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Genetic Baseline of North American Sockeye Salmon for Mixed Stock Analyses of Kodiak Management Area Commercial Fisheries, 2014–2016

by

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

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Weights and measures (metric)

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

Weights and measures (English)

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

Time and temperature

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

Physics and chemistry

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

General

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

Mathematics, statistics

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

FISHERY MANUSCRIPT SERIES NO. 16-03

GENETIC BASELINE OF NORTH AMERICAN SOCKEYE SALMON FOR MIXED STOCK ANALYSES OF KODIAK MANAGEMENT AREA COMMERCIAL FISHERIES, 2014–2016

by

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ABSTRACT

Precise, accurate estimates of stock-specific harvests of sockeye salmon (Oncorhynchus nerka) are lacking for commercial fisheries in the Kodiak Management Area (KMA). Such information would be useful for reconstructing runs, building accurate brood tables to define escapement goals, and refining management by identifying spatial and temporal harvest patterns of local and non-local stocks. Hence, the department developed a genetic baseline for mixed stock analysis (MSA) to estimate the stock compositions of sockeye salmon harvests in select KMA commercial salmon fisheries from 2014 to 2016. This report describes the methodology used to build a baseline, examines costs and benefits of a reduced marker set, describes the performance of the baseline for MSA, and provides guidance on how to interpret biases documented in the MSA tests when evaluating future stock composition estimates of KMA fishery mixtures. This genetic baseline uses single nucleotide polymorphism (SNP) markers and builds on the Western Alaska Salmon Stock Identification Project sockeye salmon baseline to include additional populations in KMA and extends coverage south from Cape Suckling, Alaska to the Columbia River, Washington. The final baseline contains 65,332 individuals from 762 collections representing 473 populations in 15 reporting groups. Mean population sample size was 138 individuals. We used 2 types of tests to measure the baseline's ability to correctly allocate to reporting groups: 100% proof tests and fishery scenario tests. Correct allocations for 100% proof tests averaged 98.2%, and ranged from 80.4% to 99.6%; 73 of the 75 proof tests met our goal of 90% correct allocation. Fishery scenario tests did not indicate any consistent directional biases among reporting groups, but misallocation was observed between Frazer and Ayakulik. Reducing the baseline from 96 to 48 SNPs had negligible effects on MSA estimates. This baseline will provide accurate and precise estimates of stock composition in KMA sockeye salmon fisheries.

Key words: Kodiak, KMA, sockeye salmon, *Oncorhynchus nerka*, mixed stock analysis, genetic baseline, SNP

INTRODUCTION

DESCRIPTION OF KODIAK MANAGEMENT AREA COMMERCIAL SOCKEYE SALMON FISHERIES

The Kodiak Management Area (KMA) comprises the state waters of the western Gulf of Alaska surrounding the Kodiak Archipelago and that portion of the Alaska Peninsula bordering the Shelikof Strait between Cape Douglas and Kilokak Rocks (Figures 1and 2). To the southwest is the Chignik Management Area and to the northeast is the Cook Inlet Management Area.

Directed sockeye salmon *Oncorhynchus nerka* fisheries occur in KMA but sockeye salmon are also incidentally harvested in directed pink *O. gorbuscha*, coho *O. kisutch*, and chum salmon *O. keta* commercial fisheries within the area. Sockeye salmon are known to spawn in 61 known streams in KMA (Jackson and Keyse 2013) but only 9 major systems are currently monitored with salmon counting weirs. Annual commercial harvests of sockeye salmon averaged 2.3 million fish from 2004 to 2013, while escapement averaged 1.2 million fish (Jackson and Keyse 2013).

HISTORY OF STOCK COMPOSITION ESTIMATES IN KMA

Beginning in the late 1970s the Alaska Board of Fisheries established numerous management plans defining how different portions of KMA will be managed (e.g., Cape Igvak, Alitak Bay, North Shelikof, and Westside). Central to these plans was maintaining traditional fishing opportunities and allocations among gear types and also promoting sustainable fisheries. Inherent was the recognition that many of the fisheries in this area consisted of mixed sockeye salmon stocks originating from not only in KMA (*local*) but also in neighboring management areas (*nonlocal*). An understanding of the temporal and spatial presences of both local and nonlocal sockeye salmon in these catches is of regional importance. Such information of KMA fisheries could improve run reconstructions, brood tables, and refine management of KMA by quantifying

stock-specific harvests and by characterizing spatiotemporal migration trends of important stocks.

Historically, stock-specific estimates of sockeye salmon harvest for major commercial fishing areas were based on scale pattern analysis, age-marker analysis, historical averages of the latter (Foster 2011), and tagging studies (Rich and Morton 1930; Bower 1939; Bevan 1959; L. D. Nicholson, unpublished report, Kodiak[1]; Tyler et al. 1986). Estimating stock-specific harvests using tagging or scale pattern analysis methods is time consuming, expensive, and imprecise, especially in the presence of a multitude of stock groups. Age-marker analysis is currently used in KMA to estimate the stock contribution of Karluk Lake sockeye salmon in commercial harvests, but this method relies on the unique freshwater-age-3 scale pattern of Karluk Lake sockeye salmon and has no bearing on other stocks present (Wattum 2015).

Genetic mixed stock analysis (MSA) has been used effectively for sockeye salmon as a tool to estimate stock compositions of mixtures of fish of unknown origin since the 1980s throughout their range (Grant et al. 1980; Wood et al. 1989; Seeb et al. 2000; Beacham et al. 2004; Barclay et al. 2010; Dann et al. 2012b). Commercial fishery managers and stakeholders in Alaska have increasingly valued genetic stock composition information. Nevertheless, genetic MSA of commercial sockeye salmon harvests has never been conducted in KMA, despite being conducted in flanking management areas. The Western Alaska Salmon Stock Identification Program (WASSIP) sampled catches from 2006 to 2009 to estimate genetic MSA stocks of origin of chum and sockeye salmon caught by inshore commercial salmon fisheries of western Alaska (Eggers et al. 2011). Stock compositions and stock-specific harvests and harvest rates were reported in 2012 (Dann et al. 2012b; Habicht et al. 2012; Munro et al. 2012; Templin et al. 2012). However, fisheries east of the border of Chignik and Kodiak management areas (Cape Kumlik) were not analyzed as part of WASSIP. To the north, the Gene Conservation Laboratory (GCL) has conducted genetic MSA of sockeye salmon harvests in the Cook Inlet Management Area since 2005, but due to the terminal nature of the fishery the baseline does not report stock of origin for nonlocal stocks (Barclay et al. 2013).

COMPONENTS OF GENETIC BASELINE FOR KMA

The foundation for genetic MSA of fishery samples is a genetic characterization of all the stocks that might contribute to the fishery (hereafter *baseline*). This characterization is accomplished by measuring allele frequencies at specific loci within populations. Populations are combined into reporting groups consisting of one or more stocks. Reporting groups are the unit to which portions of a mixture are allocated by mixed stock analyses. Reporting groups are defined by incorporating regional management needs, population genetic structure, adequacy of representation in the baseline, and the expected number of fish from a stock potentially within a mixture. Estimating stock composition is accomplished by comparing genotypes of fish of unknown origin (i.e.. fish captured in a fishery) to a baseline of population allele frequencies from potentially contributing stocks. Such baselines are defined by 3 components: (1) populations of individuals, (2) genetic markers used to genotype fish, and (3) reporting groups aggregating populations that are genetically and/or geographically similar.

[1] Nicholson, L. D. A Summary of all known red salmon (*Oncorhynchus nerka*) tagging conducted on Kodiak Island, Alaska. Alaska Department of Fish and Game, Division of Commercial Fisheries, unpublished report, 1978, Kodiak.

1. Populations: KMA fisheries occur around the Kodiak archipelago in the Gulf of Alaska where salmon from throughout the North Pacific rear and migrate (Quinn 2005). In addition, limited information shows that nonlocal stocks are also harvested in KMA fisheries (Koo 1962). As a result, we included populations from throughout North America into the genetic baseline.

2. Genetic Markers: Single nucleotide polymorphism (SNP) markers are the markers of choice for this study due to the availability of archived data and genotyping efficiency. Archived SNP data derived from WASSIP and from studies with baselines in Bristol Bay, Cook Inlet, Prince William Sound, Southeast Alaska, British Columbia, and the Pacific Northwest provide a readily available source of data for the development of this baseline (Habicht et al. 2010; Barclay and Habicht 2012; Dann et al. 2012a; Rogers Olive et al. *in prep*). In addition, the infrastructure at the GCL is suited to efficiently collect SNP data from fishery mixture samples.

3. Reporting Groups: Aggregating populations into reporting groups is performed before mixtures are analyzed to ensure that group identifiability meets accepted standards. Defining reporting groups is an iterative process that takes into account the following: (1) management needs (fishery management and escapement goals), (2) genetic population structure (MSA potential), (3) adequacy of representation in the baseline (number of individuals and representative value of genetic variation within groups), and (4) the expected number of fish from a reporting group in a mixture (Habicht and Dann 2012).

This document describes the baseline that GCL has built for use in MSA of sockeye salmon commercial fishery harvests in KMA. It expands the WASSIP sockeye salmon baseline (Dann et al. 2012a) by including additional collections from Kodiak and by including populations extending to the Columbia River, Washington. This coastwide, North American baseline comprises 473 populations ranging from Norton Sound to the Columbia River, spanning approximately 10,000 kilometers (>6,000 miles) of coastline and uses SNPs to distinguish the 15 reporting groups defined for this study.

OBJECTIVES

This document has 4 objectives:

1. Describe the methodology used to resolve the population genetic structure and to build a baseline for use in MSA of KMA commercial harvests.
2. Describe the performance of the baseline for MSA with the GCL's standard 96 sockeye salmon SNPs.
3. Determine if the baseline provides similar MSA performance with a reduced set of SNPs.
4. Provide guidance on how to interpret biases documented in the MSA tests when evaluating future stock composition estimates of KMA sockeye mixtures.

DEFINITIONS

To reduce confusion associated with the methods, results, and interpretation of this study, basic definitions of commonly used genetic and salmon management terms are offered here.

Allele. Alternative form(s) of a given gene or DNA sequence.

Brood (year). All salmon in a stock spawned in a specific year.

Credibility Interval. In Bayesian statistics, a credibility interval is a posterior probability interval. A credibility interval differs from a confidence interval in frequentist statistics in that it is a statement of probability: i.e., a 90% credibility interval has a 90% chance of containing the true answer.

District. A portion of a body of water, areas of which may be open to commercial salmon fishing. Districts are subdivided into statistical areas and used to document the spatial origin of fishery harvests. Commercial fishing districts, subdistricts and sections in KMA commercial fishing areas are defined in statutes listed below under *Salmon administrative area*.

Effective Population Size (Ne). The size of an ideal population that would be affected by genetic drift at the same rate as the actual population. This idealized population has discrete generations, an even sex ratio, constant size, random union of gametes, and random survivorship of offspring (Kalinowski and Waples 2002).

Escapement (or Spawning Abundance or Spawners). The annual estimated size of the spawning salmon stock— the quality of escapement may be determined not only by numbers of spawners, but also factors such as sex ratio, age composition, temporal entry into the system, and spatial distribution with the salmon spawning habitat (from 5 AAC 39.222(f)).

F-statistics. Measures used to partition genetic diversity within and among populations in a hierarchical fashion. Common measures include: F_{IS}, the average departure of genotype frequencies from Hardy-Weinberg expectations within populations; F_{ST}, the proportion of the variation due to allele frequency differences among populations; and F_{IT}, the departure of genotype frequencies from Hardy-Weinberg expectations relative to the entire population. In this hierarchy, subscripts refer to comparisons between levels in the hierarchy: $_{IS}$ refers to individuals within populations, $_{ST}$ to subpopulations within the total population, and $_{IT}$ to individuals within the total population. Hierarchies and subscript notation can be extended to any level to accommodate different study designs.

Gametic Disequilibrium (or Linkage Disequilibrium). A state that exists in a population when alleles at different loci are not distributed independently in the population's gamete pool, often because the loci are physically linked.

Genetic Drift. Chance changes in allele frequency that result from the random sampling of gametes from generation to generation in a finite population. The magnitude of these changes is inversely related to effective population size.

Genetic Marker. A genetic variant showing Mendelian inheritance, such as a DNA sequence that can be identified by a simple assay.

Genotype. The set of alleles for one or more loci for an individual.

Hardy-Weinberg Expectations (HWE). The genotype frequencies that would be expected from given allele frequencies assuming random mating, no mutation (the alleles do not change), no migration or emigration (no exchange of alleles between populations), infinitely large population size, and no selective pressure for or against any traits.

Harvest. The number of salmon or weight of salmon taken of a run from a specific stock.

Heterozygosity. The proportion of individuals in a population that carry different alleles (i.e., are heterozygous) at a particular marker; measure of variability.

Lake Ecotype. The typical anadromous form of sockeye salmon that spends 1-3 years in a nursery lake before migrating seaward (Burgner 1991).

Locus (Loci, plural). A fixed position or region on a chromosome that may contain more than 1 genetic marker.

Mixed stock Analysis (MSA). A method using allele frequencies from populations and genotypes from mixture samples to estimate stock compositions of mixtures.

Polymerase Chain Reaction (PCR). A method to amplifiy a single or few copies of a locus across several orders of magnitude, generating millions of copies of the DNA.

Reporting Group. A group of populations in a genetic baseline to which portions of a mixture are allocated with mixed stock analyses; constructed based on a combination of stakeholder needs and genetic distinction.

Run. The total number of salmon in a stock surviving to adulthood and returning to the vicinity of the natal stream in any calendar year, composed of both the harvest of adult salmon plus the escapement; the annual run in any calendar year. Except for pink salmon, a run is composed of several age classes of mature fish from the stock, derived from the spawning of a number of previous brood years (from 5 AAC 39.222(f)).

Salmon Administrative Area (Area). Geographic areas used to administer the registration of commercial salmon fishing permits (from 20 AAC 05.230). Commercial salmon fishing areas are designated by letter code and are defined by the following Alaska administrative code: Southeast Alaska (Area A; 5 AAC 33.100); Yakutat (Area D; 5 AAC 30.100); Prince William Sound (Area E; 5 AAC 24.100); Cook Inlet (Area H; 5 AAC 21.100); Kodiak (Area K; 5 AAC 18.100); Chignik (Area L; 5 AAC 15.100); Alaska Peninsula (Area M; 5 AAC 12.100, 5 AAC 09.100, and 5 AAC 11.101); Bristol Bay (Area T; 5 AAC 06.100); and Kuskokwim (Area W; 5 AAC 07.100). Districts and subdistricts within areas used to aid management are further defined by administrative code.

Salmon Stock. A locally interbreeding group of salmon that is distinguished by a distinct combination of genetic, phenotypic, life history, and habitat characteristics, or an aggregation of 2 or more interbreeding groups occurring in the same geographic area and managed as a unit (from 5 AAC 39.222(f)).

Sea/River Ecotype. An anadromous form of sockeye salmon that does not spend any part of its life in a nursery lake before migrating seaward (Wood et al. 2008)

Single Nucleotide Polymorphism (SNP). DNA sequence variation occurring when a single nucleotide (A, T, C, or G) differs among individuals or within an individual between paired chromosomes.

METHODS

TISSUE SAMPLING FOR BASELINE COLLECTIONS

Baseline samples were collected from spawning populations of sockeye salmon ranging from Norton Sound to the Columbia River drainage to compile our library of tissues. Axillary

processes, muscle, heart, or liver tissues were collected and preserved in either 95% ethanol or by freezing at –80°C. These tissues were collected by Alaska Department of Fish and Game (ADF&G) staff and collaborators through several dedicated sockeye salmon projects. Other collections were made in collaboration with the U.S. Forest Service, U.S. Fish and Wildlife Service, National Park Service, National Marine Fisheries Service, hatchery organizations, and nongovernmental organizations. Specific effort targeted increased representation of collections within KMA (Figures 2 and 3). When possible, the target sample size for each baseline collection was 95 individuals—to achieve acceptable precision for estimating allele frequencies (Allendorf and Phelps 1981; Waples 1990) and to accommodate our genotyping platform. However, it was not always possible to meet this minimum.

Selection of baseline collections already genotyped

We selected a subset of collections previously genotyped for other projects to include in KMA sockeye baseline to efficiently represent the following: (1) population abundance, (2) geographic coverage of populations, (3) genetic diversity, and (4) among-year variation of allele frequencies within populations. We used information from fishery managers and researchers to evaluate population abundance and geographic coverage to target sampling locations and run timings. The range of collections for this coastwide sockeye baseline spans spawning locations from Cape Prince of Wales to the Columbia River drainage (Figure 1). Using population structure information from the WASSIP sockeye salmon baseline (Dann et al. 2012a), we added newer collections that exist in regional baselines (Dann et al. 2012c; Barclay et al. 2013; Dann et al. 2013; Rogers Olive et al. *in prep*) to include samples that represented known population genetic structure and to exclude redundant samples.

New baseline collections genotyped

To increase representation of KMA sockeye salmon populations not in the WASSIP baseline, we genotyped additional collections collected by ADF&G staff.

LABORATORY ANALYSIS

Assaying genotypes

We extracted genomic DNA from tissue samples using a DNeasy® 96 Blood & Tissue Kit by QIAGEN® (Valencia, CA). We screened 96 SNP markers (Table 1) using Fluidigm® 96.96 Dynamic Array™ Integrated Fluidic Circuits (IFCs), which systematically combine up to 96 assays and 96 samples into 9,216 parallel reactions. The components were pressurized into the IFC using the IFC Controller HX (Fluidigm). Each reaction was conducted in a 7.2 nL volume chamber consisting of a mixture of 20X Fast GT Sample Loading Reagent (Fluidigm), 2X TaqMan® GTXpress™ Master Mix (Applied Biosystems™), Custom TaqMan® SNP Genotyping Assay (Applied Biosystems™), 2X Assay Loading Reagent (Fluidigm), 50X ROX Reference Dye (Invitrogen™), and 60–400 ng/µl DNA. Thermal cycling was performed on a Fluidigm FC1™ Cycler using a Fast-PCR protocol as follows: a *Thermal-Mix* step of 70ºC for 30 min and 25ºC for 10 min, an initial *Hot-Start* denaturation of 95ºC for 2 min followed by 40 cycles of denaturation at 95ºC for 2 sec and annealing at 60ºC for 20 sec, with a final *Cool-Down* at 25ºC for 10 sec. The Dynamic Array IFCs were read on a Biomark™ or EP1™ System (Fluidigm) after amplification and scored using Fluidigm SNP Genotyping Analysis software.

Assays that failed to amplify on the Fluidigm system were reanalyzed with the QuantStudio™ 12K Flex Real-Time PCR System (Life Technologies). Each reaction was performed in 384-well plates in a 5 µL volume consisting of 6–40 ng/µl of DNA, 2X TaqMan GTXpress Master Mix (Applied Biosystems), and Custom TaqMan SNP Genotyping Assay (Applied Biosystems). Thermal cycling was performed on a Dual 384-Well GeneAmp® PCR System 9700 (Applied Biosystems) as follows: an initial "Hot-Start" denaturation of 95°C for 10 min followed by 40 cycles of denaturation at 92°C for 1 sec and annealing at 60°C for 1 min, with a final "Cool-Down" hold at 10°C. The plates were scanned on the system after amplification and scored using the Life Technologies QuantStudio 12K Flex Software.

Genotypes produced on both platforms were imported and archived in the Gene Conservation Laboratory Oracle database, LOKI.

Laboratory quality control

We conducted quality control (QC) analyses to identify laboratory errors and to measure the background discrepancy rate of the genotyping process. The QC analyses were performed as a separate event from the original genotyping, with staff duties altered to reduce the likihood of repeated human errors. A majority of the collections included in the baseline were subject to QC analyses associated with other projects, in particular WASSIP (Dann et al. 2012a) and MSA programs in Cook Inlet (Barclay et al. 2013) and Southeast Alaska (Rogers Olive et al. *in prep*). New collections that were sampled to increase representation of Kodiak area populations were subject to the following QC protocol: re-extraction of 8% of project fish and genotyping them for the same SNPs assayed in the original project. Discrepancy rates were calculated as the number of conflicting genotypes divided by the total number of genotypes compared. These rates describe the difference between original project data and QC data for all SNPs, and are capable of identifying extraction, assay plate, and genotyping errors. This QC method is the best representation of the error rate of our current genotype production.

STATISTICAL ANALYSIS

Data retrieval and quality control

We retrieved genotypes from LOKI and imported them into *R* version 3.2.3 (Wooden Christmas-Tree).[2] All subsequent analyses were performed in *R* unless otherwise noted. Prior to statistical analysis, we performed 4 analyses to confirm the quality of the data used. First, we identified SNP markers that were invariant in all individuals. We excluded these markers from further statistical analyses.

Second, we removed individuals that had genotypes indicative of other species.

Third, we removed individuals that were missing substantial genotypic data from further analyses. We used an *80% rule* that excludes individuals missing genotypes for 20% or more of loci, because these samples likely had poor quality DNA. The inclusion of individuals with poor quality DNA might introduce genotyping errors into the baseline and reduce the accuracies of MSA estimates (Dann et al. 2012a).

Finally, we identified individuals with duplicate genotypes, and we removed them from further analyses. Duplicate genotypes can occur as a result of duplicate sampling or extracting the same

[2] R Core Team. 2015. R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. URL https://www.R-project.org/.

individual twice, and were defined as pairs of individuals sharing the same alleles in 95% of loci screened. The individual with the most missing data from each duplicate pair was removed from further analyses. If both samples had the same amount of genotypic data, the first sample was removed from further analyses.

Baseline development

Hardy-Weinberg Expectations

After calculating allelic frequencies for each locus, we tested observed genotype frequencies for each baseline collection for conformance to Hardy-Weinberg expectations (HWE) at each locus by Monte Carlo simulation. We used *Genepop* version 4.3 (Rousset 2008) with 10,000 burn-in steps, followed by 20 batches of 5,000 iterations/batch. We combined probabilities for each collection across loci using Fisher's method (Sokal and Rohlf 1995) and examined the frequency of departures from HWE to identify collections that exhibited substantially more departures than others. We removed collections from subsequent analyses if they departed significantly from HWE after correcting for multiple tests with Bonferroni's method ($\alpha = 0.05$ / no. of collections), if they departed from HWE substantially more frequently than others, or if the distribution of *p*-values across loci was indicative of nonconformance to HWE (Waples 2014). We defined *substantially more* by examining a histogram of the frequency of the number of collections in which SNPs were out of HWE.

Pooling collections into populations

We pooled collections to obtain better estimates of allele frequencies when appropriate. Pooling for this coastwide sockeye salmon baseline largely followed previous pooling results of the GCL's most recent regional sockeye salmon baselines for Bristol Bay and the Alaska Peninsula (Dann et al. 2012c), Cook Inlet (Barclay et al. 2013), and Prince William Sound and Southeast Alaska (Rogers Olive et al. *in prep*). These regional baselines and pooling of new Kodiak collections followed the GCL's standard stepwise protocol: first, we pooled collections from the same geographic location, and sampled at similar calendar dates but in different years, as suggested by (Waples 1990). We then tested for differences in allele frequencies between pairs of geographically proximate collections (~5 km) that were collected at similar calendar dates and might represent the same spawning population. We used Fisher's exact test (Sokal and Rohlf 1995) of allele frequency homogeneity and based our decisions on a summary across loci using Fisher's method. When these tests indicated no difference between collections ($P > 0.01$), we pooled them. When these pooled collections were near other collections we followed the same protocol until we found significant differences between the pairs of collections being tested. After this pooling protocol, we considered these final collections to be populations. Finally, we tested populations for conformance to HWE following the same protocol described above to ensure that our pooling was appropriate and that tests for linkage disequilibrium would not result in falsely positive results due to departure from HWE.

Removal of loci from the baseline

When testing populations for conformance to HWE we combined probabilities for each locus across populations using Fisher's method (Sokal and Rohlf 1995) and examined the frequency of departures from HWE to identify loci that exhibited substantially more departures than others. We removed loci with significant departures from HWE across populations ($P < 0.01$). We

examined the distribution of F_{IS} for any failing loci to determine the likely cause of nonconformance to HWE.

Removal of collections from the baseline

We removed some collections from further analysis for other reasons as per other GCL regional baselines. We removed collections that did not pool with geographically close collections and lacked reliable collection data to discern their exact sample date and location.

Similar to procedures in WASSIP, we removed collections from the Yukon River (Dann et al. 2012a). We also removed collections that were believed to be mixtures of multiple populations and not representative of single, spawning populations. We removed hatchery broodstock collections that were believed to not represent either the hatchery or original population as well as older collections that have been replaced with more recent collections. Finally, we identified collections of escapement samples that were previously used as baseline but were no longer needed to represent spawning populations because more representative collections replaced them.

Linkage disequilibrium

We tested for linkage disequilibrium between each pair of nuclear SNPs in each population to ensure that subsequent baseline and MSA would be based on independent markers. We used the program *Genepop* version 4.3 (Rousset 2008) with 10,000 burn-in steps, followed by 100 batches of 5,000 iterations/batch for these tests. We summarized the frequency of significant linkage disequilibrium between pairs of SNPs ($P < 0.05$) and further investigated pairs that exhibited linkage in a substantial number of populations. We considered pairs to be linked if they exhibited linkage in more than half of all populations or if they exhibited linkage in less than half of populations, but in substantially more populations than a majority of SNP pairs. We defined *substantially more* by examining a histogram of the frequency of the number of populations in which pairs were linked. We also examined Pearson's correlation coefficient r between the first alphabetical allele in each linked pair of SNPs in each population to visualize the pattern of linkage across the geographic range of the baseline.

For each linked SNP pair, we removed 1 of the linked SNPs or combined the pair into a composite, haploid marker in further analyses, if the pattern of linkage provided information useful for MSA. We used f_{ORCA} as our measure of information. f_{ORCA} assesses the rate of correct allocation of simulated individuals to defined reporting groups based upon the markers in question (Rosenberg et al. 2005). Because combinations of alleles from 2 or more markers can exist in more forms than single markers (9 possible phenotypes vs. 4 alleles for a pair of SNPs), composite markers generally have higher f_{ORCA} values than the single markers that form them. Simple comparisons of these values would always suggest combining linked pairs into composite markers. However, there is a cost associated with combining linked pairs, as estimates of 8 phenotype frequencies are less precise than estimates of 1 allele frequency at 2 loci for a given sample size.

To account for this cost, and to ensure that we combined only SNP pairs that provided significantly more information than the single SNPs in question, we compared the difference between f_{ORCA} values of the composite marker and the single SNP with the greater f_{ORCA} value in the pair [$\Delta = f_{ORCA\text{-}pair} - \max(f_{ORCA\text{-}single1}, f_{ORCA\text{-}single2})$]. This difference ($\Delta$) was our test statistic. Since we did not know the distribution of Δ, we calculated Δ for each pair of all possible SNP

combinations to empirically define the test statistic distribution, and set the 90th quantile of the distribution as a critical value (Δ_{90}). We then either combined linked SNPs into composite, haploid markers if Δ was greater than this critical value or dropped the SNP with the lower f_{ORCA} value if Δ was less than the critical value.

Analysis of genetic structure

Analysis of temporal variance

We did not examine among-year temporal variation in allele frequencies with a hierarchical, 4-level Analysis of Variance (ANOVA), because temporal variation among collections within populations was found to be negligible for 60 populations in WASSIP (Dann et al. 2012a). Temporal variation in allele frequencies is not expected to be significant, unless effective population sizes are very small and thus subject to strong genetic drift.

Visualization of genetic distances

We visualized pairwise F_{ST} estimates among populations with Neighbor-Joining trees. Pairwise F_{ST} were estimated using the methods of Weir and Cockerham (1984) from the final set of independent markers estimated with the package *hierfstat.*[3] We plotted the consensus Neighbor-Joining tree with *FigTree.*[4] These trees provided insight into the variability of the genetic structure among populations.

Self-assignment likelihood profiles

We computed a *likelihood profile* of the baseline, or the self-assignment probability for each individual within populations within reporting groups. We calculated the likelihood of each individual's genotype originating from all baseline populations based on leave-one-out population allele frequencies (Anderson et al. 2008). These genotype likelihoods were then rolled up to the population and reporting group levels to determine the overall probability of individuals from a group being assigned back to that group at these 2 different hierarchical levels. We visualized these probabilities as a matrix to better understand self-assignment of individuals back to their respective reporting groups and gain insight into potential misallocation in fishery mixtures for different sets of genetic markers.

Baseline evaluation for MSA

Process for defining reporting groups

We defined reporting groups by first examining population structure and representation of potential stocks by populations in the baseline to determine which stocks might be distinguishable using MSA. We then consulted with area biologists to determine which of these stocks could also improve run reconstructions, brood tables, and/or refine management of KMA by quantifying stock-specific harvests and characterizing spatiotemporal migration trends of important stocks. Finally, we consulted with regional biologists to identify other stocks that may contribute substantially enough to any of these fisheries to justify representation as a reporting group.

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[3] Goudet, J., and T. Jombart. hierfstat: Estimation and Tests of Hierarchical F-Statistics. R package version 0.04-22. [released December 4, 2015; cited December 15, 2015]. Available from https://CRAN.R-project.org/package=hierfstat.

[4] Rambaut, A. FigTree v1.4.2. [released July 9, 2014; cited January 8, 2016]. Available from http://tree.bio.ed.ac.uk/software/figtree/

We used the following metrics to define reporting groups for this project: (1) 90% correct allocation in 100% proof tests of the baselines ability to allocate to reporting groups, (2) correct allocation in manager-defined fishery scenario tests of the baseline to allocate to reporting groups, (3) approximately 400 individuals from enough different collections to adequately represent the genetic diversity present within a reporting group, and (4) an expected contribution to at least 1 stratum mixture of 5%, or 19 fish for the 380 fish mixtures proposed for KMA commercial harvest samples. Final reporting groups are summarized in Table 2.

100% proof tests

The first method to assess the identifiability of reporting groups in mixtures was *100% proof tests*, in which we sampled half of the individuals in a reporting group (up to 200 individuals) without replacement and analyzed them as a mixture against the reduced baseline. These tests provided an indication of the power of the baseline for MSA under the assumption that all the populations from a reporting group were represented in the baseline. This process was repeated 4 more times, to produce 5 replicates for each reporting group to better understand precision and accuracy of assignments given different mixture draws. The GCL uses the common guideline that correct allocation for these single-reporting group tests should exceed 90% to be considered adequate, as is generally accepted (Seeb et al. 2000).

Fishery scenario tests

The 2nd, more stringent method to assess the identifiability of reporting groups in mixtures was *fishery scenario tests*, in which we obtained 6 hypothetical fishery scenarios from regional management and research biologists consisting of different mixed compositions that may be expected to show up in KMA commercial fisheries. These tests were used to determine if genetic structure supported proposed reporting groups under realistic MSA situations and to provide insights into potential biases in misallocation. These tests provide valuable context for interpreting MSA results from KMA commercial harvest mixtures.

For each of these 6 fishery scenarios and a 7th *flat* scenario (i.e., all reporting groups have equal representation), we sampled 400 individuals (390 for flat) without replacement from the reporting groups according to the proportions for the given scenario, and analyzed them as a mixture against the reduced baseline. This process was repeated 4 more times, to produce 5 replicates for each scenario. These tests provided an unbiased indication of the power of the baseline for MSA, without the potential issue of overestimation of power seen with 100% proof tests (Anderson et al. 2008). Fishery scenario tests provide information on the accuracy and precision of MSA with this baseline with regard to potential biases in misallocation.

BAYES protocol

Stock compositions of these test mixtures were estimated with the program *BAYES* (Pella and Masuda 2001). The Bayesian model implemented by *BAYES* places a Dirichlet distribution as the prior distribution for the stock proportions, and the parameters for this distribution must be specified. We defined prior parameters for each reporting group to be equal (a *flat* prior) with the prior for each reporting group subsequently divided equally to populations within that reporting group. We set the sum of all prior parameters to 1 (prior weight), which is equivalent to adding 1 fish to each mixture (Pella and Masuda 2001). We ran 5 independent Markov Chain Monte Carlo (MCMC) chains of 40,000 iterations for each proof test repeat. Each MCMC chain had different starting values and we discarded the first 20,000 iterations (burn-in) to remove the influences of

the initial starting values. For 100% proof tests, we defined the starting values for the first chain such that the first 1/5 of the baseline populations summed to 0.9 and the remaining populations summed to 0.1. Each chain had a different 1/5 of baseline populations sum to 0.9. For fishery scenario tests, starting values for each chain were flat across reporting groups, but randomly drawn from a gamma distribution across populations within reporting groups.

We combined the 2nd half of each chain to form the posterior distribution with a total of 100,000 iterations. From this posterior distribution of stock compositions, we tabulated summary statistics for each reporting group, including mean, median, standard deviation, 90% credibility intervals, and the probability that a given reporting group has a stock composition of 0% ($P = 0$). We also assessed the within- and among-chain convergence of these estimates using the Raftery-Lewis and Gelman-Rubin diagnostics, respectively. These compare variation of estimates within a chain (Raftery and Lewis 1996), and within a chain to the total variation among chains (Gelman and Rubin 1992). If the Gelman-Rubin diagnostic for any stock group estimate was greater than 1.2, we reanalyzed the mixture with 80,000-iteration chains following the same protocol. We repeated this procedure for each reporting group mixture and fishery scenario test. We summarized the average across replicates by taking the mean of the 5 median point estimates. A critical level of 90% correct allocation in the 100% proof tests was used to determine if the reporting group was acceptably identifiable (Seeb et al. 2000). We calculated mean bias, root mean square error of the estimator (RMSE), and mean 90% credibility interval width for the all proof tests to compare the predicative power of the baseline for different reporting groups in terms of precision and accuracy. Mean bias indicates if there is directional bias in the median point estimate of the posterior (i.e., accuracy of median), RMSE shows the variability in central tendency of the median between replicates (i.e., precision of median between replicates), and mean 90% credibility interval width shows variation within the posterior for each replicate (i.e., precision of posterior within replicates). We visualized these results of 100% proof tests as barplots using the *gplots*[5] package, and as dot and whisker plots for the fishery scenario tests in order to better visualize stock composition estimates vs. true values.

Reduce baseline to a subset of SNPs

The GCL continues to search for efficiencies in generating genotypes for genetic MSA. One simple way to increase efficiency and lower costs is to screen mixtures for a reduced set of SNPs. With the GCL's current Fluidigm® genotyping platform, it is more time and cost effective to screen mixture fish for 24 or 48 SNPs than 96 SNPs.

The use of a subset of the 96 SNPs will potentially result in a loss of precision in MSA, because genetic variation among populations and reporting groups is not equal for all SNP markers. By selecting the markers that best differentiate among reporting groups (*high-grading*), it is possible to increase efficiencies with minimal cost to precision and accuracy of stock composition results.

We selected a subset of 48 SNP loci to test whether a reduced marker suite could meet the GCL's criteria for MSA (listed above). The reduced marker suite was selected based on observed heterozygosity, coastwide F_{ST}, visual examination of allele frequency plots, and results of 3 hierarchical ANOVAs following the method described in Weir (1996). The ANOVAs partitioned genetic variation among populations (σ_P^2), subpopulations within populations (σ_S^2), individuals

[5] Warnes, G. R., B. Bolker, L. Bonebakker, R. Gentleman, W. H. A. Liaw, T. Lumley, M. Maechler, A. Magnusson, S. Moeller, M. Schwartz and B. Venables. gplots: Various R Programming Tools for Plotting Data. R package version 2.17.0. [released May 2, 2015; cited November 18, 2015]. Available from https://CRAN.R-project.org/package=gplots

within subpopulations (σ_I^2), and alleles within subpopulations (σ_G^2). These 3 ANOVAs were constructed as follows: (1) a 3-level ANOVA with Frazer and Ayakulik reporting groups as populations and the 12 Frazer/Ayakulik populations as subpopulations, (2) a 3-level ANOVA with Kodiak reporting groups as populations and the 57 Kodiak populations as subpopulations, and (3) a 3-level ANOVA with all reporting groups as populations and the 473 populations as subpopulations. The different hierarchical ANOVAs were performed to assess which markers best differentiate among Frazer and Ayakulik reporting groups, Kodiak reporting groups, and all reporting groups in the baseline.

We performed the same 100% proof tests and fishery scenario tests for this alternate marker suite. As convergence between the 5 MCMC chains was not an issue for any reporting groups in the 96 SNP proof tests, the BAYES protocol (above) was simplified to include only a single MCMC chain of 40,000 iterations to create a posterior distribution of 20,000 iterations (as opposed to 100,000). Since we only ran a single chain for each of these mixtures, the initial starting values were flat across reporting groups and random draws from a gamma distribution for populations within reporting groups. Stock composition results from the proof tests were compared to the performance of the full 96 SNP baseline by examining the average stock compositions across replicates, mean bias, RMSE of the median across the replicates, and average 90% credibility interval width. A reduced marker suite was deemed appropriate if the increases in mean bias and/or RMSE were small and would likely have minimal impact on MSA of commercial catch samples.

RESULTS

TISSUE SAMPLING FOR BASELINE COLLECTIONS

We restricted the geographic area of our baseline to include only those populations likely to be present in KMA commercial fishery mixtures, so we chose a subset of collections ranging from Salmon Lake on the Seward Peninsula to Cedar River near Lake Washington (Figures 1, 2, and 3). These collections spanned the years 1985–2015 (Table 3) and totaled 66,513 sockeye salmon from 762 collections. Of these baseline collections, 76 (7,699 individuals) were from KMA.

Selection of baseline collections already genotyped

Of the 762 collections included in this baseline, 722 (62,175 individuals) had already been genotyped for the GCL's standard 96 sockeye salmon SNPs as part of other projects. Of these baseline collections, 36 (3,361 individuals) were from KMA.

New baseline collections genotyped

To increase representation of KMA sockeye salmon populations, we genotyped an additional 40 collections (4,338 individuals) collected by ADF&G staff from 1999 through 2015. These additional collections provided better representation of 2 populations and added 29 populations that did not appear in the WASSIP sockeye salmon baseline (Dann et al. 2012a). New collections included samples from Olga Lakes (Upper Station), Akalura Lake, Frazer Lake, Ayakulik (Red Lake), Karluk Lake, Upper Thumb Lake, Uganik Lake, Barabara Lake, Paul's Lake, Buskin Lake, Lake Louise, Saltery Lake, and Little Kitoi (Table 3; Figures 2 and 3).

LABORATORY ANALYSIS

Assaying genotypes

A total of 66,513 individuals were genotyped at all 96 SNP markers (Table 3). The number of individuals genotyped per baseline collection ranged from 3 to 380 and averaged 87 individuals. Baseline collections from KMA ranged from 44 to 250 and averaged 101 individuals.

Laboratory quality control

Many of the collections in this baseline were included in WASSIP (n = 485) where the overall discrepancy rate was 0.34% (Dann et al. 2012a). This discrepancy rate was similar to that observed for the 311 collections in this baseline from Prince William Sound and Southeast Alaska, where the overall discrepancy rate was 0.43% (Rogers Olive et al. *in prep*), and the 16 collections most recently added to this baseline in the fall of 2015 for which the overall discrepancy rate was 0.28%. The majority of discrepancies were between heterozygotes and homozygotes, and very few homozygote-homozygote discrepancies were observed (0.02%) for all QC methods. Assuming that half of the errors occurred in the QC and half in the original genotyping, baseline collections of sockeye salmon were genotyped with a process that produced genotypes with an overall error rate approximately 0.2%.

STATISTICAL ANALYSIS

Data retrieval and quality control

All SNPs were variable in the collections screened in this analysis. No SNP markers were removed before further analyses.

A total of 33 individuals in the baseline had genotypes indicative of nontarget species (i.e., nonsockeye salmon) and were removed from further analyses (Table 3).

Another 856 individuals were removed from the baseline due to missing genotypes from greater than 20% of the loci (19 SNPs). The percentage of fish from a collection missing genotypes ranged from 0% to 29%, with an average of 1.3% of individuals per collection. For baseline collections in KMA, 122 individuals were removed (1.6%).

There were 292 duplicate individuals identified in the 746 baseline collections, which were removed from further analysis. The percentage of fish from a collection with duplicate genotypes ranged from 0% to 25%, with an average of 0.4% of individuals per collection. For baseline collections in KMA, 38 individuals were removed (0.5%). The number of duplicate individuals was initially much higher. However, the collection from Kanalku Lake on Admiralty Island in Southeast Alaska had an abnormally high number of duplicate genotypes. This population is thought to have undergone severe bottlenecks (Rogers Olive et al. *in prep*) and therefore was nearly fixed for most SNP loci, giving it a high rate of false positives (n = 116 across all 3 collections; Table 3). Evidence of this is found in the results of the duplicate check where a single individual can share 98% of their genotypes, not only in samples from the same year, but across years as well (data not shown). For these reasons, Kanalku Lake samples were removed from duplicate check analyses.

Baseline development

Hardy-Weinberg Expectations

After adjusting for multiple tests, no baseline collections deviated from HWE according to Fisher's summary probability over diploid loci. However, there were 11 collections that had a probability distribution among loci indicative of nonconformance to HWE (Waples 2014). These 11 collections (3 from West of Chignik, 2 from Cook Inlet, and 6 South of Cape Sucking) were retained in the baseline, as they have been included in other regional baselines.

Pooling collections into populations

The 762 collections were pooled into 473 populations with a total of 65,332 fish (Table 3). After pooling, 17 populations had less than the GCL desired minimum sample size of 75 fish, mostly from South of Cape Sucking (Table 3). Another 17 populations deviated from HWE as indicated by Fisher's summary probability over all diploid loci ($P < 0.01$), without adjusting for multiple tests. These 17 collections (3 from West of Chignik, 3 from Cook Inlet, and 11 from South of Cape Suckling) were retained in the baseline, as they have been included in other regional baselines. No markers, other than the 2 loci removed (see *Removal of loci from the baseline* below), failed to conform to HWE in more than 12 of the 473 populations ($P < 0.01$), and no population failed to conform to HWE at more than 5 of the 91 remaining nuclear markers ($P < 0.01$).

Removal of loci from the baseline

Two nuclear markers (*One_c3-98* and *One_ACBP-79*) deviated from HWE as indicated by Fisher's summary probability over all 473 populations ($P < 0.01$) and were removed from further analysis, leaving 94 loci (Table 1). Geographically, *One_c3-98* appeared to deviate from HWE in many SEAK populations, whereas *One_ACBP-79* had considerable deviations from HWE in southwest Kodiak populations. Examination of F_{IS} values showed positive values for populations deviating from HWE for *One_ACBP-79*, indicating an excess of homozygotes, and extremely negative values for populations deviating from HWE for *One_c3-98*, indicating an excess of heterozygotes (likely due to the difficulty of scoring the alternate homozygote with the Fluidigm® genotyping platform).

Linkage disequilibrium

Three SNP pairs exhibited significantly more linkage than others among the 473 coastwide populations tested for linkage disequilibrium, with 2 of these pairs linked in greater than half of all populations (*One_MHC2_190* and *One_MHC2_251*, $P < 0.05$ for 70% of populations; *One_GPDH-201* and *One_GPDH2-1872*, 66% of populations; and *One_Tf_ex11-750* and *One_Tf_in3-182*, 36% of populations; Figure 4).

The 90% critical value of the f_{ORCA} difference distribution ($\Delta 90$) was 0.022, which was less than the Δ for *One_Tf_ex11-750* and *One_Tf_in3-182* ($\Delta = 0.061$) and greater than Δ for the other 2 linked pairs (*One_MHC2_190* and *One_MHC2_251*: $\Delta = 0.007$; *One_GPDH-201* and *One_GPDH2-1872*: $\Delta = 0.005$; Table 4; Figure 5). Therefore we combined *One_Tf_ex11-750* and *One_Tf_in3-182* into a composite haploid marker and dropped the marker with the lowest individual f_{ORCA} value in each of the 2 other pairs from further analysis; *One_GPDH2* and *One_MHC2-251*. We also combined the 3 mitochondrial SNPs into a single composite locus (*One_CO1.One_Cytb_17.One_Cytb_26*), leaving a total of 92 SNP loci represented by 89 independent markers (Table 1).

Analysis of genetic structure

Visualization of genetic distances

The Neighbor-Joining tree of pairwise F_{ST} indicated that sockeye salmon from the South of Cape Suckling group (Southeast Alaska/British Columbia/Washington) exhibited the greatest divergences between populations included in this baseline (Figure 6), and substantial genetic structure existed within KMA reporting groups for use in MSA (Figure 7). Overall, genetic structure appears to be correlated with geography, especially in larger populations of lake-type sockeye salmon. Some population groupings were defined more by life history and habitat usage than by geography (e.g., sea/river ecotype sockeye salmon in Bristol Bay and Western Alaska). Additionally, the South of Cape Suckling group exhibited greater genetic structure at finer spatial scales (Figure 6). Importantly, we observed fairly high levels of interdrainage genetic structuring among sockeye salmon populations in KMA, especially in southwest Kodiak (Figure 7), with the notable exception of Ayakulik and Frazer reporting groups.

Self-assignment likelihood profiles

A matrix of the overall self-assignment probability of individuals to a reporting group (likelihood profile) indicates that most groups are highly identifiable with minimal evidence of directional biases (Figure 8). Overall self-assignment probabilities of individuals back to their group averaged 0.78, and ranged from 0.52 to 0.90. Misallocations were most common to geographically nearby groups. The most pronounced misallocation was between Ayakulik and Frazer reporting groups (see *Effect of Genetic Similarity Among Frazer and Ayakulik Sockeye Salmon on MSA* below). These results provide information on the potential for misallocation between closely related reporting groups and can aid in the interpretation of future stock composition results.

Baseline evaluation for MSA

100% proof tests

Correct allocations for 100% proof tests averaged 98.3%, and medians ranged from 85.0% to 99.7% (Table 5; Figure 9; Appendix A). Seventy-two of the 75 100% proof tests (5 replicates for each of the 15 reporting groups) met our goal of 90% correct allocation, with only 3 tests failing to meet the goal from the Frazer reporting group (Appendix A).

For West of Chignik, Black Lake, and Chignik Lake reporting groups, correct allocations in the proof tests averaged 98.7% (West of Chignik), 99.6% (Black Lake), and 99.4% (Chignik Lake) across replicates (Table 5; Figure 9; Appendix A). Within southwest Kodiak, correct allocations averaged 99.6% (Upper Station/Akalura), 90.1% (Frazer), 97.5% (Ayakulik), and 98.7% (Karluk). Three 100% proof tests did not reach the 90% correct allocation level in Frazer (median correct allocation = 85.0%, 85.0%, and 89.8%; median misallocation to Ayakulik = 14.4%, 14.5%, and 9.7%, respectively; Appendix A). Correct allocations to other reporting groups in KMA averaged 97.2% (Uganik), 99.3% (Northwest Kodiak), 98.1% (Afognak), 99.2% (Eastside Kodiak), and 99.4% (Saltery). Correct allocations to groups east of KMA averaged 98.8% (Cook Inlet), 99.5% (Prince William Sound), and 98.7% (South of Cape Suckling; Table 5; Appendix A).

Fishery scenario tests

The 6 mixed-composition fishery scenario proof tests and the flat scenario suggested that the coastwide baseline can accurately and precisely estimate stock compositions of KMA reporting groups in proportions thought to be similar to those expected in 6 different KMA fisheries (Table 6; Figures 10–16; Appendix B). With regard to accuracy of point estimates (median) across replicates for each scenario, there was little indication of systematic, directional biases (i.e., reporting groups consistently under- or overestimated; Table 6). Nevertheless, average estimates for the Cook Inlet reporting group were 0.6% low across replicates and scenarios, indicating that the median posterior values had a slight bias towards underestimation of the Cook Inlet reporting group by a fraction of a percent (Table 6). With regard to precision among replicates (variation of medians across replicates), RMSE values were most elevated for Frazer and Ayakulik reporting groups (Frazer: range = 1.9–7.1%, average = 4.0%; Ayakulik: range = 2.3–6.3%, average = 3.4%), indicating lower precision between replicates for scenarios (Table 6). Regarding precision within replicates (variation of posterior within replicates), average 90% credibility interval widths were largest for Frazer and Ayakulik reporting groups (Frazer: range = 5.4–15.2%, average = 9.3%; Ayakulik: range = 6.7–14.3%, average = 10.5%; Table 6).

The flat fishery scenario test is potentially the most informative scenario for testing reporting groups in a Bayesian mixed stock analysis model. This scenario failed to indicate any persistent, directional biases (all less than ±1%), but highlighted the relatively higher level of uncertainty in estimating stock composition for Frazer and Ayakulik reporting groups (i.e., higher RMSE and 90% credibility interval widths; Table 6; Figure 16).

Overall, fishery scenario proof tests showed a slight bias toward underestimation of Cook Inlet and indicated that although there was no evidence of bias for the Frazer and Ayakulik reporting groups, there can be substantial variability in the estimation of their stock compositions (Figures 10–16), as was expected given the weak genetic structure between populations in these reporting groups (Figures 7 and 8).

Reduce baseline to subset of SNPs

We selected a subset of 48 SNPs comprising 46 loci based on (1) H_O (Table 1), (2) F_{ST} (Table 1), (3) examination of allele frequencies, and (4) the reporting group level variance components (σ_P^2) from 3 different hierarchical genetic ANOVAs (Weir 1996) to determine which SNPs best differentiated between Frazer and Ayakulik, KMA, and coastwide reporting groups (Table 7). The 48 SNPs selected (46 loci) showed improved performance in almost all metrics as compared to the full set of 92 SNPs (89 loci), with an average H_O of 0.329 vs. 0.273, F_{ST} of 0.158 vs. 0.138, Ayakulik/Frazer σ_P^2 of 0.0001 vs. 0.0001, KMA σ_P^2 of 0.0243 vs. 0.0149, and coastwide σ_P^2 of 0.0227 vs. 0.0139.

A matrix of the overall self-assignment probability of individuals to a group based on the 46 loci (Figure 17) rather than on 89 loci (Figure 8) indicated slightly lower probabilities for most reporting groups; however, all continued to appear to be well defined. Overall self-assignment probabilities of individuals back to their group averaged 0.67, ranging from 0.45 to 0.79. This represented an overall reduction of average overall self-assignment of reporting groups of 0.11.

Correct allocations for 100% proof tests averaged 98.2%, and medians ranged from 80.4% to 99.6% (Table 8; Figure 18; Appendix C). Seventy-three of the 75 100% proof tests (5 replicates

for each of the 15 reporting groups) met our goal of 90% correct allocation, with the only 3 tests failing to meet the goal from the Frazer reporting group (Appendix C).

For West of Chignik, Black Lake, and Chignik Lake reporting groups, correct allocations in the proof tests averaged 98.0% (West of Chignik), 99.2% (Black Lake), and 98.9% (Chignik Lake) across replicates (Table 8; Figure 18; Appendix C). Within southwest Kodiak, correct allocations averaged 99.6% (Upper Station/Akalura), 91.8% (Frazer), 98.0% (Ayakulik), and 99.2% (Karluk). Two 100% proof tests did not reach the 90% correct allocation level in Frazer (median correct allocation = 85.1% and 80.4%, median misallocation to Ayakulik = 13.7% and 19.0%, respectively; Appendix C). Correct allocations for other reporting groups in KMA averaged 97.5% (Uganik), 99.5% (Northwest Kodiak), 98.1% (Afognak), 98.8% (Eastside Kodiak), and 99.3% (Saltery). Correct allocations for groups east of KMA averaged 97.2% (Cook Inlet), 99.2% (Prince William Sound), and 97.7% (South of Cape Suckling; Table 8; Appendix C).

The 6 mixed-composition, fishery scenario proof tests suggested that the coastwide baseline could accurately and precisely estimate stock compositions of KMA reporting groups in proportions thought to be similar to those expected in KMA fisheries (Table 9; Figures 10–16; Appendix D). With regard to accuracy of point estimates (median) across replicates for each scenario, there was little indication of systematic, directional biases of reporting groups being consistently under- or overestimated (Table 9). Nevertheless, average estimates for the Frazer and Cook Inlet reporting groups were low (Frazer = 1.2% low; Cook Inlet = 1.1% low), while Ayakulik was 1.2% above true values across replicates and scenarios. These results indicated that the median posterior values had a slight bias towards underestimation of the Frazer and Cook Inlet reporting groups and overestimation of the Ayakulik reporting group by small percentages (Table 9). With regard to precision among replicates (variation of medians across replicates), RMSE values were most elevated for Frazer and Ayakulik reporting groups (Frazer: range = 2.0–7.1%, average = 4.5%; Ayakulik; range = 2.5–6.5%, average = 3.9%), indicating lower precision between replicates compared to other reporting groups (Table 9). Regarding precision within replicates (variation of posterior within replicates), average 90% credibility interval widths were highest for Frazer and Ayakulik reporting groups (Frazer: range = 6.7–16.7%, average = 11.2%; Ayakulik: range = 6.3–17.3%, average = 12.6%; Table 9).

Average bias across the 5 replicates for the flat scenario was –1.3% for the West of Chignik reporting group, and +1.3% for the Frazer reporting group, while all other reporting groups had an average bias of less than ±1%. This scenario highlighted the relatively higher level of uncertainty in estimating stock composition for Frazer and Ayakulik reporting groups (higher RMSE and 90% credibility interval widths; Table 9; Figure 16).

Overall, fishery scenario proof tests of the 48 SNP baseline (46 loci) showed slight bias toward underestimation of Cook Inlet, Frazer, and potentially the West of Chignik reporting groups and overestimation of the Ayakulik reporting group. Additionally, as in the 96 SNP baseline (89 loci), there can be substantial variability in the estimation of stock compositions for Frazer and Ayakulik reporting groups (Figures 10–16), as was expected given the close relationship between populations in these reporting groups (Figures 7 and 17).

DISCUSSION

This report describes the most comprehensive coastwide baseline to date for sockeye salmon from Norton Sound to the Columbia River and was specifically designed for MSA of KMA fisheries. This baseline contains more than 26,000 additional fish than the previously published

sockeye salmon baseline used for WASSIP (Dann et al. 2012a). In addition, this baseline contains 40 additional KMA collections representing 29 populations (n = 4,338) identified as gaps by area managers. This baseline is the foundation for estimates of stock composition and stock-specific harvests in KMA fisheries.

We set out to describe the methodology used to build a baseline for use in MSA, detail how we selected a reduced set of 48 SNPs from the 96 available, describe the performance of the baseline for MSA, and provide guidance on how to interpret biases documented in the 100% and fishery scenario proof tests when evaluating future stock composition estimates of KMA mixtures. The discussion will focus primarily on interpreting the results of population structure and on how to use MSA proof tests when evaluating stock composition estimates in future KMA reports.

GENETIC VARIATION AMONG SOCKEYE SALMON POPULATIONS POTENTIALLY CONTRIBUTING TO KMA COMMERCIAL FISHERIES

The distribution of genetic variation observed in this baseline (Figures 6 and 7) is concordant with that previously observed using 45 SNPs (Habicht et al. 2010) and 96 SNPs (Dann et al. 2012a). As previously observed among sockeye salmon populations throughout the Pacific Rim, genetic variation tends to be hierarchically distributed among regions and among nursery lakes within regions (Varnavskaya et al. 1994; Wood et al. 2008; Habicht et al. 2010; Dann et al. 2013). This pattern is well suited for MSA for KMA fisheries because the reporting groups designed for this project were either regional, single, or multidrainage reporting groups that correspond to the distribution of genetic variation. However, we also observed common deviations from these patterns due to ecotype, geography, demography, and stocking history (Figures 6 and 7).

Patterns of genetic variation produced by geography and demography were frequently observed among populations on the Alaska Peninsula, small drainages on Kodiak Island, and Southeast Alaska. Populations in these regions are commonly small in number and separated by salt water (as opposed to fresh water, within a drainage). Less abundant populations generally have smaller effective population sizes and are more influenced by the effect of genetic drift on allele frequencies than populations with larger effective population sizes (Hedrick 2005). Reduced migration, coupled with high rates of genetic drift, can result in a deviation from the broad scale pattern of increasing genetic distance with geographic distance (isolation by distance). The patterns we observed correspond with previous observations of high interpopulation genetic diversity among sockeye salmon in Southeast Alaska (Wood et al. 1994; Rogers Olive et al. *in prep*). Fortunately, the genetic diversity among these populations is so high that the genetic relationships among them do not affect MSA performance. Additionally, in most areas, these smaller populations are within the same reporting group (i.e., West of Chignik or South of Cape Suckling).

The stocking history of certain KMA populations has impacted genetic structure among them (Figure 7). There are 3 primary areas in KMA that have been subjected to historical and current stocking efforts: Spiridon Lake, Pauls Lake, and Frazer Lake. Spiridon Lake sockeye were not sampled for this baseline effort (Table 3), as the current brood years have been annually stocked with Saltery Lake broodstock and are thus not expected to be genetically distinguishable (Weber 2015). Pauls Lake sockeye appear to be most closely related to Portage Lake sockeye on Afognak Island, despite a varied stocking history (Stockley 1996). Frazer Lake was also subject to a lengthy and varied stocking history, with significant attempts to stock at least 3 different

donor sources: Red Lake (Ayakulik), Karluk Lake, and Ruth Lake in the Egegik drainage (Stockley 1996; Burger et al. 2000). While populations from Frazer Lake are genetically distinct from their donor sources (see Figure 7 and previous work by Burger et al. 2000), the stocking history has left its mark, and has resulted in decreased MSA performance as evidenced by our baseline evaluation tests. Frazer Lake is the only reporting group with a stocking history leading to decreased MSA performance, but it still meets GCL standards.

DEFINING REPORTING GROUPS – DYNAMIC VS STATIC METHOD

One of the challenges in defining reporting groups is to include fine-scale reporting groups that are critical to stakeholders while reducing the number of reporting groups that are unlikely to be represented adequately in the fishery mixture. This balance is easier to accomplish when the variability of stock components among project fishery mixtures are limited, as is the case within areas such as Bristol Bay or Cook Inlet (Barclay et al. 2013; Dann et al. 2013). The balance is more difficult when the fisheries are highly divergent—that is, when stock compositions are highly variable among fishery mixtures. WASSIP is a good example of a program with highly divergent fisheries. In WASSIP, a *dynamic reporting group* method was used whereby only local stocks were allocated at a fine scale, while nonlocal stocks were allocated at broad scales (Dann et al. 2012b). This differs from the *static reporting group* method used in Bristol Bay and Cook Inlet, where all fisheries have populations allocated to the same reporting groups within projects.

We chose to use the static reporting group method for this project because we do not have adequate information to determine appropriate dynamic reporting groups for each fishery area. As a result, it is likely that in any given fishery area, some reporting groups will make up less than 5% of the catch. However, based on available information (Rich and Morton 1930; Bower 1939; Bevan 1959; L. D. Nicholson, unpublished report, Kodiak[6]; Tyler et al. 1986; Foster 2011), we anticipate that all reporting groups have a high likelihood of representing at least 5% in a mixed stock sample from at least 1 fishery.

EFFECT OF GENETIC SIMILARITY AMONG FRAZER AND AYAKULIK SOCKEYE SALMON ON MSA PERFORMANCE

Frazer Lake populations are genetically distinct from donor populations despite the varied stocking history and short timeframe since stocking ceased. Stocking efforts consisted of the transplant of large numbers of eggs, fry, and adults from 3 donor populations over 2 decades that resulted in genetically distinct populations heavily influenced by founder effects and genetic drift (Burger et al. 2000). Nevertheless, Frazer Lake sockeye remain genetically similar to their primary donor, Red Lake in the Ayakulik drainage, with subsequent impacts on MSA performance (Figures 7, 8, and 17).

The similarity among populations in the Frazer and Ayakulik reporting groups produces challenges for MSA. The Frazer reporting group was the only reporting group to have any 100% proof tests fall below our 90% correct allocation threshold, for both 96 SNP (89 loci) and 48 SNP (46 loci) baselines (Tables 5 and 8; Figures 9 and 18). Additionally, although there was little indication of persistent, directional biases, these 2 reporting groups consistently had the lowest precision of the 15 reporting groups both among and between replicates for the fishery

[6] Nicholson, L. D. A Summary of all known red salmon (*Oncorhynchus nerka*) tagging conducted on Kodiak Island, Alaska. Alaska Department of Fish and Game, Division of Commercial Fisheries, unpublished report, 1978, Kodiak.

scenario tests (Tables 6 and 9; Figures 10–16). The reduced correct allocations in the 100% proof tests and loss of precision in the fishery scenario tests resulted in misallocation between the 2 reporting groups. Nonetheless, despite a loss of precision in the stock composition estimates for the fishery scenarios (including flat), the 90% credibility intervals contained the known stock composition of Frazer and Ayakulik reporting groups in 83% (Frazer) and 86% (Ayakulik) of the estimates (Tables 6 and 9; Figures 10–16). These results highlight the importance of considering the entire posterior distribution of stock composition estimates and not solely point estimates.

MSA PERFORMANCE

Baseline proof tests are conservative

We used 2 types of tests to evaluate the baseline's accuracy and precision in estimating stock compositions for the 15 reporting groups: 100% proof tests and fishery scenario tests. The 100% proof tests assume that all populations from a reporting group are present in the baseline but provide a conservative, gating measure of the power of the baseline for MSA. Fishery scenario tests make the same assumption but provide more realistic tests of the accuracy and precision of the baseline to estimate different stocks in a true mixture. The 100% proof tests were performed with fewer fish than the sampling goal for KMA mixed fisheries strata (380 individuals). These tests also used regionally flat priors. As a result, estimates of correct allocations to reporting groups may be conservative, especially estimates from tests with small sample sizes.

The 100% proof tests were performed with 200 individuals (except Uganik 100% n = 142 and Afognak 100% n = 134) to avoid depopulating the baseline for reporting groups represented by fewer than 400 individuals. The fishery scenario tests were performed with 400 individuals (except flat n = 390).

The use of a flat prior in baseline evaluation tests is also conservative as we anticipate using an informative prior in the MSA of KMA fisheries. The use of a flat prior in both the 100% proof and fishery scenario tests is likely to have the most negative impact on the correct assignments for reporting groups that have populations with similar allele frequencies, such as Frazer/Ayakulik. We anticipate that an informed prior, such as the sequential prior used for the WASSIP and SEDM projects (Dann et al. 2012b; Dann et al. 2012c), will improve the performance of the baseline.

Reduce baseline to subset of SNPs

The GCL has sought to increase the efficiency of generating multilocus genotypes and providing accurate, timely results. One approach used successfully in Bristol Bay, Chignik, and Southeast Alaska has been to reduce the number of SNPs analyzed for mixtures. While early genetic studies relied on using all the available genetic markers due to their paucity (Utter et al. 1974; Grant et al. 1980), modern researchers often have thousands of markers to choose from (McKinney et al. 2015). It is important to identify the best set of markers for a specific objective (e.g., MSA of KMA fisheries) to maximize efficiency. As a consequence to the genotyping platform used by the GCL, increases in efficiency are achieved by decreasing markers to 24 or 48 markers. Toward this end we selected 48 SNPs that best differentiated among the 15 reporting groups defined for analysis of KMA fishery mixtures from the 96 available.

Comparison of the 96 SNPs used in the WASSIP baseline to the 48 selected for this study showed small losses in identifiability of individuals in the 15 reporting groups identified for analyzing KMA fishery mixtures (Figures 8 and 17). While these likelihood profiles do not

directly translate into MSA performance, they provide information on the relative identifiability among groups and indicate that the 48 SNPs we selected do not preferentially bias some groups over others. Performance of the 48 SNP baseline in 100% proof tests and fishery scenario tests was similar to the 96 SNP baseline (Tables 6 and 9; Figures 10–16). While the 48 SNP baseline showed small decreases in accuracy and precision of stock composition estimates, there were no large (>±1.5%), persistent, directional biases in misallocation among reporting groups. Further reduction of markers from 48 SNPs to 24 showed substantial losses in identifiability of individuals in the 15 reporting groups (data not shown).

Baseline is adequate for KMA objectives

We believe this baseline will provide accurate and precise estimates of stock composition in KMA sockeye salmon fisheries. The baseline accurately describes the genetic structure among coastwide populations and consistently meets our goal of 90% correct allocation in 100% proof tests. We are confident in the methods used to build the baseline as well as the product of those methods, and believe that this baseline will provide accurate and precise estimates of stock composition in KMA fisheries with either the full 96 SNP or the reduced 48 SNP baseline.

MSA Test Biases and Interpreting Stock Composition Estimates

The baseline tests not only provided a basis for determining if the genetic variation among populations was adequate to support the reporting groups important to management, they also provided information useful when interpreting future stock composition estimates. This context will be especially useful when mixtures allocate large proportions to reporting groups that performed worse in the tests than other reporting groups. An example of such reporting groups is Frazer and Ayakulik (see *Effect of Genetic Similarity Among Frazer and Ayakulik Sockeye Salmon on MSA*). For example, in the July Alitak fishery scenario, the first replicate had a higher median value for Ayakulik than for Frazer, even though the known stock composition for Frazer was twice that of Ayakulik (Figure 11; Appendix D). Nevertheless, over all 5 replicates, this fishery scenario did not indicate large, consistent biases in misallocation between Frazer and Ayakulik groups (Appendix D), but showed that there can be substantial variation in the stock composition estimates (lower precision than for other reporting groups).

Additionally, it is necessary to recognize that even with fishery samples of 380 fish per stratum, it is challenging to estimate small proportions in a mixture. For example, the 3rd replicate of the August Uganik fishery scenario reported a median of 1.9% for the Prince William Sound group, despite the true proportion being 0% (Figure 15; Appendix D). While this may seem like a small proportion of the total catch in the fishery, it is important to consider the difficulty in estimating small proportions when they are expanded by the fishery catch. If that 1.9% were representing 500,000 fish caught, they would represent a harvest of approximately 9,500 Prince William Sound fish.

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TABLES AND FIGURES

Table 1.–Source, observed heterozygosity (H_O), F_{IS} and F_{ST} for the 96 single nucleotide polymorphisms (SNPs) used to analyze the population genetic structure of sockeye salmon in the KMA sockeye study area. Weir and Cockerham estimates of F_{ST} are also provided for the 2 sets of linked loci combined as composite, haploid markers. Statistics for each marker are based on the 473 populations within the area, while overall H_O is the average value across loci and overall F_{IS} and F_{ST} are estimated following Weir and Cockerham (1984).

Assay	Source[a]	H_O	F_{IS}	F_{ST}
One_ACBP-79[b]	A	0.407	0.029	0.115
One_agt-132	B	0.396	0.004	0.127
One_aldB-152	C	0.340	0.004	0.101
One_apoe-83	B	0.353	0.002	0.180
One_c3-98	B	0.165	-0.184	0.091
One_CD9-269	B	0.347	0.002	0.103
One_cetn1-167[b]	B	0.425	0.011	0.130
One_CFP1	D	0.249	0.009	0.152
One_cin-177	C	0.451	0.006	0.073
One_CO1[c]	A	N/A	N/A	0.298
One_ctgf-301	A	0.046	0.002	0.053
One_Cytb_17[c]	A	N/A	N/A	0.500
One_Cytb_26[c]	A	N/A	N/A	0.291
One_E2-65	A	0.291	-0.002	0.107
One_gdh-212	C	0.433	0.003	0.085
One_GHII-2165	A	0.245	0.006	0.250
One_ghsR-66	C	0.372	0.005	0.141
One_GPDH-201	A	0.444	0.007	0.095
One_GPDH2-187[d]	A	0.183	0.015	0.162
One_GPH-414	A	0.380	0.009	0.122
One_HGFA-49	A	0.274	0.015	0.105
One_HpaI-71	A	0.408	0.004	0.148
One_HpaI-99	A	0.186	0.013	0.222
One_hsc71-220	A	0.284	0.001	0.104
One_Hsp47	D	0.320	0.001	0.114
One_IL8r-362	A	0.115	-0.017	0.103
One_KCT1-453	B	0.192	0.005	0.091
One_KPNA-422	A	0.339	0.007	0.095
One_LEI-87	A	0.406	0.007	0.119
One_lpp1-44	B	0.380	0.010	0.163
One_metA-253	C	0.093	0.015	0.276
One_MHC2_190	A	0.309	0.025	0.340
One_MHC2_251[d]	A	0.350	0.012	0.273
One_Mkpro-129	C	0.436	0.006	0.121
One_ODC1-196	B	0.419	0.006	0.117
One_Ots208-234	C	0.213	0.003	0.172
One_Ots213-181	A	0.272	0.011	0.122
One_p53-534	A	0.076	0.003	0.104
One_pax7-248	C	0.204	0.009	0.093
One_PIP	D	0.427	0.006	0.099
One_Prl2	A	0.446	0.006	0.101
One_rab1a-76	B	0.213	0.012	0.126
One_RAG1-103	A	0.063	-0.010	0.097
One_RAG3-93	A	0.154	0.007	0.114
One_redd1-414	C	0.404	0.012	0.172
One_RFC2-102	A	0.296	0.012	0.130
One_RFC2-285	A	0.092	0.005	0.124
One_rpo2j-261	C	0.292	0.009	0.090
One_sast-211	C	0.091	0.016	0.066
One_spf30-207	C	0.288	0.004	0.119
One_srp09-127	C	0.084	0.007	0.224
One_ssrd-135	C	0.450	-0.002	0.096
One_STC-410	A	0.349	0.015	0.203
One_STR07	A	0.395	0.001	0.154
One_SUMO1-6	C	0.273	0.008	0.084
One_sys1-230	C	0.423	0.007	0.134
One_taf12-248	C	0.058	0.018	0.177
One_Tf_ex11-750[c]	A	0.368	0.003	0.216
One_Tf_in3-182[c]	A	0.125	0.012	0.297
One_tshB-92	C	0.127	0.012	0.117
One_txnip-401	C	0.037	0.010	0.119
One_U1003-75	B	0.294	0.005	0.228
One_U1004-183	B	0.368	0.005	0.268
One_U1009-91	B	0.296	0.003	0.156
One_U1010-81	B	0.079	0.006	0.112
One_U1012-68	B	0.253	0.013	0.121
One_U1013-108	B	0.227	0.012	0.099
One_U1014-74	B	0.230	0.010	0.092
One_U1016-115	B	0.409	0.016	0.136
One_U1024-197	B	0.184	-0.001	0.091

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Table 1.–Page 2 of 2.

Assay	Source[a]	H_O	F_{IS}	F_{ST}
One_U1101	B	0.315	0.005	0.093
One_U1103	B	0.051	0.017	0.095
One_U1105	B	0.282	0.015	0.173
One_U1201-492	B	0.428	-0.001	0.093
One_U1202-1052	B	0.363	0.021	0.118
One_U1203-175	B	0.390	0.004	0.111
One_U1204-53	B	0.333	0.015	0.093
One_U1205-57	B	0.066	0.013	0.126
One_U1206-108	B	0.274	0.010	0.075
One_U1208-67	B	0.404	-0.006	0.097
One_U1209-111	B	0.195	0.007	0.124
One_U1210-173	B	0.143	0.011	0.068
One_U1212-106	B	0.417	0.005	0.141
One_U1214-107	B	0.132	0.007	0.177
One_U1216-230	B	0.403	0.010	0.150
One_U301-92	A	0.253	0.005	0.106
One_U401-224	A	0.439	-0.004	0.107
One_U404-229	A	0.121	0.002	0.140
One_U502-167	A	0.047	0.004	0.058
One_U503-170	A	0.209	0.009	0.111
One_U504-141	A	0.348	0.008	0.087
One_vamp5-255	C	0.307	0.005	0.095
One_vatf-214	C	0.105	0.008	0.155
One_VIM-569	A	0.210	0.008	0.091
One_ZNF-61	A	0.340	0.004	0.150
One_Zp3b-49	A	0.183	0.007	0.300
One_CO1_Cytb17_26[c]		N/A	N/A	0.337
One_Tf_in3-182_ex11-750[c]		N/A	N/A	0.185
Average/Overall		0.273	0.007	0.138

[a] A = Gene Conservation Laboratory of the Alaska Department of Fish and Game; Smith et al. (2005); Elfstrom et al. (2006).
B = International Program for Salmon Ecological Genetics at the University of Washington; Storer et al. (2012).
C = Hagerman Genetics Laboratory of the Columbia River Inter-Tribal Fish Commission; Campbell and Narum (2011).
D = Molecular Genetics Laboratory at the Canadian Department of Fisheries and Oceans, Nanaimo, Canada, unpublished.

[b] These SNPs were dropped due to failure to conform to Hardy-Weinberg Expectations.

[c] These SNPs were combined into composite, haploid markers and treated together as single loci, *One_CO1_Cytb17_26* and *One_Tf_in3-182_ex11-750*.

[d] These SNPs were dropped due to linkage.

Table 2.–Geographic boundaries of the reporting groups defined for use in mixed stock analysis of sockeye salmon for KMA commercial harvest, 2014–2016.

Reporting Group	Start point	Stop point
West of Chignik	Cape Prince of Wales	Kupreanof Point
Black Lake	Tributaries of Black River	Black Lake outlet
Chignik Lake	Kupreanof Point	Kilokak Rocks (excluding Black Lake)[a]
Upper Station / Akalura	Stockholm Point	57º 07.64' N. lat., 154 º 05.00' W. long
Frazer	Headwaters of Pinnell Creek	Dog Salmon Creek Outlet
Ayakulik	Low Cape	Cape Ikolik
Karluk	Cape Ikolik	Rocky Point
Uganik	West Point	Mesa Rocks
Northwest Kodiak	Rocky Point	Termination Point (excluding Uganik Lake and Spiridon Lake)
Northwest Kodiak (continued)	Raspberry Cape	Cape Current
Afognak	Cape Current	Dolphin Point
Eastside Kodiak	Termination Point	Dog Salmon Creek Outlet (excluding Saltery Lake)
Saltery	57º 29.00' N. lat., 152º 43.29' W. long.	57º 29.79' N. lat., 152º 47.70' W. long. (including Spiridon Lake and Kitoi Bay brood)
Cook Inlet	Cape Douglas	Cape Fairfield
Prince William Sound	Cape Fairfield	Cape Suckling
South of Cape Suckling	Cape Suckling	Puget Sound

[a] Note that the Chignik Lake reporting group does include Surprise Lake (Collection #254), which was placed in the East of WASSIP reporting group for WASSIP. This was done for the following reasons: (1) Surprise Lake is in the Chignik Management Area, (2) Surprise Lake is closely related to Chignik and Black Lake stocks, and (3) it is unlikely that Surprise Lake fish are harvested at levels significant for this project.

Table 3.–Reporting group, ADF&G collection code, location, collection and population number, collection date, and the numbers of sockeye salmon used to describe the genetic structure of sockeye salmon in the KMA sockeye study area and estimate the stock composition of KMA commercial harvest from 2014–2016. Numbers of individuals include the number of individuals initially genotyped for the set of 96 SNPs (Initial), removed because of alternate species (Alternate), missing loci (Missing), and duplicate individuals (Duplicate), and the incorporated into the baseline (Final).

Reporting Group	ADF&G code	Location	Collection	Population	Date	No. of individuals				
						Initial	Alternate	Missing	Duplicate	Final
West of Chignik	SSALM01	Salmon Lake	1	1	8/3/2001	88	0	5	0	83
	SGLAC04	Glacial Lake	2	2	8/15/2004	190	0	3	0	187
	SUNA07	Unalakleet River	3	3	8/22/2007	95	0	5	0	90
	SNECO06	Two Lakes - Necons River	4	4	8/1/2006	55	0	0	0	55
	SNECO07		5	4	7/28/2007	95	0	2	0	93
	STELAPC09	Telaquana Lake - Phylis Creek	6	5	9/2/2009	89	0	2	6	81
	STELABC209	Telaquana Lake - Bear Creek	7	5	8/30/2009	95	0	0	0	95
	STELAUB09	Telaquana Lake - Upper Beach	8	6	8/31/2009	93	0	0	0	93
	STELA05	Telaquana Lake - East Beach	9	6	10/4/2005	95	0	0	0	95
	STELASWB09	Telaquana Lake - Southwest Beach	10	6	9/3/2009	94	0	1	2	91
	STELA03	Telaquana Lake - Outlet	11	7	8/14/2003	96	0	0	0	96
	STELA09		12	7	8/29/2009	94	0	0	1	93
	SKOGR08	Kogrukluk River	13	8	8/4/2008	71	0	0	0	71
	SCHUKO08	Chukowan River - Kogrukluk River	14	8	8/7/2008	75	0	0	0	75
	SHOLI08	Holitna River - Kogrukluk River	15	8	8/9/2008	75	0	0	0	75
	SATSAK09	Atsaksovluk Creek - Aniak River	16	9	8/6/2009	95	0	0	6	89
	STULU08	Tuluksak River	17	10	7/4/2008	75	0	0	1	74
	SKWETL06	Kwethluk River Lakes	18	11	8/8/2006	68	0	14	3	51
	SKWETR07	Kwethluk River	19	11	8/5/2007	50	0	1	0	49
	SKAGF09	Kagati Lake Tributary	20	12	8/9/2009	95	0	1	0	94
	SPEGF09	Pegati Lake Tributatry	21	12	8/8/2009	95	0	0	0	95
	SKAGB09	Kagati Lake Beach	22	13	8/9/2009	95	0	0	0	95
	SPEGB09	Pegati Lake Beach	23	13	8/8/2009	95	0	0	1	94
	SKAGO09	Kagati-Pegati Lake - Outlet	24	14	8/10/2009	95	0	0	0	95
	SKANE09	Kanektok River	25	15	8/12/2009	95	0	2	0	93
	SGOODSO10NF	Goodnews Lake - North Fork Tributary	26	16	8/12/2010	95	0	0	3	92
	SGOODB10NF	Goodnews Lake - North Fork Beach	27	17	8/12/2010	95	0	0	0	95

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Table 3.–Page 2 of 26.

Reporting Group	ADF&G code	Location	Collection	Population	Date	No. of individuals				
						Initial	Alternate	Missing	Duplicate	Final
West of Chignik	SGOODO10NF	Goodnews Lake - North Fork Outlet	28	17	8/12/2010	95	0	0	1	94
	SGOODR10NF	Goodnews River - North Fork River	29	18	8/13/2010	95	0	0	1	94
	SGOOD02		30	18	7/23/2002	95	0	4	0	91
	SGOOD06		31	18	7/20/2006	48	0	2	1	45
	SGOODSO10MF	Goodnews Lake - Middle Fork Tributary	32	19	8/8/2010	95	0	0	2	93
	SGOODB10MF	Goodnews Lake - Middle Fork Beach	33	19	8/8/2010	95	0	0	0	95
	SGOODO10MF	Goodnews Lake - Middle Fork Outlet	34	19	8/8/2010	95	0	0	0	95
	SKUKAIS12	Kukaktlim Lake - Stream	35	20	8/4/2012	95	0	0	3	92
	SKUKALB12	Kukaktlim Lake - Beach	36	21	8/4/2012	95	0	0	0	95
	SKUKALO12	Kukaktlim Lake - Outlet	37	21	8/5/2012	95	0	0	0	95
	SGOODR10MF	Goodnews River - Middle Fork River	38	22	9/14/2010	69	0	0	0	69
	SGOODR11MF		39	22	8/7/2011	7	0	0	0	7
	SSLUG10	Slug River	40	23	8/8/2010	108	0	1	0	107
	SOSVIAK10	Osviak River	41	23	8/8/2010	75	0	0	0	75
	STOGMU12	Upper Togiak Lake - Beach	42	24	8/15/2012	95	0	0	0	95
	STOGUO12	Upper Togiak Lake - Outlet	43	24	8/16/2012	95	0	0	0	95
	SIZAVR12	Izavieknik River	44	25	8/17/2012	95	0	0	0	95
	SIZAVRM12	Izavieknik River - Mouth	45	25	8/18/2012	95	0	0	0	95
	SSUND12	Sunday Creek	46	26	8/19/2012	95	0	1	0	94
	STOGL00		47	26	8/21/2000	95	0	1	1	93
	STOGT06	Togiak Lake	48	27	7/27/2006	95	0	0	0	95
	SONGI06	Ongivinuk Lake	49	28	8/24/2006	95	0	0	0	95
	SNENE06	Nenevok Lake	50	29	8/24/2006	95	0	1	0	94
	SPUNGO11	Pungokepuk Lake	51	30	8/23/2011	95	0	1	0	94
	SGECH00	Gechiak Lake	52	31	8/21/2000	96	0	1	0	95
	STOGRM11	Togiak River	53	32	8/19/2011	95	0	1	0	94
	SKULU06	Kulukak Lake	54	33	8/24/2006	95	0	0	1	94
	SUALI03	Ualik Lake	55	34	8/14/2003	99	0	1	0	98
	SUALI03f		56	34	8/14/2003	30	0	0	0	30
	SUALIB12		57	34	8/18/2012	95	0	0	2	93
	SUALIO12	Ongoke River - Outlet	58	35	8/19/2012	95	0	1	0	94

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Table 3.–Page 3 of 26.

Reporting Group	ADF&G code	Location	Collection	Population	Date	No. of individuals				
						Initial	Alternate	Missing	Duplicate	Final
West of Chignik	SONGL07	Ongoke River - Lower	59	35	8/28/2007	95	0	0	0	95
	SONGU07	Ongoke River - Upper	60	35	8/27/2007	95	0	6	1	88
	SAMAN03	Amanka Lake	61	36	8/14/2003	100	0	1	2	97
	SAMAN03f		62	36	8/14/2003	56	0	0	0	56
	SSNAKLKB10	Snake Lake - Beach	63	37	8/11/2010	89	0	1	0	88
	SSNAKLKO10	Snake Lake - Outlet	64	37	8/11/2010	83	0	0	0	83
	SLKUL07	Lake Kulik - East Beach	65	38	9/10/2007	95	0	4	0	91
	SGRANT07	Grant River	66	39	8/22/2007	95	0	9	3	83
	SKULIK01	Lake Kulik - West Beach	67	40	8/1/2001	96	0	2	0	94
	SMIKCH09	Mikchalk Lake	68	41	9/10/2009	95	0	1	0	94
	SSILVH07	Silver Horn Beach	69	42	9/10/2007	95	0	0	0	95
	SHARDL07	Hardluck Bay Beach	70	43	9/10/2007	95	0	0	0	95
	SMOOSCK09	Beverley Lake - Moose Creek	71	44	8/17/2009	95	0	1	1	93
	SAGULU01	Agulukpak River	72	45	8/21/2001	94	0	2	0	92
	SANVI06	Anvil Bay Beach	73	46	8/20/2006	95	0	0	1	94
	SSIXCK08	Sixth Creek	74	47	2008	95	0	1	0	94
	SN4BE06	N4 Beach	75	48	8/11/2006	95	0	0	1	94
	SABEA04	Little Togiak Lake - A Beach	76	49	8/8/2004	65	0	0	0	65
	SABEA05		77	49	8/10/2005	30	0	2	0	28
	SLTOG08	Little Togiak River	78	50	2008	95	0	13	0	82
	SPICK01	Pick Creek	79	51	8/3/2001	95	0	1	2	92
	SPICK08		80	51	7/22/2008	93	0	1	3	89
	SLYNXLK09	Lynx Lake	81	52	9/9/2009	95	0	2	1	92
	SLYNX06	Lynx Beach	82	53	8/11/2006	95	0	0	0	95
	SLYNXCKT09	Lynx Creek - Cold Tributary	83	54	8/12/2009	81	0	2	0	79
	SLYNX01	Lynx Creek	84	55	8/22/2001	95	0	1	0	94
	SLYNXCK09		85	55	8/21/2009	109	0	1	1	107
	SAGULO01	Agulowok River	86	56	8/22/2001	95	0	0	0	95
	SICEL07	Ice Creek	87	57	8/9/2007	95	0	6	0	89
	SBEAR01	Bear Creek	88	58	8/2/2001	96	0	2	0	94
	SYAKOB06	Yako Beach	89	59	8/19/2006	95	0	0	0	95

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Reporting Group	ADF&G code	Location	Collection	Population	Date	No. of individuals				
						Initial	Alternate	Missing	Duplicate	Final
West of Chignik	SHAPP01	Happy Creek	90	60	7/30/2001	95	0	0	0	95
	SHANS04	Hansen Creek	91	61	8/4/2004	95	0	0	0	95
	SEAGL07	Eagle Creek	92	62	8/12/2007	93	0	1	0	92
	SMISS98	Mission Creek	93	63	1988	94	0	2	1	91
	SWOOD09	Wood River	94	64	9/5/2009	95	0	3	0	92
	SFISHT10	Fish Trap Lake	95	65	9/4/2010	80	0	1	0	79
	SMULC01B	Upper Mulchatna River	96	66	8/27/2001	65	0	0	0	65
	SMULC01A		97	66	8/27/2001	95	0	8	0	87
	SKOKT00	Koktuli River	98	67	8/13/2000	96	0	3	0	93
	SKOKT11S	Koktuli River - South Fork	99	67	7/31/2011	87	0	1	0	86
	SSTUY00	Stuyahok River	100	68	8/14/2000	96	0	2	0	94
	SUPNK01	Upper Nushagak River - Klutapuk Creek	101	69	8/18/2001	95	0	0	0	95
	SKING01	Upper Nushagak River - King Salmon River	102	69	8/18/2001	48	0	0	0	48
	SCHAU01	Chauekuktuli Lake Beach	103	70	8/22/2001	96	0	0	0	96
	SALLE00	Allen River Beach	104	71	8/17/2000	96	0	4	1	91
	SALLE01	Allen River	105	72	8/22/2001	95	0	1	0	94
	SNUYL00	Nuyakuk Lake	106	73	8/16/2000	95	0	4	0	91
	SNUYA01	Nuyakuk Lake - South Beach	107	73	8/23/2001	94	0	0	0	94
	STIKC01	Tikchik River	108	74	8/18/2001	95	0	2	0	93
	STIKC00	Tikchik Lake - Creek	109	75	8/18/2000	95	0	1	0	94
	STLGF99	Upper Tlikakila River - Glacier Fork	110	76	10/6/1999	47	0	0	0	47
	SUTLIK01	Upper Tlikakila River	111	76	9/24/2001	96	0	0	0	96
	SLLCL99	Little Lake Clark	112	77	10/9/1999	95	0	0	0	95
	SKIJI01	Kijik River	113	78	9/19/2001	96	0	9	0	87
	SLKIJ01	Lower Kijik River	114	79	9/18/2001	96	0	1	0	95
	SCHLP99	Chulitna Lodge - Ponds	115	80	10/1/1999	48	0	0	1	47
	SCHLB99	Chulitna Lodge - Beach	116	80	10/5/1999	96	0	1	0	95
	SSUCK07	Sucker Bay Lake	117	81	9/14/2007	95	0	0	0	95
	STAZI01	Sixmile Lake - Tazimina River	118	82	8/29/2001	95	0	0	0	95
	SNHAL02	Sixmile Lake - Newhalen River	119	82	9/3/2002	96	0	0	0	96
	STOMK00	Tomkok Creek	120	83	8/24/2000	95	0	0	0	95

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Reporting Group	ADF&G code	Location	Collection	Population	Date	No. of individuals				
						Initial	Alternate	Missing	Duplicate	Final
West of Chignik	STOMK02		121	83	8/28/2002	48	0	8	0	40
	SKNUT00	Knutson Bay	122	84	8/27/2000	96	0	13	0	83
	SKNUT99L		123	84	10/16/1999	95	0	0	0	95
	SPEDR99	Pedro Ponds	124	85	1999	47	0	0	0	47
	SGRAS99L	Pedro Ponds - Grass Pond Late	125	85	10/15/1999	44	0	0	0	44
	SILIA04B	Iliamna River	126	86	8/21/2004	95	0	0	3	92
	SCHIN00	Iliamna River - Chinkelyes Creek	127	86	8/28/2000	96	0	1	0	95
	SILIA99L	Iliamna River - Late	128	87	10/17/1999	96	0	10	0	86
	SFING00	Pile Bay - Finger Beach 1	129	88	8/24/2000	84	0	1	0	83
	SSOUT99	Pile Bay - Southeast Beach	130	88	8/26/1999	95	0	0	0	95
	SPORC99	Iliamna Lake Islands - Porcupine Island	131	89	1999	48	0	0	0	48
	SWOOD01	Iliamna Lake Islands - Woody Island	132	89	8/19/2001	96	0	1	0	95
	SFUEL00	Iliamna Lake Islands - Fuel Dump Island	133	89	8/28/2000	96	0	4	0	92
	STRIA00	Iliamna Lake Islands - Triangle Island	134	89	8/16/2000	96	0	1	0	95
	STOMM00	Tommy Creek	135	90	8/24/2000	96	0	4	0	92
	STOMM02		136	90	8/19/2002	48	0	0	1	47
	SCOPP00	Copper River	137	91	8/28/2000	96	0	0	0	96
	SCOPP99		138	91	8/23/1999	47	0	0	0	47
	SNICK00	Nick N Creek	139	92	8/25/2000	96	0	4	0	92
	SSECK00	Gibralter Lake - Southeast Creek	140	93	8/26/2000	96	0	2	0	94
	SDREA01	Gibralter Lake - Dream Creek	141	93	8/22/2001	95	0	1	0	94
	SGIBR00	Gibralter River	142	94	8/25/2000	90	0	11	0	79
	SGIBR99		143	94	8/23/1999	95	0	0	1	94
	SDENN00	South Iliamna Lake - Dennis Creek	144	95	8/23/2000	96	0	0	0	96
	SBELI00	South Iliamna Lake - Belinda Creek	145	95	8/25/2000	95	0	12	0	83
	SUTAL04	Upper Talarik Creek	146	96	8/15/2004	95	0	4	1	90
	SUTAL06		147	96	8/10/2006	95	0	0	2	93
	SUTAL11		148	96	7/31/2011	99	0	1	0	98
	SLTAL00	Lower Talarik Creek	149	97	8/26/2000	95	0	0	0	95
	SLTAL01		150	97	8/23/2001	70	0	1	0	69
	SMORA04E	Moraine Creek	151	98	8/8/2004	96	0	0	0	96

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Table 3.–Page 6 of 26.

Reporting Group	ADF&G code	Location	Collection	Population	Date	No. of individuals				
						Initial	Alternate	Missing	Duplicate	Final
West of Chignik	SBATT01	Battle Lake - Creek	152	99	9/4/2001	96	0	4	0	92
	SBATL04T	Battle Lake - Tributary	153	99	9/11/2004	96	0	0	0	96
	SBATL04B	Battle Lake - Beach	154	99	9/11/2004	96	0	0	0	96
	SNANU04	Nanuktuk Creek	155	100	9/9/2004	96	0	1	0	95
	SKULI01	Kulik River	156	101	9/5/2001	96	0	6	0	90
	SKULI04		157	101	9/10/2004	96	0	0	0	96
	SAMER00	Americian River	158	102	8/22/2000	92	0	2	1	89
	SAMER01		159	102	8/17/2001	96	0	9	1	86
	SGROS03	Grosvenor Lake	160	103	8/12/2003	96	0	2	0	94
	SHARD03	Hardscrabble Creek	161	104	8/12/2003	96	0	0	1	95
	SMARG01	Margot Creek	162	105	8/15/2001	95	0	0	1	94
	SHEAD01	Brooks Lake - Headwater Creek	163	106	7/22/2001	93	0	19	0	74
	SBRLK00	Brooks Lake	164	106	8/22/2000	96	0	0	0	96
	SDUMP306	Dumpling Creek - Beach	165	107	9/17/2006	83	0	0	0	83
	SLQTIP06	Lower Q-Tip Lake	166	108	9/12/2006	86	0	0	0	86
	SIDAV00	Idavain Creek	167	109	8/23/2000	95	0	2	0	93
	SIDAV06		168	109	8/29/2006	48	0	0	0	48
	SCABI00	East Becharof - Cabin Creek	169	110	8/15/2000	96	0	1	0	95
	SSALCR06	East Becharof - Salmon Creek	170	110	8/16/2006	95	0	7	0	88
	SBURL06	East Becharof - Burls Creek	171	110	8/16/2006	95	0	1	2	92
	SCLEO01	East Becharof - Cleo Creek	172	110	8/16/2001	48	0	0	0	48
	SFEAT01	East Becharof - Featherly Creek	173	110	8/16/2001	48	0	0	0	48
	SBECH00	East Becharof - Becharof Creek	174	110	8/11/2000	94	1	2	0	91
	SKEJU00	Kejulik River - Upper	175	111	8/8/2000	96	0	0	2	94
	SKEJU01	Kejulik River	176	111	8/17/2001	96	0	0	0	96
	SBECH08NT	Becharof Lake - North Tributary	177	112	8/11/2008	95	0	1	1	93
	SBECH08SB	Becharof Lake - South Beach	178	113	8/11/2008	95	0	1	1	93
	SUGAS01	Ugashik Creek	179	114	7/21/2001	96	0	7	0	89
	SCROCK05	Crooked Creek	180	115	8/24/2005	95	0	0	0	95
	SDEER01	Deer Creek	181	115	7/20/2001	96	0	0	0	96
	SUGAS00	Ugashik Narrows	182	116	8/24/2000	96	0	0	0	96

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Reporting Group	ADF&G code	Location	Collection	Population	Date	No. of individuals				
						Initial	Alternate	Missing	Duplicate	Final
West of Chignik	SECRE05	Lower Ugashik - East Creek	183	117	8/8/2005	95	0	0	0	95
	SBLACKU05	Lower Ugashik - Black Creek	184	117	8/24/2005	95	0	1	0	94
	SOUTL00	Ugashik - Outlet	185	118	8/26/2000	95	0	4	0	91
	SFIGU05	Figure Eight Creek	186	119	8/22/2005	95	0	4	1	90
	SOLDH05	Old Ham Creek	187	120	8/22/2005	95	0	1	0	94
	SWIGGC05	Cinder River - Wiggly Creek	188	121	7/29/2005	90	0	0	10	80
	SMAINC05	Cinder River - Mainstem	189	121	7/29/2005	95	0	1	0	94
	SLAVA04	Cinder River - Lava Creek	190	122	7/23/2004	95	0	0	2	93
	SMUDA05	Mud Creek	191	123	7/29/2005	95	0	0	0	95
	SMESLK05	Meshik Lake - Beach	192	124	7/30/2005	95	0	0	0	95
	SMESLKO05	Meshik Lake - Outlet	193	124	7/30/2005	95	0	0	0	95
	SMESHL05	Upper Meshik River - Lower Creek	194	125	7/30/2005	95	0	1	0	94
	SMESH202	Upper Meshik River - Blue Violet Creek	195	125	7/29/2002	93	0	0	2	91
	SMESH102	Upper Meshik River - Landlocked Creek	196	126	7/29/2002	96	0	0	0	96
	SREDBC05	Red Bluff Creek	197	127	7/30/2005	95	0	0	0	95
	SNPEN01	Ocean River - Willie Creek	198	128	8/27/2001	81	0	1	0	80
	SOCEA01	Ocean River	199	128	2001	96	0	1	0	95
	SILNIK07	Ilnik River	200	129	7/7/2007	190	0	1	1	188
	SWILD05	Wildman Lake	201	130	7/30/2005	95	0	0	1	94
	SSAND00	Sandy Lake	202	131	6/30/2000	95	0	0	0	95
	SSANDR07	Sandy River	203	131	7/8/2007	190	0	0	0	190
	SBEAR00E	Bear River - Early 1	204	132	6/29/2000	95	0	0	0	95
	SBEARR07	Bear River - Early 2	205	133	7/7/2007	95	0	0	0	95
	SCUB04	Upper Bear Lake - Cub Creek	206	134	8/15/2004	95	0	0	0	95
	SREDC04	Upper Bear Lake - Red Creek	207	134	8/15/2004	95	0	0	0	95
	SBEARS05	Bear Lake - Beach	208	135	8/29/2005	95	0	1	0	94
	SBEARO05	Bear Lake - Outlet	209	136	8/29/2005	95	0	0	0	95
	SBEAR00L	Bear River - Late	210	137	8/18/2000	96	0	2	0	94
	SHOOD01	Sapsuk Lake - Hoodoo Lake	211	138	7/31/2001	95	0	1	0	94
	SHOOD05	Sapsuk Lake - Hoodoo Lake - Beach	212	138	7/31/2005	95	0	1	0	94
	SNELSR07	Sapsuk River	213	138	7/1/2007	47	0	0	0	47

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Reporting Group	ADF&G code	Location	Collection	Population	Date	No. of individuals				
						Initial	Alternate	Missing	Duplicate	Final
West of Chignik	SDAVI05	Davids River	214	139	7/31/2005	95	0	0	0	95
	SHOOD00	Sapsuk River	215	140	7/22/2000	96	0	0	0	96
	SNCREK07	North Creek	216	141	7/25/2007	95	0	1	4	90
	SMOF09	Moffett Creek	217	142	8/18/2009	95	0	0	3	92
	SMOFF02	Paul Hansen Lake	218	143	7/30/2002	95	0	2	0	93
	SOUTE04	Izembek Lagoon Lakes - Outer Marker Lake	219	144	9/9/2004	95	0	2	0	93
	SBLUE04	Izembek Lagoon Lakes - Blue Bill Lake	220	144	9/7/2004	95	0	0	1	94
	SSWANL08	Swansons Lagoon	221	145	8/25/2008	95	0	1	0	94
	SPETELA05	Peterson Lagoon	222	146	8/2/2005	95	0	1	0	94
	SWHAL02	Whaleback Mountain Creek	223	147	7/30/2002	96	0	0	0	96
	SMCLE04	McLees Lake	224	148	6/4/2004	143	0	0	1	142
	SSUMM99	Summer Bay Lake	225	149	8/6/1999	96	0	0	0	96
	SSANA08	Sanak Island	226	150	8/24/2008	86	0	0	0	86
	SHANLK05	Hansen Lake	227	151	8/2/2005	95	0	0	0	95
	SMIDL04	Morzhovoi Bay	228	152	7/28/2004	95	0	2	0	93
	STHIN05	Thin Point Lagoon	229	153	8/1/2005	95	0	1	0	94
	SMORT04	Mortensen's Lagoon	230	154	8/2/2004	95	0	0	0	95
	SLONGJ05	Long John Lagoon	231	155	8/1/2005	95	0	0	0	95
	SCANBR08	Canoe Bay River	232	156	8/26/2008	95	0	1	0	94
	SARCH05	Acheredin Lake	233	157	8/3/2005	95	0	1	0	94
	SORZI00	Orzinski Lake	234	158	7/1/2000	94	0	1	0	93
	SORZI12		235	158	6/16/2012	380	0	1	0	379
	West of Chignik Total					21,627	1	332	98	21,196
Black Lake	SBROAD97	Broad Creek	236	159	9/1/1997	96	0	1	1	94
	SBSPR97	Big Spring	237	159	1997	95	0	2	0	93
	SBOUL97	Boulevard Creek	238	159	9/1/1997	95	0	0	0	95
	SFAN97	Fan Creek	239	159	1997	95	0	0	0	95
	SALEC97	Alec River	240	159	9/1/1997	96	0	0	0	96
	Black Lake Total					477	0	3	1	473
Chignik Lake	SCHIA08	Chiaktuak Creek	241	160	8/29/2008	95	0	2	0	93
	SCHIA97E		242	160	1997	95	0	0	1	94

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Reporting Group	ADF&G code	Location	Collection	Population	Date	No. of individuals				
						Initial	Alternate	Missing	Duplicate	Final
Chignik Lake	SCHIA97M		243	160	9/18/1997	94	0	1	0	93
	SWESTF08	West Fork Chignik River	244	161	8/28/2008	95	0	1	0	94
	SCUCU08	Cucumber Creek	245	162	8/29/2008	95	0	0	1	94
	SHAT08E	Hatchery Creek - Early	246	162	8/29/2008	95	0	1	2	92
	SHAT97E		247	162	9/15/1997	94	0	0	0	94
	SHAT96	Hatchery Beach - Late	248	163	10/18/1996	95	0	0	0	95
	SCLARK96	Clark River - Late	249	163	10/19/1996	95	0	0	0	95
	SCLARK08	Clark Fork	250	164	8/28/2008	94	0	3	0	91
	SCLRK97E		251	164	9/16/1997	96	0	1	0	95
	SCHIG08	Chignik River	252	165	8/30/2008	95	0	1	0	94
	SCHIG98		253	165	8/22/1998	95	0	0	0	95
	SSURPL08	Surprise Lake	254	166	8/22/2008	95	0	0	0	95
	Chignik Lake Total					1,328	0	10	4	1,314
Upper Station / Akalura	SAKALNE01L	Akalura Lake - Northeast Beach	255	167	9/25/2001	96	0	6	2	88
	SAKALNE11		256	167	9/16/2011	95	0	0	0	95
	SAKAL05L	Akalura Lagoon	257	168	9/2/2005	95	0	0	0	95
	SOLGB01E	Upper Olga Lake - Tributary B	258	169	7/24/2001	96	0	0	0	96
	SOLGA01E	Upper Olga Lake - Tributary A	259	170	7/23/2001	96	0	0	1	95
	SOLGC01E	Upper Olga Lake - Tributary C	260	171	7/23/2001	96	0	1	0	95
	SUPPSW01L	Upper Olga Lake - Southwest Shoal	261	172	9/26/2001	96	0	4	3	89
	SUPS00E	Upper Station Weir - Early	262	173	6/14/2000	95	0	0	0	95
	SUPUP93	Upper Station - Upper Olga Lake	263	174	9/1/1993	95	0	0	0	95
	SLUPS93	Upper Station - Lower Olga Lake	264	175	1993	95	0	1	0	94
	Upper Station / Akalura Total					955	0	12	6	937
Frazer	SPINNM08	Frazer Lake - Pinnell Creek	265	176		78	0	0	0	78
	SSTUM08	Frazer Lake - Stumble Creek	266	176		95	0	1	0	94
	SCOUR08	Frazer Lake - Courts Beach	267	177	8/21/2008	95	0	7	0	88
	SMIDWS08	Frazer Lake - Midway Beach	268	177	8/21/2008	95	0	4	0	91
	SHOLFS08	Frazer Lake - Hollow Fox Beach	269	177	8/22/2008	95	0	1	0	94
	SMIDWM08	Frazer Lake - Midway Creek	270	178	8/21/2008	93	0	1	0	92
	SLINDM08	Frazer Lake - Linda Creek	271	178	8/22/2008	95	0	5	0	90

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Reporting Group	ADF&G code	Location	Collection	Population	Date	No. of individuals				
						Initial	Alternate	Missing	Duplicate	Final
Frazer	SVALA08	Frazer Lake - Valarian Creek	272	179	8/21/2008	95	0	0	0	95
	SOUTS08	Frazer Lake - Outlet	273	180	8/20/2008	95	0	10	0	85
	SDOGSC08	Dog Salmon Creek	274	181	8/22/2008	95	0	3	0	92
	SCAIDA14	Frazer Lake - Caida Creek	275	182	8/4/2014	95	0	0	3	92
	Frazer					1,026	0	32	3	991
Ayakulik	SREDSS11	Red Lake - South Beach	276	183	9/16/2011	95	0	0	0	95
	SREDSWS11	Red Lake - Southwest Beach	277	183	10/17/2011	95	0	2	0	93
	SREDWS12	Red Lake - West Beach	278	183	9/11/2012	95	0	1	0	94
	SREDNWS11	Red Lake - Northwest Beach	279	183	10/17/2011	95	0	1	0	94
	SREDNES11	Red Lake - Northeast Beach	280	183	9/16/2011	95	0	0	0	95
	SREDCRY11	Red Lake - Crystal Creek	281	184	7/18/2011	95	0	1	0	94
	SREDCON11	Red Lake - Connecticut Creek	282	185	7/18/2011	95	0	0	0	95
	SAYAK00	Ayakulik River Weir - Late	283	186	7/26/2000	96	0	1	2	93
	SAYAK08L		284	186	8/14/2008	95	1	2	1	91
	SAYAK11L		285	186	8/8/2011	70	0	0	0	70
	SAYAK12L		286	186	7/26/2012	250	0	0	0	250
	SAYAK12E	Ayakulik River Weir - Early	287	187	6/5/2012	200	0	0	0	200
	Ayakulik Total					1,376	1	8	3	1,364
Karluk	SFAL99E	Karluk Lake - Falls Creek	288	188	8/5/1999	66	0	0	0	66
	SCAN99E	Karluk Lake - Canyon Creek	289	188	7/31/1999	96	1	9	1	85
	SOMALL99	Karluk Lake - O'Malley River	290	189	9/28/1999	95	0	1	2	92
	SKARLSE11	Karluk Lake - Southeast Shoal	291	190	9/16/2011	95	0	0	0	95
	SKARLSE99L		292	190	9/28/1999	96	0	0	1	95
	SCAS99E	Karluk Lake - Cascade Creek	293	191	7/28/1999	96	0	6	3	87
	SUTHU99E	Upper Thumb River	294	192	7/29/1999	64	0	3	2	59
	SUTHU00E	Upper Thumb Lake	295	193	7/24/2000	95	0	0	0	95
	SSAL99E	Karluk Lake - Salmon Creek	296	194	7/29/1999	96	0	3	1	92
	SLTHUM99	Lower Thumb River	297	195	9/30/1999	95	0	19	0	76
	STHUS99L	Karluk Lake - Thumb Shoal	298	196	10/1/1999	96	0	1	1	94
	SHAL01E	Karluk Lake - Halfway Creek	299	197	7/19/2001	96	0	0	1	95
	SGRA99E	Karluk Lake - Grassy Point Creek	300	198	7/27/1999	96	0	5	5	86

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Reporting Group	ADF&G code	Location	Collection	Population	Date	No. of individuals				
						Initial	Alternate	Missing	Duplicate	Final
Karluk	SKARLW99L	Karluk Lake - West Shoal	301	199	9/27/1999	96	0	1	1	94
	SKARLE99L	Karluk Lake - East Shoal	302	200	9/27/1999	96	0	0	0	96
	SCOT99E	Karluk Lake - Cottonwood Creek	303	201	7/27/1999	96	0	7	0	89
	SMOR99E	Karluk Lake - Moraine Creek	304	202	7/26/1999	96	0	4	2	90
	SKARL01L	Karluk River	305	203	10/14/2001	62	6	0	0	56
	Karluk Total					1,628	7	59	20	1,542
Uganik	SUGAN97	Uganik Lake	306	204	7/15/1997	95	0	0	0	95
	SUGAN15	Uganik Lake - Tributary	307	205	8/4/2015	190	0	0	0	190
	Uganik Total					285	0	0	0	285
Northwest Kodiak	SBARAB12	Barabara Lake	308	206	8/17/2012	44	0	0	0	44
	SBARAB15		309	206	8/4/2015	51	0	1	0	50
	SLRIV97	Little River Lake	310	207	7/15/1997	96	0	1	0	95
	SMALI93	Malina Lake - Lower	311	208	8/19/1993	80	0	1	1	78
	STHOR06	Thorsheim Lake	312	209	8/23/2006	83	0	0	0	83
	SKAFL08	Kaflia Lake - Mouth Creek	313	210	8/27/2008	95	0	1	0	94
	Northwest Kodiak Total					449	0	4	1	444
Afognak	SAFOG93	Afognak Lake	314	211	8/17/1993	79	0	0	1	78
	SPORT98	Portage Lake	315	212	8/11/1998	96	0	0	0	96
	SPAUL14	Pauls Lake	316	213	6/25/2014	95	0	0	0	95
	Afognak Total					270	0	0	1	269
Eastside Kodiak	SBUSK05	Buskin Lake	317	214	6/26/2005	95	0	1	0	94
	SBUSKL10		318	214	6/13/2010	95	0	0	1	94
	SBUSKL15		319	214	6/15/2015	190	0	1	0	189
	SLKLOU05	Lake Louise - Buskin River	320	215	8/3/2005	95	0	0	0	95
	SLKLOU10		321	215	7/19/2010	95	0	0	2	93
	SLKLOU14	Lake Louise - Buskin River	322	216	7/2/2014	190	0	1	0	189
	SPASA05	Pasagshak Lake	323	217	7/15/2005	95	0	0	0	95
	SLMIA05	Lake Miam	324	218	9/2/2005	95	0	0	1	94
	SOCEAB06	Ocean Beach	325	219	8/29/2006	95	0	0	0	95
	SHORS05	Horse Marine Lake	326	220	9/2/2005	95	0	0	0	95
	Eastside Kodiak Total					1,140	0	3	4	1,133

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Reporting Group	ADF&G code	Location	Collection	Population	Date	No. of individuals				
						Initial	Alternate	Missing	Duplicate	Final
Saltery	SSALT94	Saltery Lake - Creek	327	221	9/16/1994	95	0	2	0	93
	SSALT99		328	221	8/26/1999	95	0	1	0	94
	SSALT14	Saltery Lake - Weir Early	329	222	6/29/2014	190	0	0	0	190
	SLKIT15	Little Kitoi Hatchery	330	223	9/15/2015	190	0	1	0	189
	Saltery Total					570	0	4	0	566
Cook Inlet	SWACK09	Wackton Creek - Lake Fork Crescent River	331	224	8/13/2009	94	0	1	0	93
	SPYRAM09	Crescent Lake - Pyramid Creek	332	225	8/13/2009	95	0	0	0	95
	SCRES941		333	225	1994	48	0	0	0	48
	SCREE942	Cresent Lake - Outlet	334	226	1994	47	0	0	0	47
	SCRESL09		335	226	8/12/2009	95	0	0	0	95
	SHARRIET12	Harriet Creek	336	227	8/18/2012	95	0	0	0	95
	SLJACK06	Little Jack Creek	337	228	9/6/2006	95	0	1	0	94
	SPACK13E	Packers Lake - Early	338	229	7/8/2013	115	0	2	0	113
	SPACK12	Packers Lake - Late	339	230	8/16/2012	95	0	0	0	95
	SSFBIG07	South Fork Big River	340	231	8/14/2007	123	0	0	0	123
	SSFBIGF09	South Fork Big River Falls	341	231	7/7/2009	48	0	0	0	48
	SWOLV93	Big River - Wolverine Creek	342	232	7/5/1993	95	0	1	0	94
	SBLACSC07	Black Sand Creek	343	233	8/13/2007	95	0	0	0	95
	SFARR07	Farro Lake Creek	344	234	8/13/2007	95	0	0	0	95
	SMCCA93	McArthur River - Stream 121, 93	345	235	8/18/1993	95	0	0	1	94
	SCHIL92	Chilligan River	346	236	1992	48	0	0	0	48
	SCHIL94		347	236	1994	48	0	0	0	48
	SCHAK08	Chakachatna Slough	348	237	8/27/2008	95	0	0	1	94
	SCOAS09	Coal Creek - Spring	349	238	8/21/2009	47	0	0	0	47
	SCOAW09	Coal Creek - West Fork	350	238	8/21/2009	46	0	0	0	46
	SSUS9511	Susitna River - Slough 11	351	239	1995	50	0	2	0	48
	SSUS9611		352	239	9/5/1996	6	0	0	0	6
	SSUS1311		353	239	8/14/2013	61	0	0	2	59
	SSUS97	Susitna River - Slough 8A,11, 21	354	240	9/5/1997	94	0	0	0	94
	SWHISKER13	Whiskers Slough	355	241	8/14/2013	58	0	0	0	58
	SBYER93	Byers Lake	356	242	8/23/1993	48	0	1	0	47

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Reporting Group	ADF&G code	Location	Collection	Population	Date	No. of individuals				
						Initial	Alternate	Missing	Duplicate	Final
Cook Inlet	SBYER07	Byers Creek - Susitina weir	357	242	8/13/2007	95	0	3	0	92
	SBYERCR13	Byers Creek	358	242	7/21/2013	23	0	0	0	23
	SSPINK08	Spink Creek - Mouth	359	243	8/30/2008	95	2	0	0	93
	SSWALK06	Swan Lake	360	244	9/2/2006	95	0	0	0	95
	SSWLK07	Swan Lake - Susitna weir	361	244	8/15/2007	47	0	4	0	43
	SSWALK09	Swan Lake	362	244	9/8/2009	48	0	0	1	47
	SSTEP07	Stephan Lake - Susitina weir	363	245	7/28/2007	95	0	0	0	95
	SSTEP93	Stephan Lake - Talkeetna River	364	245	9/2/1993	48	0	0	0	48
	SSHEEP08	Sheep River	365	246	8/30/2008	95	0	0	0	95
	SLARS93	Larson Lake - Talkeetna River	366	247	8/31/1993	95	0	0	0	95
	SLARS11O	Larson Lake - Outlet	367	247	9/7/2011	126	0	1	0	125
	SLARS06	Larson Lake - East Beach	368	248	7/23/2006	95	0	1	0	94
	SLARS11E		369	248	9/7/2011	90	0	0	0	90
	SMAMA97	Mama and Papa Bear Lakes	370	249	9/3/1997	50	0	0	0	50
	SPAPA07	Papa Bear Lake	371	249	8/28/2007	54	0	0	1	53
	STALK97	Talkeetna River Sloughs	372	249	9/4/1997	79	0	11	0	68
	SPAPA13	Papa Bear Lake	373	250	7/17/2013	75	0	0	0	75
	SBIRC07	Birch Creek	374	251	8/28/2007	95	0	0	1	94
	SYENW92	Yentna River - West Fork Slough	375	252	9/1/1992	96	0	8	0	88
	SYENW93	Yentna River - West Fork	376	252	9/10/1993	100	0	3	0	97
	SKICH107	Kichatna River	377	253	8/27/2007	95	0	0	0	95
	SJOHNCK09	Johnson Creek	378	253	8/28/2009	95	0	0	2	93
	SWHISK06	Whiskey Lake Outlet	379	254	9/2/2006	58	0	0	0	58
	SWHISK09		380	254	9/1/2009	47	0	0	0	47
	SHEWI06	Hewitt Lake - Susitina weir	381	254	8/2/2006	65	0	4	0	61
	SMOOSE07	Moose Creek	382	255	8/27/2007	95	0	0	1	94
	SPUNT06	Puntilla Lake	383	256	9/6/2006	95	0	0	0	95
	SREDSA06	Red Salmon Lake	384	257	9/7/2006	95	0	2	0	93
	STRIM207	Trimble River	385	258	9/17/2007	47	0	0	0	47
	STRIM209		386	258	9/1/2009	48	0	0	0	48
	SHAYT08	Hayes River	387	259	9/2/2008	48	0	0	1	47

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Reporting Group	ADF&G code	Location	Collection	Population	Date	No. of individuals				
						Initial	Alternate	Missing	Duplicate	Final
Cook Inlet	SHAYT09		388	259	8/28/2009	46	0	0	0	46
	SSKWEN07	Skwentna River	389	260	9/20/2007	108	0	0	0	108
	SCANYC07	Canyon Creek	390	260	9/20/2007	65	0	0	0	65
	SSHEL93	Shell Lake	391	261	9/3/1993	48	0	0	0	48
	SSHEL06		392	261	7/24/2006	95	0	1	0	94
	SSHEL09		393	261	2009	95	0	2	0	93
	SJUDD93	Judd Lake	394	262	8/24/1993	96	0	0	0	96
	SJUDD06		395	262	7/26/2006	94	0	2	0	92
	SJUDD09		396	262	2009	95	0	2	0	93
	STRIN92	Trinity Lake	397	263	8/1/1992	48	0	0	1	47
	STRIN09	Trinity Lake - Inlet	398	263	8/22/2009	94	0	0	0	94
	SCHEL93	Chelatna Lake	399	264	8/28/1993	95	0	0	0	95
	SCHEL09	Chelatna Lake - Susitina weir	400	264	8/7/2009	95	0	0	0	95
	SCHEL06		401	264	7/27/2006	95	0	0	0	95
	SNANC93	Nancy Lake - Little Susitna River	402	265	8/26/1993	95	0	0	0	95
	SNANC10	Nancy Lake	403	265	9/3/2010	95	0	0	0	95
	SLMEAD09	Little Meadow Creek	404	266	8/8/2009	142	0	0	0	142
	SFISH94		405	266	8/15/1994	94	0	0	0	94
	SBIGL11	Big Lake Outlet - Fish Creek	406	267	8/30/2011	190	0	2	0	188
	SCOTT93	Cottonwood Creek	407	268	8/18/1993	95	0	0	0	95
	SWASI98	Wasilla Creek	408	268	1998	71	0	5	0	66
	SESKA06	Eska Creek	409	269	9/5/2006	95	0	0	0	95
	SJIM97	Jim Creek	410	270	9/2/1997	95	0	1	0	94
	SJIMLK11	Jim Lake	411	270	9/1/2011	67	0	0	1	66
	SBODE06	Bodenburg Creek	412	271	8/30/2006	95	0	1	0	94
	SEAGLR11	Eagle River	413	272	8/23/2011	95	0	0	0	95
	SSIXM08	Sixmile Creek	414	273	7/30/2008	95	0	0	1	94
	SWILLIW06	Williwaw Creek	415	274	9/7/2006	39	0	0	0	39
	SWILLIW07		416	274	8/23/2007	69	0	0	0	69
	SCARMLK10	Carmen Lake	417	275	8/23/2010	95	0	0	0	95
	SCHICK10	Chickaloon River	418	276	7/13/2010	95	0	0	0	95

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Reporting Group	ADF&G code	Location	Collection	Population	Date	No. of individuals				
						Initial	Alternate	Missing	Duplicate	Final
Cook Inlet	SSWAN97	Swanson River	419	277	8/21/1997	95	0	0	0	95
	SDANI93	Daniels Lake	420	278	8/20/1993	95	0	2	0	93
	SBISH93	Bishop Creek	421	279	8/23/1993	95	0	0	0	95
	SRAIL97	Railroad Creek	422	280	8/13/1997	48	0	0	0	48
	SJOHN97	Johnson Creek	423	280	8/12/1997	88	0	1	0	87
	SMOOK93	Moose Creek	424	281	7/27/1993	47	0	0	0	47
	SMOOK94		425	281	1994	95	0	0	0	95
	SPTAR92	Ptarmigan Creek	426	282	8/1/1992	47	0	1	0	46
	SPTAR93		427	282	8/1/1993	95	0	1	0	94
	STERN92	Tern Lake	428	283	9/1/1992	48	0	0	1	47
	STERN93		429	283	8/24/1993	48	0	0	0	48
	SQUAR93	Quartz Creek	430	284	8/6/1993	94	0	1	0	93
	SSKK194L	Upper Kenai River - Upper	431	285	8/22/1994	47	0	0	0	47
	SSKK294L	Upper Kenai River - Upper	432	285	8/22/1994	48	0	0	0	48
	SSKK394E	Upper Kenai River - Upper	433	285	1994	96	0	1	0	95
	SSKK394L	Upper Kenai River - Upper	434	285	8/22/1994	47	0	0	0	47
	SURUS97	Upper Russian Lake - Goat Creek Early	435	286	8/19/1997	95	0	0	0	95
	SURGOAT09E		436	286	7/20/2009	95	0	2	0	93
	SRUSA92E		437	286	7/1/1992	96	0	0	0	96
	SURGOATM09	Upper Russian Lake - Goat Creek Late	438	287	9/3/2009	95	0	1	0	94
	SRBEAR09	Upper Russian Lake - Bear Creek	439	288	9/3/2009	95	0	1	1	93
	SUPRUS99	Upper Russian Lake - South Shoal	440	289	9/16/1999	95	0	0	1	94
	SURSHOAL09	Upper Russian Lake - Shoal	441	289	9/4/2009	95	0	0	0	95
	SURUSA99	Upper Russian Lake - Outlet	442	290	9/17/1999	95	0	1	0	94
	SUROUT09		443	290	9/2/2009	95	0	0	0	95
	SRUSB93	Upper Kenai River - Lower	444	291	8/17/1993	95	0	0	1	94
	SSKK594L	Upper Kenai River - Lower	445	291	9/9/1994	95	0	0	0	95
	SSKKE93E	Upper Kenai River - Lower	446	291	8/13/1993	48	1	0	0	47
	SSKKE93L	Upper Kenai River - Lower	447	291	8/27/1993	47	0	1	0	46
	SSKK494L	Upper Kenai River - Lower	448	291	8/22/1994	48	0	0	0	48
	SHIDDN08	Hidden Lake - North Beach	449	292	9/23/2008	95	0	2	0	93

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Reporting Group	ADF&G code	Location	Collection	Population	Date	No. of individuals				
						Initial	Alternate	Missing	Duplicate	Final
Cook Inlet	SHIDD93	Hidden Creek	450	292	7/29/1993	95	0	0	0	95
	SSKIL92	Skilak Lake - Outlet	451	293	8/1/1992	96	0	0	0	96
	SSKIL94E		452	293	1994	45	0	2	0	43
	SSKIL94L		453	293	1994	50	0	3	0	47
	SSKIL95	Skilak Lake	454	293	1995	48	0	0	0	48
	STUST942	Tustumena Lake	455	294	1994	48	0	0	0	48
	STUST941		456	294	1994	48	0	0	0	48
	SSEEP94	Seepage Creek	457	295	1994	95	0	0	0	95
	SGLAC94	Glacier Flats Creek	458	295	8/4/1994	95	0	0	0	95
	SMOOT92	Moose Creek	459	296	8/1/1992	96	0	2	0	94
	SBEAR92	Bear Creek	460	296	8/12/1992	95	0	0	0	95
	SNIKO92	Nikolai Creek	461	297	7/1/1992	95	0	0	0	95
	SENG92E	English Bay Early	462	298	6/1/1992	95	4	5	0	86
	SENG92L	English Bay Late	463	299	10/1/1992	95	0	1	0	94
	SBEARLK10	Bear Lake - Resurrection Bay	464	300	8/9/2010	190	0	0	1	189
	Cook Inlet Total					10,809	7	89	19	10,694
Prince William Sound	SBAIN10	Bainbridge Lake	465	301	8/6/2010	95	0	0	0	95
	SCOGH91	Coghill Lake	466	302	9/1/1991	96	0	1	0	95
	SCOG92HL		467	302	8/27/1992	96	0	3	0	93
	SCOG92ES		468	302	8/27/1992	96	0	1	0	95
	SCOGH10		469	302	7/7/2010	95	0	0	0	95
	SESHAR08	Eshamy Creek	470	303	8/3/2008	95	0	0	0	95
	SESHA91	Eshamy Lake	471	303	10/1/1991	96	0	6	0	90
	SMAIN91	Main Bay	472	304	7/13/1991	96	0	0	0	96
	SMINE09	Miners Lake	473	305	7/9/2009	95	0	0	0	95
	SMINE91		474	305	8/9/1991	96	0	0	0	96
	SEYAM07	Eyak Lake - Middle Arm	475	306	8/2/2007	95	0	0	0	95
	SEYASB07	Eyak Lake - South Beach	476	307	8/22/2007	95	0	7	1	87
	SEYAK10	Eyak Lake - Hatchery Creek	477	308	7/24/2010	95	0	0	0	95
	SMEND08	Mendeltna Creek	478	309	8/22/2008	95	0	0	1	94
	SMEND09		479	309	8/12/2009	94	0	0	0	94

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Reporting Group	ADF&G code	Location	Collection	Population	Date	No. of individuals				
						Initial	Alternate	Missing	Duplicate	Final
Prince William Sound	SSWEDE08	Swede Lake	480	310	8/13/2008	95	0	0	0	95
	SFISHC08	Gulkana River - Fish Creek	481	311	8/5/2008	95	0	0	0	95
	SGULK08EF	Gulkana River - East Fork	482	312	8/1/2008	75	0	0	0	75
	SPAXSO09	Paxson Lake - Outlet	483	313	8/21/2009	77	0	0	2	75
	SMENT08	Mentasta Lake	484	314	7/15/2008	95	0	0	0	95
	STANA05	Tanada Creek	485	315	8/21/2005	95	0	0	1	94
	STANAO09	Tanada Lake - Lower Outlet	486	316	9/9/2009	95	0	0	0	95
	STANAS09	Tanada Lake - Beach	487	317	9/9/2009	95	0	2	0	93
	SKLUT08	Klutina River - Mainstem	488	318	8/21/2008	95	0	0	0	95
	SKLUTI08	Klutina Lake - Inlet	489	319	8/21/2008	44	0	0	0	44
	SKLUTI09		490	319	8/13/2009	51	0	0	0	51
	SBEARH08	Klutina river - Bear Hole	491	320	8/14/2008	95	0	1	0	94
	SBANA08	Banana Lake	492	321	8/18/2008	82	0	2	0	80
	SSANN05	St. Anne Creek	493	322	7/15/2005	95	0	0	1	94
	SSTACR08		494	322	7/22/2008	95	0	0	3	92
	SMAHL08	Mahlo River	495	323	7/22/2008	95	0	0	1	94
	STONSL09	Tonsina Lake	496	324	8/8/2009	95	0	0	1	94
	SLONGLK05	Long Lake	497	325	9/7/2005	95	0	0	0	95
	STEBA08	Tebay River	498	326	8/18/2008	94	0	1	0	93
	SSTEAM08	Steamboat Lake - Bremner	499	327	8/17/2008	95	0	0	0	95
	SSALMC08	Salmon Creek - Bremner	500	328	8/17/2008	95	0	2	0	93
	SCLEAR07	Clear Creek at 40 Mile	501	329	8/24/2007	95	0	8	1	86
	SMCKI07	McKinley Lake - Upper	502	330	8/20/2007	95	0	0	0	95
	SMCKI08	McKinley Lake	503	331	7/29/2008	95	0	0	0	95
	SMCKI91	McKinley Lake - Salmon Creek	504	332	7/1/1991	95	0	0	0	95
	SMCKSC07		505	332	7/25/2007	95	0	2	0	93
	SMART07	Martin Lake	506	333	7/26/2007	95	0	2	0	93
	SMART08		507	333	7/21/2008	95	0	1	0	94
	SMARTR08	Martin River Slough	508	334	7/11/2008	95	0	0	0	95
	STOKUN08	Tokun Lake	509	335	6/19/2008	95	0	0	0	95
	STOKUN09		510	335	6/25/2009	94	0	0	0	94

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Reporting Group	ADF&G code	Location	Collection	Population	Date	No. of individuals				
						Initial	Alternate	Missing	Duplicate	Final
Prince William Sound	SBERI91	Bering Lake	511	336	7/10/1991	95	0	0	0	95
	SKUSH07	Kushtaka Lake	512	337	8/9/2007	95	0	1	0	94
	SKUSH08		513	337	8/8/2008	95	0	0	0	95
	Prince William Sound Total					4,512	0	40	12	4,460
South of Cape Suckling	SSITU07	Situk Lake - Mountain Stream	514	338	8/22/2007	159	0	0	0	159
	SSITU13	Situk Lake	515	339	8/7/2013	195	0	3	2	190
	SOSITU07	Old Situk River	516	340	7/15/2007	163	0	0	0	163
	SLOST03B	Lost/Tahwah Rivers	517	341	8/7/2003	94	0	1	0	93
	SAHRN07	Ahrnklin River	518	342	7/7/2007	90	0	0	0	90
	SDANG09	Dangerous River	519	343	7/20/2009	95	0	0	0	95
	SAKWE09	Akwe River	520	344	6/28/2009	95	0	0	0	95
	SEAST03B	East Alsek River	521	345	7/14/2003	94	0	0	0	94
	SBORD07	Alsek River - Border Slough	522	346	9/25/2007	50	0	0	0	50
	SBORD08		523	346	9/23/2008	21	0	0	0	21
	SBORD09		524	346	9/22/2009	32	0	0	0	32
	SBORD11		525	346	2011	39	0	1	0	38
	STWEED07	Tweedsmuir River	526	347	8/6/2007	48	0	0	0	48
	STWEED09		527	347	8/3/2009	47	0	0	1	46
	SVERNR09	Alsek River - Vern Ritchie	528	348	8/3/2009	94	0	0	1	93
	SVERNR10		529	348	9/29/2010	22	0	1	0	21
	SNESK07	Neskataheen Lake	530	349	9/5/2007	198	0	3	0	195
	SKLUK07	Klukshu River	531	350	2007	95	0	0	1	94
	SKLUK08		532	350	2008	7	0	0	0	7
	SKUDW09	Kudwat Creek	533	351	9/22/2009	20	0	0	0	20
	SKUDW10		534	351	9/28/2010	50	0	0	0	50
	SKUDW11		535	351	2011	31	0	0	1	30
	SUTATS03		536	351	2003	95	0	0	0	95
	SKWAT11	Tatshenshini Kwatini River	537	352	9/1/2011	65	0	0	0	65
	SDATLAS12	Datlasaka Creek	538	353	9/1/2012	95	0	0	0	95
	SBLAN07	Blanchard River	539	354	8/7/2007	95	0	6	0	89
	SBLAN08		540	354	8/28/2008	9	0	0	0	9

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Reporting Group	ADF&G code	Location	Collection	Population	Date	No. of individuals				
						Initial	Alternate	Missing	Duplicate	Final
South of Cape Suckling	SBLAN09		541	354	8/20/2009	62	0	0	0	62
	SBEARFL07	Chilkat River - Bear Flats	542	355	8/9/2007	95	0	0	0	95
	SMULE03	Chilkat River - Mule Meadows	543	356	8/1/2003	95	0	0	0	95
	SMULE07		544	356	7/27/2007	95	0	0	0	95
	SMOSQ07	Mosquito Lake	545	357	8/4/2007	95	0	0	0	95
	SCKAT07E	Chilkat Lake - Early	546	358	7/29/2007	95	0	0	0	95
	SCKAT07L	Chilkat Lake - Late	547	358	8/12/2007	95	0	0	0	95
	SCHIK03	Chilkoot River	548	359	2003	164	0	2	3	159
	SCHILBC07	Chilkoot Lake - Bear Creek	549	360	9/27/2007	234	0	1	0	233
	SCHILB07	Chilkoot Lake - Beach	550	361	7/9/2007	252	0	0	1	251
	SVIVID93	Vivid Lake	551	362	9/3/1993	48	0	0	0	48
	SNBERG91	North Berg Bay Inlet	552	363	8/21/1991	54	1	0	0	53
	SNBERG92		553	363	8/23/1992	100	0	0	0	100
	SBART13	Bartlett River	554	364	7/5/2013	73	0	3	1	69
	SNEVA09	Neva Lake	555	365	7/7/2009	95	0	0	0	95
	SNEVA13		556	365	8/13/2013	165	0	1	4	160
	SHOKTAI04	Hoktaheen Lake - Inlet	557	366	9/3/2004	50	0	0	3	47
	SHOKTAO04	Hoktaheen Lake - Outlet	558	366	9/14/2004	50	0	1	0	49
	SKLAG09	Klag Bay Stream - Outlet	559	367	8/12/2009	200	0	0	0	200
	SFORD13	Ford Arm Creek	560	368	8/16/2013	202	1	1	1	199
	SREDOUBT13	Redoubt Lake - Outlet	561	369	7/14/2013	200	0	0	0	200
	SSALML07	Salmon Lake	562	370	7/21/2007	91	0	0	0	91
	SSALML08		563	370	7/10/2008	95	1	0	0	94
	SNECKER91	Necker Bay - Benzeman Lake	564	371	7/23/1991	47	0	0	0	47
	SNECKER93		565	371	8/15/1993	48	0	0	0	48
	SFALL03	Falls Lake	566	372	9/2/2003	95	0	0	0	95
	SFALL10		567	372	7/20/2010	95	0	0	0	95
	SREDB93	Redfish Lake - Beach	568	373	8/10/1993	96	0	0	2	94
	SKUTL12	Kutlaku Lake	569	374	9/5/2012	78	0	0	0	78
	SKUTL13		570	374	8/28/2013	50	0	0	0	50
	SLACE13	Lace River	571	375	8/14/2013	68	0	5	0	63

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Reporting Group	ADF&G code	Location	Collection	Population	Date	No. of individuals				
						Initial	Alternate	Missing	Duplicate	Final
South of Cape Suckling	SBERN03	Berners River	572	376	8/18/2003	95	0	0	0	95
	SBERN13		573	376	8/13/2013	70	0	0	0	70
	SWIND03	Windfall Lake	574	377	7/31/2003	48	0	0	0	48
	SWIND07		575	377	8/2/2007	95	0	0	1	94
	SSTEE03	Steep Creek	576	378	8/20/2003	95	0	4	0	91
	SAUKE13baseline	Lake Creek - Auke Creek	577	379	7/2/2013	200	0	0	0	200
	SCRES03	Crescent Lake	578	380	9/10/2003	198	0	0	4	194
	SSPEE03	Speel Lake	579	381	9/17/2003	95	0	0	0	95
	SSPEE07	Snettisham Hatchery - Speel Lake	580	382	10/23/2007	95	0	0	0	95
	SSPEE13		581	382	10/5/2013	146	0	0	0	146
	SPAVLOF12	Pavlof Lake	582	383	8/6/2012	91	0	0	0	91
	SPAVLOFR13	Pavlof River	583	383	7/30/2013	85	0	2	0	83
	SKOOK07	Kook Lake	584	384	7/30/2007	95	0	1	0	94
	SKOOK10E		585	384	8/4/2010	4	0	0	0	4
	SKOOK10L		586	384	9/3/2010	37	0	0	0	37
	SKOOK12E		587	384	7/8/2012	84	0	0	0	84
	SKOOK12L		588	384	8/25/2012	64	0	0	1	63
	SKOOK13		589	384	7/27/2013	64	0	0	0	64
	SSITK03	Sitkoh Lake	590	385	9/26/2003	95	0	3	0	92
	SSITK11		591	385	9/6/2011	139	0	3	0	136
	SSITK12		592	385	9/4/2012	124	0	1	0	123
	SLEVA12	Lake Eva	593	386	7/25/2012	115	0	0	0	115
	SHASSEL12	Hasselborg Lake	594	387	8/23/2012	95	0	0	0	95
	SHASSELR13	Hasselborg River	595	387	8/30/2013	115	0	0	1	114
	SKANA07[a]	Kanalku Lake	596	388	7/7/2007	95	0	0	0	95
	SKANA10[a]		597	388	8/6/2010	95	0	1	0	94
	SKANAL13[a]		598	388	7/4/2013	130	0	0	0	130
	SKUTH06	Kuthai Lake	599	389	2006	171	0	0	0	171
	SKSLK10	King Salmon Lake	600	390	7/15/2010	151	0	2	0	149
	SKSLK11		601	390	8/8/2011	65	0	0	0	65
	SLTRA90	Little Trapper Lake	602	391	9/21/1990	94	0	0	0	94

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Reporting Group	ADF&G code	Location	Collection	Population	Date	No. of individuals				
						Initial	Alternate	Missing	Duplicate	Final
South of Cape Suckling	SLTRA06		603	391	2006	146	0	3	0	143
	SLTAT90	Taku River - Tatsatua Lake	604	392	9/21/1990	58	0	0	0	58
	SLTAT91		605	392	9/11/1991	23	0	1	0	22
	SLTAT11		606	392	9/8/2011	59	0	0	0	59
	STATS05	Taku River - Tatsamenie Lake	607	393	2005	95	0	1	0	94
	STATS06		608	393	8/19/2006	196	0	2	0	194
	SLTAH90	Stikine River - Little Tahltan	609	394	9/24/1990	95	0	0	0	95
	STAHL06	Stikine River - Tahltan Lake	610	395	2006	196	0	0	0	196
	SHACK08	Taku River - Hackett River	611	396	8/5/2008	56	0	4	0	52
	SNAHL03	Taku River - Nahlin River	612	397	7/31/2003	50	0	0	0	50
	SNAHL07		613	397	7/31/2007	34	0	0	0	34
	SNAHL12		614	397	7/30/2012	95	0	0	0	95
	STAKU07	Taku River - Mainstem	615	398	9/24/2007	95	0	0	0	95
	STAKWA09	Taku River - Mainstem - Takwahoni/Sinwa	616	399	9/14/2009	69	0	0	2	67
	STAKWA11		617	399	9/13/2011	41	0	0	0	41
	SSUSTA08	Taku River - Sustahine Slough	618	400	9/22/2008	95	0	1	1	93
	SSHUST09		619	400	9/14/2009	95	1	1	1	92
	STUCH08	Taku River - Mainstem - Tuskwa/Chunk	620	401	9/25/2008	95	0	0	0	95
	SCHUNK09	Taku River - Mainstem - Chunk/Bear	621	401	9/2/2009	34	0	0	0	34
	STUSK08	Taku River - Mainstem - Tuskwa Creek	622	401	9/23/2008	24	0	0	0	24
	SBEARSL09	Taku River - Mainstem - Bear Slough	623	401	9/15/2009	95	0	0	0	95
	STUSKS08	Taku River - Mainstem - Tuskwa Slough	624	401	10/1/2008	19	0	1	1	17
	STUSKS09		625	401	9/16/2009	92	0	0	1	91
	SYELLB08	Taku River - Yellow Bluff	626	402	9/24/2008	34	0	0	0	34
	SYELLB10		627	402	9/14/2010	31	0	1	0	30
	SYELLB11		628	402	9/13/2011	17	0	0	0	17
	STULS07	Taku River - Tulsequah River	629	403	9/7/2007	15	1	0	0	14
	STULS08		630	403	9/15/2008	53	0	0	0	53
	STULS09		631	403	9/17/2009	95	0	4	2	89
	SFISHCR09	Taku River - Fish Creek	632	404	10/8/2009	74	0	4	1	69
	SFISHCR10		633	404	9/27/2010	95	0	2	3	90

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Reporting Group	ADF&G code	Location	Collection	Population	Date	No. of individuals				
						Initial	Alternate	Missing	Duplicate	Final
South of Cape Suckling	SYEHR07	Taku River - Yehring Creek	634	405	2007	83	0	2	1	80
	SYEHR09		635	405	2009	95	0	0	4	91
	SCHUT08	Stikine River - Chutine River	636	406	9/23/2008	95	1	0	0	94
	SCHUTL09	Stikine River - Chutine Lake	637	407	9/11/2009	65	0	0	1	64
	SCHUT11		638	407	9/18/2011	160	0	0	0	160
	SANDY07	Stikine River - Andy Smith Slough	639	408	9/15/2007	10	0	0	0	10
	SANDY09		640	408	2009	18	0	0	0	18
	SPORCU08	Stikine River - Porcupine River	641	408	9/24/2008	3	0	0	0	3
	SPORCU09		642	408	9/14/2009	3	0	0	0	3
	SPORCU10		643	408	9/18/2010	23	0	0	1	22
	SPORCU11		644	408	9/16/2011	39	0	0	1	38
	SFOWL07	Stikine River - Fowler Slough	645	408	9/15/2007	11	0	0	0	11
	SFOWL08		646	408	9/24/2008	8	0	0	0	8
	SFOWL09		647	408	9/14/2009	8	0	1	0	7
	SDEVIL07	Stikine River - Devil's Elbow	648	409	9/7/2007	55	0	0	0	55
	SDEVIL08		649	409	9/26/2008	95	0	2	0	93
	SDEVIL09		650	409	2009	53	0	0	0	53
	SSCUD07	Stikine River - Scud River	651	410	9/13/2007	90	0	0	2	88
	SSCUD08		652	410	9/24/2008	48	0	2	1	45
	SSCUD09		653	410	9/14/2009	60	0	0	2	58
	SISKU85	Stikine River - Iskut River	654	411	1985	30	0	1	0	29
	SISKU86		655	411	1986	24	0	0	0	24
	SISKU02		656	411	2002	31	2	8	1	20
	SISKU06		657	411	9/27/2006	47	0	0	0	47
	SISKU07		658	411	9/14/2007	43	0	1	0	42
	SISKU08		659	411	9/25/2008	22	0	0	0	22
	SISKU09		660	411	9/15/2009	11	0	0	0	11
	SZAPP08	Stikine River - Iskut River - Zappa	661	411	9/25/2008	7	0	0	0	7
	SCRAIG06	Stikine River - Craig River	662	411	2006	12	0	0	0	12
	SCRAIG07		663	411	2007	5	0	0	0	5
	SCRAIG08		664	411	9/13/2008	21	0	0	0	21

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Table 3.–Page 23 of 26.

Reporting Group	ADF&G code	Location	Collection	Population	Date	No. of individuals				
						Initial	Alternate	Missing	Duplicate	Final
South of Cape Suckling	SBRON08	Stikine River - Bronson Slough	665	411	9/25/2008	63	1	0	0	62
	SBRON09		666	411	9/15/2009	16	0	0	0	16
	SVERR10	Stikine River - Verrett River	667	412	9/19/2010	24	0	0	0	24
	SVERR11		668	412	9/17/2011	43	0	1	1	41
	SSHAKS06	Stikine River - Shakes Slough Creek	669	413	8/22/2006	41	0	0	0	41
	SSHAKES07		670	413	8/16/2007	13	0	0	0	13
	SSHAKS09		671	413	8/12/2009	13	0	0	0	13
	SSHAKS11		672	413	8/15/2011	95	0	0	24	71
	SCHRI10	Stikine River - Christina Lake	673	414	9/24/2010	14	0	0	0	14
	SCHRI11		674	414	9/22/2011	36	0	0	0	36
	SPETL04	Petersburg Lake	675	415	8/23/2004	95	0	0	0	95
	SKAHS03	Kah Sheets Lake	676	416	8/25/2003	96	0	0	0	96
	SMILLC07E	Mill Creek Weir Early - Virginia Lake	677	417	7/24/2007	95	1	0	0	94
	SMILLC07L	Mill Creek Weir Late - Virginia Lake	678	417	8/12/2007	95	0	0	0	95
	SKUNK03	Kunk Lake - Etolin Island	679	418	9/14/2003	96	0	0	0	96
	STHOM04	Thoms Lake	680	419	9/2/2004	95	0	28	1	66
	SREDBL04	Red Bay Lake	681	420	9/13/2004	95	0	0	0	95
	SSALM04	Salmon Bay Lake	682	421	9/10/2004	95	0	0	0	95
	SSALM07		683	421	9/5/2007	75	0	0	0	75
	SSHIP03	Shipley Lake	684	422	9/8/2003	95	0	0	1	94
	SSARK00	Sarkar Lakes	685	423	2000	45	0	1	0	44
	SSARF05	Sarkar Lakes - Five Finger Creek	686	423	9/8/2005	50	0	3	0	47
	SHATC03	Sweetwater Lake - Hatchery Creek	687	424	6/7/2003	47	0	0	0	47
	SHATC07		688	424	6/23/2007	95	0	0	0	95
	SLUCK04	Luck Lake - Prince of Wales Island	689	425	9/10/2004	95	0	0	1	94
	SBIGLK10	Big Lake - Ratz Harbor Creek	690	426	9/8/2010	68	0	1	0	67
	SBIGLA11	Big Lake - Prince of Wales Island	691	426	9/12/2011	25	0	0	2	23
	SBIGLA14		692	426	9/3/2014	95	0	0	1	94
	SMCDO01	McDonald Lake - Hatchery Creek	693	427	9/15/1992	96	0	10	0	86
	SMCDO03		694	427	9/5/2003	140	0	3	5	132
	SMCDO07		695	427	9/1/2007	95	1	6	0	88

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Table 3.–Page 24 of 26.

Reporting Group	ADF&G code	Location	Collection	Population	Date	No. of individuals				
						Initial	Alternate	Missing	Duplicate	Final
South of Cape Suckling	SMCDO13	McDonald Lake - Walker Creek	696	427	9/18/2013	70	0	7	0	63
	SKART92	Karta River	697	428	8/25/1992	94	0	0	0	94
	SMCGI03	Salmon Lake - McGilvery Creek	698	428	9/4/2003	96	0	0	0	96
	SMCGI04		699	428	8/29/2004	95	0	0	0	95
	SGENE07	Unuk River - Gene's Lake	700	429	8/17/2007	95	0	0	0	95
	SGENE08		701	429	8/16/2008	70	0	0	1	69
	SHELM05	Helm Lake	702	430	9/21/2005	95	0	1	0	94
	SHECK04	Heckman Lake	703	431	9/25/2004	95	0	1	0	94
	SHECK07	Heckman Lake - Naha River	704	431	9/21/2007	95	0	0	0	95
	SMAHO03	Mahoney Creek	705	432	8/15/2003	64	0	0	5	59
	SMAHO07		706	432	8/14/2007	95	0	0	0	95
	SKEGA04	Kegan Lake	707	433	9/10/2004	95	0	0	0	95
	SFILLM05	Fillmore Lake - Hoffman Creek	708	434	8/30/2005	55	0	0	3	52
	STHRE04	Klawock Lake - Three Mile Creek	709	435	9/30/2004	95	1	2	0	92
	STHRE10		710	435	9/1/2010	95	0	6	0	89
	SHALF08	Klawock Lake - Half Mile Creek	711	436	9/11/2008	52	0	10	0	42
	SINCK03	Klawock Lake - Inlet Creek	712	436	9/17/2003	95	1	18	1	75
	SINCK08		713	436	9/2/2008	95	0	0	0	95
	SHETT03	Hetta Lake	714	437	2003	93	0	1	0	92
	SHETT08	Hetta Lake	715	437	8/12/2008	95	0	0	0	95
	SHETT09L	Hetta Creek - Late	716	437	8/23/2009	95	0	1	0	94
	SHETT09M	Hetta Creek - Middle	717	438	7/1/2009	95	0	0	0	95
	SHETT10E	Hetta Creek - Early	718	439	6/15/2010	95	0	0	0	95
	SEEK04	Eek Creek	719	440	9/18/2004	32	0	1	0	31
	SEEK07		720	440	8/29/2007	20	0	0	1	19
	SKLAK04	Klakas Lake	721	441	9/12/2004	95	0	0	0	95
	SBAR04	Essowah Lake - Bar Creek	722	442	9/5/2004	95	0	0	0	95
	SHUGH04	Hugh Smith Lake - Bushmann Creek	723	443	9/8/2004	151	0	0	1	150
	SHUGH13	Hugh Smith Lake	724	443	7/15/2013	60	0	0	0	60
	SCOBB07	Hugh Smith Lake - Cobb Creek	725	443	9/6/2007	101	1	1	0	99
	SBOWS01	Nass River - Bowser Lake	726	444	9/13/2001	95	0	1	0	94

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Table 3.–Page 25 of 26.

Reporting Group	ADF&G code	Location	Collection	Population	Date	No. of individuals				
						Initial	Alternate	Missing	Duplicate	Final
South of Cape Suckling	SDAMD01	Nass River - Damdochax Creek	727	445	9/18/2001	95	0	1	1	93
	SMERI01	Nass River - Meziadin Lake	728	446	9/19/2001	95	0	0	4	91
	SMEZIB06		729	446	9/26/2006	95	0	0	0	95
	STINT06	Nass River - Tintina Creek	730	447	9/12/2006	95	0	0	1	94
	SSUST06	Skeena River - Johanson Lake	731	448	2006	95	0	0	0	95
	SSLAM06	Skeena River - Slamgeesh River	732	449	8/7/2006	95	0	0	0	95
	SUBAB06	Skeena River - Upper Babine River	733	450	2006	95	0	0	0	95
	SFMILE06	Skeena River - Four Mile Creek	734	451	8/29/2006	85	0	0	0	85
	SPIER06	Skeena River - Pierre Creek	735	451	8/30/2006	95	0	0	0	95
	SFULT06	Skeena River - Fulton River	736	452	2006	95	0	0	0	95
	SMORR07	Skeena River - Morrison Creek	737	452	9/7/2007	95	0	0	3	92
	SLTAH88	Skeena River - Lower Tahlo River	738	453	1988	10	0	0	0	10
	SLTAH94		739	453	1994	85	0	7	0	78
	STAHLO07	Skeena River - Tahlo Creek	740	453	9/20/2007	95	0	0	0	95
	SMCDON06	Skeena River - McDonell Lake	741	454	9/3/2006	64	0	1	0	63
	SKALUM06	Skeena River - Kitsumkalum Lake	742	455	11/6/2006	56	0	0	0	56
	SALAS06	Skeena River - Alastair Lake	743	456	9/14/2006	86	0	0	1	85
	SNANG06	Skeena River - Nangeese River	744	457	9/19/2006	44	0	2	2	40
	SSWANLK06	Skeena River - Swan Lake	745	458	10/15/2006	95	0	1	1	93
	SNANI07	Skeena River - Nanika River	746	459	9/21/2007	95	0	0	1	94
	SSTEL07	Fraser River - Stellako River	747	460	9/28/2007	94	0	0	0	94
	SLHOR01	Fraser River - Lower Horsefly River	748	461	9/12/2001	95	0	8	0	87
	SUHOR01	Fraser River - Upper Horsefly River	749	461	9/2/2001	95	0	3	0	92
	SHORSE07	Fraser River - Horsefly River	750	461	9/5/2007	95	0	0	0	95
	SCHILK01	Fraser River - Chilko Lake	751	462	2001	95	1	6	1	87
	SRAFT01	Fraser River - Raft River	752	463	9/4/2001	95	0	11	0	84
	SADAM07	Fraser River - Adams River - Shuswap Lake	753	464	10/3/2007	95	0	0	0	95
	SGATES09	Fraser River - Gates Creek	754	465	9/10/2009	95	0	5	0	90
	SBIRK07	Fraser River - Birkenhead	755	466	10/18/2007	95	1	4	0	90
	SWEAV01	Fraser River - Weaver Creek	756	467	2001	95	1	5	1	88
	SHARR07	Fraser River - Harrison River	757	468	10/17/2007	95	0	0	0	95

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Reporting Group	ADF&G code	Location	Collection	Population	Date	No. of individuals				
						Initial	Alternate	Missing	Duplicate	Final
South of Cape Suckling	SNADE95	Naden River - Queen Charlotte Island	758	469	1995	95	0	0	0	95
	SKITL06	Central - Kitlope Lake	759	470	8/3/2006	95	0	0	0	95
	SBAKE96	Baker Lake	760	471	5/16/1996	92	0	1	1	90
	SISSA96	Issaquah Creek - Puget Sound	761	472	10/22/1996	95	0	12	1	82
	SCEDAR94	Cedar River	762	473	10/26/1994	95	0	2	0	93
	South of Cape Suckling Total					20,061	17	260	120	19,664
Cape Prince of Wales to Puget Sound Total						66,513	33	856	292	65,332

[a] Kanalku Lake samples were removed from duplicate check analyses due to suspected high levels of inbreeding, leading to a high proportion of false duplicates.

Table 4.–Pairs of single nucleotide polymorphisms (SNPs) that exhibited significant ($P < 0.01$) linkage disequilibrium in 473 populations of sockeye salmon in the WASSIP study area, f_{ORCA} values for each locus separate, as well as for combined loci, and decision for handling linkage for each locus pair based upon the Δ90 of 0.022. See text for details.

Locus	Linkage pair	f_{ORCA}	Decision
One_GPDH-201	1	0.081	Keep
One_GPDH2-1872	1	0.076	Drop
One_GPDH-201_GPDH2-1872	1	0.086	Do not combine
One_MHC2_190	2	0.064	Keep
One_MHC2_251	2	0.059	Drop
One_MHC2_190_251	2	0.071	Do not combine
One_Tf_ex11-750	3	0.120	Drop
One_Tf_in3-182	3	0.095	Drop
One_Tf_ex11-750_in3-182	3	0.181	Combine

Table 5.–Estimates of average stock composition, bias, root mean square error (RMSE), and 90% credibility interval (CI) width for 5 replicates of 100% proof tests of the coastwide sockeye salmon genetic baseline with 89 loci. Each replicate was a sample of 200 individuals removed from the genetic baseline, except for Uganik (n = 142) and Afognak (n = 134). Bold indicates correct allocations. Stock composition estimates (percentage) may not sum to 100 due to rounding error.

	West of Chignik				Black Lake				Chignik Lake			
Reporting Group	Average	Bias	RMSE	CI Width	Average	Bias	RMSE	CI Width	Average	Bias	RMSE	CI Width
West of Chignik	**98.7**	-1.3	1.7	3.4	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3
Black Lake	0.4	0.4	0.9	1.3	**99.6**	-0.4	0.4	1.9	0.0	0.0	0.0	1.7
Chignik Lake	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.6	**99.4**	-0.6	0.6	2.8
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Frazer	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Ayakulik	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Karluk	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.5
Uganik	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.2
Northwest Kodiak	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Afognak	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Eastside Kodiak	0.1	0.1	0.1	1.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.4
Saltery	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Cook Inlet	0.1	0.1	0.1	0.5	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3
Prince William Sound	0.1	0.1	0.2	0.9	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
South of Cape Suckling	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2

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	Upper Station / Akalura				Frazer				Ayakulik			
Reporting Group	Average	Bias	RMSE	CI Width	Average	Bias	RMSE	CI Width	Average	Bias	RMSE	CI Width
West of Chignik	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.2	0.2	0.3	1.0
Black Lake	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Chignik Lake	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Upper Station / Akalura	**99.6**	-0.4	0.4	1.7	0.0	0.0	0.0	0.3	0.1	0.1	0.2	0.7
Frazer	0.0	0.0	0.0	0.4	**90.1**	-9.9	11.0	23.7	0.7	0.7	1.6	9.4
Ayakulik	0.0	0.0	0.0	0.3	9.3	9.3	10.5	23.4	**97.5**	-2.5	2.7	10.7
Karluk	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.5	0.4	0.4	0.6	2.1
Uganik	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3
Northwest Kodiak	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
Afognak	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Eastside Kodiak	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.4
Saltery	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3
Cook Inlet	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Prince William Sound	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
South of Cape Suckling	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2

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	Karluk				Uganik				Northwest Kodiak			
Reporting Group	Average	Bias	RMSE	CI Width	Average	Bias	RMSE	CI Width	Average	Bias	RMSE	CI Width
West of Chignik	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2
Black Lake	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.2
Chignik Lake	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.2
Upper Station / Akalura	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2
Frazer	0.0	0.0	0.0	1.1	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.2
Ayakulik	0.6	0.6	1.2	1.8	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.2
Karluk	**98.7**	-1.3	1.7	3.3	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.3
Uganik	0.0	0.0	0.0	0.3	**97.2**	-2.8	3.0	5.6	0.0	0.0	0.0	0.2
Northwest Kodiak	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.3	**99.3**	-0.7	0.8	2.1
Afognak	0.0	0.0	0.0	0.2	0.2	0.2	0.3	1.0	0.2	0.2	0.4	1.2
Eastside Kodiak	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.2
Saltery	0.0	0.0	0.0	0.2	1.3	1.3	1.8	3.8	0.0	0.0	0.0	0.2
Cook Inlet	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2
Prince William Sound	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2
South of Cape Suckling	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.2

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	Afognak				Eastside Kodiak				Saltery			
Reporting Group	Average	Bias	RMSE	CI Width	Average	Bias	RMSE	CI Width	Average	Bias	RMSE	CI Width
West of Chignik	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2
Black Lake	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.2
Chignik Lake	0.0	0.0	0.0	0.9	0.1	0.1	0.2	0.6	0.0	0.0	0.0	0.2
Upper Station / Akalura	0.1	0.1	0.2	1.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Frazer	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2
Ayakulik	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Karluk	0.1	0.1	0.3	1.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2
Uganik	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3
Northwest Kodiak	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Afognak	**98.1**	-1.9	2.3	4.2	0.2	0.2	0.3	1.0	0.2	0.2	0.2	0.8
Eastside Kodiak	0.4	0.4	0.9	1.7	**99.2**	-0.8	0.9	2.6	0.0	0.0	0.0	0.4
Saltery	0.1	0.1	0.1	1.1	0.0	0.0	0.0	0.6	**99.4**	-0.6	0.6	1.9
Cook Inlet	0.1	0.1	0.1	0.9	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Prince William Sound	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.3
South of Cape Suckling	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2

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	Cook Inlet				Prince William Sound				South of Cape Suckling			
Reporting Group	Average	Bias	RMSE	CI Width	Average	Bias	RMSE	CI Width	Average	Bias	RMSE	CI Width
West of Chignik	0.2	0.2	0.3	2.0	0.0	0.0	0.0	0.5	0.0	0.0	0.1	0.6
Black Lake	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.4
Chignik Lake	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.4
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Frazer	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.5
Ayakulik	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.4
Karluk	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.5
Uganik	0.1	0.1	0.1	0.6	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.4
Northwest Kodiak	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Afognak	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Eastside Kodiak	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Saltery	0.1	0.1	0.1	0.7	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2
Cook Inlet	**98.8**	-1.2	1.2	3.5	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.5
Prince William Sound	0.0	0.0	0.0	0.5	**99.5**	-0.5	0.5	2.8	0.4	0.4	0.7	3.0
South of Cape Suckling	0.0	0.0	0.0	0.4	0.0	0.0	0.0	1.5	**98.7**	-1.3	1.5	4.1

Table 6.–True stock composition, estimates of average stock composition, bias, root mean square error (RMSE), and 90% credibility interval (CI) width for 5 replicates of 7 different hypothetical fishery scenario proof tests of the coastwide sockeye salmon genetic baseline with 89 loci. Each replicate was a sample of 400 individuals removed from the genetic baseline, except for the flat scenario (n = 390). Stock composition estimates (percentage) may not sum to 100 due to rounding error. See text for details.

	Hypothetical July Uyak Scenario					Hypothetical July Alitak Scenario				
Reporting Group	True	Average	Bias	RMSE	CI Width	True	Average	Bias	RMSE	CI Width
West of Chignik	10.0	9.9	-0.1	0.6	5.5	9.0	8.7	-0.3	1.0	5.0
Black Lake	0.0	0.3	0.3	0.6	1.4	0.0	0.0	0.0	0.0	0.6
Chignik Lake	10.0	9.5	-0.5	0.9	5.4	10.0	10.2	0.2	0.4	5.4
Upper Station / Akalura	0.0	0.0	0.0	0.0	0.1	10.0	9.9	-0.1	0.6	5.3
Frazer	5.0	4.8	-0.2	3.4	10.0	30.0	29.0	-1.0	4.9	15.2
Ayakulik	22.0	22.0	-0.0	2.7	11.7	15.0	16.1	1.1	4.0	14.3
Karluk	7.0	7.0	0.0	1.0	5.2	5.0	4.7	-0.3	1.4	4.6
Uganik	2.0	1.8	-0.2	0.3	2.6	1.0	1.2	0.2	0.3	2.1
Northwest Kodiak	5.0	5.0	-0.0	0.2	3.8	1.0	0.7	-0.3	0.4	1.5
Afognak	1.0	0.9	-0.1	0.2	1.7	1.0	0.8	-0.2	0.3	1.6
Eastside Kodiak	1.0	0.5	-0.5	0.6	2.0	1.0	1.1	0.1	0.6	2.2
Saltery	20.0	20.6	0.6	0.7	7.0	2.0	2.3	0.3	0.3	2.8
Cook Inlet	15.0	14.3	-0.7	1.1	6.4	15.0	14.1	-0.9	1.1	6.1
Prince William Sound	2.0	1.9	-0.1	0.7	2.8	0.0	0.0	0.0	0.0	0.9
South of Cape Suckling	0.0	0.0	0.0	0.1	0.5	0.0	0.0	0.0	0.0	0.1

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Table 6.–Page 2 of 4.

	Hypothetical August Karluk Scenario					Hypothetical June Cape Igvak Scenario				
Reporting Group	True	Average	Bias	RMSE	CI Width	True	Average	Bias	RMSE	CI Width
West of Chignik	5.0	4.4	-0.6	0.7	3.5	15.0	15.0	0.0	1.1	6.6
Black Lake	0.0	0.0	0.0	0.0	0.3	46.0	46.2	0.2	0.9	8.7
Chignik Lake	5.0	4.9	-0.1	0.3	3.9	0.0	0.2	0.2	0.3	1.7
Upper Station / Akalura	15.0	14.3	-0.7	0.7	6.3	1.0	0.6	-0.4	0.5	1.4
Frazer	2.0	0.1	-1.9	1.9	5.4	4.0	3.2	-0.8	2.5	6.4
Ayakulik	15.0	16.7	1.7	2.3	8.9	4.0	4.6	0.6	2.4	6.7
Karluk	50.0	50.0	0.0	1.3	9.5	7.0	7.1	0.1	0.9	5.0
Uganik	0.0	0.0	0.0	0.0	0.2	0.0	0.1	0.1	0.2	0.7
Northwest Kodiak	2.0	2.0	-0.0	0.4	2.6	1.0	0.6	-0.4	0.5	1.4
Afognak	0.0	0.1	0.1	0.1	0.4	0.0	0.0	0.0	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.2
Saltery	4.0	3.8	-0.2	0.4	3.3	2.0	1.8	-0.2	0.3	2.4
Cook Inlet	2.0	2.0	-0.0	0.2	2.6	20.0	19.2	-0.8	1.2	6.9
Prince William Sound	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.3
South of Cape Suckling	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1

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Table 6.–Page 3 of 4.

	Hypothetical June Ayakulik Scenario					Hypothetical August Uganik Scenario				
Reporting Group	True	Average	Bias	RMSE	CI Width	True	Average	Bias	RMSE	CI Width
West of Chignik	5.0	5.3	0.3	0.7	4.0	1.0	0.9	-0.1	0.3	1.9
Black Lake	5.0	4.7	-0.3	0.5	3.8	0.0	0.2	0.2	0.4	0.9
Chignik Lake	0.0	0.0	0.0	0.1	0.6	3.0	2.4	-0.6	0.7	3.0
Upper Station / Akalura	15.0	14.7	-0.3	0.6	6.4	5.0	4.5	-0.5	1.0	3.7
Frazer	10.0	12.8	2.8	7.1	13.5	3.0	3.5	0.5	3.9	5.7
Ayakulik	30.0	28.4	-1.6	6.3	14.2	10.0	9.4	-0.6	2.8	7.4
Karluk	30.0	28.6	-1.4	2.2	9.0	30.0	31.2	1.2	1.6	8.6
Uganik	0.0	0.0	0.0	0.0	0.1	2.0	1.7	-0.3	0.7	2.5
Northwest Kodiak	0.0	0.0	0.0	0.0	0.4	2.0	1.7	-0.3	0.7	2.4
Afognak	0.0	0.0	0.0	0.0	0.1	1.0	0.9	-0.1	0.2	1.6
Eastside Kodiak	0.0	0.0	0.0	0.0	0.3	1.0	0.7	-0.3	0.5	1.7
Saltery	0.0	0.0	0.0	0.0	0.1	23.0	23.2	0.2	0.6	7.3
Cook Inlet	5.0	4.3	-0.7	1.0	3.6	17.0	16.4	-0.6	0.9	6.5
Prince William Sound	0.0	0.0	0.0	0.0	0.4	0.0	0.1	0.1	0.2	1.1
South of Cape Suckling	0.0	0.0	0.0	0.0	0.3	2.0	1.8	-0.2	0.4	2.5

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Table 6.–Page 4 of 4.

	Hypothetical Flat Scenario				
Reporting Group	True	Average	Bias	RMSE	CI Width
West of Chignik	6.7	6.0	-0.7	0.9	4.7
Black Lake	6.7	6.0	-0.6	1.0	5.0
Chignik Lake	6.7	6.8	0.1	0.9	5.3
Upper Station / Akalura	6.7	6.9	0.2	0.4	4.6
Frazer	6.7	7.3	0.6	2.1	8.9
Ayakulik	6.7	6.3	-0.4	1.8	8.6
Karluk	6.7	6.4	-0.3	0.8	5.1
Uganik	6.7	7.0	0.3	1.1	4.6
Northwest Kodiak	6.7	6.2	-0.5	0.7	4.2
Afognak	6.7	6.1	-0.5	0.7	4.1
Eastside Kodiak	6.7	6.6	-0.0	0.7	5.0
Saltery	6.7	6.7	0.0	0.6	4.7
Cook Inlet	6.7	6.8	0.1	0.5	5.0
Prince William Sound	6.7	6.8	0.1	0.7	5.4
South of Cape Suckling	6.7	6.8	0.2	0.5	5.2

Table 7.–Variance components for the amount of genetic variation among reporting groups (σ_P^2) from 3 hierarchical genetic ANOVA's targeting Ayakulik and Frazer, KMA, and coastwide reporting groups. An "X" for Included indicates whether a locus was included in the final coastwide genetic baseline of 46 loci (48 SNPs). See text for details.

Assay	Included	Ayakulik Frazer	KMA	Coast wide
One_ACBP-79[a]		-0.0002	0.0279	0.0223
One_agt-132	X	0.0032	0.0164	0.0126
One_aldB-152	X	-0.0001	0.0393	0.0055
One_apoe-83	X	-0.0006	0.0177	0.0286
One_c3-98		0.0000	0.0006	0.0035
One_CD9-269		0.0001	0.0099	0.0056
One_cetn1-167[a]	X	-0.0003	0.0142	0.0333
One_CFP1		0.0001	0.0088	0.0174
One_cin-177		-0.0004	0.0025	0.0043
One_CO1[b]		0.0001	0.0423	0.0508
One_ctgf-301		0.0000	0.0003	0.0004
One_Cytb_17[c]		0.0000	0.0187	0.0452
One_Cytb_26[b]		0.0001	0.0262	0.0265
One_E2-65		-0.0002	0.0138	0.0079
One_gdh-212	X	-0.0008	0.0154	0.0070
One_GHII-2165	X	0.0001	0.0002	0.0555
One_ghsR-66	X	-0.0001	0.0138	0.0085
One_GPDH-201	X	-0.0011	0.0078	0.0170
One_GPDH2-187[c]		0.0000	0.0008	0.0195
One_GPH-414	X	-0.0036	0.0288	0.0283
One_HGFA-49	X	-0.0001	0.0038	0.0045
One_HpaI-71		-0.0001	0.0069	0.0063
One_HpaI-99	X	-0.0005	0.0145	0.0275
One_hsc71-220	X	0.0026	0.0780	0.0325
One_Hsp47		0.0002	0.0129	0.0146
One_IL8r-362		0.0018	0.0007	0.0000
One_KCT1-453		0.0006	0.0060	0.0035
One_KPNA-422	X	0.0000	0.0252	0.0079
One_LEI-87	X	0.0013	0.0022	0.0301
One_lpp1-44	X	0.0013	0.0035	0.0304
One_metA-253	X	0.0000	0.0016	0.0164
One_MHC2_190	X	0.0009	0.0528	0.0270
One_MHC2_251[c]		-0.0001	0.0189	0.0135
One_Mkpro-129	X	-0.0005	0.0116	0.0179
One_ODC1-196	X	0.0039	0.0337	0.0073
One_Ots208-234	X	-0.0001	0.0025	0.0325
One_Ots213-181		-0.0005	0.0058	0.0147
One_p53-534		0.0000	0.0029	0.0031
One_pax7-248		-0.0001	0.0026	0.0023
One_PIP		-0.0007	0.0047	0.0058
One_Prl2	X	0.0000	0.0236	0.0029
One_rab1a-76	X	-0.0003	0.0288	0.0077
One_RAG1-103		-0.0001	0.0007	0.0012
One_RAG3-93		-0.0001	0.0034	0.0041
One_redd1-414	X	-0.0006	0.0782	0.0402
One_RFC2-102		0.0010	0.0002	0.0040
One_RFC2-285		0.0000	0.0032	0.0016
One_rpo2j-261		-0.0006	0.0025	0.0046
One_sast-211		0.0000	0.0003	0.0015
One_spf30-207		-0.0006	0.0060	0.0135
One_srp09-127		0.0001	0.0001	0.0121
One_ssrd-135		0.0005	0.0103	0.0047
One_STC-410	X	-0.0009	0.0098	0.0256
One_STR07	X	0.0016	0.0287	0.0110
One_SUMO1-6		-0.0002	0.0120	0.0144
One_sys1-230	X	-0.0005	0.0438	0.0098
One_taf12-248	X	0.0011	0.0038	0.0041
One_Tf_ex11-750[b]		0.0004	0.0239	0.0796
One_Tf_in3-182[b]		-0.0003	0.1503	0.0556
One_tshB-92		0.0004	0.0212	0.0039
One_txnip-401		0.0000	0.0000	0.0018
One_U1003-75	X	0.0003	0.0124	0.0636
One_U1004-183	X	-0.0108	0.0010	0.0362
One_U1009-91	X	-0.0001	0.0283	0.0246
One_U1010-81		0.0000	0.0017	0.0021
One_U1012-68	X	-0.0007	0.0281	0.0119
One_U1013-108		0.0001	0.0051	0.0003
One_U1014-74		-0.0004	0.0085	0.0039
One_U1016-115	X	0.0019	0.0601	0.0260
One_U1024-197		0.0000	0.0015	0.0033

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Table 7.–Page 2 of 2.

Assay	Included	Ayakulik Frazer	KMA	Coast wide
One_U1101		0.0000	0.0102	0.0039
One_U1103		0.0000	0.0003	0.0015
One_U1105	X	0.0000	0.0027	0.0273
One_U1201-492		-0.0006	0.0080	0.0035
One_U1202-1052	X	-0.0002	0.0021	0.0255
One_U1203-175	X	-0.0001	0.0102	0.0051
One_U1204-53		0.0007	0.0042	0.0053
One_U1205-57		0.0000	0.0051	0.0010
One_U1206-108		-0.0004	0.0081	0.0072
One_U1208-67		0.0007	0.0014	0.0043
One_U1209-111	X	0.0028	0.0166	0.0077
One_U1210-173		-0.0001	0.0005	0.0045
One_U1212-106	X	-0.0005	0.0743	0.0088
One_U1214-107		0.0000	0.0044	0.0083
One_U1216-230	X	0.0008	0.0323	0.0347
One_U301-92	X	-0.0003	0.0298	0.0075
One_U401-224	X	-0.0002	0.0167	0.0193
One_U404-229		0.0007	0.0005	0.0074
One_U502-167		0.0000	0.0005	0.0000
One_U503-170		0.0005	0.0097	0.0054
One_U504-141	X	0.0023	0.0101	0.0043
One_vamp5-255		-0.0001	0.0079	0.0078
One_vatf-214	X	0.0002	0.0114	0.0087
One_VIM-569		-0.0001	0.0087	0.0031
One_ZNF-61	X	-0.0004	0.0121	0.0213
One_Zp3b-49	X	0.0000	0.0022	0.0231
One_MHC2_190_251[c]		0.0013	0.0527	0.0178
One_GPDH-201_GPDH2-1872[c]		-0.0017	0.0108	0.0241
One_Tf_in3-182_ex11-750[b]	X	0.0017	0.1191	0.0955
One_CO1_Cytb17_26[c]		0.0005	0.0470	0.0612
One_CO1_Cytb17[c]		0.0004	0.0432	0.0611
One_CO1_Cytb26[b]	X	0.0003	0.0472	0.0617
One_Cytb17_26[c]		0.0003	0.0461	0.0608
Average over included 46 loci		0.0001	0.0243	0.0227
Average over all 89 loci		0.0001	0.0149	0.0139

[a] These SNPs were dropped due to failure to conform to Hardy-Weinberg Expectations.

[b] These SNPs were combined into haplotypes and treated together as single loci, *One_CO1_Cytb26* and *One_Tf_in3-182_ex11-750*.

[c] These SNPs were dropped due to linkage.

Table 8.–Estimates of average stock composition, bias, root mean square error (RMSE), and 90% credibility interval (CI) width for 5 replicates of 100% proof tests of the coastwide sockeye salmon genetic baseline with 46 loci. Each replicate was a sample of 200 individuals removed from the genetic baseline, except for Uganik (n = 142) and Afognak (n = 134). Bold indicates correct allocations. Stock composition estimates (percentage) may not sum to 100 due to rounding error.

	West of Chignik				Black Lake				Chignik Lake			
Reporting Group	Average	Bias	RMSE	CI Width	Average	Bias	RMSE	CI Width	Average	Bias	RMSE	CI Width
West of Chignik	**98.0**	-2.0	2.8	4.8	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.5
Black Lake	0.3	0.3	0.7	1.2	**99.2**	-0.8	0.8	2.8	0.4	0.4	0.8	2.6
Chignik Lake	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.7	**98.9**	-1.1	1.3	4.1
Upper Station / Akalura	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Frazer	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Ayakulik	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Karluk	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3
Uganik	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.5
Northwest Kodiak	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Afognak	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
Eastside Kodiak	0.2	0.2	0.5	2.4	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.3
Saltery	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.3
Cook Inlet	0.0	0.0	0.1	1.5	0.0	0.0	0.0	0.4	0.0	0.0	0.1	0.5
Prince William Sound	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.5
South of Cape Suckling	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.3

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	Upper Station / Akalura				Frazer				Ayakulik			
Reporting Group	Average	Bias	RMSE	CI Width	Average	Bias	RMSE	CI Width	Average	Bias	RMSE	CI Width
West of Chignik	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3	0.2	0.2	0.4	1.3
Black Lake	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.2
Chignik Lake	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3
Upper Station / Akalura	**99.6**	-0.4	0.4	1.8	0.0	0.0	0.0	1.1	0.2	0.2	0.3	0.9
Frazer	0.0	0.0	0.0	0.4	**91.8**	-8.2	11.1	24.9	0.0	0.0	0.0	13.9
Ayakulik	0.0	0.0	0.0	0.4	6.8	6.8	10.5	24.2	**98.0**	-2.0	2.0	15.1
Karluk	0.0	0.0	0.0	0.4	0.0	0.0	0.0	1.3	0.3	0.3	0.6	1.9
Uganik	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Northwest Kodiak	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.3
Afognak	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Eastside Kodiak	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
Saltery	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Cook Inlet	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3
Prince William Sound	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
South of Cape Suckling	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.2

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	Karluk				Uganik				Northwest Kodiak			
Reporting Group	Average	Bias	RMSE	CI Width	Average	Bias	RMSE	CI Width	Average	Bias	RMSE	CI Width
West of Chignik	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.2
Black Lake	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.2
Chignik Lake	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.2
Upper Station / Akalura	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.2
Frazer	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.2
Ayakulik	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.2
Karluk	**99.2**	-0.8	0.9	3.3	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.4
Uganik	0.0	0.0	0.0	0.3	**97.5**	-2.5	2.6	6.6	0.0	0.0	0.0	0.3
Northwest Kodiak	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.3	**99.5**	-0.5	0.5	2.2
Afognak	0.0	0.0	0.0	0.3	0.2	0.2	0.3	1.1	0.0	0.0	0.0	0.6
Eastside Kodiak	0.0	0.0	0.0	0.6	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.6
Saltery	0.0	0.0	0.0	0.2	0.5	0.5	1.0	4.5	0.0	0.0	0.0	0.3
Cook Inlet	0.0	0.0	0.0	0.2	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.3
Prince William Sound	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.3
South of Cape Suckling	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2

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	Afognak				Eastside Kodiak				Saltery			
Reporting Group	Average	Bias	RMSE	CI Width	Average	Bias	RMSE	CI Width	Average	Bias	RMSE	CI Width
West of Chignik	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2
Black Lake	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.2
Chignik Lake	0.5	0.5	1.2	1.9	0.1	0.1	0.2	0.7	0.0	0.0	0.0	0.6
Upper Station / Akalura	0.2	0.2	0.3	1.4	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.3
Frazer	0.0	0.0	0.0	0.3	0.1	0.1	0.3	0.7	0.0	0.0	0.0	0.2
Ayakulik	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Karluk	0.0	0.0	0.1	1.1	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.2
Uganik	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.7
Northwest Kodiak	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.2
Afognak	**98.1**	-1.9	2.1	4.6	0.0	0.0	0.0	0.5	0.2	0.2	0.3	0.8
Eastside Kodiak	0.0	0.0	0.0	0.7	**98.8**	-1.2	1.3	3.6	0.0	0.0	0.0	0.3
Saltery	0.0	0.0	0.0	0.4	0.0	0.0	0.1	1.4	**99.3**	-0.7	0.8	2.5
Cook Inlet	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.4
Prince William Sound	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3
South of Cape Suckling	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3

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	Cook Inlet				Prince William Sound				South of Cape Suckling			
Reporting Group	Average	Bias	RMSE	CI Width	Average	Bias	RMSE	CI Width	Average	Bias	RMSE	CI Width
West of Chignik	1.4	1.4	2.8	3.5	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.7
Black Lake	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.3	0.1	0.1	0.3	0.8
Chignik Lake	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.3	0.0	0.0	0.1	0.7
Upper Station / Akalura	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.5
Frazer	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.4
Ayakulik	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.4
Karluk	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.3	0.0	0.0	0.1	0.5
Uganik	0.2	0.2	0.4	1.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.4
Northwest Kodiak	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2	0.1	0.1	0.2	0.6
Afognak	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3
Eastside Kodiak	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.3	0.0	0.0	0.0	1.0
Saltery	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.6
Cook Inlet	**97.2**	-2.8	3.9	5.4	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.6
Prince William Sound	0.0	0.0	0.0	1.4	**99.2**	-0.8	0.8	4.7	0.3	0.3	0.5	7.5
South of Cape Suckling	0.0	0.0	0.0	0.7	0.0	0.0	0.0	2.9	**97.7**	-2.3	2.3	8.7

Table 9.–True stock composition, estimates of average stock composition, bias, root mean square error (RMSE), and 90% credibility interval (CI) width for 5 replicates of 7 different hypothetical fishery scenario proof tests of the coastwide sockeye salmon genetic baseline with 46 loci. Each replicate was a sample of 400 individuals removed from the genetic baseline, except for the flat scenario (n = 390). Stock composition estimates (percentage) may not sum to 100 due to rounding error. See text for details.

	Hypothetical July Uyak Scenario					Hypothetical July Alitak Scenario				
Reporting Group	True	Average	Bias	RMSE	CI Width	True	Average	Bias	RMSE	CI Width
West of Chignik	10.0	9.4	-0.6	1.1	6.4	9.0	9.2	0.2	1.2	6.1
Black Lake	0.0	0.1	0.1	0.3	1.7	0.0	0.0	0.0	0.0	0.5
Chignik Lake	10.0	9.3	-0.7	0.9	5.9	10.0	9.6	-0.4	0.8	5.6
Upper Station / Akalura	0.0	0.0	0.0	0.0	0.2	10.0	10.0	-0.0	1.2	5.7
Frazer	5.0	2.7	-2.3	4.3	11.8	30.0	27.5	-2.5	5.2	16.7
Ayakulik	22.0	23.2	1.2	2.5	14.4	15.0	17.4	2.4	5.1	16.0
Karluk	7.0	8.0	1.0	1.7	6.0	5.0	5.4	0.4	2.2	5.9
Uganik	2.0	2.5	0.5	0.6	3.7	1.0	0.6	-0.4	1.0	1.9
Northwest Kodiak	5.0	5.0	0.0	0.5	4.2	1.0	0.6	-0.4	0.5	1.6
Afognak	1.0	0.8	-0.2	0.7	1.8	1.0	0.9	-0.1	0.4	1.9
Eastside Kodiak	1.0	0.2	-0.8	0.9	2.1	1.0	1.0	-0.0	0.7	2.3
Saltery	20.0	21.1	1.1	1.4	7.7	2.0	2.6	0.6	1.0	3.4
Cook Inlet	15.0	13.7	-1.3	1.4	7.0	15.0	13.6	-1.4	1.6	7.0
Prince William Sound	2.0	1.3	-0.7	0.7	2.8	0.0	0.0	0.0	0.0	0.8
South of Cape Suckling	0.0	0.1	0.1	0.2	1.0	0.0	0.0	0.0	0.0	0.4

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	Hypothetical August Karluk Scenario					Hypothetical June Cape Igvak Scenario				
Reporting Group	True	Average	Bias	RMSE	CI Width	True	Average	Bias	RMSE	CI Width
West of Chignik	5.0	4.4	-0.6	0.7	3.9	15.0	14.3	-0.7	2.1	7.6
Black Lake	0.0	0.0	0.0	0.0	0.3	46.0	46.1	0.1	1.5	9.1
Chignik Lake	5.0	4.7	-0.3	0.6	4.1	0.0	0.0	0.0	0.0	1.5
Upper Station / Akalura	15.0	13.8	-1.2	1.7	6.8	1.0	0.5	-0.5	0.7	1.3
Frazer	2.0	0.0	-2.0	2.0	7.5	4.0	3.8	-0.2	3.8	6.7
Ayakulik	15.0	17.3	2.3	2.9	11.5	4.0	4.3	0.3	2.9	6.3
Karluk	50.0	50.4	0.4	1.2	10.7	7.0	7.0	-0.0	1.1	5.6
Uganik	0.0	0.0	0.0	0.0	0.2	0.0	0.1	0.1	0.2	1.2
Northwest Kodiak	2.0	1.7	-0.3	0.6	2.8	1.0	0.7	-0.3	0.5	1.6
Afognak	0.0	0.1	0.1	0.2	0.5	0.0	0.0	0.0	0.0	0.2
Eastside Kodiak	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.5
Saltery	4.0	4.0	-0.0	0.4	3.8	2.0	2.2	0.2	0.8	3.0
Cook Inlet	2.0	1.7	-0.3	0.6	2.8	20.0	18.9	-1.1	1.5	7.8
Prince William Sound	0.0	0.0	0.0	0.0	0.2	0.0	0.1	0.1	0.1	1.9
South of Cape Suckling	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.5

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	Hypothetical June Ayakulik Scenario					Hypothetical August Uganik Scenario				
Reporting Group	True	Average	Bias	RMSE	CI Width	True	Average	Bias	RMSE	CI Width
West of Chignik	5.0	4.3	-0.7	1.1	4.2	1.0	1.2	0.2	0.5	2.7
Black Lake	5.0	4.6	-0.4	0.9	4.0	0.0	0.0	0.0	0.0	0.9
Chignik Lake	0.0	0.1	0.1	0.2	1.0	3.0	2.7	-0.3	0.5	3.5
Upper Station / Akalura	15.0	15.2	0.2	1.3	7.0	5.0	4.8	-0.2	0.9	4.3
Frazer	10.0	10.4	0.4	7.1	16.2	3.0	2.5	-0.5	4.5	8.4
Ayakulik	30.0	30.5	0.5	6.5	17.3	10.0	10.3	0.3	3.7	10.0
Karluk	30.0	29.3	-0.7	2.8	10.1	30.0	30.9	0.9	2.0	9.4
Uganik	0.0	0.0	0.0	0.0	0.4	2.0	2.2	0.2	0.5	3.5
Northwest Kodiak	0.0	0.1	0.1	0.2	0.7	2.0	1.8	-0.2	0.9	2.8
Afognak	0.0	0.0	0.0	0.0	0.2	1.0	0.9	-0.1	0.3	1.8
Eastside Kodiak	0.0	0.0	0.0	0.0	0.7	1.0	0.2	-0.8	0.8	2.4
Saltery	0.0	0.0	0.0	0.0	0.3	23.0	23.0	0.0	1.2	7.8
Cook Inlet	5.0	4.2	-0.8	1.0	4.0	17.0	15.2	-1.8	2.2	7.0
Prince William Sound	0.0	0.1	0.1	0.2	0.6	0.0	0.5	0.5	0.9	2.2
South of Cape Suckling	0.0	0.0	0.0	0.0	0.5	2.0	1.3	-0.7	0.8	2.8

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	Hypothetical Flat Scenario				
Reporting Group	True	Average	Bias	RMSE	CI Width
West of Chignik	6.7	5.3	-1.3	1.7	5.4
Black Lake	6.7	6.0	-0.6	1.3	5.6
Chignik Lake	6.7	7.0	0.4	0.8	6.2
Upper Station / Akalura	6.7	7.0	0.4	1.1	5.0
Frazer	6.7	8.0	1.3	3.7	11.2
Ayakulik	6.7	5.9	-0.8	3.2	10.4
Karluk	6.7	6.6	-0.1	0.8	6.3
Uganik	6.7	7.0	0.3	2.0	5.1
Northwest Kodiak	6.7	6.1	-0.6	0.8	4.5
Afognak	6.7	6.0	-0.7	1.0	4.6
Eastside Kodiak	6.7	6.0	-0.7	1.1	5.4
Saltery	6.7	6.7	0.0	0.4	5.4
Cook Inlet	6.7	6.9	0.2	0.7	5.9
Prince William Sound	6.7	6.9	0.2	1.1	7.4
South of Cape Suckling	6.7	6.9	0.3	1.6	6.7

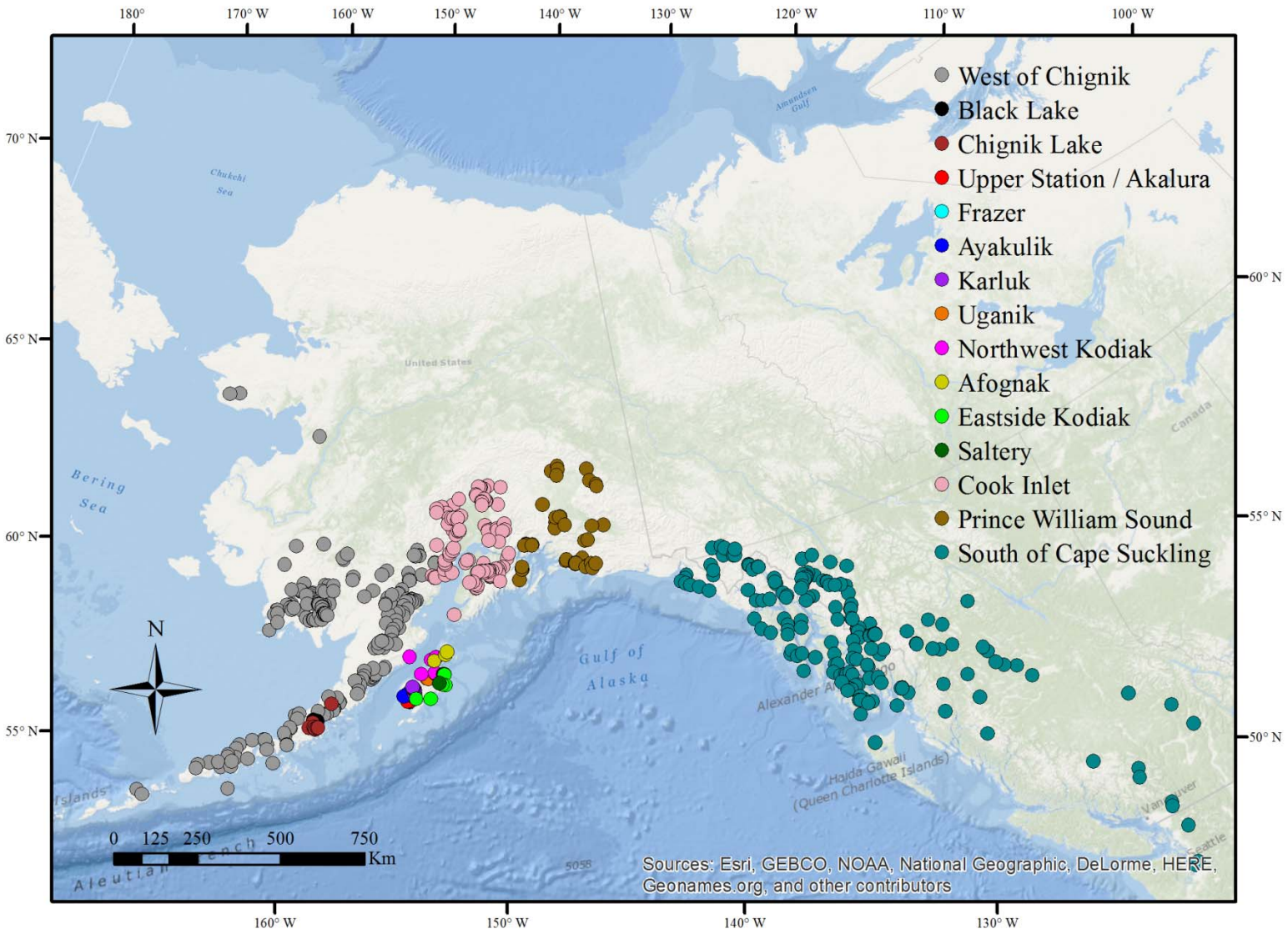

Figure 1.–The location and reporting group affiliation of 746 collections of sockeye salmon included in final coastwide baseline analyses for KMA commercial harvest, 2014–2016.

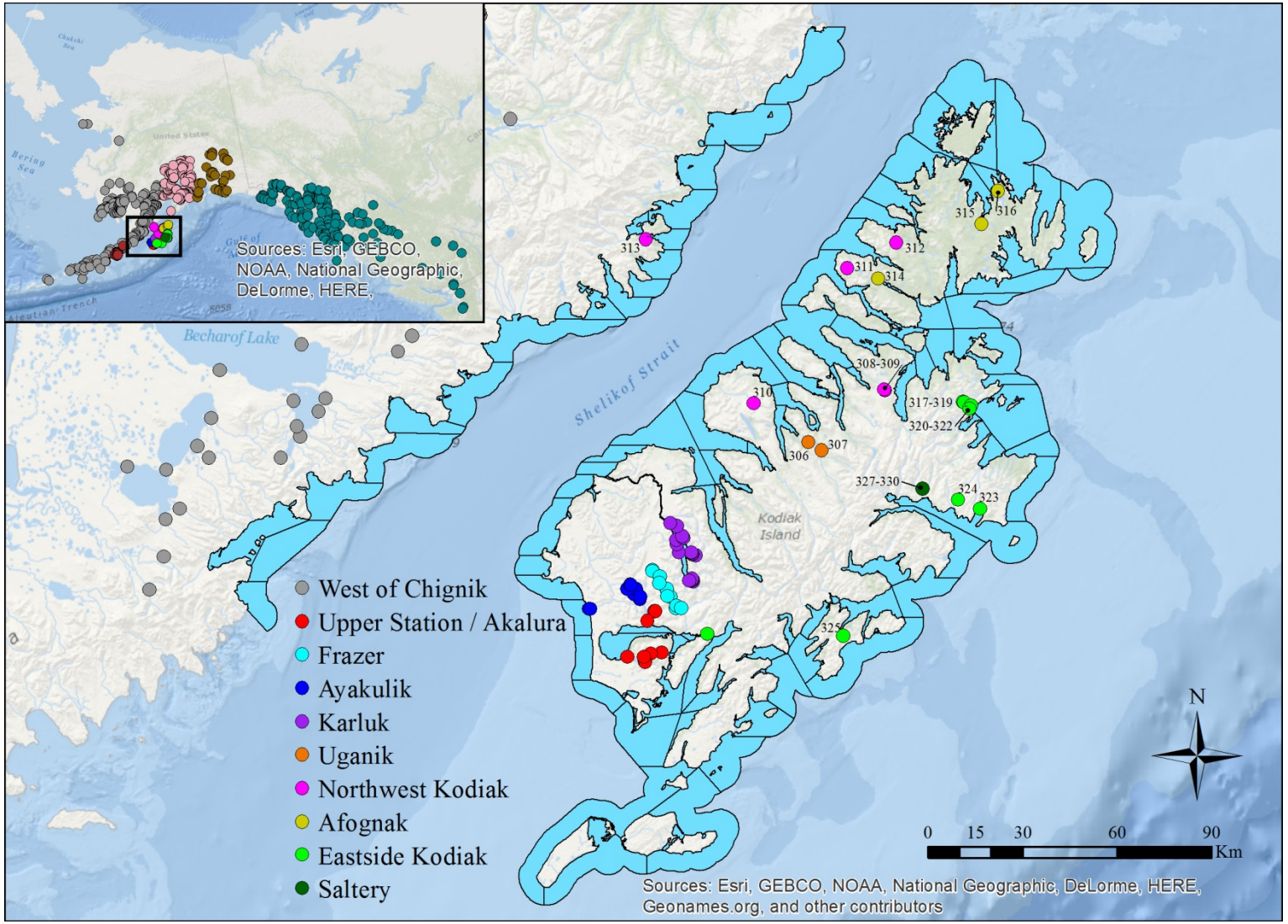

Figure 2.–The locations of collections of sockeye salmon from Kodiak Management Area reporting groups included in final baseline analyses for KMA commercial harvest, 2014–2016. Blue areas are the commercial fishing statistical areas of KMA.

Note: Numbers correspond to collection numbers listed in Table 3.

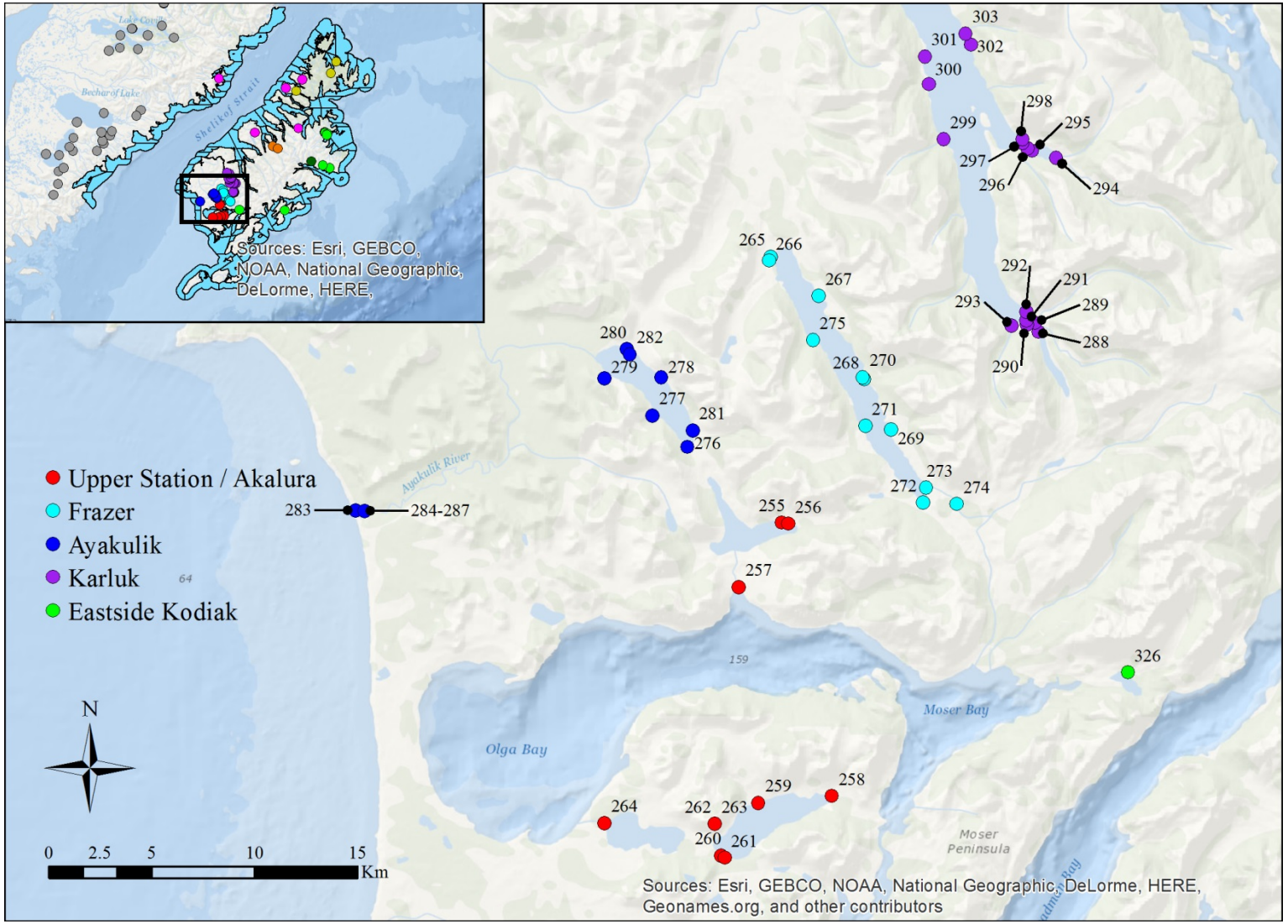

Figure 3.–The location of collections of sockeye salmon from the Upper Station/Akalura, Frazer, Ayakulik, and Karluk reporting groups in southwest Kodiak Island included in final baseline analyses for KMA commercial harvest, 2014–2016.

Note: Numbers correspond to collection numbers listed in Table 3.

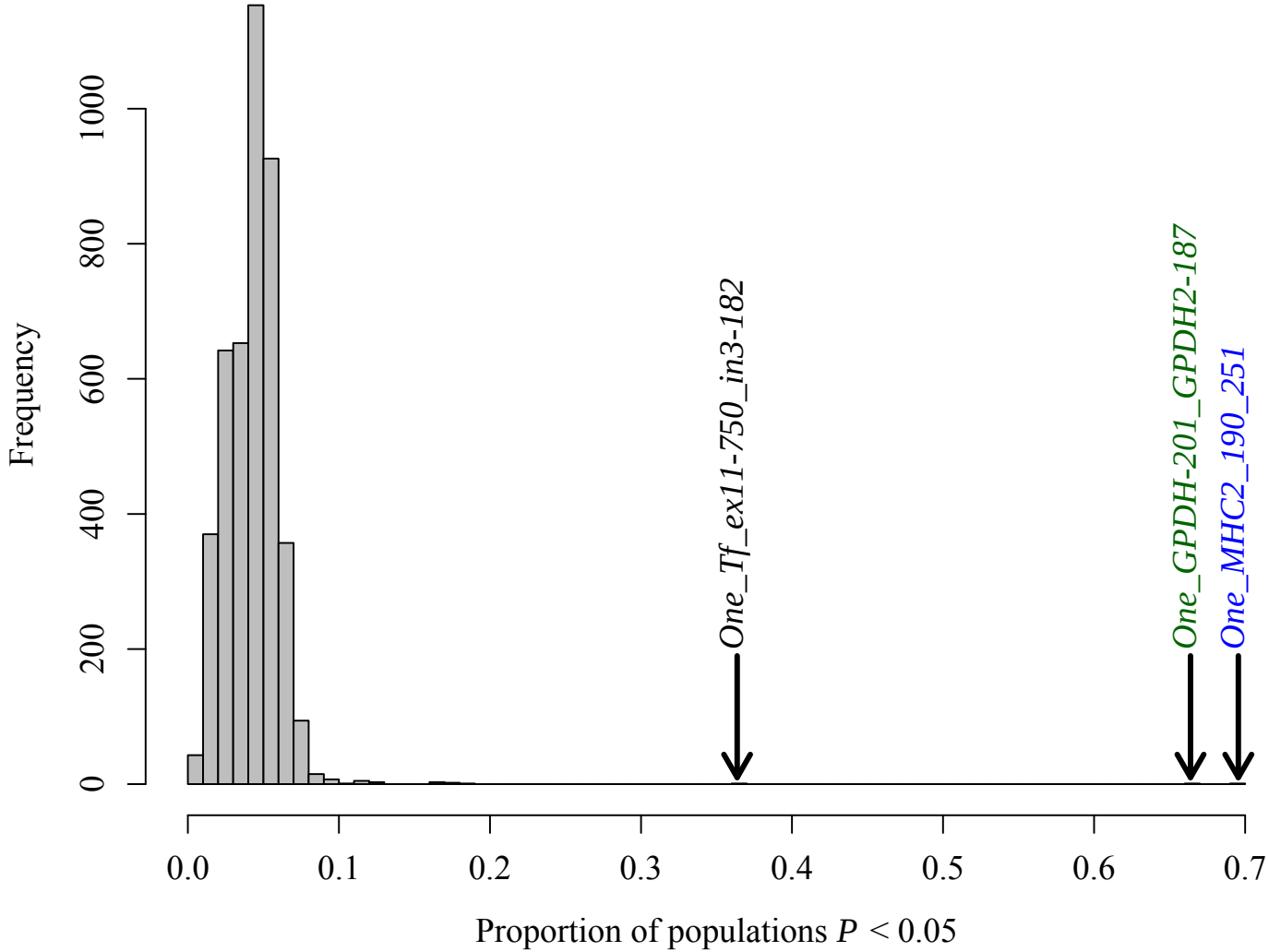

Figure 4.–Histogram of the proportion of populations with significant ($P < 0.05$) linkage disequilibrium between 4,278 pairs of the 93 nuclear SNPs tested in the 473 coastwide baseline populations.

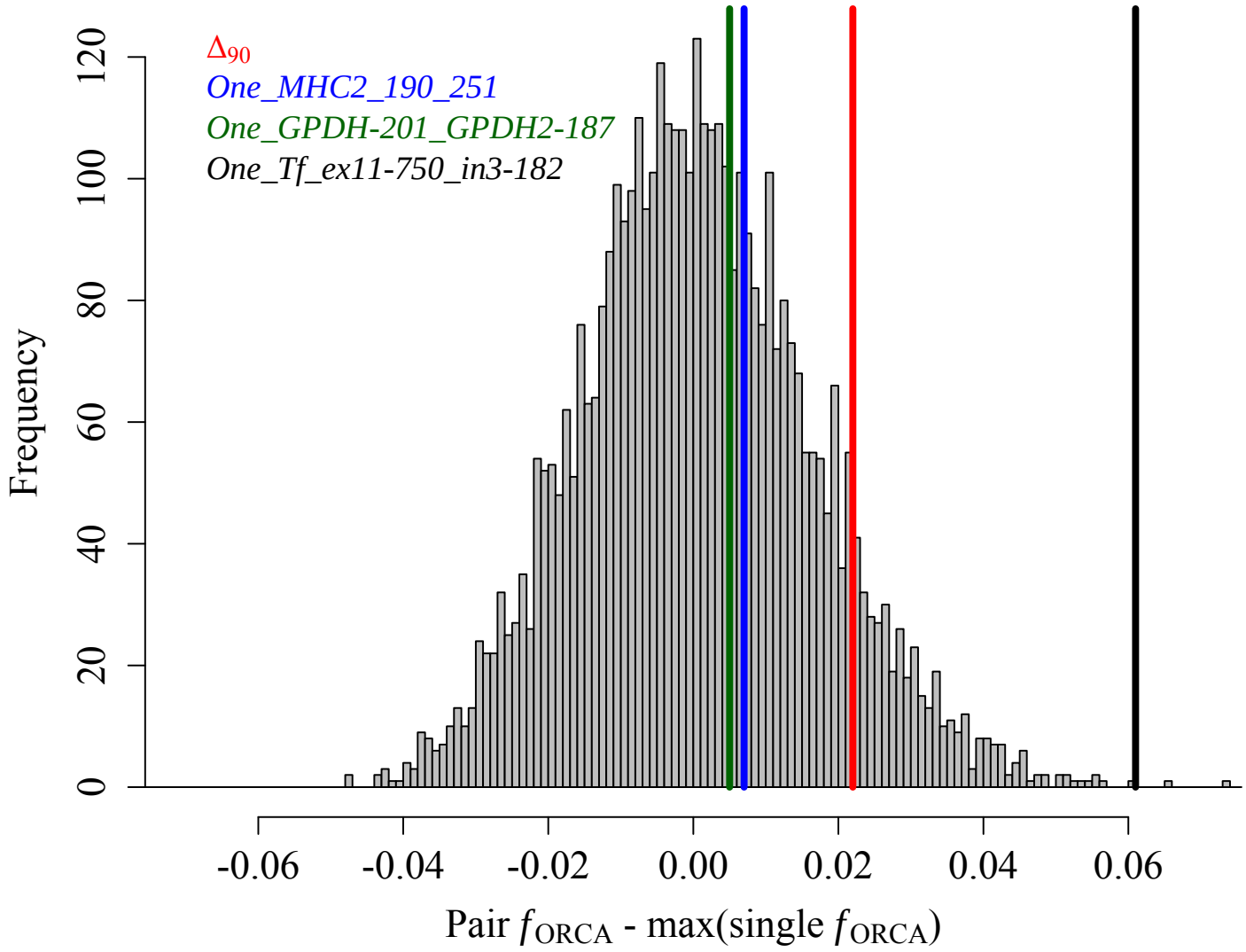

Figure 5.–The distribution of Δ for all 4,278 SNP pairs with Δ90 in red and the Δ values for *One_MHC2190_251* in blue, *One_GPDH-201_GPDH2-187* in green, and *One_Tf_ex11-750_in3-182* in black.

Note: See text for details.

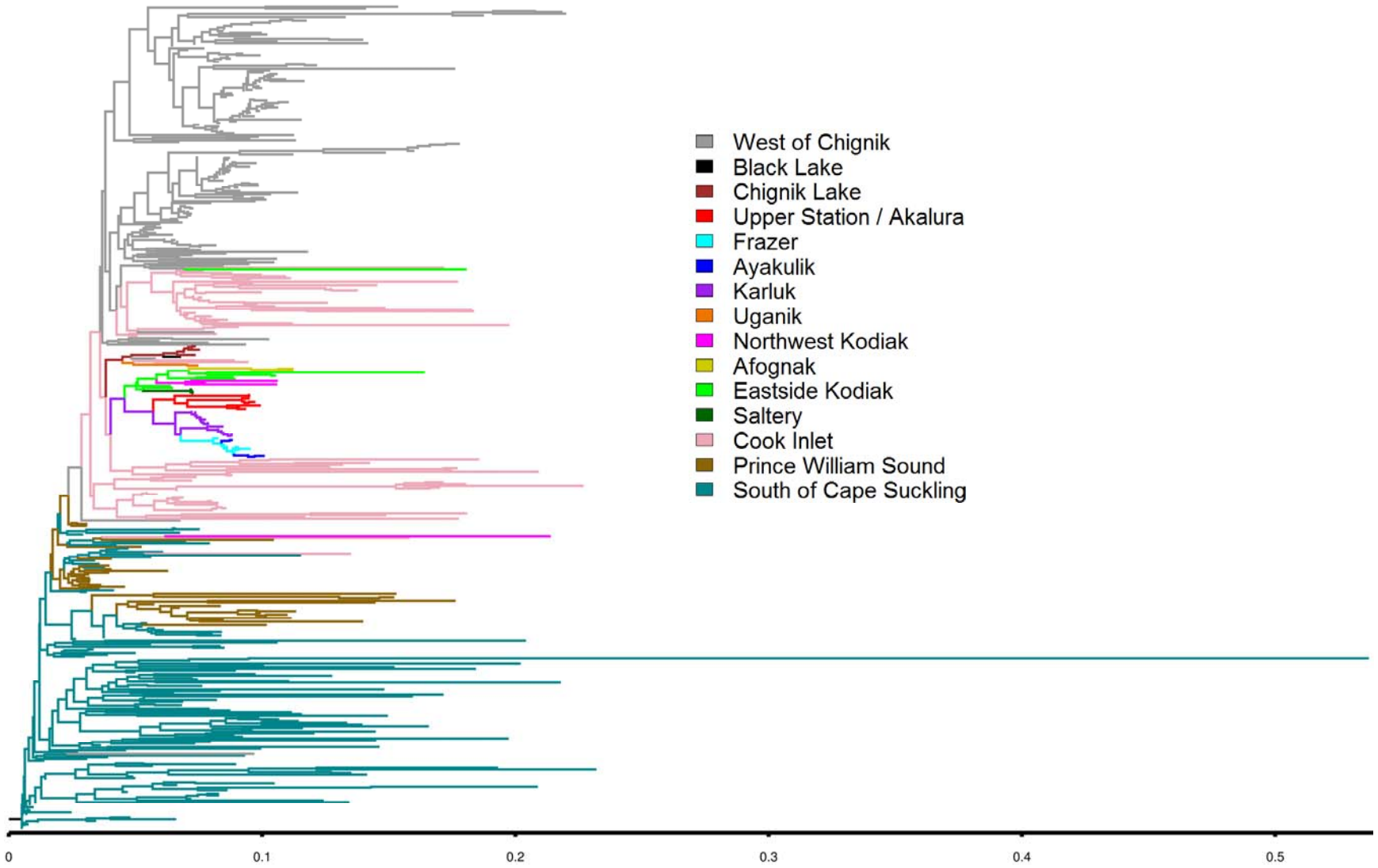

Figure 6.–Broad-scale view of a consensus Neighbor-Joining tree based upon pairwise F_{ST} between 473 populations of sockeye salmon included in the KMA coastwide sockeye salmon baseline. Tree branch colors denote reporting group affiliation of populations.

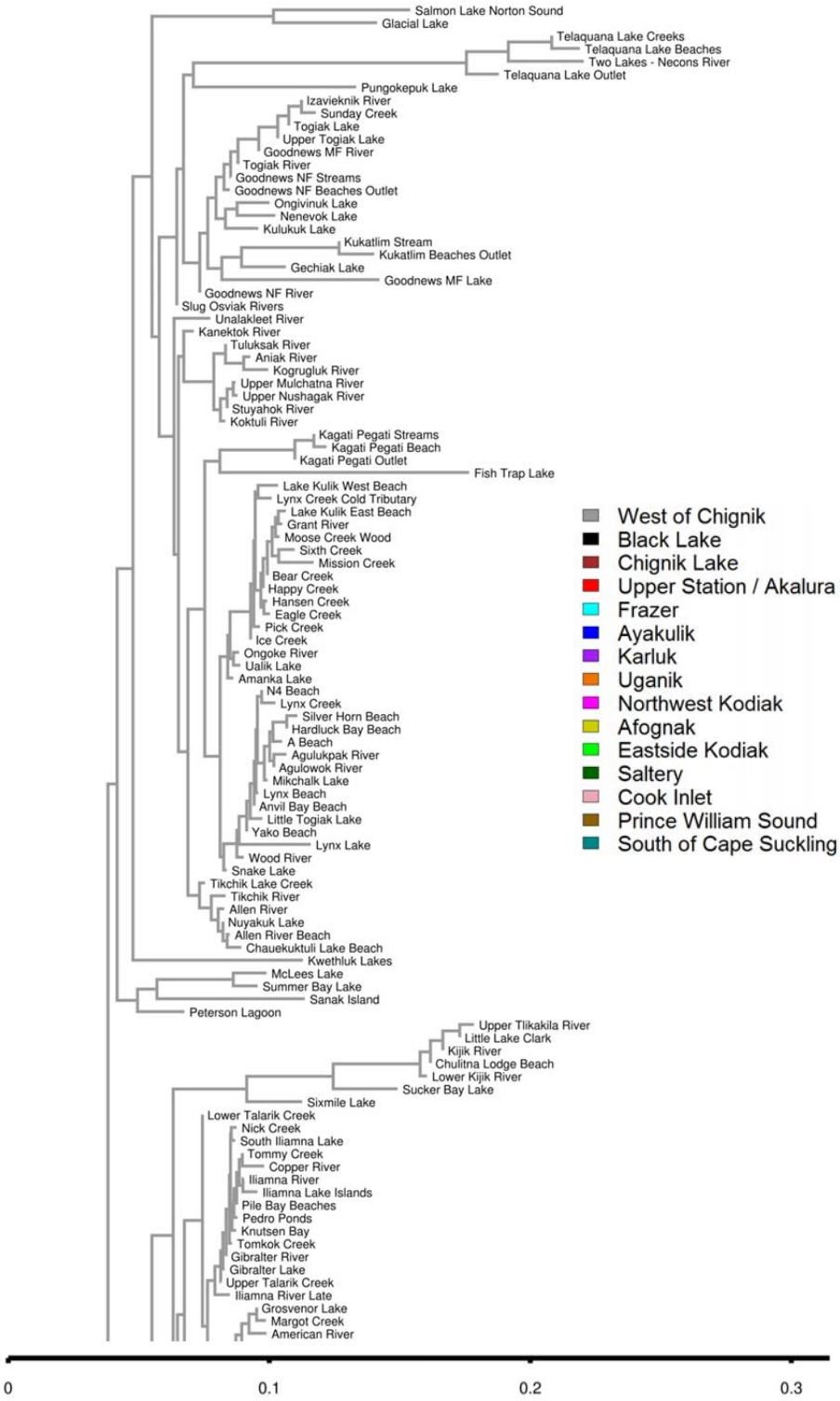

Figure 7.–Fine-scale view of a consensus Neighbor-Joining tree based on pairwise F_{ST} between 473 populations of sockeye salmon included in the KMA coastwide sockeye salmon baseline. Tree branch colors denote reporting group affiliation of populations. Note that the branch for Kanalku Lake in the South of Cape Suckling reporting group is truncated (true length ~ 0.53).

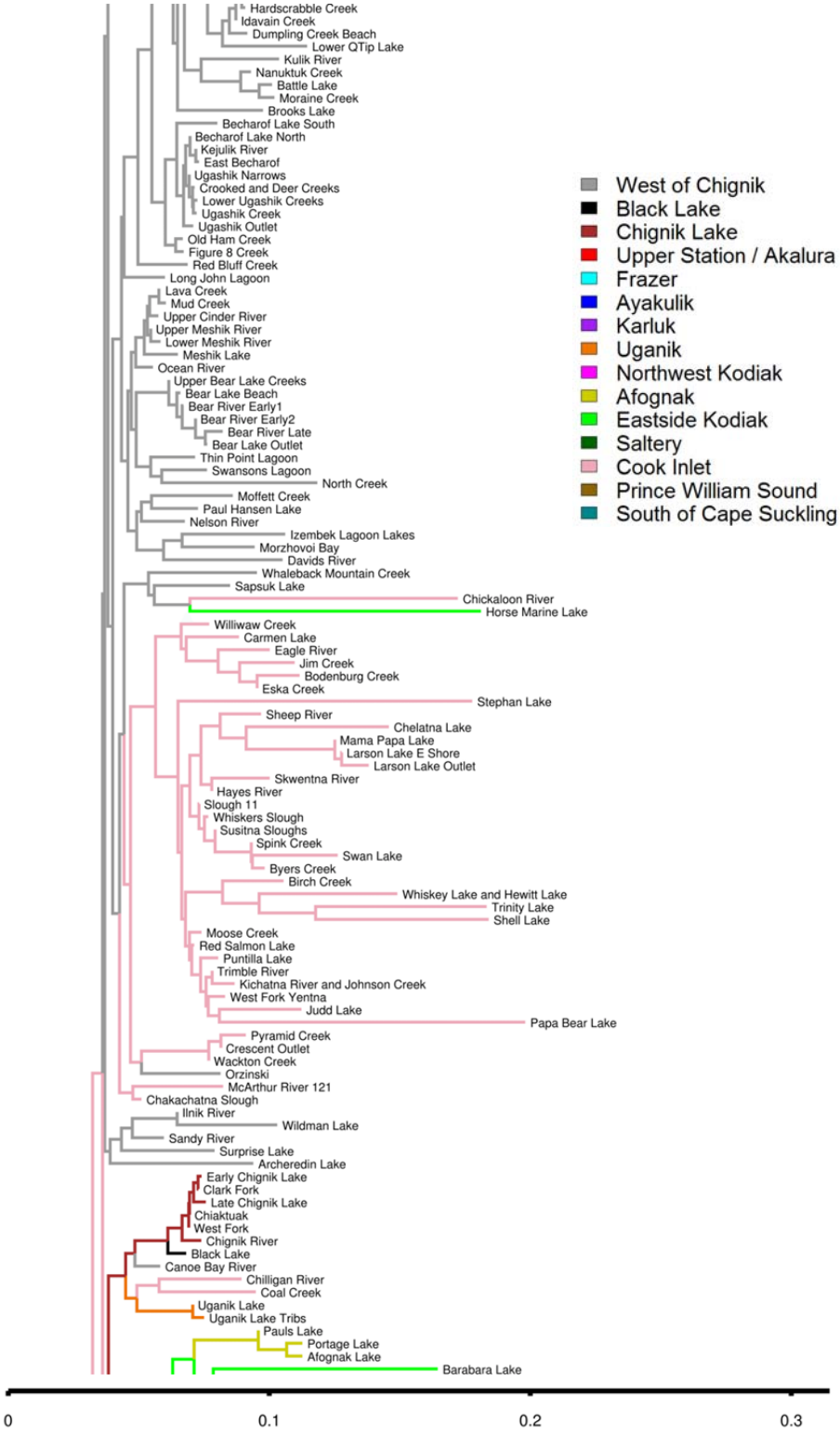

Figure 7.–Page 2 of 5.

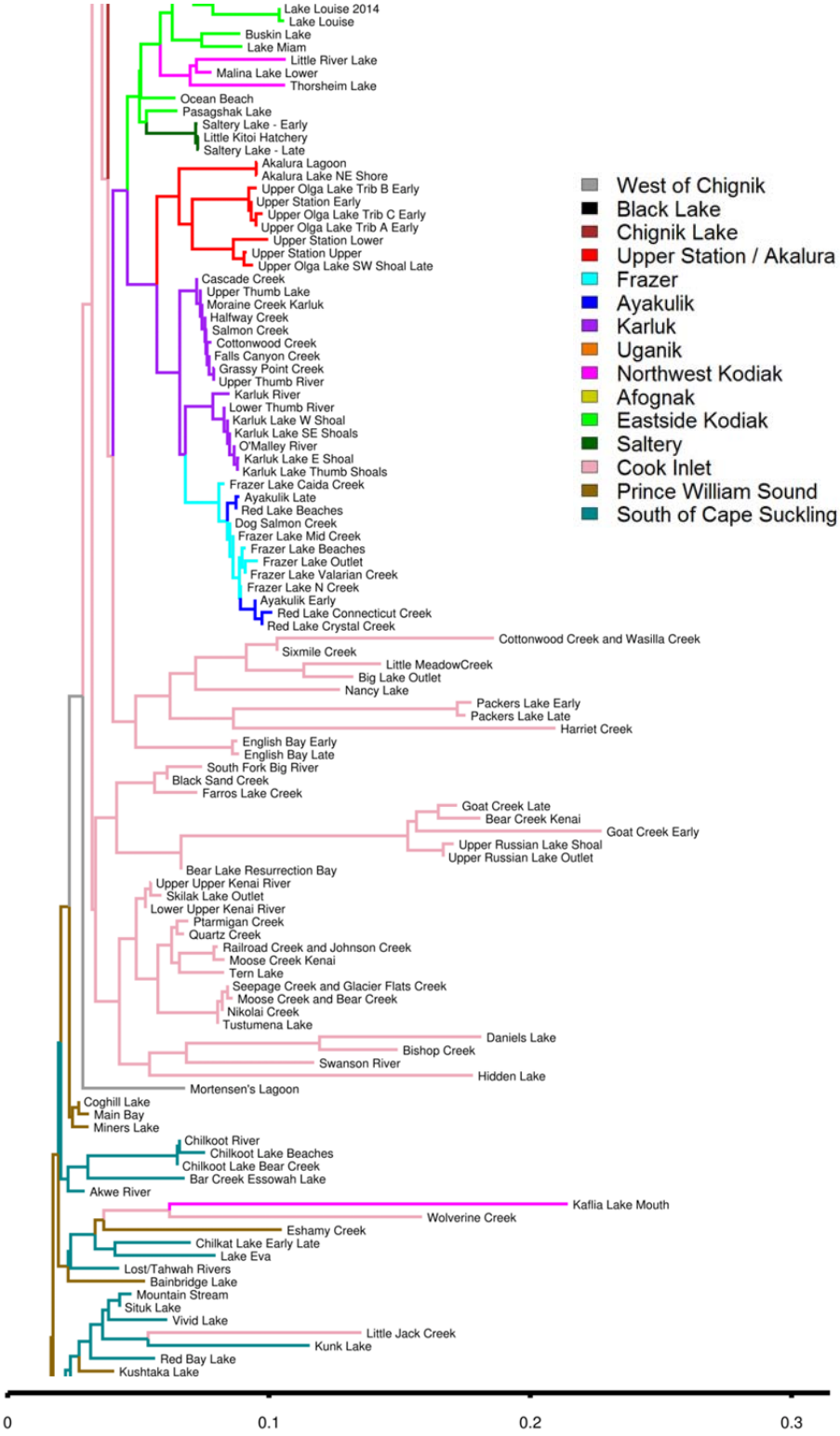

Figure 7.–Page 3 of 5.

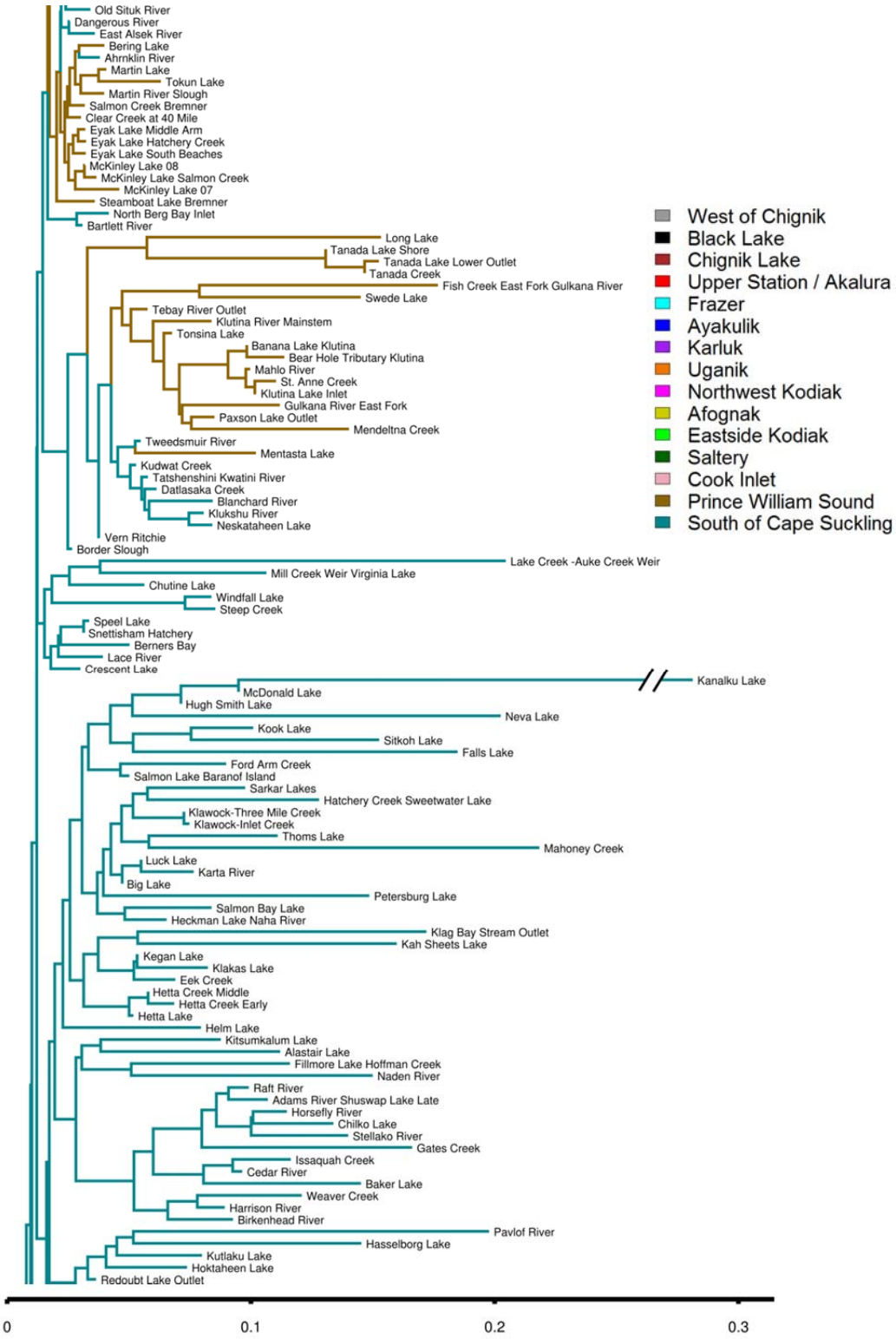

Figure 7.–Page 4 of 5.

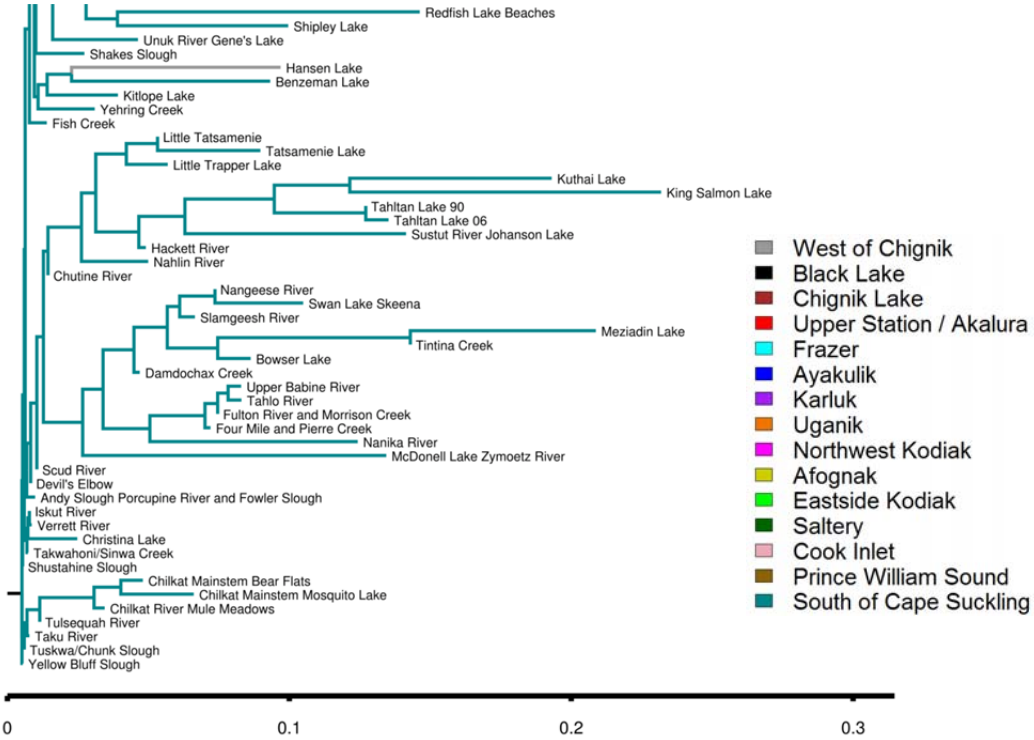

Figure 7.–Page 5 of 5.

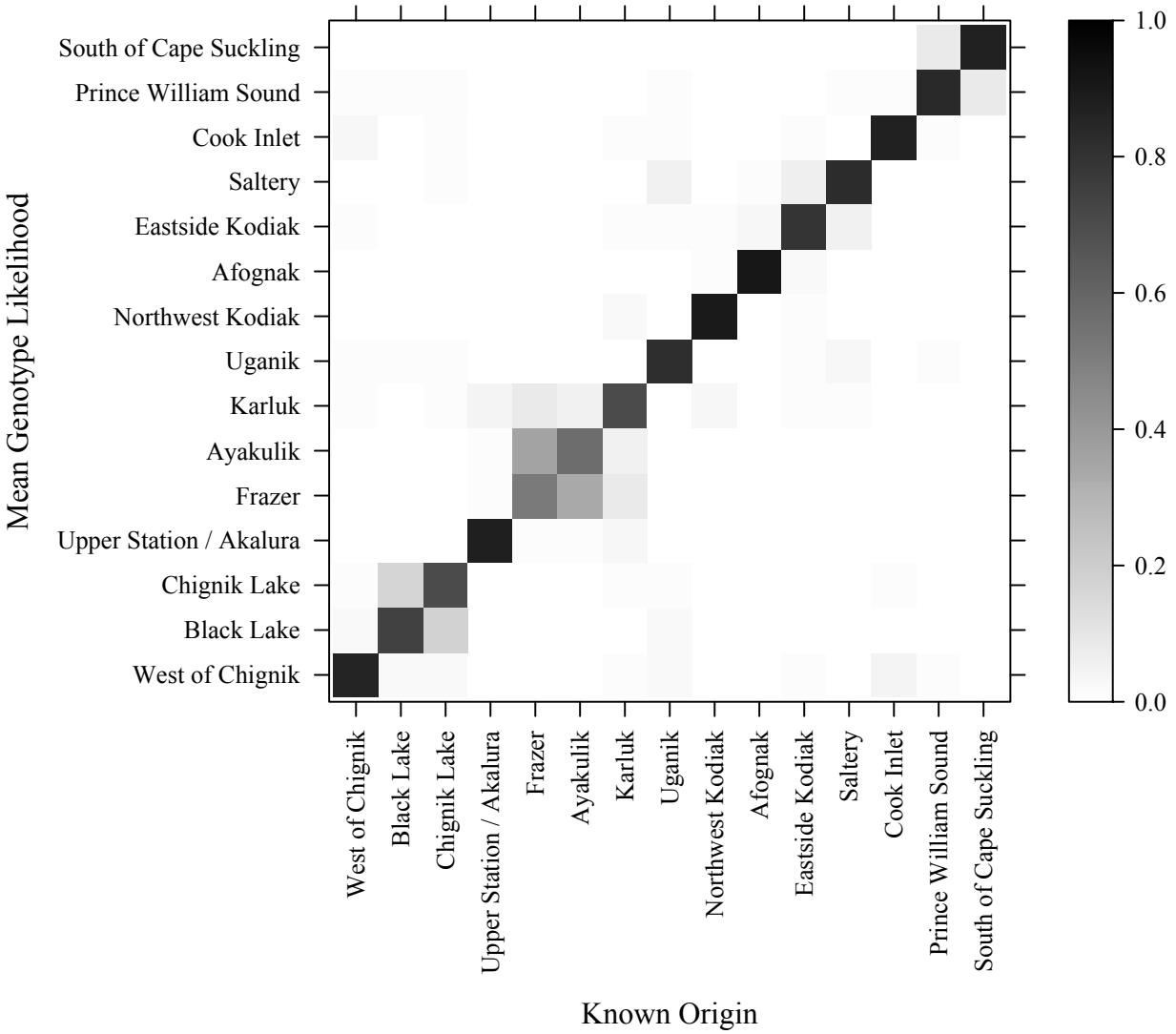

Figure 8.–Summary of mean genotype likelihood for all baseline individuals across reporting groups for the marker suite of 89 loci. Probabilities off the diagonal indicate uncertainty in genetic assignment and provide indications of potential misallocation.

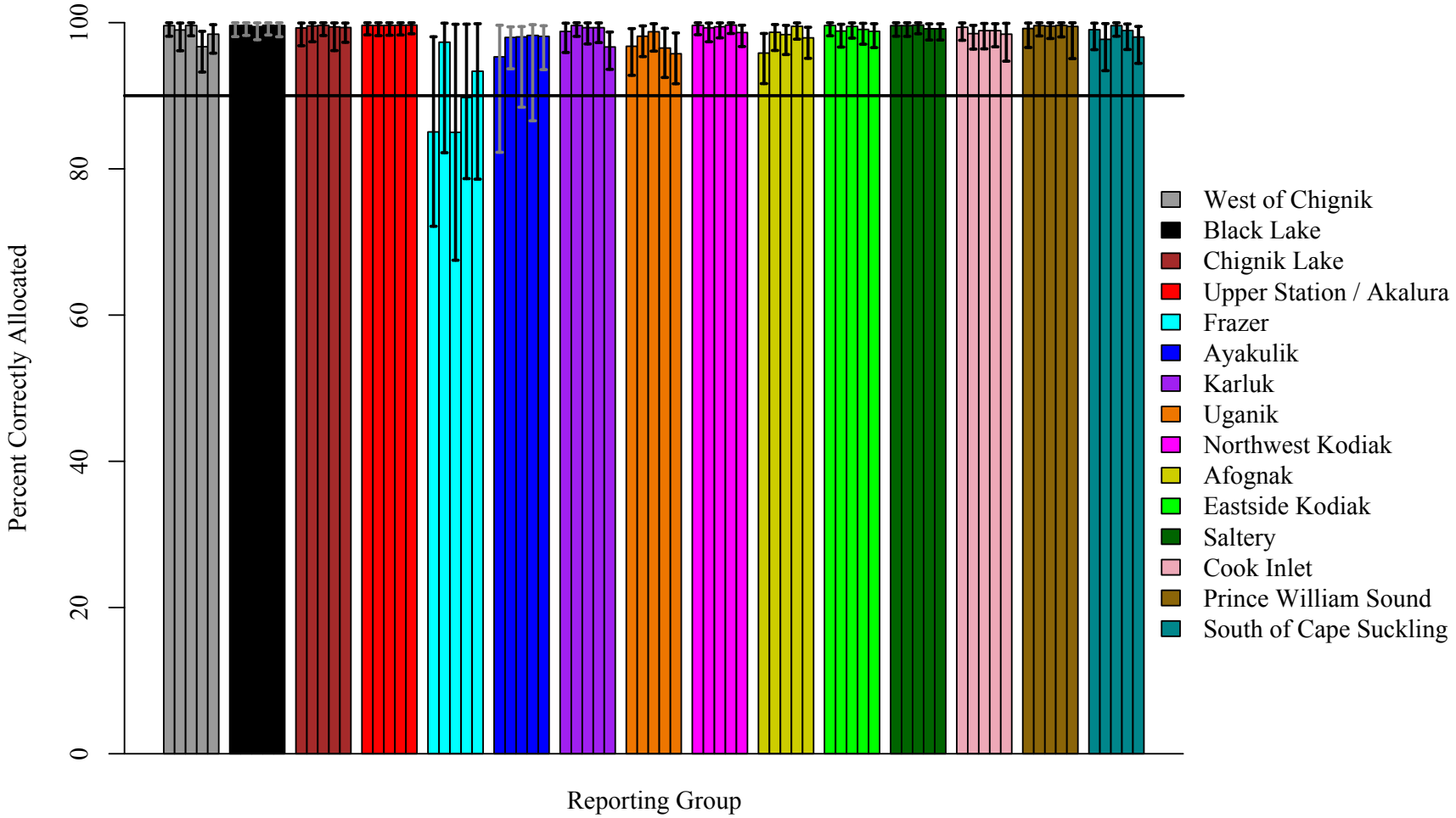

Figure 9.–Median percentage of fish correctly allocated back to reporting group of origin and 90% credibility intervals for mixtures of known individuals removed from the baseline populations that comprise each reporting group (100% proof tests) using the program *BAYES* with a regionally flat prior and 89 loci. One hundred forty-two individuals were removed from the Uganik reporting group, 134 individuals were removed from the Afognak reporting group, and 200 individuals were removed from all other groups. Each bar represents results from 1 of the 5 replicates, or set of draws from the baseline populations.

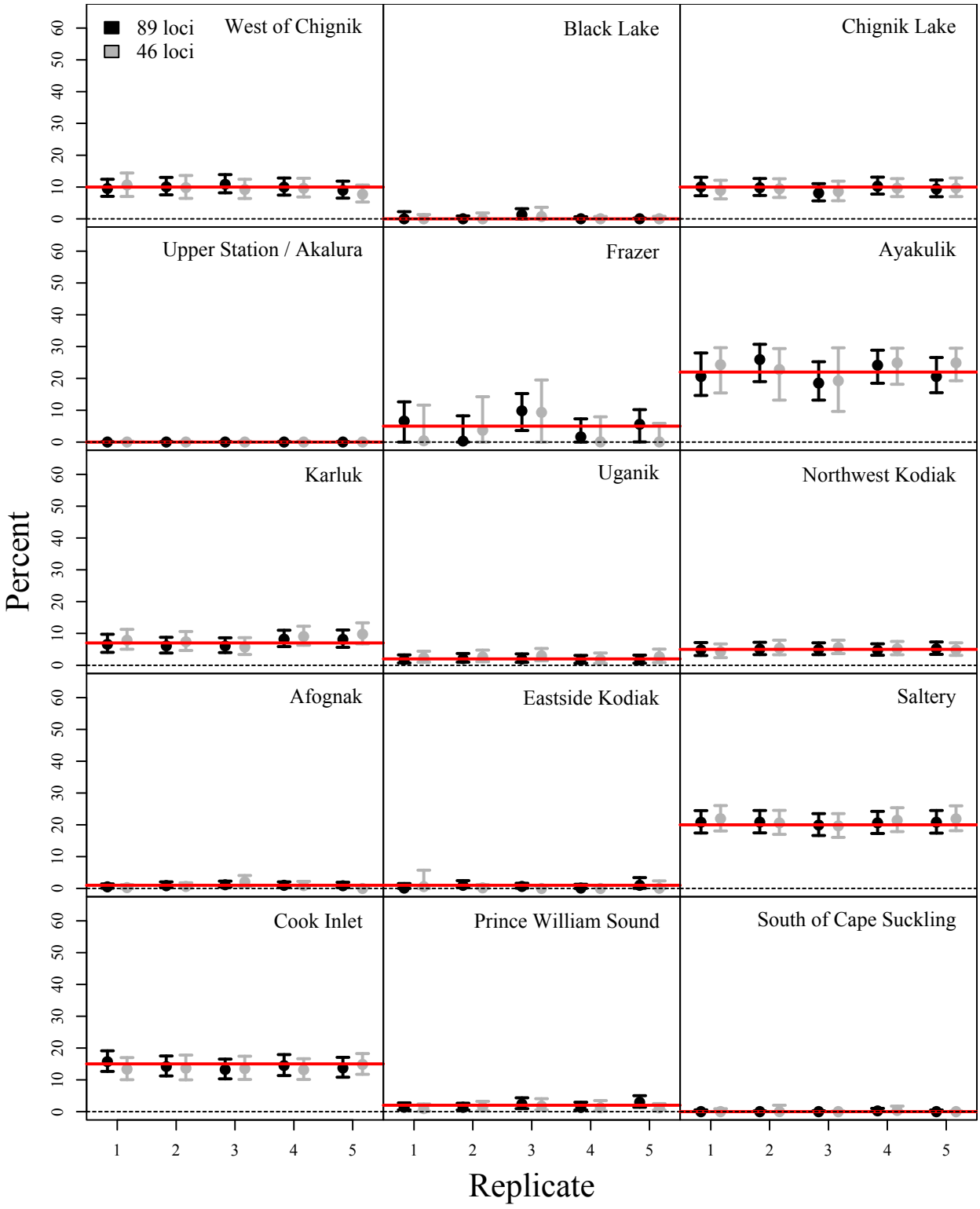

Figure 10.–Median (closed circles) and 90% credibility interval (bars) estimates for 5 replicates of a simulated, hypothetical July Uyak fishery. Each replicate was a sample of 400 individuals removed from the baseline. Black circles and bars indicate results for a baseline of 89 loci, grey for 46 loci. Each cell represents a reporting group, the red line shows the true stock composition of the simulation, and deviations from the red line show magnitude and direction of biases for each replicate.

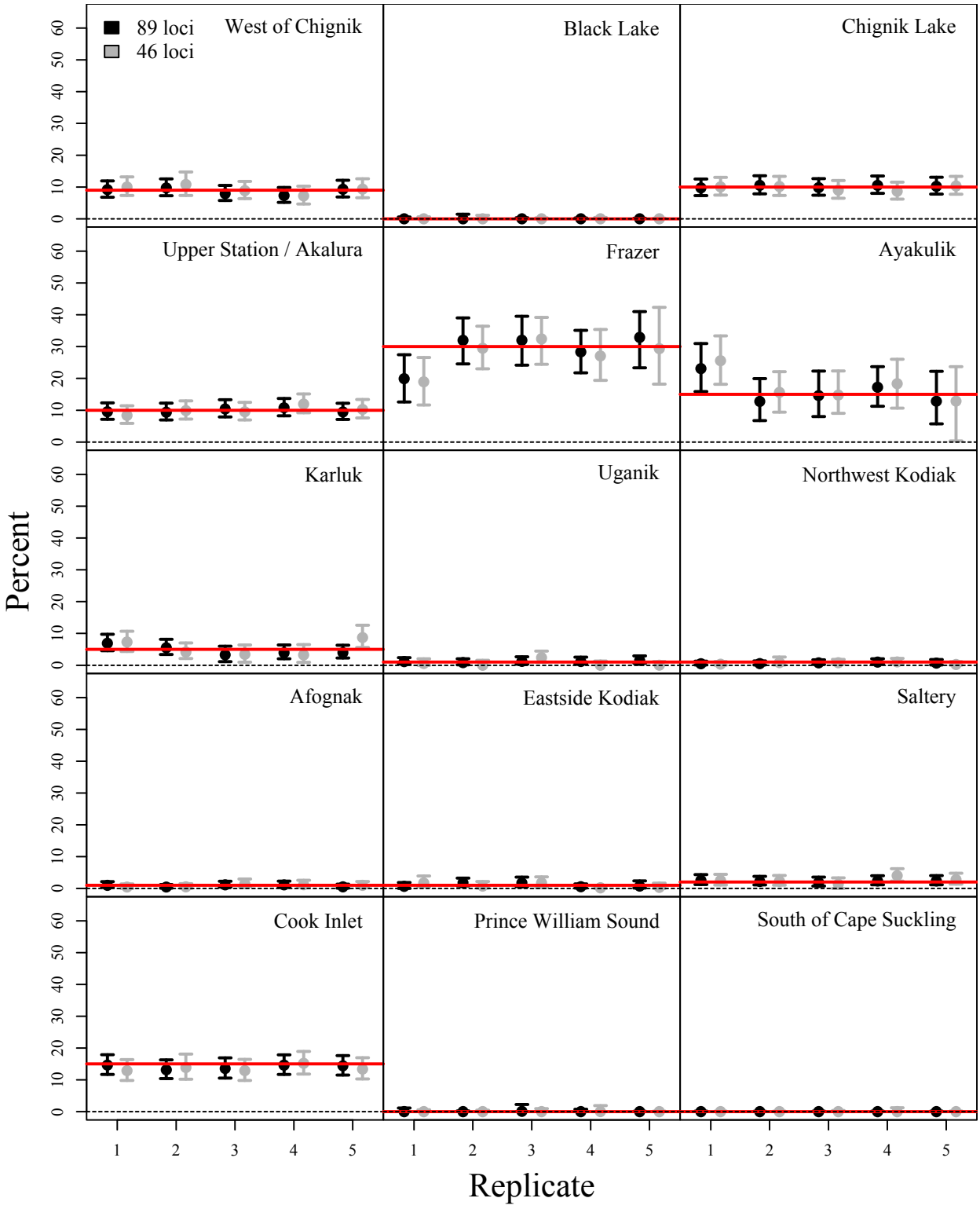

Figure 11.–Median (closed circles) and 90% credibility interval (bars) estimates for 5 replicates of a simulated, hypothetical July Alitak fishery. Each replicate was a sample of 400 individuals removed from the baseline. Black circles and bars indicate results for a baseline of 89 loci, grey for 46 loci. Each cell represents a reporting group, the red line shows the true stock composition of the simulation, and deviations from the red line show magnitude and direction of biases for each replicate.

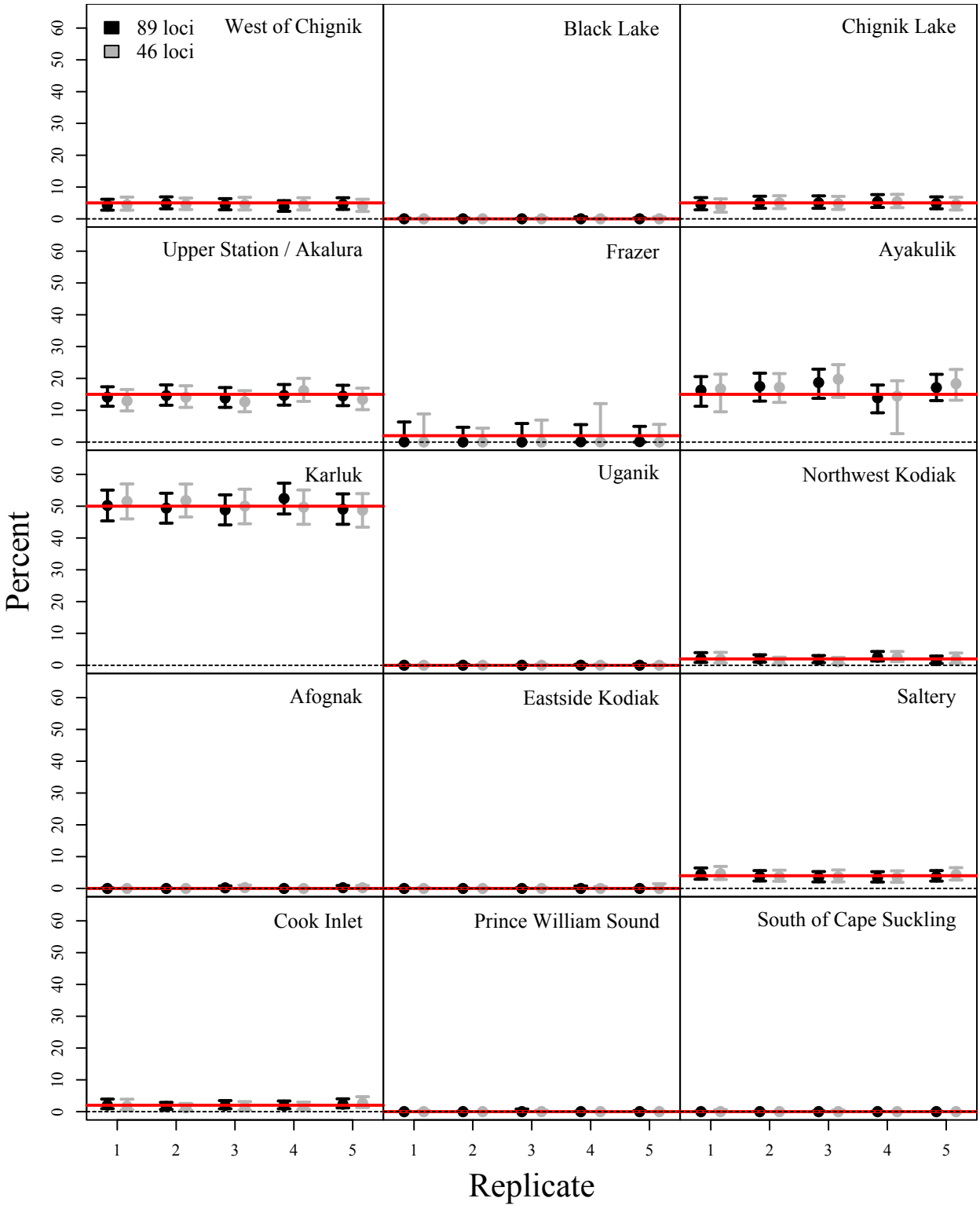

Figure 12.–Median and 90% credibility interval (bars) estimates for 5 replicates of a simulated, hypothetical August Karluk fishery. Each replicate was a sample of 400 individuals removed from the baseline. Black circles and bars indicate results for a baseline of 89 loci, grey for 46 loci. Each cell represents a reporting group, the red line shows the true stock composition of the simulation, and deviations from the red line show magnitude and direction of biases for each replicate.

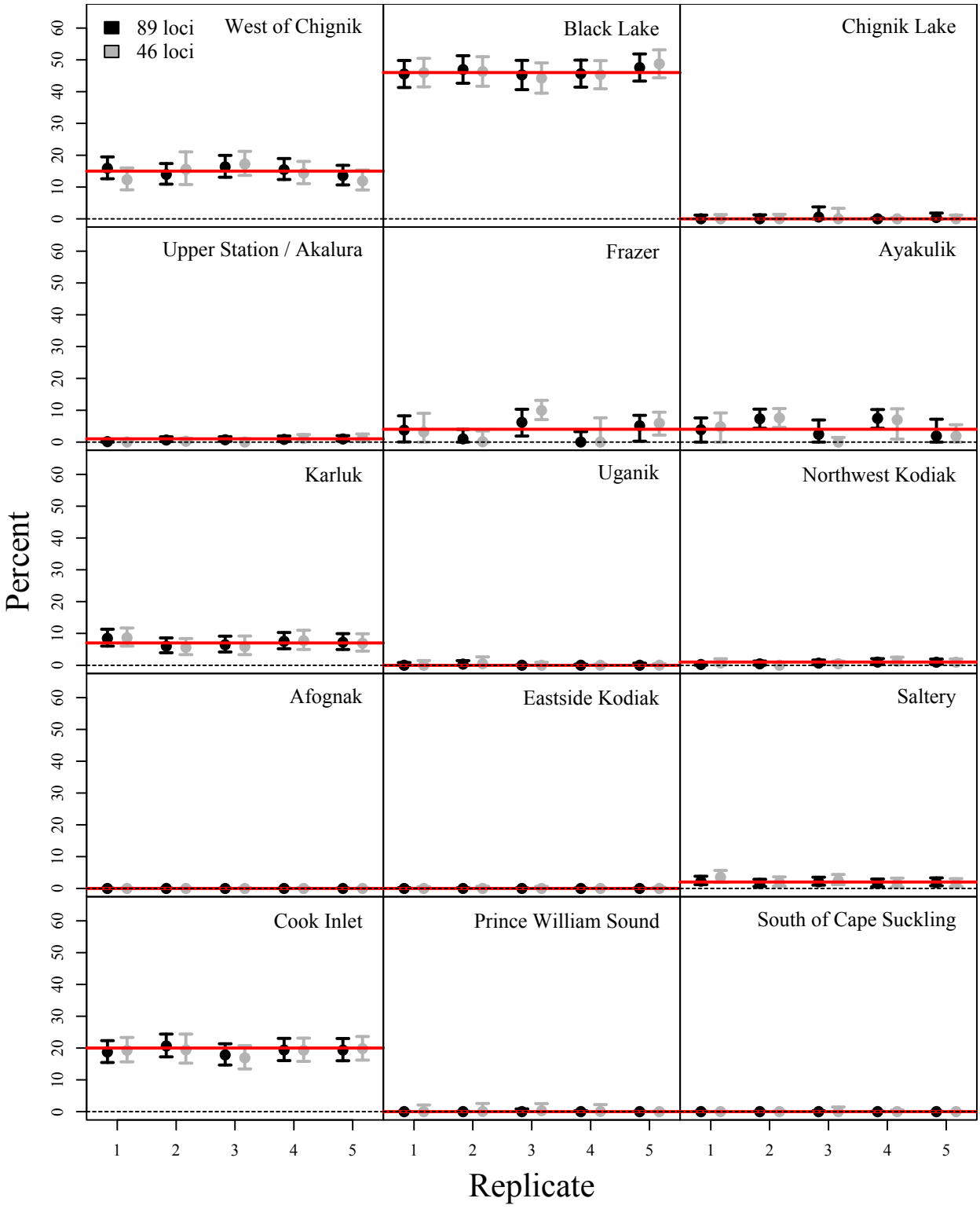

Figure 13.–Median (closed circles) and 90% credibility interval (bars) estimates for 5 replicates of a simulated, hypothetical June Cape Igvak fishery. Each replicate was a sample of 400 individuals removed from the baseline. Black circles and bars indicate results for a baseline of 89 loci, grey for 46 loci. Each cell represents a reporting group, the red line shows the true stock composition of the simulation, and deviations from the red line show magnitude and direction of biases for each replicate.

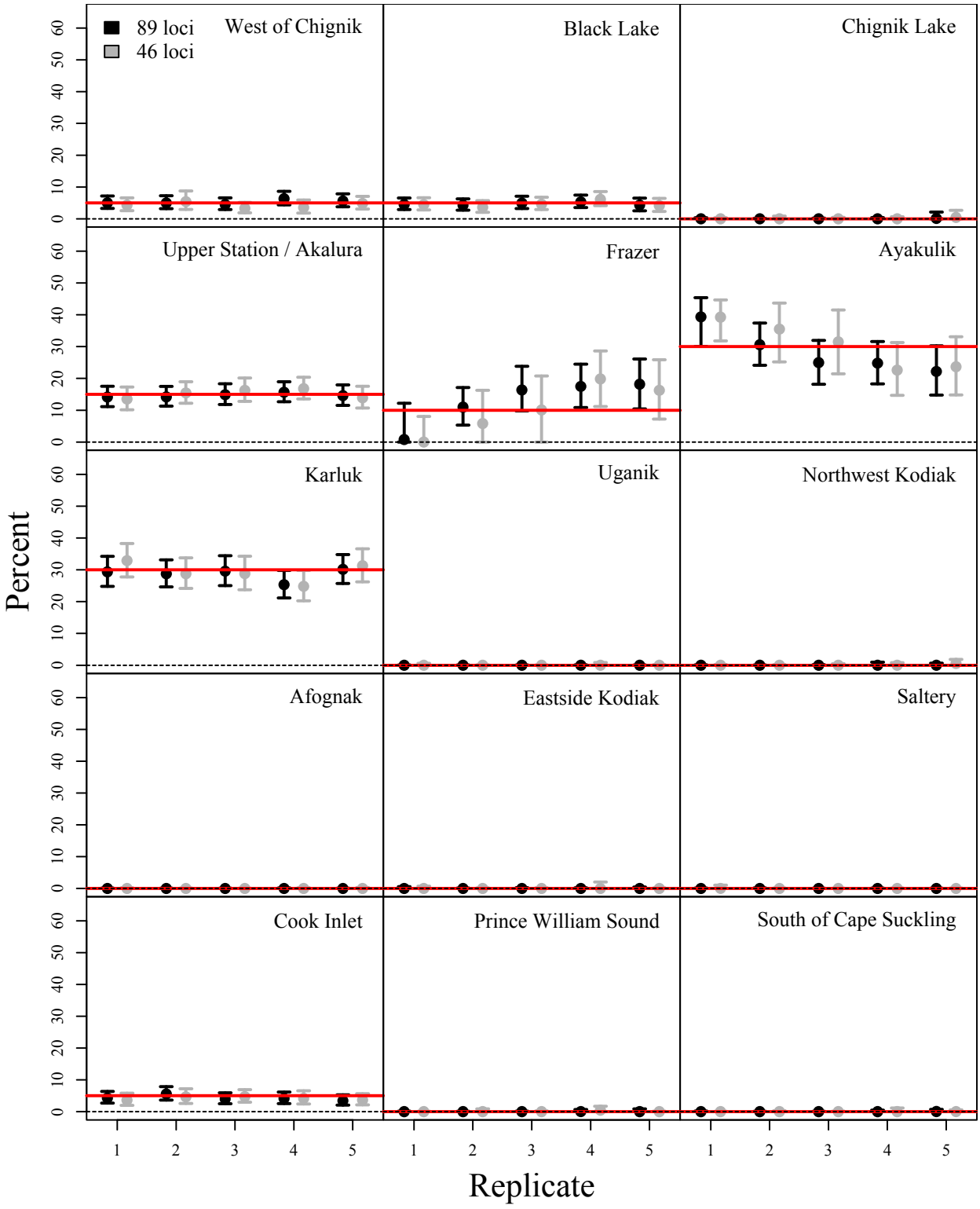

Figure 14.–Median (closed circles) and 90% credibility interval (bars) estimates for 5 replicates of a simulated, hypothetical June Ayakulik fishery. Each replicate was a sample of 400 individuals removed from the baseline. Black circles and bars indicate results for a baseline of 89 loci, grey for 46 loci. Each cell represents a reporting group, the red line shows the true stock composition of the simulation, and deviations from the red line show magnitude and direction of biases for each replicate.

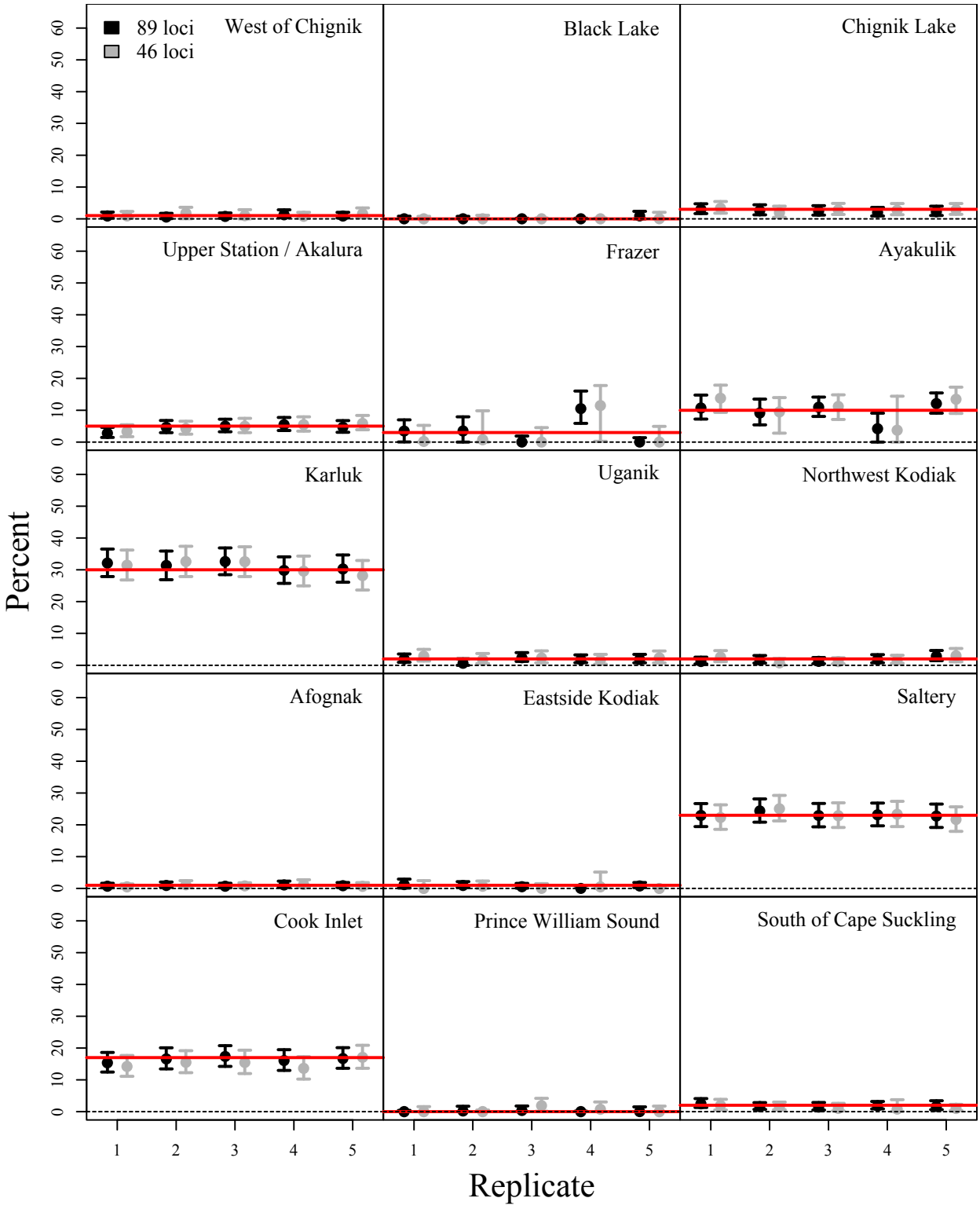

Figure 15.–Median (closed circles) and 90% credibility interval (bars) estimates for 5 replicates of a simulated, hypothetical August Uganik fishery. Each replicate was a sample of 400 individuals removed from the baseline. Black circles and bars indicate results for a baseline of 89 loci, grey for 46 loci. Each cell represents a reporting group, the red line shows the true stock composition of the simulation, and deviations from the red line show magnitude and direction of biases for each replicate.

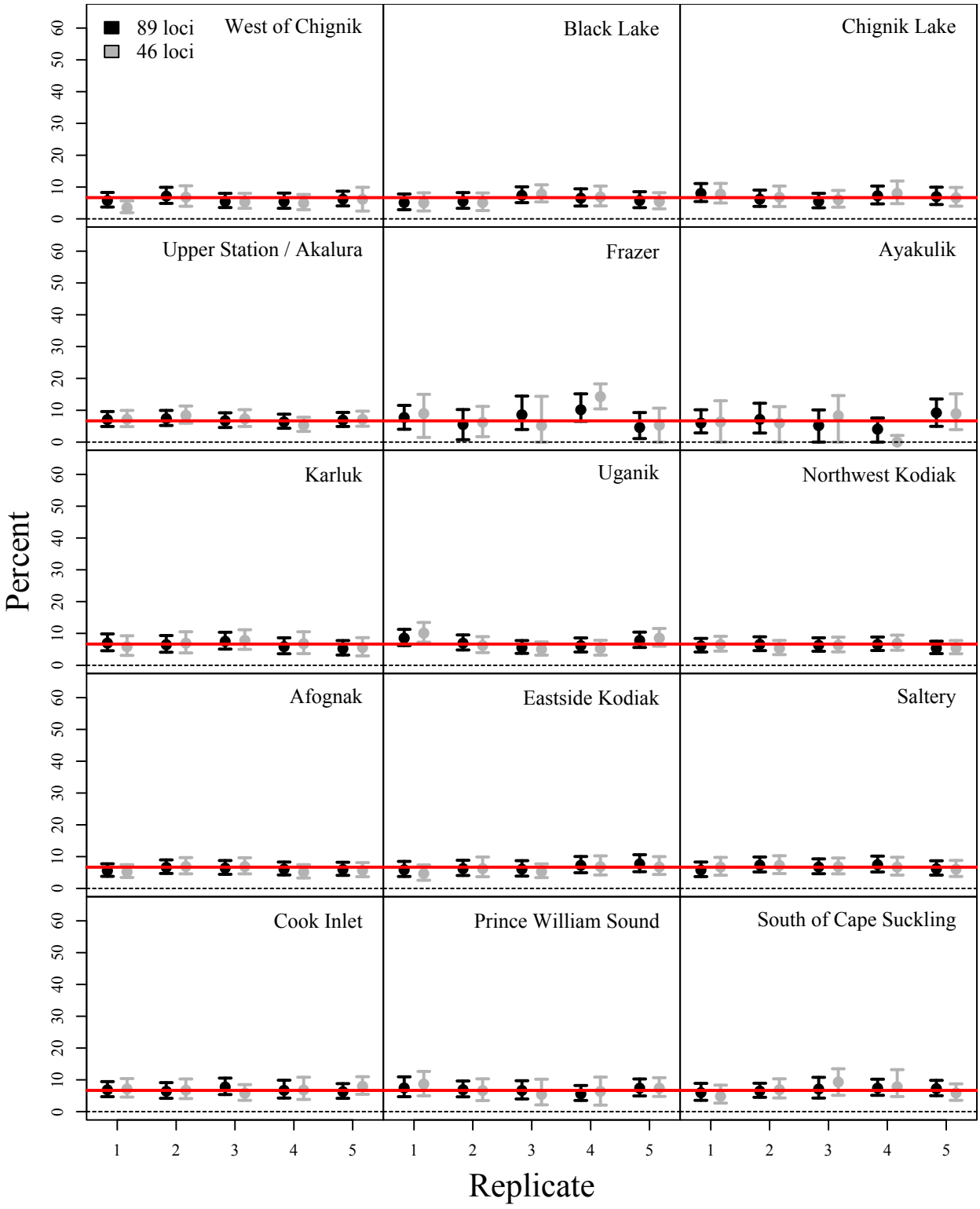

Figure 16.–Median (closed circles) and 90% credibility interval (bars) estimates for 5 replicates of a simulated, hypothetical flat scenario. Each replicate was a sample of 390 individuals removed from the baseline. Black circles and bars indicate results for a baseline of 89 loci, grey for 46 loci. Each cell represents a reporting group, the red line shows the true stock composition of the simulation, and deviations from the red line show magnitude and direction of biases for each replicate.

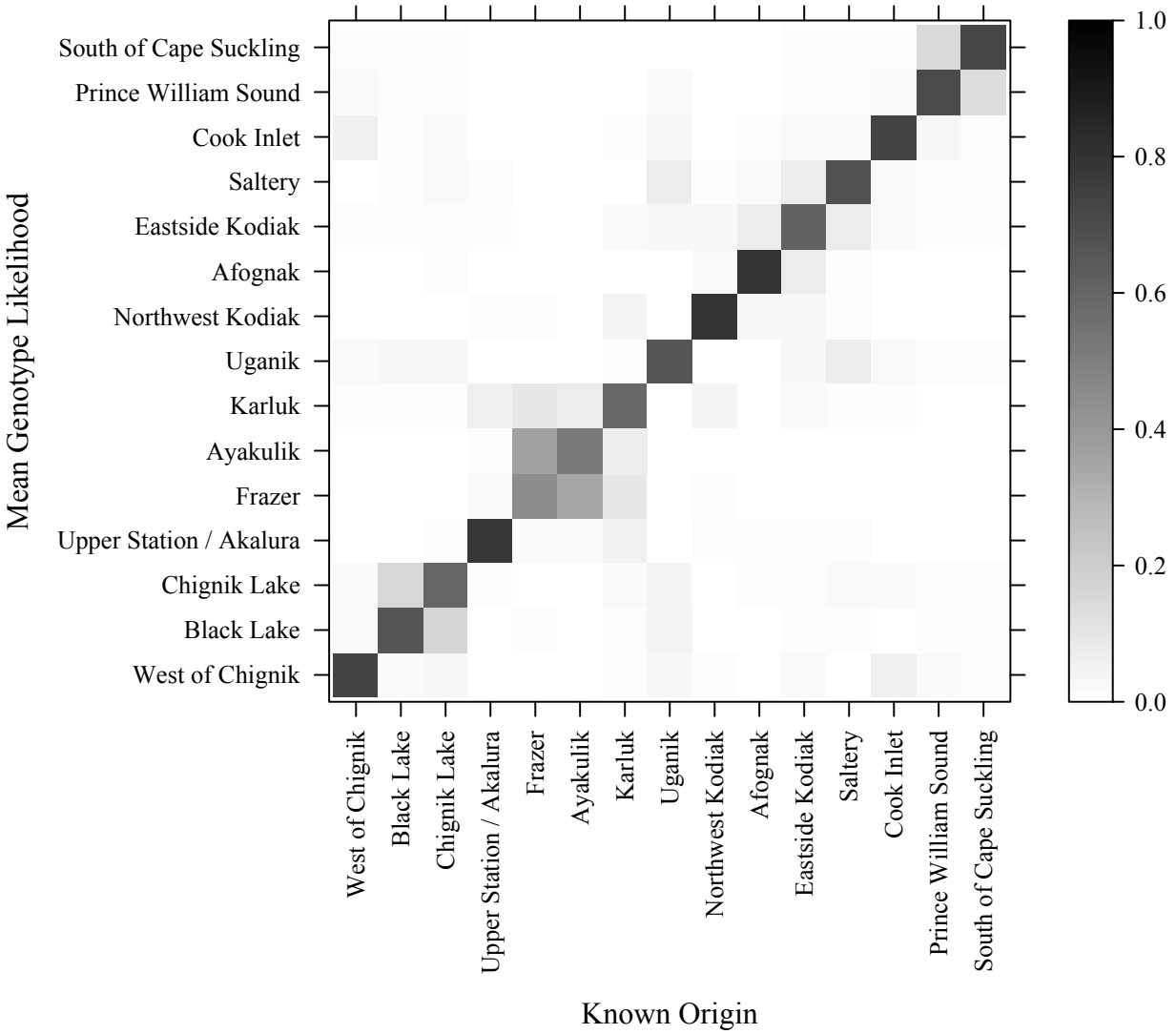

Figure 17.–Summary of mean genotype likelihood for all baseline individuals across reporting groups for the marker suite of 46 loci. Probabilities off the diagonal indicate uncertainty in genetic assignment and provide indications of potential misallocation.

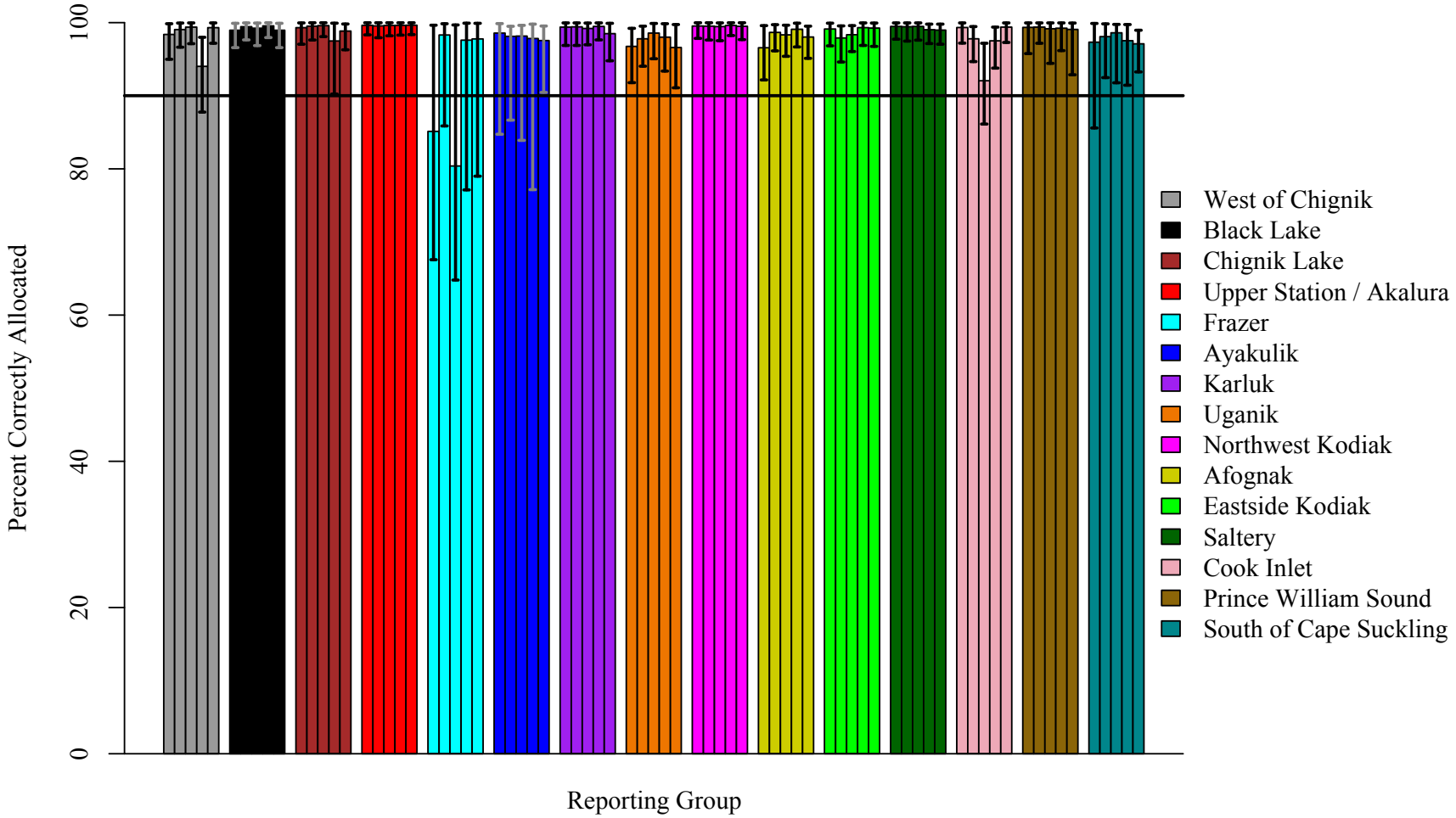

Figure 18.–Median percentage of fish correctly allocated back to reporting group of origin and 90% credibility intervals for mixtures of known individuals removed from the baseline populations that comprise each reporting group (100% proof tests) using the program *BAYES* with a regionally flat prior and 46 loci. One hundred forty-two individuals were removed from the Uganik reporting group, 134 individuals were removed from the Afognak reporting group, and 200 individuals were removed from all other groups. Each bar represents results from 1 of the 5 replicates, or set of draws from the baseline populations.

APPENDICES

Appendix A.–Estimates of stock composition (percentage) for 5 replicates of 100% proof tests for each reporting group included as part of the coastwide sockeye salmon genetic baseline with 89 loci. Each replicate was a sample of 200 individuals removed from the genetic baseline, except for Uganik (n = 142) and Afognak (n = 134). Estimates for each replicate describe the posterior distributions by the median, 90% credibility interval, probability that the group estimate is equal to zero (P = 0), mean and SD.

		West of Chignik Replicate 1						West of Chignik Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	P=0	Mean	SD	Median	5%	95%	P=0	Mean	SD
West of Chignik	100.0	99.6	98.1	100.0	0.00	99.4	0.6	99.0	96.2	100.0	0.00	98.6	1.2
Black Lake	0.0	0.0	0.0	0.4	0.54	0.1	0.2	0.0	0.0	0.3	0.54	0.1	0.2
Chignik Lake	0.0	0.0	0.0	0.4	0.52	0.1	0.2	0.0	0.0	0.2	0.55	0.0	0.2
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.2
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.2
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.3	0.0	3.2	0.26	0.8	1.1
Saltery	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Cook Inlet	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		West of Chignik Replicate 3						West of Chignik Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	100.0	99.6	98.2	100.0	0.00	99.4	0.6	96.7	93.2	98.8	0.00	96.5	1.7
Black Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.2	1.9	0.4	4.6	0.00	2.1	1.3
Chignik Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.6	0.51	0.1	0.3
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.2
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.4	0.54	0.1	0.2
Uganik	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.3	0.55	0.0	0.2
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	2.1	0.49	0.3	0.8
Saltery	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.2
Cook Inlet	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Prince William Sound	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.4	0.0	2.1	0.13	0.6	0.7
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

Reporting Group	True Percentage	West of Chignik Replicate 5						Average of 5 Replicates
			90% CI					
		Median	5%	95%	*P*=0	Mean	SD	
West of Chignik	100.0	98.4	95.8	99.7	0.00	98.2	1.2	98.7
Black Lake	0.0	0.0	0.0	1.3	0.45	0.2	0.5	0.4
Chignik Lake	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0
Upper Station / Akalura	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0
Frazer	0.0	0.0	0.0	0.5	0.52	0.1	0.3	0.0
Ayakulik	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Karluk	0.0	0.0	0.0	1.0	0.43	0.2	0.4	0.0
Uganik	0.0	0.0	0.0	0.8	0.45	0.1	0.3	0.0
Northwest Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Eastside Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.1
Saltery	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Cook Inlet	0.0	0.3	0.0	1.5	0.13	0.4	0.5	0.1
Prince William Sound	0.0	0.0	0.0	1.8	0.33	0.4	0.7	0.1
South of Cape Suckling	0.0	0.0	0.0	0.4	0.53	0.1	0.3	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Black Lake Replicate 1						Black Lake Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.2
Black Lake	100.0	99.6	98.1	100.0	0.00	99.4	0.7	99.6	98.2	100.0	0.00	99.4	0.6
Chignik Lake	0.0	0.0	0.0	0.7	0.52	0.1	0.4	0.0	0.0	0.5	0.53	0.1	0.3
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.3	0.54	0.1	0.2
Saltery	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Cook Inlet	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Prince William Sound	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0	0.0	0.2	0.56	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Black Lake Replicate 3						Black Lake Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Black Lake	100.0	99.5	97.7	100.0	0.00	99.2	0.8	99.6	98.3	100.0	0.00	99.5	0.6
Chignik Lake	0.0	0.0	0.0	0.5	0.52	0.1	0.4	0.0	0.0	0.5	0.52	0.1	0.3
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Uganik	0.0	0.0	0.0	1.4	0.37	0.3	0.5	0.0	0.0	0.3	0.55	0.0	0.2
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Saltery	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Cook Inlet	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Black Lake Replicate 5						
	True		90% CI					Average of 5
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Replicates
West of Chignik	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Black Lake	100.0	99.6	98.1	100.0	0.00	99.4	0.7	99.6
Chignik Lake	0.0	0.0	0.0	0.7	0.51	0.1	0.4	0.0
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Karluk	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Eastside Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Saltery	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Cook Inlet	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Prince William Sound	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0
South of Cape Suckling	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Chignik Lake Replicate 1						Chignik Lake Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.2
Black Lake	0.0	0.0	0.0	1.8	0.46	0.3	0.8	0.0	0.0	1.8	0.47	0.3	0.8
Chignik Lake	100.0	99.3	96.8	100.0	0.00	99.0	1.1	99.6	97.4	100.0	0.00	99.2	1.0
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	1.2	0.33	0.3	0.5	0.0	0.0	0.2	0.56	0.0	0.1
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.3	0.54	0.0	0.2
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Saltery	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Cook Inlet	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Prince William Sound	0.0	0.0	0.0	0.7	0.51	0.1	0.3	0.0	0.0	0.3	0.54	0.0	0.2
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Chignik Lake Replicate 3						Chignik Lake Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.2
Black Lake	0.0	0.0	0.0	0.7	0.52	0.1	0.4	0.0	0.0	3.1	0.42	0.5	1.2
Chignik Lake	100.0	99.6	98.2	100.0	0.00	99.4	0.6	99.4	96.2	100.0	0.00	99.0	1.3
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.2
Karluk	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.6	0.49	0.1	0.3
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Saltery	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Cook Inlet	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

Reporting Group	True Percentage	Chignik Lake Replicate 5						Average of 5 Replicates
			90% CI					
		Median	5%	95%	*P*=0	Mean	SD	
West of Chignik	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0
Black Lake	0.0	0.0	0.0	1.2	0.48	0.2	0.6	0.0
Chignik Lake	100.0	99.3	97.3	100.0	0.00	99.1	0.9	99.4
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Karluk	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Eastside Kodiak	0.0	0.0	0.0	1.1	0.34	0.2	0.4	0.0
Saltery	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0
Cook Inlet	0.0	0.0	0.0	0.6	0.50	0.1	0.3	0.0
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Upper Station / Akalura Replicate 1						Upper Station / Akalura Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Upper Station / Akalura	100.0	99.6	98.3	100.0	0.00	99.5	0.6	99.6	98.2	100.0	0.00	99.4	0.6
Frazer	0.0	0.0	0.0	0.4	0.52	0.1	0.2	0.0	0.0	0.6	0.50	0.1	0.3
Ayakulik	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.4	0.53	0.1	0.2
Karluk	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Saltery	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Cook Inlet	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Upper Station / Akalura Replicate 3						Upper Station / Akalura Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Chignik Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Upper Station / Akalura	100.0	99.6	98.3	100.0	0.00	99.4	0.6	99.6	98.3	100.0	0.00	99.5	0.6
Frazer	0.0	0.0	0.0	0.4	0.52	0.1	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Ayakulik	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.4	0.53	0.1	0.3
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Saltery	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Cook Inlet	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Upper Station / Akalura Replicate 5						
	True		90% CI					Average of 5
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Replicates
West of Chignik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Upper Station / Akalura	100.0	99.7	98.5	100.0	0.00	99.5	0.5	99.6
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Karluk	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Eastside Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Saltery	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Cook Inlet	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Frazer Replicate 1						Frazer Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Black Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Frazer	100.0	85.0	72.2	98.1	0.00	85.0	7.6	97.3	82.2	99.9	0.00	94.7	6.2
Ayakulik	0.0	14.3	1.2	27.2	0.02	14.4	7.6	1.8	0.0	17.1	0.23	4.7	6.2
Karluk	0.0	0.0	0.0	0.4	0.53	0.1	0.3	0.0	0.0	0.5	0.53	0.1	0.3
Uganik	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.3	0.54	0.0	0.2
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.8	0.46	0.1	0.3	0.0	0.0	1.0	0.44	0.2	0.4
Saltery	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Cook Inlet	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Frazer Replicate 3						Frazer Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Upper Station / Akalura	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	100.0	85.0	67.5	99.8	0.00	85.1	10.5	89.8	78.7	99.8	0.00	89.9	6.8
Ayakulik	0.0	14.5	0.0	32.0	0.07	14.4	10.5	9.6	0.0	20.7	0.09	9.5	6.7
Karluk	0.0	0.0	0.0	0.4	0.54	0.1	0.2	0.0	0.0	0.7	0.51	0.1	0.4
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.5	0.51	0.1	0.3
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Saltery	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Cook Inlet	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

Reporting Group	True Percentage	Frazer Replicate 5						Average of 5 Replicates
			90% CI					
		Median	5%	95%	*P*=0	Mean	SD	
West of Chignik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Frazer	100.0	93.4	78.6	99.8	0.00	92.1	6.9	90.1
Ayakulik	0.0	6.1	0.0	20.9	0.11	7.4	6.9	9.3
Karluk	0.0	0.0	0.0	0.4	0.54	0.1	0.2	0.0
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Eastside Kodiak	0.0	0.0	0.0	0.6	0.49	0.1	0.3	0.0
Saltery	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Cook Inlet	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Ayakulik Replicate 1						Ayakulik Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.3	0.0	1.4	0.13	0.4	0.5	0.5	0.0	1.9	0.03	0.7	0.6
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.3	0.55	0.0	0.2
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	0.0	3.6	0.0	16.7	0.19	5.3	5.8	0.0	0.0	4.0	0.44	0.6	1.7
Ayakulik	100.0	95.3	82.3	99.6	0.00	93.7	5.8	98.0	93.7	99.4	0.00	97.5	2.0
Karluk	0.0	0.0	0.0	1.0	0.48	0.2	0.5	0.6	0.0	2.8	0.16	0.9	1.0
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Northwest Kodiak	0.0	0.0	0.0	0.4	0.54	0.1	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.6	0.50	0.1	0.3	0.0	0.0	0.2	0.56	0.0	0.1
Saltery	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.3	0.54	0.0	0.2
Cook Inlet	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.2
South of Cape Suckling	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Ayakulik Replicate 3						Ayakulik Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.2	0.0	1.4	0.15	0.4	0.5
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Chignik Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Upper Station / Akalura	0.0	0.4	0.0	2.0	0.11	0.6	0.7	0.0	0.0	0.6	0.50	0.1	0.3
Frazer	0.0	0.0	0.0	9.8	0.40	1.5	3.6	0.0	0.0	12.2	0.34	2.6	4.4
Ayakulik	100.0	98.0	88.4	99.5	0.00	96.8	3.7	98.2	86.6	99.7	0.00	96.2	4.4
Karluk	0.0	0.4	0.0	1.8	0.04	0.6	0.6	0.0	0.0	1.6	0.42	0.3	0.6
Uganik	0.0	0.0	0.0	0.5	0.51	0.1	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.6	0.49	0.1	0.3
Saltery	0.0	0.0	0.0	0.5	0.52	0.1	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Cook Inlet	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.2

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Ayakulik Replicate 5						
	True		90% CI					Average of 5
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Replicates
West of Chignik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.2
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Upper Station / Akalura	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.1
Frazer	0.0	0.0	0.0	4.3	0.45	0.6	1.9	0.7
Ayakulik	100.0	98.1	93.6	99.6	0.00	97.6	2.2	97.5
Karluk	0.0	1.0	0.0	3.3	0.03	1.3	1.1	0.4
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Northwest Kodiak	0.0	0.0	0.0	0.6	0.52	0.1	0.3	0.0
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Eastside Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Saltery	0.0	0.0	0.0	0.4	0.52	0.1	0.2	0.0
Cook Inlet	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Karluk Replicate 1						Karluk Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.2
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.3	0.54	0.0	0.2
Upper Station / Akalura	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.2
Frazer	0.0	0.0	0.0	1.6	0.46	0.2	0.7	0.0	0.0	0.5	0.53	0.1	0.3
Ayakulik	0.0	0.3	0.0	3.1	0.25	0.8	1.1	0.0	0.0	0.5	0.52	0.1	0.3
Karluk	100.0	98.8	95.9	99.9	0.00	98.5	1.3	99.6	98.1	100.0	0.00	99.4	0.6
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Northwest Kodiak	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.2
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Saltery	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Cook Inlet	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Karluk Replicate 3						Karluk Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.8	0.47	0.1	0.3	0.0	0.0	0.2	0.56	0.0	0.1
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.8	0.46	0.1	0.3
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.3	0.54	0.0	0.2
Upper Station / Akalura	0.0	0.0	0.0	0.4	0.54	0.1	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Frazer	0.0	0.0	0.0	1.5	0.47	0.2	0.6	0.0	0.0	1.2	0.47	0.2	0.5
Ayakulik	0.0	0.0	0.0	0.4	0.53	0.1	0.3	0.0	0.0	0.4	0.54	0.1	0.2
Karluk	100.0	99.3	97.1	100.0	0.00	99.0	1.0	99.3	97.3	100.0	0.00	99.0	0.9
Uganik	0.0	0.0	0.0	0.5	0.51	0.1	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.7	0.49	0.1	0.3
Afognak	0.0	0.0	0.0	0.3	0.53	0.1	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.6	0.51	0.1	0.3	0.0	0.0	0.3	0.54	0.1	0.2
Saltery	0.0	0.0	0.0	0.2	0.56	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Cook Inlet	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.6	0.50	0.1	0.3
Prince William Sound	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0	0.0	0.2	0.56	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Karluk Replicate 5						
	True		90% CI					Average of 5
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Replicates
West of Chignik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Frazer	0.0	0.0	0.0	0.6	0.52	0.1	0.4	0.0
Ayakulik	0.0	2.7	0.8	5.6	0.01	2.9	1.5	0.6
Karluk	100.0	96.7	93.6	98.7	0.00	96.5	1.6	98.7
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Northwest Kodiak	0.0	0.0	0.0	0.4	0.53	0.1	0.3	0.0
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Eastside Kodiak	0.0	0.0	0.0	0.4	0.53	0.1	0.3	0.0
Saltery	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Cook Inlet	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Uganik Replicate 1						Uganik Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.4	0.53	0.1	0.3
Black Lake	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Chignik Lake	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Upper Station / Akalura	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Frazer	0.0	0.0	0.0	1.3	0.40	0.2	0.5	0.0	0.0	1.6	0.37	0.3	0.6
Ayakulik	0.0	0.0	0.0	0.5	0.52	0.1	0.3	0.0	0.0	0.6	0.51	0.1	0.3
Karluk	0.0	0.0	0.0	1.6	0.31	0.4	0.6	0.0	0.0	1.4	0.36	0.3	0.6
Uganik	100.0	96.8	92.8	99.2	0.00	96.5	2.0	98.2	95.3	99.5	0.00	97.9	1.3
Northwest Kodiak	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Afognak	0.0	0.5	0.0	2.2	0.00	0.8	0.7	0.5	0.0	2.2	0.00	0.8	0.7
Eastside Kodiak	0.0	0.0	0.0	0.4	0.53	0.1	0.3	0.0	0.0	0.3	0.54	0.0	0.2
Saltery	0.0	1.3	0.0	4.8	0.14	1.6	1.6	0.0	0.0	1.3	0.45	0.2	0.6
Cook Inlet	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Prince William Sound	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2
South of Cape Suckling	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.3	0.55	0.0	0.2

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Uganik Replicate 3						Uganik Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.4	0.53	0.1	0.3
Black Lake	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	1.0	0.48	0.1	0.4
Chignik Lake	0.0	0.0	0.0	0.7	0.50	0.1	0.4	0.0	0.0	0.6	0.52	0.1	0.3
Upper Station / Akalura	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Frazer	0.0	0.0	0.0	1.7	0.36	0.3	0.6	0.0	0.0	1.3	0.40	0.2	0.5
Ayakulik	0.0	0.0	0.0	0.5	0.52	0.1	0.3	0.0	0.0	0.6	0.51	0.1	0.3
Karluk	0.0	0.0	0.0	1.4	0.38	0.3	0.5	0.0	0.0	1.5	0.36	0.3	0.6
Uganik	100.0	98.8	96.1	99.9	0.00	98.5	1.2	96.5	92.5	99.2	0.00	96.3	2.1
Northwest Kodiak	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Afognak	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Eastside Kodiak	0.0	0.0	0.0	0.5	0.52	0.1	0.3	0.0	0.0	0.4	0.53	0.1	0.2
Saltery	0.0	0.0	0.0	1.1	0.47	0.2	0.5	2.1	0.0	5.6	0.05	2.3	1.7
Cook Inlet	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.4	0.54	0.1	0.3
Prince William Sound	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.3	0.54	0.1	0.2
South of Cape Suckling	0.0	0.0	0.0	0.7	0.49	0.1	0.3	0.0	0.0	0.8	0.49	0.1	0.4

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Uganik Replicate 5						
	True		90% CI					Average of 5
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Replicates
West of Chignik	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0
Black Lake	0.0	0.0	0.0	0.8	0.48	0.1	0.4	0.0
Chignik Lake	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0
Upper Station / Akalura	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0
Frazer	0.0	0.0	0.0	1.0	0.46	0.2	0.4	0.0
Ayakulik	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0
Karluk	0.0	0.0	0.0	1.2	0.42	0.2	0.5	0.0
Uganik	100.0	95.7	91.7	98.6	0.00	95.5	2.1	97.2
Northwest Kodiak	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0
Afognak	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.2
Eastside Kodiak	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0
Saltery	0.0	3.2	0.7	7.0	0.01	3.5	1.9	1.3
Cook Inlet	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0
Prince William Sound	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0
South of Cape Suckling	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Northwest Kodiak Replicate 1						Northwest Kodiak Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Northwest Kodiak	100.0	99.6	98.3	100.0	0.00	99.5	0.6	99.3	97.4	100.0	0.00	99.1	0.8
Afognak	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.1	0.0	1.9	0.25	0.5	0.7
Eastside Kodiak	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Saltery	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Cook Inlet	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Northwest Kodiak Replicate 3						Northwest Kodiak Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.2
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Northwest Kodiak	100.0	99.4	97.9	100.0	0.00	99.2	0.7	99.7	98.5	100.0	0.00	99.5	0.5
Afognak	0.0	0.1	0.0	1.2	0.29	0.3	0.4	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Saltery	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Cook Inlet	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

Reporting Group	True Percentage	Northwest Kodiak Replicate 5						Average of 5 Replicates
			90% CI					
		Median	5%	95%	*P*=0	Mean	SD	
West of Chignik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Karluk	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Northwest Kodiak	100.0	98.6	96.7	99.7	0.00	98.5	0.9	99.3
Afognak	0.0	0.9	0.1	2.5	0.01	1.0	0.8	0.2
Eastside Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Saltery	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Cook Inlet	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Afognak Replicate 1						Afognak Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.4	0.53	0.1	0.4	0.0	0.0	0.3	0.54	0.0	0.2
Black Lake	0.0	0.0	0.0	0.4	0.54	0.1	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Chignik Lake	0.0	0.0	0.0	2.0	0.42	0.3	0.8	0.0	0.0	0.3	0.55	0.0	0.2
Upper Station / Akalura	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.3	0.0	2.0	0.17	0.6	0.7
Frazer	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Ayakulik	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.3	0.54	0.1	0.2
Karluk	0.0	0.0	0.0	0.4	0.54	0.1	0.3	0.0	0.0	1.4	0.39	0.3	0.6
Uganik	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Northwest Kodiak	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Afognak	100.0	95.8	91.7	98.5	0.00	95.5	2.1	98.7	96.2	99.7	0.00	98.4	1.1
Eastside Kodiak	0.0	1.9	0.0	5.8	0.10	2.2	1.9	0.0	0.0	1.1	0.48	0.2	0.5
Saltery	0.0	0.3	0.0	3.0	0.24	0.8	1.1	0.0	0.0	0.3	0.54	0.1	0.2
Cook Inlet	0.0	0.2	0.0	2.0	0.23	0.5	0.7	0.0	0.0	0.3	0.55	0.0	0.2
Prince William Sound	0.0	0.0	0.0	0.4	0.53	0.1	0.3	0.0	0.0	0.3	0.54	0.0	0.2
South of Cape Suckling	0.0	0.0	0.0	0.4	0.53	0.1	0.3	0.0	0.0	0.4	0.53	0.1	0.3

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Afognak Replicate 3						Afognak Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Black Lake	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Chignik Lake	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Upper Station / Akalura	0.0	0.3	0.0	2.1	0.18	0.6	0.7	0.0	0.0	0.3	0.54	0.1	0.2
Frazer	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Ayakulik	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Karluk	0.0	0.0	0.0	1.4	0.39	0.3	0.6	0.0	0.0	0.3	0.55	0.0	0.2
Uganik	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Northwest Kodiak	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Afognak	100.0	98.4	95.6	99.6	0.00	98.1	1.3	99.5	97.7	100.0	0.00	99.3	0.8
Eastside Kodiak	0.0	0.0	0.0	0.4	0.54	0.1	0.2	0.0	0.0	0.3	0.54	0.1	0.2
Saltery	0.0	0.0	0.0	0.8	0.51	0.1	0.4	0.0	0.0	0.4	0.53	0.1	0.2
Cook Inlet	0.0	0.1	0.0	1.8	0.29	0.4	0.7	0.0	0.0	0.3	0.54	0.0	0.2
Prince William Sound	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.3	0.55	0.0	0.2
South of Cape Suckling	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Afognak Replicate 5						
	True		90% CI					Average of 5
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Replicates
West of Chignik	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0
Black Lake	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0
Chignik Lake	0.0	0.0	0.0	1.4	0.40	0.3	0.6	0.0
Upper Station / Akalura	0.0	0.0	0.0	1.5	0.38	0.3	0.6	0.1
Frazer	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0
Ayakulik	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0
Karluk	0.0	0.7	0.0	3.1	0.17	1.0	1.1	0.1
Uganik	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0
Northwest Kodiak	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0
Afognak	100.0	97.9	95.1	99.4	0.00	97.7	1.3	98.1
Eastside Kodiak	0.0	0.0	0.0	0.7	0.51	0.1	0.4	0.4
Saltery	0.0	0.0	0.0	1.2	0.45	0.2	0.5	0.1
Cook Inlet	0.0	0.0	0.0	0.4	0.54	0.1	0.2	0.1
Prince William Sound	0.0	0.0	0.0	0.4	0.53	0.1	0.3	0.0
South of Cape Suckling	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Eastside Kodiak Replicate 1						Eastside Kodiak Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.2
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.9	0.45	0.1	0.4
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.3	0.0	1.8	0.13	0.6	0.6
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.2
Uganik	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	100.0	99.6	98.2	100.0	0.00	99.4	0.6	98.8	96.7	99.8	0.00	98.6	1.0
Saltery	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	1.2	0.48	0.2	0.5
Cook Inlet	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.7	0.47	0.1	0.3
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Eastside Kodiak Replicate 3						Eastside Kodiak Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Black Lake	0.0	0.0	0.0	0.9	0.43	0.1	0.3	0.0	0.0	1.0	0.42	0.2	0.4
Chignik Lake	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.4	0.53	0.1	0.2
Upper Station / Akalura	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	0.0	0.0	0.0	0.5	0.52	0.1	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Northwest Kodiak	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.1	0.0	1.4	0.23	0.3	0.5
Eastside Kodiak	100.0	99.5	97.9	100.0	0.00	99.3	0.7	99.1	97.0	99.9	0.00	98.8	0.9
Saltery	0.0	0.0	0.0	0.4	0.54	0.1	0.2	0.0	0.0	0.5	0.52	0.1	0.3
Cook Inlet	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.8	0.46	0.1	0.3
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.2

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Eastside Kodiak Replicate 5						
	True		90% CI					Average of 5
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Replicates
West of Chignik	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.1
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Karluk	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0
Uganik	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0
Northwest Kodiak	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0
Afognak	0.0	0.6	0.0	2.6	0.09	0.9	0.9	0.2
Eastside Kodiak	100.0	98.8	96.6	99.8	0.00	98.6	1.0	99.2
Saltery	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0
Cook Inlet	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Prince William Sound	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Saltery Replicate 1						Saltery Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.2
Uganik	0.0	0.0	0.0	0.3	0.53	0.1	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Northwest Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Eastside Kodiak	0.0	0.0	0.0	0.5	0.52	0.1	0.2	0.0	0.0	0.7	0.49	0.1	0.3
Saltery	100.0	99.6	98.1	100.0	0.00	99.4	0.6	99.6	98.1	100.0	0.00	99.4	0.6
Cook Inlet	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Prince William Sound	0.0	0.0	0.0	0.4	0.54	0.1	0.3	0.0	0.0	0.2	0.56	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Saltery Replicate 3						Saltery Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Uganik	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.1
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.4	0.0	1.6	0.00	0.5	0.5
Eastside Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.2
Saltery	100.0	99.7	98.5	100.0	0.00	99.5	0.5	99.2	97.6	99.8	0.00	99.0	0.7
Cook Inlet	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.3	0.55	0.0	0.2
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Saltery Replicate 5						
	True		90% CI					Average of 5
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Replicates
West of Chignik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Karluk	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Afognak	0.0	0.4	0.0	1.6	0.00	0.5	0.5	0.2
Eastside Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Saltery	100.0	99.2	97.6	99.8	0.00	99.0	0.7	99.4
Cook Inlet	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Prince William Sound	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Cook Inlet Replicate 1						Cook Inlet Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	1.1	0.46	0.2	0.4	0.0	0.0	0.3	0.54	0.0	0.2
Black Lake	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.8	0.48	0.1	0.3
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	0.0	0.0	0.0	1.0	0.39	0.2	0.4	0.0	0.0	0.2	0.56	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Uganik	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.2	0.0	2.0	0.23	0.5	0.7
Northwest Kodiak	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.2
Saltery	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.3	0.0	2.1	0.19	0.6	0.7
Cook Inlet	100.0	99.4	97.6	100.0	0.00	99.1	0.8	98.5	96.4	99.6	0.00	98.3	1.0
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.3	0.54	0.1	0.2
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.2

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Cook Inlet Replicate 3						Cook Inlet Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	2.2	0.32	0.5	0.8	0.5	0.0	2.4	0.06	0.8	0.8
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.3	0.54	0.0	0.2
Chignik Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.3	0.55	0.0	0.2
Uganik	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.5	0.52	0.1	0.3
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.4	0.53	0.1	0.2
Saltery	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.2
Cook Inlet	100.0	98.9	96.4	99.9	0.00	98.6	1.1	98.9	96.7	99.8	0.00	98.7	1.0
Prince William Sound	0.0	0.0	0.0	1.2	0.32	0.3	0.4	0.0	0.0	0.2	0.55	0.0	0.2
South of Cape Suckling	0.0	0.0	0.0	1.1	0.40	0.2	0.5	0.0	0.0	0.2	0.56	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Cook Inlet Replicate 5						
	True		90% CI					Average of 5
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Replicates
West of Chignik	0.0	0.6	0.0	4.3	0.24	1.2	1.5	0.2
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Chignik Lake	0.0	0.0	0.0	0.7	0.49	0.1	0.3	0.0
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Karluk	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0
Uganik	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.1
Northwest Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Eastside Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Saltery	0.0	0.0	0.0	0.9	0.44	0.1	0.3	0.1
Cook Inlet	100.0	98.4	94.7	99.9	0.00	98.0	1.7	98.8
Prince William Sound	0.0	0.0	0.0	0.6	0.52	0.1	0.4	0.0
South of Cape Suckling	0.0	0.0	0.0	0.4	0.53	0.1	0.3	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Prince William Sound Replicate 1						Prince William Sound Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.6	0.49	0.1	0.3
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	0.0	0.0	0.0	0.4	0.52	0.1	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.5	0.52	0.1	0.2	0.0	0.0	0.2	0.55	0.0	0.2
Uganik	0.0	0.0	0.0	1.3	0.35	0.3	0.5	0.0	0.0	0.2	0.56	0.0	0.1
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Saltery	0.0	0.0	0.0	0.7	0.48	0.1	0.3	0.0	0.0	0.2	0.56	0.0	0.1
Cook Inlet	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Prince William Sound	100.0	99.2	96.6	99.9	0.00	98.9	1.1	99.6	98.2	100.0	0.00	99.4	0.6
South of Cape Suckling	0.0	0.0	0.0	1.9	0.48	0.3	0.8	0.0	0.0	0.4	0.54	0.1	0.3

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Prince William Sound Replicate 3						Prince William Sound Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.9	0.47	0.1	0.4	0.0	0.0	0.3	0.55	0.0	0.2
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.2
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Saltery	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Cook Inlet	0.0	0.0	0.0	0.8	0.49	0.1	0.4	0.0	0.0	0.3	0.55	0.0	0.2
Prince William Sound	100.0	99.5	97.8	100.0	0.00	99.3	0.7	99.6	98.0	100.0	0.00	99.4	0.9
South of Cape Suckling	0.0	0.0	0.0	0.3	0.55	0.1	0.3	0.0	0.0	0.5	0.54	0.1	0.7

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Prince William Sound Replicate 5						
	True		90% CI					Average of 5
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Replicates
West of Chignik	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Karluk	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Uganik	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Eastside Kodiak	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0
Saltery	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0
Cook Inlet	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Prince William Sound	100.0	99.5	95.1	100.0	0.00	98.8	1.7	99.5
South of Cape Suckling	0.0	0.0	0.0	4.4	0.44	0.7	1.6	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		South of Cape Suckling Replicate 1						South of Cape Suckling Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.5	0.50	0.1	0.3	0.0	0.0	0.5	0.52	0.1	0.3
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.3	0.55	0.0	0.2
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.7	0.50	0.1	0.3
Uganik	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	1.0	0.38	0.2	0.4
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.3	0.54	0.0	0.2
Saltery	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Cook Inlet	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.6	0.50	0.1	0.3
Prince William Sound	0.0	0.4	0.0	3.0	0.16	0.8	1.1	1.4	0.0	5.5	0.21	1.8	2.0
South of Cape Suckling	100.0	99.0	96.3	99.9	0.00	98.7	1.2	97.7	93.4	99.9	0.00	97.3	2.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		South of Cape Suckling Replicate 3						South of Cape Suckling Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.2	0.0	1.5	0.15	0.4	0.5
Black Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.3	0.54	0.0	0.2
Chignik Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.3	0.54	0.0	0.2
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Karluk	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.8	0.46	0.1	0.3
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.1
Saltery	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Cook Inlet	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.9	0.43	0.2	0.4
Prince William Sound	0.0	0.0	0.0	0.6	0.52	0.1	0.3	0.0	0.0	2.0	0.47	0.3	0.9
South of Cape Suckling	100.0	99.6	98.1	100.0	0.00	99.4	0.6	98.9	96.3	99.8	0.00	98.6	1.2

Note: Stock composition estimates may not sum to 100% due to rounding error.

		South of Cape Suckling Replicate 5						
	True		90% CI					Average of 5
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Replicates
West of Chignik	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0
Black Lake	0.0	0.1	0.0	1.3	0.24	0.3	0.5	0.0
Chignik Lake	0.0	0.0	0.0	1.3	0.30	0.3	0.5	0.0
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Frazer	0.0	0.2	0.0	1.6	0.19	0.4	0.6	0.0
Ayakulik	0.0	0.0	0.0	1.0	0.42	0.2	0.4	0.0
Karluk	0.0	0.0	0.0	0.6	0.50	0.1	0.3	0.0
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Eastside Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Saltery	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Cook Inlet	0.0	0.0	0.0	0.6	0.51	0.1	0.3	0.0
Prince William Sound	0.0	0.0	0.0	3.7	0.37	0.7	1.3	0.4
South of Cape Suckling	100.0	98.0	94.4	99.5	0.00	97.6	1.6	98.7

Note: Stock composition estimates may not sum to 100% due to rounding error.

Appendix B.–Estimates of stock composition (percentage) for 5 replicates of 7 different hypothetical fishery scenario proof tests for each reporting group included as part of the coastwide sockeye salmon genetic baseline with 89 loci. Each replicate was a sample of 400 individuals removed from the genetic baseline, except for the flat (n = 390). Estimates for each replicate describe the posterior distributions by the median, 90% credibility interval, probability that the group estimate is equal to zero (P = 0), mean and SD.

		Hypothetical July Uyak Replicate 1						Hypothetical July Uyak Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	P=0	Mean	SD	Median	5%	95%	P=0	Mean	SD
West of Chignik	10.0	9.5	7.1	12.4	0.00	9.6	1.6	10.1	7.5	13.0	0.00	10.1	1.7
Black Lake	0.0	0.0	0.0	2.2	0.38	0.4	0.8	0.0	0.0	0.9	0.49	0.1	0.4
Chignik Lake	10.0	10.1	7.2	13.1	0.00	10.1	1.8	9.8	7.3	12.7	0.00	9.9	1.6
Upper Station / Akalura	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0	0.0	0.1	0.57	0.0	0.1
Frazer	5.0	6.6	0.0	12.6	0.07	6.3	4.0	0.3	0.0	8.2	0.27	2.1	2.9
Ayakulik	22.0	20.6	14.6	28.0	0.00	20.9	4.1	25.9	19.0	30.7	0.00	25.5	3.6
Karluk	7.0	6.6	4.0	9.7	0.00	6.7	1.7	6.1	3.9	8.8	0.00	6.2	1.5
Uganik	2.0	1.7	0.7	3.2	0.00	1.8	0.8	2.1	0.9	3.7	0.00	2.2	0.8
Northwest Kodiak	5.0	4.8	3.0	7.1	0.00	4.9	1.2	5.1	3.4	7.2	0.00	5.1	1.2
Afognak	1.0	0.5	0.1	1.4	0.00	0.6	0.4	0.9	0.3	2.0	0.00	1.0	0.6
Eastside Kodiak	1.0	0.1	0.0	1.6	0.29	0.4	0.6	1.0	0.2	2.5	0.00	1.1	0.7
Saltery	20.0	20.8	17.4	24.5	0.00	20.9	2.1	20.9	17.5	24.5	0.00	20.9	2.1
Cook Inlet	15.0	15.7	12.6	19.1	0.00	15.8	2.0	14.2	11.2	17.5	0.00	14.2	1.9
Prince William Sound	2.0	1.4	0.6	2.8	0.00	1.5	0.7	1.4	0.5	2.6	0.00	1.4	0.7
South of Cape Suckling	0.0	0.0	0.0	0.6	0.49	0.1	0.2	0.0	0.0	0.2	0.55	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Hypothetical July Uyak Replicate 3						Hypothetical July Uyak Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	10.0	10.8	8.2	13.9	0.00	10.9	1.8	10.0	7.5	12.8	0.00	10.0	1.6
Black Lake	0.0	1.3	0.0	3.2	0.08	1.4	1.0	0.0	0.0	0.6	0.48	0.1	0.3
Chignik Lake	10.0	8.1	5.6	11.0	0.00	8.2	1.6	10.2	7.8	13.1	0.00	10.3	1.6
Upper Station / Akalura	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0	0.0	0.1	0.58	0.0	0.1
Frazer	5.0	9.8	3.6	15.2	0.01	9.7	3.5	1.6	0.0	7.3	0.17	2.3	2.5
Ayakulik	22.0	18.5	13.2	25.2	0.00	18.8	3.7	24.1	18.5	28.9	0.00	24.0	3.2
Karluk	7.0	6.1	4.0	8.6	0.00	6.2	1.4	8.2	5.8	11.0	0.00	8.3	1.6
Uganik	2.0	2.0	0.9	3.6	0.00	2.1	0.8	1.6	0.6	3.1	0.00	1.7	0.8
Northwest Kodiak	5.0	5.0	3.4	7.0	0.00	5.1	1.1	4.7	3.1	6.7	0.00	4.8	1.1
Afognak	1.0	1.1	0.4	2.3	0.00	1.2	0.6	1.0	0.4	2.0	0.00	1.1	0.5
Eastside Kodiak	1.0	0.6	0.1	1.6	0.01	0.7	0.5	0.1	0.0	1.3	0.29	0.3	0.5
Saltery	20.0	19.9	16.6	23.5	0.00	20.0	2.1	20.6	17.3	24.2	0.00	20.7	2.1
Cook Inlet	15.0	13.2	10.3	16.5	0.00	13.3	1.9	14.5	11.3	17.9	0.00	14.5	2.0
Prince William Sound	2.0	2.4	0.9	4.4	0.00	2.5	1.0	1.3	0.5	3.0	0.00	1.5	0.8
South of Cape Suckling	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.2	0.0	1.0	0.00	0.3	0.3

Note: Stock composition estimates may not sum to 100% due to rounding error.

Reporting Group	True Percentage	Hypothetical July Uyak Replicate 5						Average of 5 Replicates
			90% CI					
		Median	5%	95%	*P*=0	Mean	SD	
West of Chignik	10.0	9.0	6.5	11.9	0.00	9.1	1.6	9.9
Black Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.3
Chignik Lake	10.0	9.4	7.0	12.2	0.00	9.4	1.6	9.5
Upper Station / Akalura	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0
Frazer	5.0	5.6	0.0	10.2	0.03	5.5	2.8	4.8
Ayakulik	22.0	20.6	15.5	26.6	0.00	20.7	3.3	22.0
Karluk	7.0	8.1	5.6	11.1	0.00	8.2	1.7	7.0
Uganik	2.0	1.6	0.7	3.2	0.00	1.7	0.8	1.8
Northwest Kodiak	5.0	5.2	3.4	7.3	0.00	5.2	1.2	5.0
Afognak	1.0	0.8	0.2	1.9	0.00	0.9	0.5	0.9
Eastside Kodiak	1.0	1.0	0.0	3.4	0.02	1.3	1.1	0.5
Saltery	20.0	20.8	17.4	24.5	0.00	20.9	2.2	20.6
Cook Inlet	15.0	13.7	10.8	17.1	0.00	13.8	1.9	14.3
Prince William Sound	2.0	3.0	1.4	5.0	0.00	3.0	1.1	1.9
South of Cape Suckling	0.0	0.0	0.0	0.5	0.51	0.1	0.2	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Hypothetical July Alitak Replicate 1						Hypothetical July Alitak Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	9.0	9.2	6.8	11.9	0.00	9.2	1.6	9.7	7.3	12.6	0.00	9.8	1.6
Black Lake	0.0	0.0	0.0	0.6	0.51	0.1	0.3	0.0	0.0	1.4	0.42	0.2	0.5
Chignik Lake	10.0	9.7	7.3	12.5	0.00	9.8	1.6	10.5	7.9	13.5	0.00	10.6	1.7
Upper Station / Akalura	10.0	9.5	7.1	12.3	0.00	9.6	1.6	9.4	6.9	12.2	0.00	9.4	1.6
Frazer	30.0	19.9	12.6	27.5	0.00	20.0	4.5	32.0	24.6	39.0	0.00	31.9	4.4
Ayakulik	15.0	23.1	15.9	31.0	0.00	23.2	4.6	12.8	6.7	20.0	0.00	13.0	4.1
Karluk	5.0	6.9	4.5	9.7	0.00	7.0	1.6	5.5	3.4	8.2	0.00	5.6	1.5
Uganik	1.0	1.1	0.4	2.4	0.00	1.2	0.6	0.8	0.1	2.0	0.01	0.9	0.6
Northwest Kodiak	1.0	0.4	0.1	1.3	0.00	0.5	0.4	0.5	0.1	1.4	0.00	0.6	0.4
Afognak	1.0	1.0	0.3	2.1	0.00	1.1	0.6	0.4	0.1	1.2	0.00	0.5	0.4
Eastside Kodiak	1.0	0.6	0.0	1.8	0.05	0.8	0.6	1.8	0.8	3.2	0.00	1.9	0.8
Saltery	2.0	2.5	1.2	4.3	0.00	2.6	0.9	2.2	1.1	3.8	0.00	2.3	0.8
Cook Inlet	15.0	14.6	11.7	17.9	0.00	14.7	1.9	13.2	10.4	16.3	0.00	13.2	1.8
Prince William Sound	0.0	0.0	0.0	1.2	0.47	0.2	0.4	0.0	0.0	0.2	0.55	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.1	0.57	0.0	0.1	0.0	0.0	0.1	0.59	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Hypothetical July Alitak Replicate 3						Hypothetical July Alitak Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	9.0	7.9	5.8	10.5	0.00	8.0	1.4	7.3	5.2	9.9	0.00	7.4	1.4
Black Lake	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Chignik Lake	10.0	9.8	7.4	12.6	0.00	9.9	1.6	10.5	8.0	13.5	0.00	10.6	1.7
Upper Station / Akalura	10.0	10.4	7.9	13.3	0.00	10.5	1.6	10.8	8.2	13.7	0.00	10.8	1.7
Frazer	30.0	32.0	24.2	39.5	0.00	32.0	4.7	28.3	21.7	35.1	0.00	28.4	4.1
Ayakulik	15.0	14.6	8.0	22.3	0.00	14.8	4.4	17.2	11.3	23.7	0.00	17.3	3.8
Karluk	5.0	3.3	1.1	6.0	0.00	3.4	1.5	3.9	2.0	6.4	0.00	4.0	1.3
Uganik	1.0	1.2	0.3	2.7	0.00	1.3	0.7	1.2	0.4	2.5	0.00	1.3	0.7
Northwest Kodiak	1.0	0.7	0.2	1.7	0.00	0.8	0.5	1.0	0.4	2.0	0.00	1.0	0.5
Afognak	1.0	1.1	0.4	2.3	0.00	1.2	0.6	1.1	0.4	2.3	0.00	1.2	0.6
Eastside Kodiak	1.0	1.7	0.6	3.5	0.00	1.8	0.9	0.5	0.1	1.4	0.00	0.6	0.4
Saltery	2.0	1.9	0.8	3.5	0.00	2.0	0.8	2.3	1.2	4.0	0.00	2.4	0.9
Cook Inlet	15.0	13.6	10.6	16.9	0.00	13.6	1.9	14.6	11.7	17.9	0.00	14.7	1.9
Prince William Sound	0.0	0.1	0.0	2.3	0.29	0.6	0.8	0.0	0.0	0.7	0.50	0.1	0.3
South of Cape Suckling	0.0	0.0	0.0	0.1	0.57	0.0	0.2	0.0	0.0	0.2	0.57	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

Reporting Group	True Percentage	Hypothetical July Alitak Replicate 5						Average of 5 Replicates
			90% CI					
		Median	5%	95%	*P*=0	Mean	SD	
West of Chignik	9.0	9.3	6.9	12.1	0.00	9.4	1.6	8.7
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Chignik Lake	10.0	10.2	7.8	13.1	0.00	10.3	1.6	10.2
Upper Station / Akalura	10.0	9.5	7.1	12.2	0.00	9.5	1.6	9.9
Frazer	30.0	32.9	23.3	41.0	0.00	32.6	5.4	29.0
Ayakulik	15.0	12.8	5.7	22.2	0.00	13.3	5.1	16.1
Karluk	5.0	4.0	2.3	6.3	0.00	4.1	1.2	4.7
Uganik	1.0	1.5	0.6	2.9	0.00	1.6	0.7	1.2
Northwest Kodiak	1.0	0.7	0.1	1.8	0.00	0.8	0.5	0.7
Afognak	1.0	0.5	0.1	1.4	0.00	0.6	0.4	0.8
Eastside Kodiak	1.0	0.7	0.1	2.4	0.00	0.9	0.7	1.1
Saltery	2.0	2.4	1.2	4.0	0.00	2.4	0.9	2.3
Cook Inlet	15.0	14.4	11.5	17.6	0.00	14.5	1.9	14.1
Prince William Sound	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0
South of Cape Suckling	0.0	0.0	0.0	0.1	0.57	0.0	0.1	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Hypothetical August Karluk Replicate 1						Hypothetical August Karluk Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	5.0	4.2	2.7	6.2	0.00	4.3	1.1	4.8	3.2	6.9	0.00	4.9	1.1
Black Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Chignik Lake	5.0	4.5	2.8	6.7	0.00	4.6	1.2	5.0	3.3	7.1	0.00	5.1	1.2
Upper Station / Akalura	15.0	14.1	11.2	17.4	0.00	14.2	1.9	14.6	11.6	18.0	0.00	14.7	1.9
Frazer	2.0	0.0	0.0	6.3	0.32	1.4	2.2	0.0	0.0	4.6	0.37	0.9	1.6
Ayakulik	15.0	16.3	11.3	20.6	0.00	16.2	2.8	17.5	12.8	21.6	0.00	17.4	2.7
Karluk	50.0	50.2	45.4	55.1	0.00	50.2	3.0	49.4	44.7	54.1	0.00	49.4	2.9
Uganik	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0	0.0	0.3	0.53	0.0	0.1
Northwest Kodiak	2.0	2.1	0.9	4.0	0.00	2.2	0.9	1.9	1.0	3.3	0.00	2.0	0.7
Afognak	0.0	0.0	0.0	0.1	0.57	0.0	0.1	0.0	0.0	0.1	0.58	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0	0.0	0.1	0.58	0.0	0.1
Saltery	4.0	4.4	2.9	6.5	0.00	4.5	1.1	3.8	2.3	5.6	0.00	3.8	1.0
Cook Inlet	2.0	2.1	0.9	3.9	0.00	2.2	0.9	1.6	0.7	2.9	0.00	1.7	0.7
Prince William Sound	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0	0.0	0.1	0.58	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0	0.0	0.1	0.59	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Hypothetical August Karluk Replicate 3						Hypothetical August Karluk Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	5.0	4.4	2.8	6.4	0.00	4.4	1.1	3.8	2.4	5.7	0.00	3.9	1.0
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.6	0.43	0.1	0.2
Chignik Lake	5.0	5.0	3.3	7.2	0.00	5.1	1.2	5.4	3.6	7.6	0.00	5.5	1.2
Upper Station / Akalura	15.0	13.8	10.9	17.1	0.00	13.9	1.9	14.7	11.6	18.1	0.00	14.7	2.0
Frazer	2.0	0.0	0.0	5.8	0.34	1.2	2.1	0.1	0.0	5.4	0.30	1.3	2.0
Ayakulik	15.0	18.7	13.7	22.9	0.00	18.6	2.8	13.9	9.2	17.9	0.00	13.8	2.7
Karluk	50.0	48.8	44.1	53.6	0.00	48.9	2.9	52.5	47.6	57.2	0.00	52.4	2.9
Uganik	0.0	0.0	0.0	0.1	0.57	0.0	0.1	0.0	0.0	0.3	0.53	0.0	0.1
Northwest Kodiak	2.0	1.7	0.8	3.0	0.00	1.8	0.7	2.6	1.3	4.3	0.00	2.7	0.9
Afognak	0.0	0.2	0.0	0.8	0.00	0.3	0.3	0.0	0.0	0.1	0.59	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.8	0.50	0.1	0.3
Saltery	4.0	3.5	2.1	5.3	0.00	3.5	1.0	3.4	2.0	5.3	0.00	3.5	1.0
Cook Inlet	2.0	2.0	0.9	3.5	0.00	2.1	0.8	1.9	0.9	3.4	0.00	2.0	0.8
Prince William Sound	0.0	0.0	0.0	0.8	0.44	0.1	0.3	0.0	0.0	0.1	0.59	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.1	0.59	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

Reporting Group	True Percentage	Hypothetical August Karluk Replicate 5						Average of 5 Replicates
			90% CI					
		Median	5%	95%	*P*=0	Mean	SD	
West of Chignik	5.0	4.6	2.9	6.6	0.00	4.6	1.1	4.4
Black Lake	0.0	0.0	0.0	0.3	0.53	0.0	0.2	0.0
Chignik Lake	5.0	4.8	3.2	6.9	0.00	4.9	1.1	4.9
Upper Station / Akalura	15.0	14.4	11.4	17.9	0.00	14.5	2.0	14.3
Frazer	2.0	0.1	0.0	4.9	0.30	1.4	1.8	0.1
Ayakulik	15.0	17.1	13.0	21.3	0.00	17.1	2.5	16.7
Karluk	50.0	49.1	44.3	53.9	0.00	49.1	2.9	50.0
Uganik	0.0	0.0	0.0	0.4	0.52	0.1	0.2	0.0
Northwest Kodiak	2.0	1.5	0.6	2.9	0.00	1.6	0.7	2.0
Afognak	0.0	0.2	0.0	0.9	0.00	0.3	0.3	0.1
Eastside Kodiak	0.0	0.0	0.0	0.1	0.57	0.0	0.1	0.0
Saltery	4.0	3.7	2.3	5.6	0.00	3.8	1.0	3.8
Cook Inlet	2.0	2.3	1.2	4.0	0.00	2.4	0.9	2.0
Prince William Sound	0.0	0.0	0.0	0.3	0.53	0.0	0.2	0.0
South of Cape Suckling	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Hypothetical June Cape Igvak Replicate 1						Hypothetical June Cape Igvak Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	15.0	15.9	12.6	19.5	0.00	15.9	2.1	13.9	10.9	17.4	0.00	14.0	2.0
Black Lake	46.0	45.5	41.3	49.8	0.00	45.5	2.6	46.9	42.6	51.3	0.00	46.9	2.6
Chignik Lake	0.0	0.0	0.0	1.2	0.46	0.2	0.5	0.0	0.0	1.2	0.47	0.2	0.5
Upper Station / Akalura	1.0	0.1	0.0	0.8	0.17	0.2	0.3	0.6	0.1	1.6	0.00	0.7	0.5
Frazer	4.0	3.7	0.0	8.2	0.03	4.0	2.3	1.0	0.0	4.0	0.15	1.3	1.3
Ayakulik	4.0	3.9	0.0	7.6	0.06	3.9	2.2	7.3	4.3	10.3	0.00	7.3	1.8
Karluk	7.0	8.5	6.0	11.3	0.00	8.5	1.6	6.0	3.9	8.6	0.00	6.1	1.4
Uganik	0.0	0.0	0.0	0.8	0.42	0.1	0.3	0.4	0.0	1.4	0.14	0.5	0.5
Northwest Kodiak	1.0	0.2	0.0	0.9	0.00	0.3	0.3	0.4	0.0	1.3	0.01	0.5	0.4
Afognak	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0	0.0	0.1	0.58	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Saltery	2.0	2.3	1.2	3.8	0.00	2.4	0.8	1.5	0.6	2.9	0.00	1.6	0.7
Cook Inlet	20.0	18.7	15.5	22.3	0.00	18.8	2.1	20.7	17.2	24.4	0.00	20.7	2.2
Prince William Sound	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0	0.0	0.1	0.58	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0	0.0	0.1	0.58	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Hypothetical June Cape Igvak Replicate 3						Hypothetical June Cape Igvak Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	15.0	16.4	13.1	19.9	0.00	16.4	2.1	15.5	12.3	18.9	0.00	15.5	2.0
Black Lake	46.0	45.3	40.6	49.8	0.00	45.2	2.8	45.6	41.4	49.9	0.00	45.6	2.6
Chignik Lake	0.0	0.5	0.0	3.7	0.22	1.1	1.3	0.0	0.0	0.3	0.54	0.0	0.2
Upper Station / Akalura	1.0	0.7	0.2	1.7	0.00	0.8	0.5	0.8	0.2	1.9	0.00	0.9	0.5
Frazer	4.0	6.2	1.9	10.3	0.00	6.1	2.6	0.0	0.0	3.2	0.38	0.6	1.2
Ayakulik	4.0	2.4	0.0	6.9	0.08	2.8	2.2	7.4	4.3	10.2	0.00	7.4	1.8
Karluk	7.0	6.4	4.2	9.1	0.00	6.5	1.5	7.5	5.2	10.3	0.00	7.6	1.6
Uganik	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0	0.0	0.3	0.52	0.0	0.1
Northwest Kodiak	1.0	0.7	0.2	1.6	0.00	0.8	0.5	1.0	0.4	2.0	0.00	1.1	0.5
Afognak	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0	0.0	0.1	0.59	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.1	0.57	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Saltery	2.0	2.1	1.0	3.5	0.00	2.1	0.8	1.5	0.6	3.0	0.00	1.6	0.7
Cook Inlet	20.0	17.8	14.7	21.3	0.00	17.9	2.0	19.4	16.1	23.0	0.00	19.4	2.1
Prince William Sound	0.0	0.0	0.0	0.9	0.44	0.1	0.3	0.0	0.0	0.3	0.53	0.0	0.2
South of Cape Suckling	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.1	0.58	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

Reporting Group	True Percentage	Hypothetical June Cape Igvak Replicate 5						Average of 5 Replicates
			90% CI					
		Median	5%	95%	*P*=0	Mean	SD	
West of Chignik	15.0	13.6	10.7	16.8	0.00	13.6	1.9	15.0
Black Lake	46.0	47.6	43.3	51.9	0.00	47.6	2.6	46.2
Chignik Lake	0.0	0.4	0.0	1.8	0.20	0.6	0.6	0.2
Upper Station / Akalura	1.0	0.9	0.3	2.0	0.00	1.0	0.5	0.6
Frazer	4.0	5.1	0.3	8.4	0.02	4.8	2.4	3.2
Ayakulik	4.0	1.9	0.0	7.2	0.08	2.6	2.3	4.6
Karluk	7.0	7.2	5.0	9.9	0.00	7.3	1.5	7.1
Uganik	0.0	0.0	0.0	0.6	0.47	0.1	0.3	0.1
Northwest Kodiak	1.0	0.9	0.3	2.0	0.00	1.0	0.5	0.6
Afognak	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0
Eastside Kodiak	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0
Saltery	2.0	1.8	0.9	3.3	0.00	1.9	0.8	1.8
Cook Inlet	20.0	19.4	16.0	23.0	0.00	19.4	2.1	19.2
Prince William Sound	0.0	0.0	0.0	0.1	0.57	0.0	0.1	0.0
South of Cape Suckling	0.0	0.0	0.0	0.1	0.59	0.0	0.1	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Hypothetical June Ayakulik Replicate 1						Hypothetical June Ayakulik Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	5.0	5.0	3.3	7.2	0.00	5.1	1.2	5.0	3.2	7.3	0.00	5.1	1.2
Black Lake	5.0	4.5	2.9	6.6	0.00	4.6	1.1	4.3	2.7	6.3	0.00	4.3	1.1
Chignik Lake	0.0	0.0	0.0	0.3	0.53	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Upper Station / Akalura	15.0	14.1	11.1	17.5	0.00	14.2	1.9	14.2	11.3	17.5	0.00	14.2	1.9
Frazer	10.0	0.8	0.0	12.2	0.25	3.3	4.3	11.0	5.3	17.1	0.00	11.0	3.6
Ayakulik	30.0	39.4	30.1	45.4	0.00	38.7	4.7	30.6	24.1	37.4	0.00	30.7	4.0
Karluk	30.0	29.4	24.8	34.3	0.00	29.4	2.9	28.8	24.7	33.1	0.00	28.8	2.6
Uganik	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0	0.0	0.1	0.58	0.0	0.1
Northwest Kodiak	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0	0.0	0.1	0.58	0.0	0.1
Afognak	0.0	0.0	0.0	0.1	0.57	0.0	0.1	0.0	0.0	0.1	0.59	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.6	0.53	0.1	0.2	0.0	0.0	0.1	0.58	0.0	0.1
Saltery	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Cook Inlet	5.0	4.3	2.7	6.3	0.00	4.4	1.1	5.6	3.6	7.9	0.00	5.6	1.3
Prince William Sound	0.0	0.0	0.0	0.1	0.57	0.0	0.1	0.0	0.0	0.1	0.58	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.1	0.58	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Hypothetical June Ayakulik Replicate 3						Hypothetical June Ayakulik Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	5.0	4.5	2.9	6.6	0.00	4.6	1.1	6.3	4.4	8.7	0.00	6.4	1.3
Black Lake	5.0	4.9	3.2	7.1	0.00	5.0	1.2	5.3	3.6	7.5	0.00	5.4	1.2
Chignik Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.4	0.53	0.1	0.2
Upper Station / Akalura	15.0	14.9	11.8	18.3	0.00	14.9	2.0	15.6	12.7	18.9	0.00	15.7	1.9
Frazer	10.0	16.4	9.8	23.8	0.00	16.5	4.3	17.5	10.8	24.5	0.00	17.5	4.1
Ayakulik	30.0	25.0	18.1	32.0	0.00	25.0	4.2	24.8	18.3	31.6	0.00	24.9	4.0
Karluk	30.0	29.6	25.0	34.4	0.00	29.6	2.8	25.3	21.1	29.8	0.00	25.4	2.6
Uganik	0.0	0.0	0.0	0.1	0.59	0.0	0.1	0.0	0.0	0.1	0.58	0.0	0.1
Northwest Kodiak	0.0	0.0	0.0	0.1	0.57	0.0	0.1	0.0	0.0	0.9	0.47	0.1	0.4
Afognak	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Saltery	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0	0.0	0.1	0.58	0.0	0.1
Cook Inlet	5.0	4.0	2.5	5.9	0.00	4.1	1.1	4.1	2.5	6.2	0.00	4.2	1.1
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.7	0.35	0.1	0.2
South of Cape Suckling	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0	0.0	0.5	0.53	0.1	0.2

Note: Stock composition estimates may not sum to 100% due to rounding error.

Reporting Group	True Percentage	Hypothetical June Ayakulik Replicate 5						Average of 5 Replicates
			90% CI					
		Median	5%	95%	*P*=0	Mean	SD	
West of Chignik	5.0	5.6	3.8	7.9	0.00	5.7	1.2	5.3
Black Lake	5.0	4.3	2.5	6.5	0.00	4.4	1.2	4.7
Chignik Lake	0.0	0.1	0.0	2.1	0.28	0.5	0.8	0.0
Upper Station / Akalura	15.0	14.6	11.5	18.0	0.00	14.6	2.0	14.7
Frazer	10.0	18.2	10.4	26.1	0.00	18.2	4.8	12.8
Ayakulik	30.0	22.2	14.8	30.3	0.00	22.3	4.7	28.4
Karluk	30.0	30.1	25.7	34.8	0.00	30.2	2.8	28.6
Uganik	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0
Northwest Kodiak	0.0	0.0	0.0	0.6	0.50	0.1	0.3	0.0
Afognak	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0
Eastside Kodiak	0.0	0.0	0.0	0.4	0.46	0.1	0.2	0.0
Saltery	0.0	0.0	0.0	0.1	0.59	0.0	0.1	0.0
Cook Inlet	5.0	3.4	2.0	5.3	0.00	3.5	1.0	4.3
Prince William Sound	0.0	0.0	0.0	0.9	0.41	0.2	0.3	0.0
South of Cape Suckling	0.0	0.0	0.0	0.7	0.29	0.2	0.3	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Hypothetical August Uganik Replicate 1						Hypothetical August Uganik Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	1.0	0.9	0.2	2.1	0.00	1.0	0.6	0.6	0.0	1.7	0.02	0.7	0.5
Black Lake	0.0	0.0	0.0	0.8	0.43	0.1	0.3	0.0	0.0	0.8	0.45	0.1	0.3
Chignik Lake	3.0	3.0	1.6	4.7	0.00	3.0	0.9	2.6	1.2	4.4	0.00	2.7	1.0
Upper Station / Akalura	5.0	2.8	1.4	4.6	0.00	2.9	1.0	4.6	2.9	6.8	0.00	4.7	1.2
Frazer	3.0	3.5	0.0	7.0	0.04	3.5	2.0	3.5	0.0	7.9	0.11	3.4	2.6
Ayakulik	10.0	10.7	7.2	14.8	0.00	10.8	2.3	9.1	5.4	13.5	0.00	9.3	2.5
Karluk	30.0	32.1	27.9	36.5	0.00	32.1	2.6	31.4	26.9	35.9	0.00	31.4	2.7
Uganik	2.0	2.0	0.9	3.5	0.00	2.0	0.8	0.6	0.0	2.0	0.12	0.7	0.7
Northwest Kodiak	2.0	1.2	0.4	2.5	0.00	1.3	0.7	1.6	0.7	3.1	0.00	1.7	0.7
Afognak	1.0	0.7	0.2	1.6	0.00	0.8	0.4	0.9	0.3	2.0	0.00	1.0	0.5
Eastside Kodiak	1.0	1.2	0.1	2.9	0.01	1.3	0.9	0.9	0.2	2.2	0.00	1.0	0.6
Saltery	23.0	22.9	19.5	26.7	0.00	23.0	2.2	24.4	20.8	28.2	0.00	24.4	2.2
Cook Inlet	17.0	15.4	12.4	18.6	0.00	15.4	1.9	16.6	13.4	20.1	0.00	16.6	2.0
Prince William Sound	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.2	0.0	1.7	0.26	0.5	0.6
South of Cape Suckling	2.0	2.5	1.3	4.1	0.00	2.6	0.8	1.6	0.7	2.9	0.00	1.6	0.7

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Hypothetical August Uganik Replicate 3						Hypothetical August Uganik Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	1.0	0.8	0.1	1.9	0.00	0.8	0.5	1.3	0.3	2.8	0.00	1.4	0.8
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Chignik Lake	3.0	2.4	1.2	4.2	0.00	2.5	0.9	2.0	0.9	3.6	0.00	2.1	0.8
Upper Station / Akalura	5.0	5.0	3.2	7.2	0.00	5.1	1.2	5.5	3.6	7.7	0.00	5.5	1.2
Frazer	3.0	0.0	0.0	1.9	0.46	0.3	0.8	10.5	5.8	16.0	0.00	10.7	3.2
Ayakulik	10.0	10.9	8.0	14.1	0.00	11.0	1.8	4.2	0.0	9.1	0.11	4.1	3.0
Karluk	30.0	32.6	28.4	36.9	0.00	32.6	2.6	29.8	25.8	34.1	0.00	29.9	2.5
Uganik	2.0	2.3	1.2	4.0	0.00	2.4	0.9	1.8	0.8	3.2	0.00	1.9	0.8
Northwest Kodiak	2.0	1.2	0.5	2.4	0.00	1.3	0.6	1.8	0.8	3.4	0.00	1.9	0.8
Afognak	1.0	0.7	0.2	1.6	0.00	0.8	0.4	1.1	0.4	2.3	0.00	1.2	0.6
Eastside Kodiak	1.0	0.5	0.1	1.6	0.01	0.6	0.5	0.0	0.0	0.8	0.34	0.2	0.3
Saltery	23.0	22.9	19.4	26.7	0.00	23.0	2.2	23.1	19.7	26.9	0.00	23.2	2.2
Cook Inlet	17.0	17.4	14.2	20.8	0.00	17.4	2.0	16.1	13.0	19.5	0.00	16.1	2.0
Prince William Sound	0.0	0.4	0.0	1.8	0.15	0.6	0.6	0.0	0.0	0.1	0.57	0.0	0.1
South of Cape Suckling	2.0	1.4	0.5	2.9	0.00	1.5	0.7	1.8	0.9	3.2	0.00	1.9	0.7

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Hypothetical August Uganik Replicate 5						
	True		90% CI					Average of 5
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Replicates
West of Chignik	1.0	0.9	0.3	2.0	0.00	1.0	0.6	0.9
Black Lake	0.0	0.9	0.0	2.3	0.07	1.0	0.7	0.2
Chignik Lake	3.0	2.2	1.0	4.0	0.00	2.3	0.9	2.4
Upper Station / Akalura	5.0	4.7	3.1	6.7	0.00	4.8	1.1	4.5
Frazer	3.0	0.0	0.0	1.4	0.49	0.2	0.6	3.5
Ayakulik	10.0	12.1	9.1	15.4	0.00	12.1	1.9	9.4
Karluk	30.0	30.3	26.1	34.7	0.00	30.3	2.6	31.2
Uganik	2.0	1.8	0.8	3.4	0.00	1.9	0.8	1.7
Northwest Kodiak	2.0	2.8	1.4	4.6	0.00	2.9	1.0	1.7
Afognak	1.0	0.8	0.3	1.9	0.00	0.9	0.5	0.9
Eastside Kodiak	1.0	0.8	0.2	1.9	0.00	0.9	0.5	0.7
Saltery	23.0	22.8	19.2	26.6	0.00	22.8	2.2	23.2
Cook Inlet	17.0	16.7	13.6	20.1	0.00	16.8	2.0	16.4
Prince William Sound	0.0	0.0	0.0	1.5	0.39	0.3	0.5	0.1
South of Cape Suckling	2.0	1.6	0.6	3.4	0.00	1.8	0.9	1.8

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Hypothetical Flat Replicate 1						Hypothetical Flat Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	6.7	5.7	3.7	8.3	0.00	5.8	1.4	7.1	4.8	9.9	0.00	7.2	1.5
Black Lake	6.7	5.1	2.9	7.8	0.00	5.2	1.5	5.5	3.3	8.2	0.00	5.6	1.5
Chignik Lake	6.7	8.0	5.4	11.1	0.00	8.1	1.7	6.2	3.9	9.0	0.00	6.3	1.6
Upper Station / Akalura	6.7	7.0	4.9	9.6	0.00	7.1	1.4	7.3	5.2	9.9	0.00	7.4	1.4
Frazer	6.7	7.7	4.0	11.5	0.00	7.7	2.3	5.5	0.7	10.2	0.02	5.5	2.8
Ayakulik	6.7	6.0	2.9	10.1	0.00	6.2	2.2	7.1	2.8	12.2	0.01	7.2	2.9
Karluk	6.7	7.0	4.5	9.8	0.00	7.0	1.6	6.5	4.1	9.3	0.00	6.5	1.6
Uganik	6.7	8.5	6.2	11.3	0.00	8.6	1.6	6.9	4.8	9.6	0.00	7.0	1.5
Northwest Kodiak	6.7	6.1	4.2	8.4	0.00	6.2	1.3	6.6	4.6	9.0	0.00	6.6	1.3
Afognak	6.7	5.6	3.8	7.7	0.00	5.6	1.2	6.6	4.7	9.0	0.00	6.7	1.3
Eastside Kodiak	6.7	5.9	3.8	8.5	0.00	6.0	1.4	6.2	4.1	8.8	0.00	6.3	1.5
Saltery	6.7	5.8	3.7	8.3	0.00	5.9	1.4	7.3	5.2	9.9	0.00	7.4	1.4
Cook Inlet	6.7	6.8	4.7	9.4	0.00	6.9	1.4	6.4	4.2	9.2	0.00	6.5	1.5
Prince William Sound	6.7	7.5	4.7	10.9	0.00	7.6	1.9	6.9	4.6	9.7	0.00	7.0	1.5
South of Cape Suckling	6.7	6.0	3.6	8.9	0.00	6.1	1.6	6.5	4.5	8.9	0.00	6.6	1.4

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Hypothetical Flat Replicate 3						Hypothetical Flat Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	6.7	5.5	3.5	8.0	0.00	5.6	1.4	5.4	3.3	8.1	0.00	5.5	1.5
Black Lake	6.7	7.3	5.1	10.1	0.00	7.4	1.5	6.5	4.0	9.4	0.00	6.6	1.6
Chignik Lake	6.7	5.5	3.4	8.0	0.00	5.6	1.4	7.2	4.7	10.3	0.00	7.3	1.7
Upper Station / Akalura	6.7	6.7	4.6	9.2	0.00	6.8	1.4	6.3	4.3	8.8	0.00	6.4	1.4
Frazer	6.7	8.6	3.9	14.4	0.00	8.8	3.2	10.1	6.5	15.2	0.00	10.4	2.6
Ayakulik	6.7	5.2	0.0	10.1	0.07	5.1	3.1	4.0	0.0	7.6	0.06	3.9	2.3
Karluk	6.7	7.5	5.1	10.4	0.00	7.6	1.6	5.8	3.6	8.6	0.00	5.9	1.5
Uganik	6.7	5.5	3.7	7.8	0.00	5.6	1.2	6.1	4.2	8.6	0.00	6.2	1.4
Northwest Kodiak	6.7	6.3	4.4	8.6	0.00	6.4	1.3	6.5	4.6	8.8	0.00	6.6	1.3
Afognak	6.7	6.4	4.4	8.8	0.00	6.5	1.3	6.1	4.2	8.3	0.00	6.1	1.2
Eastside Kodiak	6.7	6.1	3.9	8.8	0.00	6.2	1.5	7.3	5.0	10.1	0.00	7.3	1.6
Saltery	6.7	6.7	4.6	9.3	0.00	6.8	1.4	7.5	5.2	10.2	0.00	7.5	1.5
Cook Inlet	6.7	7.8	5.4	10.5	0.00	7.8	1.6	6.7	4.2	9.9	0.00	6.8	1.7
Prince William Sound	6.7	6.6	4.0	9.7	0.00	6.7	1.7	5.6	3.5	8.2	0.00	5.7	1.5
South of Cape Suckling	6.7	7.1	4.3	10.8	0.00	7.2	2.0	7.4	5.1	10.2	0.00	7.5	1.6

Note: Stock composition estimates may not sum to 100% due to rounding error.

Reporting Group	True Percentage	Hypothetical Regionally Flat Replicate 5						Average of 5 Replicates
			90% CI					
		Median	5%	95%	*P*=0	Mean	SD	
West of Chignik	6.7	6.2	4.1	8.7	0.00	6.2	1.4	6.0
Black Lake	6.7	5.8	3.5	8.5	0.00	5.9	1.5	6.0
Chignik Lake	6.7	7.0	4.5	9.9	0.00	7.1	1.7	6.8
Upper Station / Akalura	6.7	6.9	4.9	9.3	0.00	7.0	1.4	6.9
Frazer	6.7	4.6	1.1	9.3	0.01	4.8	2.5	7.3
Ayakulik	6.7	9.2	4.9	13.6	0.00	9.2	2.6	6.3
Karluk	6.7	5.2	3.2	7.8	0.00	5.3	1.4	6.4
Uganik	6.7	7.8	5.6	10.4	0.00	7.9	1.5	7.0
Northwest Kodiak	6.7	5.4	3.6	7.5	0.00	5.4	1.2	6.2
Afognak	6.7	6.0	4.1	8.2	0.00	6.0	1.2	6.1
Eastside Kodiak	6.7	7.7	5.3	10.6	0.00	7.8	1.6	6.6
Saltery	6.7	6.2	4.2	8.7	0.00	6.3	1.4	6.7
Cook Inlet	6.7	6.3	4.2	8.8	0.00	6.3	1.4	6.8
Prince William Sound	6.7	7.4	4.9	10.3	0.00	7.4	1.6	6.8
South of Cape Suckling	6.7	7.2	5.0	9.9	0.00	7.3	1.5	6.8

Note: Stock composition estimates may not sum to 100% due to rounding error.

Appendix C.–Estimates of stock composition (percentage) for 5 replicates of 100% proof tests for each reporting group included as part of the coastwide sockeye salmon genetic baseline with 46 loci. Each replicate was a sample of 200 individuals removed from the genetic baseline, except for Uganik (n = 142) and Afognak (n = 134). Estimates for each replicate describe the posterior distributions by the median, 90% credibility interval, probability that the group estimate is equal to zero (P = 0), mean and SD.

		West of Chignik Replicate 1						West of Chignik Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	P=0	Mean	SD	Median	5%	95%	P=0	Mean	SD
West of Chignik	100.0	98.4	95.0	99.8	0.00	98.0	1.6	99.0	96.6	99.9	0.00	98.8	1.1
Black Lake	0.0	0.0	0.0	0.5	0.52	0.1	0.3	0.0	0.0	0.4	0.53	0.1	0.2
Chignik Lake	0.0	0.1	0.0	2.9	0.30	0.7	1.0	0.0	0.0	0.2	0.55	0.0	0.2
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.2	0.54	0.0	0.2	0.0	0.0	0.4	0.53	0.1	0.3
Uganik	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.4	0.54	0.1	0.2
Northwest Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	2.0	0.34	0.4	0.8	0.0	0.0	0.3	0.54	0.1	0.3
Saltery	0.0	0.0	0.0	0.9	0.47	0.1	0.4	0.0	0.0	0.2	0.55	0.0	0.1
Cook Inlet	0.0	0.0	0.0	0.5	0.52	0.1	0.3	0.2	0.0	2.4	0.27	0.6	0.9
Prince William Sound	0.0	0.0	0.0	1.6	0.49	0.2	0.7	0.0	0.0	0.2	0.56	0.0	0.2
South of Cape Suckling	0.0	0.0	0.0	0.4	0.53	0.1	0.3	0.0	0.0	0.2	0.55	0.0	0.2

Note: Stock composition estimates may not sum to 100% due to rounding error.

		West of Chignik Replicate 3						West of Chignik Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	100.0	99.4	97.1	100.0	0.00	99.1	1.0	94.0	87.8	98.0	0.00	93.6	3.2
Black Lake	0.0	0.0	0.0	0.6	0.51	0.1	0.3	1.6	0.3	4.0	0.01	1.8	1.1
Chignik Lake	0.0	0.0	0.0	0.9	0.49	0.1	0.4	0.0	0.0	0.4	0.54	0.1	0.2
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.5	0.53	0.1	0.3
Frazer	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.8	0.51	0.1	0.4
Ayakulik	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	1.6	0.47	0.2	0.6
Karluk	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	2.2	0.33	0.5	0.8
Uganik	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Northwest Kodiak	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.4	0.53	0.1	0.2
Afognak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.3	0.54	0.0	0.2
Eastside Kodiak	0.0	0.0	0.0	0.4	0.53	0.1	0.3	1.2	0.0	9.0	0.24	2.7	3.2
Saltery	0.0	0.0	0.0	0.3	0.53	0.0	0.2	0.0	0.0	0.6	0.51	0.1	0.3
Cook Inlet	0.0	0.0	0.0	0.5	0.53	0.1	0.3	0.0	0.0	3.1	0.42	0.5	1.1
Prince William Sound	0.0	0.0	0.0	0.8	0.50	0.1	0.4	0.0	0.0	0.5	0.53	0.1	0.3
South of Cape Suckling	0.0	0.0	0.0	0.3	0.54	0.1	0.3	0.0	0.0	0.2	0.55	0.0	0.2

Note: Stock composition estimates may not sum to 100% due to rounding error.

Reporting Group	True Percentage	West of Chignik Replicate 5						Average of 5 Replicates
		Median	90% CI 5%	90% CI 95%	*P*=0	Mean	SD	
West of Chignik	100.0	99.3	97.2	100.0	0.00	99.0	0.9	98.0
Black Lake	0.0	0.0	0.0	0.9	0.46	0.1	0.4	0.3
Chignik Lake	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0
Upper Station / Akalura	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0
Frazer	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0
Ayakulik	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0
Karluk	0.0	0.0	0.0	0.7	0.49	0.1	0.3	0.0
Uganik	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0
Northwest Kodiak	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Eastside Kodiak	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.2
Saltery	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0
Cook Inlet	0.0	0.0	0.0	0.9	0.48	0.1	0.4	0.0
Prince William Sound	0.0	0.0	0.0	0.4	0.53	0.1	0.3	0.0
South of Cape Suckling	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Black Lake Replicate 1						Black Lake Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.3	0.56	0.0	0.2
Black Lake	100.0	99.0	96.6	99.9	0.00	98.7	1.1	99.4	97.6	100.0	0.00	99.2	0.8
Chignik Lake	0.0	0.0	0.0	0.6	0.52	0.1	0.4	0.0	0.0	0.5	0.52	0.1	0.3
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Uganik	0.0	0.0	0.0	0.4	0.53	0.1	0.3	0.0	0.0	0.4	0.53	0.1	0.2
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Eastside Kodiak	0.0	0.0	0.0	1.3	0.44	0.2	0.5	0.0	0.0	1.1	0.45	0.2	0.4
Saltery	0.0	0.0	0.0	0.4	0.52	0.1	0.2	0.0	0.0	0.4	0.53	0.1	0.2
Cook Inlet	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Prince William Sound	0.0	0.0	0.0	1.6	0.31	0.4	0.6	0.0	0.0	0.2	0.56	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.8	0.47	0.1	0.4	0.0	0.0	0.2	0.55	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Black Lake Replicate 3						Black Lake Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.1
Black Lake	100.0	99.2	96.9	100.0	0.00	98.9	1.0	99.6	98.0	100.0	0.00	99.3	0.7
Chignik Lake	0.0	0.0	0.0	0.5	0.53	0.1	0.3	0.0	0.0	0.5	0.52	0.1	0.3
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.2
Uganik	0.0	0.0	0.0	1.9	0.41	0.3	0.7	0.0	0.0	0.4	0.54	0.1	0.2
Northwest Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.2
Eastside Kodiak	0.0	0.0	0.0	0.6	0.51	0.1	0.3	0.0	0.0	0.4	0.53	0.1	0.2
Saltery	0.0	0.0	0.0	0.6	0.51	0.1	0.3	0.0	0.0	0.2	0.56	0.0	0.1
Cook Inlet	0.0	0.0	0.0	0.6	0.50	0.1	0.3	0.0	0.0	0.2	0.55	0.0	0.1
Prince William Sound	0.0	0.0	0.0	0.5	0.52	0.1	0.3	0.0	0.0	0.5	0.52	0.1	0.2
South of Cape Suckling	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.2

Note: Stock composition estimates may not sum to 100% due to rounding error.

Reporting Group	True Percentage	Black Lake Replicate 5						Average of 5 Replicates
			90% CI					
		Median	5%	95%	*P*=0	Mean	SD	
West of Chignik	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0
Black Lake	100.0	99.0	96.6	99.9	0.00	98.7	1.1	99.2
Chignik Lake	0.0	0.0	0.0	1.1	0.50	0.2	0.6	0.0
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Karluk	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Uganik	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Eastside Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Saltery	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Cook Inlet	0.0	0.0	0.0	0.5	0.52	0.1	0.3	0.0
Prince William Sound	0.0	0.1	0.0	1.8	0.28	0.4	0.7	0.0
South of Cape Suckling	0.0	0.0	0.0	1.3	0.44	0.2	0.5	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Chignik Lake Replicate 1						Chignik Lake Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Black Lake	0.0	0.0	0.0	1.1	0.49	0.2	0.5	0.0	0.0	0.9	0.50	0.1	0.5
Chignik Lake	100.0	99.3	97.0	100.0	0.00	99.0	1.0	99.5	97.6	100.0	0.00	99.2	0.8
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.7	0.48	0.1	0.3	0.0	0.0	0.2	0.56	0.0	0.1
Uganik	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.6	0.51	0.1	0.3
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Afognak	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Eastside Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Saltery	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.4	0.53	0.1	0.2
Cook Inlet	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.2	0.55	0.0	0.1
Prince William Sound	0.0	0.0	0.0	1.3	0.46	0.2	0.5	0.0	0.0	0.3	0.54	0.0	0.2
South of Cape Suckling	0.0	0.0	0.0	0.5	0.52	0.1	0.2	0.0	0.0	0.2	0.56	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Chignik Lake Replicate 3						Chignik Lake Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.3	0.53	0.1	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Black Lake	0.0	0.0	0.0	0.6	0.51	0.1	0.4	1.9	0.0	9.1	0.20	2.9	3.2
Chignik Lake	100.0	99.6	98.1	100.0	0.00	99.4	0.7	97.5	90.2	99.9	0.00	96.5	3.3
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.3	0.55	0.0	0.2
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.3	0.55	0.0	0.2
Uganik	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.3	0.54	0.0	0.2
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Saltery	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Cook Inlet	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.3	0.55	0.0	0.2
Prince William Sound	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

Reporting Group	True Percentage	Chignik Lake Replicate 5						Average of 5 Replicates
			90% CI					
		Median	5%	95%	*P*=0	Mean	SD	
West of Chignik	0.0	0.0	0.0	1.2	0.43	0.2	0.5	0.0
Black Lake	0.0	0.0	0.0	1.3	0.49	0.2	0.6	0.4
Chignik Lake	100.0	98.8	96.3	99.8	0.00	98.5	1.2	98.9
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Karluk	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Uganik	0.0	0.0	0.0	1.1	0.48	0.2	0.5	0.0
Northwest Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Afognak	0.0	0.0	0.0	0.4	0.54	0.1	0.2	0.0
Eastside Kodiak	0.0	0.0	0.0	0.6	0.51	0.1	0.3	0.0
Saltery	0.0	0.0	0.0	0.4	0.54	0.1	0.2	0.0
Cook Inlet	0.0	0.2	0.0	1.4	0.21	0.4	0.5	0.0
Prince William Sound	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0
South of Cape Suckling	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Upper Station / Akalura Replicate 1						Upper Station / Akalura Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.2	0.57	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.57	0.0	0.1
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Upper Station / Akalura	100.0	99.6	98.3	100.0	0.00	99.5	0.6	99.6	97.9	100.0	0.00	99.3	0.7
Frazer	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.7	0.50	0.1	0.3
Ayakulik	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.8	0.50	0.1	0.4
Karluk	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.4	0.53	0.1	0.3
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Northwest Kodiak	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Saltery	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Cook Inlet	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Prince William Sound	0.0	0.0	0.0	0.2	0.57	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.2	0.57	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Upper Station / Akalura Replicate 3						Upper Station / Akalura Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Upper Station / Akalura	100.0	99.6	98.2	100.0	0.00	99.4	0.6	99.6	98.3	100.0	0.00	99.5	0.6
Frazer	0.0	0.0	0.0	0.4	0.52	0.1	0.3	0.0	0.0	0.2	0.55	0.0	0.2
Ayakulik	0.0	0.0	0.0	0.4	0.53	0.1	0.3	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.5	0.53	0.1	0.3
Uganik	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Northwest Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Saltery	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Cook Inlet	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Upper Station / Akalura Replicate 5						
	True		90% CI					Average of 5
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Replicates
West of Chignik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Upper Station / Akalura	100.0	99.6	98.4	100.0	0.00	99.5	0.6	99.6
Frazer	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Karluk	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0
Uganik	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Eastside Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Saltery	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Cook Inlet	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Prince William Sound	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
South of Cape Suckling	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Frazer Replicate 1						Frazer Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.4	0.54	0.1	0.2	0.0	0.0	0.3	0.53	0.1	0.2
Black Lake	0.0	0.0	0.0	0.7	0.49	0.1	0.3	0.0	0.0	0.2	0.56	0.0	0.1
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Upper Station / Akalura	0.0	0.0	0.0	0.3	0.53	0.1	0.2	0.0	0.0	1.8	0.33	0.4	0.7
Frazer	100.0	85.1	67.6	99.6	0.00	85.2	10.6	98.3	85.9	99.9	0.00	96.4	4.8
Ayakulik	0.0	13.7	0.0	31.3	0.11	13.6	10.5	0.0	0.0	13.1	0.36	2.4	4.8
Karluk	0.0	0.0	0.0	2.7	0.41	0.5	1.0	0.0	0.0	1.4	0.46	0.2	0.6
Uganik	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.3	0.53	0.0	0.2
Northwest Kodiak	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.2
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.3	0.54	0.1	0.2
Saltery	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Cook Inlet	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.8	0.44	0.1	0.3	0.0	0.0	1.0	0.38	0.2	0.4

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Frazer Replicate 3						Frazer Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.3	0.55	0.0	0.2
Black Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.5	0.51	0.1	0.3
Chignik Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.3	0.55	0.0	0.2
Upper Station / Akalura	0.0	0.0	0.0	1.1	0.47	0.2	0.4	0.0	0.0	0.3	0.55	0.0	0.2
Frazer	100.0	80.4	64.8	99.7	0.00	81.3	10.6	97.6	77.1	99.9	0.00	93.2	8.0
Ayakulik	0.0	19.0	0.0	34.5	0.06	18.0	10.6	0.8	0.0	22.0	0.26	6.0	8.0
Karluk	0.0	0.0	0.0	0.5	0.53	0.1	0.3	0.0	0.0	1.4	0.49	0.2	0.6
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.9	0.46	0.1	0.4
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.57	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Saltery	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Cook Inlet	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

Reporting Group	True Percentage	Frazer Replicate 5						Average of 5 Replicates
			90% CI					
		Median	5%	95%	*P*=0	Mean	SD	
West of Chignik	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Black Lake	0.0	0.0	0.0	0.5	0.51	0.1	0.3	0.0
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Upper Station / Akalura	0.0	0.0	0.0	1.8	0.38	0.3	0.6	0.0
Frazer	100.0	97.8	79.0	99.9	0.00	94.2	7.3	91.8
Ayakulik	0.0	0.4	0.0	20.1	0.27	4.9	7.3	6.8
Karluk	0.0	0.0	0.0	0.8	0.51	0.1	0.4	0.0
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Northwest Kodiak	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Eastside Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Saltery	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Cook Inlet	0.0	0.0	0.0	0.2	0.57	0.0	0.1	0.0
Prince William Sound	0.0	0.0	0.0	0.2	0.57	0.0	0.1	0.0
South of Cape Suckling	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Ayakulik Replicate 1						Ayakulik Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.2	0.0	1.7	0.23	0.4	0.6	0.9	0.2	2.4	0.01	1.0	0.7
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.2
Upper Station / Akalura	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0	0.0	0.2	0.55	0.0	0.2
Frazer	0.0	0.0	0.0	14.1	0.36	2.3	4.9	0.0	0.0	11.7	0.39	1.8	4.3
Ayakulik	100.0	98.6	84.7	99.9	0.00	96.6	5.0	98.1	86.7	99.5	0.00	96.5	4.4
Karluk	0.0	0.0	0.0	0.9	0.50	0.1	0.5	0.0	0.0	1.1	0.49	0.2	0.6
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Northwest Kodiak	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.4	0.52	0.1	0.2	0.0	0.0	0.2	0.55	0.0	0.1
Saltery	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Cook Inlet	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Prince William Sound	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.3	0.55	0.1	0.2	0.0	0.0	0.2	0.56	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Ayakulik Replicate 3						Ayakulik Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.1	0.0	1.5	0.27	0.4	0.6
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Chignik Lake	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Upper Station / Akalura	0.0	0.8	0.0	2.6	0.06	1.0	0.8	0.0	0.0	0.7	0.48	0.1	0.3
Frazer	0.0	0.0	0.0	14.6	0.39	2.3	5.3	0.0	0.0	21.7	0.33	4.2	7.5
Ayakulik	100.0	98.2	83.9	99.6	0.00	96.1	5.4	97.8	77.2	99.8	0.00	94.5	7.5
Karluk	0.0	0.0	0.0	0.6	0.51	0.1	0.3	0.0	0.0	2.5	0.40	0.4	0.9
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.2
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.2
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0	0.0	0.2	0.55	0.0	0.2
Saltery	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Cook Inlet	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.3	0.53	0.1	0.2
Prince William Sound	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.2
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.2

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Ayakulik Replicate 5						
	True		90% CI					Average of 5
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Replicates
West of Chignik	0.0	0.0	0.0	0.8	0.45	0.1	0.3	0.2
Black Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Chignik Lake	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0
Upper Station / Akalura	0.0	0.0	0.0	0.6	0.50	0.1	0.3	0.2
Frazer	0.0	0.0	0.0	7.2	0.41	1.1	2.7	0.0
Ayakulik	100.0	97.5	90.5	99.5	0.00	96.7	3.1	98.0
Karluk	0.0	1.3	0.0	4.4	0.11	1.6	1.5	0.3
Uganik	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Northwest Kodiak	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0
Afognak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Eastside Kodiak	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0
Saltery	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Cook Inlet	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.2	0.0
South of Cape Suckling	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Karluk Replicate 1						Karluk Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Chignik Lake	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.1
Upper Station / Akalura	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.5	0.53	0.1	0.3
Frazer	0.0	0.0	0.0	1.8	0.45	0.3	0.7	0.0	0.0	1.6	0.48	0.2	0.8
Ayakulik	0.0	0.0	0.0	1.2	0.48	0.2	0.5	0.0	0.0	1.2	0.47	0.2	0.6
Karluk	100.0	99.4	96.9	100.0	0.00	99.0	1.0	99.4	96.9	100.0	0.00	99.0	1.1
Uganik	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Northwest Kodiak	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.3	0.53	0.1	0.2
Afognak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.2
Saltery	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Cook Inlet	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.57	0.0	0.1
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Karluk Replicate 3						Karluk Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.4	0.52	0.1	0.2	0.0	0.0	0.2	0.55	0.0	0.1
Black Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.4	0.54	0.1	0.2
Chignik Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Upper Station / Akalura	0.0	0.0	0.0	0.5	0.52	0.1	0.3	0.0	0.0	0.3	0.54	0.0	0.2
Frazer	0.0	0.0	0.0	0.5	0.52	0.1	0.3	0.0	0.0	0.7	0.51	0.1	0.4
Ayakulik	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0	0.0	0.4	0.53	0.1	0.3
Karluk	100.0	99.2	97.0	99.9	0.00	98.9	1.0	99.5	97.6	100.0	0.00	99.2	0.8
Uganik	0.0	0.0	0.0	0.5	0.52	0.1	0.3	0.0	0.0	0.4	0.54	0.1	0.2
Northwest Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.4	0.53	0.1	0.3
Afognak	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	1.6	0.36	0.3	0.6	0.0	0.0	0.4	0.54	0.1	0.2
Saltery	0.0	0.0	0.0	0.4	0.54	0.1	0.2	0.0	0.0	0.2	0.55	0.0	0.1
Cook Inlet	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.2
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.3	0.55	0.0	0.2

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Karluk Replicate 5						
	True		90% CI					Average of 5
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Replicates
West of Chignik	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Chignik Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0
Upper Station / Akalura	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0
Frazer	0.0	0.0	0.0	3.2	0.39	0.6	1.2	0.0
Ayakulik	0.0	0.0	0.0	3.4	0.35	0.7	1.2	0.0
Karluk	100.0	98.5	94.8	99.9	0.00	98.1	1.7	99.2
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Northwest Kodiak	0.0	0.0	0.0	1.3	0.43	0.2	0.5	0.0
Afognak	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0
Eastside Kodiak	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0
Saltery	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Cook Inlet	0.0	0.0	0.0	0.2	0.56	0.0	0.2	0.0
Prince William Sound	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Uganik Replicate 1						Uganik Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.5	0.53	0.1	0.3	0.0	0.0	0.5	0.52	0.1	0.3
Black Lake	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.3	0.54	0.1	0.2
Chignik Lake	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.8	0.49	0.1	0.4
Upper Station / Akalura	0.0	0.0	0.0	1.4	0.40	0.3	0.6	0.0	0.0	0.4	0.53	0.1	0.2
Frazer	0.0	0.0	0.0	0.6	0.51	0.1	0.3	0.0	0.0	1.6	0.44	0.3	0.6
Ayakulik	0.0	0.0	0.0	0.4	0.53	0.1	0.3	0.0	0.0	0.4	0.54	0.1	0.3
Karluk	0.0	0.0	0.0	1.6	0.34	0.3	0.6	0.0	0.0	1.4	0.39	0.3	0.6
Uganik	100.0	96.7	91.8	99.2	0.00	96.3	2.4	97.8	94.0	99.5	0.00	97.4	1.8
Northwest Kodiak	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.4	0.54	0.1	0.2
Afognak	0.0	0.5	0.0	2.2	0.07	0.7	0.8	0.5	0.0	2.2	0.05	0.7	0.8
Eastside Kodiak	0.0	0.0	0.0	3.4	0.43	0.5	1.4	0.0	0.0	1.2	0.49	0.2	0.6
Saltery	0.0	0.1	0.0	4.1	0.30	0.9	1.5	0.0	0.0	2.8	0.42	0.4	1.1
Cook Inlet	0.0	0.1	0.0	2.1	0.29	0.5	0.8	0.0	0.0	0.8	0.51	0.1	0.5
Prince William Sound	0.0	0.0	0.0	0.4	0.54	0.1	0.3	0.0	0.0	0.4	0.52	0.1	0.3
South of Cape Suckling	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Uganik Replicate 3						Uganik Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.4	0.52	0.1	0.3	0.0	0.0	0.5	0.52	0.1	0.3
Black Lake	0.0	0.0	0.0	0.4	0.54	0.1	0.3	0.0	0.0	0.4	0.53	0.1	0.3
Chignik Lake	0.0	0.0	0.0	0.9	0.50	0.1	0.4	0.0	0.0	0.4	0.54	0.1	0.3
Upper Station / Akalura	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	1.2	0.44	0.2	0.5
Frazer	0.0	0.0	0.0	0.8	0.50	0.1	0.4	0.0	0.0	0.5	0.52	0.1	0.3
Ayakulik	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.3	0.54	0.1	0.2
Karluk	0.0	0.0	0.0	1.1	0.44	0.2	0.4	0.0	0.0	1.3	0.42	0.2	0.5
Uganik	100.0	98.6	95.0	99.9	0.00	98.2	1.6	98.0	93.4	99.8	0.00	97.5	2.1
Northwest Kodiak	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Afognak	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Eastside Kodiak	0.0	0.0	0.0	0.5	0.53	0.1	0.3	0.0	0.0	1.1	0.49	0.2	0.7
Saltery	0.0	0.1	0.0	3.4	0.31	0.8	1.2	0.4	0.0	5.0	0.25	1.3	1.8
Cook Inlet	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.5	0.52	0.1	0.3
Prince William Sound	0.0	0.0	0.0	0.5	0.53	0.1	0.3	0.0	0.0	0.3	0.54	0.1	0.2
South of Cape Suckling	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Uganik Replicate 5						
	True		90% CI					Average of 5
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Replicates
West of Chignik	0.0	0.0	0.0	0.5	0.53	0.1	0.3	0.0
Black Lake	0.0	0.0	0.0	0.4	0.53	0.1	0.3	0.0
Chignik Lake	0.0	0.0	0.0	0.4	0.54	0.1	0.2	0.0
Upper Station / Akalura	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0
Frazer	0.0	0.0	0.0	0.4	0.54	0.1	0.2	0.0
Ayakulik	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0
Karluk	0.0	0.0	0.0	1.4	0.39	0.2	0.5	0.0
Uganik	100.0	96.6	91.1	99.7	0.00	96.2	2.8	97.5
Northwest Kodiak	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0
Afognak	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.2
Eastside Kodiak	0.0	0.0	0.0	0.8	0.50	0.1	0.5	0.0
Saltery	0.0	2.2	0.0	7.4	0.13	2.7	2.5	0.5
Cook Inlet	0.0	0.0	0.0	1.0	0.50	0.2	0.6	0.0
Prince William Sound	0.0	0.0	0.0	0.4	0.53	0.1	0.3	0.0
South of Cape Suckling	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Northwest Kodiak Replicate 1						Northwest Kodiak Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.2
Black Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Chignik Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.1
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.4	0.53	0.1	0.3
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.4	0.53	0.1	0.3
Northwest Kodiak	100.0	99.5	97.8	100.0	0.00	99.3	0.7	99.5	97.6	100.0	0.00	99.2	0.8
Afognak	0.0	0.0	0.0	0.9	0.49	0.1	0.4	0.0	0.0	0.5	0.53	0.1	0.3
Eastside Kodiak	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0	0.0	0.9	0.49	0.1	0.4
Saltery	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Cook Inlet	0.0	0.0	0.0	0.4	0.54	0.1	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.2
South of Cape Suckling	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Northwest Kodiak Replicate 3						Northwest Kodiak Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Black Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Chignik Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.6	0.52	0.1	0.3	0.0	0.0	0.3	0.54	0.1	0.2
Uganik	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Northwest Kodiak	100.0	99.5	97.5	100.0	0.00	99.2	0.8	99.6	98.2	100.0	0.00	99.4	0.6
Afognak	0.0	0.0	0.0	0.7	0.50	0.1	0.4	0.0	0.0	0.2	0.55	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.7	0.50	0.1	0.3	0.0	0.0	0.4	0.53	0.1	0.2
Saltery	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.2
Cook Inlet	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Prince William Sound	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Northwest Kodiak Replicate 5						
	True		90% CI					Average of 5
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Replicates
West of Chignik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Black Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Chignik Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Karluk	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0
Uganik	0.0	0.0	0.0	0.3	0.53	0.1	0.2	0.0
Northwest Kodiak	100.0	99.5	97.7	100.0	0.00	99.2	0.8	99.5
Afognak	0.0	0.0	0.0	0.8	0.50	0.1	0.4	0.0
Eastside Kodiak	0.0	0.0	0.0	0.6	0.52	0.1	0.3	0.0
Saltery	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0
Cook Inlet	0.0	0.0	0.0	0.3	0.55	0.1	0.2	0.0
Prince William Sound	0.0	0.0	0.0	0.4	0.54	0.1	0.2	0.0
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.2	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Afognak Replicate 1						Afognak Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.4	0.53	0.1	0.3	0.0	0.0	0.4	0.53	0.1	0.2
Black Lake	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Chignik Lake	0.0	2.6	0.0	6.7	0.08	2.8	2.1	0.0	0.0	0.4	0.53	0.1	0.3
Upper Station / Akalura	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.5	0.0	2.2	0.08	0.7	0.8
Frazer	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Ayakulik	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Karluk	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0	0.0	0.9	0.47	0.1	0.4
Uganik	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Northwest Kodiak	0.0	0.0	0.0	0.3	0.55	0.1	0.2	0.0	0.0	0.4	0.54	0.1	0.3
Afognak	100.0	96.6	92.2	99.6	0.00	96.3	2.3	98.7	96.1	99.7	0.00	98.4	1.2
Eastside Kodiak	0.0	0.0	0.0	0.9	0.51	0.1	0.5	0.0	0.0	0.8	0.51	0.1	0.4
Saltery	0.0	0.0	0.0	0.4	0.54	0.1	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Cook Inlet	0.0	0.0	0.0	0.6	0.50	0.1	0.3	0.0	0.0	0.4	0.53	0.1	0.2
Prince William Sound	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.3	0.55	0.0	0.2
South of Cape Suckling	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.3	0.55	0.0	0.2

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Afognak Replicate 3						Afognak Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	1.2	0.49	0.2	0.6	0.0	0.0	0.5	0.52	0.1	0.3
Black Lake	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Chignik Lake	0.0	0.0	0.0	0.5	0.53	0.1	0.3	0.0	0.0	0.5	0.52	0.1	0.3
Upper Station / Akalura	0.0	0.5	0.0	2.3	0.07	0.7	0.8	0.0	0.0	0.4	0.54	0.1	0.2
Frazer	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Ayakulik	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Karluk	0.0	0.0	0.0	1.0	0.48	0.1	0.4	0.0	0.0	0.4	0.54	0.1	0.2
Uganik	0.0	0.0	0.0	0.4	0.53	0.1	0.3	0.0	0.0	0.4	0.53	0.1	0.2
Northwest Kodiak	0.0	0.0	0.0	1.4	0.41	0.2	0.6	0.0	0.0	1.7	0.31	0.4	0.6
Afognak	100.0	98.3	95.4	99.7	0.00	98.0	1.4	99.1	96.7	99.9	0.00	98.8	1.1
Eastside Kodiak	0.0	0.0	0.0	0.6	0.52	0.1	0.4	0.0	0.0	0.4	0.53	0.1	0.3
Saltery	0.0	0.0	0.0	0.4	0.53	0.1	0.3	0.0	0.0	0.4	0.54	0.1	0.2
Cook Inlet	0.0	0.0	0.0	0.4	0.53	0.1	0.3	0.0	0.0	0.3	0.54	0.1	0.2
Prince William Sound	0.0	0.0	0.0	0.4	0.54	0.1	0.3	0.0	0.0	0.4	0.53	0.1	0.2
South of Cape Suckling	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.3	0.54	0.1	0.2

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Afognak Replicate 5						
	True		90% CI					Average of 5
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Replicates
West of Chignik	0.0	0.0	0.0	1.6	0.47	0.2	0.6	0.0
Black Lake	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0
Chignik Lake	0.0	0.0	0.0	1.4	0.45	0.2	0.6	0.5
Upper Station / Akalura	0.0	0.1	0.0	1.9	0.25	0.5	0.7	0.2
Frazer	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0
Ayakulik	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0
Karluk	0.0	0.2	0.0	2.8	0.27	0.7	1.0	0.0
Uganik	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0
Northwest Kodiak	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0
Afognak	100.0	98.0	95.1	99.5	0.00	97.8	1.4	98.1
Eastside Kodiak	0.0	0.0	0.0	0.7	0.52	0.1	0.4	0.0
Saltery	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0
Cook Inlet	0.0	0.0	0.0	0.6	0.51	0.1	0.3	0.0
Prince William Sound	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0
South of Cape Suckling	0.0	0.0	0.0	0.3	0.55	0.1	0.2	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Eastside Kodiak Replicate 1						Eastside Kodiak Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Black Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.9	0.47	0.1	0.4
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.6	0.0	2.2	0.13	0.7	0.8
Upper Station / Akalura	0.0	0.0	0.0	0.6	0.52	0.1	0.3	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.4	0.53	0.1	0.2
Uganik	0.0	0.0	0.0	0.6	0.51	0.1	0.3	0.0	0.0	1.0	0.47	0.1	0.4
Northwest Kodiak	0.0	0.0	0.0	1.0	0.49	0.1	0.5	0.0	0.0	0.3	0.55	0.0	0.2
Afognak	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0	0.0	0.8	0.50	0.1	0.4
Eastside Kodiak	100.0	99.1	96.8	99.9	0.00	98.9	1.0	97.9	94.6	99.5	0.00	97.6	1.6
Saltery	0.0	0.0	0.0	0.8	0.50	0.1	0.4	0.2	0.0	3.0	0.26	0.8	1.1
Cook Inlet	0.0	0.0	0.0	1.3	0.34	0.3	0.5	0.0	0.0	0.8	0.45	0.1	0.3
Prince William Sound	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.2
South of Cape Suckling	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Eastside Kodiak Replicate 3						Eastside Kodiak Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.3	0.53	0.1	0.2
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.4	0.52	0.1	0.2
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.7	0.48	0.1	0.3
Upper Station / Akalura	0.0	0.0	0.0	0.8	0.48	0.1	0.3	0.0	0.0	0.3	0.54	0.0	0.2
Frazer	0.0	0.7	0.0	2.4	0.10	0.8	0.8	0.0	0.0	0.2	0.56	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.4	0.54	0.1	0.2	0.0	0.0	0.2	0.55	0.0	0.2
Karluk	0.0	0.0	0.0	0.4	0.52	0.1	0.3	0.0	0.0	0.7	0.51	0.1	0.4
Uganik	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Northwest Kodiak	0.0	0.0	0.0	0.9	0.46	0.1	0.4	0.0	0.0	0.2	0.55	0.0	0.2
Afognak	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Eastside Kodiak	100.0	98.3	96.0	99.6	0.00	98.2	1.1	99.3	96.9	100.0	0.00	99.0	1.0
Saltery	0.0	0.0	0.0	0.5	0.53	0.1	0.3	0.0	0.0	1.5	0.47	0.2	0.7
Cook Inlet	0.0	0.0	0.0	1.1	0.34	0.2	0.4	0.0	0.0	0.3	0.54	0.1	0.2
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.3	0.54	0.0	0.2
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.2

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Eastside Kodiak Replicate 5						
	True		90% CI					Average of 5
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Replicates
West of Chignik	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Chignik Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.1
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.1
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Karluk	0.0	0.0	0.0	1.0	0.49	0.1	0.5	0.0
Uganik	0.0	0.0	0.0	0.4	0.53	0.1	0.3	0.0
Northwest Kodiak	0.0	0.0	0.0	0.6	0.53	0.1	0.4	0.0
Afognak	0.0	0.0	0.0	0.8	0.50	0.1	0.4	0.0
Eastside Kodiak	100.0	99.2	96.8	100.0	0.00	98.9	1.1	98.8
Saltery	0.0	0.0	0.0	1.2	0.47	0.2	0.6	0.0
Cook Inlet	0.0	0.0	0.0	0.7	0.47	0.1	0.3	0.0
Prince William Sound	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Saltery Replicate 1						Saltery Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.2
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Chignik Lake	0.0	0.0	0.0	0.6	0.51	0.1	0.3	0.0	0.0	0.9	0.47	0.1	0.4
Upper Station / Akalura	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.2
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.3	0.54	0.1	0.2
Uganik	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.9	0.49	0.1	0.4
Northwest Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.3	0.56	0.0	0.2	0.0	0.0	0.4	0.54	0.1	0.3
Saltery	100.0	99.5	97.7	100.0	0.00	99.2	0.8	99.4	97.5	100.0	0.00	99.2	0.8
Cook Inlet	0.0	0.0	0.0	0.6	0.52	0.1	0.3	0.0	0.0	0.4	0.52	0.1	0.2
Prince William Sound	0.0	0.0	0.0	0.6	0.50	0.1	0.3	0.0	0.0	0.3	0.55	0.0	0.2
South of Cape Suckling	0.0	0.0	0.0	0.6	0.50	0.1	0.3	0.0	0.0	0.3	0.55	0.0	0.2

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Saltery Replicate 3						Saltery Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.2	0.56	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.1
Black Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.2
Chignik Lake	0.0	0.0	0.0	0.5	0.52	0.1	0.3	0.0	0.0	0.2	0.56	0.0	0.2
Upper Station / Akalura	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Uganik	0.0	0.0	0.0	1.2	0.47	0.2	0.5	0.0	0.0	0.6	0.51	0.1	0.4
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.4	0.0	1.7	0.00	0.6	0.6
Eastside Kodiak	0.0	0.0	0.0	0.3	0.53	0.0	0.2	0.0	0.0	0.4	0.53	0.1	0.3
Saltery	100.0	99.5	97.6	100.0	0.00	99.2	0.8	99.0	97.1	99.8	0.00	98.8	0.9
Cook Inlet	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0	0.0	0.2	0.55	0.0	0.2
Prince William Sound	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

Reporting Group	True Percentage	Saltery Replicate 5						Average of 5 Replicates
			90% CI					
		Median	5%	95%	*P*=0	Mean	SD	
West of Chignik	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Black Lake	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0
Chignik Lake	0.0	0.0	0.0	0.6	0.51	0.1	0.3	0.0
Upper Station / Akalura	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Karluk	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0
Uganik	0.0	0.0	0.0	0.4	0.54	0.1	0.2	0.0
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Afognak	0.0	0.4	0.0	1.7	0.00	0.6	0.6	0.2
Eastside Kodiak	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0
Saltery	100.0	99.0	97.0	99.8	0.00	98.8	0.9	99.3
Cook Inlet	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0
Prince William Sound	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Cook Inlet Replicate 1						Cook Inlet Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	1.5	0.44	0.2	0.6	0.0	0.0	0.5	0.53	0.1	0.3
Black Lake	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Chignik Lake	0.0	0.0	0.0	0.6	0.51	0.1	0.3	0.0	0.0	1.6	0.41	0.3	0.6
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	0.0	0.0	0.0	0.4	0.52	0.1	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Ayakulik	0.0	0.0	0.0	0.2	0.54	0.0	0.1	0.0	0.0	0.3	0.54	0.1	0.2
Karluk	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.6	0.51	0.1	0.3
Uganik	0.0	0.0	0.0	0.3	0.55	0.0	0.2	1.0	0.0	3.3	0.12	1.2	1.1
Northwest Kodiak	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.2
Afognak	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.2
Eastside Kodiak	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.5	0.53	0.1	0.3
Saltery	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.8	0.50	0.1	0.3
Cook Inlet	100.0	99.3	97.2	100.0	0.00	99.0	0.9	97.8	94.7	99.5	0.00	97.5	1.5
Prince William Sound	0.0	0.0	0.0	0.4	0.53	0.1	0.3	0.0	0.0	1.1	0.50	0.2	0.6
South of Cape Suckling	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0	0.0	1.2	0.50	0.2	0.6

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Cook Inlet Replicate 3						Cook Inlet Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	6.1	0.8	11.4	0.02	6.2	3.0	1.0	0.0	4.3	0.02	1.4	1.4
Black Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.8	0.50	0.1	0.4
Chignik Lake	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.6	0.52	0.1	0.3
Upper Station / Akalura	0.0	0.0	0.0	0.4	0.52	0.1	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Frazer	0.0	0.0	0.0	1.1	0.38	0.2	0.4	0.0	0.0	0.9	0.44	0.2	0.4
Ayakulik	0.0	0.0	0.0	0.7	0.49	0.1	0.3	0.0	0.0	1.1	0.38	0.2	0.4
Karluk	0.0	0.0	0.0	0.7	0.51	0.1	0.3	0.0	0.0	0.4	0.53	0.1	0.2
Uganik	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.6	0.52	0.1	0.3
Northwest Kodiak	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.6	0.51	0.1	0.3
Afognak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	1.0	0.47	0.2	0.5	0.0	0.0	1.2	0.43	0.2	0.5
Saltery	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	1.0	0.48	0.2	0.4
Cook Inlet	100.0	92.0	86.1	97.2	0.00	91.9	3.3	97.5	93.8	99.4	0.00	97.2	1.8
Prince William Sound	0.0	0.0	0.0	4.6	0.39	0.8	1.6	0.0	0.0	0.4	0.54	0.1	0.3
South of Cape Suckling	0.0	0.0	0.0	0.9	0.51	0.2	0.6	0.0	0.0	0.3	0.55	0.1	0.2

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Cook Inlet Replicate 5						
	True		90% CI					Average of 5
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Replicates
West of Chignik	0.0	0.0	0.0	0.9	0.51	0.1	0.5	1.4
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.2	0.0
Chignik Lake	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.54	0.0	0.2	0.0
Frazer	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.2	0.0
Karluk	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0
Uganik	0.0	0.0	0.0	1.1	0.43	0.2	0.4	0.2
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Eastside Kodiak	0.0	0.0	0.0	0.2	0.54	0.0	0.2	0.0
Saltery	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0
Cook Inlet	100.0	99.4	97.3	100.0	0.00	99.1	0.9	97.2
Prince William Sound	0.0	0.0	0.0	0.3	0.55	0.1	0.2	0.0
South of Cape Suckling	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Prince William Sound Replicate 1						Prince William Sound Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.4	0.53	0.1	0.3	0.0	0.0	0.7	0.51	0.1	0.4
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.3	0.55	0.0	0.2
Chignik Lake	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Frazer	0.0	0.0	0.0	0.5	0.50	0.1	0.3	0.0	0.0	0.2	0.56	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.7	0.50	0.1	0.3	0.0	0.0	0.3	0.54	0.1	0.2
Uganik	0.0	0.0	0.0	0.4	0.54	0.1	0.2	0.0	0.0	0.3	0.54	0.1	0.2
Northwest Kodiak	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.6	0.51	0.1	0.3
Saltery	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.6	0.51	0.1	0.3
Cook Inlet	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.4	0.54	0.1	0.3
Prince William Sound	100.0	99.3	95.8	100.0	0.00	98.8	1.7	99.4	97.2	100.0	0.00	99.1	1.0
South of Cape Suckling	0.0	0.0	0.0	3.2	0.48	0.4	1.5	0.0	0.0	0.8	0.51	0.2	0.7

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Prince William Sound Replicate 3						Prince William Sound Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	1.2	0.47	0.2	0.5	0.0	0.0	0.7	0.51	0.1	0.4
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.4	0.54	0.1	0.2
Chignik Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.5	0.52	0.1	0.3
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.2	0.57	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Karluk	0.0	0.0	0.0	0.2	0.57	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Uganik	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Afognak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Saltery	0.0	0.0	0.0	0.4	0.53	0.1	0.3	0.0	0.0	0.9	0.44	0.1	0.4
Cook Inlet	0.0	0.0	0.0	3.4	0.43	0.5	1.3	0.0	0.0	1.8	0.48	0.3	0.7
Prince William Sound	100.0	99.2	94.4	100.0	0.00	98.5	1.9	99.2	96.2	100.0	0.00	98.8	1.4
South of Cape Suckling	0.0	0.0	0.0	2.6	0.46	0.4	1.3	0.0	0.0	1.4	0.49	0.3	1.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

Reporting Group	True Percentage	Prince William Sound Replicate 5						Average of 5 Replicates
			90% CI					
		Median	5%	95%	*P*=0	Mean	SD	
West of Chignik	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Chignik Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Upper Station / Akalura	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Ayakulik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Karluk	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0
Uganik	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Afognak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0
Eastside Kodiak	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0
Saltery	0.0	0.0	0.0	1.1	0.48	0.2	0.5	0.0
Cook Inlet	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0
Prince William Sound	100.0	99.1	92.9	100.0	0.00	98.1	2.4	99.2
South of Cape Suckling	0.0	0.0	0.0	6.4	0.36	1.2	2.3	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		South of Cape Suckling Replicate 1						South of Cape Suckling Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	1.0	0.43	0.2	0.4	0.0	0.0	0.2	0.55	0.0	0.2
Black Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.3	0.55	0.0	0.2
Chignik Lake	0.0	0.0	0.0	0.4	0.54	0.1	0.2	0.0	0.0	0.2	0.55	0.0	0.1
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.1
Frazer	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.5	0.51	0.1	0.3
Ayakulik	0.0	0.0	0.0	0.2	0.57	0.0	0.1	0.0	0.0	0.4	0.53	0.1	0.2
Karluk	0.0	0.0	0.0	0.2	0.55	0.0	0.2	0.0	0.0	0.2	0.55	0.0	0.2
Uganik	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.9	0.45	0.1	0.4
Northwest Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.2
Afognak	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Eastside Kodiak	0.0	0.0	0.0	0.5	0.53	0.1	0.3	0.1	0.0	2.5	0.29	0.6	0.9
Saltery	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Cook Inlet	0.0	0.0	0.0	0.4	0.53	0.1	0.3	0.0	0.0	0.4	0.53	0.1	0.2
Prince William Sound	0.0	1.1	0.0	13.7	0.23	4.4	5.1	0.0	0.0	6.3	0.31	1.4	2.2
South of Cape Suckling	100.0	97.3	85.6	99.9	0.00	94.8	5.1	98.1	92.5	99.8	0.00	97.3	2.4

Note: Stock composition estimates may not sum to 100% due to rounding error.

		South of Cape Suckling Replicate 3						South of Cape Suckling Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	1.6	0.32	0.3	0.6
Black Lake	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.6	0.52	0.1	0.3
Chignik Lake	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.7	0.50	0.1	0.3
Upper Station / Akalura	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	0.0	0.0	0.0	0.2	0.54	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Ayakulik	0.0	0.0	0.0	0.2	0.57	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Karluk	0.0	0.0	0.0	0.3	0.53	0.1	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Uganik	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.3	0.55	0.0	0.2
Northwest Kodiak	0.0	0.5	0.0	2.1	0.06	0.7	0.7	0.0	0.0	0.3	0.55	0.0	0.2
Afognak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.4	0.53	0.1	0.2
Eastside Kodiak	0.0	0.0	0.0	0.5	0.53	0.1	0.3	0.0	0.0	1.2	0.47	0.2	0.6
Saltery	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.5	0.52	0.1	0.3
Cook Inlet	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	1.1	0.46	0.2	0.4
Prince William Sound	0.0	0.0	0.0	6.8	0.42	0.9	2.6	0.2	0.0	7.3	0.29	1.9	2.6
South of Cape Suckling	100.0	98.6	91.8	99.8	0.00	97.8	2.8	97.5	91.4	99.7	0.00	96.7	2.7

Note: Stock composition estimates may not sum to 100% due to rounding error.

Reporting Group	True Percentage	South of Cape Suckling Replicate 5						Average of 5 Replicates
			90% CI					
		Median	5%	95%	*P*=0	Mean	SD	
West of Chignik	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0
Black Lake	0.0	0.8	0.0	2.4	0.07	0.9	0.8	0.1
Chignik Lake	0.0	0.2	0.0	1.7	0.22	0.4	0.6	0.0
Upper Station / Akalura	0.0	0.0	0.0	1.2	0.44	0.2	0.5	0.0
Frazer	0.0	0.0	0.0	0.7	0.49	0.1	0.3	0.0
Ayakulik	0.0	0.0	0.0	0.8	0.46	0.1	0.3	0.0
Karluk	0.0	0.2	0.0	1.5	0.18	0.4	0.5	0.0
Uganik	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0
Northwest Kodiak	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.1
Afognak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Eastside Kodiak	0.0	0.0	0.0	0.4	0.54	0.1	0.3	0.0
Saltery	0.0	0.0	0.0	1.5	0.42	0.3	0.6	0.0
Cook Inlet	0.0	0.0	0.0	0.6	0.52	0.1	0.3	0.0
Prince William Sound	0.0	0.0	0.0	3.2	0.47	0.4	1.3	0.3
South of Cape Suckling	100.0	97.1	93.3	99.0	0.00	96.8	1.8	97.7

Note: Stock composition estimates may not sum to 100% due to rounding error.

Appendix D.–Estimates of stock composition (percentage) for 5 replicates of 7 different hypothetical fishery scenario proof tests for each reporting group included as part of the coastwide sockeye salmon genetic baseline with 46 loci. Each replicate was a sample of 400 individuals removed from the genetic baseline, except for the flat (n = 390). Estimates for each replicate describe the posterior distributions by the median, 90% credibility interval, probability that the group estimate is equal to zero (P = 0), mean and SD.

		Hypothetical July Uyak Replicate 1						Hypothetical July Uyak Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	P=0	Mean	SD	Median	5%	95%	P=0	Mean	SD
West of Chignik	10.0	10.6	7.0	14.4	0.00	10.7	2.2	9.8	6.4	13.6	0.00	9.9	2.2
Black Lake	0.0	0.0	0.0	1.3	0.46	0.2	0.5	0.0	0.0	1.8	0.33	0.4	0.7
Chignik Lake	10.0	8.9	6.3	12.1	0.00	9.0	1.8	9.4	6.7	12.6	0.00	9.5	1.8
Upper Station / Akalura	0.0	0.0	0.0	0.3	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Frazer	5.0	0.4	0.0	11.6	0.27	3.2	4.2	3.7	0.0	14.3	0.21	4.8	5.1
Ayakulik	22.0	24.3	15.4	29.6	0.00	23.5	4.4	22.8	13.2	29.4	0.00	22.1	5.1
Karluk	7.0	7.9	5.0	11.3	0.00	8.0	1.9	7.4	4.6	10.6	0.00	7.5	1.8
Uganik	2.0	2.4	1.0	4.4	0.00	2.5	1.1	2.6	1.1	4.8	0.00	2.8	1.1
Northwest Kodiak	5.0	4.3	2.4	6.7	0.00	4.4	1.3	5.3	3.3	7.9	0.00	5.4	1.4
Afognak	1.0	0.3	0.0	1.2	0.07	0.4	0.4	0.6	0.1	1.8	0.00	0.8	0.5
Eastside Kodiak	1.0	0.6	0.0	5.7	0.21	1.5	2.0	0.2	0.0	1.2	0.10	0.3	0.5
Saltery	20.0	21.9	18.1	26.1	0.00	22.0	2.4	20.6	17.0	24.6	0.00	20.7	2.3
Cook Inlet	15.0	13.3	10.0	17.0	0.00	13.4	2.1	13.6	10.0	17.8	0.00	13.8	2.4
Prince William Sound	2.0	1.0	0.2	2.4	0.01	1.1	0.7	1.5	0.3	3.3	0.00	1.6	0.9
South of Cape Suckling	0.0	0.0	0.0	0.9	0.46	0.1	0.3	0.0	0.0	2.0	0.33	0.4	0.7

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Hypothetical July Uyak Replicate 3						Hypothetical July Uyak Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	10.0	9.2	6.4	12.5	0.00	9.3	1.9	9.6	6.8	12.7	0.00	9.7	1.8
Black Lake	0.0	0.7	0.0	3.6	0.22	1.1	1.3	0.0	0.0	0.8	0.49	0.1	0.3
Chignik Lake	10.0	8.6	5.7	11.8	0.00	8.6	1.9	9.6	7.0	12.6	0.00	9.7	1.7
Upper Station / Akalura	0.0	0.0	0.0	0.3	0.54	0.0	0.1	0.0	0.0	0.3	0.54	0.0	0.2
Frazer	5.0	9.3	0.0	19.5	0.08	9.2	6.3	0.1	0.0	7.9	0.32	1.7	2.8
Ayakulik	22.0	19.3	9.6	29.6	0.00	19.5	6.3	24.9	18.2	29.5	0.00	24.5	3.4
Karluk	7.0	5.7	3.4	8.7	0.00	5.8	1.6	9.0	6.3	12.2	0.00	9.1	1.8
Uganik	2.0	3.0	1.4	5.2	0.00	3.1	1.2	1.8	0.6	3.8	0.00	1.9	1.0
Northwest Kodiak	5.0	5.6	3.7	7.9	0.00	5.6	1.3	5.2	3.3	7.5	0.00	5.2	1.3
Afognak	1.0	2.1	0.6	4.1	0.00	2.2	1.1	0.9	0.2	2.2	0.00	1.0	0.6
Eastside Kodiak	1.0	0.0	0.0	0.6	0.51	0.1	0.3	0.0	0.0	0.8	0.49	0.1	0.3
Saltery	20.0	19.7	16.1	23.5	0.00	19.7	2.3	21.4	17.9	25.4	0.00	21.5	2.3
Cook Inlet	15.0	13.5	10.1	17.4	0.00	13.6	2.2	13.2	10.1	16.6	0.00	13.2	2.0
Prince William Sound	2.0	1.8	0.5	4.1	0.00	1.9	1.1	1.2	0.2	3.5	0.00	1.5	1.0
South of Cape Suckling	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.4	0.0	1.7	0.18	0.5	0.6

Note: Stock composition estimates may not sum to 100% due to rounding error.

Reporting Group	True Percentage	Hypothetical July Uyak Replicate 5						Average of 5 Replicates
			90% CI					
		Median	5%	95%	*P*=0	Mean	SD	
West of Chignik	10.0	7.7	5.3	10.6	0.00	7.8	1.6	9.4
Black Lake	0.0	0.0	0.0	0.8	0.49	0.1	0.3	0.1
Chignik Lake	10.0	9.7	7.0	12.8	0.00	9.8	1.8	9.3
Upper Station / Akalura	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Frazer	5.0	0.0	0.0	5.9	0.33	1.2	2.1	2.7
Ayakulik	22.0	24.9	19.3	29.5	0.00	24.7	3.1	23.2
Karluk	7.0	9.8	6.8	13.3	0.00	9.9	2.0	8.0
Uganik	2.0	2.6	0.8	5.1	0.00	2.8	1.3	2.5
Northwest Kodiak	5.0	4.8	3.1	7.1	0.00	4.9	1.2	5.0
Afognak	1.0	0.0	0.0	0.5	0.50	0.1	0.2	0.8
Eastside Kodiak	1.0	0.1	0.0	2.4	0.30	0.5	0.8	0.2
Saltery	20.0	21.9	18.1	26.0	0.00	21.9	2.4	21.1
Cook Inlet	15.0	14.8	11.7	18.3	0.00	14.9	2.0	13.7
Prince William Sound	2.0	1.2	0.5	2.5	0.00	1.3	0.6	1.3
South of Cape Suckling	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Hypothetical July Alitak Replicate 1						Hypothetical July Alitak Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	9.0	10.0	7.3	13.2	0.00	10.1	1.8	10.8	7.3	14.7	0.00	10.9	2.2
Black Lake	0.0	0.0	0.0	0.6	0.51	0.1	0.3	0.0	0.0	1.1	0.47	0.2	0.4
Chignik Lake	10.0	10.1	7.4	13.0	0.00	10.1	1.7	10.2	7.3	13.3	0.00	10.2	1.8
Upper Station / Akalura	10.0	8.4	5.8	11.4	0.00	8.5	1.7	9.9	7.2	13.0	0.00	10.0	1.8
Frazer	30.0	18.9	11.7	26.6	0.00	19.0	4.5	29.5	23.0	36.4	0.00	29.6	4.1
Ayakulik	15.0	25.6	18.2	33.4	0.00	25.6	4.6	15.6	9.4	22.1	0.00	15.6	3.9
Karluk	5.0	7.3	4.3	10.7	0.00	7.4	2.0	4.2	2.1	7.0	0.00	4.3	1.5
Uganik	1.0	0.5	0.0	2.0	0.13	0.7	0.7	0.0	0.0	1.5	0.39	0.3	0.6
Northwest Kodiak	1.0	0.3	0.0	1.1	0.00	0.4	0.4	0.8	0.1	2.6	0.00	1.0	0.8
Afognak	1.0	0.4	0.0	1.4	0.08	0.5	0.5	0.5	0.0	1.5	0.02	0.6	0.5
Eastside Kodiak	1.0	1.7	0.5	3.9	0.00	1.9	1.1	0.8	0.1	2.2	0.00	0.9	0.7
Saltery	2.0	2.5	1.1	4.4	0.00	2.6	1.0	2.3	1.0	4.1	0.00	2.4	0.9
Cook Inlet	15.0	12.9	9.8	16.4	0.00	12.9	2.0	13.9	10.2	18.1	0.00	14.0	2.4
Prince William Sound	0.0	0.0	0.0	0.6	0.51	0.1	0.3	0.0	0.0	0.4	0.53	0.1	0.2
South of Cape Suckling	0.0	0.0	0.0	0.1	0.57	0.0	0.1	0.0	0.0	0.2	0.57	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Hypothetical July Alitak Replicate 3						Hypothetical July Alitak Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	9.0	8.9	6.3	11.8	0.00	8.9	1.7	7.2	4.6	10.2	0.00	7.3	1.7
Black Lake	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.4	0.53	0.1	0.2
Chignik Lake	10.0	9.0	6.5	12.0	0.00	9.1	1.7	8.6	6.2	11.5	0.00	8.7	1.6
Upper Station / Akalura	10.0	9.5	6.9	12.4	0.00	9.6	1.7	11.9	9.2	15.1	0.00	12.0	1.8
Frazer	30.0	32.4	24.5	39.2	0.00	32.2	4.5	27.1	19.4	35.4	0.00	27.2	4.8
Ayakulik	15.0	14.8	9.1	22.4	0.00	15.1	4.1	18.4	10.7	26.0	0.00	18.3	4.7
Karluk	5.0	3.4	1.0	6.4	0.00	3.5	1.6	3.2	0.9	6.5	0.01	3.4	1.7
Uganik	1.0	2.4	0.9	4.4	0.00	2.5	1.1	0.0	0.0	1.3	0.44	0.2	0.5
Northwest Kodiak	1.0	0.8	0.2	1.8	0.00	0.9	0.5	1.0	0.4	2.1	0.00	1.1	0.6
Afognak	1.0	1.5	0.6	3.0	0.00	1.6	0.7	1.2	0.4	2.6	0.00	1.3	0.7
Eastside Kodiak	1.0	1.8	0.3	3.6	0.01	1.8	1.0	0.2	0.0	0.9	0.00	0.3	0.3
Saltery	2.0	1.4	0.0	3.3	0.03	1.5	1.0	4.0	2.3	6.2	0.00	4.1	1.2
Cook Inlet	15.0	12.9	9.8	16.5	0.00	13.0	2.0	15.2	11.8	18.9	0.00	15.3	2.2
Prince William Sound	0.0	0.0	0.0	0.9	0.50	0.1	0.4	0.0	0.0	1.9	0.33	0.4	0.7
South of Cape Suckling	0.0	0.0	0.0	0.3	0.56	0.1	0.3	0.0	0.0	1.2	0.43	0.2	0.5

Note: Stock composition estimates may not sum to 100% due to rounding error.

Reporting Group	True Percentage	Hypothetical July Alitak Replicate 5						Average of 5 Replicates
			90% CI					
		Median	5%	95%	*P*=0	Mean	SD	
West of Chignik	9.0	9.3	6.6	12.6	0.00	9.4	1.8	9.2
Black Lake	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0
Chignik Lake	10.0	10.3	7.7	13.4	0.00	10.4	1.7	9.6
Upper Station / Akalura	10.0	10.2	7.6	13.4	0.00	10.3	1.8	10.0
Frazer	30.0	29.4	18.2	42.4	0.00	29.9	7.6	27.5
Ayakulik	15.0	12.9	0.3	23.7	0.03	12.4	7.2	17.4
Karluk	5.0	8.7	5.6	12.6	0.00	8.8	2.1	5.4
Uganik	1.0	0.0	0.0	1.2	0.36	0.2	0.4	0.6
Northwest Kodiak	1.0	0.2	0.0	1.1	0.00	0.4	0.4	0.6
Afognak	1.0	1.0	0.3	2.2	0.00	1.1	0.6	0.9
Eastside Kodiak	1.0	0.3	0.0	1.7	0.06	0.5	0.6	1.0
Saltery	2.0	2.8	1.3	4.8	0.00	2.9	1.1	2.6
Cook Inlet	15.0	13.4	10.3	16.9	0.00	13.5	2.0	13.6
Prince William Sound	0.0	0.0	0.0	0.1	0.57	0.0	0.1	0.0
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.2	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Hypothetical August Karluk Replicate 1						Hypothetical August Karluk Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	5.0	4.4	2.7	6.8	0.00	4.5	1.3	4.5	2.9	6.5	0.00	4.6	1.1
Black Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Chignik Lake	5.0	3.9	2.1	6.3	0.00	4.0	1.3	5.0	3.2	7.3	0.00	5.1	1.2
Upper Station / Akalura	15.0	12.9	9.8	16.5	0.00	13.0	2.0	14.1	10.9	17.7	0.00	14.2	2.1
Frazer	2.0	0.0	0.0	8.8	0.35	1.7	3.2	0.0	0.0	4.4	0.42	0.7	1.6
Ayakulik	15.0	16.7	9.5	21.3	0.00	16.2	3.8	17.2	12.5	21.6	0.00	17.1	2.8
Karluk	50.0	51.5	46.0	57.0	0.00	51.5	3.3	51.8	46.6	57.0	0.00	51.8	3.1
Uganik	0.0	0.0	0.0	0.1	0.57	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Northwest Kodiak	2.0	1.9	0.7	4.0	0.00	2.1	1.0	1.2	0.4	2.5	0.00	1.3	0.6
Afognak	0.0	0.0	0.0	0.1	0.57	0.0	0.1	0.0	0.0	0.1	0.58	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.2	0.56	0.0	0.1
Saltery	4.0	4.6	2.8	6.9	0.00	4.7	1.2	3.8	2.2	5.7	0.00	3.8	1.1
Cook Inlet	2.0	1.7	0.6	3.9	0.00	1.9	1.1	1.2	0.4	2.6	0.00	1.3	0.7
Prince William Sound	0.0	0.0	0.0	0.3	0.54	0.1	0.2	0.0	0.0	0.1	0.58	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.6	0.48	0.1	0.3	0.0	0.0	0.1	0.58	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Hypothetical August Karluk Replicate 3						Hypothetical August Karluk Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	5.0	4.5	2.8	6.7	0.00	4.6	1.2	4.5	2.8	6.6	0.00	4.5	1.2
Black Lake	0.0	0.0	0.0	0.3	0.53	0.1	0.2	0.0	0.0	0.3	0.55	0.0	0.2
Chignik Lake	5.0	4.8	2.9	7.0	0.00	4.8	1.3	5.4	3.5	7.7	0.00	5.5	1.3
Upper Station / Akalura	15.0	12.6	9.5	16.1	0.00	12.7	2.0	16.2	12.8	20.0	0.00	16.3	2.2
Frazer	2.0	0.0	0.0	6.9	0.40	1.1	2.4	0.0	0.0	12.1	0.32	2.6	4.1
Ayakulik	15.0	19.7	14.1	24.3	0.00	19.6	3.1	14.4	2.6	19.3	0.02	13.3	4.8
Karluk	50.0	50.0	44.5	55.3	0.00	50.0	3.3	49.7	44.3	55.1	0.00	49.7	3.3
Uganik	0.0	0.0	0.0	0.3	0.55	0.0	0.2	0.0	0.0	0.3	0.54	0.0	0.2
Northwest Kodiak	2.0	1.1	0.4	2.5	0.00	1.2	0.7	2.4	1.2	4.3	0.00	2.5	1.0
Afognak	0.0	0.3	0.0	1.0	0.00	0.4	0.3	0.0	0.0	0.1	0.58	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0	0.0	0.6	0.51	0.1	0.3
Saltery	4.0	3.7	2.0	5.8	0.00	3.8	1.1	3.5	2.0	5.5	0.00	3.6	1.1
Cook Inlet	2.0	1.5	0.4	3.2	0.00	1.6	0.8	1.6	0.7	3.0	0.00	1.7	0.7
Prince William Sound	0.0	0.0	0.0	0.4	0.54	0.1	0.3	0.0	0.0	0.1	0.58	0.0	0.1
South of Cape Suckling	0.0	0.0	0.0	0.4	0.50	0.1	0.3	0.0	0.0	0.1	0.57	0.0	0.1

Note: Stock composition estimates may not sum to 100% due to rounding error.

Reporting Group	True Percentage	Hypothetical August Karluk Replicate 5						Average of 5 Replicates
			90% CI					
		Median	5%	95%	*P*=0	Mean	SD	
West of Chignik	5.0	4.0	2.3	6.1	0.00	4.1	1.2	4.4
Black Lake	0.0	0.0	0.0	0.6	0.50	0.1	0.3	0.0
Chignik Lake	5.0	4.5	2.8	6.8	0.00	4.6	1.2	4.7
Upper Station / Akalura	15.0	13.4	10.2	16.9	0.00	13.4	2.0	13.8
Frazer	2.0	0.0	0.0	5.5	0.39	0.9	2.0	0.0
Ayakulik	15.0	18.4	13.2	22.8	0.00	18.2	3.0	17.3
Karluk	50.0	48.7	43.4	54.0	0.00	48.7	3.2	50.4
Uganik	0.0	0.0	0.0	0.3	0.54	0.0	0.2	0.0
Northwest Kodiak	2.0	1.9	0.7	3.8	0.00	2.0	1.0	1.7
Afognak	0.0	0.2	0.0	0.9	0.00	0.3	0.3	0.1
Eastside Kodiak	0.0	0.0	0.0	1.5	0.46	0.2	0.5	0.0
Saltery	4.0	4.4	2.6	6.5	0.00	4.4	1.2	4.0
Cook Inlet	2.0	2.7	1.3	4.7	0.00	2.8	1.0	1.7
Prince William Sound	0.0	0.0	0.0	0.2	0.57	0.0	0.1	0.0
South of Cape Suckling	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Hypothetical June Cape Igvak Replicate 1						Hypothetical June Cape Igvak Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	15.0	12.3	9.1	16.0	0.00	12.4	2.1	15.6	10.8	21.1	0.00	15.7	3.1
Black Lake	46.0	46.0	41.5	50.5	0.00	46.0	2.7	46.3	41.7	51.0	0.00	46.3	2.8
Chignik Lake	0.0	0.0	0.0	1.3	0.47	0.2	0.5	0.0	0.0	1.4	0.47	0.2	0.6
Upper Station / Akalura	1.0	0.0	0.0	0.2	0.55	0.0	0.1	0.2	0.0	1.1	0.12	0.4	0.4
Frazer	4.0	3.1	0.0	9.0	0.12	3.5	3.0	0.1	0.0	3.4	0.30	0.8	1.3
Ayakulik	4.0	4.8	0.0	9.1	0.09	4.6	2.9	7.6	4.6	10.5	0.00	7.6	1.8
Karluk	7.0	8.6	6.0	11.7	0.00	8.7	1.7	5.6	3.3	8.4	0.00	5.7	1.6
Uganik	0.0	0.0	0.0	1.5	0.43	0.2	0.6	0.5	0.0	2.6	0.22	0.8	0.9
Northwest Kodiak	1.0	0.7	0.1	2.0	0.00	0.8	0.6	0.0	0.0	0.9	0.41	0.2	0.4
Afognak	0.0	0.0	0.0	0.1	0.57	0.0	0.1	0.0	0.0	0.1	0.58	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.6	0.52	0.1	0.3	0.0	0.0	0.6	0.49	0.1	0.3
Saltery	2.0	3.5	1.9	5.6	0.00	3.6	1.1	1.9	0.7	3.6	0.00	2.0	0.9
Cook Inlet	20.0	19.3	15.7	23.3	0.00	19.3	2.3	19.4	15.3	24.4	0.00	19.6	2.8
Prince William Sound	0.0	0.0	0.0	2.1	0.41	0.4	0.8	0.1	0.0	2.6	0.31	0.6	0.9
South of Cape Suckling	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	0.3	0.55	0.0	0.2

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Hypothetical June Cape Igvak Replicate 3						Hypothetical June Cape Igvak Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	15.0	17.2	13.6	21.2	0.00	17.3	2.3	14.3	11.1	18.1	0.00	14.4	2.1
Black Lake	46.0	44.2	39.5	49.0	0.00	44.2	2.9	45.3	40.9	49.8	0.00	45.3	2.7
Chignik Lake	0.0	0.0	0.0	3.3	0.36	0.7	1.2	0.0	0.0	0.3	0.53	0.1	0.2
Upper Station / Akalura	1.0	0.0	0.0	1.0	0.37	0.2	0.4	1.1	0.4	2.4	0.00	1.2	0.6
Frazer	4.0	9.9	7.0	13.1	0.00	10.0	1.8	0.0	0.0	7.6	0.35	1.6	2.7
Ayakulik	4.0	0.0	0.0	1.4	0.44	0.2	0.6	7.0	0.9	10.4	0.02	6.5	2.8
Karluk	7.0	5.9	3.3	9.2	0.00	6.0	1.8	7.7	5.0	11.0	0.00	7.8	1.8
Uganik	0.0	0.0	0.0	0.9	0.49	0.1	0.4	0.0	0.0	0.3	0.54	0.0	0.2
Northwest Kodiak	1.0	0.4	0.1	1.3	0.00	0.5	0.4	1.3	0.5	2.5	0.00	1.4	0.6
Afognak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.6	0.52	0.1	0.3	0.0	0.0	0.2	0.56	0.0	0.2
Saltery	2.0	2.5	1.2	4.4	0.00	2.6	1.0	1.6	0.4	3.2	0.00	1.6	0.9
Cook Inlet	20.0	16.9	13.5	20.8	0.00	17.0	2.2	19.3	15.8	23.1	0.00	19.4	2.2
Prince William Sound	0.0	0.3	0.0	2.5	0.24	0.7	0.9	0.0	0.0	2.2	0.31	0.5	0.8
South of Cape Suckling	0.0	0.0	0.0	1.5	0.44	0.2	0.6	0.0	0.0	0.5	0.52	0.1	0.3

Note: Stock composition estimates may not sum to 100% due to rounding error.

Reporting Group	True Percentage	Hypothetical June Cape Igvak Replicate 5						Average of 5 Replicates
			90% CI					
		Median	5%	95%	*P*=0	Mean	SD	
West of Chignik	15.0	11.9	9.1	15.3	0.00	12.0	1.9	14.3
Black Lake	46.0	48.7	44.3	53.2	0.00	48.8	2.7	46.1
Chignik Lake	0.0	0.0	0.0	1.2	0.43	0.2	0.5	0.0
Upper Station / Akalura	1.0	1.2	0.4	2.5	0.00	1.3	0.6	0.5
Frazer	4.0	5.9	2.2	9.4	0.01	5.9	2.2	3.8
Ayakulik	4.0	1.9	0.0	5.4	0.11	2.1	1.8	4.3
Karluk	7.0	6.9	4.4	9.9	0.00	7.0	1.6	7.0
Uganik	0.0	0.0	0.0	0.5	0.52	0.1	0.2	0.1
Northwest Kodiak	1.0	0.9	0.3	2.0	0.00	1.0	0.5	0.7
Afognak	0.0	0.0	0.0	0.2	0.57	0.0	0.1	0.0
Eastside Kodiak	0.0	0.0	0.0	0.3	0.52	0.0	0.2	0.0
Saltery	2.0	1.6	0.6	3.1	0.00	1.6	0.8	2.2
Cook Inlet	20.0	19.8	16.2	23.6	0.00	19.9	2.3	18.9
Prince William Sound	0.0	0.0	0.0	0.2	0.56	0.0	0.2	0.1
South of Cape Suckling	0.0	0.0	0.0	0.2	0.57	0.0	0.1	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Hypothetical June Ayakulik Replicate 1						Hypothetical June Ayakulik Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	5.0	4.3	2.5	6.6	0.00	4.4	1.2	5.4	2.9	8.8	0.00	5.6	1.8
Black Lake	5.0	4.5	2.8	6.6	0.00	4.6	1.2	3.6	2.0	5.7	0.00	3.7	1.1
Chignik Lake	0.0	0.0	0.0	0.4	0.53	0.1	0.2	0.0	0.0	0.9	0.47	0.1	0.3
Upper Station / Akalura	15.0	13.5	10.1	17.3	0.00	13.6	2.2	15.4	12.2	18.9	0.00	15.5	2.1
Frazer	10.0	0.0	0.0	8.1	0.39	1.3	2.9	5.8	0.0	16.3	0.18	6.1	5.7
Ayakulik	30.0	39.3	31.8	44.7	0.00	38.9	4.0	35.5	25.2	43.7	0.00	35.1	5.8
Karluk	30.0	32.9	27.8	38.3	0.00	33.0	3.2	28.8	24.2	33.8	0.00	28.8	2.9
Uganik	0.0	0.0	0.0	0.6	0.47	0.1	0.2	0.0	0.0	0.1	0.57	0.0	0.1
Northwest Kodiak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.1	0.57	0.0	0.1
Afognak	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.1	0.57	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.7	0.44	0.1	0.3	0.0	0.0	0.2	0.57	0.0	0.1
Saltery	0.0	0.0	0.0	1.0	0.35	0.2	0.4	0.0	0.0	0.1	0.58	0.0	0.1
Cook Inlet	5.0	3.6	2.0	5.8	0.00	3.7	1.2	4.6	2.6	7.2	0.00	4.7	1.4
Prince William Sound	0.0	0.0	0.0	0.1	0.57	0.0	0.1	0.0	0.0	0.9	0.47	0.1	0.3
South of Cape Suckling	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0	0.0	0.3	0.55	0.0	0.2

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Hypothetical June Ayakulik Replicate 3						Hypothetical June Ayakulik Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	5.0	3.3	1.9	5.2	0.00	3.4	1.0	3.5	1.8	5.9	0.00	3.7	1.3
Black Lake	5.0	4.6	2.9	6.8	0.00	4.7	1.2	6.1	4.1	8.6	0.00	6.2	1.4
Chignik Lake	0.0	0.0	0.0	0.5	0.52	0.1	0.2	0.0	0.0	0.7	0.51	0.1	0.3
Upper Station / Akalura	15.0	16.3	12.8	20.2	0.00	16.3	2.2	16.8	13.6	20.4	0.00	16.9	2.1
Frazer	10.0	10.1	0.0	20.8	0.06	10.1	6.4	19.8	11.2	28.6	0.00	19.9	5.3
Ayakulik	30.0	31.5	21.4	41.5	0.00	31.5	6.1	22.6	14.7	31.3	0.00	22.7	5.0
Karluk	30.0	28.8	23.7	34.3	0.00	28.9	3.2	24.8	20.2	29.8	0.00	24.9	2.9
Uganik	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0	0.0	0.8	0.46	0.1	0.3
Northwest Kodiak	0.0	0.0	0.0	0.5	0.51	0.1	0.2	0.0	0.0	0.8	0.47	0.1	0.3
Afognak	0.0	0.0	0.0	0.1	0.59	0.0	0.1	0.0	0.0	0.2	0.56	0.0	0.1
Eastside Kodiak	0.0	0.0	0.0	0.2	0.56	0.0	0.1	0.0	0.0	2.0	0.42	0.3	0.7
Saltery	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0	0.0	0.1	0.57	0.0	0.1
Cook Inlet	5.0	4.7	3.0	6.9	0.00	4.8	1.2	4.2	2.4	6.6	0.00	4.3	1.3
Prince William Sound	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.5	0.0	1.7	0.10	0.6	0.6
South of Cape Suckling	0.0	0.0	0.0	0.1	0.57	0.0	0.1	0.0	0.0	1.2	0.48	0.2	0.4

Note: Stock composition estimates may not sum to 100% due to rounding error.

Reporting Group	True Percentage	Hypothetical June Ayakulik Replicate 5						Average of 5 Replicates
			90% CI					
		Median	5%	95%	*P*=0	Mean	SD	
West of Chignik	5.0	4.8	3.1	7.1	0.00	4.9	1.2	4.3
Black Lake	5.0	4.2	2.3	6.4	0.00	4.2	1.3	4.6
Chignik Lake	0.0	0.4	0.0	2.7	0.22	0.8	0.9	0.1
Upper Station / Akalura	15.0	13.9	10.7	17.5	0.00	14.0	2.1	15.2
Frazer	10.0	16.3	7.2	25.9	0.01	16.3	5.8	10.4
Ayakulik	30.0	23.7	14.8	33.1	0.00	23.8	5.5	30.5
Karluk	30.0	31.3	26.2	36.6	0.00	31.3	3.2	29.3
Uganik	0.0	0.0	0.0	0.2	0.57	0.0	0.1	0.0
Northwest Kodiak	0.0	0.6	0.0	1.8	0.13	0.7	0.6	0.1
Afognak	0.0	0.0	0.0	0.3	0.54	0.0	0.1	0.0
Eastside Kodiak	0.0	0.0	0.0	0.2	0.57	0.0	0.1	0.0
Saltery	0.0	0.0	0.0	0.1	0.58	0.0	0.1	0.0
Cook Inlet	5.0	3.6	2.1	5.6	0.00	3.7	1.1	4.2
Prince William Sound	0.0	0.0	0.0	0.1	0.57	0.0	0.1	0.1
South of Cape Suckling	0.0	0.0	0.0	0.6	0.41	0.1	0.2	0.0

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Hypothetical August Uganik Replicate 1						Hypothetical August Uganik Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	1.0	0.9	0.2	2.3	0.00	1.0	0.7	1.8	0.0	3.6	0.03	1.8	1.1
Black Lake	0.0	0.0	0.0	0.8	0.47	0.1	0.3	0.0	0.0	1.1	0.45	0.2	0.4
Chignik Lake	3.0	3.3	1.7	5.4	0.00	3.4	1.1	1.9	0.4	4.0	0.01	2.0	1.1
Upper Station / Akalura	5.0	3.3	1.7	5.4	0.00	3.4	1.1	4.2	2.5	6.5	0.00	4.3	1.2
Frazer	3.0	0.2	0.0	5.3	0.28	1.3	1.9	0.7	0.0	9.8	0.25	2.8	3.5
Ayakulik	10.0	13.8	9.3	17.9	0.00	13.7	2.6	9.5	2.8	14.0	0.01	9.0	3.4
Karluk	30.0	31.5	26.8	36.2	0.00	31.5	2.8	32.6	27.9	37.4	0.00	32.6	2.9
Uganik	2.0	2.9	1.3	5.0	0.00	3.0	1.1	1.8	0.5	3.7	0.00	1.9	1.0
Northwest Kodiak	2.0	2.6	1.1	4.6	0.00	2.7	1.1	0.7	0.1	2.1	0.02	0.9	0.6
Afognak	1.0	0.5	0.1	1.4	0.00	0.6	0.4	1.1	0.4	2.4	0.00	1.2	0.6
Eastside Kodiak	1.0	0.0	0.0	2.5	0.47	0.3	0.9	0.7	0.0	2.3	0.14	0.8	0.8
Saltery	23.0	22.3	18.6	26.3	0.00	22.4	2.3	25.1	21.2	29.2	0.00	25.1	2.4
Cook Inlet	17.0	14.2	11.1	17.7	0.00	14.3	2.0	15.5	12.3	19.2	0.00	15.6	2.1
Prince William Sound	0.0	0.0	0.0	1.6	0.50	0.2	0.7	0.0	0.0	0.5	0.44	0.1	0.2
South of Cape Suckling	2.0	2.0	0.5	3.9	0.01	2.1	1.0	1.6	0.6	3.0	0.00	1.6	0.7

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Hypothetical August Uganik Replicate 3						Hypothetical August Uganik Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	1.0	1.0	0.0	2.9	0.09	1.1	0.9	0.8	0.1	2.0	0.00	0.9	0.6
Black Lake	0.0	0.0	0.0	0.2	0.55	0.0	0.1	0.0	0.0	0.2	0.55	0.0	0.1
Chignik Lake	3.0	2.8	1.4	4.8	0.00	2.9	1.1	2.7	1.3	4.8	0.00	2.8	1.1
Upper Station / Akalura	5.0	4.9	3.0	7.4	0.00	5.0	1.4	5.5	3.4	7.9	0.00	5.5	1.4
Frazer	3.0	0.0	0.0	4.5	0.41	0.8	1.8	11.5	0.2	17.8	0.03	10.7	5.0
Ayakulik	10.0	11.2	7.1	14.8	0.00	11.1	2.5	3.7	0.0	14.4	0.15	4.9	4.9
Karluk	30.0	32.6	27.9	37.3	0.00	32.6	2.8	29.6	25.0	34.3	0.00	29.6	2.8
Uganik	2.0	2.3	0.8	4.5	0.00	2.4	1.1	1.6	0.3	3.4	0.01	1.7	0.9
Northwest Kodiak	2.0	1.1	0.4	2.3	0.00	1.2	0.6	1.6	0.6	3.1	0.00	1.7	0.8
Afognak	1.0	0.8	0.2	1.8	0.00	0.9	0.5	1.2	0.4	2.7	0.00	1.4	0.7
Eastside Kodiak	1.0	0.0	0.0	1.5	0.33	0.3	0.6	0.5	0.0	5.1	0.23	1.5	1.8
Saltery	23.0	22.9	19.2	26.9	0.00	22.9	2.4	23.3	19.5	27.4	0.00	23.4	2.4
Cook Inlet	17.0	15.5	12.0	19.3	0.00	15.5	2.2	13.6	10.2	17.3	0.00	13.7	2.1
Prince William Sound	0.0	1.9	0.1	4.2	0.03	2.0	1.2	0.7	0.0	3.0	0.23	1.0	1.1
South of Cape Suckling	2.0	1.0	0.2	2.6	0.00	1.2	0.8	0.8	0.1	3.8	0.00	1.3	1.2

Note: Stock composition estimates may not sum to 100% due to rounding error.

Reporting Group	True Percentage	Hypothetical August Uganik Replicate 5						Average of 5 Replicates
			90% CI					
		Median	5%	95%	*P*=0	Mean	SD	
West of Chignik	1.0	1.6	0.3	3.4	0.00	1.7	1.0	1.2
Black Lake	0.0	0.0	0.0	2.0	0.31	0.5	0.7	0.0
Chignik Lake	3.0	2.8	1.4	4.8	0.00	2.9	1.0	2.7
Upper Station / Akalura	5.0	5.8	3.8	8.3	0.00	5.9	1.4	4.8
Frazer	3.0	0.0	0.0	4.9	0.42	0.7	1.8	2.5
Ayakulik	10.0	13.4	9.0	17.3	0.00	13.4	2.5	10.3
Karluk	30.0	28.1	23.7	33.0	0.00	28.2	2.8	30.9
Uganik	2.0	2.3	0.7	4.5	0.01	2.4	1.1	2.2
Northwest Kodiak	2.0	3.0	1.1	5.3	0.00	3.1	1.3	1.8
Afognak	1.0	0.7	0.1	1.8	0.00	0.8	0.5	0.9
Eastside Kodiak	1.0	0.0	0.0	0.5	0.49	0.1	0.2	0.2
Saltery	23.0	21.7	17.9	25.7	0.00	21.7	2.4	23.0
Cook Inlet	17.0	17.1	13.6	20.9	0.00	17.1	2.2	15.2
Prince William Sound	0.0	0.0	0.0	1.7	0.42	0.3	0.6	0.5
South of Cape Suckling	2.0	1.0	0.4	2.3	0.00	1.1	0.6	1.3

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Hypothetical Flat Replicate 1						Hypothetical Flat Replicate 2					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	6.7	3.5	1.9	5.6	0.00	3.6	1.1	6.8	3.9	10.4	0.00	6.9	2.0
Black Lake	6.7	5.0	2.5	8.2	0.00	5.1	1.7	5.1	2.6	8.1	0.00	5.2	1.7
Chignik Lake	6.7	7.8	5.0	11.1	0.00	7.9	1.9	6.8	3.8	10.3	0.00	6.9	2.0
Upper Station / Akalura	6.7	7.2	4.8	10.0	0.00	7.2	1.6	8.4	5.9	11.3	0.00	8.5	1.7
Frazer	6.7	8.9	1.4	15.0	0.02	8.9	3.8	6.2	1.7	11.2	0.02	6.3	2.8
Ayakulik	6.7	6.3	0.0	13.0	0.03	6.5	3.5	6.0	0.0	11.1	0.03	6.0	3.0
Karluk	6.7	5.8	3.1	9.2	0.00	6.0	1.9	6.9	3.9	10.5	0.00	7.0	2.0
Uganik	6.7	10.1	7.2	13.5	0.00	10.2	1.9	6.2	3.9	9.0	0.00	6.3	1.6
Northwest Kodiak	6.7	6.5	4.4	9.1	0.00	6.6	1.4	5.3	3.3	7.8	0.00	5.4	1.4
Afognak	6.7	5.2	3.4	7.5	0.00	5.3	1.2	6.9	4.6	9.7	0.00	7.0	1.6
Eastside Kodiak	6.7	4.7	2.6	7.4	0.00	4.8	1.5	6.2	3.7	9.9	0.00	6.4	1.9
Saltery	6.7	6.7	4.2	9.8	0.00	6.8	1.7	7.2	4.7	10.3	0.00	7.3	1.7
Cook Inlet	6.7	7.1	4.6	10.4	0.00	7.3	1.8	6.7	4.1	10.3	0.00	6.9	1.9
Prince William Sound	6.7	8.7	5.0	12.6	0.00	8.7	2.3	6.6	3.5	10.3	0.00	6.7	2.1
South of Cape Suckling	6.7	4.8	2.7	8.3	0.00	5.1	1.8	6.9	4.3	10.3	0.00	7.1	1.9

Note: Stock composition estimates may not sum to 100% due to rounding error.

		Hypothetical Flat Replicate 3						Hypothetical Flat Replicate 4					
	True		90% CI						90% CI				
Reporting Group	Percentage	Median	5%	95%	*P*=0	Mean	SD	Median	5%	95%	*P*=0	Mean	SD
West of Chignik	6.7	5.3	3.3	8.0	0.00	5.4	1.4	4.9	2.9	7.6	0.00	5.0	1.5
Black Lake	6.7	7.8	5.3	10.7	0.00	7.9	1.6	6.9	4.0	10.3	0.00	7.0	1.9
Chignik Lake	6.7	6.0	3.7	8.9	0.00	6.1	1.6	8.0	4.8	11.9	0.00	8.1	2.2
Upper Station / Akalura	6.7	7.3	4.8	10.2	0.00	7.3	1.6	5.3	3.4	7.8	0.00	5.4	1.4
Frazer	6.7	5.1	0.0	14.4	0.09	5.8	4.7	14.3	10.4	18.3	0.00	14.3	2.4
Ayakulik	6.7	8.2	0.0	14.6	0.05	7.9	4.5	0.0	0.0	2.1	0.46	0.3	0.9
Karluk	6.7	7.8	5.0	11.2	0.00	7.9	1.9	6.8	3.6	10.5	0.00	6.9	2.1
Uganik	6.7	5.0	3.1	7.3	0.00	5.1	1.3	5.2	3.2	7.8	0.00	5.3	1.4
Northwest Kodiak	6.7	6.3	4.2	8.8	0.00	6.4	1.4	6.9	4.7	9.5	0.00	7.0	1.4
Afognak	6.7	6.9	4.6	9.6	0.00	7.0	1.6	5.1	3.3	7.5	0.00	5.2	1.3
Eastside Kodiak	6.7	5.3	3.4	7.7	0.00	5.4	1.3	6.8	4.2	10.2	0.00	7.0	1.8
Saltery	6.7	6.8	4.6	9.6	0.00	6.9	1.5	6.7	4.2	9.8	0.00	6.8	1.7
Cook Inlet	6.7	5.8	3.6	8.5	0.00	5.9	1.5	6.8	3.8	10.8	0.00	7.0	2.1
Prince William Sound	6.7	5.4	2.1	10.2	0.00	5.7	2.5	6.3	2.0	10.9	0.00	6.4	2.6
South of Cape Suckling	6.7	9.3	5.2	13.5	0.00	9.3	2.5	7.8	4.7	13.2	0.00	8.2	2.6

Note: Stock composition estimates may not sum to 100% due to rounding error.

Reporting Group	True Percentage	Hypothetical Regionally Flat Replicate 5						Average of 5 Replicates
			90% CI					
		Median	5%	95%	*P*=0	Mean	SD	
West of Chignik	6.7	6.2	2.4	9.9	0.00	6.2	2.2	5.3
Black Lake	6.7	5.4	3.2	8.2	0.00	5.5	1.5	6.0
Chignik Lake	6.7	6.6	4.0	9.9	0.00	6.7	1.8	7.0
Upper Station / Akalura	6.7	7.1	5.0	9.7	0.00	7.2	1.4	7.0
Frazer	6.7	5.3	0.0	10.7	0.09	5.1	3.5	8.0
Ayakulik	6.7	8.9	3.9	15.2	0.01	9.2	3.5	5.9
Karluk	6.7	5.6	2.9	8.7	0.00	5.6	1.8	6.6
Uganik	6.7	8.5	6.0	11.6	0.00	8.6	1.7	7.0
Northwest Kodiak	6.7	5.5	3.6	7.8	0.00	5.5	1.3	6.1
Afognak	6.7	5.7	3.7	8.1	0.00	5.8	1.4	6.0
Eastside Kodiak	6.7	6.8	4.4	10.0	0.00	6.9	1.7	6.0
Saltery	6.7	6.0	3.8	8.8	0.00	6.1	1.6	6.7
Cook Inlet	6.7	8.0	5.4	11.0	0.00	8.1	1.7	6.9
Prince William Sound	6.7	7.4	4.8	10.7	0.00	7.5	1.8	6.9
South of Cape Suckling	6.7	5.9	3.5	8.7	0.00	6.0	1.6	6.9

Note: Stock composition estimates may not sum to 100% due to rounding error.