617		–		–			
n	3				58		15		1		–			
Season	212			Male	0	0	926	26.44	294	8.4	9	0.26	0	0.0
		Female	68	1.95	1,653	47.18	521	14.9	32	0.91	0	0.0	2,274	64.9
		Total	68	1.95	2,579	73.61	816	23.3	41	1.16	0	0.0	3,504	100.0
		Male Mean Length	–		568		613		592		–			
		SE	–		5		11		–		–			
		Range	–		495–681		558–693		–		–			
		n	–		54		22		1		–			
		Female Mean Length	508		544		563		557		–			
		SE	18		3		5		–		–			
		Range	474–534		491–611		517–622		550–559		–			
		n	3		95		35		2		–			

Note: Fish were only harvested during Periods 1, 2, 4, and 6.

Appendix B5.–Coastal District Dall Point test fishery summer chum salmon 5.5 in mesh drift gillnet, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)												
			2009		2008		2007		2006		2005		Total		
			(0.2)		(0.3)		(0.4)		(0.5)		(0.6)		N	%	
6/16–19 Quartile 1	109	Male	0	0.0	38	34.9	19	17.4	5	4.6	0	0.0	62	56.9	
		Female	0	0.0	23	21.1	20	18.3	4	3.7	0	0.0	47	43.1	
		Subtotal	0	0.0	61	56.0	39	35.8	9	8.3	0	0.0	109	100.0	
		Male Mean Length	–		560		583		593		–				
		SE	–		4		8		13		–				
		Range	–		505–610		526–667		544–619		–				
		n	–		38		19		5		–				
		Female Mean Length	–		552		571		561		–				
		SE	–		5		6		11		–				
		Range	–		505–592		521–627		530–584		–				
		n	–		23		20		4		–				
6/21–23, 25–26 Quartile 2	114	Male	0	0.0	52	45.6	19	16.7	4	3.5	0	0.0	75	65.8	
		Female	0	0.0	20	17.5	14	12.3	5	4.4	0	0.0	39	34.2	
		Subtotal	0	0.0	72	63.2	33	28.9	9	7.9	0	0.0	114	100.0	
		Male Mean Length	–		561		599		598		–				
		SE	–		3		7		14		–				
		Range	–		508–612		537–651		568–633		–				
		n	–		52		19		4		–				
		Female Mean Length	–		552		573		581		–				
		SE	–		6		6		21		–				
		Range	–		503–636		517–619		539–651		–				
		n	–		20		14		5		–				
6/27–7/1 Quartile 3	105	Male	0	0.0	46	43.8	21	20.0	3	2.9	0	0.0	70	66.7	
		Female	0	0.0	17	16.2	15	14.3	3	2.9	0	0.0	35	33.3	
		Subtotal	0	0.0	63	60.0	36	34.3	6	5.7	0	0.0	105	100.0	
		Male Mean Length	–		572		592		607		–				
		SE	–		4		8		1		–				
		Range	–		518–643		496–664		606–608		–				
		n	–		46		21		3		–				
		Female Mean Length	–		550		571		568		–				
		SE	–		5		4		9		–				
		Range	–		521–585		536–591		555–585		–				
		n	–		17		15		3		–				
7/3–6, 9 Quartile 4	103	Male	0	0.0	39	37.9	18	17.5	2	1.9	0	0.0	59	57.3	
		Female	0	0.0	30	29.1	12	11.7	2	1.9	0	0.0	44	42.7	
		Subtotal	0	0.0	69	67.0	30	29.1	4	3.9	0	0.0	103	100.0	
		Male Mean Length	–		566		595		550		–				
		SE	–		4		8		10		–				
		Range	–		490–616		538–651		540–560		–				
		n	–		39		18		2		–				
		Female Mean Length	–		549		573		555		–				
		SE	–		4		8		7		–				
		Range	–		510–607		538–630		548–561		–				
		n	–		30		12		2		–				

Appendix B6.–Lower Yukon River test fishery (Big Eddy site) summer chum salmon 5.5 in mesh drift gillnet, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)												
			2009		2008		2007		2006		2005		Total		
			(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	N	%	N	%	N	%		
6/9–10, 13–22 Quartile 1	299	Male	0	0.0	86	28.8	55	18.4	11	3.7	0	0.0	152	50.8	
		Female	0	0.0	68	22.7	65	21.7	14	4.7	0	0.0	147	49.2	
		Subtotal	0	0.0	154	51.5	120	40.1	25	8.4	0	0.0	299	100.0	
		Male Mean Length	–		569		595		586		–				
		SE	–		3		4		11		–				
		Range	–		510–623		523–651		531–631		–				
		n	–		86		55		11		–				
		Female Mean Length	–		548		564		564		–				
		SE	–		2		3		7		–				
		Range	–		509–603		506–612		521–618		–				
		n	–		68		65		14		–				
6/23–30 Quartile 2	238	Male	0	0.0	76	31.9	27	11.3	1	0.4	0	0.0	104	43.7	
		Female	0	0.0	99	41.6	27	11.3	8	3.4	0	0.0	134	56.3	
		Subtotal	0	0.0	175	73.5	54	22.7	9	3.8	0	0.0	238	100.0	
		Male Mean Length	–		556		590		558		–				
		SE	–		3		6		–		–				
		Range	–		507–630		531–649		–		–				
		n	–		76		27		1		–				
		Female Mean Length	–		541		561		569		–				
		SE	–		2		4		7		–				
		Range	–		502–600		530–625		543–603		–				
		n	–		99		27		8		–				
7/1–5 Quartile 3	148	Male	0	0.0	51	34.5	13	8.8	3	2.0	0	0.0	67	45.3	
		Female	0	0.0	57	38.5	16	10.8	8	5.4	0	0.0	81	54.7	
		Subtotal	0	0.0	108	73.0	29	19.6	11	7.4	0	0.0	148	100.0	
		Male Mean Length	–		552		578		580		–				
		SE	–		3		7		18		–				
		Range	–		504–604		547–631		551–614		–				
		n	–		51		13		3		–				
		Female Mean Length	–		536		551		542		–				
		SE	–		3		5		10		–				
		Range	–		491–589		526–600		516–598		–				
		n	–		57		16		8		–				
7/6–15 Quartile 4	274	Male	0	0.0	86	31.4	16	5.8	2	0.7	0	0.0	104	38.0	
		Female	0	0.0	121	44.2	41	15.0	8	2.9	0	0.0	170	62.0	
		Subtotal	0	0.0	207	75.5	57	20.8	10	3.6	0	0.0	274	100.0	
		Male Mean Length	–		554		572		571		–				
		SE	–		3		6		23		–				
		Range	–		490–624		510–610		548–593		–				
		n	–		86		16		2		–				
		Female Mean Length	–		540		550		561		–				
		SE	–		2		4		6		–				
		Range	–		473–610		502–622		540–589		–				
		n	–		121		41		8		–				

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Sample Dates	Sample Size	Brood Year (Age)										Total		
		2009		2008		2007		2006		2005				
		(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	N	%	N	%	N	%	N	%
Total	959	Male	0	0.0	299	31.2	111	11.6	17	1.8	0	0.0	427	44.5
		Female	0	0.0	345	36.0	149	15.5	38	4.0	0	0.0	532	55.5
		Total	0	0.0	644	67.2	260	27.1	55	5.7	0	0.0	959	100.0
		Male Mean Length	–		559		588		582		–			
		SE	–		1		3		8		–			
		Range	–		490–630		510–651		531–631		–			
		n	–		299		111		17		–			
		Female Mean Length	–		541		558		560		–			
		SE	–		1		2		4		–			
		Range	–		473–610		502–625		516–618		–			
		n	–		345		149		38		–			

Appendix B7.–Lower Yukon River test fishery (Middle Mouth site) summer chum salmon 5.5 in mesh drift gillnet, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)												
			2009		2008		2007		2006		2005		Total		
			(0.2)	(0.3)	(0.4)	(0.5)	(0.6)			N	%	N	%		
6/14–22 Quartile 1	150	Male	0	0.0	42	28.0	22	14.7	3	2.0	0	0.0	67	44.7	
		Female	0	0.0	32	21.3	45	30.0	6	4.0	0	0.0	83	55.3	
		Subtotal	0	0.0	74	49.3	67	44.7	9	6.0	0	0.0	150	100.0	
		Male Mean Length	–		570		593		572		–				
		SE	–		4		6		11		–				
		Range	–		510–610		552–650		554–591		–				
		n	–		42		22		3		–				
		Female Mean Length	–		549		568		578		–				
		SE	–		3		3		8		–				
		Range	–		514–577		516–598		555–604		–				
		n	–		32		45		6		–				
6/23–30 Quartile 2	169	Male	0	0.0	61	36.1	14	8.3	2	1.2	0	0.0	77	45.6	
		Female	0	0.0	67	39.6	22	13.0	3	1.8	0	0.0	92	54.4	
		Subtotal	0	0.0	128	75.7	36	21.3	5	3.0	0	0.0	169	100.0	
		Male Mean Length	–		556		566		591		–				
		SE	–		3		8		11		–				
		Range	–		510–676		496–609		580–602		–				
		n	–		61		14		2		–				
		Female Mean Length	–		546		562		572		–				
		SE	–		2		5		8		–				
		Range	–		514–588		537–603		558–586		–				
		n	–		67		22		3		–				
7/1–5 Quartile 3	117	Male	0	0.0	40	34.2	7	6.0	2	1.7	0	0.0	49	41.9	
		Female	0	0.0	54	46.2	11	9.4	3	2.6	0	0.0	68	58.1	
		Subtotal	0	0.0	94	80.3	18	15.4	5	4.3	0	0.0	117	100.0	
		Male Mean Length	–		551		584		547		–				
		SE	–		4		13		22		–				
		Range	–		511–599		554–659		525–569		–				
		n	–		40		7		2		–				
		Female Mean Length	–		543		565		579		–				
		SE	–		2		5		1		–				
		Range	–		500–581		530–591		577–582		–				
		n	–		54		11		3		–				
7/6–15 Quartile 4	181	Male	0	0.0	53	29.3	5	2.8	5	2.8	0	0.0	63	34.8	
		Female	0	0.0	90	49.7	22	12.2	6	3.3	0	0.0	118	65.2	
		Subtotal	0	0.0	143	79.0	27	14.9	11	6.1	0	0.0	181	100.0	
		Male Mean Length	–		558		586		582		–				
		SE	–		3		15		13		–				
		Range	–		496–620		556–624		546–625		–				
		n	–		53		5		5		–				
		Female Mean Length	–		541		560		574		–				
		SE	–		2		5		10		–				
		Range	–		493–591		527–603		538–600		–				
		n	–		90		22		6		–				

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Appendix B7.–Page 2 of 2.

Sample Dates	Sample Size		Brood Year (Age)											
			2009		2008		2007		2006		2005		Total	
			(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	N	%	N	%	N	%	
Total	617	Male	0	0.0	196	31.8	48	7.8	12	1.9	0	0.0	256	41.5
		Female	0	0.0	243	39.4	100	16.2	18	2.9	0	0.0	361	58.5
		Total	0	0.0	439	71.2	148	24.0	30	4.9	0	0.0	617	100.0
		Male Mean Length	–		559		583		575		–			
		SE	–		2		4		8		–			
		Range	–		496–676		496–659		525–625		–			
		n	–		196		48		12		–			
		Female Mean Length	–		544		565		576		–			
		SE	–		1		2		4		–			
		Range	–		493–591		516–603		538–604		–			
		n	–		243		100		18		–			

Appendix B8.–Lower Yukon River test fishery (combined Big Eddy and Middle Mouth sites) summer chum salmon 5.5 in mesh drift gillnet, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)										Total		
			2009		2008		2007		2006		2005				
			(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	N	%	N	%	N	%	N	%
6/9–10, 13–22 Quartile 1	449	Male	0	0.0	128	28.5	77	17.1	14	3.1	0	0.0	219	48.8	
		Female	0	0.0	100	22.3	110	24.5	20	4.5	0	0.0	230	51.2	
		Subtotal	0	0.0	228	50.8	187	41.6	34	7.6	0	0.0	449	100.0	
		Male Mean Length	–		570		594		583		–				
		SE	–		2		3		9		–				
		Range	–		510–623		523–651		531–631		–				
		n	–		128		77		14		–				
		Female Mean Length	–		548		566		568		–				
		SE	–		2		2		6		–				
		Range	–		509–603		506–612		521–618		–				
		n	–		100		110		20		–				
		6/23–30 Quartile 2	407	Male	0	0.0	137	33.7	41	10.1	3	0.7	0	0.0	181
Female	0			0.0	166	40.8	49	12.0	11	2.7	0	0.0	226	55.5	
Subtotal	0			0.0	303	74.4	90	22.1	14	3.4	0	0.0	407	100.0	
Male Mean Length	–				556		582		580		–				
SE	–				2		5		13		–				
Range	–				507–676		496–649		558–602		–				
n	–				137		41		3		–				
Female Mean Length	–				543		562		570		–				
SE	–				1		3		5		–				
Range	–				502–600		530–625		543–603		–				
n	–				166		49		11		–				
7/1–5 Quartile 3	265			Male	0	0.0	91	34.3	20	7.5	5	1.9	0	0.0	116
		Female	0	0.0	111	41.9	27	10.2	11	4.2	0	0.0	149	56.2	
		Subtotal	0	0.0	202	76.2	47	17.7	16	6.0	0	0.0	265	100.0	
		Male Mean Length	–		552		580		567		–				
		SE	–		2		6		15		–				
		Range	–		504–604		547–659		525–614		–				
		n	–		91		20		5		–				
		Female Mean Length	–		539		557		552		–				
		SE	–		2		4		9		–				
		Range	–		491–589		526–600		516–598		–				
		n	–		111		27		11		–				
		7/6–15 Quartile 4	455	Male	0	0.0	139	30.5	21	4.6	7	1.5	0	0.0	167
Female	0			0.0	211	46.4	63	13.8	14	3.1	0	0.0	288	63.3	
Subtotal	0			0.0	350	76.9	84	18.5	21	4.6	0	0.0	455	100.0	
Male Mean Length	–				555		576		578		–				
SE	–				2		6		10		–				
Range	–				490–624		510–624		546–625		–				
n	–				139		21		7		–				
Female Mean Length	–				541		554		567		–				
SE	–				1		3		6		–				
Range	–				473–610		502–622		538–600		–				
n	–				211		63		14		–				

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Appendix B8.–Page 2 of 2.

Sample Dates	Sample Size	Brood Year (Age)										Total		
		2009 (0.2)		2008 (0.3)		2007 (0.4)		2006 (0.5)		2005 (0.6)				
		N	%	N	%	N	%	N	%	N	%	N	%	
Total	1,576	Male	0	0.0	495	31.4	159	10.1	29	1.8	0	0.0	683	43.3
		Female	0	0.0	588	37.3	249	15.8	56	3.6	0	0.0	893	56.7
		Total	0	0.0	1,083	68.7	408	25.9	85	5.4	0	0.0	1,576	100.0
		Male Mean Length	–		559		587		579		–			
		SE	–		1		2		6		–			
		Range	–		490–676		496–659		525–631		–			
		n	–		495		159		29		–			
		Female Mean Length	–		542		561		565		–			
		SE	–		1		2		3		–			
		Range	–		473–610		502–625		516–618		–			
		n	–		588		249		56		–			

Appendix B9.–Andreafsky River (East Fork) weir summer chum salmon escapement, age and sex composition, and mean length (mm), 2012.

Sample Dates (Strata Dates)	Sample Size		Brood Year (Age)													
			2009		2008		2007		2006		2005		Total			
			(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	N	%	N	%	N	%			
7/1–4 (6/30–7/6)	151	Male	0	0.0	7,845	33.1	5,021	21.2	941	4.0	0	0.0	13,807	58.3		
		Female	157	0.7	5,962	25.2	3,452	14.6	314	1.3	0	0.0	9,885	41.7		
		Subtotal	157	0.7	13,807	58.3	8,473	35.8	1,255	5.3	0	0.0	23,692	100.0		
		Male Mean Length	–		565		594		602		–					
		SE	–		4		5		17		–					
		Range	–		479–625		540–670		548–652		–					
		n	–		50		32		6		–					
		Female Mean Length	452		527		549		569		–					
		SE	–		3		6		21		–					
		Range	–		488–574		491–593		548–590		–					
		n	1		38		22		2		–					
		7/8–11 (7/7–13)	152	Male	102	0.7	4,813	30.9	1,741	11.2	614	3.9	0	0.0	7,270	46.7
				Female	0	0.0	6,656	42.8	1,536	9.9	102	0.7	0	0.0	8,295	53.3
Subtotal	102			0.7	11,469	73.7	3,277	21.1	717	4.6	0	0.0	15,565	100.0		
Male Mean Length	539				546		569		586		–					
SE	–				7		8		18		–					
Range	–				479–785		490–610		510–628		–					
n	1				47		17		6		–					
Female Mean Length	–				514		538		530		–					
SE	–				3		7		–		–					
Range	–				448–573		497–592		–		–					
n	–				65		15		1		–					
7/15–18 (7/14–20)	154			Male	0	0.0	4,802	40.9	1,372	11.7	76	0.6	0	0.0	6,250	53.2
				Female	76	0.6	4,802	40.9	610	5.2	0	0.0	0	0.0	5,488	46.8
		Subtotal	76	0.6	9,604	81.8	1,982	16.9	76	0.6	0	0.0	11,738	100.0		
		Male Mean Length	–		543		568		573		–					
		SE	–		4		10		–		–					
		Range	–		482–605		499–625		–		–					
		n	–		63		18		1		–					
		Female Mean Length	533		517		540		–		–					
		SE	–		4		11		–		–					
		Range	–		436–578		498–583		–		–					
		n	1		63		8		–		–					
		7/22–26 (7/21–8/1)	149	Male	0	0.0	1,717	30.2	534	9.4	114	2.0	0	0.0	2,366	41.6
				Female	0	0.0	2,594	45.6	649	11.4	76	1.3	0	0.0	3,319	58.4
Subtotal	0			0.0	4,311	75.8	1,183	20.8	191	3.4	0	0.0	5,685	100.0		
Male Mean Length	–				550		551		607		–					
SE	–				5		11		7		–					
Range	–				471–631		470–605		598–620		–					
n	–				45		14		3		–					
Female Mean Length	–				512		520		546		–					
SE	–				3		7		14		–					
Range	–				447–580		478–571		532–559		–					
n	–				68		17		2		–					

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Appendix B9.–Page 2 of 2.

Sample Dates (Strata Dates)	Sample Size	Brood Year (Age)												
		2009		2008		2007		2006		2005		Total		
		N	%	N	%	N	%	N	%	N	%	N	%	
Season	606	Male	102	0.2	19,177	33.8	8,668	15.3	1,746	3.1	0	0.0	29,693	52.4
		Female	233	0.4	20,015	35.3	6,246	11.0	493	0.9	0	0.0	26,987	47.6
		Total	336	0.6	39,191	69.1	14,914	26.3	2,239	4.0	0	0.0	56,680	100.0
		Male Mean Length	539		554		578		592		–			
		SE	–		3		4		11		–			
		Range	–		471–785		470–670		510–652		–			
		n	1		205		81		16		–			
		Female Mean Length	479		520		541		553		–			
		SE	–		2		4		17		–			
		Range	452–533		436–580		478–593		530–590		–			
		n	2		234		62		5		–			

Appendix B10.—Anvik River sonar summer chum salmon escapement, age and sex composition, and mean length (mm), 2012.

Sample Dates (Strata Dates)	Sample Size		Brood Year (Age)													
			2009		2008		2007		2006		2005		Total			
			(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	N	%	N	%	N	%			
6/29; 7/2 (6/18–7/4)	100	Male	975	1.0	27,307	28.0	28,282	29.0	3,901	4.0	0	0.0	60,465	62.0		
		Female	0	0.0	19,505	20.0	14,629	15.0	2,926	3.0	0	0.0	37,059	38.0		
		Subtotal	975	1.0	46,812	48.0	42,911	44.0	6,827	7.0	0	0.0	97,524	100.0		
		Male Mean Length	540		580		614		629		–					
		SE	–		6		7		8		–					
		Range	–		530–650		540–690		610–650		–					
		n	1		28		29		4		–					
		Female Mean Length	–		556		576		555		–					
		SE	–		6		10		22		–					
		Range	–		490–610		500–650		520–595		–					
		n	–		20		15		3		–					
		7/6–8 (7/5–10)	132	Male	0	0.0	38,200	23.5	20,948	12.9	4,929	3.0	0	0.0	64,077	39.4
				Female	2,464	1.5	66,541	40.9	27,109	16.7	2,464	1.5	0	0.0	98,579	60.6
Subtotal	2,464			1.5	104,741	64.4	48,057	29.5	7,393	4.5	0	0.0	162,656	100.0		
Male Mean Length	–				580		594		591		–					
SE	–				8		9		5		–					
Range	–				510–688		535–650		580–605		–					
n	–				31		17		4		–					
Female Mean Length	508				535		554		545		–					
SE	18				3		6		30		–					
Range	490–525				480–590		500–620		515–575		–					
n	2				54		22		2		–					
7/12–13, 19– 20 (7/11–26)	190			Male	0	0.0	62,459	27.9	27,105	12.1	0	0.0	0	0.0	89,564	40.0
				Female	0	0.0	108,420	48.4	23,569	10.5	2,357	1.1	0	0.0	134,346	60.0
		Subtotal	0	0.0	170,879	76.3	50,674	22.6	2,357	1.1	0	0.0	223,910	100.0		
		Male Mean Length	–		574		585		–		–					
		SE	–		4		8		–		–					
		Range	–		500–680		520–645		–		–					
		n	–		53		23		–		–					
		Female Mean Length	–		531		552		535		–					
		SE	–		3		6		25		–					
		Range	–		480–590		520–610		510–560		–					
		n	–		92		20		2		–					
		Season	422	Male	975	0.2	127,965	26.4	76,335	15.8	8,830	1.8	0	0.0	214,105	44.2
				Female	2,464	0.5	194,465	40.2	65,307	13.5	7,747	1.6	0	0.0	269,985	55.8
Total	3,440			0.7	322,431	66.6	141,642	29.3	16,577	3.4	0	0.0	484,090	100.0		
Male Mean Length	540				577		594		605		–					
SE	–				3		5		4		–					
Range	–				500–688		520–690		580–650		–					
n	1				112		69		8		–					
Female Mean Length	508				537		557		542		–					
SE	18				2		4		16		–					
Range	490–525				480–610		500–650		510–595		–					
n	2				166		57		7		–					

Appendix B11.–Gisasa River weir summer chum salmon escapement, age and sex composition, and mean length (mm), 2012.

Sample Dates (Strata Dates)	Sample Size		Brood Year (Age)											
			2009		2008		2007		2006		2005		Total	
			(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	N	%	N	%	N	%	
6/28–7/4 (6/20–7/6)	218	Male	0	0.0	6,301	41.7	3,324	22.0	623	4.1	0	0.0	10,248	67.9
		Female	0	0.0	2,700	17.9	1,800	11.9	346	2.3	0	0.0	4,847	32.1
		Subtotal	0	0.0	9,002	59.6	5,124	33.9	969	6.4	0	0.0	15,095	100.0
		Male Mean Length	–		572		591		596		–			
		SE	–		3		5		10		–			
		Range	–		500–635		520–660		530–625		–			
		n	–		91		48		9		–			
		Female Mean Length	–		549		567		569		–			
		SE	–		4		4		12		–			
		Range	–		500–600		515–610		535–600		–			
		n	–		39		26		5		–			
7/8–11 (7/7–13)	140	Male	0	0.0	9,513	33.6	2,226	7.9	202	0.7	0	0.0	11,942	42.1
		Female	0	0.0	12,144	42.9	4,048	14.3	202	0.7	0	0.0	16,394	57.9
		Subtotal	0	0.0	21,657	76.4	6,274	22.1	405	1.4	0	0.0	28,336	100.0
		Male Mean Length	–		567		585		595		–			
		SE	–		5		9		–		–			
		Range	–		500–660		540–630		–		–			
		n	–		47		11		1		–			
		Female Mean Length	–		533		543		575		–			
		SE	–		4		6		–		–			
		Range	–		470–625		500–585		–		–			
		n	–		60		20		1		–			
7/15–18 (7/14–20)	128	Male	0	0.0	9,169	40.6	1,234	5.5	0	0.0	0	0.0	10,403	46.1
		Female	176	0.8	10,579	46.9	1,411	6.3	0	0.0	0	0.0	12,166	53.9
		Subtotal	176	0.8	19,748	87.5	2,645	11.7	0	0.0	0	0.0	22,569	100.0
		Male Mean Length	–		554		576		–		–			
		SE	–		5		10		–		–			
		Range	–		480–680		545–620		–		–			
		n	–		52		7		–		–			
		Female Mean Length	460		522		550		–		–			
		SE	–		4		9		–		–			
		Range	–		460–605		515–605		–		–			
		n	1		60		8		–		–			
7/22–25, 29– 30 (7/21–30)	201	Male	0	0.0	5,548	31.8	1,214	7.0	0	0.0	0	0.0	6,761	38.8
		Female	0	0.0	9,622	55.2	953	5.5	87	0.5	0	0.0	10,662	61.2
		Subtotal	0	0.0	15,169	87.1	2,167	12.4	87	0.5	0	0.0	17,423	100.0
		Male Mean Length	–		553		576		–		–			
		SE	–		4		8		–		–			
		Range	–		460–630		515–655		–		–			
		n	–		64		14		–		–			
		Female Mean Length	–		516		544		570		–			
		SE	–		3		11		–		–			
		Range	–		435–580		480–595		–		–			
		n	–		111		11		1		–			

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Appendix B11.–Page 2 of 2.

Sample Dates (Strata Dates)	Sample Size	Brood Year (Age)												
		2009		2008		2007		2006		2005		Total		
		(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	N		%					
Season	687	Male	0	0.0	30,530	36.6	7,998	9.6	826	1.0	0	0.0	39,354	47.2
		Female	176	0.2	35,045	42.0	8,212	9.8	635	0.8	0	0.0	44,069	52.8
		Total	176	0.2	65,576	78.6	16,210	19.4	1,461	1.8	0	0.0	83,423	100.0
		Male Mean Length	–		562		582		595		–			
		SE	–		2		4		10		–			
		Range	–		460–680		515–660		530–625		–			
		n	–		254		80		10		–			
		Female Mean Length	460		529		549		572		–			
		SE	–		2		4		12		–			
		Range	–		435–625		480–610		535–600		–			
		n	1		270		65		7		–			

Appendix B12.–Henshaw Creek weir summer chum salmon escapement, age and sex composition, and mean length (mm), 2012.

Sample Dates (Strata Dates)	Sample Size		Brood Year (Age)											
			2009 (0.2)		2008 (0.3)		2007 (0.4)		2006 (0.5)		2005 (0.6)		Total	
			N	%	N	%	N	%	N	%	N	%	N	%
7/10, 12, 15–16 (6/24–7/17)	136	Male	764	0.7	52,699	50.7	12,984	12.5	1,528	1.5	0	0.0	67,974	65.4
		Female	0	0.0	28,259	27.2	5,346	5.1	2,291	2.2	0	0.0	35,896	34.6
		Subtotal	764	0.7	80,958	77.9	18,330	17.6	3,819	3.7	0	0.0	103,870	100.0
		Male Mean Length	503		565		584		603		–			
		SE	–		3		6		12		–			
		Range	–		505–625		537–613		591–615		–			
		n	1		69		17		2		–			
		Female Mean Length	–		554		558		572		–			
		SE	–		4		3		14		–			
		Range	–		490–608		540–565		557–600		–			
		n	–		37		7		3		–			
7/19–21, 23 (7/18–23)	127	Male	0	0.0	31,444	34.6	5,003	5.5	715	0.8	0	0.0	37,162	40.9
		Female	1,429	1.6	43,593	48.0	7,861	8.7	715	0.8	0	0.0	53,598	59.1
		Subtotal	1,429	1.6	75,038	82.7	12,864	14.2	1,429	1.6	0	0.0	90,760	100.0
		Male Mean Length	–		560		573		571		–			
		SE	–		4		10		–		–			
		Range	–		521–645		540–610		–		–			
		n	–		44		7		1		–			
		Female Mean Length	515		540		548		573		–			
		SE	5		3		11		–		–			
		Range	510–520		477–595		469–610		–		–			
		n	2		61		11		1		–			
7/24, 26–27, 29 (7/24–29)	97	Male	0	0.0	17,439	27.8	3,229	5.2	0	0.0	0	0.0	20,669	33.0
		Female	0	0.0	40,046	63.9	1,938	3.1	0	0.0	0	0.0	41,983	67.0
		Subtotal	0	0.0	57,485	91.8	5,167	8.2	0	0.0	0	0.0	62,652	100.0
		Male Mean Length	–		555		563		–		–			
		SE	–		5		7		–		–			
		Range	–		520–641		545–587		–		–			
		n	–		27		5		–		–			
		Female Mean Length	–		523		520		–		–			
		SE	–		4		38		–		–			
		Range	–		426–593		457–588		–		–			
		n	–		62		3		–		–			
7/30; 8/1, 3 (7/30–8/4)	118	Male	0	0.0	12,976	37.3	590	1.7	0	0.0	0	0.0	13,566	39.0
		Female	295	0.8	19,169	55.1	1,769	5.1	0	0.0	0	0.0	21,234	61.0
		Subtotal	295	0.8	32,146	92.4	2,359	6.8	0	0.0	0	0.0	34,800	100.0
		Male Mean Length	–		555		575		–		–			
		SE	–		4		35		–		–			
		Range	–		495–665		540–610		–		–			
		n	–		44		2		–		–			
		Female Mean Length	503		544		549		–		–			
		SE	–		3		18		–		–			
		Range	–		485–612		515–632		–		–			
		n	1		65		6		–		–			

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Appendix B12.–Page 2 of 2.

Sample Dates (Strata Dates)	Sample Size		Brood Year (Age)											
			2009		2008		2007		2006		2005		Total	
			(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	(0.7)	(0.8)	(0.9)	(1.0)	(1.1)	(1.2)	
			N	%	N	%	N	%	N	%	N	%	N	%
Season	478	Male	764	0.3	114,559	39.2	21,806	7.5	2,242	0.8	0	0.0	139,370	47.7
		Female	1,724	0.6	131,067	44.9	16,915	5.8	3,006	1.0	0	0.0	152,712	52.3
		Total	2,488	0.9	245,626	84.1	38,720	13.3	5,248	1.8	0	0.0	292,082	100.0
		Male Mean Length	503		560		575		588		–			
		SE	–		2		6		12		–			
		Range	–		495–665		537–613		571–615		–			
		n	1		184		31		3		–			
		Female Mean Length	512		542		546		572		–			
		SE	5		2		9		14		–			
		Range	503–520		426–612		457–632		557–600		–			
		n	3		225		27		4		–			

Appendix B13.–Salcha River carcass survey summer chum salmon escapement, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)										Total	
			2009		2008		2007		2006		2005			
			(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	N	%	N	%	N	%	N
8/20, 30	159	Male	0	0.0	31	19.5	19	11.9	5	3.1	0	0.0	55	34.6
		Female	2	1.3	71	44.7	28	17.6	3	1.9	0	0.0	104	65.4
		Total	2	1.3	102	64.2	47	29.6	8	5.0	0	0.0	159	100.0
		Male Mean Length	–		547		590		634		–			
		SE	–		4		6		15		–			
		Range	–		505–605		541–645		595–670		–			
		n	–		31		19		5		–			
		Female Mean Length	510		528		562		588		–			
		SE	15		3		5		10		–			
		Range	495–525		470–590		500–620		570–605		–			
		n	2		71		28		3		–			

Note: Ages determined from vertebrae.

APPENDIX C: FALL CHUM SALMON

Appendix C1.–Yukon River District 1 fall chum salmon commercial gillnet harvest, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)											
			2009		2008		2007		2006		2005		Total	
			(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	N	%	N	%	N	%	
7/16, 19 Periods 1, 2	158	Male	0	0.0	8,715	31.6	2,615	9.5	697	2.5	0	0.0	12,027	43.7
		Female	0	0.0	11,853	43.0	3,312	12.0	349	1.3	0	0.0	15,513	56.3
		Subtotal	0	0.0	20,568	74.7	5,926	21.5	1,046	3.8	0	0.0	27,540	100.0
		Male Mean Length	–		559		590		590		–			
		SE	–		3		6		6		–			
		Range	–		479–600		559–637		573–601		–			
		n	–		50		15		4		–			
		Female Mean Length	–		557		573		572		–			
		SE	–		3		6		9		–			
		Range	–		503–602		525–622		563–581		–			
		n	–		68		19		2		–			
7/23, 26 Periods 3, 4	159	Male	0	0.0	9,458	29.6	2,012	6.3	201	0.6	0	0.0	11,672	36.5
		Female	0	0.0	14,690	45.9	5,031	15.7	604	1.9	0	0.0	20,325	63.5
		Subtotal	0	0.0	24,149	75.5	7,043	22.0	805	2.5	0	0.0	31,997	100.0
		Male Mean Length	–		570		581		612		–			
		SE	–		3		12		–		–			
		Range	–		529–622		534–675		–		–			
		n	–		47		10		1		–			
		Female Mean Length	–		558		570		573		–			
		SE	–		3		4		12		–			
		Range	–		488–670		537–600		556–595		–			
		n	–		73		25		3		–			
7/30; 8/2 Periods 5, 6	159	Male	0	0.0	7,524	29.6	2,081	8.2	480	1.9	0	0.0	10,085	39.6
		Female	160	0.6	11,846	46.5	3,041	11.9	320	1.3	0	0.0	15,367	60.4
		Subtotal	160	0.6	19,369	76.1	5,122	20.1	800	3.1	0	0.0	25,452	100.0
		Male Mean Length	–		570		582		618		–			
		SE	–		3		8		9		–			
		Range	–		520–619		546–628		609–636		–			
		n	–		47		13		3		–			
		Female Mean Length	525		562		567		560		–			
		SE	–		3		4		8		–			
		Range	–		522–677		530–597		552–568		–			
		n	1		74		19		2		–			
8/5, 9 Periods 7, 8	158	Male	100	0.6	5,910	37.3	1,402	8.9	0	0.0	0	0.0	7,413	46.8
		Female	200	1.3	6,912	43.7	1,102	7.0	200	1.3	0	0.0	8,414	53.2
		Subtotal	301	1.9	12,822	81.0	2,504	15.8	200	1.3	0	0.0	15,827	100.0
		Male Mean Length	539		569		571		–		–			
		SE	–		3		4		–		–			
		Range	–		523–603		542–596		–		–			
		n	1		59		14		–		–			
		Female Mean Length	537		551		559		565		–			
		SE	9		3		5		8		–			
		Range	528–545		499–603		530–589		557–572		–			
		n	2		69		11		2		–			

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Appendix C1.–Page 2 of 2.

Sample Dates	Sample Size		Brood Year (Age)											
			2009		2008		2007		2006		2005		Total	
			(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	N	%	N	%			
8/18, 20 Periods 9, 10	159	Male	0	0.0	12,758	49.7	1,776	6.9	161	0.6	0	0.0	14,696	57.2
		Female	0	0.0	9,689	37.7	1,292	5.0	0	0.0	0	0.0	10,981	42.8
		Subtotal	0	0.0	22,447	87.4	3,068	11.9	161	0.6	0	0.0	25,677	100.0
		Male Mean Length	–		569		567		582		–			
		SE	–		3		9		–		–			
		Range	–		512–637		499–604		–		–			
		n	–		79		11		1		–			
		Female Mean Length	–		554		565		–		–			
		SE	–		3		9		–		–			
		Range	–		498–607		536–601		–		–			
		n	–		60		8		–		–			
		8/23, 27, 30 Periods 11, 12, 13	228	Male	117	0.9	6,675	50.0	585	4.4	59	0.4	0	0.0
Female	176			1.3	5,504	41.2	176	1.3	59	0.4	0	0.0	5,913	44.3
Subtotal	293			2.2	12,178	91.2	761	5.7	117	0.9	0	0.0	13,349	100.0
Male Mean Length	545				573		576		572		–			
SE	20				2		12		–		–			
Range	525–565				520–638		501–628		–		–			
n	2				114		10		1		–			
Female Mean Length	557				553		540		573		–			
SE	17				6		21		–		–			
Range	540–590				58–610		505–578		–		–			
n	3				94		3		1		–			
Season	1,021			Male	217	0.2	51,039	36.5	10,472	7.5	1,599	1.1	0	0.0
		Female	536	0.4	60,493	43.3	13,954	10.0	1,531	1.1	0	0.0	76,515	54.7
		Total	753	0.5	111,533	79.8	24,426	17.5	3,130	2.2	0	0.0	139,842	100.0
		Male Mean Length	542		568		579		598		–			
		SE	20		1		4		5		–			
		Range	525–565		479–638		499–675		572–636		–			
		n	3		396		73		10		–			
		Female Mean Length	536		557		565		569		–			
		SE	9		1		3		5		–			
		Range	525–590		58–677		505–622		552–595		–			
		n	6		438		85		10		–			

Note: All commercial fishing periods were restricted to 6.0 in or smaller mesh gillnets.

Appendix C2.–Yukon River District 2 fall chum salmon commercial gillnet harvest, age and sex composition, 2012.

Sample Dates		Brood Year (Age)										Total	
		2009		2008		2007		2006		2005			
		(0.2)		(0.3)		(0.4)		(0.5)		(0.6)		N	%
Period 1 ^a	Male	0	0.0	4,247	31.6	1,274	9.5	340	2.5	0	0.0	5,861	43.7
	Female	0	0.0	5,776	43.0	1,614	12.0	170	1.3	0	0.0	7,560	56.3
	Subtotal	0	0.0	10,023	74.7	2,888	21.5	510	3.8	0	0.0	13,421	100.0
Period 2 ^b	Male	0	0.0	949	31.0	291	9.5	0	0.0	0	0.0	1,240	40.5
	Female	0	0.0	1,356	44.3	407	13.3	58	1.9	0	0.0	1,821	59.5
	Subtotal	0	0.0	2,305	75.3	697	22.8	58	1.9	0	0.0	3,061	100.0
Period 3 ^c	Male	0	0.0	5,126	29.6	1,091	6.3	109	0.6	0	0.0	6,326	36.5
	Female	0	0.0	7,962	45.9	2,727	15.7	327	1.9	0	0.0	11,015	63.5
	Subtotal	0	0.0	13,088	75.5	3,817	22.0	436	2.5	0	0.0	17,341	100.0
Period 4 ^d	Male	0	0.0	3,726	28.1	828	6.3	248	1.9	0	0.0	4,802	36.3
	Female	83	0.6	5,961	45.0	2,153	16.3	248	1.9	0	0.0	8,445	63.8
	Subtotal	83	0.6	9,687	73.1	2,981	22.5	497	3.8	0	0.0	13,247	100.0
Period 5 ^e	Male	0	0.0	3,201	29.6	885	8.2	204	1.9	0	0.0	4,290	39.6
	Female	68	0.6	5,039	46.5	1,294	11.9	136	1.3	0	0.0	6,538	60.4
	Subtotal	68	0.6	8,240	76.1	2,179	20.1	341	3.1	0	0.0	10,828	100.0
Period 6 ^f	Male	96	0.6	5,000	32.9	1,154	7.6	96	0.6	0	0.0	6,346	41.8
	Female	0	0.0	7,019	46.2	1,634	10.8	192	1.3	0	0.0	8,845	58.2
	Subtotal	96	0.6	12,018	79.1	2,788	18.4	288	1.9	0	0.0	15,191	100.0
Period 7 ^g	Male	0	0.0	18,793	48.4	3,661	9.4	244	0.6	0	0.0	22,698	58.5
	Female	488	1.3	14,156	36.5	1,464	3.8	0	0.0	0	0.0	16,108	41.5
	Subtotal	488	1.3	32,948	84.9	5,125	13.2	244	0.6	0	0.0	38,806	100.0
Period 8 ^h	Male	0	0.0	4,592	49.7	639	6.9	58	0.6	0	0.0	5,289	57.2
	Female	0	0.0	3,488	37.7	465	5.0	0	0.0	0	0.0	3,953	42.8
	Subtotal	0	0.0	8,079	87.4	1,104	11.9	58	0.6	0	0.0	9,242	100.0
Period 9 ⁱ	Male	0	0.0	1,582	44.9	181	5.1	0	0.0	0	0.0	1,763	50.0
	Female	45	1.3	1,582	44.9	136	3.8	0	0.0	0	0.0	1,763	50.0
	Subtotal	45	1.3	3,164	89.7	316	9.0	0	0.0	0	0.0	3,526	100.0
Period 10 ^j	Male	18	0.6	1,280	47.4	140	5.2	0	0.0	0	0.0	1,438	53.2
	Female	53	1.9	1,157	42.9	35	1.3	18	0.6	0	0.0	1,262	46.8
	Subtotal	70	2.6	2,437	90.3	175	6.5	18	0.6	0	0.0	2,700	100.0
Period 11 ^k	Male	25	1.3	1,018	53.0	76	4.0	13	0.7	0	0.0	1,132	58.9
	Female	13	0.7	751	39.1	13	0.7	13	0.7	0	0.0	789	41.1
	Subtotal	38	2.0	1,768	92.1	89	4.6	25	1.3	0	0.0	1,921	100.0

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Appendix C2.–Page 2 of 2.

		Brood Year (Age)										Total	
		2009		2008		2007		2006		2005			
Sample		(0.2)		(0.3)		(0.4)		(0.5)		(0.6)		N	%
Dates		N	%	N	%	N	%	N	%	N	%	N	%
Season ^l	Male	380	0.3	50,143	38.8	9,244	7.1	1,266	1.0	0	0.0	61,033	47.2
	Female	760	0.6	55,462	42.9	10,763	8.3	1,266	1.0	0	0.0	68,251	52.8
	Total	1,140	0.9	105,605	81.7	20,007	15.5	2,532	2.0	0	0.0	129,284	100.0

Note: All commercial fishing periods were restricted to 7.5 in or smaller mesh gillnets.

- ^a Age and sex proportions from District 1 Periods 1 and 2 samples were applied to the harvest of this period to estimate composition.
- ^b Age and sex proportions from District 1 Periods 2 and 3 samples were applied to the harvest of this period to estimate composition.
- ^c Age and sex proportions from District 1 Periods 3 and 4 samples were applied to the harvest of this period to estimate composition.
- ^d Age and sex proportions from District 1 Periods 4 and 5 samples were applied to the harvest of this period to estimate composition.
- ^e Age and sex proportion from District 1 Periods 5 and 6 samples were applied to the harvest of this period to estimate composition.
- ^f Age and sex proportions from District 1 Periods 6 and 7 samples were applied to the harvest of this period to estimate composition.
- ^g Age and sex proportions from District 1 Periods 8 and 9 samples were applied to the harvest of this period to estimate composition.
- ^h Age and sex proportions from District 1 Periods 9 and 10 samples were applied to the harvest of this period to estimate composition.
- ⁱ Age and sex proportions from District 1 Periods 10 and 11 samples were applied to the harvest of this period to estimate composition.
- ^j Age and sex proportions from District 1 Periods 11 and 12 samples were applied to the harvest of this period to estimate composition.
- ^k Age and sex proportions from District 1 Periods 12 and 13 samples were applied to the harvest of this period to estimate composition.
- ^l Age and sex proportions from all District 1 commercial samples were applied to the total harvest to estimate composition.

Appendix C3.–Yukon River Subdistrict 4-A fall chum salmon commercial fish wheel harvest, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size	Brood Year (Age)										Total		
		2009		2008		2007		2006		2005				
		(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	N	%	N	%	N	%	N	%
8/30–9/1 Period 4	105	Male	11	2.9	149	40.0	25	6.7	0	0.0	0	0.0	184	49.5
		Female	4	1.0	177	47.6	7	1.9	0	0.0	0	0.0	188	50.5
		Subtotal	14	3.8	326	87.6	32	8.6	0	0.0	0	0.0	372	100.0
	Male Mean Length	569		592		604		–		–				
	SE	10		4		18		–		–				
	Range	550–580		546–645		575–713		–		–				
	n	3		42		7		–		–				
	Female Mean Length	581		573		577		–		–				
	SE	–		3		11		–		–				
	Range	–		538–623		566–588		–		–				
n	1		50		2		–		–					

Note: Samples were only taken from fish harvested during Period 4. Not considered representative of entire harvest.

Appendix C4.–Yukon River Subdistrict 5-C (Rampart) fall chum salmon subsistence fish wheel harvest, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)										Total	
			2009		2008		2007		2006		2005		N	%
			(0.2)	(0.3)	(0.4)	(0.5)	(0.6)							
N	%	N	%	N	%	N	%	N	%	N	%			
Total	49	Male	0	0.0	21	42.9	4	8.2	0	0.0	0	0.0	25	51.0
		Female	2	4.1	19	38.8	3	6.1	0	0.0	0	0.0	24	49.0
		Total	2	4.1	40	81.6	7	14.3	0	0.0	0	0.0	49	100.0
		Male Mean Length	–		596		610		–		–			
		SE	–		6		11		–		–			
		Range	–		549–645		583–639		–		–			
		n	–		21		4		–		–			
		Female Mean Length	544		555		549		–		–			
		SE	10		5		11		–		–			
		Range	534–554		484–581		530–567		–		–			
		n	2		19		3		–		–			

Appendix C5.–Lower Yukon River test fishery (Big Eddy site) fall chum salmon 6.0 in mesh drift gillnet, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)											
			2009		2008		2007		2006		2005		Total	
			(0.2)		(0.3)		(0.4)		(0.5)		(0.6)		N	%
		N	%	N	%	N	%	N	%	N	%	N	%	
7/16–24 Quartile 1	180	Male	1	0.6	71	39.4	22	12.2	5	2.8	0	0.0	99	55.0
		Female	0	0.0	45	25.0	30	16.7	6	3.3	0	0.0	81	45.0
		Subtotal	1	0.6	116	64.4	52	28.9	11	6.1	0	0.0	180	100.0
		Male Mean Length	535		571		587		604		–			
		SE	–		3		4		17		–			
		Range	–		521–614		549–619		564–668		–			
		n	1		71		22		5		–			
		Female Mean Length	–		560		580		565		–			
		SE	–		3		4		17		–			
		Range	–		526–609		526–641		520–631		–			
		n	–		45		30		6		–			
7/25–29, 31–8/4 Quartile 2	248	Male	0	0.0	82	33.1	17	6.9	4	1.6	0	0.0	103	41.5
		Female	0	0.0	97	39.1	48	19.4	0	0.0	0	0.0	145	58.5
		Subtotal	0	0.0	179	72.2	65	26.2	4	1.6	0	0.0	248	100.0
		Male Mean Length	–		580		618		612		–			
		SE	–		3		6		10		–			
		Range	–		537–661		572–658		596–642		–			
		n	–		82		17		4		–			
		Female Mean Length	–		570		589		–		–			
		SE	–		2		3		–		–			
		Range	–		524–641		549–641		–		–			
		n	–		97		48		–		–			
8/5–16 Quartile 3	109	Male	1	0.9	37	33.9	6	5.5	1	0.9	0	0.0	45	41.3
		Female	1	0.9	50	45.9	11	10.1	2	1.8	0	0.0	64	58.7
		Subtotal	2	1.8	87	79.8	17	15.6	3	2.8	0	0.0	109	100.0
		Male Mean Length	557		581		629		630		–			
		SE	–		4		15		–		–			
		Range	–		545–644		570–676		–		–			
		n	1		37		6		1		–			
		Female Mean Length	585		580		581		596		–			
		SE	–		3		5		1		–			
		Range	–		532–636		548–612		595–597		–			
		n	1		50		11		2		–			
8/17–22, 24–25, 31; 9/11–12 Quartile 4	58	Male	0	0.0	16	27.6	2	3.4	0	0.0	0	0.0	18	31.0
		Female	2	3.4	37	63.8	1	1.7	0	0.0	0	0.0	40	69.0
		Subtotal	2	3.4	53	91.4	3	5.2	0	0.0	0	0.0	58	100.0
		Male Mean Length	–		588		600		–		–			
		SE	–		6		48		–		–			
		Range	–		520–612		552–648		–		–			
		n	–		16		2		–		–			
		Female Mean Length	615		566		588		–		–			
		SE	39		3		–		–		–			
		Range	576–653		519–596		–		–		–			
		n	2		37		1		–		–			

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Appendix C5.–Page 2 of 2.

Sample Dates	Sample Size	Brood Year (Age)										Total		
		2009 (0.2)		2008 (0.3)		2007 (0.4)		2006 (0.5)		2005 (0.6)				
		N	%	N	%	N	%	N	%	N	%	N	%	
Total	595	Male	2	0.3	206	34.6	47	7.9	10	1.7	0	0.0	265	44.5
		Female	3	0.5	229	38.5	90	15.1	8	1.3	0	0.0	330	55.5
		Total	5	0.8	435	73.1	137	23.0	18	3.0	0	0.0	595	100.0
		Male Mean Length	546		577		604		609		–			
		SE	11		2		4		9		–			
		Range	535–557		520–661		549–676		564–668		–			
		n	2		206		47		10		–			
		Female Mean Length	605		570		585		573		–			
		SE	24		1		2		13		–			
		Range	576–653		519–641		526–641		520–631		–			
		n	3		229		90		8		–			

Appendix C6.–Lower Yukon River test fishery (Middle Mouth site) fall chum salmon 6.0 in mesh drift gillnet, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)											
			2009		2008		2007		2006		2005		Total	
			(0.2)		(0.3)		(0.4)		(0.5)		(0.6)		N	%
		N	%	N	%	N	%	N	%	N	%	N	%	
7/16–23 Quartile 1	123	Male	1	0.8	50	40.7	14	11.4	8	6.5	0	0.0	73	59.3
		Female	0	0.0	29	23.6	18	14.6	3	2.4	0	0.0	50	40.7
		Subtotal	1	0.8	79	64.2	32	26.0	11	8.9	0	0.0	123	100.0
		Male Mean Length	602		572		575		602		–			
		SE	–		3		7		11		–			
		Range	–		502–617		502–610		551–656		–			
		n	1		50		14		8		–			
		Female Mean Length	–		562		578		569		–			
		SE	–		4		6		7		–			
		Range	–		528–618		532–625		555–580		–			
		n	–		29		18		3		–			
7/25, 27–29, 31– 8/1, 4 Quartile 2	100	Male	1	1.0	33	33.0	11	11.0	1	1.0	0	0.0	46	46.0
		Female	0	0.0	41	41.0	13	13.0	0	0.0	0	0.0	54	54.0
		Subtotal	1	1.0	74	74.0	24	24.0	1	1.0	0	0.0	100	100.0
		Male Mean Length	572		575		596		579		–			
		SE	–		4		7		–		–			
		Range	–		529–617		568–650		–		–			
		n	1		33		11		1		–			
		Female Mean Length	–		562		573		–		–			
		SE	–		7		6		–		–			
		Range	–		316–603		530–609		–		–			
		n	–		41		13		–		–			
8/5–9, 14–16 Quartile 3	116	Male	0	0.0	44	37.9	6	5.2	1	0.9	0	0.0	51	44.0
		Female	0	0.0	52	44.8	12	10.3	1	0.9	0	0.0	65	56.0
		Subtotal	0	0.0	96	82.8	18	15.5	2	1.7	0	0.0	116	100.0
		Male Mean Length	–		572		597		569		–			
		SE	–		4		12		–		–			
		Range	–		503–623		567–652		–		–			
		n	–		44		6		1		–			
		Female Mean Length	–		577		594		530		–			
		SE	–		3		7		–		–			
		Range	–		526–665		572–646		–		–			
		n	–		52		12		1		–			
8/17–20, 22–23, 26–29, 31–9/7 Quartile 4	261	Male	4	1.5	88	33.7	2	0.8	1	0.4	0	0.0	95	36.4
		Female	2	0.8	150	57.5	12	4.6	2	0.8	0	0.0	166	63.6
		Subtotal	6	2.3	238	91.2	14	5.4	3	1.1	0	0.0	261	100.0
		Male Mean Length	551		576		576		569		–			
		SE	12		2		14		–		–			
		Range	520–576		528–645		562–589		–		–			
		n	4		88		2		1		–			
		Female Mean Length	567		573		581		582		–			
		SE	20		2		9		8		–			
		Range	547–587		500–635		528–633		574–590		–			
		n	2		150		12		2		–			

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Appendix C6.–Page 2 of 2.

Sample Dates	Sample Size	Brood Year (Age)										Total		
		2009 (0.2)		2008 (0.3)		2007 (0.4)		2006 (0.5)		2005 (0.6)				
		N	%	N	%	N	%	N	%	N	%	N	%	
Total	600	Male	6	1.0	215	35.8	33	5.5	11	1.8	0	0.0	265	44.2
		Female	2	0.3	272	45.3	55	9.2	6	1.0	0	0.0	335	55.8
		Total	8	1.3	487	81.2	88	14.7	17	2.8	0	0.0	600	100.0
		Male Mean Length	563		574		586		594		–			
		SE	11		2		5		9		–			
		Range	520–602		502–645		502–652		551–656		–			
		n	6		215		33		11		–			
		Female Mean Length	567		571		581		567		–			
		SE	20		2		3		9		–			
		Range	547–587		316–665		528–646		530–590		–			
		n	2		272		55		6		–			

Appendix C7.–Lower Yukon River test fishery (combined Big Eddy and Middle Mouth sites) fall chum salmon 6.0 in mesh drift gillnet, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)											
			2009		2008		2007		2006		2005		Total	
			(0.2)	(0.3)	(0.4)	(0.5)	(0.6)			N	%	N	%	
7/16–24 Quartile 1	303	Male	2	0.7	121	39.9	36	11.9	13	4.3	0	0.0	172	56.8
		Female	0	0.0	74	24.4	48	15.8	9	3.0	0	0.0	131	43.2
		Subtotal	2	0.7	195	64.4	84	27.7	22	7.3	0	0.0	303	100.0
		Male Mean Length	569		571		582		603		–			
		SE	34		2		4		9		–			
		Range	535–602		502–617		502–619		551–668		–			
		n	2		121		36		13		–			
		Female Mean Length	–		561		579		566		–			
		SE	–		2		3		11		–			
		Range	–		526–618		526–641		520–631		–			
		n	–		74		48		9		–			
7/25–29, 31–8/4 Quartile 2	348	Male	1	0.3	115	33.0	28	8.0	5	1.4	0	0.0	149	42.8
		Female	0	0.0	138	39.7	61	17.5	0	0.0	0	0.0	199	57.2
		Subtotal	1	0.3	253	72.7	89	25.6	5	1.4	0	0.0	348	100.0
		Male Mean Length	572		578		609		605		–			
		SE	–		2		5		10		–			
		Range	–		529–661		568–658		579–642		–			
		n	1		115		28		5		–			
		Female Mean Length	–		567		586		–		–			
		SE	–		3		3		–		–			
		Range	–		316–641		530–641		–		–			
		n	–		138		61		–		–			
8/5–16 Quartile 3	225	Male	1	0.4	81	36.0	12	5.3	2	0.9	0	0.0	96	42.7
		Female	1	0.4	102	45.3	23	10.2	3	1.3	0	0.0	129	57.3
		Subtotal	2	0.9	183	81.3	35	15.6	5	2.2	0	0.0	225	100.0
		Male Mean Length	557		576		613		600		–			
		SE	–		3		10		31		–			
		Range	–		503–644		567–676		569–630		–			
		n	1		81		12		2		–			
		Female Mean Length	585		579		588		574		–			
		SE	–		2		4		22		–			
		Range	–		526–665		548–646		530–597		–			
		n	1		102		23		3		–			
8/17–22, 23–29, 31–9/2, 11–12 Quartile 4	319	Male	4	1.3	104	32.6	4	1.3	1	0.3	0	0.0	113	35.4
		Female	4	1.3	187	58.6	13	4.1	2	0.6	0	0.0	206	64.6
		Subtotal	8	2.5	291	91.2	17	5.3	3	0.9	0	0.0	319	100.0
		Male Mean Length	551		578		588		569		–			
		SE	12		2		22		–		–			
		Range	520–576		520–645		552–648		–		–			
		n	4		104		4		1		–			
		Female Mean Length	591		572		581		582		–			
		SE	22		2		8		8		–			
		Range	547–653		500–635		528–633		574–590		–			
		n	4		187		13		2		–			

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Appendix C7.–Page 2 of 2.

Sample Dates	Sample Size	Brood Year (Age)												
		2009		2008		2007		2006		2005		Total		
		(0.2)	(0.3)	(0.4)	(0.5)	(0.6)								
		N	%	N	%	N	%	N	%	N	%	N	%	
Total	1,195	Male	8	0.7	421	35.2	80	6.7	21	1.8	0	0.0	530	44.4
		Female	5	0.4	501	41.9	145	12.1	14	1.2	0	0.0	665	55.6
		Total	13	1.1	922	77.2	225	18.8	35	2.9	0	0.0	1,195	100.0
		Male Mean Length	559		576		597		601		–			
		SE	9		1		3		7		–			
		Range	520–602		502–661		502–676		551–668		–			
		n	8		421		80		21		–			
		Female Mean Length	590		570		583		570		–			
		SE	17		1		2		8		–			
		Range	547–653		316–665		526–646		520–631		–			
		n	5		501		145		14		–			

Appendix C8.–Yukon River Mountain Village test fishery fall chum salmon 5 7/8 in mesh drift gillnet, age and sex composition, and mean length (mm) 2012.

Sample Dates	Sample Size		Brood Year (Age)											
			2009		2008		2007		2006		2005		Total	
			(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	N	%	N	%	N	%	
7/17–23, 26 Quartile 1	52	Male	0	0.0	15	28.8	9	17.3	1	1.9	0	0.0	25	48.1
		Female	0	0.0	17	32.7	8	15.4	2	3.8	0	0.0	27	51.9
		Subtotal	0	0.0	32	61.5	17	32.7	3	5.8	0	0.0	52	100.0
		Male Mean Length	–		575		603		615		–			
		SE	–		6		8		–		–			
		Range	–		530–610		562–630		–		–			
		n	–		15		9		1		–			
		Female Mean Length	–		560		594		578		–			
		SE	–		6		9		23		–			
		Range	–		505–610		559–648		555–600		–			
		n	–		17		8		2		–			
7/27–31 Quartile 2	54	Male	0	0.0	23	42.6	7	13.0	1	1.9	0	0.0	31	57.4
		Female	0	0.0	19	35.2	4	7.4	0	0.0	0	0.0	23	42.6
		Subtotal	0	0.0	42	77.8	11	20.4	1	1.9	0	0.0	54	100.0
		Male Mean Length	–		570		597		619		–			
		SE	–		4		11		–		–			
		Range	–		540–622		566–634		–		–			
		n	–		23		7		1		–			
		Female Mean Length	–		558		580		–		–			
		SE	–		4		7		–		–			
		Range	–		531–595		570–602		–		–			
		n	–		19		4		–		–			
8/1–3, 6–10, 14– 15 Quartile 3	31	Male	0	0.0	8	25.8	3	9.7	0	0.0	0	0.0	11	35.5
		Female	0	0.0	20	64.5	0	0.0	0	0.0	0	0.0	20	64.5
		Subtotal	0	0.0	28	90.3	3	9.7	0	0.0	0	0.0	31	100.0
		Male Mean Length	–		583		606		–		–			
		SE	–		8		21		–		–			
		Range	–		553–616		566–635		–		–			
		n	–		8		3		–		–			
		Female Mean Length	–		575		–		–		–			
		SE	–		5		–		–		–			
		Range	–		528–611		–		–		–			
		n	–		20		–		–		–			
8/19–20, 28; 9/1, 3–6 Quartile 4	12	Male	0	0.0	4	33.3	0	0.0	0	0.0	0	0.0	4	33.3
		Female	0	0.0	7	58.3	1	8.3	0	0.0	0	0.0	8	66.7
		Subtotal	0	0.0	11	91.7	1	8.3	0	0.0	0	0.0	12	100.0
		Male Mean Length	–		537		–		–		–			
		SE	–		19		–		–		–			
		Range	–		500–590		–		–		–			
		n	–		4		–		–		–			
		Female Mean Length	–		581		570		–		–			
		SE	–		8		–		–		–			
		Range	–		554–612		–		–		–			
		n	–		7		1		–		–			

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Appendix C8.–Page 2 of 2.

Sample Dates	Sample Size	Brood Year (Age)												
		2009		2008		2007		2006		2005		Total		
		(0.2)	(0.3)	(0.4)	(0.5)	(0.6)								
		N	%	N	%	N	%	N	%	N	%	N	%	
Total	149	Male	0	0.0	50	33.6	19	12.8	2	1.3	0	0.0	71	47.7
		Female	0	0.0	63	42.3	13	8.7	2	1.3	0	0.0	78	52.3
		Total	0	0.0	113	75.8	32	21.5	4	2.7	0	0.0	149	100.0
		Male Mean Length	–		571		601		617		–			
		SE	–		3		6		2		–			
		Range	–		500–622		562–635		615–619		–			
		n	–		50		19		2		–			
		Female Mean Length	–		566		588		578		–			
		SE	–		3		6		23		–			
		Range	–		505–612		559–648		555–600		–			
		n	–		63		13		2		–			

Appendix C9.–Yukon River Eagle sonar test fishery fall chum salmon variable mesh drift gillnet, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)										Total			
			2009		2008		2007		2006		2005					
			(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	N	%	N	%	N	%	N	%	
8/3, 23, 28–9/12 5.25" Mesh	373	Male	0	0.0	114	30.6	56	15.0	3	0.8	0	0.0	173	46.4		
		Female	4	1.1	157	42.1	39	10.5	0	0.0	0	0.0	200	53.6		
		Subtotal	4	1.1	271	72.7	95	25.5	3	0.8	0	0.0	373	100.0		
		Male Mean Length	–		586		598		622		–					
		SE	–		3		3		10		–					
		Range	–		523–680		540–649		602–635		–					
		n	–		114		56		3		–					
		Female Mean Length	552		569		578		–		–					
		SE	10		2		3		–		–					
		Range	528–574		514–679		542–623		–		–					
		n	4		157		39		–		–					
		8/28–29, 31– 9/10, 12–15, 18 7.5" Mesh	100	Male	1	1.0	53	53.0	37	37.0	1	1.0	0	0.0	92	92.0
				Female	0	0.0	6	6.0	2	2.0	0	0.0	0	0.0	8	8.0
Subtotal	1			1.0	59	59.0	39	39.0	1	1.0	0	0.0	100	100.0		
Male Mean Length	552				611		624		659		–					
SE	–				4		5		–		–					
Range	–				561–714		555–678		–		–					
n	1				53		37		1		–					
Female Mean Length	–				588		604		–		–					
SE	–				11		6		–		–					
Range	–				544–611		598–609		–		–					
n	–				6		2		–		–					
Total	473			Male	1	0.2	167	35.3	93	19.7	4	0.8	0	0.0	265	56.0
				Female	4	0.8	163	34.5	41	8.7	0	0.0	0	0.0	208	44.0
		Total	5	1.1	330	69.8	134	28.3	4	0.8	0	0.0	473	100.0		
		Male Mean Length	552		594		609		632		–					
		SE	–		3		3		12		–					
		Range	–		523–714		540–678		602–659		–					
		n	1		167		93		4		–					
		Female Mean Length	552		569		579		–		–					
		SE	10		2		3		–		–					
		Range	528–574		514–679		542–623		–		–					
		n	4		163		41		–		–					

Appendix C10.–Delta River carcass survey fall chum salmon escapement, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size	Brood Year (Age)										Total		
		2009		2008		2007		2006		2005				
		(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	N	%	
11/7, 21	180	Male	2	1.1	86	47.8	32	17.8	1	0.6	0	0.0	121	67.2
		Female	1	0.6	42	23.3	16	8.9	0	0.0	0	0.0	59	32.8
		Total	3	1.7	128	71.1	48	26.7	1	0.6	0	0.0	180	100.0
		Male Mean Length	546		582		592		606		–			
		SE	8		3		5		–		–			
		Range	538–553		533–638		529–648		–		–			
		n	2		86		32		1		–			
		Female Mean Length	542		556		568		–		–			
		SE	–		3		7		–		–			
		Range	–		508–610		521–635		–		–			
		n	1		42		16		–		–			

Note: Ages determined from vertebrae.

Appendix C11.–Sheenjek River sonar fall chum salmon beach seine, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size	Brood Year (Age)										Total		
		2009		2008		2007		2006		2005				
		(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	N	%	N	%	N	%	N	%
8/24, 26, 28 Total	180	Male	0	0.0	41	22.8	39	21.7	4	2.2	0	0.0	84	46.7
		Female	0	0.0	61	33.9	31	17.2	4	2.2	0	0.0	96	53.3
		Total	0	0.0	102	56.7	70	38.9	8	4.4	0	0.0	180	100.0
		Male Mean Length	–		594		614		661		–			
		SE	–		4		5		8		–			
		Range	–		525–645		545–665		640–680		–			
		n	–		41		39		4		–			
		Female Mean Length	–		573		604		619		–			
		SE	–		3		5		17		–			
		Range	–		520–620		565–680		580–655		–			
		n	–		61		31		4		–			

Note: Ages determined from vertebrae.

Appendix C12.–Toklat River carcass survey fall chum salmon escapement, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size	Brood Year (Age)										Total	
		2009		2008		2007		2006		2005			
		(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	N	%	N	%	N	%	N
11/1	150	3	2.0	119	79.3	27	18.0	1	0.7	0	0.0	150	100.0
Total	180	Male	63										
		Female	117										
		% Female	65.0										
		Mean Length	536										
		SE	2										
		Range	355–610										

Note: A total of 180 fish were sampled, of the fish sampled 150 were sampled for vertebrae for age determination. Due to collection conditions age, sex, and length data cannot be paired.

Appendix C13.—Yukon River fall chum salmon mean length (mm) by project, sex, year, and age, 1973–2012.

Project and Sex	Year	Percent (%)					
		Age					
		3 yr (0.2)	4 yr (0.3)	5 yr (0.4)	6 yr (0.5)	7 yr (0.6)	
Chandalar River Male	1986	^a	–	–	–	–	–
	1987		–	627	651	660	–
	1988	^a	–	–	–	–	–
	1989	^a	–	–	–	–	–
	1990	^a	–	–	–	–	–
	1991	^b	–	–	–	–	–
	1992	^b	–	–	–	–	–
	1993	^b	–	–	–	–	–
	1994	^b	–	–	–	–	–
	1995	^a	–	–	–	–	–
	1996	^a	–	–	–	–	–
	1997	^b	–	–	–	–	–
	1998	^b	–	–	–	–	–
	1999	^b	–	–	–	–	–
	2000	^b	–	–	–	–	–
	2001	^b	–	–	–	–	–
	2002	^b	–	–	–	–	–
	2003	^b	–	–	–	–	–
	2004	^b	–	–	–	–	–
	2005	^c	–	604	615	699	–
	2006	^c	548	585	581	577	–
	2007	^c	570	583	604	–	–
	2008	^c	540	575	608	595	–
	2009	^c	575	584	615	607	660
	2010	^c	599	606	586	595	–
	2011	^c	558	600	614	612	–
2012	^b	–	–	–	–	–	
Average ^d (1986–2011)			565	596	609	621	660
5 yr Average ^d (2007–2011)			568	590	605	602	660
Odd Year Average ^d			568	600	620	644	660
Even Year Average ^d			562	589	592	589	–

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Appendix C13.–Page 2 of 8.

Project and Sex	Year	Percent (%)					
		Age					
		3 yr (0.2)	4 yr (0.3)	5 yr (0.4)	6 yr (0.5)	7 yr (0.6)	
Chandalar River Female	1986	^a	–	–	–	–	–
	1987		–	608	635	700	–
	1988	^a	–	–	–	–	–
	1989	^a	–	–	–	–	–
	1990	^a	–	–	–	–	–
	1991	^b	–	–	–	–	–
	1992	^b	–	–	–	–	–
	1993	^b	–	–	–	–	–
	1994	^b	–	–	–	–	–
	1995	^a	–	–	–	–	–
	1996	^a	–	–	–	–	–
	1997	^b	–	–	–	–	–
	1998	^b	–	–	–	–	–
	1999	^b	–	–	–	–	–
	2000	^b	–	–	–	–	–
	2001	^b	–	–	–	–	–
	2002	^b	–	–	–	–	–
	2003	^b	–	–	–	–	–
	2004	^b	–	–	–	–	–
	2005	^c	–	575	566	–	–
	2006	^c	540	546	555	568	–
	2007	^c	543	551	564	607	–
	2008	^c	543	552	578	560	593
	2009	^c	553	557	565	590	–
	2010	^c	545	558	568	585	630
	2011	^c	531	562	582	594	–
	2012	^b	–	–	–	–	–
Average ^d (1986–2011)			542	564	577	601	612
5 yr Average ^d (2007–2011)			543	556	571	587	612
Odd Year Average ^d			542	571	583	623	–
Even Year Average ^d			543	552	567	571	612

-continued-

Appendix C13.–Page 3 of 8.

Project and Sex	Year	Percent (%)				
		Age				
		3 yr (0.2)	4 yr (0.3)	5 yr (0.4)	6 yr (0.5)	7 yr (0.6)
Delta River ^c	1973 ^e	–	–	–	–	–
Male	1974	551	601	560	–	–
	1975	530	602	632	–	–
	1976	508	553	607	–	–
	1977	600	624	611	–	–
	1978	570	608	643	–	–
	1979	–	–	–	–	–
	1980	516	592	621	–	–
	1981	–	–	–	–	–
	1982	583	610	621	655	–
	1983	555	598	621	595	–
	1984	569	584	628	–	–
	1985	611	601	636	590	–
	1986	545	588	616	–	–
	1987	588	610	641	643	–
	1988 ^e	–	–	–	–	–
	1989	572	603	612	640	–
	1990 ^e	–	–	–	–	–
	1991	543	586	594	–	–
	1992	–	599	624	617	–
	1993	535	586	600	597	–
	1994	530	547	584	578	–
	1995	–	–	584	592	596
	1996	595	613	634	636	–
	1997	545	599	635	640	–
	1998	579	591	603	630	–
	1999	603	591	609	660	–
	2000	558	593	625	–	–
	2001	555	606	625	–	–
	2002	581	613	635	665	–
	2003	–	612	607	620	–
	2004	–	565	595	610	–
	2005	–	575	604	589	–
	2006	561	577	597	565	–
	2007	580	598	619	653	–
	2008	–	605	624	634	–
	2009	558	602	614	633	–
	2010	588	596	601	618	598
	2011	548	607	619	626	–
	2012	546	582	592	606	–
	Average ^d (1973–2011)	563	595	614	621	597
	5 yr Average ^d (2007–2011)	569	602	615	633	598
	Odd Year Average ^d	566	600	615	621	596
	Even Year Average ^d	560	590	613	621	598

-continued-

Appendix C13.–Page 4 of 8.

Project and Sex	Year	Percent (%)				
		Age				
		3 yr (0.2)	4 yr (0.3)	5 yr (0.4)	6 yr (0.5)	7 yr (0.6)
Delta River ^c	1973 ^e	–	–	–	–	–
Female	1974	542	578	570	–	–
	1975	524	582	618	–	–
	1976	528	539	583	615	–
	1977	592	602	612	–	–
	1978	543	586	637	–	–
	1979	–	–	–	–	–
	1980	543	586	–	–	–
	1981	–	–	–	–	–
	1982	561	592	608	625	–
	1983	533	576	591	555	–
	1984	512	559	571	–	–
	1985	566	572	587	–	–
	1986	536	568	585	605	–
	1987	553	584	618	620	–
	1988 ^e	–	–	–	–	–
	1989	543	567	581	–	–
	1990 ^e	–	–	–	–	–
	1991	490	565	571	565	–
	1992	–	572	595	615	–
	1993	–	567	571	585	–
	1994	–	547	567	–	–
	1995	–	545	570	572	582
	1996	568	590	600	625	–
	1997	470	574	596	570	–
	1998	550	557	562	583	–
	1999	575	564	581	–	–
	2000	535	561	598	605	–
	2001	535	565	597	560	–
	2002	544	584	606	–	–
	2003	556	581	591	–	–
	2004	–	547	563	576	550
	2005	–	–	573	599	–
	2006	531	535	562	578	–
	2007	557	569	591	–	–
	2008	573	578	596	614	625
	2009	548	563	578	588	585
	2010	555	568	571	605	580
	2011	515	577	607	599	–
	2012	542	556	568	–	–
	Average ^d (1973–2011)	542	570	588	593	584
	5 yr Average ^d (2007–2011)	550	571	589	601	597
	Odd Year Average ^d	540	572	590	581	583
	Even Year Average ^d	544	568	586	604	585

-continued-

Appendix C13.–Page 5 of 8.

Project and Sex	Year	Percent (%)					
		Age					
		3 yr (0.2)	4 yr (0.3)	5 yr (0.4)	6 yr (0.5)	7 yr (0.6)	
Sheenjek River Male	1974	^c	555	618	674	–	–
	1975	^c	599	592	663	–	–
	1976	^c	–	609	640	–	–
	1977	^c	569	615	622	–	–
	1978	^c	584	624	668	–	–
	1979	^b	–	–	–	–	–
	1980	^b	–	–	–	–	–
	1981	^f	548	620	638	620	–
	1982	^f	618	626	655	640	–
	1983	^f	603	613	609	–	–
	1984	^g	563	616	627	–	–
	1985	^g	570	619	654	–	–
	1986	^g	568	601	632	630	–
	1987	^g	630	628	648	655	–
	1988	^g	–	639	650	–	–
	1989	^g	588	623	641	635	–
	1990	^g	–	608	664	710	–
	1991	^g	–	603	645	650	–
	1992	^g	–	626	640	–	–
	1993	^{g,h}	550	608	625	620	–
	1994	^g	610	588	610	650	–
	1995	^g	–	–	601	616	624
	1996	^g	600	601	632	631	–
	1997	^b	–	–	–	–	–
	1998	^b	–	–	–	–	–
1999	^b	–	–	–	–	–	
2000	^b	–	–	–	–	–	
2001	^g	–	602	634	–	–	
2002	^g	–	637	657	–	–	
2003	^g	–	623	643	710	–	
2004	^g	–	602	621	648	–	
2005	^g	–	623	633	635	–	
2006	^g	–	622	622	630	–	
2007	^g	–	599	624	666	–	
2008	^g	–	593	622	652	680	
2009	^b	–	–	–	–	–	
2010	^g	614	601	654	610	700	
2011	^g	563	602	628	673	–	
2012	^g	–	594	614	661	–	
Average ^d (1974–2011)			584	613	638	646	668
5 yr Average ^d (2006–2008, 2010–2011)			589	603	630	646	690
Odd Year Average ^d			580	612	634	648	624
Even Year Average ^d			589	613	642	645	690

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Appendix C13.–Page 6 of 8.

Project and Sex	Year	Percent (%)				
		Age				
		3 yr (0.2)	4 yr (0.3)	5 yr (0.4)	6 yr (0.5)	7 yr (0.6)
Sheenjek River	1974 ^c	530	577	660	575	–
Female	1975 ^c	564	582	632	–	–
	1976 ^c	513	572	592	–	–
	1977 ^c	557	582	593	–	–
	1978 ^c	557	607	603	–	–
	1979 ^b	–	–	–	–	–
	1980 ^b	–	–	–	–	–
	1981 ^f	573	596	613	–	–
	1982 ^f	525	598	615	–	–
	1983 ^f	554	593	626	–	–
	1984 ^g	508	584	608	–	–
	1985 ^g	568	599	613	–	–
	1986 ^g	557	576	590	648	–
	1987 ^g	599	597	616	597	–
	1988 ^g	560	595	601	–	–
	1989 ^g	588	596	610	610	–
	1990 ^g	584	590	636	655	–
	1991 ^g	–	585	608	615	–
	1992 ^g	–	589	606	613	–
	1993 ^{g,h}	–	579	594	623	–
	1994 ^g	570	570	585	577	–
	1995 ^g	–	582	573	601	590
	1996 ^g	605	589	612	652	–
	1997 ^b	–	–	–	–	–
	1998 ^b	–	–	–	–	–
	1999 ^b	–	–	–	–	–
	2000 ^b	–	–	–	–	–
	2001 ^g	–	574	582	–	–
	2002 ^g	–	618	610	–	–
	2003 ^g	580	600	638	–	–
	2004 ^g	–	571	597	619	–
	2005 ^g	–	600	596	–	–
	2006 ^g	570	571	601	610	–
	2007 ^g	–	584	581	597	–
	2008 ^g	580	581	598	608	–
	2009 ^b	–	–	–	–	–
	2010 ^g	588	587	624	–	–
	2011 ^g	557	586	603	630	–
	2012 ^g	–	573	604	619	–
Average ^d (1974–2011)		563	587	607	614	590
5 yr Average ^d (2006–2008, 2010–2011)		574	582	601	611	–
Odd Year Average ^d		571	589	605	610	590
Even Year Average ^d		557	586	609	617	–

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Appendix C13.–Page 7 of 8.

Project and Sex	Year	Percent (%)				
		Age				
		3 yr (0.2)	4 yr (0.3)	5 yr (0.4)	6 yr (0.5)	7 yr (0.6)
Toklat River ^c	1974	551	601	560	–	–
Male	1975	^b –	–	–	–	–
	1976	528	533	603	–	–
	1977	590	597	613	–	–
	1978	545	567	629	–	–
	1979	581	603	622	–	–
	1980	556	602	601	–	–
	1981	^b –	–	–	–	–
	1982	562	590	630	–	–
	1983	550	609	623	575	–
	1984	540	580	608	–	–
	1985	590	594	604	598	–
	1986	505	576	603	555	–
	1987	542	586	620	–	–
	1988	513	587	616	653	–
	1989	505	584	564	600	–
	1990	^e –	–	–	–	–
	1991	565	580	617	–	–
	1992	527	578	608	675	–
	1993	520	557	570	535	–
	1994	^e –	–	–	–	–
	1995	–	543	560	571	608
	1996	–	585	600	610	–
	1997	543	565	589	590	–
	1998	540	574	591	605	–
	1999	–	523	576	–	–
	2000	^b –	–	–	–	–
	2001	534	581	595	–	–
	2002	550	598	631	–	–
	2003	570	595	589	585	–
	2004	–	558	579	593	545
	2005	540	593	597	–	–
	2006	–	561	586	560	–
	2007	ⁱ 580	564	565	581	–
	2008	^b –	–	–	–	–
	2009	538	572	603	572	570
	2010	^b –	–	–	–	–
	2011	^b –	–	–	–	–
	2012	^j –	–	–	–	–
	Average ^d (1974–2011)	547	578	598	591	574
	5 yr Average ^d (2004–2007, 2009)	553	570	586	576	558
	Odd Year Average ^d	553	578	594	578	589
	Even Year Average ^d	538	578	603	607	545

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Appendix C13.–Page 8 of 8.

Project and Sex	Year	Percent (%)				
		Age				
		3 yr (0.2)	4 yr (0.3)	5 yr (0.4)	6 yr (0.5)	7 yr (0.6)
Toklat River ^c	1974	542	578	570	–	–
Female	1975 ^b	–	–	–	–	–
	1976	514	541	606	–	–
	1977	556	574	–	–	–
	1978	534	558	609	–	–
	1979	566	578	–	–	–
	1980	512	575	584	–	–
	1981 ^b	–	–	–	–	–
	1982	560	538	563	–	–
	1983	535	572	591	655	–
	1984	517	558	591	–	–
	1985	550	565	577	–	–
	1986	523	553	570	555	–
	1987	544	560	597	635	–
	1988	499	562	592	–	–
	1989	523	565	563	590	–
	1990 ^e	–	–	–	–	–
	1991	503	534	546	–	–
	1992	575	570	596	590	–
	1993	493	537	542	548	–
	1994	522	544	551	566	571
	1995	–	–	550	566	573
	1996	490	558	569	570	–
	1997	520	531	561	555	–
	1998	505	547	559	580	–
	1999	–	462	406	–	–
	2000 ^b	–	–	–	–	–
	2001	–	556	585	605	–
	2002	524	571	584	–	–
	2003	552	563	581	–	–
	2004	–	543	555	580	–
	2005	–	560	530	–	–
	2006	–	551	546	550	–
	2007 ⁱ	–	542	558	585	630
	2008 ^b	–	–	–	–	–
	2009	533	554	567	544	560
	2010 ^b	–	–	–	–	–
	2011 ^b	–	–	–	–	–
	2012 ^j	–	–	–	–	–
	Average ^d (1974–2011)	529	553	565	580	584
	5 yr Average ^d (2004–2007, 2009)	533	550	551	565	595
	Odd Year Average ^d	534	550	554	587	588
	Even Year Average ^d	524	556	576	570	571

^a Missing information.

^b No samples collected.

^c Carcass samples collected on spawning grounds, unless otherwise noted.

^d Averages not weighted by sample size.

^e Samples aged. Missing information.

^f Escapement samples taken with 5 7/8 in mesh gillnet.

^g Escapement samples taken with beach seine.

^h Samples taken predominantly late in run.

ⁱ Collection taken at the mouth of the Kantishna River of which the Toklat is a tributary producing the majority of fall chum salmon. Samples were collected from subsistence caught fish throughout the run based on historical timing at this site.

^j Age, sex, and length data collected, but cannot be paired.

APPENDIX D: COHO SALMON

Appendix D1.–Yukon River District 1 coho salmon commercial gillnet harvest, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)						Total	
			2009		2008		2007			
			(1.1)	(2.1)	(3.1)	N	%	N	%	N
7/23, 26, 30; 8/9, 18 Periods 1–9	190	Male	1,954	10.0	7,199	36.8	514	2.6	9,667	49.5
		Female	1,954	10.0	7,302	37.4	617	3.2	9,873	50.5
		Subtotal	3,908	20.0	14,501	74.2	1,131	5.8	19,540	100.0
		Male Mean Length	547		536		549			
		SE	6		3		15			
		Range	495–595		476–600		513–591			
		n	19		70		5			
		Female Mean Length	542		537		526			
		SE	5		3		5			
		Range	511–576		475–578		513–550			
		n	19		71		6			
8/20, 23 Periods 10, 11	136	Male	2,101	16.2	4,201	32.4	573	4.4	6,875	52.9
		Female	1,623	12.5	3,915	30.1	573	4.4	6,111	47.1
		Subtotal	3,724	28.7	8,116	62.5	1,146	8.8	12,986	100.0
		Male Mean Length	563		549		548			
		SE	4		4		11			
		Range	525–598		489–604		516–588			
		n	22		44		6			
		Female Mean Length	535		546		528			
		SE	7		4		15			
		Range	463–572		486–584		475–579			
		n	17		41		6			
8/27, 30 Periods 12, 13	132	Male	1,205	16.7	2,410	33.3	55	0.8	3,670	50.8
		Female	1,150	15.9	2,191	30.3	219	3.0	3,561	49.2
		Subtotal	2,356	32.6	4,602	63.6	274	3.8	7,231	100.0
		Male Mean Length	556		540		590			
		SE	6		4		–			
		Range	505–595		487–593		–			
		n	22		44		1			
		Female Mean Length	547		547		550			
		SE	4		5		7			
		Range	512–594		474–599		537–568			
		n	21		40		4			
Season	458	Male	5,260	13.2	13,811	34.7	1,142	2.9	20,212	50.8
		Female	4,728	11.9	13,408	33.7	1,409	3.5	19,545	49.2
		Total	9,987	25.1	27,219	68.5	2,551	6.4	39,757	100.0
		Male Mean Length	554		541		556			
		SE	4		2		10			
		Range	495–598		476–604		513–591			
		n	63		158		12			
		Female Mean Length	540		542		531			
		SE	3		2		6			
		Range	463–594		474–599		475–579			
		n	57		152		16			

Note: All commercial fishing periods were restricted to 6.0 in or smaller mesh gillnets.

Appendix D2.–Lower Yukon River test fishery (Big Eddy site) coho salmon 6.0 in mesh drift gillnet, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)						Total			
			2009		2008		2007					
			(1.1)	(2.1)	(3.1)	N	%	N	%	N	%	
7/30–8/7, 9–15 Quartile 1	65	Male	16	24.6	23	35.4	0	0.0	39	60.0		
		Female	7	10.8	18	27.7	1	1.5	26	40.0		
		Subtotal	23	35.4	41	63.1	1	1.5	65	100.0		
		Male Mean Length	556		556		–					
		SE	7		5		–					
		Range	504–593		505–596		–					
		N	16		23		–					
		Female Mean Length	560		567		553					
		SE	7		4		–					
		Range	533–593		540–589		–					
		N	7		18		1					
		8/16–18 Quartile 2	35	Male	4	11.4	15	42.9	2	5.7	21	60.0
				Female	4	11.4	10	28.6	0	0.0	14	40.0
Subtotal	8			22.9	25	71.4	2	5.7	35	100.0		
Male Mean Length	565			560		540						
SE	13			6		32						
Range	526–587			520–600		508–572						
n	4			15		2						
Female Mean Length	559			560		–						
SE	8			9		–						
Range	543–580			516–604		–						
n	4			10		–						
8/24–25, 31–9/2, 4 Quartile 3	9			Male	2	22.2	3	33.3	0	0.0	5	55.6
				Female	2	22.2	2	22.2	0	0.0	4	44.4
		Subtotal	4	44.4	5	55.6	0	0.0	9	100.0		
		Male Mean Length	559		554		–					
		SE	16		16		–					
		Range	543–575		537–587		–					
		n	2		3		–					
		Female Mean Length	577		556		–					
		SE	22		2		–					
		Range	555–599		554–557		–					
		n	2		2		–					
		9/7–8, 11–16, 19 Quartile 4	13	Male	3	23.1	2	15.4	1	7.7	6	46.2
				Female	2	15.4	4	30.8	1	7.7	7	53.8
Subtotal	5			38.5	6	46.2	2	15.4	13	100.0		
Male Mean Length	560			556		567						
SE	22			28		–						
Range	518–591			528–583		–						
n	3			2		1						
Female Mean Length	532			542		593						
SE	22			9		–						
Range	510–553			520–557		–						
n	2			4		1						

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Sample Dates	Sample Size	Brood Year (Age)								
		2009 (1.1)		2008 (2.1)		2007 (3.1)		Total		
		N	%	N	%	N	%	N	%	
Total	122	Male	25	20.5	43	35.2	3	2.5	71	58.2
		Female	15	12.3	34	27.9	2	1.6	51	41.8
		Total	40	32.8	77	63.1	5	4.1	122	100.0
		Male Mean Length	558		557		549			
		SE	5		4		21			
		Range	504–593		505–600		508–572			
		n	25		43		3			
		Female Mean Length	558		561		573			
		SE	6		4		20			
		Range	510–599		516–604		553–593			
		n	15		34		2			

Appendix D3.–Lower Yukon River test fishery (Middle Mouth site) coho salmon 6.0 in mesh drift gillnet, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)						Total			
			2009		2008		2007					
			(1.1)	(2.1)	(3.1)	N	%	N	%	N	%	
8/1, 4–10, 14–15 Quartile 1	29	Male	5	17.2	10	34.5	2	6.9	17	58.6		
		Female	5	17.2	7	24.1	0	0.0	12	41.4		
		Subtotal	10	34.5	17	58.6	2	6.9	29	100.0		
		Male Mean Length	545		539		550					
		SE	12		7		6					
		Range	515–578		509–586		544–555					
		n	5		10		2					
		Female Mean Length	563		555		–					
		SE	7		8		–					
		Range	539–577		516–582		–					
		n	5		7		–					
		8/16–20 Quartile 2	55	Male	9	16.4	16	29.1	1	1.8	26	47.3
				Female	8	14.5	20	36.4	1	1.8	29	52.7
Subtotal	17			30.9	36	65.5	2	3.6	55	100.0		
Male Mean Length	571			556		572						
SE	11			9		–						
Range	527–629			447–604		–						
n	9			16		1						
Female Mean Length	568			565		548						
SE	4			3		–						
Range	554–586			547–593		–						
n	8			20		1						
8/22–23, 26–29, 31; 9/1–4 Quartile 3	97			Male	8	8.2	26	26.8	6	6.2	40	41.2
				Female	16	16.5	35	36.1	6	6.2	57	58.8
		Subtotal	24	24.7	61	62.9	12	12.4	97	100.0		
		Male Mean Length	564		552		552					
		SE	13		4		10					
		Range	518–601		514–590		528–585					
		n	8		26		6					
		Female Mean Length	551		553		557					
		SE	5		4		8					
		Range	505–596		504–628		540–582					
		n	16		35		6					
		9/5–19 Quartile 4	91	Male	18	19.8	26	28.6	5	5.5	49	53.8
				Female	11	12.1	27	29.7	4	4.4	42	46.2
Subtotal	29			31.9	53	58.2	9	9.9	91	100.0		
Male Mean Length	554			560		557						
SE	6			5		10						
Range	519–615			514–615		524–580						
n	18			26		5						
Female Mean Length	552			547		562						
SE	6			4		5						
Range	516–589			512–587		551–572						
n	11			27		4						

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Appendix D3.–Page 2 of 2.

Sample Dates	Sample Size	Brood Year (Age)								
		2009 (1.1)		2008 (2.1)		2007 (3.1)		Total		
		N	%	N	%	N	%	N	%	
Total	272	Male	40	14.7	78	28.7	14	5.1	132	48.5
		Female	40	14.7	89	32.7	11	4.0	140	51.5
		Total	80	29.4	167	61.4	25	9.2	272	100.0
		Male Mean Length	559		554		555			
		SE	5		3		5			
		Range	515–629		447–615		524–585			
		n	40		78		14			
		Female Mean Length	556		554		558			
		SE	3		2		5			
		Range	505–596		504–628		540–582			
		n	40		89		11			

Appendix D4.–Lower Yukon River test fishery (combined Big Eddy and Middle Mouth sites) coho salmon 6.0 in mesh drift gillnet, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)						Total			
			2009		2008		2007					
			(1.1)	(2.1)	(3.1)	N	%	N	%	N	%	
7/30–8/4, 10–15 Quartile 1	94	Male	21	22.3	33	35.1	2	2.1	56	59.6		
		Female	12	12.8	25	26.6	1	1.1	38	40.4		
		Subtotal	33	35.1	58	61.7	3	3.2	94	100.0		
		Male Mean Length	553		551		550					
		SE	6		4		6					
		Range	504–593		505–596		544–555					
		n	21		33		2					
		Female Mean Length	561		564		553					
		SE	5		3		–					
		Range	533–593		516–589		–					
		n	12		25		1					
		8/16–20 Quartile 2	90	Male	13	14.4	31	34.4	3	3.3	47	52.2
				Female	12	13.3	30	33.3	1	1.1	43	47.8
Subtotal	25			27.8	61	67.8	4	4.4	90	100.0		
Male Mean Length	569			558		551						
SE	8			6		21						
Range	526–629			447–604		508–572						
n	13			31		3						
Female Mean Length	565			563		548						
SE	4			4		–						
Range	543–586			516–604		–						
n	12			30		1						
8/22–29, 31–9/4 Quartile 3	106			Male	10	9.4	29	27.4	6	5.7	45	42.5
				Female	18	17.0	37	34.9	6	5.7	61	57.5
		Subtotal	28	26.4	66	62.3	12	11.3	106	100.0		
		Male Mean Length	563		552		552					
		SE	11		4		10					
		Range	518–601		514–590		528–585					
		n	10		29		6					
		Female Mean Length	554		553		557					
		SE	5		4		8					
		Range	505–599		504–628		540–582					
		n	18		37		6					
		9/5–19 Quartile 4	104	Male	21	20.2	28	26.9	6	5.8	55	52.9
				Female	13	12.5	31	29.8	5	4.8	49	47.1
Subtotal	34			32.7	59	56.7	11	10.6	104	100.0		
Male Mean Length	555			559		558						
SE	6			5		8						
Range	518–615			514–615		524–580						
n	21			28		6						
Female Mean Length	548			546		568						
SE	6			3		7						
Range	510–589			512–587		551–593						
n	13			31		5						

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Appendix D4.–Page 2 of 2.

Sample Dates	Sample Size		Brood Year (Age)						Total	
			2009 (1.1)		2008 (2.1)		2007 (3.1)			
			N	%	N	%	N	%	N	%
Total	394	Male	65	16.5	121	30.7	17	4.3	203	51.5
		Female	55	14.0	123	31.2	13	3.3	191	48.5
		Total	120	30.5	244	61.9	30	7.6	394	100.0
		Male Mean Length	558		555		554			
		SE	4		2		5			
		Range	504–629		447–615		508–585			
		n	65		121		17			
		Female Mean Length	556		556		560			
		SE	3		2		5			
		Range	505–599		504–628		540–593			
		n	55		123		13			

Appendix D5.–Yukon River Mountain Village test fishery coho salmon 5 7/8 in mesh drift gillnet, age and sex composition, and mean length (mm), 2012.

Sample Dates	Sample Size		Brood Year (Age)						Total	
			2009 (1.1)		2008 (2.1)		2007 (3.1)			
			N	%	N	%	N	%	N	%
7/27–29; 8/4–5, 7–8, 10–11, 13, 15 Quartile 1	18	Male	4	22.2	8	44.4	1	5.6	13	72.2
		Female	2	11.1	3	16.7	0	0.0	5	27.8
		Subtotal	6	33.3	11	61.1	1	5.6	18	100.0
		Male Mean Length	514		559		527			
		SE	39		10		–			
		Range	410–600		523–600		–			
		n	4		8		1			
		Female Mean Length	580		549		–			
		SE	4		9		–			
		Range	576–584		532–559		–			
		n	2		3		–			
8/19–20 Quartile 2	16	Male	3	18.8	7	43.8	0	0.0	10	62.5
		Female	2	12.5	3	18.8	1	6.3	6	37.5
		Subtotal	5	31.3	10	62.5	1	6.3	16	100.0
		Male Mean Length	530		552		–			
		SE	4		9		–			
		Range	523–535		518–592		–			
		n	3		7		–			
		Female Mean Length	556		557		555			
		SE	1		31		–			
		Range	555–557		512–615		–			
		n	2		3		1			
8/27–28, 8/30–9/4 Quartile 3	46	Male	14	30.4	9	19.6	1	2.2	24	52.2
		Female	8	17.4	12	26.1	2	4.3	22	47.8
		Subtotal	22	47.8	21	45.7	3	6.5	46	100.0
		Male Mean Length	540		572		533			
		SE	7		8		–			
		Range	500–605		540–605		–			
		n	14		9		1			
		Female Mean Length	549		548		555			
		SE	6		7		10			
		Range	525–575		510–590		545–565			
		n	8		12		2			
9/5–9, 11, 13 Quartile 4	34	Male	8	23.5	9	26.5	0	0.0	17	50.0
		Female	4	11.8	9	26.5	4	11.8	17	50.0
		Subtotal	12	35.3	18	52.9	4	11.8	34	100.0
		Male Mean Length	540		537		–			
		SE	7		8		–			
		Range	505–575		490–565		–			
		n	8		9		–			
		Female Mean Length	539		556		544			
		SE	6		8		8			
		Range	530–555		525–600		525–560			
		n	4		9		4			

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Appendix D5.–Page 2 of 2.

Sample Dates	Sample Size	Brood Year (Age)								
		2009 (1.1)		2008 (2.1)		2007 (3.1)		Total		
		N	%	N	%	N	%	N	%	
Total	114	Male	29	25.4	33	28.9	2	1.8	64	56.1
		Female	16	14.0	27	23.7	7	6.1	50	43.9
		Total	45	39.5	60	52.6	9	7.9	114	100.0
		Male Mean Length	535		555		530			
		SE	6		5		3			
		Range	410–605		490–605		527–533			
		n	29		33		2			
		Female Mean Length	551		552		549			
		SE	4		5		5			
		Range	525–584		510–615		525–565			
		n	16		27		7			