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Addendum to FMS 16-10: Redefinition of Reporting Groups to Separate Cook Inlet into Four Groups for the Genetic Stock Composition of the Commercial Harvest of Sockeye Salmon in Kodiak Management Area, 2014–2016

by

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September 2017

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 NO. 17-07

ADDENDUM TO FMS 16-10: REDEFINITION OF REPORTING GROUPS TO SEPARATE COOK INLET INTO FOUR GROUPS FOR THE GENETIC STOCK COMPOSITION OF THE COMMERCIAL HARVEST OF SOCKEYE SALMON IN KODIAK MANAGEMENT AREA, 2014–2016

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ABSTRACT

We conducted a study using mixed stock analysis (MSA) based on genetic data to estimate the stock compositions of sockeye salmon harvests in select Kodiak Management Area (KMA) commercial salmon fisheries from June through August from 2014 to 2016. This information was presented to the Alaska Board of Fisheries (BOF) in January 2017. This study showed that *nonlocal* harvest of Cook Inlet-origin sockeye salmon occurred in all 3 years, amounting to 8%, 37%, and 30% of the sampled KMA sockeye salmon harvest. The BOF asked the Alaska Department of Fish and Game to further separate Cook Inlet harvest into 4 subregional reporting groups: Kenai, Kasilof, Susitna, and Other Cook Inlet. This addendum to the original study describes additional genetic baseline testing done to verify the accuracy and precision of MSA performance for the 4 Cook Inlet subregional reporting groups and the stock-specific harvest results for the 34 of 47 spatiotemporal strata where Cook Inlet-origin fish contributed greater than 5% of the harvest. In each of the 3 years, the majority of the harvest of Cook Inlet sockeye salmon in the KMA came from the Kenai subregional reporting group. Annual stock compositions of the sampled KMA sockeye harvest ranged from 4.0–21.4% for Kenai, 1.7–6.1% for Kasilof, 0.3–4.4% for Susitna, and 0.8–4.7% for the Other Cook Inlet reporting group.

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

INTRODUCTION

STUDY BACKGROUND

The Alaska Department of Fish and Game (ADF&G) used genetic mixed stock analysis (MSA) to estimate the stock composition and stock-specific harvest of commercial sockeye salmon (*Oncorhynchus nerka*) harvests in the Kodiak Management Area (KMA) from 2014 to 2016 (Shedd et al. 2016c). The experimental design for this study was described in 2 operational plans (Foster and Dann 2014, 2015). Briefly, samples were collected from 6 sampling areas for up to 3 temporal strata in each year, for a total of 47 total strata that were analyzed across the 3 years of study. For the 3 temporal strata, the early stratum coincides with the commercial fisheries targeting early-run sockeye salmon, the middle stratum coincides with the commercial fisheries targeting early-run sockeye and/or pink and chum salmon, and the late stratum coincides with the commercial fisheries targeting late-run sockeye and/or pink and chum salmon (Foster and Dann 2015). Samples from these strata were analyzed with a genetic baseline described in Shedd et al. (2016a) and a subsequent addendum (Shedd et al. 2016b). The final baseline contained 65,332 individuals from 762 collections representing 473 populations in 14 reporting groups: 1) West of Chignik, 2) Black Lake, 3) Chignik Lake, 4) Upper Station/Akalura, 5) Ayakulik/Frazer, 6) Karluk, 7) Uganik, 8) Northwest Kodiak, 9) Afognak, 10) Eastside Kodiak, 11) Saltery (includes Spiridon), 12) Cook Inlet, 13) Prince William Sound, and 14) South of Cape Suckling. To aid in the interpretation of results, stock composition estimates were reported with 2 hierarchical levels of reporting groups: regional and subregional. The 6 regional reporting groups were 1) West of Chignik, 2) Chignik, 3) Kodiak, 4) Cook Inlet, 5) Prince William Sound, and 6) South of Cape Suckling. The Chignik regional reporting group summarized the combined estimates from the Black Lake and Chignik Lake subregional reporting groups. The Kodiak regional reporting group summarized the combined estimates from the Upper Station/Akalura, Ayakulik/Frazer, Karluk, Uganik, Northwest Kodiak, Afognak, Eastside Kodiak, and Saltery subregional reporting groups.

ALASKA BOARD OF FISHERIES REQUEST

The results from the KMA sockeye salmon genetics study were presented to the Alaska Board of Fisheries (BOF) in January 2017 at the Kodiak BOF meeting, and again in February 2017 at the

Upper Cook Inlet BOF meeting. *Nonlocal* harvest of Cook Inlet sockeye salmon was present in KMA commercial salmon fisheries from 2014 to 2016, but varied in magnitude both spatially and temporally (Shedd et al. 2016c). Given the *nonlocal* harvest of Cook Inlet sockeye salmon, the BOF asked ADF&G to further separate genetic stock composition estimates of Cook Inlet harvest into 4 subregional reporting groups: Kenai, Kasilof, Susitna, and Other Cook Inlet (Barclay and Habicht 2012). The BOF asked ADF&G to use their professional judgement to determine how to conduct these analyses and what level of detail to provide. Estimates at the subregional reporting group level provide information on whether KMA commercial fisheries selectively harvested differential components of Cook Inlet sockeye salmon stocks among fishing strata.

SEPARATING COOK INLET INTO FOUR SUBREGIONAL REPORTING GROUPS

These *post hoc* genetic stock composition analyses were agreed to by ADF&G, provided that 5 criteria were met: 1) clear statement of objectives, 2) adequate representation in the genetic baseline, 3) acceptable accuracy and precision (±5% of true value 90% of the time) of reporting group identification, 4) reporting groups of interest present at 5% or more of the harvest, and 5) the value of the new information is worth the additional expense.[1] ADF&G determined that the criteria were met, so long as the reduced SNP marker set used in this study could adequately distinguish the Cook Inlet subregional reporting groups (Barclay and Habicht 2012 used 96 SNPs, whereas this study used a reduced set of 48 SNPs). ADF&G also determined that Cook Inlet subregional stock composition estimates would only be provided for spatiotemporal strata with Cook Inlet contributions of 5% or greater. This latter determination was based on the high relative uncertainty associated with low stock contribution estimates.

MEDIANS

Misallocation to reporting groups that are either absent or at low proportions within mixture samples occurs with MSA when the discriminant methods do not produce perfect identifiability (Pella and Milner 1987; Xu et al. 1994; Pella and Masuda 2001). Medians provide a less upwardly biased point estimate than means for distributions of stock composition with low stock proportions. For stock composition estimates of small contributors, the mean is biased high, whereas for large contributors, the median is biased low. Medians have been reported in previous ADF&G genetics studies (i.e., Habicht et al. 2012) and the initial study (Shedd et al. 2016c), and are reported in this addendum. Unlike means, medians summed across strata provide low estimates for the median of multiple combined strata. For example, summed medians for sockeye fisheries along the Alaska Peninsula and Bristol Bay were downwardly biased by 0–3% when calculating the total for fishery mixtures (Habicht et al. 2012). Therefore, accurate (unbiased) medians for grouped strata must be estimated each time strata are combined.

[1] Habicht, C. 2017. Memorandum. Alaska Department of Fish and Game, Division of Commercial Fisheries, Gene Conservation Laboratory, Guidelines for MSA reanalysis under new objectives, Anchorage.

OBJECTIVES

This document describes the reanalysis of data from the original study (Shedd et al. 2016c) and has 3 objectives:

1. Determine if the genetic baseline for this study based on 48 SNPs can precisely and accurately separate Cook Inlet-origin fish into 4 subregional reporting groups: Kenai, Kasilof, Susitna, and Other Cook Inlet.
2. Report MSA results of stock compositions and stock-specific harvests of sockeye salmon sampled from select commercial salmon fisheries in the KMA from 2014 to 2016 for the 4 Cook Inlet subregional reporting groups in spatiotemporal strata where Cook Inlet-origin fish were greater than 5% of the harvest.
3. Characterize when and where Cook Inlet-origin sockeye salmon stocks were harvested from select commercial fisheries in the KMA, 2014–2016.

METHODS

STATISTICAL ANALYSIS

Separation of Cook Inlet into Four Subregional Reporting Groups

Cook Inlet populations in the genetic baseline for this study (Shedd et al. 2016a; Shedd et al. 2016b) were divided into 4 subregional reporting groups: Kenai, Kasilof, Susitna, and Other Cook Inlet according to Barclay and Habicht (2012).

Baseline Evaluation for MSA

Self-assignment Likelihood Profiles

Using the 48 SNPs (46 loci) screened for the mixture samples, we computed a *likelihood profile* of the baseline, or the self-assignment probability for each individual within populations within reporting groups, for the 4 Cook Inlet subregional 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 between reporting groups in fishery mixtures.

100% Proof Tests

In order to assess the identifiability of the 4 Cook Inlet subregional reporting groups using the 48 SNPs (46 loci) screened in the mixture samples, we used *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 the precision and accuracy of assignments given different mixture draws. The ADF&G Gene Conservation Lab 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).

Estimating Stock Compositions and Stock-Specific Harvests

Previous stock composition results estimated using the Bayesian Pella-Masuda Model as implemented in the program *BAYES* (Pella and Masuda 2001) and reported in Shedd et al. (2016c) were resummarized to provide estimates for the 4 Cook Inlet subregional reporting groups. Briefly, .RGN output files from all *BAYES* chains, each containing Markov Chain Monte Carlo (MCMC) samples of stock-group (population) proportions, were imported into *R* version 3.4.0[2] and stock compositions were summed up over all populations in each of the 4 Cook Inlet subregional reporting groups. We combined the second halves of MCMC chains from each mixture to form the posterior distribution and tabulated median and mean estimates, 90% credibility intervals, the probability of an estimate being equal to zero, and standard deviations from a total of 100,000 iterations. For each tabulated measure, summary statistics were based upon the raw posterior, which was calculated out to 6 significant digits. We calculated stock-specific harvests in the manner described by Dann et al. (2009) and used in Shedd et al. (2016c). In tables and text, we report Cook Inlet subregional reporting group estimates only for spatiotemporal strata where Cook Inlet reporting group exceeded 5% of the harvest. We also report these subregional reporting group estimates for combined spatiotemporal strata where at least one of the contributing strata exceeded 5% for the Cook Inlet reporting group. We report both medians and means for stock composition and stock-specific harvest for all strata in the appendices, but report only medians in the tables and text.

RESULTS

STATISTICAL ANALYSIS

Baseline Evaluation for Mixed Stock Analysis

Self-assignment Likelihood Profiles

A matrix of the overall self-assignment probability of individuals to a reporting group (likelihood profile) indicates that the 4 Cook Inlet subregional reporting groups are identifiable with minimal evidence of directional biases (Figure 1). Overall self-assignment probabilities of individuals back to their group averaged 0.75, and ranged from 0.69 to 0.83 for the 4 Cook Inlet subregional reporting groups.

100% Proof Tests

Correct allocations for 100% proof tests averaged 98.8%, and medians ranged from 97.3% to 99.6% for the 4 Cook Inlet subregional reporting groups (Figure 2). Within these groups, correct allocations averaged 99.2% (Kenai), 99.5% (Kasilof), 98.5% (Susitna), and 98.1% (Other Cook Inlet).

Stock Compositions and Stock-Specific Harvests

Stock compositions and stock-specific sockeye salmon harvests were resummarized for the 4 Cook Inlet subregional reporting groups and are reported for 34 of the 47 spatiotemporal strata that had at least 5% harvest of Cook Inlet-origin fish. Results are first presented by sampling area (Figure 3) and then by reporting group, primarily focusing on the new data for the 4 Cook Inlet

[2] R Core Team. 2017. R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. Available from https://www.R-project.org/.

subregional groups (see the original study, Shedd et al. 2016c, for a more comprehensive summary of all reporting groups).

Estimates by Sampling Area

Uganik-Kupreanof (253-11, 12, 13, 14, 31, 32, 33, 34, 35)

Early stratum harvests of Cook Inlet-origin fish were typically smaller than middle and late strata harvests (Tables 1–9; Figure 4; Appendix A1–12).

In 2014, harvest of Cook Inlet-origin fish never exceeded 5% in any of the 3 temporal strata (Appendix A1–4) and therefore no estimates are provided for Cook Inlet subregional reporting groups.

For the early stratum of 2015, the overall Cook Inlet regional reporting group harvest was 8.2%; no subregional reporting group exceeded 5% (Appendix A5). For the middle stratum, the overall Cook Inlet harvest increased to 17.5%; only the Kenai (7.2%) and Susitna (5.5%) subregional reporting groups exceeded 5% (Appendix A6). For the late stratum, the overall Cook Inlet harvest increased to 31.2%; only the Kenai subregional reporting group exceeded 5% (24.2%; Appendix A7). Overall, for 2015, stock-specific harvest of Cook Inlet-origin fish in the Uganik-Kupreanof sampling area was estimated at 85,382 fish; only the Kenai subregional reporting group exceeded 5% (13.0%; 50,771 fish; Appendix A8; Figure 4).

In 2016, the early stratum harvests of Cook Inlet-origin fish remained smaller than in the middle and late stratum (7.3%); no subregional reporting group exceeded 5% (Appendix A9). Similar to 2015, Cook Inlet-origin fish increased in the middle stratum to 26.1% of the harvest, and included Kenai (13.2%), Susitna (5.6%), and Other Cook Inlet (5.4%) subregional reporting groups (Appendix A10). Stock proportions remained steady in the late stratum with 24.3% Cook Inlet-origin fish; only the Kenai subregional reporting group exceeded 5% (17.4%; Appendix A11). The total stock-specific harvest of Cook Inlet-origin fish in the Uganik-Kupreanof sampling area in 2016 was 74,674 fish; only the Kenai subregional reporting group exceeded 5% (12.6%; 43,085 fish; Appendix A12; Figure 4).

Uyak (254-10, 20, 21, 30, 31, 40, 41)

The stock composition in the Uyak sampling area was similar to the Uganik-Kupreanof sampling area—a lower Cook Inlet harvest in 2014 and in the early temporal strata of 2015 and 2016, and a higher harvest in the middle and late temporal strata of 2015 and 2016 (Tables 1–9; Figure 5; Appendix A13–24).

In 2014, Cook Inlet-origin fish only exceeded 5% of the harvest during the middle temporal stratum when they contributed 5.5%; no subregional reporting group exceeded 5% (Appendix A13–16).

Between 2014 and 2015, overall Cook Inlet harvest in the early stratum increased to 17.2%; only the Other Cook Inlet subregional reporting group exceeded 5% (11.1%; Appendix A17). Cook Inlet harvest became the majority in the middle temporal stratum at 54.0%, and included Kenai (32.4%), Susitna (9.3%), and Other Cook Inlet (7.4%) subregional reporting groups (Appendix A18). Late stratum Cook Inlet harvests decreased to 31.7%; only the Kenai (23.4%) and Susitna (7.1%) subregional reporting groups exceeded 5% (Appendix A19). The total stock-specific harvest of Cook Inlet-origin fish in the Uyak sampling area in 2015 was estimated at 142,488

fish, subregional reporting group estimates included 87,224 Kenai fish, 25,211 Susitna fish, and 19,966 Other Cook Inlet fish (Appendix A20; Figure 5).

In 2016, Cook Inlet harvest decreased relative to 2015, contributing 8.9% to the early stratum; only the Other Cook Inlet subregional reporting group exceeded 5% (6.7%; Appendix A21). Cook Inlet harvest again increased in the middle stratum—to 16.2%; only the Kenai subregional reporting group exceeded 5% (9.3%; Appendix A22). Late stratum harvest contained 9.3% Cook Inlet-origin fish; only the Kenai subregional reporting group exceeded 5% (7.0%; Appendix A23). The total stock-specific harvest of Cook Inlet-origin fish in the Uyak sampling area in 2016 was 26,509 fish; only the Kenai subregional reporting group exceeded 5% (6.6%; 15,439 fish; Appendix A24; Figure 5).

Karluk-Sturgeon (255-10, 20; 256-40)

Harvest of Cook Inlet-origin fish in the Karluk-Sturgeon sampling area was typically lower than in adjacent areas, but always peaked in the middle temporal stratum (Tables 1–9; Figure 6; Appendix A25–36).

During 2014, harvest of Cook Inlet-origin fish never exceeded 5% in any of the 3 temporal strata (Appendix A25–28); therefore, no estimates are provided for Cook Inlet subregional reporting groups.

In 2015, the early temporal stratum contained less than 5% Cook Inlet-origin fish, and thus no estimates are provided for subregional reporting groups (Appendix A29). The middle stratum consisted of 29.1% Cook Inlet-origin fish, and included Kenai (12.5%), Other Cook Inlet (6.1%), and Susitna (5.7%) subregional reporting groups. The remainder was from the Kasilof subregional reporting group (Appendix A30). Harvest of Cook Inlet-origin fish decreased in the late stratum to 9.0%; only the Kenai subregional reporting group exceeded 5% (6.4%; Appendix A31). The total stock-specific harvest of Cook Inlet-origin fish in the Karluk-Sturgeon sampling area in 2015 was 14,608 fish; only the Kenai subregional reporting group exceeded 5% (6.1%; 7,851 fish; Appendix A32; Figure 6).

In 2016, overall Cook Inlet harvest only exceeded 5% during the middle temporal stratum when it was 10.8%; no Cook Inlet subregional reporting groups exceeded 5% (Appendix A33-35; Figure 6). The total stock-specific harvest of Cook Inlet-origin fish in the Karluk-Sturgeon sampling area in 2016 was 2,645 fish; no Cook Inlet subregional reporting groups exceeded 5% (Appendix A36; Figure 6).

Ayakulik-Halibut Bay (256-10, 15, 20, 25, 30)

Similar to other sampling areas, Cook Inlet harvests were lower in 2014 than in 2015 and 2016, and tended to peak during the middle temporal stratum of each year (Tables 1–9; Figure 7; Appendix A37–48).

The early stratum of 2014 consisted of 7.1% Cook Inlet-origin fish; only the Kasilof subregional reporting group exceeded 5% (5.0%; Appendix A37). The proportion of Cook Inlet-origin fish increased to 23.6% in the middle stratum; only the Kenai subregional reporting group exceeded 5% (16.8%; Appendix A38). In the late stratum, harvest of Cook Inlet-origin fish decreased to 5.2%; no subregional reporting group exceeded 5% (Appendix A39). The total stock-specific harvest of Cook Inlet-origin fish in the Ayakulik-Halibut Bay sampling area in 2014 was 56,044 fish; only the Kenai subregional reporting group exceeded 5% (8.5%; 33,461 fish; Appendix A40; Figure 7).

In 2015, harvest of Cook Inlet-origin fish increased from 7.1% (2014) to 28.2% in the early stratum; only the Kasilof subregional reporting group exceeded 5% (19.0%; Appendix A41). In the middle stratum, Cook Inlet harvest peaked for the year at 48.2%, and included Kenai (27.0%), Kasilof (9.8%), and Other Cook Inlet (7.4%) subregional reporting groups (Appendix A42). The proportion of Cook Inlet-origin fish decreased to 8.3% in the late stratum; only the Kenai subregional reporting group exceeded 5% (7.5%; Appendix A43). The total stock-specific harvest of Cook Inlet-origin fish in the Ayakulik-Halibut Bay sampling area in 2015 was 224,759 fish; the Kenai (115,289 fish), Kasilof (76,450 fish), and Other Cook Inlet (37,114 fish) subregional reporting groups all exceeded 5%; (Appendix A44; Figure 7).

In 2016, the early temporal stratum was solely represented by samples from the ADF&G test fishery operating in front of the Ayakulik River mouth; the commercial fishery was not open (Appendix A45). In the middle stratum, similar to 2015, 42.2% of the harvest was Cook Inlet-origin fish; only the Kenai (30.5%) and Susitna (5.9%) subregional reporting groups exceeded 5% (Appendix A46). Cook Inlet harvest decreased to 28.5% in the late stratum; only the Kenai subregional reporting group exceeded 5% (20.5%; Appendix A47). The total stock-specific harvest of Cook Inlet-origin fish in the Ayakulik-Halibut Bay sampling area in 2016 was 54,597 fish; only the Kenai subregional reporting group exceeded 5% (27.6%; 43,577 fish; Appendix A48; Figure 7).

Alitak (257-10, 20, 50, 60, 70)

The overall Cook Inlet reporting group contributed a higher proportion of the harvest compared to other sampling areas, especially in the middle temporal stratum (Tables 1–9; Figure 8; Appendix A49–59).

The early stratum was not sampled in 2014, as there was no harvest. During the middle stratum, 32.3% of the harvest was attributed to Cook Inlet-origin fish; only the Kenai (16.1%) and Kasilof (11.1%) subregional reporting groups exceeded 5% (Appendix A49). Late stratum harvest had only 5.2% Cook Inlet-origin fish; no subregional reporting group exceeded 5% (Appendix A50). The total stock-specific harvest of Cook Inlet-origin fish in the Alitak sampling area in 2014 was 37,751 fish; only the Kenai (18,912 fish) and Kasilof (12,933 fish) subregional reporting groups exceeded 5% (Appendix A51; Figure 8).

In 2015, Cook Inlet-origin fish contributed 26.8% of the early stratum harvest; only the Kasilof (16.7%) and Other Cook Inlet (6.9%) subregional reporting groups exceeded 5% (Appendix A52). During the middle temporal stratum, Cook Inlet-origin fish were the majority of the harvest (77.0%); only the Kenai (60.8%) and Susitna (8.9%) subregional reporting groups exceeded 5% (Appendix A53). Harvest of Cook Inlet-origin fish dropped to below 5% in the late stratum (Appendix A54). The total stock-specific harvest of Cook Inlet-origin fish in the Alitak sampling area in 2015 was 136,314 fish; only the Kenai (102,338 fish) and Susitna (14,928 fish) subregional reporting groups exceeded 5% (Appendix A55; Figure 8).

In 2016, stock compositions of Cook Inlet-origin fish were similar to 2015. Cook Inlet-origin fish contributed 23.3% to the early stratum harvest; the Other Cook Inlet (10.3%), Kenai (6.9%), and Kasilof (5.6%) subregional reporting groups all exceeded 5% (Appendix A56). During the middle temporal stratum, Cook Inlet-origin fish made up the majority of the harvest (66.4%); only the Kenai (55.0%) and Susitna (5.5%) subregional groups exceeded 5% (Appendix A57). Late stratum harvest had 7.1% Cook Inlet-origin fish; only the Kenai subregional reporting group exceeded 5% (5.5%; Appendix A58). The total stock-specific harvest of Cook Inlet-origin fish in

the Alitak sampling area in 2016 was 45,279 fish; only the Kenai subregional reporting group exceeded 5% (38.2%; 36,045 fish; Appendix A59; Figure 8).

Igvak (262-75, 80, 90, 95)

Igvak sampling area was not sampled in either strata of 2014 or the early temporal stratum of 2015 due to fishery closures. When sampling did occur in the Igvak sampling area, harvest was primarily attributed to the Cook Inlet group, the Black Lake group, and the Chignik Lake group (Tables 5, 7, and 8; Figure 9; Appendix A60–64).

Although samples were taken from the middle stratum of 2015, harvest was low relative to historical averages and contained 54.0% Cook Inlet-origin fish; the Kenai (23.7%), Other Cook Inlet (19.2%), and Kasilof (7.4%) subregional reporting groups all exceeded 5% (Appendix A60). The total stock-specific harvest of Cook Inlet-origin fish in the Igvak sampling area in 2015 was 3,560 fish; the Kenai (1,560 fish), Other Cook Inlet (1,268 fish), and Kasilof (489 fish) subregional reporting groups all exceeded 5% (Appendix A61; Figure 9).

In 2016, stock compositions of Cook Inlet-origin fish were lowest in the early temporal stratum at 6.0%; no Cook Inlet subregional reporting groups exceeded 5% (Appendix A62). However, harvest during the middle temporal stratum consisted almost exclusively of Cook Inlet-origin fish (93.2%); the Kenai (74.2%), Other Cook Inlet (11.7%), and Susitna (5.2%) subregional reporting groups all exceeded 5% (Appendix A63). The total stock-specific harvest of Cook Inlet-origin fish in the Igvak sampling area in 2016 was 174,456; only the Kenai (132,088 fish) and Other Cook Inlet (22,950 fish) subregional reporting groups exceeded 5% (Appendix A64; Figure 9).

Estimates for KMA

In 2014, the total KMA harvest in sampled fisheries was 1,523,042 sockeye salmon, representing 46.7% of the total KMA sockeye salmon harvest for 2014 (Anderson et al. 2017). Of this sampled sockeye salmon harvest, 7.5% was attributed to the Cook Inlet reporting group; no Cook Inlet subregional reporting groups exceeded 5% (Appendix A65; Figure 10). Cook Inlet-origin harvest was 113,972 fish (Appendix A65; Figures 10 and 11).

In 2015, the total KMA harvest in fisheries that were sampled was 1,709,784 sockeye salmon, representing 55.2% of the total KMA sockeye salmon harvest for 2015 (Anderson et al. 2016a). Of this sampled sockeye salmon harvest, 36.6% was attributed to the Cook Inlet reporting group (Appendix A66; Figure 10). The only Cook Inlet subregional reporting groups exceeding 5% were Kenai (21.4%) and Kasilof (6.1%). Cook Inlet-origin harvest was 626,472 fish; only the Kenai (365,335 fish) and Kasilof (103,539 fish) subregional reporting groups exceeded 5% (Appendix A66; Figures 10 and 11).

In 2016, the total KMA harvest in fisheries that were sampled was 1,296,193 sockeye salmon, representing 62.4% of the total KMA sockeye salmon harvest for 2016 (Anderson et al. 2016b). Of this sampled sockeye salmon harvest, 29.6% was attributed to the Cook Inlet reporting group (Appendix A67; Figure 10). The only Cook Inlet subregional reporting group exceeding 5% was Kenai (21.0%). Cook Inlet-origin harvest was 384,089 fish; only the Kenai subregional reporting group exceeded 5% (272,160 fish; Appendix A67; Figures 10 and 11).

Estimates by Reporting Group

Kenai

Kenai fish constituted greater than 5% of a mixture in 22 of the 47 strata analyzed. Harvest of Kenai fish in KMA was variable across years, but primarily occurred during the middle temporal strata in the southwest sampling areas and the late temporal strata in the northwest sampling areas (Tables 1–9; Figures 12–23). In 2014, 80% of the harvest of Kenai fish within sampled areas of KMA occurred during the middle temporal stratum within the Ayakulik-Halibut Bay and Alitak areas (Tables 1–3; Figures 12–15). In 2015, when overall Kenai harvest was highest, 56% of the harvest occurred during the middle temporal stratum within the Ayakulik-Halibut Bay and Alitak areas, and 37% occurred in the middle and late strata within the Uyak and Uganik-Kupreanof areas (Tables 4–6; Figures 16–19). In 2016, 48% of the Kenai harvest occurred during the middle temporal stratum in Igvak, and the remainder was spread out among Ayakulik-Halibut Bay and Alitak in the middle stratum and Uganik-Kupreanof and Uyak in the middle and late strata (Tables 7–9; Figures 20–23). Kenai fish never exceeded 2% of the annual sockeye salmon harvest in the Karluk-Sturgeon sampling area in any of the 3 years. Overall, Kenai fish contributions to the sampled annual KMA harvest were lower in 2014 than in 2015 and 2016, amounting to 4.0% (60,973 fish), 21.4% (365,335 fish), and 21.0% (272,160 fish) of the KMA commercial sockeye salmon harvest from sampling areas and temporal periods analyzed in this study, 2014–2016 (Table 10; Figures 10 and 11).

Kasilof

Kasilof fish constituted greater than 5% of a mixture in 7 of the 47 strata analyzed. Harvest of Kasilof fish in KMA was variable across years, but primarily occurred during the early and middle temporal strata in the southwest sampling areas (Tables 1–9; Figures 12–23). In 2014, 80% of the harvest of Kasilof fish within sampled areas of KMA occurred during the early and middle temporal strata within the Ayakulik-Halibut Bay and Alitak areas (Tables 1–3; Figures 12–15). In 2015, when overall Kasilof harvest was highest, 75% of the harvest occurred during the early and middle temporal strata within the Ayakulik-Halibut Bay sampling area (Tables 4–6; Figures 16–19). In 2016, when the overall harvest of Kasilof fish was lowest, 45% of the Kasilof harvest occurred during the early and middle temporal strata in Igvak and the remainder spread out among Ayakulik-Halibut Bay, Uganik-Kupreanof, Alitak, and Uyak sampling areas in the middle stratum (Tables 7–9; Figures 20–23). Kasilof fish never exceeded 8% of the annual sockeye salmon harvest in the Karluk-Sturgeon sampling area in any of the 3 years. Overall, Kasilof fish contributions to the sampled annual KMA harvest were relatively low but variable across sampling years, amounting to 2.4% (36,019 fish), 6.1% (103,539 fish), and 1.7% (22,501 fish) of the KMA commercial sockeye salmon harvest from sampling areas and temporal periods analyzed in this study, 2014–2016 (Table 10; Figures 10 and 11).

Susitna

Susitna fish constituted greater than 5% of a mixture in 9 of the 47 strata analyzed. Harvest of Susitna fish in KMA was variable across years, but primarily occurred during the middle temporal stratum at relatively consistent levels across all Westside sampling areas (Tables 1–9; Figures 12–23). In 2014, Susitna fish were only detected in the harvest the middle temporal stratum (Tables 1–3; Figures 12–15). In 2015, when overall Susitna harvest was highest, 79% of the harvest occurred during the middle temporal stratum, primarily in the Uyak, Alitak, Ayakulik-Halibut Bay and Uganik-Kupreanof sampling areas; the remainder of the harvest

occurred in the northwest sampling areas in the late stratum (Tables 4–6; Figures 16–19). In 2016, harvest patterns were consistent with 2015; 79% of the harvest occurred during the middle temporal stratum, primarily in the Igvak, Uganik-Kupreanof, Ayakulik-Halibut Bay, Alitak, and Uyak sampling areas, and the remainder of the harvest occurred in the northwest sampling areas in the late stratum (Tables 7–9; Figures 20–23). Susitna fish never exceeded 4% of the annual sockeye salmon harvest in the Karluk-Sturgeon sampling area in any of the 3 years. Overall, Susitna fish contributions to the sampled annual KMA harvest were lower than other Cook Inlet stocks, but variable across sampling years amounting to 0.3% (4,466 fish), 4.4% (75,989 fish), and 3.0% (39,440 fish) of the KMA commercial sockeye salmon harvest from sampling areas and temporal periods analyzed in this study, 2014–2016 (Table 10; Figures 10 and 11).

Other Cook Inlet

Other Cook Inlet fish constituted greater than 5% of a mixture in 10 of the 47 strata analyzed. Harvest of Other Cook Inlet fish in KMA was variable across years but primarily occurred during the middle temporal stratum; more harvest occurred in southern areas in the early strata and in northern areas in the late strata (Tables 1–9; Figures 12–23). In 2014, overall Other Cook Inlet harvest was low; 71% occurred in the Alitak and Ayakulik-Halibut Bay sampling areas during the middle temporal stratum (Tables 1–3; Figures 12–15). In 2015, when overall Other Cook Inlet harvest was highest, 70% of the harvest occurred in the Ayakulik-Halibut Bay and Uyak sampling areas during the early and middle temporal strata (Tables 4–6; Figures 16–19). In 2016 72% of the harvest occurred during the middle temporal stratum, primarily in Igvak (Tables 7–9; Figures 20–23). Other Cook Inlet fish never exceeded 5% of the annual sockeye salmon harvest in the Karluk-Sturgeon sampling area in any of the 3 years. Overall, Other Cook Inlet fish contributions to the sampled annual KMA harvest varied across sampling years amounting to 0.8% (11,908 fish), 4.7% (80,698 fish), and 3.7% (49,536 fish) of the KMA commercial sockeye salmon harvest from sampling areas and temporal periods analyzed in this study, 2014–2016 (Table 10; Figures 10 and 11).

When and Where Were Cook Inlet Fish Caught in KMA?

Overall, the harvest of Cook Inlet stocks was variable among years, peaking at 36.6% of the sampled KMA sockeye salmon harvest in 2015 (626,473 fish; Table 10; Appendix A66); however, some consistent spatial and temporal patterns emerged (Tables 1–9; Figures 24–25). Cook Inlet-origin fish were present in the harvest at relatively low proportions during the early temporal stratum in each year, but often higher in the southwest sampling areas, Alitak and Ayakulik-Halibut Bay (Figure 24). Cook Inlet-origin fish stock compositions peaked during the middle temporal stratum in each year; peak harvests occurred in the Ayakulik-Halibut Bay, Igvak, and Alitak sampling areas (Figures 24–25). Harvest of Cook Inlet-origin fish in the late temporal stratum was largely confined to the northwest sampling areas, Uganik-Kupreanof and Uyak (Figures 24–25).

DISCUSSION

SAMPLING LIMITATIONS

The impetus for the original study (Shedd et al. 2016c) was to provide analytically sound estimates of sockeye salmon stocks harvested in KMA commercial salmon fisheries to better understand stock productivity and address management assumptions. The principal objective of the original study (Shedd et al. 2016c) was to sample the KMA salmon fishery in areas with

significant harvest of sockeye salmon stocks associated with run reconstructions. As discussed in the 2 operational plans outlining this study (Foster and Dann 2014, 2015), funding constraints limited the scope of this study to specific sampling areas and time periods. Outside of the sampling areas in this study are the Eastside Kodiak District, Afognak District, Mainland District (North of Cape Igvak Section), Alitak District gillnet areas (Alitak Bay, Moser Bay, and Olga Bay sections), 5 SHAs, and 1 THA, with general openings targeting *local* pink, chum, and sockeye salmon (Shedd et al. 2016c). From 2014 to 2016, the average percent of the total KMA sockeye salmon harvest in these unsampled areas (those outside of the MSA sampling areas) was 31.3% (range: 30.8–32.5%). Additionally, sampling from the KMA sockeye salmon commercial harvest only occurred from June 1 to August 29 in all 3 years of this study; however, stock composition results from late August harvest in 2014 indicated that almost all fish were of Kodiak origin (see Appendix D in Shedd et al. 2016c). Overall, the stock composition and stock-specific harvest in this study represent 46.7%, 55.2%, and 62.4% of the total KMA sockeye salmon commercial harvest in 2014–2016 (Shedd et al. 2016c). Given these sampling constraints, the total stock-specific harvest of all reporting groups is incomplete. Although this 3-year data set provides some measure of interannual variability in stock composition, some caution must be exercised when extrapolating the results to years not analyzed because changes in relative abundance among reporting groups, prosecution of fisheries, or migratory behavior due to ocean conditions might affect distribution of stock-specific harvests among fisheries.

PERFORMANCE OF THE BASELINE

Previous SNP MSA analyses of sockeye salmon that separate Cook Inlet stocks have used 96 SNPs (Barclay and Habicht 2012). These analyses used 8 reporting groups that meet ADF&G standards. Two of the reporting groups requested by the BOF match 2 of these previously used reporting groups, and the other 2 are combinations of these reporting groups. However, the KMA fishery mixtures were analyzed with a reduced set of 48 SNPs (46 loci) that were selected to distinguish among the reporting groups identified for the KMA study (Shedd et al. 2016a; Shedd et al. 2016b). It was likely, but unknown, if this reduced set of SNPs would be adequate to meet ADF&G standards for MSA using the newly requested Cook Inlet subregional reporting groups.

Using the subset of 48 SNP markers screened in the KMA mixtures, the 4 Cook Inlet subregional reporting groups exceeded ADF&G's standards for incorporation in MSA and identified little concern for asymmetric misallocations among these reporting groups. The smallest average correct allocation for the 4 Cook Inlet sugbregional reporting groups was 98.1%, which exceeded the 90% threshold used by ADF&G as adequate performance (Figure 2). In addition, the self-assignment likelihood profiles indicated little potential for misallocation among the 4 Cook Inlet subregional reporting groups and little asymmetric misallocation (misassignment from one reporting group to another, but not the reverse; Figure 1).

SUMMARY

These *post hoc* analyses were completed at the request of the BOF to provide them information to determine if and what allocation actions are appropriate for KMA fisheries. The analyses provide analytically sound stock-specific harvest estimates of Cook Inlet-origin sockeye salmon stocks harvested in sampled KMA fisheries between 2014 and 2016. The results show patterns (and variations in patterns) for Cook Inlet subregional stock compositions among fishing areas and periods across the 3 sampled years.

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TABLES AND FIGURES

Table 1.–Kodiak Management Area, 2014, early temporal stratum. Median estimates of stock-specific harvest by sampling area for all subregional reporting groups. Numbers for Unknown (reporting group) and for Total by Year are estimates based on fish ticket information by area. See Appendix A1, A13, A25, and A37 for additional stock composition and stock-specific harvest statistics.

Reporting Group	Unsampled Areas	Igvak	Alitak	Ayakulik Halibut Bay	Karluk Sturgeon	Uyak	Uganik Kupreanof	Total by Reporting Group
West of Chignik	0	0	0	2,479	1,292	2,066	5,273	11,403
Black Lake	0	0	0	1	146	1,348	3,486	5,350
Chignik Lake	0	0	0	0	0	0	977	1,168
Upper Station / Akalura	0	0	0	4,539	1,622	1,523	524	8,472
Ayakulik / Frazer	0	0	0	116,247	19,980	18,819	12,571	167,723
Karluk	0	0	0	16,588	26,303	31,477	16,000	90,526
Uganik	0	0	0	768	816	18,449	12,073	32,444
Northwest Kodiak	0	0	0	0	363	6,027	4,121	10,855
Afognak	0	0	0	0	313	936	3,869	5,301
Eastside Kodiak	0	0	0	348	425	0	0	1,353
Saltery	0	0	0	2,897	830	16,457	17,565	37,982
Other Cook Inlet	0	0	0	1,223	*	*	*	2,784
Susitna	0	0	0	0	*	*	*	2
Kenai	0	0	0	1,601	*	*	*	2,056
Kasilof	0	0	0	8,228	*	*	*	10,854
PWS	0	0	0	3,866	881	2,009	1,065	8,095
South of Cape Suckling	0	0	0	1,625	49	1	0	2,105
Unknown	137,712	0	0	0	0	0	0	137,712
Total by Sampling Area	137,712	0	0	162,984	56,018	102,346	79,494	538,554

Note: Stock-specific harvest estimates may not sum to the total harvest because summed medians are biased low.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Table 2.–Kodiak Management Area, 2014, middle temporal stratum. Median estimates of stock-specific harvest by sampling area for all subregional reporting groups. Numbers for Unknown (reporting group) and for Total by Year are estimates based on fish ticket information by area. See Appendix A2, A14, A26, A38, and A49 for additional stock composition and stock-specific harvest statistics.

Reporting Group	Unsampled Areas	Igvak	Alitak	Ayakulik Halibut Bay	Karluk Sturgeon	Uyak	Uganik Kupreanof	Total by Reporting Group
West of Chignik	0	0	139	7,202	4	0	0	8,461
Black Lake	0	0	0	0	0	0	1,137	1,450
Chignik Lake	0	0	1,217	0	2,244	1,138	3,085	8,076
Upper Station / Akalura	0	0	5,383	3,428	0	0	0	9,641
Ayakulik / Frazer	0	0	65,573	90,666	17,635	6,804	4,331	185,249
Karluk	0	0	0	1,725	25,856	12,800	11,895	53,027
Uganik	0	0	2	0	3,665	2,305	8,208	14,736
Northwest Kodiak	0	0	0	0	115	0	0	538
Afognak	0	0	0	0	0	256	927	1,600
Eastside Kodiak	0	0	2,579	4,617	220	198	0	8,320
Saltery	0	0	935	22,990	13,690	90,992	88,284	217,070
Other Cook Inlet	0	0	4,239	2,775	*	0	*	7,976
Susitna	0	0	1,194	1,173	*	1,081	*	4,214
Kenai	0	0	18,640	29,413	*	2,866	*	51,541
Kasilof	0	0	12,932	6,987	*	2,840	*	24,990
PWS	0	0	768	958	1,096	2,689	7,839	14,102
South of Cape Suckling	0	0	10	0	0	0	0	612
Unknown	569,159	0	0	0	0	0	0	569,159
Total by Sampling Area	569,159	0	115,998	175,205	68,438	126,840	128,836	1,184,476

Note: Stock-specific harvest estimates may not sum to the total harvest because summed medians are biased low.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Table 3.–Kodiak Management Area, 2014, late temporal stratum. Median estimates of stock-specific harvest by sampling area for all subregional reporting groups. Numbers for Unknown (reporting group) and for Total by Year are estimates based on fish ticket information by area. See Appendix A3, A15, A27, A39, and A50 for additional stock composition and stock-specific harvest statistics.

Reporting Group	Unsampled Areas	Igvak	Alitak	Ayakulik Halibut Bay	Karluk Sturgeon	Uyak	Uganik Kupreanof	Total by Reporting Group
West of Chignik	0	0	0	423	0	0	0	484
Black Lake	0	0	0	0	0	0	0	0
Chignik Lake	0	0	19	401	334	0	1,103	2,029
Upper Station / Akalura	0	0	3,449	12,307	11,887	11,664	7,194	46,775
Ayakulik / Frazer	0	0	1,366	29,735	7,688	3,581	0	43,013
Karluk	0	0	0	7,239	100,168	111,318	131,408	349,984
Uganik	0	0	0	0	0	13	0	254
Northwest Kodiak	0	0	0	0	0	0	0	2
Afognak	0	0	0	0	0	0	0	0
Eastside Kodiak	0	0	203	398	0	393	0	1,180
Saltery	0	0	0	2,403	3,591	25,780	18,364	50,307
Other Cook Inlet	0	0	0	548	*	*	*	752
Susitna	0	0	0	0	*	*	*	24
Kenai	0	0	268	2,270	*	*	*	7,171
Kasilof	0	0	0	0	*	*	*	0
PWS	0	0	9	95	14	671	143	1,269
South of Cape Suckling	0	0	62	412	5	170	1,245	2,173
Unknown	254,809	0	0	0	0	0	0	254,809
Total by Sampling Area	254,809	2,477	5,437	57,066	124,879	155,658	163,843	764,169

Note: Stock-specific harvest estimates may not sum to the total harvest because summed medians are biased low.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Table 4.–Kodiak Management Area, 2015, early temporal stratum. Median estimates of stock-specific harvest by sampling area for all subregional reporting groups. Numbers for Unknown (reporting group) and for Total by Year are estimates based on fish ticket information by area. See Appendix A5, A17, A29, A41, and A52 for additional stock composition and stock-specific harvest statistics.

Reporting Group	Unsampled Areas	Igvak	Alitak	Ayakulik Halibut Bay	Karluk Sturgeon	Uyak	Uganik Kupreanof	Total by Reporting Group
West of Chignik	0	0	50	0	182	0	63	546
Black Lake	0	0	290	3,628	0	2,161	2,806	9,149
Chignik Lake	0	0	0	0	0	0	0	12
Upper Station / Akalura	0	0	1,801	8,193	1,494	0	0	11,609
Ayakulik / Frazer	0	0	15,333	91,015	12,355	1,879	687	121,361
Karluk	0	0	110	19,035	15,885	13,736	4,404	53,331
Uganik	0	0	0	4,314	1,220	9,887	9,681	25,330
Northwest Kodiak	0	0	0	0	1,232	3,002	3,080	7,822
Afognak	0	0	242	1,064	687	962	3,446	6,617
Eastside Kodiak	0	0	429	0	0	0	0	677
Saltery	0	0	93	0	0	1,985	2,611	4,805
Other Cook Inlet	0	0	1,970	8,289	*	5,490	1,327	17,240
Susitna	0	0	0	0	*	0	0	0
Kenai	0	0	858	9,964	*	1,269	232	12,500
Kasilof	0	0	4,809	38,593	*	1,633	947	46,174
PWS	0	0	2,068	16,111	1,271	6,565	1,725	27,747
South of Cape Suckling	0	0	0	0	0	0	0	134
Unknown	119,569	0	0	0	0	0	0	119,569
Total by Sampling Area	119,569	0	28,723	203,170	35,183	49,515	31,607	467,767

Note: Stock-specific harvest estimates may not sum to the total harvest because summed medians are biased low.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Table 5.–Kodiak Management Area, 2015, middle temporal stratum. Median estimates of stock-specific harvest by sampling area for all subregional reporting groups. Numbers for Unknown (reporting group) and for Total by Year are estimates based on fish ticket information by area. See Appendix A6, A18, A30, A42, A53, and A60 for additional stock composition and stock-specific harvest statistics.

Reporting Group	Unsampled Areas	Igvak	Alitak	Ayakulik Halibut Bay	Karluk Sturgeon	Uyak	Uganik Kupreanof	Total by Reporting Group
West of Chignik	0	93	0	0	0	0	0	122
Black Lake	0	727	0	0	0	293	2	1,364
Chignik Lake	0	1,324	0	0	0	0	8,725	10,193
Upper Station / Akalura	0	0	0	0	0	0	0	36
Ayakulik / Frazer	0	0	28,542	156,626	2,394	7	2,974	191,277
Karluk	0	152	0	17,586	14,921	11,758	19,845	64,814
Uganik	0	54	0	0	0	4,822	9,812	15,550
Northwest Kodiak	0	74	0	0	1	0	871	1,246
Afognak	0	0	0	0	495	0	2	604
Eastside Kodiak	0	0	5,691	1,991	299	0	0	8,387
Saltery	0	119	810	18,453	1,921	52,377	121,181	195,662
Other Cook Inlet	0	1,268	7,796	28,391	1,815	12,925	4,493	57,626
Susitna	0	220	14,845	14,172	1,707	16,184	11,840	59,809
Kenai	0	1,560	100,790	103,596	3,725	56,413	15,510	282,000
Kasilof	0	489	3,438	37,658	1,369	7,798	5,099	56,450
PWS	0	384	1,857	1,056	846	7,874	11,886	24,953
South of Cape Suckling	0	0	0	0	0	520	0	676
Unknown	493,152	0	0	0	0	0	0	493,152
Total by Sampling Area	493,152	6,595	165,894	384,390	29,915	174,009	215,645	1,469,600

Note: Stock-specific harvest estimates may not sum to the total harvest because summed medians are biased low.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Table 6.–Kodiak Management Area, 2015, late temporal stratum. Median estimates of stock-specific harvest by sampling area for all subregional reporting groups. Numbers for Unknown (reporting group) and for Total by Year are estimates based on fish ticket information by area. See Appendix A7, A19, A31, A43, and A54 for additional stock composition and stock-specific harvest statistics.

Reporting Group	Unsampled Areas	Igvak	Alitak	Ayakulik Halibut Bay	Karluk Sturgeon	Uyak	Uganik Kupreanof	Total by Reporting Group
West of Chignik	0	0	0	40	0	0	0	49
Black Lake	0	0	0	0	0	0	0	0
Chignik Lake	0	0	0	0	0	0	2,382	2,418
Upper Station / Akalura	0	0	10,719	3,271	2,498	0	919	17,591
Ayakulik / Frazer	0	0	11,648	5,105	162	0	0	17,150
Karluk	0	0	0	5,030	50,056	47,994	30,477	133,679
Uganik	0	0	0	38	0	294	4,338	5,343
Northwest Kodiak	0	0	0	41	0	0	0	84
Afognak	0	0	0	0	0	0	0	9
Eastside Kodiak	0	0	5,127	352	0	0	304	5,989
Saltery	0	0	2,214	4,475	3,821	36,573	49,391	96,587
Other Cook Inlet	0	0	*	116	412	1,253	3,308	5,465
Susitna	0	0	*	1	1,101	8,896	5,713	16,009
Kenai	0	0	*	1,542	4,038	29,461	34,796	70,645
Kasilof	0	0	*	0	0	0	414	571
PWS	0	0	160	232	66	0	7,673	8,698
South of Cape Suckling	0	0	0	0	517	0	1,578	2,622
Unknown	334,654	0	0	0	0	0	0	334,654
Total by Sampling Area	334,654	1,552	31,294	20,619	63,532	126,126	143,567	721,344

Note: Stock-specific harvest estimates may not sum to the total harvest because summed medians are biased low.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Table 7.–Kodiak Management Area, 2016, early temporal stratum. Median estimates of stock-specific harvest by sampling area for all subregional reporting groups. Numbers for Unknown (reporting group) and for Total by Year are estimates based on fish ticket information by area. See Appendix A9, A21, A33, A45, A56, and A62 for additional stock composition and stock-specific harvest statistics.

Reporting Group	Unsampled Areas	Igvak	Alitak	Ayakulik Halibut Bay	Karluk Sturgeon	Uyak	Uganik Kupreanof	Total by Reporting Group
West of Chignik	0	11,843	0	0	414	0	0	12,375
Black Lake	0	109,455	231	0	0	0	321	110,161
Chignik Lake	0	4,762	0	0	170	0	0	4,955
Upper Station / Akalura	0	13	1,548	0	674	0	0	2,459
Ayakulik / Frazer	0	4,166	6,022	3,859	3,073	1,698	1,349	20,301
Karluk	0	7,224	0	28	7,760	7,057	5,027	27,308
Uganik	0	1,565	244	7	778	19,102	43,092	64,998
Northwest Kodiak	0	5	0	0	58	88	2,066	2,632
Afognak	0	0	56	0	58	649	1,782	2,664
Eastside Kodiak	0	0	265	0	0	0	35	484
Saltery	0	0	0	0	0	1,609	2,424	4,147
Other Cook Inlet	0	2,079	1,151	*	*	2,509	2,957	8,855
Susitna	0	0	2	*	*	0	0	20
Kenai	0	301	773	*	*	0	322	1,550
Kasilof	0	6,542	627	*	*	726	1,052	9,080
PWS	0	3,307	0	0	363	3,372	1,195	8,548
South of Cape Suckling	0	4	0	0	277	0	0	461
Unknown	83,870	0	0	0	0	0	0	83,870
Total by Sampling Area	83,870	154,318	11,118	3,937	13,856	37,238	62,771	367,108

Note: Stock-specific harvest estimates may not sum to the total harvest because summed medians are biased low.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Table 8.–Kodiak Management Area, 2016, middle temporal stratum. Median estimates of stock-specific harvest by sampling area for all subregional reporting groups. Numbers for Unknown (reporting group) and for Total by Year are estimates based on fish ticket information by area. See Appendix A10, A22, A34, A46, A57, and A63 for additional stock composition and stock-specific harvest statistics.

Reporting Group	Unsampled Areas	Igvak	Alitak	Ayakulik Halibut Bay	Karluk Sturgeon	Uyak	Uganik Kupreanof	Total by Reporting Group
West of Chignik	0	0	0	0	0	0	0	52
Black Lake	0	440	1,172	0	0	0	0	1,802
Chignik Lake	0	9,300	0	0	0	0	0	10,137
Upper Station / Akalura	0	0	1,761	1,083	132	0	0	3,206
Ayakulik / Frazer	0	1,008	15,768	56,389	1,826	2,767	0	78,019
Karluk	0	0	0	4,487	3,455	5,442	13,192	27,061
Uganik	0	0	0	1,611	745	6,835	20,508	29,991
Northwest Kodiak	0	0	0	0	0	4	265	805
Afognak	0	0	0	242	109	0	1,912	2,406
Eastside Kodiak	0	0	789	252	100	0	0	1,448
Saltery	0	0	0	1,912	1,740	40,571	64,073	108,507
Other Cook Inlet	0	20,696	1,839	3,507	154	767	7,512	35,065
Susitna	0	9,174	3,406	7,055	311	2,625	7,738	30,640
Kenai	0	131,637	34,067	36,642	306	6,465	18,257	227,515
Kasilof	0	3,087	1,588	3,005	341	1,140	2,119	11,774
PWS	0	0	294	0	1,322	1,854	94	4,992
South of Cape Suckling	0	0	0	317	0	0	0	1,471
Unknown	423,895	0	0	0	0	0	0	423,895
Total by Sampling Area	423,895	177,315	61,930	120,068	10,700	69,803	138,281	1,001,992

Note: Stock-specific harvest estimates may not sum to the total harvest because summed medians are biased low.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Table 9.–Kodiak Management Area, 2016, late temporal stratum. Median estimates of stock-specific harvest by sampling area for all subregional reporting groups. Numbers for Unknown (reporting group) and for Total by Year are estimates based on fish ticket information by area. See Appendix A11, A23, A35, A47, and A58 for additional stock composition and stock-specific harvest statistics.

Reporting Group	Unsampled Areas	Igvak	Alitak	Ayakulik Halibut Bay	Karluk Sturgeon	Uyak	Uganik Kupreanof	Total by Reporting Group
West of Chignik	0	0	0	0	0	0	0	110
Black Lake	0	0	0	0	0	0	0	0
Chignik Lake	0	0	0	0	0	0	0	0
Upper Station / Akalura	0	0	13,918	2,976	2,976	1,890	0	21,920
Ayakulik / Frazer	0	0	2,777	2,027	42	2,667	0	7,831
Karluk	0	0	936	15,965	103,210	79,005	75,234	274,309
Uganik	0	0	0	0	0	0	586	751
Northwest Kodiak	0	0	0	0	213	0	0	235
Afognak	0	0	0	120	0	0	0	131
Eastside Kodiak	0	0	185	153	0	0	0	494
Saltery	0	0	1,681	1,780	3,904	29,558	26,032	63,176
Other Cook Inlet	0	0	114	1,196	*	298	3,343	5,262
Susitna	0	0	62	470	*	2,334	5,318	8,505
Kenai	0	0	1,178	6,918	*	8,874	24,262	42,846
Kasilof	0	0	54	914	*	0	159	1,352
PWS	0	0	42	383	125	0	727	1,928
South of Cape Suckling	0	0	0	191	302	804	1,050	2,625
Unknown	153,272	0	0	0	0	0	0	153,272
Total by Sampling Area	153,272	9,228	21,243	33,721	113,445	126,837	139,612	597,358

Note: Stock-specific harvest estimates may not sum to the total harvest because summed medians are biased low.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Table 10.–Kodiak Management Area, 2014–2016. Median estimates of stock-specific harvest by year across all sampling areas for all subregional reporting groups. Numbers for Unknown (reporting group) and for Total by Year are estimates based on fish ticket information. See Appendices A65–67 for additional stock composition and stock-specific harvest statistics for these years.

Reporting Group	2014	2015	2016
West of Chignik	20,559	873	13,398
Black Lake	7,016	10,848	112,103
Chignik Lake	11,579	13,014	15,267
Upper Station / Akalura	65,196	29,702	27,924
Ayakulik / Frazer	396,083	329,848	106,364
Karluk	493,692	252,170	328,862
Uganik	47,797	46,650	96,205
Northwest Kodiak	11,895	9,569	3,938
Afognak	7,057	7,648	5,330
Eastside Kodiak	11,300	15,339	2,988
Saltery	305,476	297,204	175,968
Other Cook Inlet	11,908	80,698	49,536
Susitna	4,466	75,989	39,440
Kenai	60,973	365,335	272,160
Kasilof	36,019	103,539	22,501
PWS	23,716	61,815	15,986
South of Cape Suckling	5,656	4,500	4,949
Unknown	1,738,649	1,392,603	770,647
Total by Year	3,259,037	3,097,344	2,063,566

Note: Stock-specific harvest estimates may not sum to the total harvest because summed medians are biased low.

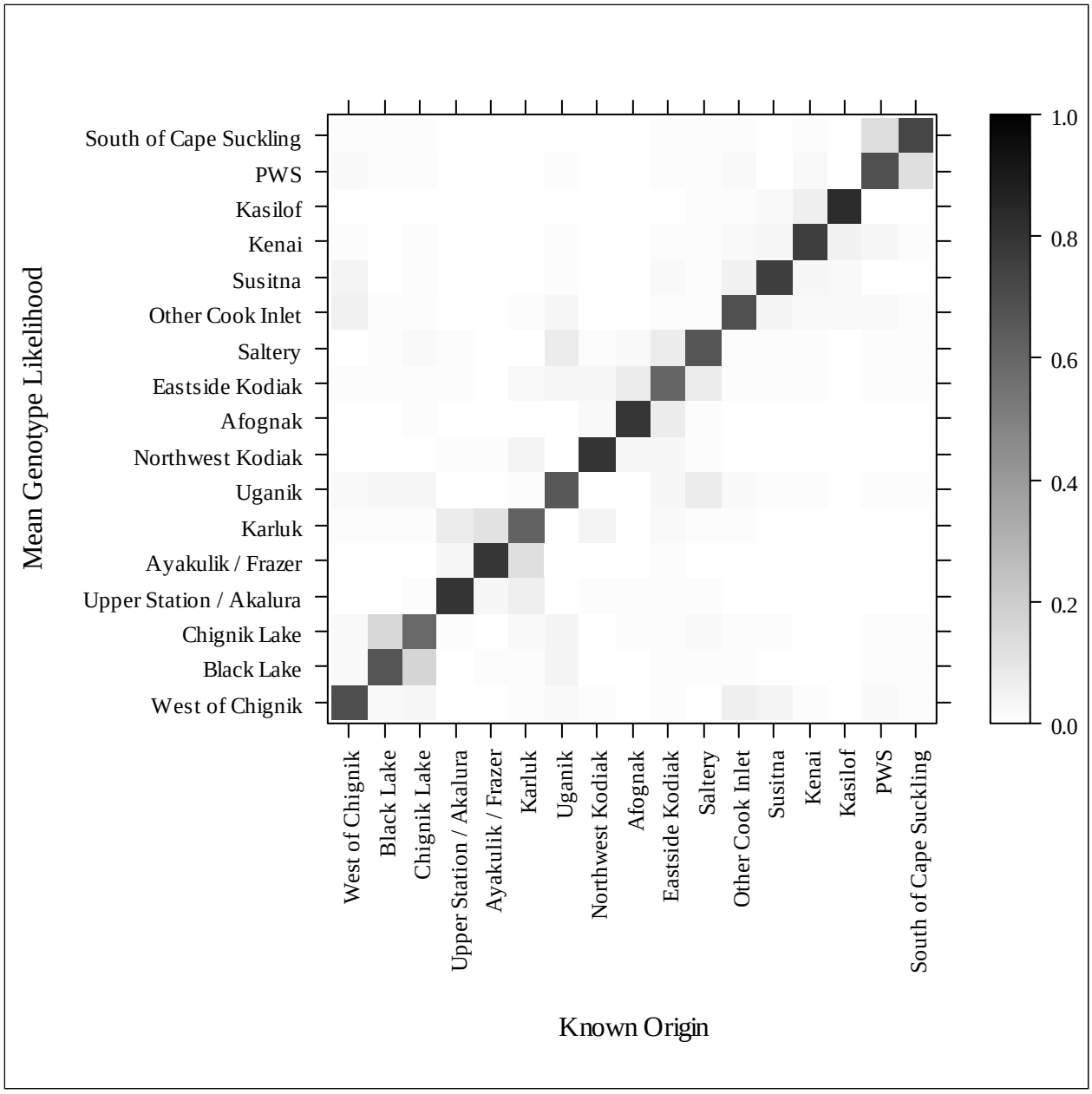

Figure 1.–Summary of mean genotype likelihood for all baseline individuals across reporting groups for the marker suite of 46 loci (48 SNPs). Probabilities off the diagonal indicate uncertainty in genetic assignment and provide indications of potential misallocation.

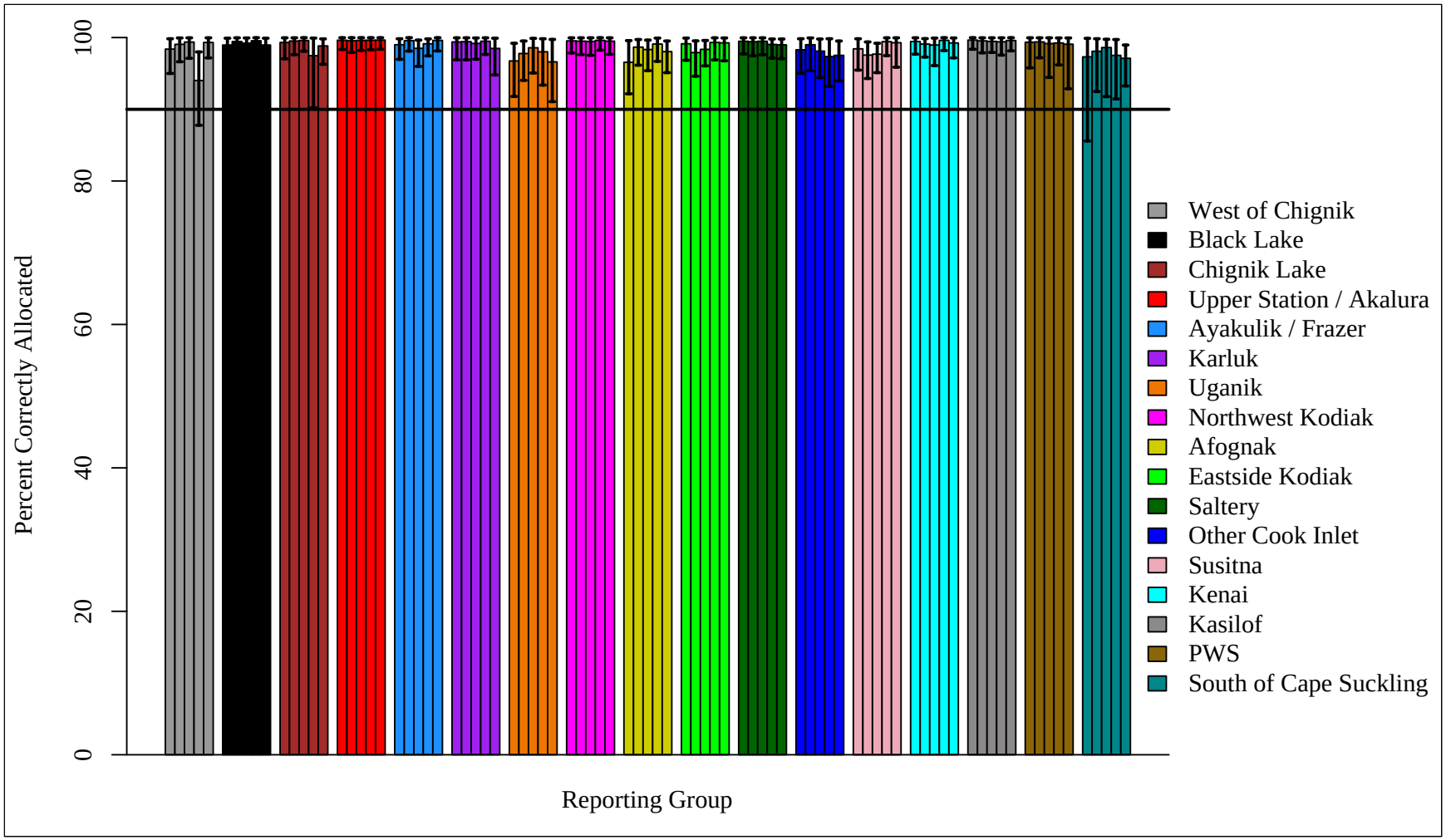

Figure 2.–Median percentage of fish correctly allocated back to reporting group of origin and 90% credibility intervals for mixtures of known individuals removed from the baseline populations that compose each reporting group (100% proof tests) using the program *BAYES* with a regionally flat prior and 46 loci (48 SNPs). 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 one of the 5 replicates, or sets of draws from the baseline populations. The solid line at 90% shows our threshold for reporting group performance.

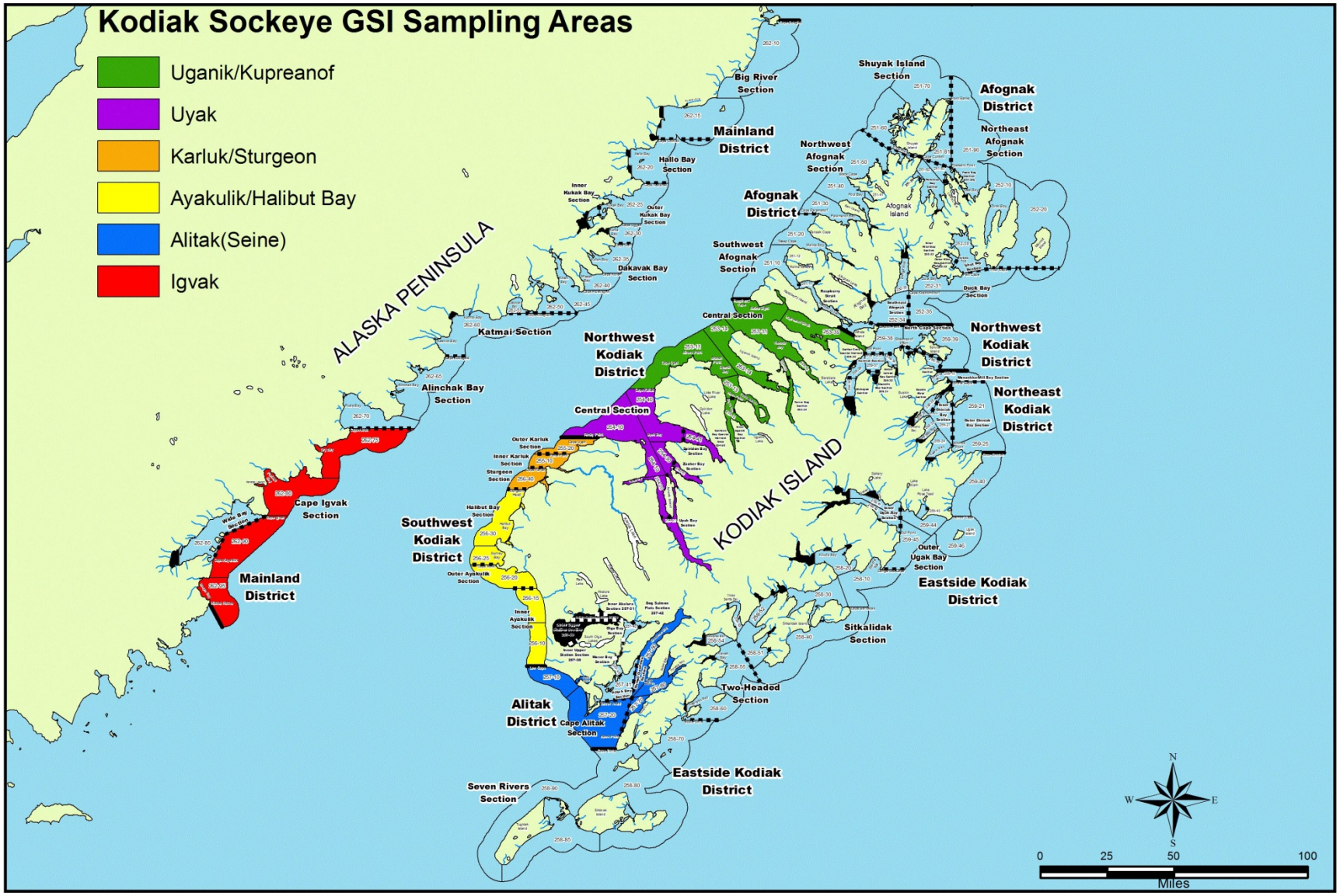

Figure 3.–The Kodiak Management Area, Westward Region, with the areas included in this study highlighted.

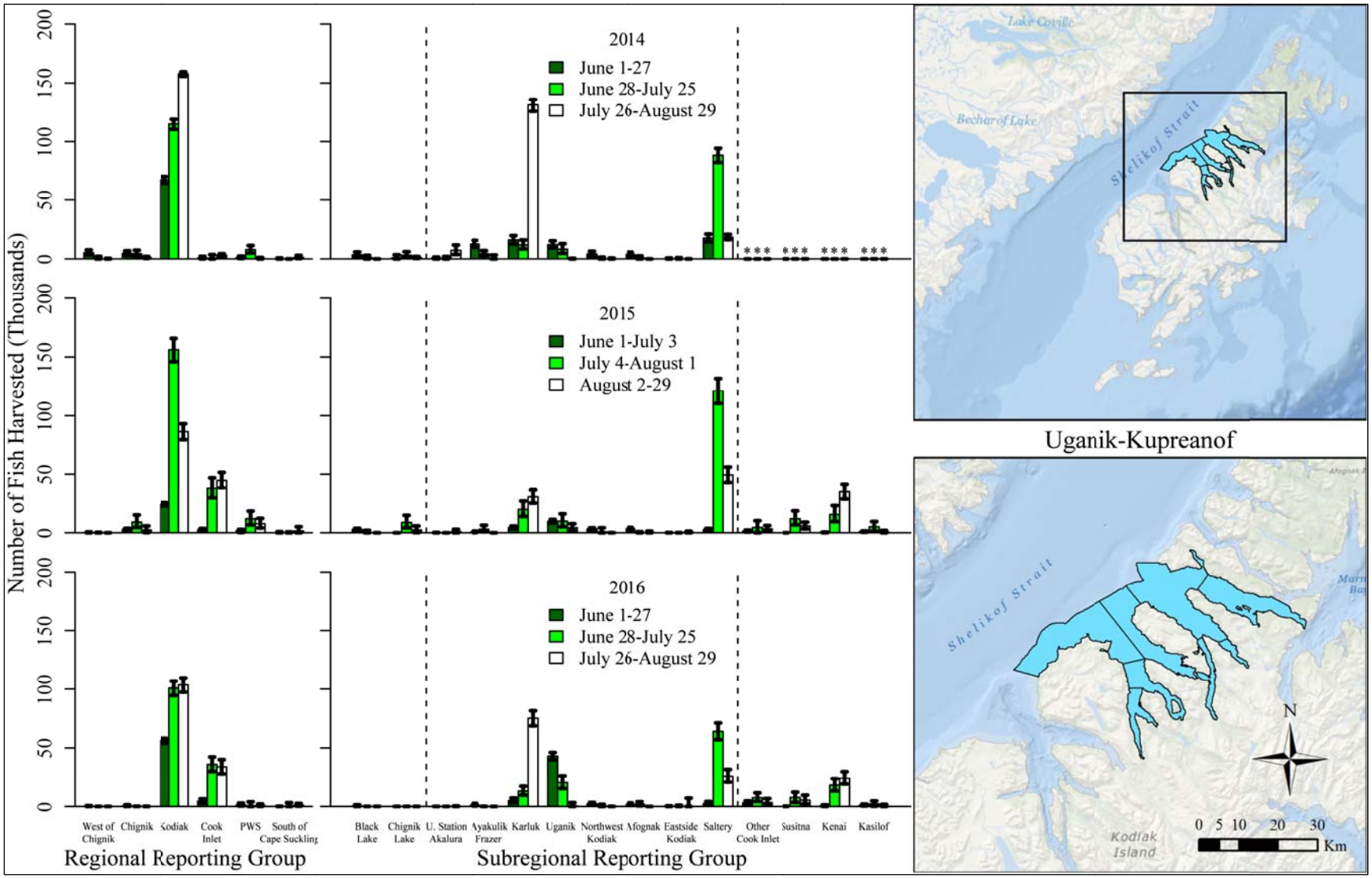

Figure 4.–Uganik-Kupreanof (statistical areas 253-11, 12, 13, 14, 31, 32, 33, 34, 35), Kodiak Management Area, Alaska, 2014–2016. Stock-specific harvest estimates (medians) and 90% credibility intervals of samples of sockeye salmon harvests.

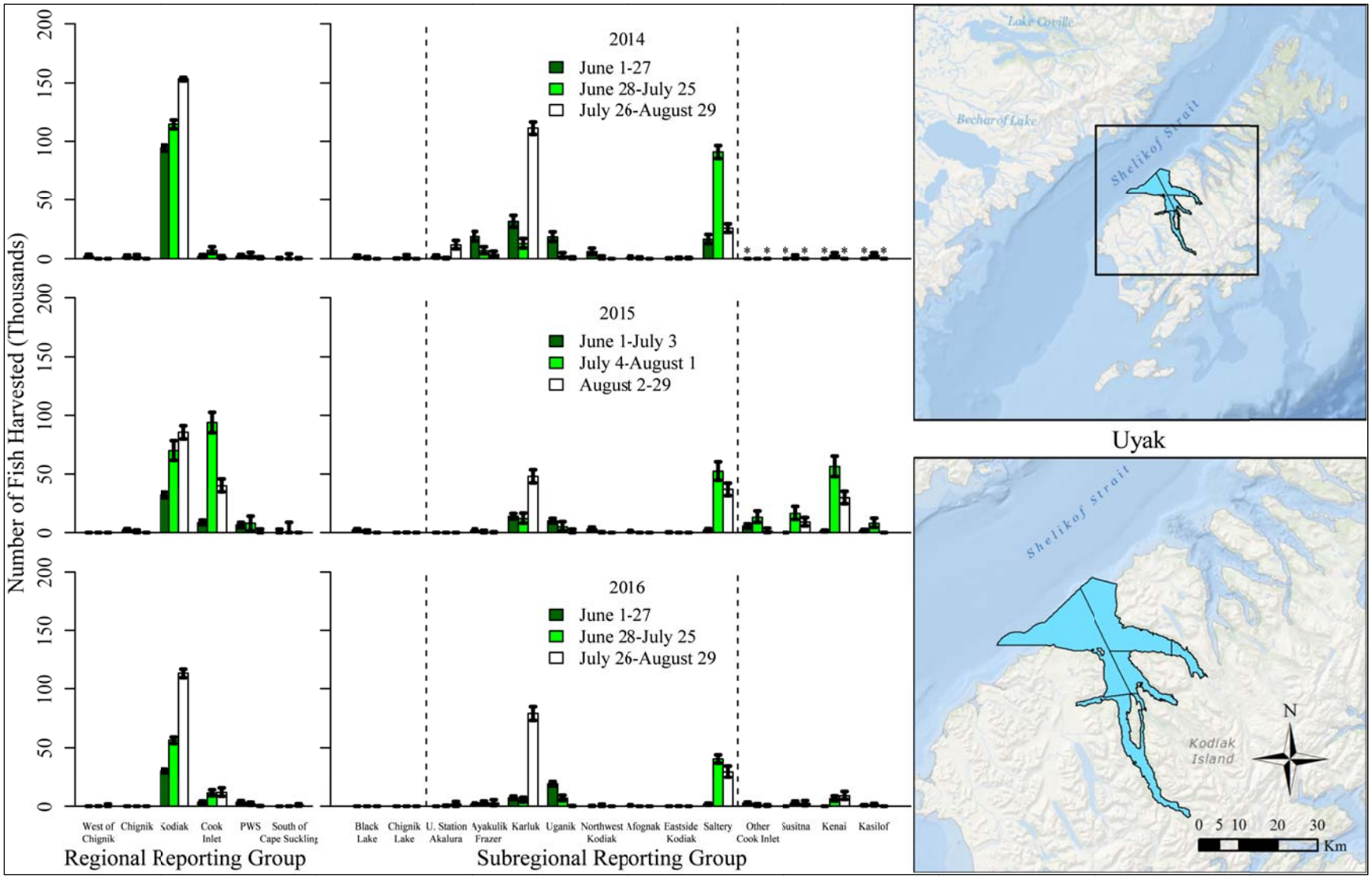

Figure 5.–Uyak (statistical areas 254-10, 20, 21, 30, 31, 40, 41; does not include Spiridon SHA 254-50), Kodiak Management Area, Alaska, 2014–2016. Stock-specific harvest estimates (medians) and 90% credibility intervals of samples of sockeye salmon harvests.

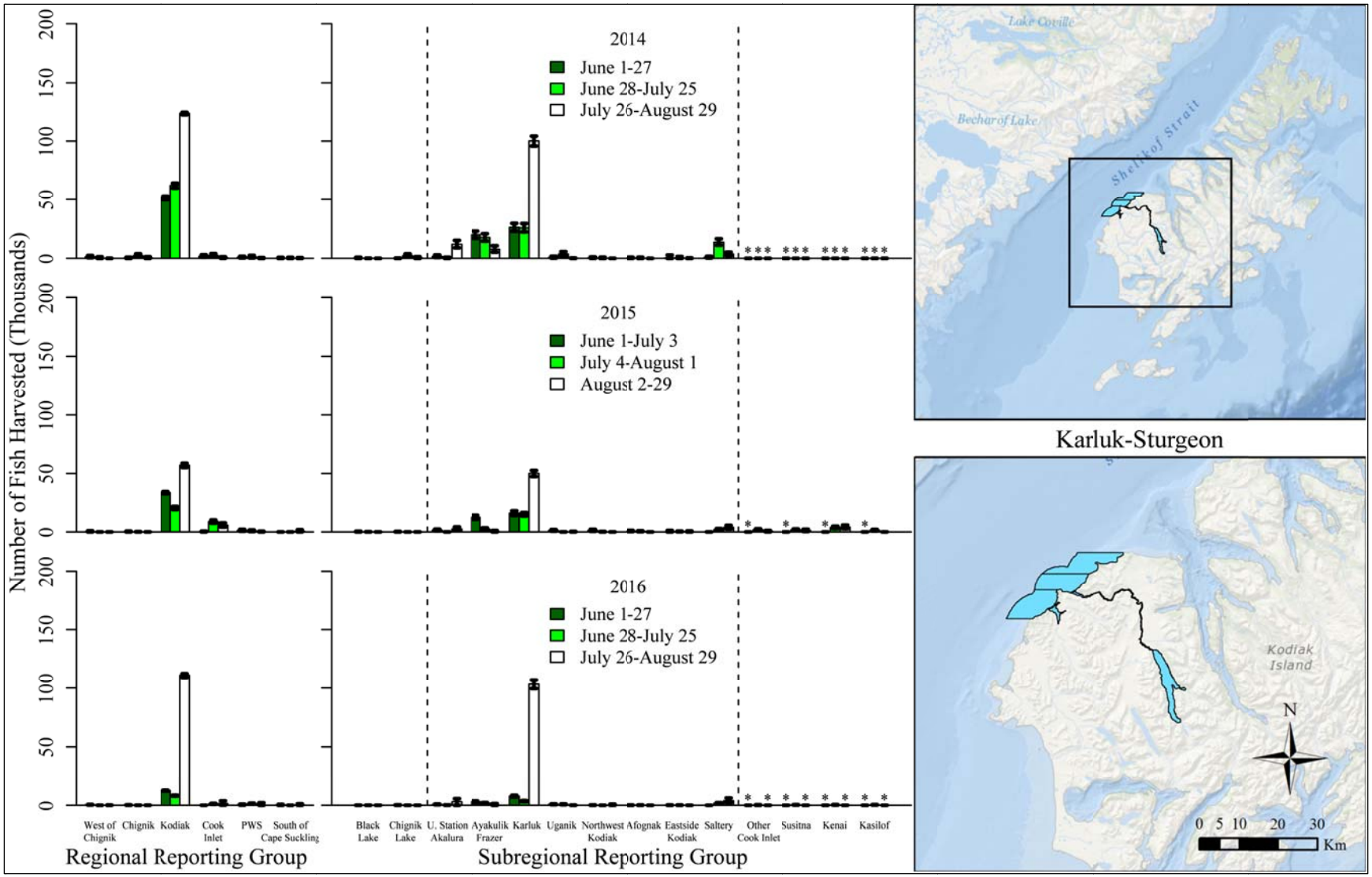

Figure 6.–Karluk-Sturgeon (statistical areas 255-10, 20; 256-40), Kodiak Management Area, Alaska, 2014–2016. Stock-specific harvest estimates (medians) and 90% credibility intervals of samples of sockeye salmon harvests.

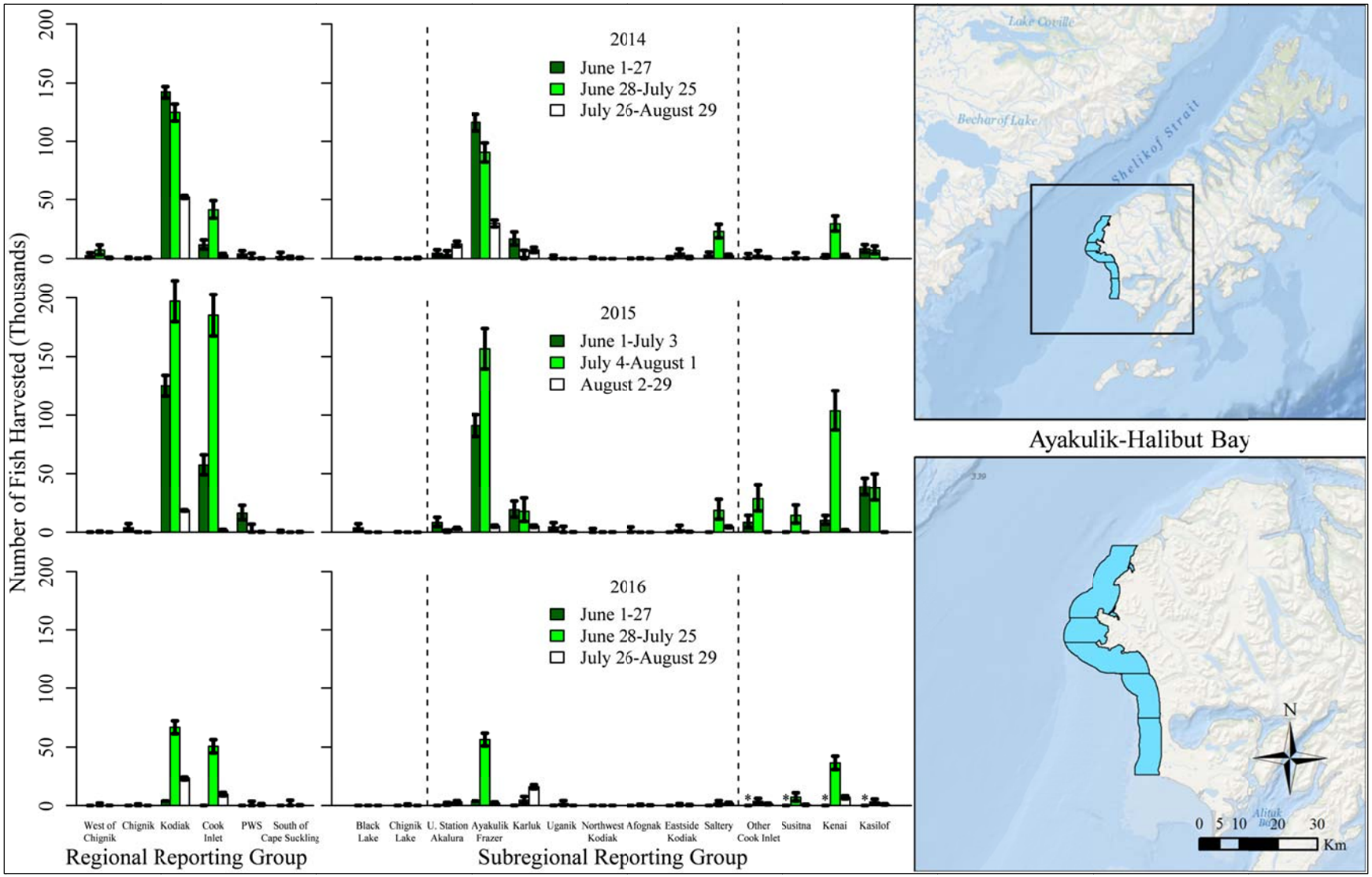

Figure 7.–Ayakulik-Halibut Bay (statistical areas 256-10, 15, 20, 25, 30), Kodiak Management Area, Alaska, 2014–2016. Stock-specific harvest estimates (medians) and 90% credibility intervals of samples of sockeye salmon harvests.

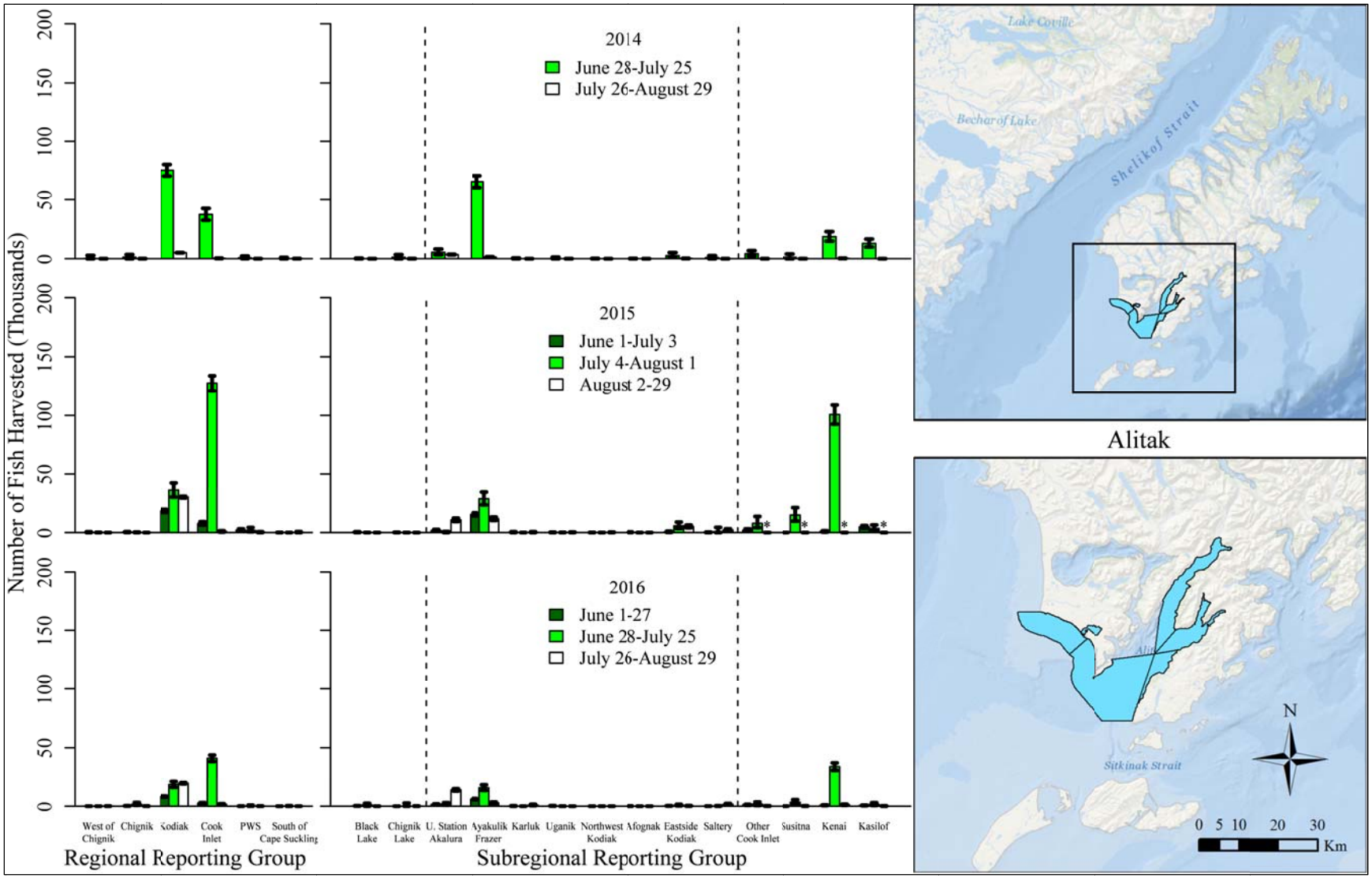

Figure 8.–Alitak (statistical areas 257-10, 20, 50, 60, 70; seine harvest only), Kodiak Management Area, Alaska, 2014–2016. Stock-specific harvest estimates (medians) and 90% credibility intervals of samples of sockeye salmon harvests.

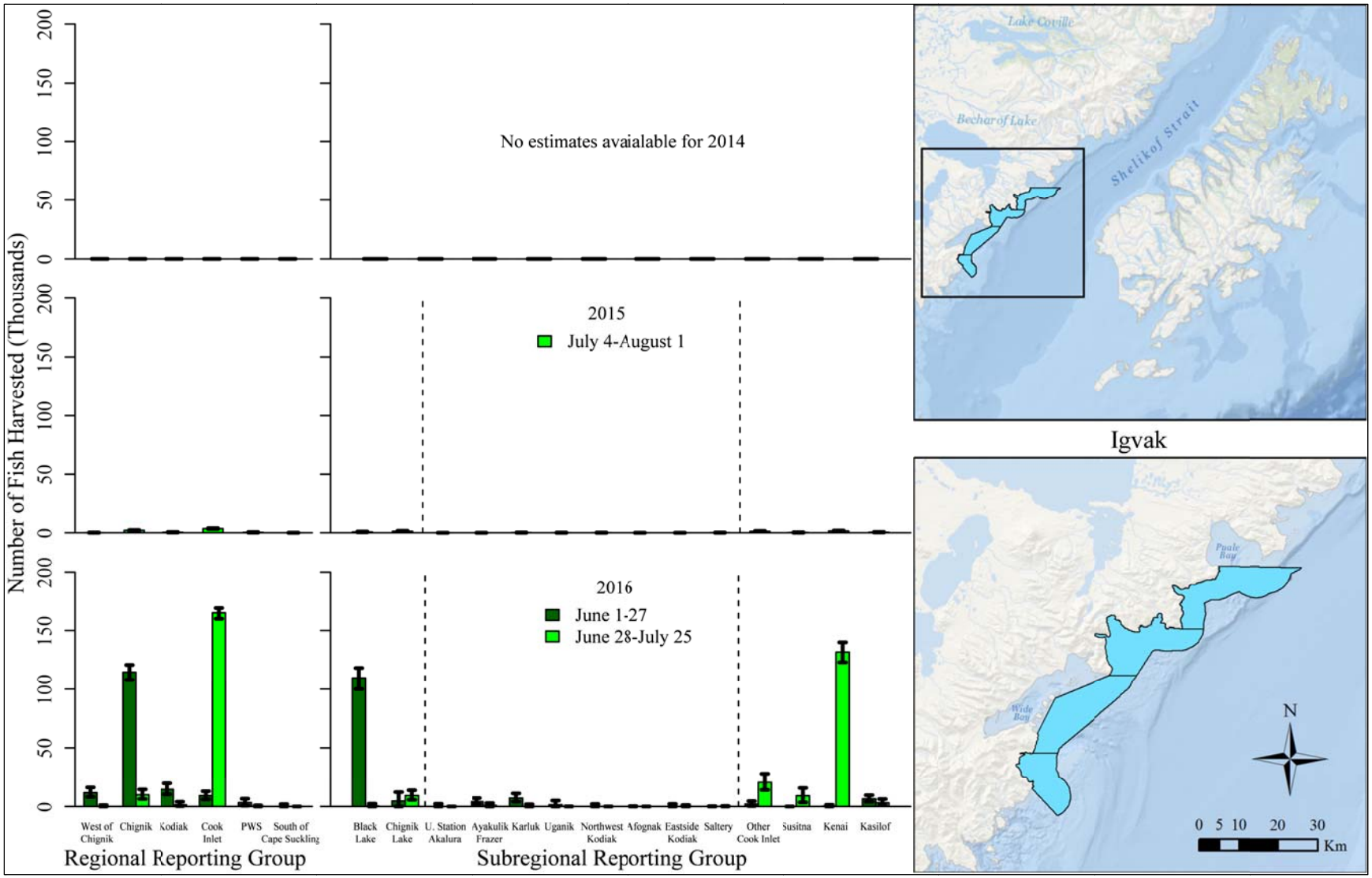

Figure 9.–Igvak (statistical areas 262-75, 80, 90, 95), Kodiak Management Area, Alaska, 2014–2016. Stock-specific harvest estimates (medians) and 90% credibility intervals of samples of sockeye salmon harvests.

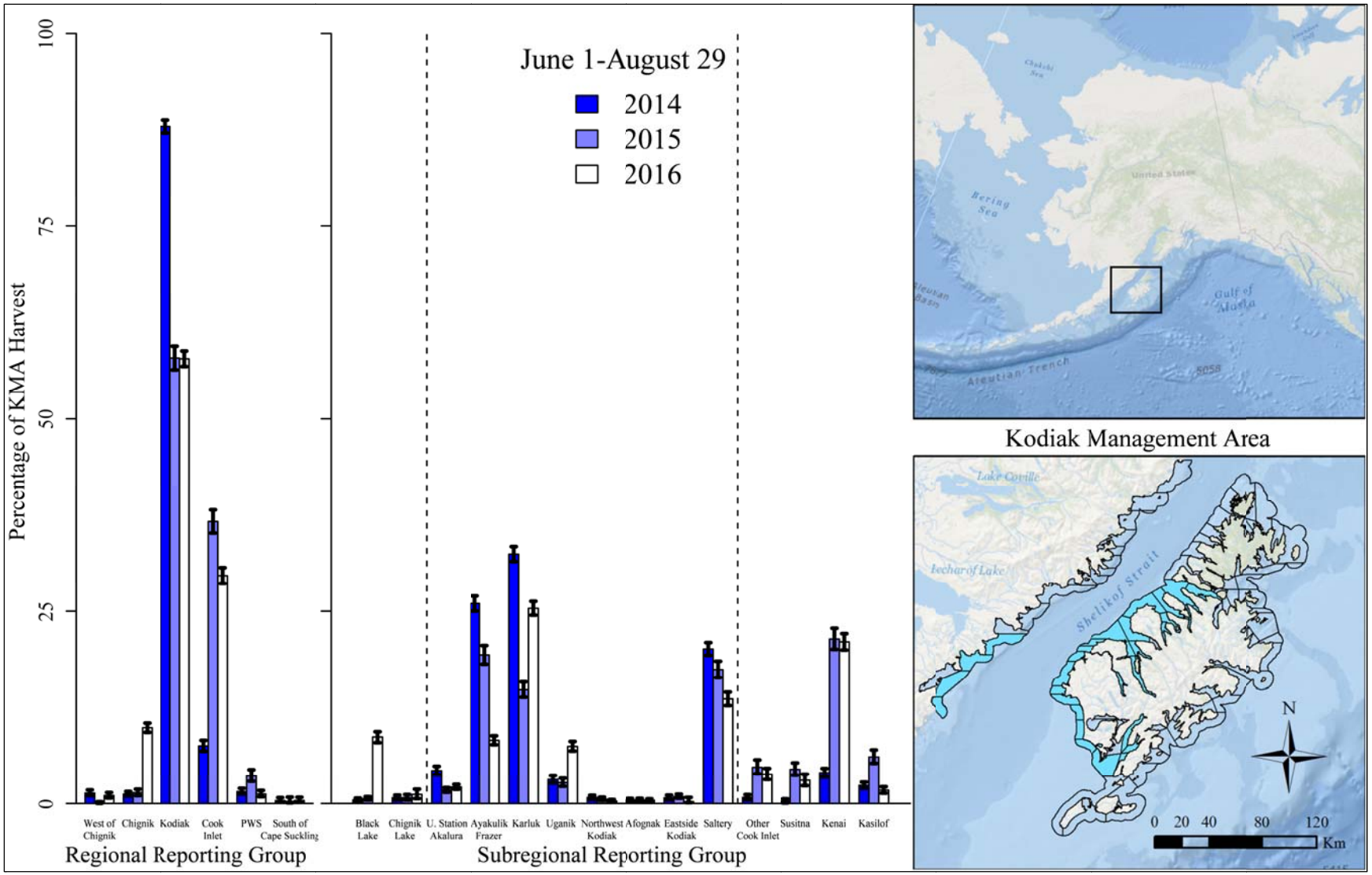

Figure 10.–Kodiak Management Area, Alaska, 2014–2016. Stock composition estimates (medians) and 90% credibility intervals of samples of sockeye salmon harvests.

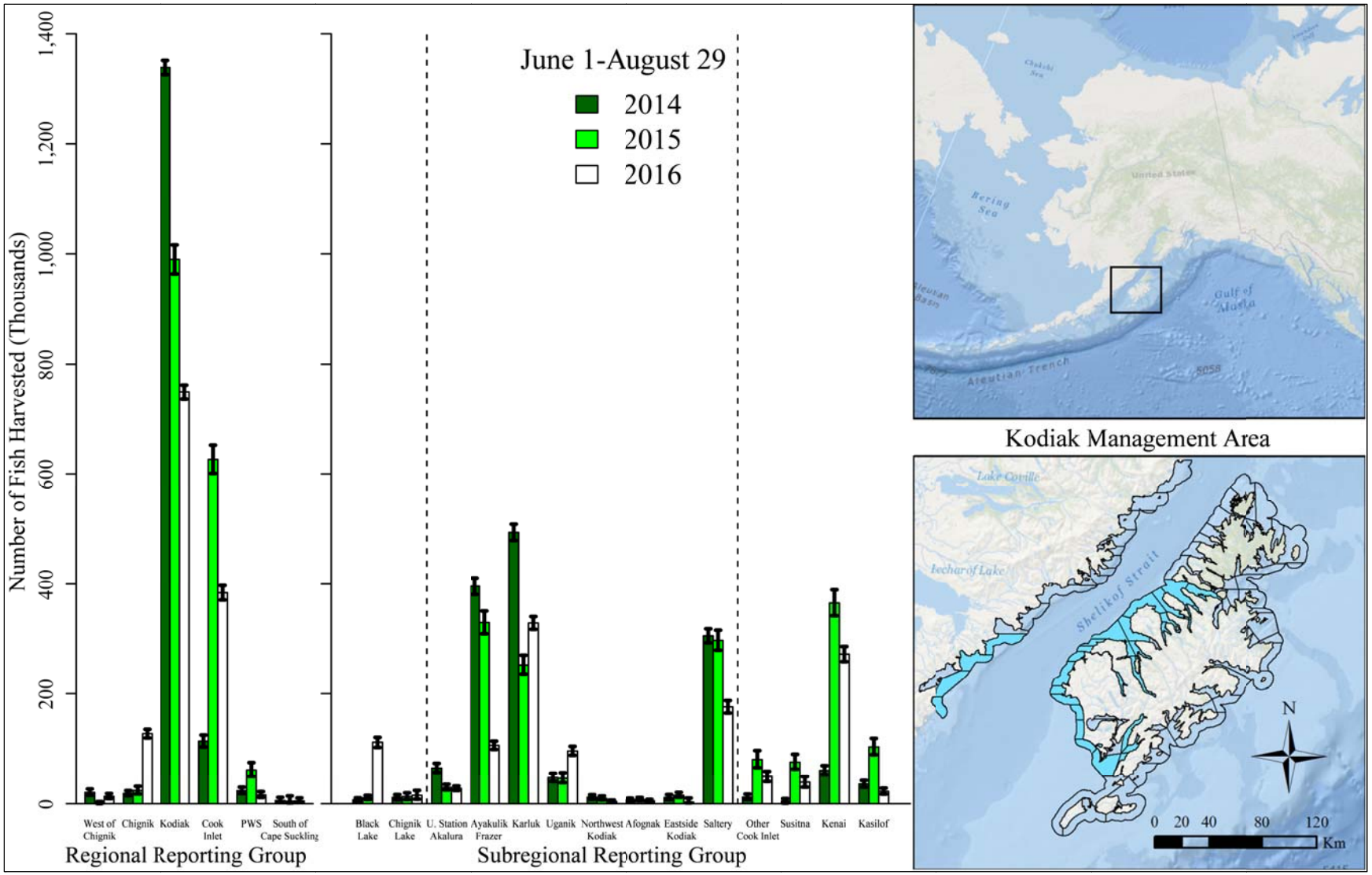

Figure 11.–Kodiak Management Area, Alaska, 2014–2016. Stock-specific harvest estimates (medians) and 90% credibility intervals of samples of sockeye salmon harvests.

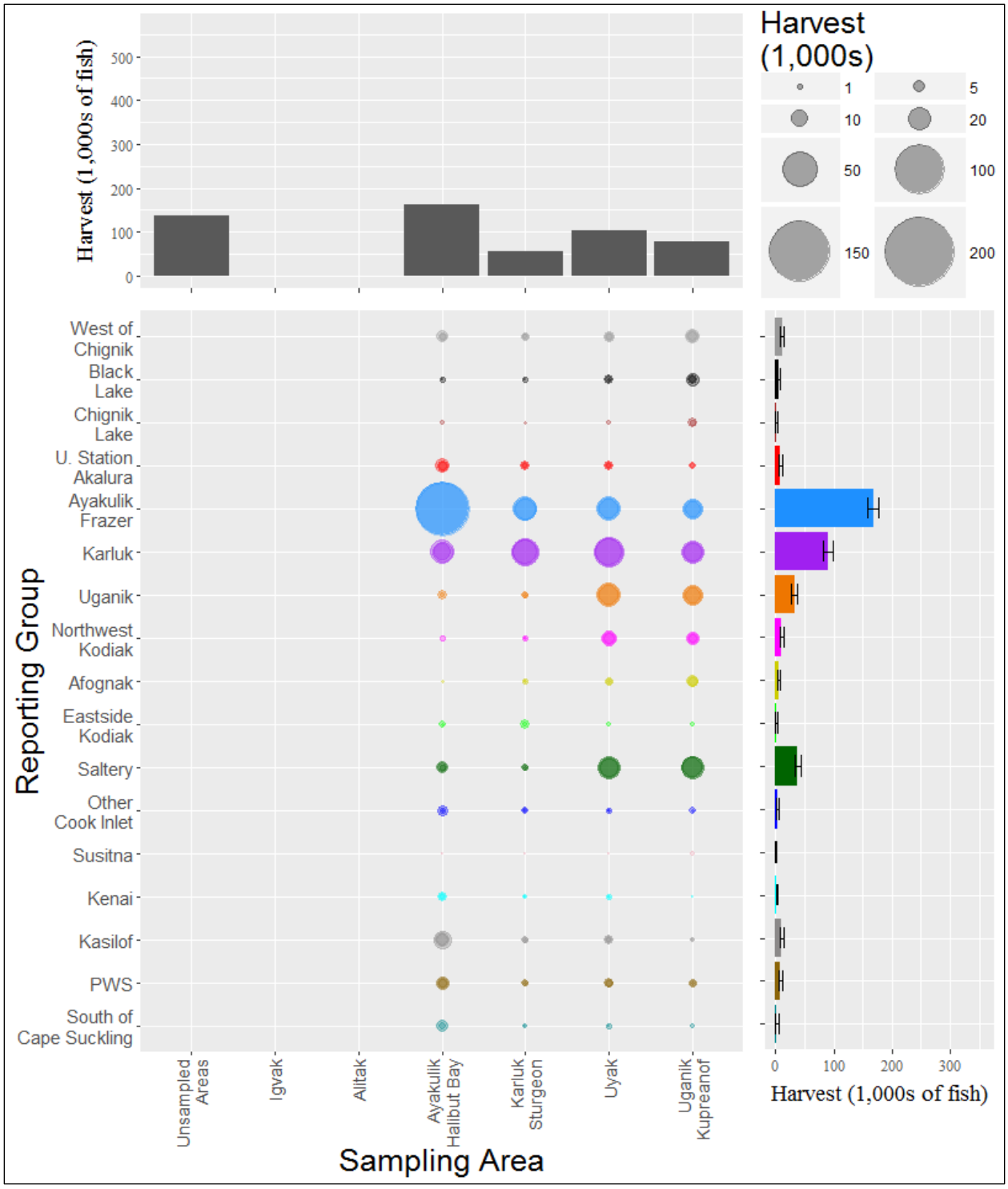

Figure 12.–Early temporal stratum (June 1–27), 2014, Kodiak Management Area (KMA).

Key: The bubble plot shows stock-specific harvest estimates (medians) of sockeye salmon for all 6 sampling areas (x-axis) for all 17 subregional reporting groups (y-axis). The size of the circle represents the stock-specific harvest for a sampling area (see legend, top right). Reporting groups are denoted by color. The top bar plot shows the total harvest in each sampling area, along with the unsampled areas of the KMA. The right bar plot shows the stock-specific harvest and 90% credibility intervals for the entire temporal stratum across all sampling areas.

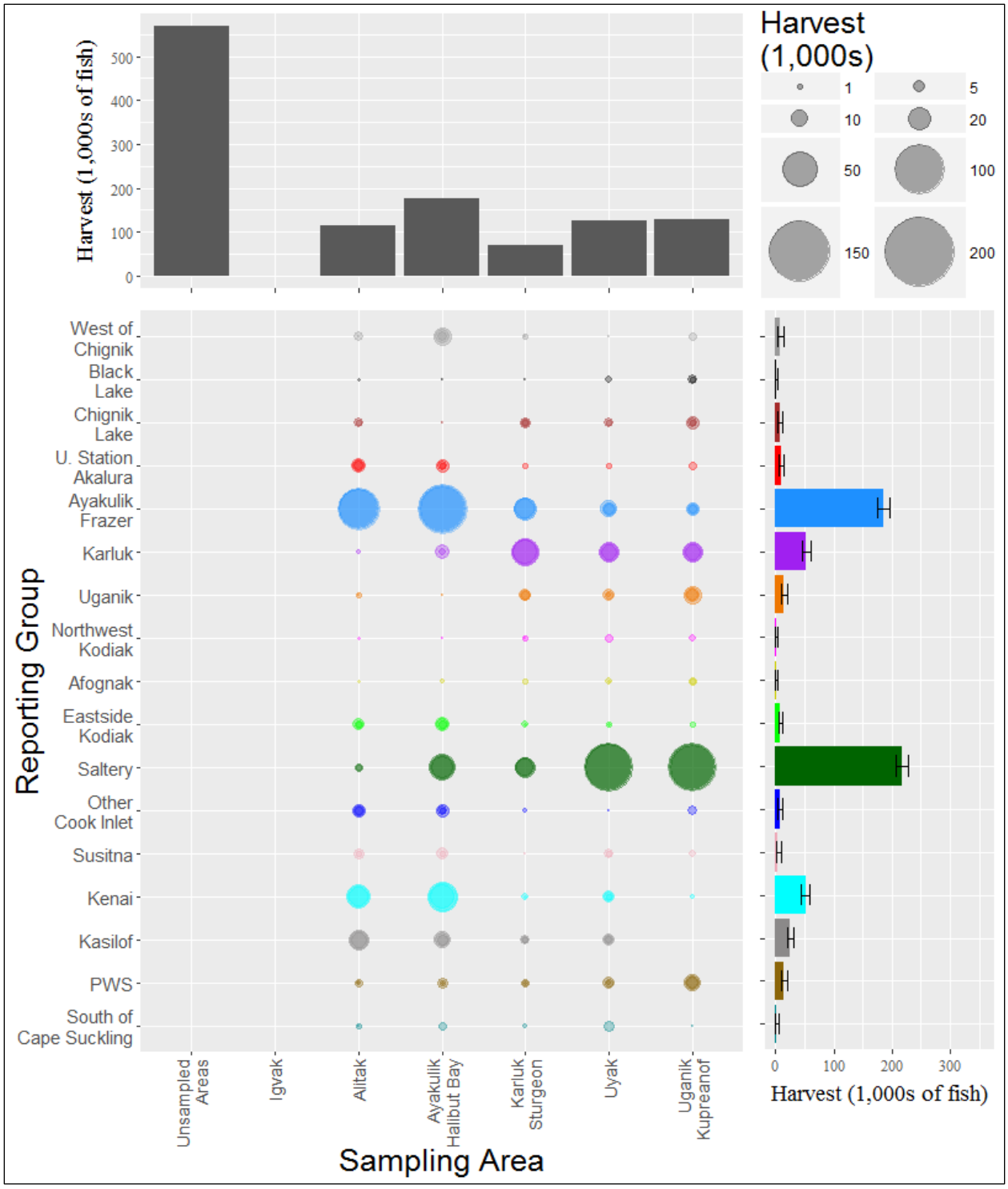

Figure 13.–Middle temporal stratum (June 28–July 25), 2014, Kodiak Management Area (KMA).

Key: The bubble plot shows stock-specific harvest estimates (medians) of sockeye salmon for all 6 sampling areas (x-axis) for all 17 subregional reporting groups (y-axis). The size of the circle represents the stock-specific harvest for a sampling area (see legend, top right). Reporting groups are denoted by color. The top bar plot shows the total harvest in each sampling area, along with the unsampled areas of the KMA. The right bar plot shows the stock-specific harvest and 90% credibility intervals for the entire temporal stratum across all sampling areas.

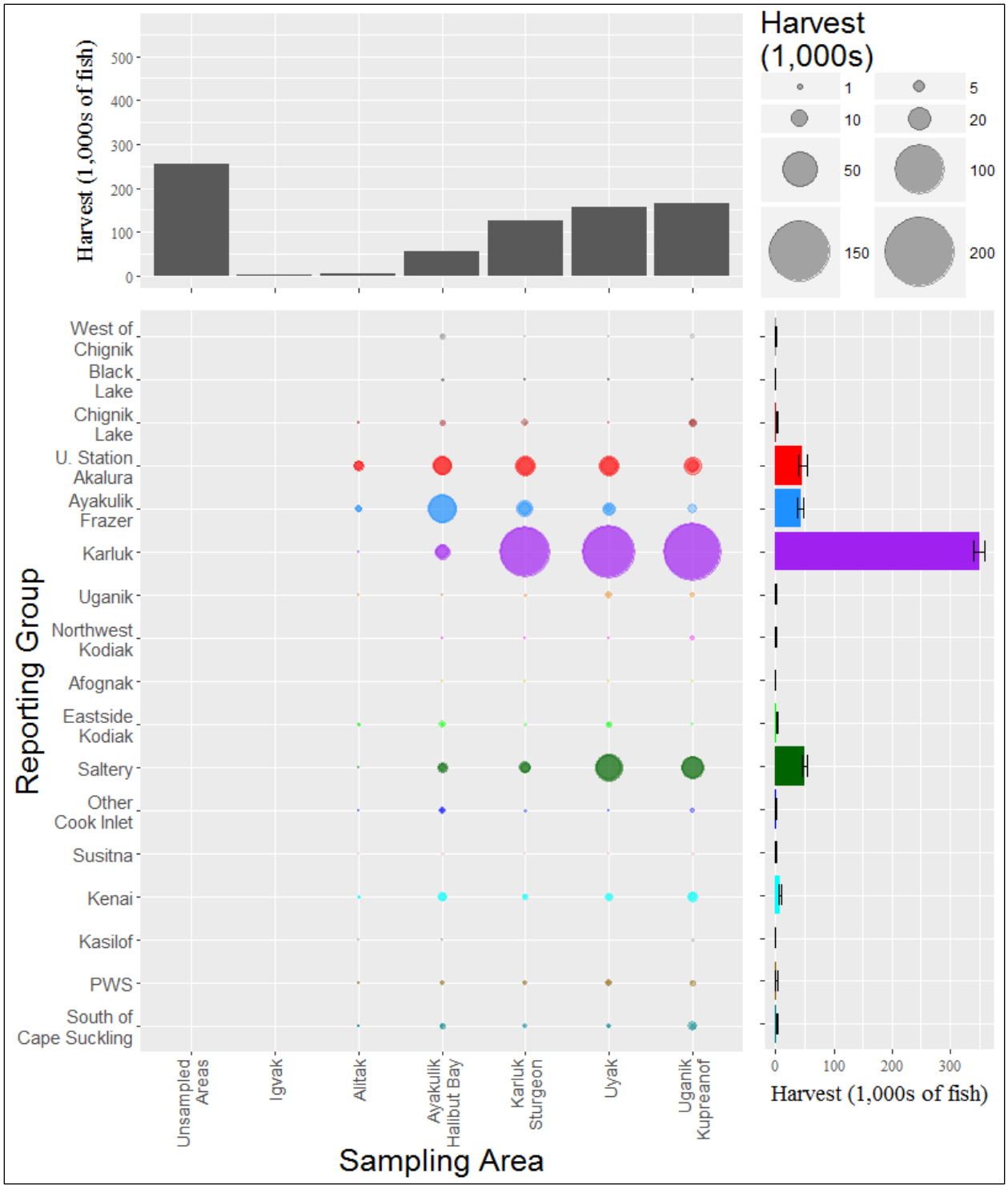

Figure 14.–Late temporal stratum (July 25–August 29), 2014, Kodiak Management Area (KMA).

Key: The bubble plot shows stock-specific harvest estimates (medians) of sockeye salmon for all 6 sampling areas (x-axis) for all 17 subregional reporting groups (y-axis). The size of the circle represents the stock-specific harvest for a sampling area (see legend, top right). Reporting groups are denoted by color. The top bar plot shows the total harvest in each sampling area, along with the unsampled areas of the KMA. The right bar plot shows the stock-specific harvest and 90% credibility intervals for the entire temporal stratum across all sampling areas.

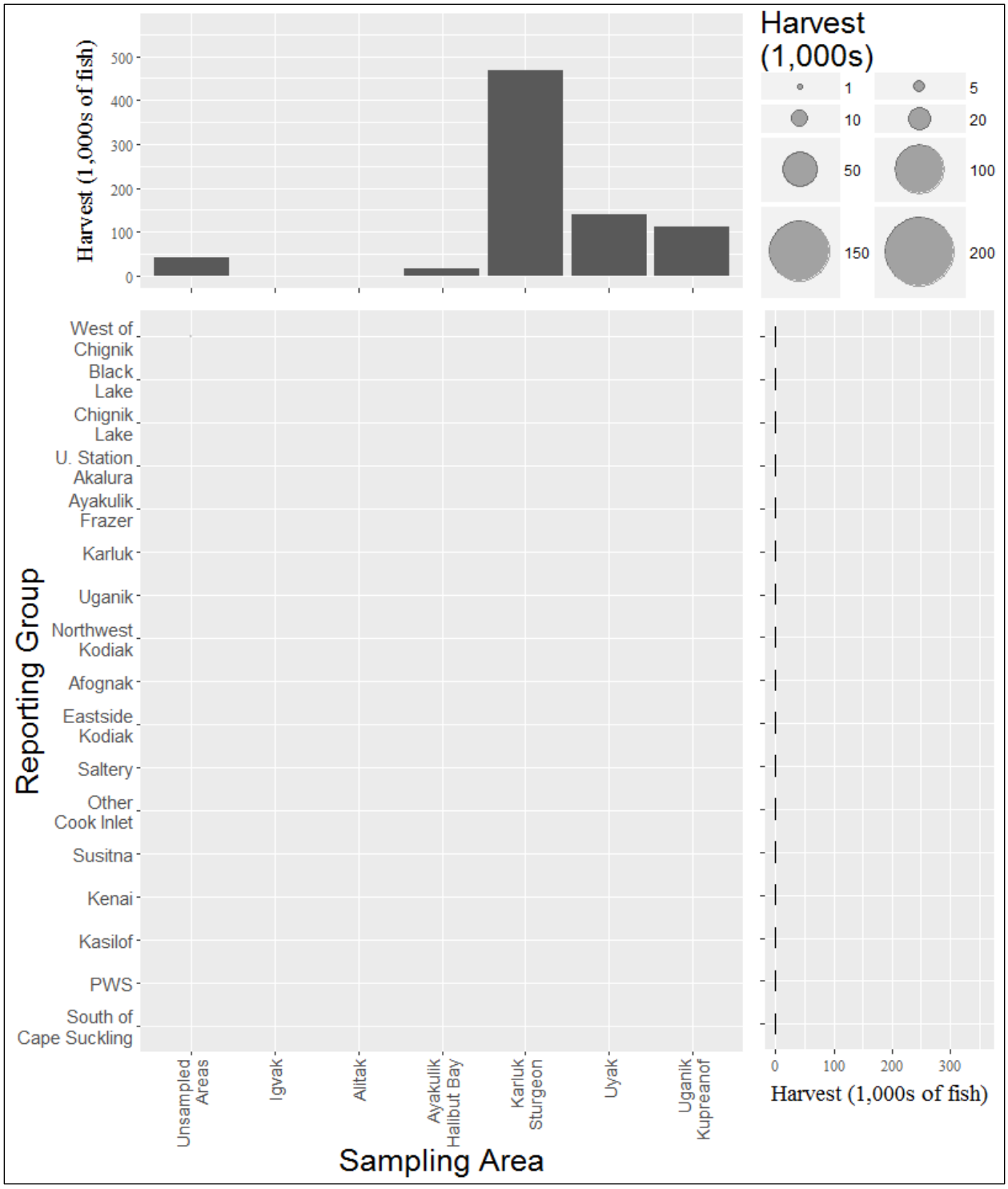

Figure 15.–Postsampling (after August 29), 2014, Kodiak Management Area (KMA). Stock-specific harvest estimates are not available as no samples were collected.

Key: The top bar plot shows the total harvest in each sampling area, along with the unsampled areas of the KMA.

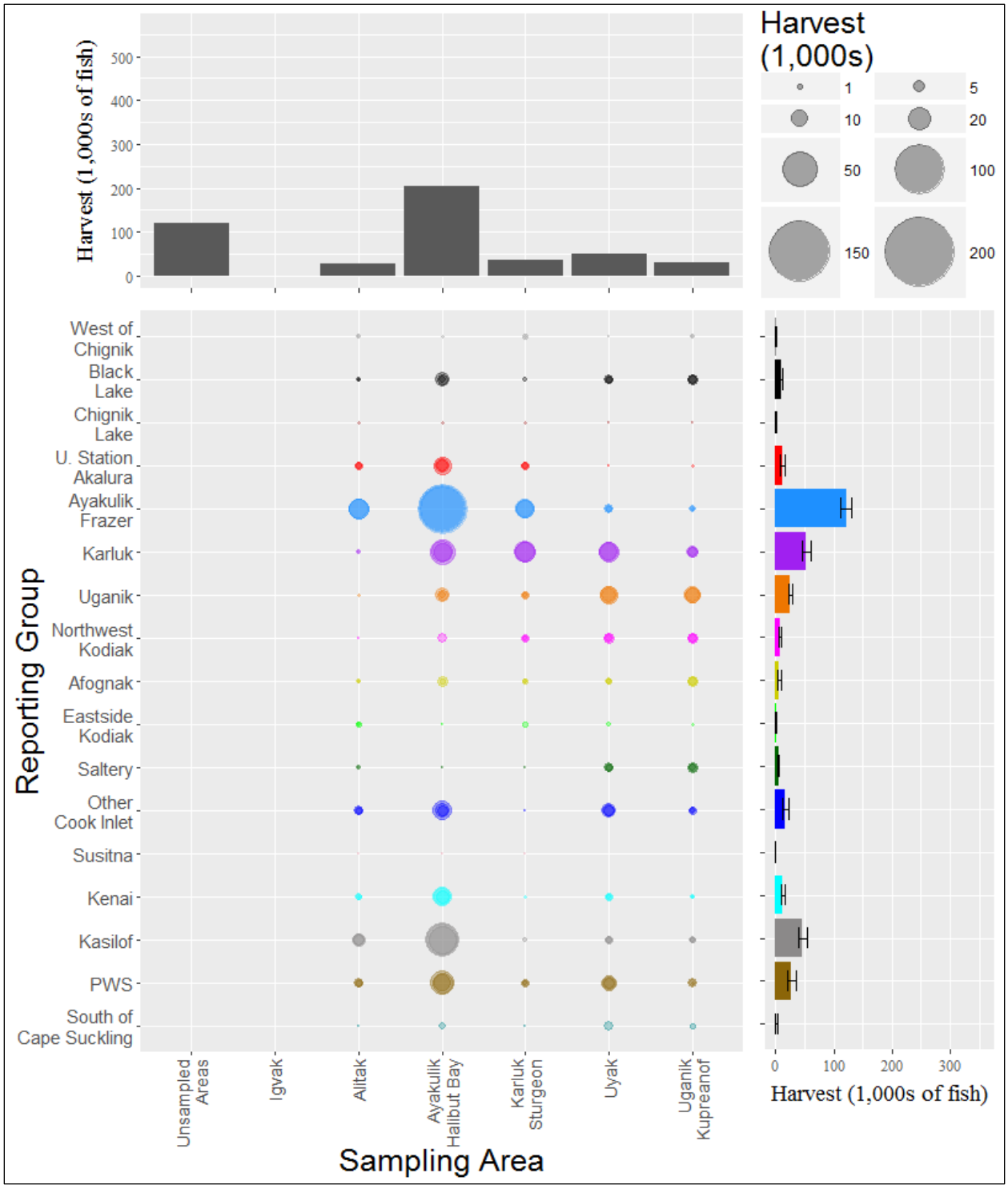

Figure 16.–Early temporal stratum (June 1–July 3), 2015, Kodiak Management Area (KMA).

Key: The bubble plot shows stock-specific harvest estimates (medians) of sockeye salmon for all 6 sampling areas (x-axis) for all 17 subregional reporting groups (y-axis). The size of the circle represents the stock-specific harvest for a sampling area (see legend, top right). Reporting groups are denoted by color. The top bar plot shows the total harvest in each sampling area, along with the unsampled areas of the KMA. The right bar plot shows the stock-specific harvest and 90% credibility intervals for the entire temporal stratum across all sampling areas.

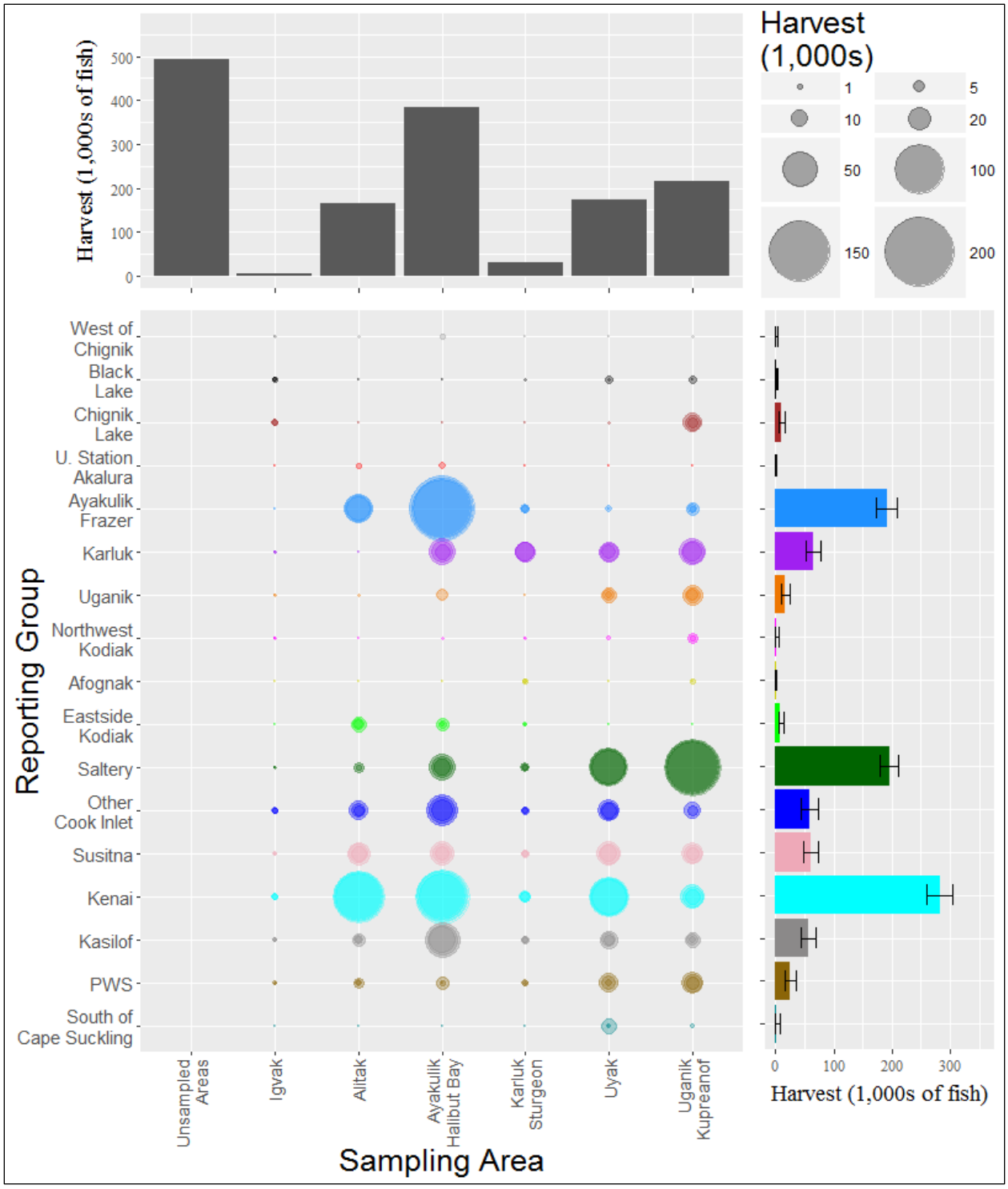

Figure 17.–Middle temporal stratum (July 4–August 1), 2015, Kodiak Management Area (KMA).

Key: The bubble plot shows stock-specific harvest estimates (medians) of sockeye salmon for all 6 sampling areas (x-axis) for all 17 subregional reporting groups (y-axis). The size of the circle represents the stock-specific harvest for a sampling area (see legend, top right). Reporting groups are denoted by color. The top bar plot shows the total harvest in each sampling area, along with the unsampled areas of the KMA. The right bar plot shows the stock-specific harvest and 90% credibility intervals for the entire temporal stratum across all sampling areas.

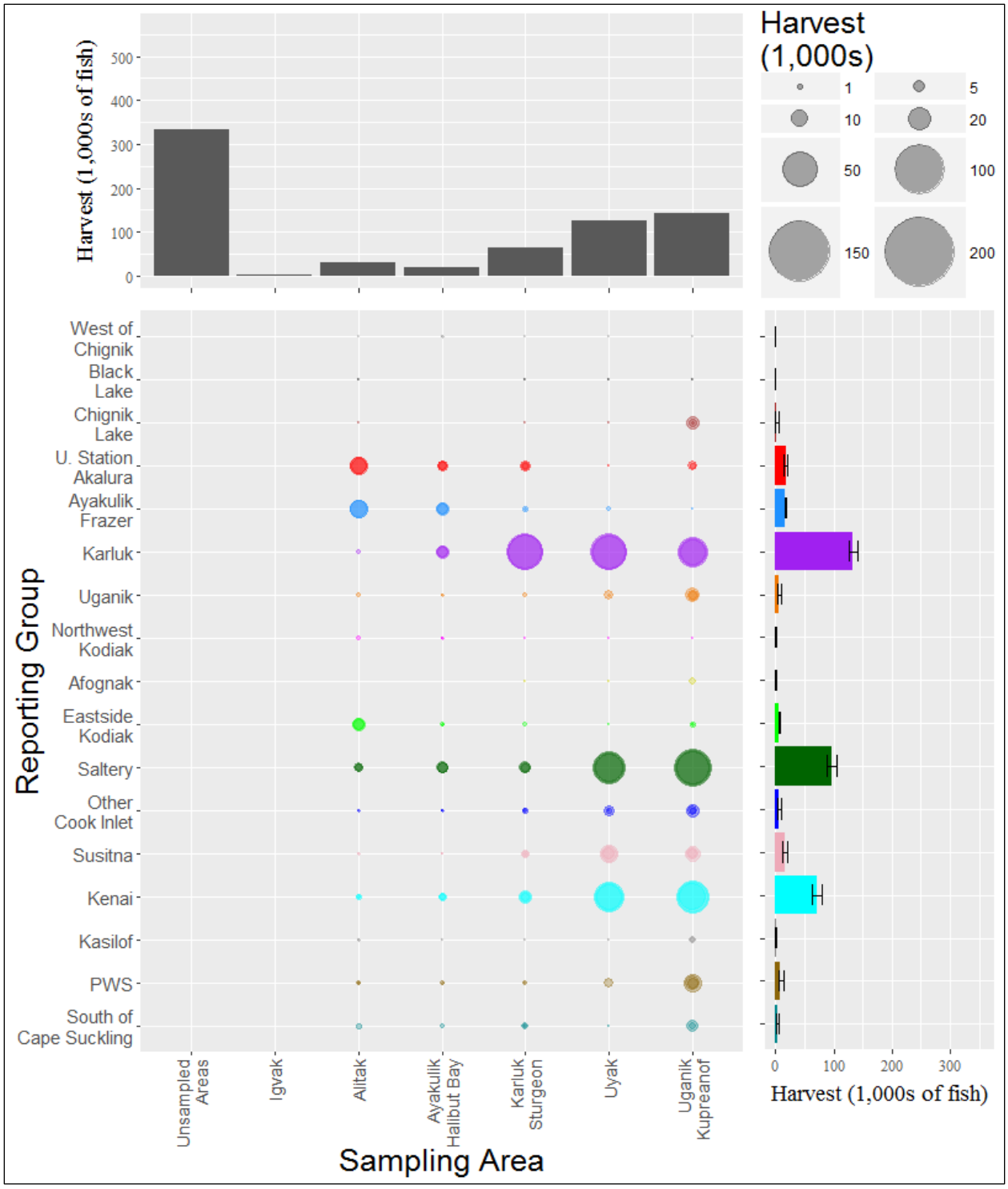

Figure 18.–Late temporal stratum (August 2–29), 2015, Kodiak Management Area (KMA).

Key: The bubble plot shows stock-specific harvest estimates (medians) of sockeye salmon for all 6 sampling areas (x-axis) for all 17 subregional reporting groups (y-axis). The size of the circle represents the stock-specific harvest for a sampling area (see legend, top right). Reporting groups are denoted by color. The top bar plot shows the total harvest in each sampling area, along with the unsampled areas of the KMA. The right bar plot shows the stock-specific harvest and 90% credibility intervals for the entire temporal stratum across all sampling areas.

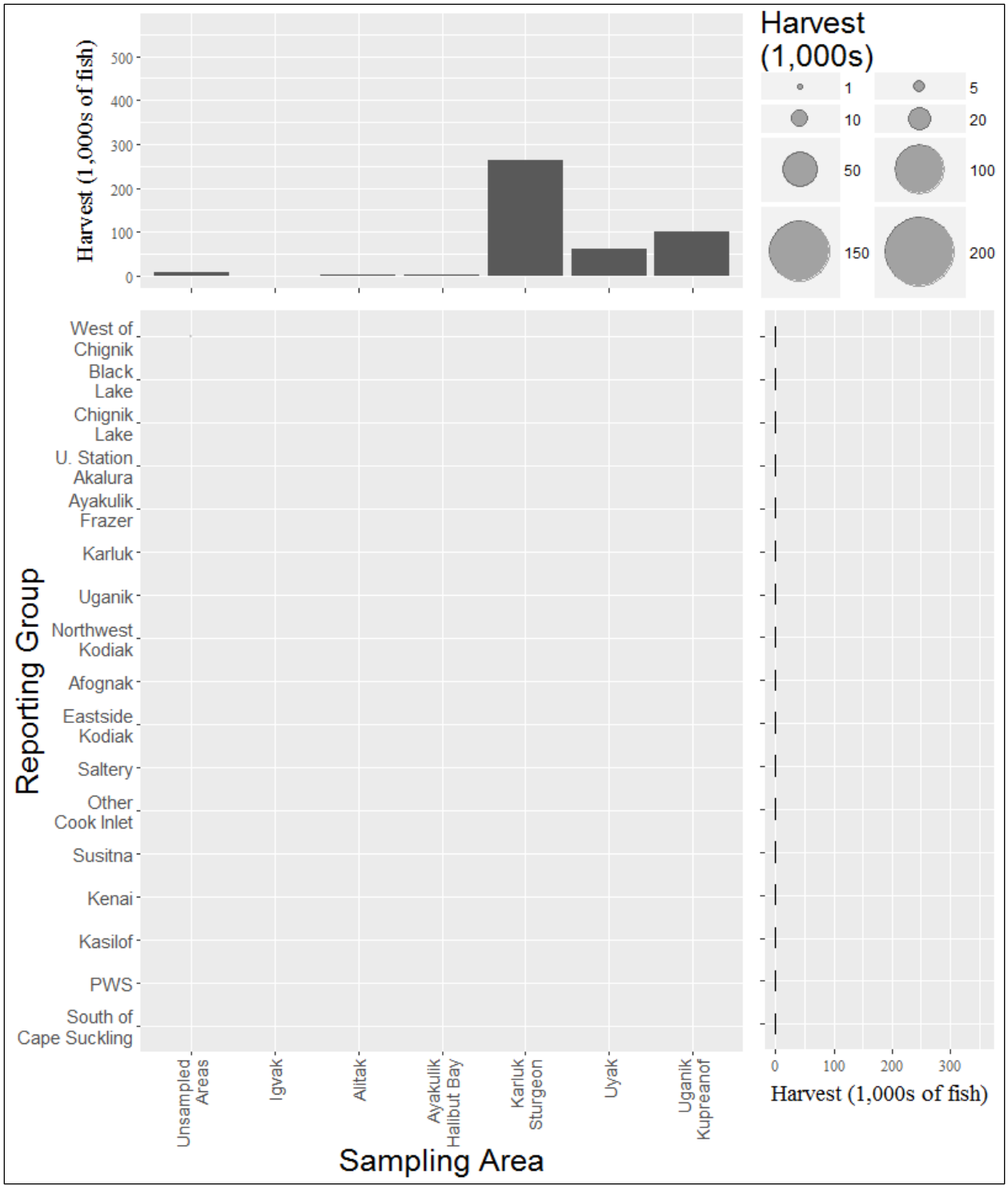

Figure 19.–Postsampling (after August 29), 2015, Kodiak Management Area (KMA). Stock-specific harvest estimates are not available as no samples were collected.

Key: The top bar plot shows the total harvest in each sampling area, along with the unsampled areas of the KMA.

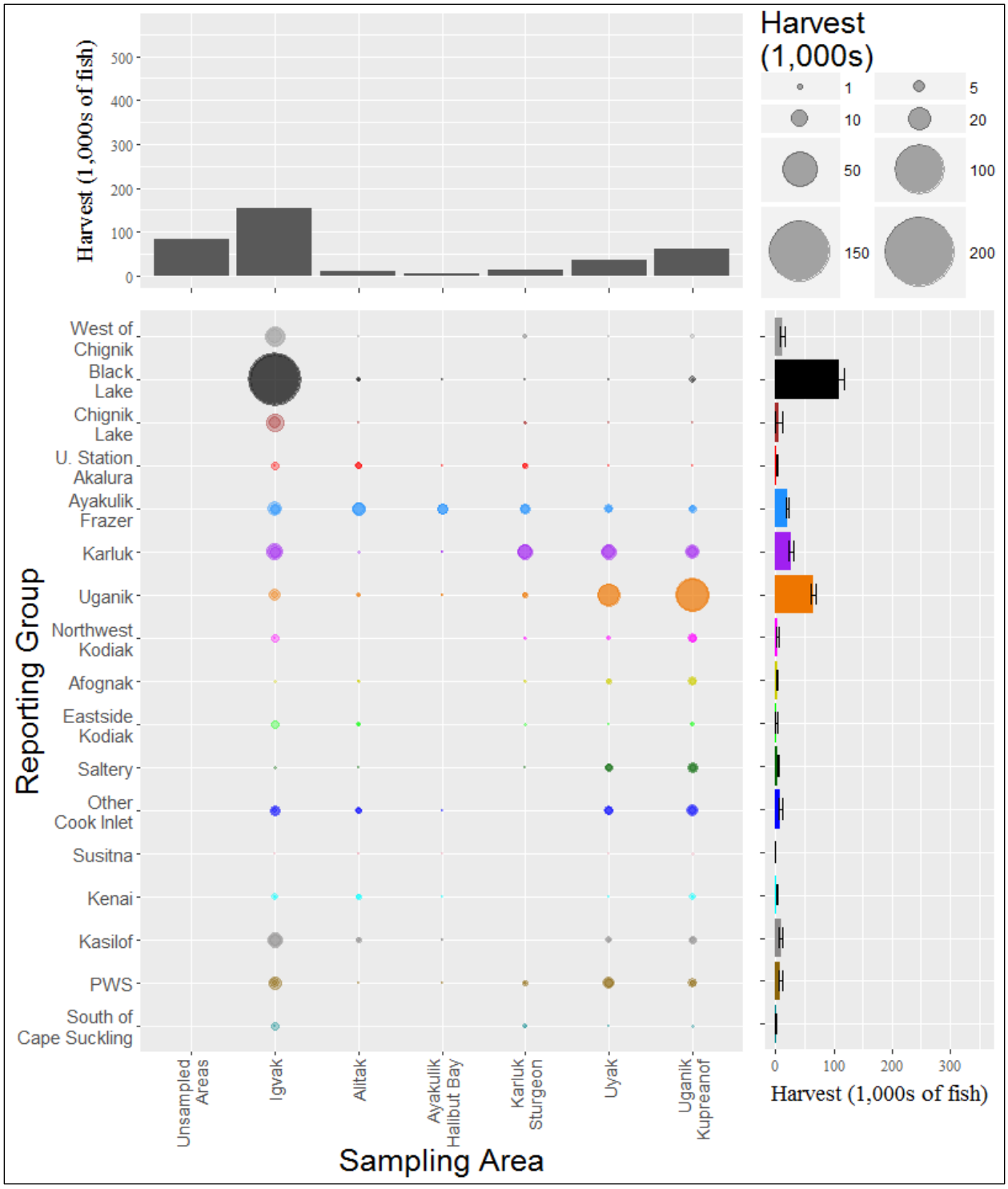

Figure 20.–Early temporal stratum (June 1–27), 2016, Kodiak Management Area (KMA).

Key: The bubble plot shows stock-specific harvest estimates (medians) of sockeye salmon for all 6 sampling areas (x-axis) for all 17 subregional reporting groups (y-axis). The size of the circle represents the stock-specific harvest for a sampling area (see legend, top right). Reporting groups are denoted by color. The top bar plot shows the total harvest in each sampling area, along with the unsampled areas of the KMA. The right bar plot shows the stock-specific harvest and 90% credibility intervals for the entire temporal stratum across all sampling areas.

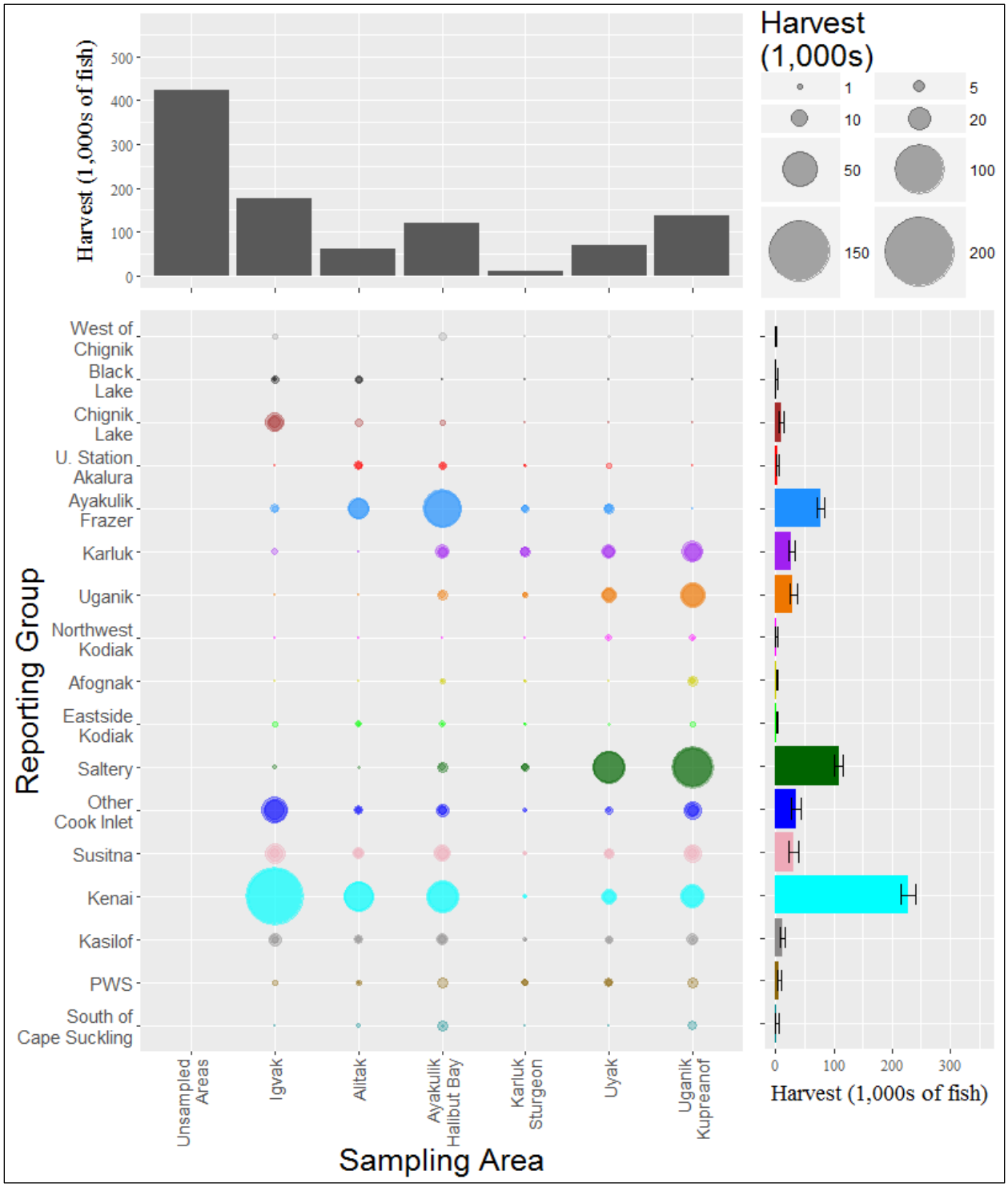

Figure 21.–Middle temporal stratum (June 28–July 25), 2016, Kodiak Management Area (KMA).

Key: The bubble plot shows stock-specific harvest estimates (medians) of sockeye salmon for all 6 sampling areas (x-axis) for all 17 subregional reporting groups (y-axis). The size of the circle represents the stock-specific harvest for a sampling area (see legend, top right). Reporting groups are denoted by color. The top bar plot shows the total harvest in each sampling area, along with the unsampled areas of the KMA. The right bar plot shows the stock-specific harvest and 90% credibility intervals for the entire temporal stratum across all sampling areas.

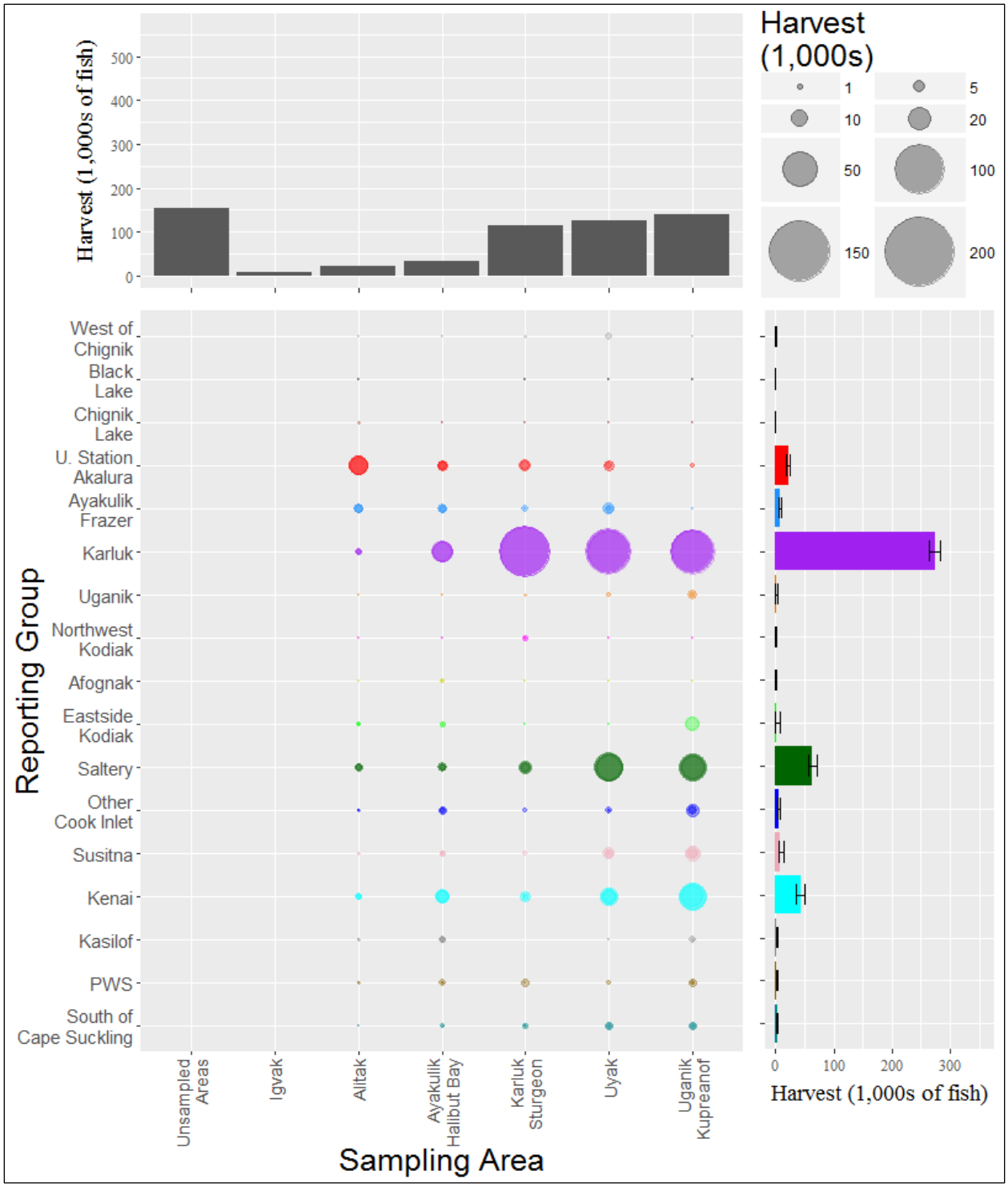

Figure 22.–Late temporal stratum (July 26–August 29), 2016, Kodiak Management Area (KMA).

Key: The bubble plot shows stock-specific harvest estimates (medians) of sockeye salmon for all 6 sampling areas (x-axis) for all 17 subregional reporting groups (y-axis). The size of the circle represents the stock-specific harvest for a sampling area (see legend, top right). Reporting groups are denoted by color. The top bar plot shows the total harvest in each sampling area, along with the unsampled areas of the KMA. The right bar plot shows the stock-specific harvest and 90% credibility intervals for the entire temporal stratum across all sampling areas.

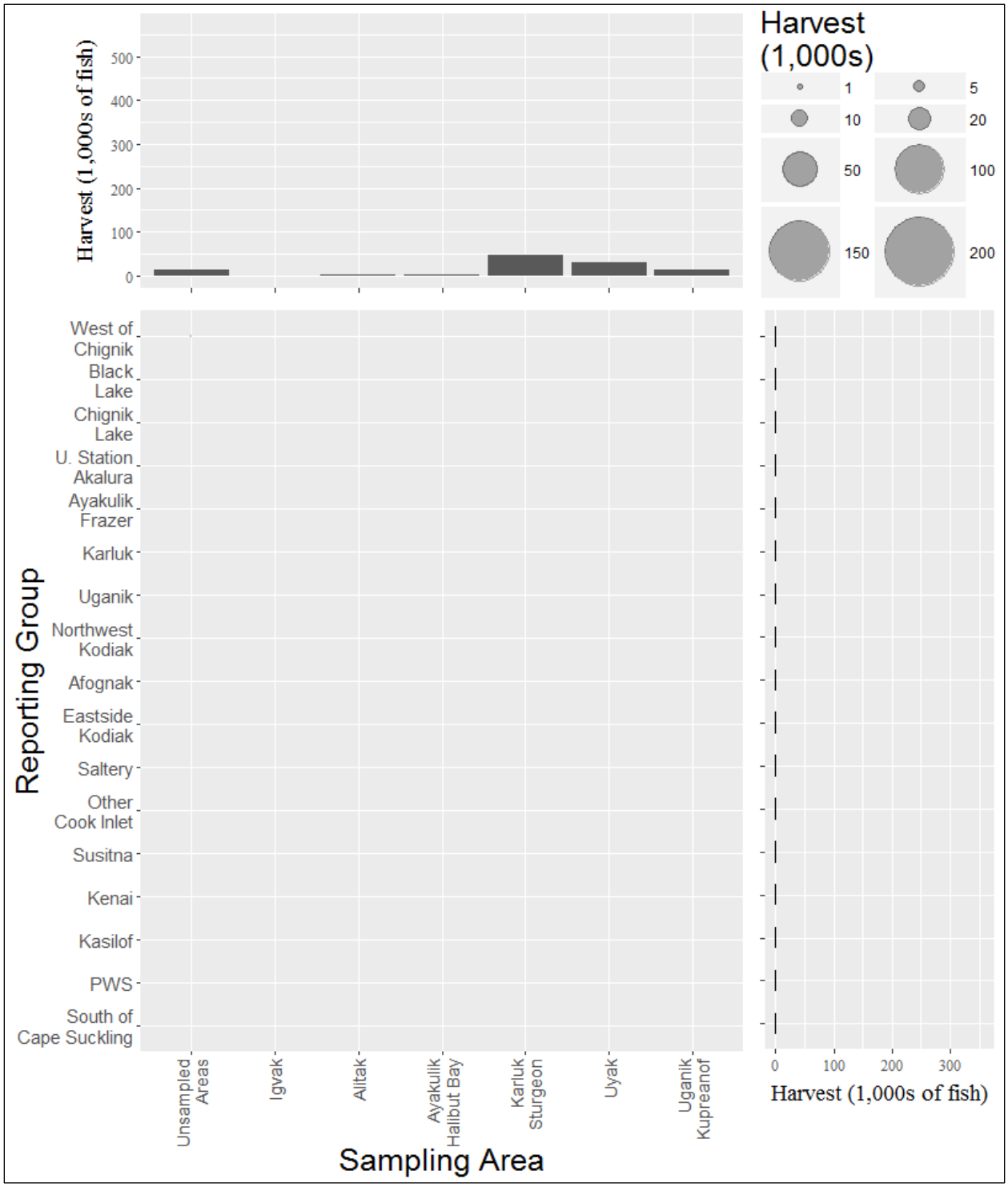

Figure 23.–Postsampling (after August 29), 2016, Kodiak Management Area (KMA). Stock-specific harvest estimates are not available as no samples were collected.

Key: The top bar plot shows the total harvest in each sampling area, along with the unsampled areas of the KMA.

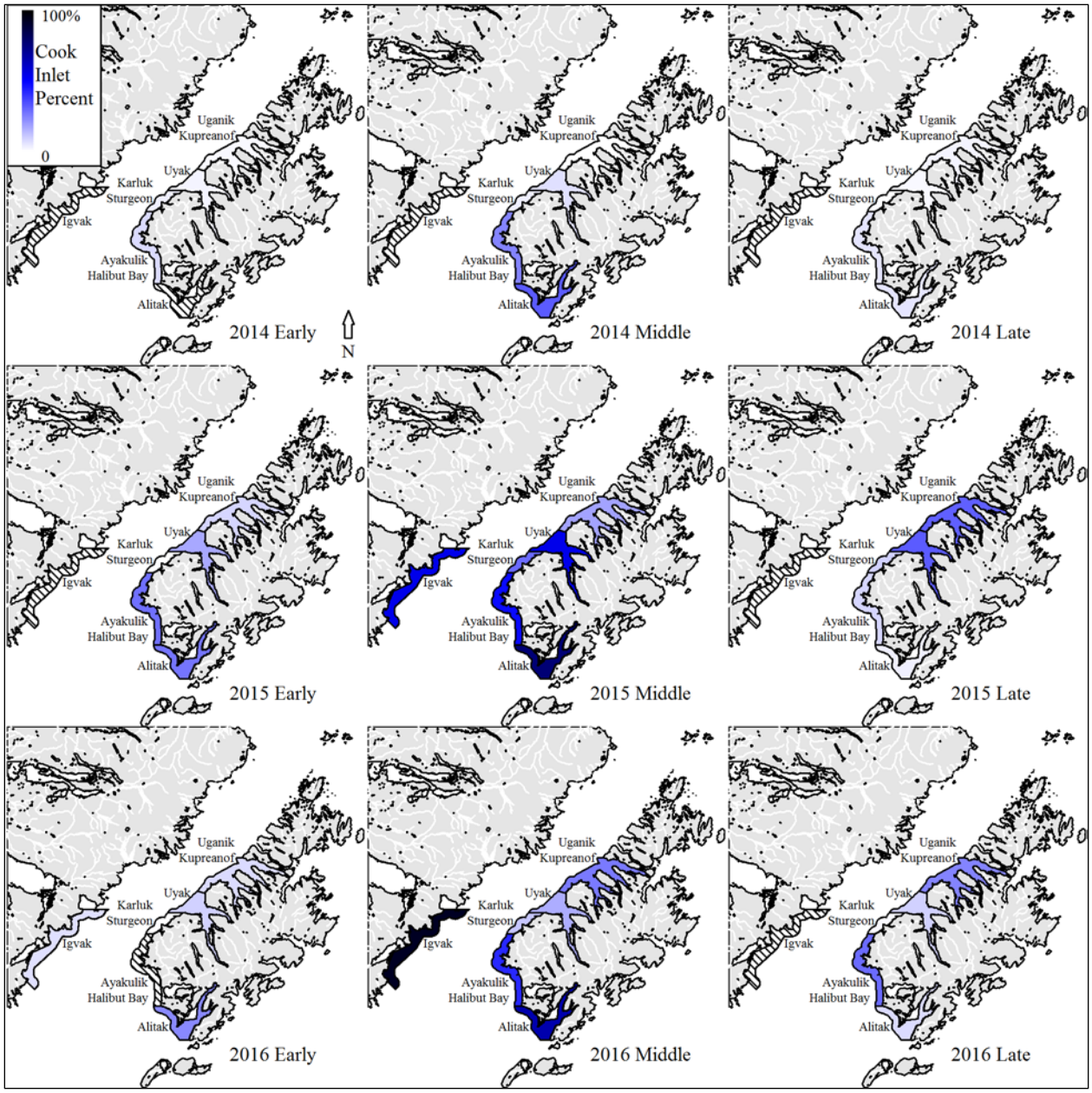

Figure 24.–Kodiak Management Area, Alaska, 2014–2016. Stock composition estimates (medians) of Cook Inlet-origin contribution to samples of sockeye salmon harvests.

Key: Each map shows the percentage of Cook Inlet-origin fish for each of the 6 sampling areas. The 3 temporal strata (Early, Middle, Late) are in columns and the 3 sampling years (2014–2016) are in rows. If no estimates were available for a given sampling area, it is crossed out.

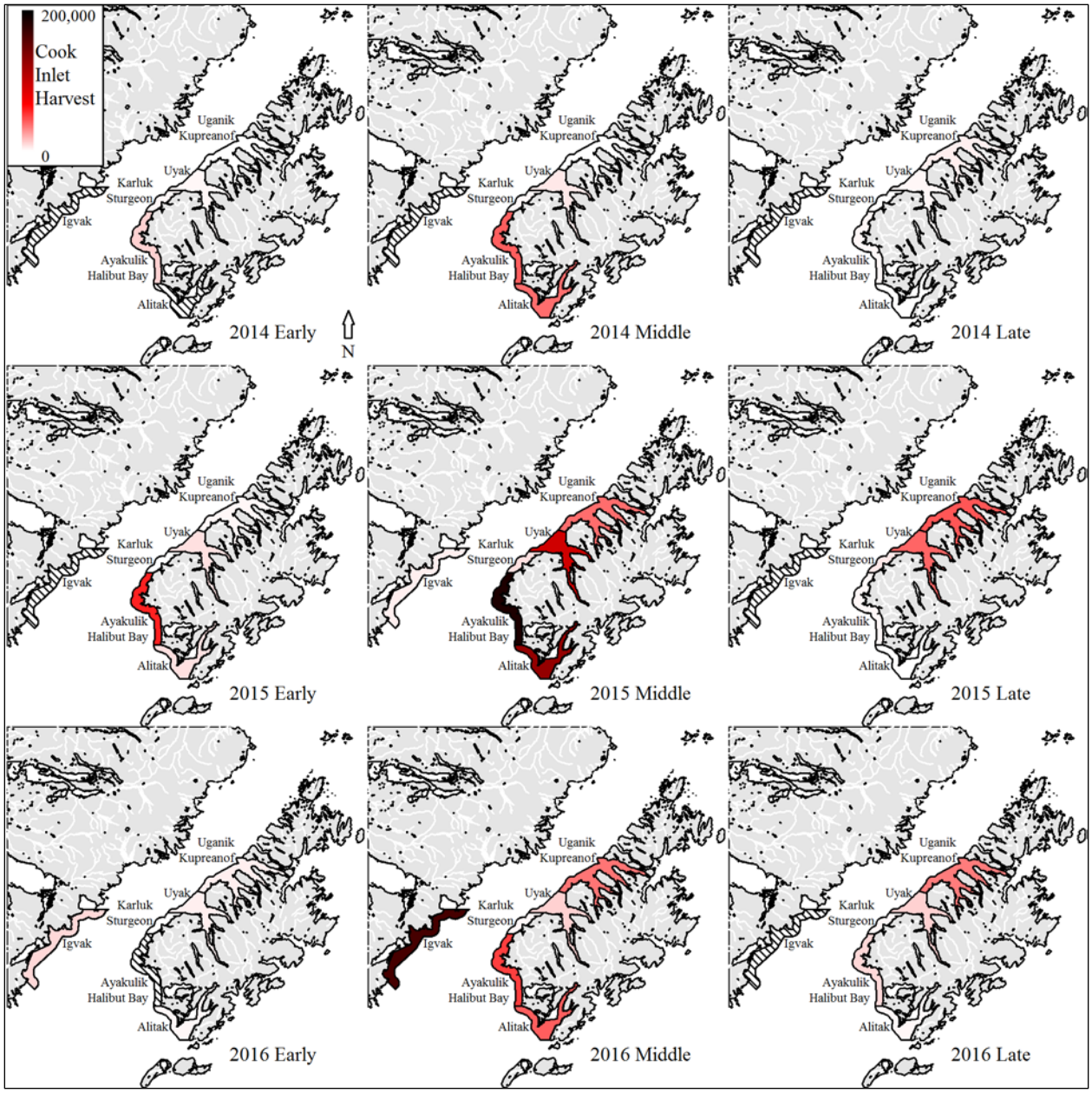

Figure 25.–Kodiak Management Area, Alaska, 2014–2016. Stock-specific harvest estimates (medians) of Cook Inlet-origin contribution to samples of sockeye salmon harvests.

Key: Each map shows the harvest of Cook Inlet-origin fish for each of the 6 sampling areas. The 3 temporal strata (Early, Middle, Late) are in columns and the 3 sampling years (2014–2016) are in rows. If no estimates were available for a given sampling area, it is crossed out.

APPENDIX A: DETAILED ESTIMATES OF STOCK COMPOSITION (%) AND STOCK-SPECIFIC HARVEST

Appendix A1.–Uganik-Kupreanof (statistical areas 253-11, 12, 13, 14, 31, 32, 33, 34, 35), temporal stratum 1 ("Early"; June 1–27; Harvest = 79,494; *n* = 376), 2014. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		6.6	4.4	9.5	0.00	6.7	1.6	5,273	3,466	7,545	5,359	1,247
Chignik		5.9	3.7	8.6	0.00	6.0	1.5	4,680	2,977	6,802	4,759	1,169
Kodiak		84.7	80.9	88.1	0.00	84.6	2.2	67,332	64,302	70,024	67,268	1,740
Cook Inlet		0.8	0.1	2.7	0.00	1.0	0.8	619	81	2,155	801	671
Prince William Sound		1.3	0.5	3.0	0.00	1.5	0.8	1,065	399	2,347	1,178	618
South of Cape Suckling		0.0	0.0	0.9	0.42	0.2	0.4	0	0	753	129	322
										Total	79,494	
Chignik	Black Lake	4.4	1.9	7.3	0.00	4.5	1.7	3,486	1,493	5,838	3,550	1,327
	Chignik Lake	1.2	0.0	4.3	0.14	1.5	1.5	977	0	3,425	1,209	1,172
Kodiak	Upper Station / Akalura	0.7	0.0	1.9	0.09	0.7	0.6	524	0	1,500	595	485
	Ayakulik / Frazer	15.8	12.3	19.7	0.00	15.9	2.2	12,571	9,813	15,629	12,623	1,775
	Karluk	20.1	15.8	24.8	0.00	20.2	2.7	16,000	12,591	19,712	16,052	2,166
	Uganik	15.2	11.6	19.2	0.00	15.3	2.3	12,073	9,251	15,229	12,133	1,819
	Northwest Kodiak	5.2	2.9	8.1	0.00	5.3	1.6	4,121	2,275	6,421	4,206	1,271
	Afognak	4.9	3.1	7.2	0.00	5.0	1.3	3,869	2,425	5,707	3,940	1,001
	Eastside Kodiak	0.0	0.0	0.9	0.47	0.1	0.4	0	0	715	110	317
	Saltery	22.1	18.1	26.4	0.00	22.2	2.5	17,565	14,359	21,003	17,608	2,023
Cook Inlet	Other Cook Inlet	*	*	*	*	*	*	*	*	*	*	*
	Susitna	*	*	*	*	*	*	*	*	*	*	*
	Kenai	*	*	*	*	*	*	*	*	*	*	*
	Kasilof	*	*	*	*	*	*	*	*	*	*	*

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A2.–Uganik-Kupreanof (statistical areas 253-11, 12, 13, 14, 31, 32, 33, 34, 35), temporal stratum 2 ("Middle"; June 28–July 25; Harvest = 128,836; *n* = 376), 2014. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	1.6	0.47	0.3	0.7	0	0	2,110	326	950
Chignik		3.4	1.8	5.7	0.00	3.5	1.2	4,403	2,260	7,316	4,545	1,551
Kodiak		89.3	85.8	92.4	0.00	89.2	2.0	115,105	110,499	119,036	114,977	2,609
Cook Inlet		0.4	0.0	2.8	0.36	0.8	1.0	498	0	3,570	1,003	1,265
Prince William Sound		6.1	3.9	8.8	0.00	6.2	1.5	7,839	5,016	11,356	7,965	1,935
South of Cape Suckling		0.0	0.0	0.0	0.90	0.0	0.1	0	0	10	19	150
										Total	128,836	
Chignik	Black Lake	0.9	0.0	2.3	0.06	1.0	0.7	1,137	0	2,992	1,266	934
	Chignik Lake	2.4	0.9	4.7	0.00	2.5	1.2	3,085	1,191	6,048	3,279	1,503
Kodiak	Upper Station / Akalura	0.0	0.0	1.5	0.58	0.3	0.6	0	0	1,974	412	717
	Ayakulik / Frazer	3.4	1.9	5.4	0.00	3.5	1.1	4,331	2,415	6,931	4,457	1,388
	Karluk	9.2	6.5	12.4	0.00	9.3	1.8	11,895	8,398	15,965	12,006	2,306
	Uganik	6.4	3.6	10.0	0.00	6.5	2.0	8,208	4,668	12,863	8,413	2,514
	Northwest Kodiak	0.0	0.0	1.1	0.48	0.2	0.4	0	0	1,428	251	529
	Afognak	0.7	0.0	2.0	0.05	0.8	0.6	927	0	2,515	1,051	780
	Eastside Kodiak	0.0	0.0	0.8	0.86	0.1	0.6	0	0	971	157	710
	Saltery	68.5	63.7	73.1	0.00	68.5	2.9	88,284	82,072	94,223	88,230	3,691
Cook Inlet	Other Cook Inlet	*	*	*	*	*	*	*	*	*	*	*
	Susitna	*	*	*	*	*	*	*	*	*	*	*
	Kenai	*	*	*	*	*	*	*	*	*	*	*
	Kasilof	*	*	*	*	*	*	*	*	*	*	*

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A3.–Uganik-Kupreanof (statistical areas 253-11, 12, 13, 14, 31, 32, 33, 34, 35), temporal stratum 3 ("Late"; July 26–August 29; Harvest = 163,843; *n* = 654), 2014. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.3	0.77	0.0	0.1	0	0	437	53	180
Chignik		0.7	0.3	1.2	0.00	0.7	0.3	1,109	476	2,008	1,159	472
Kodiak		96.3	95.1	97.3	0.00	96.3	0.7	157,851	155,740	159,484	157,761	1,148
Cook Inlet		1.9	1.3	2.6	0.00	1.9	0.4	3,123	2,100	4,331	3,159	680
Prince William Sound		0.1	0.0	0.7	0.24	0.2	0.2	143	0	1,119	313	396
South of Cape Suckling		0.8	0.2	1.8	0.00	0.9	0.5	1,245	384	2,939	1,398	807
										Total	163,843	
Chignik	Black Lake	0.0	0.0	0.0	0.86	0.0	0.0	0	0	13	7	53
	Chignik Lake	0.7	0.3	1.2	0.00	0.7	0.3	1,103	472	1,997	1,152	470
Kodiak	Upper Station / Akalura	4.4	2.2	7.2	0.00	4.5	1.5	7,194	3,677	11,751	7,386	2,465
	Ayakulik / Frazer	0.0	0.0	2.0	0.55	0.3	0.7	0	0	3,272	524	1,187
	Karluk	80.2	76.8	82.9	0.00	80.1	1.9	131,408	125,887	135,894	131,209	3,064
	Uganik	0.0	0.0	0.3	0.49	0.0	0.1	0	0	420	66	169
	Northwest Kodiak	0.0	0.0	0.4	0.59	0.1	0.1	0	0	636	125	234
	Afognak	0.0	0.0	0.0	0.84	0.0	0.0	0	0	33	12	71
	Eastside Kodiak	0.0	0.0	0.0	0.84	0.0	0.1	0	0	36	16	116
	Saltery	11.2	9.9	12.7	0.00	11.2	0.8	18,364	16,285	20,763	18,423	1,366
Cook Inlet	Other Cook Inlet	*	*	*	*	*	*	*	*	*	*	*
	Susitna	*	*	*	*	*	*	*	*	*	*	*
	Kenai	*	*	*	*	*	*	*	*	*	*	*
	Kasilof	*	*	*	*	*	*	*	*	*	*	*

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A4.–Uganik-Kupreanof (statistical areas 253-11, 12, 13, 14, 31, 32, 33, 34, 35), 2014, all strata. Annual regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		1.5	1.0	2.3	0.00	1.5	0.4	5,551	3,604	8,495	5,738	1,562
Chignik		2.8	2.0	3.7	0.00	2.8	0.5	10,353	7,363	13,952	10,463	2,010
Kodiak		91.4	89.8	92.8	0.00	91.4	0.9	340,121	334,286	345,334	340,006	3,359
Cook Inlet		1.3	0.8	2.1	0.00	1.3	0.4	4,719	2,863	7,868	4,963	1,560
Prince William Sound		2.5	1.7	3.5	0.00	2.5	0.6	9,324	6,288	13,062	9,456	2,069
South of Cape Suckling		0.4	0.1	0.9	0.00	0.4	0.2	1,382	434	3,232	1,546	882
										Total	372,173	
Chignik	Black Lake	1.3	0.6	2.1	0.00	1.3	0.4	4,732	2,305	7,649	4,823	1,629
	Chignik Lake	1.5	0.7	2.5	0.00	1.5	0.5	5,459	2,762	9,144	5,640	1,962
Kodiak	Upper Station / Akalura	2.2	1.2	3.5	0.00	2.3	0.7	8,203	4,471	12,985	8,393	2,604
	Ayakulik / Frazer	4.7	3.7	5.9	0.00	4.7	0.7	17,431	13,712	22,075	17,603	2,559
	Karluk	42.8	40.8	44.7	0.00	42.8	1.2	159,307	151,964	166,443	159,268	4,400
	Uganik	5.5	4.2	7.0	0.00	5.5	0.8	20,466	15,736	26,016	20,613	3,130
	Northwest Kodiak	1.2	0.7	1.9	0.00	1.2	0.4	4,469	2,493	7,042	4,581	1,396
	Afognak	1.3	0.8	1.9	0.00	1.3	0.3	4,913	3,078	7,241	5,002	1,270
	Eastside Kodiak	0.0	0.0	0.4	0.39	0.1	0.2	2	0	1,671	284	788
	Saltery	33.4	31.4	35.3	0.00	33.4	1.2	124,286	116,890	131,529	124,261	4,454
Cook Inlet	Other Cook Inlet	*	*	*	*	*	*	*	*	*	*	*
	Susitna	*	*	*	*	*	*	*	*	*	*	*
	Kenai	*	*	*	*	*	*	*	*	*	*	*
	Kasilof	*	*	*	*	*	*	*	*	*	*	*

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A5.–Uganik-Kupreanof (statistical areas 253-11, 12, 13, 14, 31, 32, 33, 34, 35), temporal stratum 1 ("Early"; June 1–July 3; Harvest = 31,607; *n* = 378), 2015. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.2	0.0	2.2	0.26	0.5	0.8	63	0	683	171	254
Chignik		8.9	6.4	11.9	0.00	9.0	1.7	2,810	2,017	3,751	2,838	527
Kodiak		76.4	71.9	80.6	0.00	76.4	2.7	24,152	22,722	25,489	24,136	842
Cook Inlet		8.2	5.5	11.4	0.00	8.3	1.8	2,580	1,730	3,596	2,612	569
Prince William Sound		5.5	0.8	8.9	0.02	5.4	2.3	1,725	259	2,819	1,691	719
South of Cape Suckling		0.0	0.0	2.8	0.66	0.5	1.1	0	0	890	158	334
										Total	31,607	
Chignik	Black Lake	8.9	6.4	11.9	0.00	9.0	1.7	2,806	2,012	3,746	2,834	527
	Chignik Lake	0.0	0.0	0.0	0.87	0.0	0.1	0	0	7	5	34
Kodiak	Upper Station / Akalura	0.0	0.0	0.8	0.76	0.1	0.3	0	0	259	36	108
	Ayakulik / Frazer	2.2	0.7	4.4	0.00	2.3	1.1	687	208	1,378	725	359
	Karluk	13.9	10.4	18.0	0.00	14.0	2.3	4,404	3,280	5,682	4,434	730
	Uganik	30.6	26.0	35.5	0.00	30.7	2.9	9,681	8,233	11,208	9,697	905
	Northwest Kodiak	9.7	6.9	13.1	0.00	9.8	1.9	3,080	2,180	4,138	3,109	595
	Afognak	10.9	8.2	14.0	0.00	11.0	1.8	3,446	2,590	4,439	3,470	562
	Eastside Kodiak	0.0	0.0	0.6	0.84	0.1	0.3	0	0	178	24	101
	Saltery	8.3	5.6	11.5	0.00	8.4	1.8	2,611	1,761	3,628	2,641	567
Cook Inlet	Other Cook Inlet	4.2	2.1	6.9	0.00	4.3	1.5	1,327	669	2,193	1,367	467
	Susitna	0.0	0.0	0.0	0.97	0.0	0.0	0	0	0	1	13
	Kenai	0.7	0.2	1.9	0.00	0.9	0.6	232	71	596	270	176
	Kasilof	3.0	1.6	4.8	0.00	3.1	1.0	947	516	1,524	974	310

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A6.–Uganik-Kupreanof (statistical areas 253-11, 12, 13, 14, 31, 32, 33, 34, 35), temporal stratum 2 ("Middle"; July 4–August 1; Harvest = 215,645; *n* = 379), 2015. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.2	0.87	0.0	0.2	0	0	368	88	480
Chignik		4.2	2.1	7.0	0.00	4.3	1.5	9,037	4,489	15,115	9,318	3,247
Kodiak		72.4	67.7	76.9	0.00	72.4	2.8	156,176	145,958	165,797	156,059	6,033
Cook Inlet		17.5	13.7	21.8	0.00	17.6	2.4	37,774	29,584	46,918	37,934	5,263
Prince William Sound		5.5	3.1	8.5	0.00	5.6	1.7	11,886	6,686	18,401	12,139	3,590
South of Cape Suckling		0.0	0.0	0.3	0.82	0.0	0.2	0	0	752	107	426
										Total	215,645	
Chignik	Black Lake	0.0	0.0	0.9	0.40	0.1	0.4	2	0	1,945	317	796
	Chignik Lake	4.0	2.0	6.8	0.00	4.2	1.5	8,725	4,207	14,764	9,000	3,236
Kodiak	Upper Station / Akalura	0.0	0.0	0.0	0.91	0.0	0.1	0	0	6	15	133
	Ayakulik / Frazer	1.4	0.4	2.9	0.00	1.5	0.8	2,974	877	6,361	3,210	1,702
	Karluk	9.2	6.4	12.5	0.00	9.3	1.9	19,845	13,791	26,898	20,034	3,995
	Uganik	4.5	2.4	7.4	0.00	4.7	1.6	9,812	5,068	16,033	10,087	3,357
	Northwest Kodiak	0.4	0.0	1.9	0.16	0.6	0.7	871	0	4,186	1,307	1,454
	Afognak	0.0	0.0	0.4	0.38	0.1	0.2	2	0	861	145	401
	Eastside Kodiak	0.0	0.0	0.0	0.89	0.1	0.4	0	0	93	117	811
	Saltery	56.2	51.2	61.1	0.00	56.2	3.0	121,181	110,481	131,688	121,143	6,445
Cook Inlet	Other Cook Inlet	2.1	0.0	4.7	0.05	2.2	1.4	4,493	0	10,206	4,760	3,043
	Susitna	5.5	3.1	8.6	0.00	5.6	1.7	11,840	6,712	18,603	12,140	3,649
	Kenai	7.2	4.4	10.7	0.00	7.3	1.9	15,510	9,533	23,061	15,809	4,133
	Kasilof	2.4	0.6	4.4	0.02	2.4	1.1	5,099	1,314	9,513	5,225	2,474

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A7.–Uganik-Kupreanof (statistical areas 253-11, 12, 13, 14, 31, 32, 33, 34, 35), temporal stratum 3 ("Late"; August 2–29; Harvest = 143,567; *n* = 377), 2015. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.0	0.92	0.0	0.1	0	0	3	12	138
Chignik		1.7	0.1	4.0	0.02	1.8	1.2	2,398	177	5,782	2,617	1,716
Kodiak		60.1	55.4	64.8	0.00	60.1	2.9	86,354	79,486	93,083	86,326	4,141
Cook Inlet		31.2	26.6	35.9	0.00	31.2	2.8	44,740	38,206	51,568	44,788	4,058
Prince William Sound		5.3	2.8	8.5	0.00	5.5	1.7	7,673	4,085	12,214	7,841	2,501
South of Cape Suckling		1.1	0.0	3.6	0.10	1.4	1.1	1,578	0	5,107	1,983	1,632
										Total	143,567	
Chignik	Black Lake	0.0	0.0	0.0	0.91	0.0	0.1	0	0	9	16	125
	Chignik Lake	1.7	0.1	4.0	0.02	1.8	1.2	2,382	156	5,770	2,601	1,718
Kodiak	Upper Station / Akalura	0.6	0.0	2.0	0.23	0.7	0.7	919	0	2,903	1,060	985
	Ayakulik / Frazer	0.0	0.0	0.0	0.89	0.0	0.0	0	0	9	8	70
	Karluk	21.2	17.5	25.3	0.00	21.3	2.4	30,477	25,141	36,280	30,567	3,385
	Uganik	3.0	1.4	5.3	0.00	3.1	1.2	4,338	2,047	7,606	4,519	1,711
	Northwest Kodiak	0.0	0.0	0.1	0.88	0.0	0.1	0	0	77	30	175
	Afognak	0.0	0.0	0.9	0.53	0.2	0.4	0	0	1,359	275	504
	Eastside Kodiak	0.2	0.0	0.9	0.00	0.3	0.3	304	23	1,282	433	426
	Saltery	34.4	29.9	39.1	0.00	34.4	2.8	49,391	42,929	56,083	49,435	4,000
Cook Inlet	Other Cook Inlet	2.3	0.9	4.3	0.00	2.4	1.0	3,308	1,250	6,140	3,449	1,504
	Susitna	4.0	2.3	6.2	0.00	4.1	1.2	5,713	3,233	8,965	5,852	1,756
	Kenai	24.2	19.9	28.8	0.00	24.3	2.7	34,796	28,632	41,417	34,876	3,889
	Kasilof	0.3	0.0	1.3	0.11	0.4	0.5	414	0	1,928	611	652

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A8.–Uganik-Kupreanof (statistical areas 253-11, 12, 13, 14, 31, 32, 33, 34, 35), 2015, all strata. Annual regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.3	0.25	0.1	0.1	96	0	1,085	272	557
Chignik		3.7	2.3	5.4	0.00	3.8	0.9	14,508	9,147	21,282	14,772	3,708
Kodiak		68.2	65.1	71.3	0.00	68.2	1.9	266,576	254,257	278,460	266,491	7,375
Cook Inlet		21.8	19.1	24.7	0.00	21.8	1.7	85,243	74,595	96,531	85,352	6,670
Prince William Sound		5.5	3.8	7.5	0.00	5.5	1.1	21,466	14,867	29,276	21,684	4,396
South of Cape Suckling		0.5	0.0	1.4	0.03	0.6	0.4	1,906	190	5,377	2,249	1,649
										Total	390,819	
Chignik	Black Lake	0.8	0.5	1.3	0.00	0.8	0.2	2,980	2,089	4,944	3,166	962
	Chignik Lake	2.9	1.6	4.6	0.00	3.0	0.9	11,344	6,075	18,028	11,605	3,664
Kodiak	Upper Station / Akalura	0.2	0.0	0.8	0.17	0.3	0.3	966	0	2,973	1,110	1,002
	Ayakulik / Frazer	1.0	0.4	1.8	0.00	1.0	0.4	3,715	1,531	7,150	3,949	1,745
	Karluk	14.0	11.9	16.4	0.00	14.1	1.4	54,892	46,530	63,961	55,022	5,308
	Uganik	6.2	4.7	8.0	0.00	6.2	1.0	24,057	18,366	31,075	24,301	3,880
	Northwest Kodiak	1.1	0.6	1.9	0.00	1.1	0.4	4,107	2,501	7,494	4,447	1,577
	Afognak	1.0	0.7	1.4	0.00	1.0	0.2	3,769	2,738	5,463	3,890	857
	Eastside Kodiak	0.1	0.0	0.4	0.00	0.1	0.2	351	28	1,611	575	917
	Saltery	44.3	41.1	47.5	0.00	44.3	1.9	173,213	160,683	185,687	173,197	7,610
Cook Inlet	Other Cook Inlet	2.4	1.1	4.0	0.00	2.5	0.9	9,318	4,409	15,634	9,576	3,432
	Susitna	4.5	3.0	6.4	0.00	4.6	1.0	17,735	11,865	25,078	17,999	4,048
	Kenai	13.0	10.7	15.5	0.00	13.0	1.5	50,771	41,881	60,649	50,961	5,699
	Kasilof	1.7	0.7	2.9	0.00	1.7	0.7	6,686	2,745	11,271	6,816	2,576

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A9.–Uganik-Kupreanof (statistical areas 253-11, 12, 13, 14, 31, 32, 33, 34, 35), temporal stratum 1 ("Early"; June 1–27; Harvest = 62,771; *n* = 375), 2016. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	1.1	0.81	0.1	0.5	0	0	678	86	302
Chignik		0.5	0.0	2.2	0.13	0.7	0.8	323	0	1,389	450	477
Kodiak		89.6	86.1	92.7	0.00	89.5	2.0	56,269	54,019	58,171	56,205	1,268
Cook Inlet		7.3	4.6	10.4	0.00	7.4	1.8	4,565	2,912	6,526	4,622	1,101
Prince William Sound		1.9	0.7	4.5	0.00	2.2	1.2	1,195	448	2,831	1,365	749
South of Cape Suckling		0.0	0.0	0.3	0.87	0.1	0.4	0	0	186	45	223
										Total	62,771	
Chignik	Black Lake	0.5	0.0	2.2	0.15	0.7	0.8	321	0	1,385	447	476
	Chignik Lake	0.0	0.0	0.0	0.92	0.0	0.0	0	0	1	2	21
Kodiak	Upper Station / Akalura	0.0	0.0	0.0	0.90	0.0	0.1	0	0	5	8	64
	Ayakulik / Frazer	2.1	0.8	4.0	0.00	2.2	1.0	1,349	473	2,536	1,407	631
	Karluk	8.0	5.2	11.5	0.00	8.1	1.9	5,027	3,251	7,234	5,106	1,216
	Uganik	68.6	63.7	73.4	0.00	68.6	3.0	43,092	39,956	46,097	43,067	1,870
	Northwest Kodiak	3.3	1.6	5.5	0.00	3.4	1.2	2,066	1,035	3,423	2,126	730
	Afognak	2.8	1.5	4.7	0.00	2.9	1.0	1,782	918	2,978	1,844	633
	Eastside Kodiak	0.1	0.0	0.8	0.37	0.2	0.4	35	0	520	130	252
	Saltery	3.9	1.8	6.7	0.00	4.0	1.5	2,424	1,142	4,215	2,516	943
Cook Inlet	Other Cook Inlet	4.7	2.5	7.5	0.00	4.8	1.5	2,957	1,580	4,685	3,022	947
	Susitna	0.0	0.0	0.5	0.73	0.1	0.3	0	0	297	41	159
	Kenai	0.5	0.1	2.1	0.00	0.7	0.7	322	65	1,311	447	430
	Kasilof	1.7	0.7	3.1	0.00	1.8	0.7	1,052	456	1,969	1,111	467

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A10.–Uganik-Kupreanof (statistical areas 253-11, 12, 13, 14, 31, 32, 33, 34, 35), temporal stratum 2 ("Middle"; June 28–July 25; Harvest = 138,281; *n* = 377), 2016. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.0	0.89	0.0	0.1	0	0	36	26	189
Chignik		0.0	0.0	0.1	0.81	0.0	0.1	0	0	189	40	206
Kodiak		72.9	68.3	77.2	0.00	72.8	2.7	100,784	94,444	106,764	100,718	3,746
Cook Inlet		26.1	21.7	30.6	0.00	26.1	2.7	36,024	30,013	42,371	36,088	3,759
Prince William Sound		0.1	0.0	2.9	0.37	0.5	1.0	94	0	3,963	690	1,368
South of Cape Suckling		0.0	0.0	2.3	0.59	0.5	0.9	0	0	3,228	718	1,177
										Total	138,281	
Chignik	Black Lake	0.0	0.0	0.0	0.89	0.0	0.1	0	0	37	24	156
	Chignik Lake	0.0	0.0	0.0	0.90	0.0	0.1	0	0	9	16	134
Kodiak	Upper Station / Akalura	0.0	0.0	0.0	0.92	0.0	0.0	0	0	2	7	62
	Ayakulik / Frazer	0.0	0.0	0.1	0.81	0.0	0.1	0	0	132	33	179
	Karluk	9.5	7.0	12.5	0.00	9.6	1.7	13,192	9,661	17,327	13,300	2,339
	Uganik	14.8	11.1	19.0	0.00	14.9	2.4	20,508	15,325	26,299	20,614	3,341
	Northwest Kodiak	0.2	0.0	1.2	0.23	0.3	0.4	265	0	1,720	483	612
	Afognak	1.4	0.4	2.9	0.00	1.5	0.8	1,912	580	4,025	2,056	1,067
	Eastside Kodiak	0.0	0.0	0.7	0.79	0.1	0.3	0	0	1,023	139	484
	Saltery	46.3	41.2	51.5	0.00	46.3	3.1	64,073	56,982	71,201	64,087	4,317
Cook Inlet	Other Cook Inlet	5.4	3.1	8.4	0.00	5.5	1.6	7,512	4,306	11,615	7,671	2,229
	Susitna	5.6	2.5	8.9	0.00	5.6	1.9	7,738	3,447	12,242	7,781	2,641
	Kenai	13.2	9.6	17.3	0.00	13.3	2.3	18,257	13,299	23,876	18,378	3,229
	Kasilof	1.5	0.2	3.4	0.04	1.6	1.0	2,119	224	4,653	2,258	1,318

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A11.–Uganik-Kupreanof (statistical areas 253-11, 12, 13, 14, 31, 32, 33, 34, 35), temporal stratum 3 ("Late"; July 26–August 29; Harvest = 139,612; *n* = 371), 2016. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.0	0.90	0.0	0.2	0	0	18	46	337
Chignik		0.0	0.0	0.1	0.81	0.0	0.2	0	0	159	40	217
Kodiak		74.1	69.7	78.4	0.00	74.1	2.6	103,514	97,316	109,467	103,470	3,684
Cook Inlet		24.3	20.1	28.7	0.00	24.4	2.6	33,956	28,084	40,092	34,011	3,640
Prince William Sound		0.5	0.1	1.5	0.00	0.6	0.4	727	154	2,042	863	617
South of Cape Suckling		0.8	0.2	1.8	0.00	0.8	0.5	1,050	304	2,502	1,182	700
										Total	139,612	
Chignik	Black Lake	0.0	0.0	0.0	0.91	0.0	0.1	0	0	8	14	109
	Chignik Lake	0.0	0.0	0.0	0.90	0.0	0.1	0	0	20	26	189
Kodiak	Upper Station / Akalura	0.0	0.0	0.3	0.87	0.1	0.3	0	0	412	84	411
	Ayakulik / Frazer	0.0	0.0	0.0	0.92	0.0	0.0	0	0	2	7	65
	Karluk	53.9	49.3	58.4	0.00	53.9	2.8	75,234	68,763	81,540	75,207	3,892
	Uganik	0.4	0.0	2.3	0.10	0.7	0.8	586	0	3,277	975	1,131
	Northwest Kodiak	0.0	0.0	0.1	0.88	0.0	0.1	0	0	85	28	164
	Afognak	0.0	0.0	0.0	0.89	0.0	0.0	0	0	6	6	50
	Eastside Kodiak	0.0	0.0	5.1	0.75	0.7	1.8	0	0	7,155	1,039	2,461
	Saltery	18.6	14.9	22.7	0.00	18.7	2.4	26,032	20,795	31,724	26,124	3,332
Cook Inlet	Other Cook Inlet	2.4	1.1	4.9	0.00	2.6	1.2	3,343	1,504	6,786	3,636	1,700
	Susitna	3.8	1.6	6.9	0.00	4.0	1.7	5,318	2,257	9,702	5,561	2,304
	Kenai	17.4	13.8	21.4	0.00	17.5	2.3	24,262	19,226	29,884	24,371	3,234
	Kasilof	0.1	0.0	1.2	0.38	0.3	0.4	159	0	1,730	443	618

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A12.–Uganik-Kupreanof (statistical areas 253-11, 12, 13, 14, 31, 32, 33, 34, 35), 2016, all strata. Annual regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.3	0.68	0.0	0.1	0	0	1,044	158	492
Chignik		0.1	0.0	0.5	0.11	0.2	0.2	388	0	1,601	530	563
Kodiak		76.5	73.8	79.0	0.00	76.4	1.6	260,447	251,393	269,171	260,392	5,403
Cook Inlet		21.9	19.4	24.5	0.00	21.9	1.6	74,674	66,010	83,632	74,720	5,351
Prince William Sound		0.7	0.3	1.9	0.00	0.9	0.5	2,481	1,087	6,497	2,918	1,716
South of Cape Suckling		0.5	0.1	1.4	0.00	0.6	0.4	1,552	381	4,721	1,945	1,390
										Total	340,664	
Chignik	Black Lake	0.1	0.0	0.4	0.14	0.1	0.2	355	0	1,475	485	511
	Chignik Lake	0.0	0.0	0.1	0.78	0.0	0.1	0	0	188	45	236
Kodiak	Upper Station / Akalura	0.0	0.0	0.2	0.75	0.0	0.1	0	0	591	99	420
	Ayakulik / Frazer	0.4	0.1	0.8	0.00	0.4	0.2	1,380	489	2,619	1,446	658
	Karluk	27.5	25.2	29.7	0.00	27.5	1.4	93,597	85,939	101,343	93,613	4,696
	Uganik	18.9	17.1	21.0	0.00	19.0	1.2	64,555	58,273	71,425	64,656	3,995
	Northwest Kodiak	0.7	0.4	1.3	0.00	0.8	0.3	2,523	1,266	4,394	2,637	967
	Afognak	1.1	0.6	1.8	0.00	1.1	0.4	3,784	2,091	6,131	3,905	1,243
	Eastside Kodiak	0.0	0.0	2.2	0.23	0.4	0.7	146	0	7,421	1,308	2,507
	Saltery	27.2	24.6	29.9	0.00	27.2	1.6	92,672	83,705	101,923	92,728	5,537
Cook Inlet	Other Cook Inlet	4.1	2.9	5.7	0.00	4.2	0.9	14,102	9,890	19,503	14,329	2,947
	Susitna	3.9	2.3	5.7	0.00	3.9	1.0	13,224	7,797	19,458	13,384	3,545
	Kenai	12.6	10.5	14.9	0.00	12.7	1.3	43,085	35,888	50,927	43,196	4,571
	Kasilof	1.1	0.4	1.9	0.00	1.1	0.5	3,673	1,518	6,555	3,812	1,536

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A13.–Uyak (statistical areas 254-10, 20, 21, 30, 31, 40, 41), temporal stratum 1 ("Early"; June 1–27; Harvest = 102,346; *n* = 378), 2014. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		2.0	1.0	3.6	0.00	2.1	0.8	2,066	992	3,660	2,161	821
Chignik		1.4	0.4	3.0	0.00	1.5	0.8	1,414	448	3,049	1,535	809
Kodiak		92.3	89.6	94.6	0.00	92.2	1.5	94,462	91,662	96,798	94,374	1,565
Cook Inlet		1.9	0.8	3.4	0.00	2.0	0.8	1,920	865	3,478	2,014	805
Prince William Sound		2.0	1.0	3.4	0.00	2.1	0.8	2,009	992	3,527	2,103	783
South of Cape Suckling		0.0	0.0	0.9	0.42	0.2	0.3	1	0	917	160	350
										Total	102,346	
Chignik	Black Lake	1.3	0.4	2.9	0.00	1.4	0.8	1,348	392	2,972	1,470	801
	Chignik Lake	0.0	0.0	0.4	0.51	0.1	0.2	0	0	421	65	206
Kodiak	Upper Station / Akalura	1.5	0.5	3.0	0.00	1.6	0.8	1,523	539	3,096	1,633	798
	Ayakulik / Frazer	18.4	14.7	22.5	0.00	18.5	2.4	18,819	15,021	23,008	18,894	2,422
	Karluk	30.8	26.0	35.7	0.00	30.8	3.0	31,477	26,605	36,572	31,528	3,030
	Uganik	18.0	14.2	22.2	0.00	18.1	2.4	18,449	14,568	22,699	18,520	2,480
	Northwest Kodiak	5.9	3.6	8.7	0.00	6.0	1.6	6,027	3,684	8,922	6,130	1,601
	Afognak	0.9	0.2	2.1	0.01	1.0	0.6	936	231	2,178	1,036	610
	Eastside Kodiak	0.0	0.0	0.6	0.46	0.1	0.3	0	0	662	107	291
	Saltery	16.1	12.5	20.0	0.00	16.1	2.3	16,457	12,827	20,485	16,525	2,330
Cook Inlet	Other Cook Inlet	*	*	*	*	*	*	*	*	*	*	*
	Susitna	*	*	*	*	*	*	*	*	*	*	*
	Kenai	*	*	*	*	*	*	*	*	*	*	*
	Kasilof	*	*	*	*	*	*	*	*	*	*	*

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A14.–Uyak (statistical areas 254-10, 20, 21, 30, 31, 40, 41), temporal stratum 2 ("Middle"; June 28–July 25; Harvest = 126,840; *n* = 380), 2014. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.0	0.83	0.0	0.3	0	0	46	50	442
Chignik		1.1	0.2	2.7	0.02	1.2	0.8	1,385	194	3,437	1,544	1,006
Kodiak		90.4	87.2	93.1	0.00	90.3	1.8	114,686	110,653	118,111	114,572	2,272
Cook Inlet		5.5	3.5	8.0	0.00	5.6	1.4	6,994	4,441	10,129	7,101	1,734
Prince William Sound		2.1	0.6	4.2	0.00	2.2	1.1	2,689	755	5,364	2,811	1,437
South of Cape Suckling		0.0	0.0	3.2	0.64	0.6	1.2	0	0	4,094	763	1,478
										Total	126,840	
Chignik	Black Lake	0.0	0.0	1.3	0.68	0.2	0.5	0	0	1,706	272	624
	Chignik Lake	0.9	0.0	2.6	0.21	1.0	0.9	1,138	0	3,349	1,272	1,122
Kodiak	Upper Station / Akalura	0.0	0.0	0.8	0.77	0.1	0.3	0	0	1,017	127	422
	Ayakulik / Frazer	5.4	3.3	7.9	0.00	5.5	1.4	6,804	4,215	10,066	6,926	1,790
	Karluk	10.1	7.1	13.5	0.00	10.2	1.9	12,800	9,042	17,114	12,896	2,456
	Uganik	1.8	0.4	4.0	0.00	2.0	1.1	2,305	545	5,131	2,501	1,420
	Northwest Kodiak	0.0	0.0	1.9	0.46	0.3	0.7	0	0	2,361	389	856
	Afognak	0.2	0.0	1.2	0.20	0.3	0.4	256	0	1,488	431	520
	Eastside Kodiak	0.2	0.0	1.0	0.13	0.3	0.5	198	0	1,222	370	589
	Saltery	71.7	67.3	76.0	0.00	71.7	2.6	90,992	85,348	96,349	90,933	3,348
Cook Inlet	Other Cook Inlet	0.0	0.0	0.0	0.92	0.0	0.1	0	0	5	12	100
	Susitna	0.9	0.0	2.5	0.24	0.9	0.8	1,081	0	3,148	1,191	1,064
	Kenai	2.3	0.7	4.0	0.04	2.3	1.0	2,866	948	5,096	2,927	1,274
	Kasilof	2.2	1.0	4.0	0.00	2.3	0.9	2,840	1,312	5,076	2,970	1,157

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A15.–Uyak (statistical areas 254-10, 20, 21, 30, 31, 40, 41), temporal stratum 3 ("Late"; July 26–August 29; Harvest = 155,658; *n* = 657), 2014. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.0	0.85	0.0	0.0	0	0	14	6	44
Chignik		0.0	0.0	0.1	0.73	0.0	0.1	0	0	78	17	91
Kodiak		98.6	97.5	99.4	0.00	98.5	0.6	153,485	151,790	154,686	153,396	890
Cook Inlet		0.7	0.1	1.6	0.01	0.8	0.5	1,136	210	2,546	1,223	723
Prince William Sound		0.4	0.1	1.1	0.00	0.5	0.3	671	149	1,687	763	490
South of Cape Suckling		0.1	0.0	0.5	0.04	0.2	0.2	170	2	777	253	265
										Total	155,658	
Chignik	Black Lake	0.0	0.0	0.0	0.85	0.0	0.0	0	0	13	6	43
	Chignik Lake	0.0	0.0	0.0	0.85	0.0	0.1	0	0	24	11	80
Kodiak	Upper Station / Akalura	7.5	5.4	9.9	0.00	7.5	1.4	11,664	8,359	15,415	11,750	2,152
	Ayakulik / Frazer	2.3	1.1	4.0	0.00	2.4	0.9	3,581	1,693	6,294	3,734	1,415
	Karluk	71.5	68.0	74.8	0.00	71.5	2.1	111,318	105,822	116,474	111,257	3,236
	Uganik	0.0	0.0	1.0	0.43	0.2	0.4	13	0	1,538	361	555
	Northwest Kodiak	0.0	0.0	0.0	0.85	0.0	0.0	0	0	17	8	59
	Afognak	0.0	0.0	0.0	0.86	0.0	0.0	0	0	12	5	36
	Eastside Kodiak	0.3	0.1	0.7	0.00	0.3	0.2	393	83	1,101	467	330
	Saltery	16.6	14.3	18.9	0.00	16.6	1.4	25,780	22,265	29,469	25,813	2,186
Cook Inlet	Other Cook Inlet	*	*	*	*	*	*	*	*	*	*	*
	Susitna	*	*	*	*	*	*	*	*	*	*	*
	Kenai	*	*	*	*	*	*	*	*	*	*	*
	Kasilof	*	*	*	*	*	*	*	*	*	*	*

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A16.–Uyak (statistical areas 254-10, 20, 21, 30, 31, 40, 41), 2014, all strata. Annual regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.5	0.3	1.0	0.00	0.6	0.2	2,093	1,006	3,779	2,217	933
Chignik		0.8	0.3	1.4	0.00	0.8	0.3	2,947	1,243	5,441	3,095	1,293
Kodiak		94.2	92.9	95.3	0.00	94.2	0.8	362,449	357,411	366,947	362,347	2,902
Cook Inlet		2.7	1.9	3.6	0.00	2.7	0.5	10,218	7,189	13,857	10,334	2,033
Prince William Sound		1.4	0.8	2.3	0.00	1.5	0.4	5,552	3,088	8,679	5,676	1,717
South of Cape Suckling		0.1	0.0	1.2	0.01	0.3	0.4	494	21	4,515	1,174	1,527
										Total	384,844	
Chignik	Black Lake	0.4	0.1	1.0	0.00	0.5	0.3	1,563	450	3,680	1,747	1,015
	Chignik Lake	0.3	0.0	0.9	0.10	0.4	0.3	1,208	0	3,460	1,348	1,141
Kodiak	Upper Station / Akalura	3.5	2.6	4.6	0.00	3.5	0.6	13,411	9,825	17,513	13,510	2,334
	Ayakulik / Frazer	7.7	6.3	9.1	0.00	7.7	0.9	29,466	24,281	35,172	29,552	3,315
	Karluk	40.4	38.3	42.6	0.00	40.5	1.3	155,669	147,375	164,057	155,688	5,079
	Uganik	5.5	4.4	6.9	0.00	5.6	0.8	21,271	16,769	26,368	21,383	2,920
	Northwest Kodiak	1.7	1.0	2.5	0.00	1.7	0.5	6,356	3,845	9,763	6,526	1,820
	Afognak	0.3	0.1	0.8	0.00	0.4	0.2	1,343	407	2,959	1,471	803
	Eastside Kodiak	0.2	0.1	0.6	0.00	0.2	0.2	774	204	2,185	944	738
	Saltery	34.6	32.6	36.6	0.00	34.6	1.2	133,287	125,647	140,857	133,273	4,636
Cook Inlet	Other Cook Inlet	0.1	0.0	0.2	0.00	0.1	0.1	220	18	949	320	332
	Susitna	0.3	0.0	0.8	0.18	0.3	0.3	1,098	0	3,161	1,206	1,066
	Kenai	1.1	0.5	1.8	0.00	1.1	0.4	4,334	2,075	6,920	4,400	1,469
	Kasilof	1.1	0.6	1.8	0.00	1.1	0.4	4,284	2,415	6,831	4,409	1,351

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A17.–Uyak (statistical areas 254-10, 20, 21, 30, 31, 40, 41), temporal stratum 1 ("Early"; June 1–July 3; Harvest = 49,515; *n* = 379), 2015. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.0	0.84	0.0	0.1	0	0	13	6	40
Chignik		4.4	2.6	6.7	0.00	4.5	1.3	2,171	1,291	3,319	2,220	620
Kodiak		64.3	59.5	68.9	0.00	64.2	2.9	31,827	29,455	34,111	31,813	1,414
Cook Inlet		17.2	13.5	21.2	0.00	17.2	2.4	8,492	6,667	10,507	8,526	1,170
Prince William Sound		13.3	8.4	17.3	0.00	13.1	2.7	6,565	4,155	8,590	6,503	1,336
South of Cape Suckling		0.0	0.0	5.8	0.68	0.9	2.1	0	0	2,854	447	1,023
										Total	49,515	
Chignik	Black Lake	4.4	2.6	6.7	0.00	4.5	1.2	2,161	1,284	3,303	2,210	617
	Chignik Lake	0.0	0.0	0.0	0.89	0.0	0.1	0	0	10	10	71
Kodiak	Upper Station / Akalura	0.0	0.0	0.1	0.85	0.0	0.1	0	0	29	11	64
	Ayakulik / Frazer	3.8	1.9	6.3	0.00	3.9	1.3	1,879	963	3,105	1,936	656
	Karluk	27.7	23.1	32.6	0.00	27.8	2.9	13,736	11,449	16,142	13,756	1,427
	Uganik	20.0	16.1	24.2	0.00	20.0	2.5	9,887	7,955	12,003	9,923	1,232
	Northwest Kodiak	6.1	3.6	9.2	0.00	6.2	1.7	3,002	1,781	4,567	3,065	854
	Afognak	1.9	0.9	3.5	0.00	2.0	0.8	962	438	1,755	1,012	406
	Eastside Kodiak	0.0	0.0	1.1	0.81	0.1	0.5	0	0	553	69	244
	Saltery	4.0	1.9	6.8	0.00	4.1	1.5	1,985	929	3,349	2,041	741
Cook Inlet	Other Cook Inlet	11.1	7.9	14.8	0.00	11.2	2.1	5,490	3,889	7,322	5,534	1,048
	Susitna	0.0	0.0	0.0	0.95	0.0	0.0	0	0	0	1	15
	Kenai	2.6	1.4	4.1	0.00	2.6	0.8	1,269	716	2,048	1,311	409
	Kasilof	3.3	1.7	5.4	0.00	3.4	1.1	1,633	862	2,659	1,680	550

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A18.–Uyak (statistical areas 254-10, 20, 21, 30, 31, 40, 41), temporal stratum 2 ("Middle"; July 4–August 1; Harvest = 174,009; *n* = 377), 2015. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.0	0.92	0.0	0.0	0	0	3	8	84
Chignik		0.2	0.0	1.2	0.18	0.4	0.4	361	0	2,151	620	755
Kodiak		40.2	35.4	45.1	0.00	40.2	2.9	69,960	61,635	78,453	69,988	5,106
Cook Inlet		54.0	49.0	58.9	0.00	54.0	3.0	93,923	85,210	102,564	93,909	5,273
Prince William Sound		4.5	0.9	8.0	0.00	4.5	2.1	7,875	1,535	13,891	7,815	3,681
South of Cape Suckling		0.3	0.0	5.0	0.00	1.0	1.7	520	36	8,692	1,669	2,893
										Total	174,009	
Chignik	Black Lake	0.2	0.0	1.2	0.23	0.3	0.4	293	0	2,053	565	729
	Chignik Lake	0.0	0.0	0.1	0.87	0.0	0.2	0	0	217	55	296
Kodiak	Upper Station / Akalura	0.0	0.0	0.0	0.92	0.0	0.0	0	0	3	7	74
	Ayakulik / Frazer	0.0	0.0	1.1	0.42	0.2	0.4	7	0	1,841	398	675
	Karluk	6.8	4.5	9.4	0.00	6.8	1.5	11,758	7,904	16,422	11,913	2,600
	Uganik	2.8	0.9	5.3	0.00	2.9	1.3	4,822	1,600	9,229	5,044	2,345
	Northwest Kodiak	0.0	0.0	0.4	0.57	0.1	0.3	0	0	737	123	462
	Afognak	0.0	0.0	0.0	0.83	0.0	0.1	0	0	77	27	166
	Eastside Kodiak	0.0	0.0	0.0	0.92	0.0	0.1	0	0	3	14	151
	Saltery	30.1	25.7	34.7	0.00	30.1	2.7	52,377	44,712	60,439	52,462	4,779
Cook Inlet	Other Cook Inlet	7.4	4.9	10.5	0.00	7.5	1.7	12,925	8,560	18,296	13,115	2,975
	Susitna	9.3	6.4	12.7	0.00	9.4	1.9	16,184	11,131	22,101	16,336	3,339
	Kenai	32.4	27.5	37.5	0.00	32.5	3.0	56,413	47,857	65,256	56,470	5,296
	Kasilof	4.5	2.5	7.0	0.00	4.6	1.4	7,798	4,422	12,192	7,988	2,375

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A19.–Uyak (statistical areas 254-10, 20, 21, 30, 31, 40, 41), temporal stratum 3 ("Late"; August 2–29; Harvest = 126,126; *n* = 373), 2015. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.0	0.92	0.0	0.1	0	0	2	7	65
Chignik		0.0	0.0	0.1	0.82	0.0	0.1	0	0	74	25	155
Kodiak		67.9	63.3	72.3	0.00	67.9	2.7	85,647	79,839	91,153	85,595	3,438
Cook Inlet		31.7	27.3	36.3	0.00	31.8	2.7	39,989	34,450	45,798	40,046	3,448
Prince William Sound		0.0	0.0	2.4	0.57	0.3	0.8	0	0	3,012	439	1,069
South of Cape Suckling		0.0	0.0	0.0	0.91	0.0	0.1	0	0	6	14	124
										Total	126,126	
Chignik	Black Lake	0.0	0.0	0.0	0.92	0.0	0.0	0	0	2	5	53
	Chignik Lake	0.0	0.0	0.0	0.90	0.0	0.1	0	0	17	20	146
Kodiak	Upper Station / Akalura	0.0	0.0	0.0	0.90	0.0	0.1	0	0	17	17	122
	Ayakulik / Frazer	0.0	0.0	0.5	0.82	0.1	0.3	0	0	681	92	348
	Karluk	38.1	33.7	42.6	0.00	38.1	2.7	47,994	42,457	53,697	48,026	3,418
	Uganik	0.2	0.0	2.3	0.37	0.6	0.8	294	0	2,905	808	1,038
	Northwest Kodiak	0.0	0.0	0.0	0.92	0.0	0.0	0	0	2	5	48
	Afognak	0.0	0.0	0.0	0.92	0.0	0.0	0	0	2	5	43
	Eastside Kodiak	0.0	0.0	0.0	0.91	0.0	0.2	0	0	5	23	241
	Saltery	29.0	24.7	33.5	0.00	29.0	2.7	36,573	31,179	42,248	36,620	3,361
Cook Inlet	Other Cook Inlet	1.0	0.1	3.0	0.00	1.2	0.9	1,253	128	3,726	1,498	1,151
	Susitna	7.1	4.5	10.1	0.00	7.1	1.7	8,896	5,694	12,750	9,017	2,154
	Kenai	23.4	19.3	27.6	0.00	23.4	2.5	29,461	24,396	34,857	29,517	3,176
	Kasilof	0.0	0.0	0.0	0.80	0.0	0.1	0	0	48	14	83

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A20.–Uyak (statistical areas 254-10, 20, 21, 30, 31, 40, 41), 2015, all strata. Annual regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.0	0.75	0.0	0.0	0	0	90	21	114
Chignik		0.8	0.4	1.3	0.00	0.8	0.3	2,723	1,537	4,705	2,867	990
Kodiak		53.6	50.6	56.6	0.00	53.6	1.8	187,386	177,000	197,848	187,392	6,341
Cook Inlet		40.8	37.7	43.8	0.00	40.8	1.8	142,488	131,893	153,019	142,484	6,425
Prince William Sound		4.2	2.3	6.2	0.00	4.2	1.2	14,790	7,917	21,529	14,757	4,100
South of Cape Suckling		0.2	0.0	2.7	0.00	0.6	0.9	791	49	9,469	2,130	3,134
										Total	349,650	
Chignik	Black Lake	0.8	0.4	1.3	0.00	0.8	0.3	2,641	1,497	4,551	2,781	956
	Chignik Lake	0.0	0.0	0.2	0.73	0.0	0.1	0	0	550	86	337
Kodiak	Upper Station / Akalura	0.0	0.0	0.1	0.74	0.0	0.0	0	0	199	35	156
	Ayakulik / Frazer	0.6	0.3	1.2	0.00	0.7	0.3	2,258	1,109	4,313	2,425	1,004
	Karluk	21.1	19.0	23.2	0.00	21.1	1.3	73,628	66,341	81,212	73,692	4,527
	Uganik	4.5	3.3	5.9	0.00	4.5	0.8	15,579	11,423	20,755	15,773	2,853
	Northwest Kodiak	0.9	0.5	1.4	0.00	0.9	0.3	3,091	1,822	4,888	3,193	972
	Afognak	0.3	0.1	0.5	0.00	0.3	0.1	983	446	1,829	1,043	441
	Eastside Kodiak	0.0	0.0	0.2	0.71	0.0	0.1	0	0	714	106	380
	Saltery	26.0	23.3	28.9	0.00	26.1	1.7	91,045	81,539	100,991	91,124	5,896
Cook Inlet	Other Cook Inlet	5.7	4.3	7.4	0.00	5.8	1.0	19,966	14,955	25,929	20,148	3,358
	Susitna	7.2	5.5	9.2	0.00	7.3	1.1	25,211	19,103	32,145	25,355	3,971
	Kenai	24.9	22.1	27.9	0.00	25.0	1.8	87,224	77,205	97,550	87,298	6,205
	Kasilof	2.7	1.7	4.0	0.00	2.8	0.7	9,513	6,005	13,966	9,684	2,436

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A21.–Uyak (statistical areas 254-10, 20, 21, 30, 31, 40, 41), temporal stratum 1 ("Early"; June 1–27; Harvest = 37,238; *n* = 377), 2016. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.3	0.79	0.0	0.2	0	0	129	18	65
Chignik		0.0	0.0	0.2	0.62	0.0	0.1	0	0	67	13	54
Kodiak		81.9	77.6	85.7	0.00	81.8	2.5	30,487	28,904	31,911	30,459	914
Cook Inlet		8.9	6.3	11.9	0.00	9.0	1.7	3,299	2,345	4,428	3,333	635
Prince William Sound		9.1	6.0	12.7	0.00	9.2	2.1	3,372	2,221	4,727	3,409	764
South of Cape Suckling		0.0	0.0	0.0	0.90	0.0	0.1	0	0	3	6	53
										Total	37,238	
Chignik	Black Lake	0.0	0.0	0.1	0.69	0.0	0.1	0	0	32	6	30
	Chignik Lake	0.0	0.0	0.0	0.90	0.0	0.1	0	0	5	6	45
Kodiak	Upper Station / Akalura	0.0	0.0	0.0	0.90	0.0	0.1	0	0	6	5	36
	Ayakulik / Frazer	4.6	2.6	7.3	0.00	4.7	1.4	1,698	954	2,710	1,748	539
	Karluk	19.0	15.1	23.1	0.00	19.0	2.4	7,057	5,627	8,604	7,082	906
	Uganik	51.3	46.2	56.4	0.00	51.3	3.1	19,102	17,204	20,989	19,098	1,152
	Northwest Kodiak	0.2	0.0	1.6	0.18	0.4	0.6	88	0	593	165	207
	Afognak	1.7	0.7	3.3	0.00	1.8	0.8	649	267	1,239	688	301
	Eastside Kodiak	0.0	0.0	0.3	0.86	0.1	0.3	0	0	96	20	98
	Saltery	4.3	2.3	6.9	0.00	4.4	1.4	1,609	874	2,583	1,653	523
Cook Inlet	Other Cook Inlet	6.7	4.5	9.5	0.00	6.8	1.5	2,509	1,662	3,542	2,543	573
	Susitna	0.0	0.0	0.1	0.62	0.0	0.1	0	0	52	10	41
	Kenai	0.0	0.0	0.2	0.74	0.0	0.2	0	0	85	18	85
	Kasilof	1.9	0.9	3.5	0.00	2.0	0.8	726	338	1,308	763	300

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A22.–Uyak (statistical areas 254-10, 20, 21, 30, 31, 40, 41), temporal stratum 2 ("Middle"; June 28–July 25; Harvest = 69,803; *n* = 378), 2016. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.3	0.81	0.0	0.2	0	0	202	29	110
Chignik		0.0	0.0	0.0	0.84	0.0	0.1	0	0	13	6	40
Kodiak		80.9	76.9	84.5	0.00	80.8	2.3	56,478	53,662	59,006	56,424	1,623
Cook Inlet		16.2	12.7	20.0	0.00	16.2	2.2	11,283	8,894	13,960	11,336	1,538
Prince William Sound		2.7	1.2	4.9	0.00	2.8	1.2	1,854	828	3,452	1,958	810
South of Cape Suckling		0.0	0.0	0.2	0.87	0.1	0.4	0	0	141	50	277
										Total	69,803	
Chignik	Black Lake	0.0	0.0	0.0	0.92	0.0	0.0	0	0	1	2	22
	Chignik Lake	0.0	0.0	0.0	0.92	0.0	0.0	0	0	1	4	34
Kodiak	Upper Station / Akalura	0.0	0.0	1.2	0.75	0.2	0.5	0	0	847	117	318
	Ayakulik / Frazer	4.0	2.2	6.3	0.00	4.1	1.2	2,767	1,538	4,373	2,838	869
	Karluk	7.8	5.2	10.8	0.00	7.9	1.7	5,442	3,642	7,559	5,501	1,191
	Uganik	9.8	6.7	13.4	0.00	9.9	2.0	6,835	4,704	9,363	6,907	1,421
	Northwest Kodiak	0.0	0.0	2.4	0.48	0.7	0.9	4	0	1,670	469	610
	Afognak	0.0	0.0	0.0	0.85	0.0	0.1	0	0	24	10	63
	Eastside Kodiak	0.0	0.0	0.3	0.82	0.0	0.2	0	0	200	33	152
	Saltery	58.1	53.1	63.0	0.00	58.1	3.0	40,571	37,098	43,968	40,551	2,091
Cook Inlet	Other Cook Inlet	1.1	0.0	3.0	0.06	1.3	0.9	767	0	2,098	874	650
	Susitna	3.8	2.0	6.2	0.00	3.9	1.3	2,625	1,393	4,349	2,716	910
	Kenai	9.3	6.4	12.6	0.00	9.4	1.9	6,465	4,457	8,818	6,533	1,328
	Kasilof	1.6	0.5	3.3	0.01	1.7	0.9	1,140	344	2,334	1,213	612

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A23.–Uyak (statistical areas 254-10, 20, 21, 30, 31, 40, 41), temporal stratum 3 ("Late"; July 26–August 29; Harvest = 126,837; *n* = 377), 2016. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	1.5	0.57	0.3	0.5	0	0	1,853	421	676
Chignik		0.0	0.0	0.0	0.84	0.0	0.1	0	0	33	14	93
Kodiak		89.5	86.5	92.2	0.00	89.5	1.7	113,580	109,703	116,936	113,484	2,210
Cook Inlet		9.3	6.7	12.3	0.00	9.4	1.7	11,808	8,520	15,656	11,917	2,176
Prince William Sound		0.0	0.0	0.4	0.75	0.1	0.3	0	0	533	86	369
South of Cape Suckling		0.6	0.1	1.6	0.01	0.7	0.5	804	172	2,043	915	591
										Total	126,837	
Chignik	Black Lake	0.0	0.0	0.0	0.92	0.0	0.0	0	0	2	5	47
	Chignik Lake	0.0	0.0	0.0	0.91	0.0	0.1	0	0	4	9	80
Kodiak	Upper Station / Akalura	1.5	0.0	3.1	0.06	1.6	0.9	1,890	0	3,995	1,974	1,147
	Ayakulik / Frazer	2.1	0.5	4.3	0.02	2.2	1.2	2,667	585	5,476	2,802	1,490
	Karluk	62.3	57.6	66.8	0.00	62.3	2.8	79,005	73,095	84,736	78,971	3,534
	Uganik	0.0	0.0	0.5	0.42	0.1	0.2	0	0	574	94	274
	Northwest Kodiak	0.0	0.0	0.0	0.92	0.0	0.0	0	0	1	4	40
	Afognak	0.0	0.0	0.0	0.92	0.0	0.0	0	0	3	6	60
	Eastside Kodiak	0.0	0.0	0.0	0.91	0.0	0.1	0	0	6	16	144
	Saltery	23.3	19.6	27.2	0.00	23.4	2.3	29,558	24,883	34,563	29,616	2,950
Cook Inlet	Other Cook Inlet	0.2	0.0	1.0	0.00	0.3	0.4	298	25	1,320	436	451
	Susitna	1.8	0.4	3.7	0.01	1.9	1.0	2,334	569	4,731	2,454	1,269
	Kenai	7.0	4.6	9.9	0.00	7.1	1.6	8,874	5,815	12,593	8,994	2,065
	Kasilof	0.0	0.0	0.1	0.90	0.0	0.2	0	0	75	33	191

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A24.–Uyak (statistical areas 254-10, 20, 21, 30, 31, 40, 41), 2016, all strata. Annual regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.8	0.38	0.2	0.3	57	0	1,905	468	684
Chignik		0.0	0.0	0.1	0.50	0.0	0.0	0	0	179	32	113
Kodiak		85.7	83.6	87.7	0.00	85.7	1.2	200,446	195,494	204,995	200,372	2,891
Cook Inlet		11.3	9.5	13.3	0.00	11.4	1.2	26,509	22,238	31,208	26,584	2,730
Prince William Sound		2.3	1.6	3.2	0.00	2.3	0.5	5,360	3,700	7,534	5,453	1,180
South of Cape Suckling		0.4	0.1	0.9	0.01	0.4	0.3	839	183	2,201	970	653
										Total	233,878	
Chignik	Black Lake	0.0	0.0	0.0	0.65	0.0	0.0	0	0	70	13	60
	Chignik Lake	0.0	0.0	0.0	0.77	0.0	0.0	0	0	90	19	96
Kodiak	Upper Station / Akalura	0.9	0.0	1.8	0.05	0.9	0.5	2,006	1	4,204	2,096	1,195
	Ayakulik / Frazer	3.1	2.0	4.5	0.00	3.2	0.8	7,264	4,634	10,554	7,387	1,804
	Karluk	39.2	36.4	41.8	0.00	39.2	1.6	91,587	85,203	97,819	91,565	3,834
	Uganik	11.1	9.9	12.5	0.00	11.2	0.8	26,055	23,121	29,235	26,099	1,860
	Northwest Kodiak	0.2	0.0	0.8	0.08	0.3	0.3	429	0	1,898	637	645
	Afognak	0.3	0.1	0.5	0.00	0.3	0.1	662	273	1,276	704	313
	Eastside Kodiak	0.0	0.0	0.2	0.66	0.0	0.1	0	0	412	68	230
	Saltery	30.7	28.2	33.3	0.00	30.7	1.6	71,791	65,883	77,852	71,817	3,639
Cook Inlet	Other Cook Inlet	1.6	1.0	2.4	0.00	1.6	0.4	3,761	2,419	5,584	3,852	975
	Susitna	2.2	1.2	3.4	0.00	2.2	0.7	5,067	2,816	7,928	5,182	1,567
	Kenai	6.6	5.0	8.4	0.00	6.6	1.1	15,439	11,686	19,737	15,542	2,458
	Kasilof	0.8	0.4	1.4	0.00	0.9	0.3	1,938	983	3,274	2,008	706

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A25.–Karluk-Sturgeon (statistical areas 255-10, 20; 256-40), temporal stratum 1 ("Early"; June 1–27; Harvest = 56,018; *n* = 380), 2014. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		2.3	1.0	4.2	0.00	2.4	1.0	1,292	545	2,376	1,355	564
Chignik		0.3	0.0	1.6	0.10	0.5	0.5	190	0	885	278	304
Kodiak		91.9	89.0	94.4	0.00	91.9	1.6	51,508	49,858	52,864	51,454	917
Cook Inlet		3.1	1.7	5.4	0.00	3.2	1.2	1,729	925	3,005	1,816	645
Prince William Sound		1.6	0.7	3.0	0.00	1.7	0.7	881	371	1,685	935	409
South of Cape Suckling		0.1	0.0	1.4	0.26	0.3	0.5	49	0	762	181	279
										Total	56,018	
Chignik	Black Lake	0.3	0.0	1.5	0.20	0.4	0.5	146	0	835	245	292
	Chignik Lake	0.0	0.0	0.4	0.51	0.1	0.2	0	0	206	33	106
Kodiak	Upper Station / Akalura	2.9	1.3	5.1	0.00	3.0	1.2	1,622	720	2,861	1,686	657
	Ayakulik / Frazer	35.7	30.4	41.1	0.00	35.7	3.3	19,980	17,010	23,035	20,000	1,837
	Karluk	47.0	40.9	52.9	0.00	47.0	3.7	26,303	22,935	29,651	26,306	2,047
	Uganik	1.5	0.4	3.1	0.01	1.6	0.8	816	218	1,742	878	471
	Northwest Kodiak	0.6	0.1	2.1	0.00	0.8	0.7	363	60	1,157	453	366
	Afognak	0.6	0.0	1.7	0.02	0.7	0.5	313	16	925	372	287
	Eastside Kodiak	0.8	0.0	5.0	0.14	1.5	1.8	425	0	2,792	868	983
	Saltery	1.5	0.5	3.0	0.00	1.6	0.8	830	290	1,708	891	440
Cook Inlet	Other Cook Inlet	*	*	*	*	*	*	*	*	*	*	*
	Susitna	*	*	*	*	*	*	*	*	*	*	*
	Kenai	*	*	*	*	*	*	*	*	*	*	*
	Kasilof	*	*	*	*	*	*	*	*	*	*	*

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A26.–Karluk-Sturgeon (statistical areas 255-10, 20; 256-40), temporal stratum 2 ("Middle"; June 28–July 25; Harvest = 68,438; *n* = 370), 2014. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	1.8	0.45	0.4	0.7	4	0	1,252	284	459
Chignik		3.3	1.7	5.5	0.00	3.4	1.2	2,264	1,155	3,768	2,338	800
Kodiak		90.7	87.3	93.5	0.00	90.6	1.9	62,061	59,759	63,995	61,992	1,294
Cook Inlet		3.5	1.9	5.7	0.00	3.6	1.2	2,379	1,278	3,928	2,462	815
Prince William Sound		1.6	0.6	3.6	0.01	1.8	1.0	1,096	383	2,475	1,218	656
South of Cape Suckling		0.0	0.0	1.1	0.59	0.2	0.5	0	0	787	143	316
										Total	68,438	
Chignik	Black Lake	0.0	0.0	0.1	0.88	0.1	0.3	0	0	98	35	194
	Chignik Lake	3.3	1.6	5.5	0.01	3.4	1.2	2,244	1,082	3,754	2,303	831
Kodiak	Upper Station / Akalura	0.0	0.0	1.3	0.55	0.2	0.5	0	0	863	156	316
	Ayakulik / Frazer	25.8	21.4	30.5	0.00	25.8	2.8	17,635	14,615	20,842	17,670	1,897
	Karluk	37.8	32.6	43.1	0.00	37.8	3.2	25,856	22,332	29,518	25,881	2,183
	Uganik	5.4	3.0	8.3	0.00	5.5	1.6	3,665	2,059	5,679	3,738	1,105
	Northwest Kodiak	0.2	0.0	1.4	0.21	0.3	0.5	115	0	925	239	333
	Afognak	0.0	0.0	1.3	0.68	0.2	0.5	0	0	906	154	328
	Eastside Kodiak	0.3	0.0	2.2	0.31	0.6	0.8	220	0	1,486	414	571
	Saltery	20.0	16.2	24.1	0.00	20.1	2.4	13,690	11,120	16,526	13,741	1,645
Cook Inlet	Other Cook Inlet	*	*	*	*	*	*	*	*	*	*	*
	Susitna	*	*	*	*	*	*	*	*	*	*	*
	Kenai	*	*	*	*	*	*	*	*	*	*	*
	Kasilof	*	*	*	*	*	*	*	*	*	*	*

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A27.–Karluk-Sturgeon (statistical areas 255-10, 20; 256-40), temporal stratum 3 ("Late"; July 26–August 29; Harvest = 124,879; *n* = 657), 2014. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.0	0.83	0.0	0.1	0	0	61	19	111
Chignik		0.3	0.0	1.1	0.18	0.4	0.4	343	0	1,341	449	462
Kodiak		99.0	98.0	99.7	0.00	99.0	0.5	123,685	122,430	124,493	123,603	639
Cook Inlet		0.4	0.1	1.0	0.00	0.4	0.3	484	110	1,264	559	367
Prince William Sound		0.0	0.0	0.5	0.41	0.1	0.2	14	0	576	128	217
South of Cape Suckling		0.0	0.0	0.4	0.45	0.1	0.2	5	0	558	120	210
										Total	124,879	
Chignik	Black Lake	0.0	0.0	0.0	0.85	0.0	0.0	0	0	18	8	50
	Chignik Lake	0.3	0.0	1.1	0.21	0.4	0.4	334	0	1,333	441	461
Kodiak	Upper Station / Akalura	9.5	7.2	12.2	0.00	9.6	1.5	11,887	8,948	15,195	11,953	1,899
	Ayakulik / Frazer	6.2	4.2	8.5	0.00	6.2	1.3	7,688	5,270	10,638	7,788	1,642
	Karluk	80.2	76.7	83.5	0.00	80.2	2.1	100,168	95,754	104,265	100,109	2,584
	Uganik	0.0	0.0	0.2	0.55	0.0	0.1	0	0	278	42	138
	Northwest Kodiak	0.0	0.0	0.0	0.86	0.0	0.0	0	0	12	5	35
	Afognak	0.0	0.0	0.0	0.85	0.0	0.0	0	0	13	5	36
	Eastside Kodiak	0.0	0.0	0.3	0.77	0.0	0.2	0	0	349	51	201
	Saltery	2.9	1.8	4.2	0.00	2.9	0.7	3,591	2,278	5,224	3,650	902
Cook Inlet	Other Cook Inlet	*	*	*	*	*	*	*	*	*	*	*
	Susitna	*	*	*	*	*	*	*	*	*	*	*
	Kenai	*	*	*	*	*	*	*	*	*	*	*
	Kasilof	*	*	*	*	*	*	*	*	*	*	*

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A28.–Karluk-Sturgeon (statistical areas 255-10, 20; 256-40), 2014, all strata. Annual regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.6	0.3	1.2	0.00	0.7	0.3	1,559	648	3,009	1,658	733
Chignik		1.2	0.6	1.9	0.00	1.2	0.4	2,986	1,605	4,797	3,065	972
Kodiak		95.1	93.9	96.2	0.00	95.1	0.7	237,111	234,121	239,751	237,049	1,718
Cook Inlet		1.9	1.3	2.7	0.00	1.9	0.4	4,754	3,182	6,779	4,837	1,103
Prince William Sound		0.9	0.5	1.5	0.00	0.9	0.3	2,183	1,149	3,756	2,281	805
South of Cape Suckling		0.1	0.0	0.6	0.08	0.2	0.2	307	0	1,387	444	470
										Total	249,335	
Chignik	Black Lake	0.1	0.0	0.4	0.18	0.1	0.1	176	0	959	287	355
	Chignik Lake	1.1	0.5	1.8	0.00	1.1	0.4	2,713	1,351	4,456	2,777	958
Kodiak	Upper Station / Akalura	5.5	4.2	6.9	0.00	5.5	0.8	13,723	10,577	17,260	13,795	2,033
	Ayakulik / Frazer	18.2	16.2	20.3	0.00	18.2	1.3	45,406	40,396	50,692	45,457	3,125
	Karluk	61.1	58.5	63.7	0.00	61.1	1.6	152,304	145,777	158,779	152,296	3,960
	Uganik	1.8	1.1	2.7	0.00	1.9	0.5	4,588	2,805	6,763	4,658	1,206
	Northwest Kodiak	0.2	0.1	0.7	0.00	0.3	0.2	581	127	1,662	697	497
	Afognak	0.2	0.0	0.6	0.02	0.2	0.2	421	34	1,408	532	440
	Eastside Kodiak	0.4	0.0	1.4	0.04	0.5	0.5	1,054	1	3,528	1,332	1,167
	Saltery	7.3	6.1	8.6	0.00	7.3	0.8	18,222	15,206	21,526	18,282	1,923
Cook Inlet	Other Cook Inlet	*	*	*	*	*	*	*	*	*	*	*
	Susitna	*	*	*	*	*	*	*	*	*	*	*
	Kenai	*	*	*	*	*	*	*	*	*	*	*
	Kasilof	*	*	*	*	*	*	*	*	*	*	*

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A29.–Karluk-Sturgeon (statistical areas 255-10, 20; 256-40), temporal stratum 1 ("Early"; June 1–July 3; Harvest = 35,183; *n* = 375), 2015. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.5	0.0	2.7	0.09	0.8	0.9	182	0	951	279	318
Chignik		0.2	0.0	1.8	0.38	0.5	0.7	64	0	647	174	232
Kodiak		94.7	91.8	96.9	0.00	94.5	1.5	33,305	32,299	34,077	33,261	543
Cook Inlet		0.1	0.0	1.8	0.39	0.4	0.6	23	0	625	158	226
Prince William Sound		3.6	1.8	6.0	0.00	3.7	1.3	1,271	628	2,111	1,307	455
South of Cape Suckling		0.0	0.0	0.0	0.90	0.0	0.1	0	0	6	4	31
										Total	35,183	
Chignik	Black Lake	0.0	0.0	1.6	0.54	0.3	0.6	0	0	555	122	203
	Chignik Lake	0.0	0.0	1.1	0.77	0.1	0.4	0	0	383	51	147
Kodiak	Upper Station / Akalura	4.2	2.5	6.5	0.00	4.4	1.2	1,494	885	2,297	1,531	432
	Ayakulik / Frazer	35.1	30.4	40.0	0.00	35.2	2.9	12,355	10,708	14,091	12,371	1,026
	Karluk	45.1	39.5	50.7	0.00	45.1	3.4	15,885	13,914	17,828	15,877	1,188
	Uganik	3.5	1.9	5.5	0.00	3.6	1.1	1,220	682	1,935	1,252	383
	Northwest Kodiak	3.5	1.5	6.1	0.00	3.6	1.4	1,232	537	2,148	1,272	494
	Afognak	2.0	0.8	3.7	0.00	2.1	0.9	687	291	1,288	725	308
	Eastside Kodiak	0.0	0.0	3.5	0.59	0.6	1.2	0	0	1,216	228	434
	Saltery	0.0	0.0	0.0	0.86	0.0	0.1	0	0	8	5	32
Cook Inlet	Other Cook Inlet	*	*	*	*	*	*	*	*	*	*	*
	Susitna	*	*	*	*	*	*	*	*	*	*	*
	Kenai	*	*	*	*	*	*	*	*	*	*	*
	Kasilof	*	*	*	*	*	*	*	*	*	*	*

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A30.–Karluk-Sturgeon (statistical areas 255-10, 20; 256-40), temporal stratum 2 ("Middle"; July 4–August 1; Harvest = 29,915; *n* = 375), 2015. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.1	0.88	0.0	0.2	0	0	21	11	67
Chignik		0.0	0.0	0.7	0.74	0.1	0.3	0	0	218	29	98
Kodiak		67.7	63.3	72.0	0.00	67.7	2.6	20,258	18,928	21,532	20,248	790
Cook Inlet		29.1	24.8	33.6	0.00	29.2	2.7	8,711	7,425	10,061	8,722	799
Prince William Sound		2.8	1.1	5.4	0.00	3.0	1.3	846	343	1,611	894	391
South of Cape Suckling		0.0	0.0	0.0	0.89	0.0	0.3	0	0	6	11	90
										Total	29,915	
Chignik	Black Lake	0.0	0.0	0.6	0.83	0.1	0.3	0	0	177	23	90
	Chignik Lake	0.0	0.0	0.0	0.90	0.0	0.1	0	0	6	6	39
Kodiak	Upper Station / Akalura	0.0	0.0	0.1	0.69	0.0	0.1	0	0	39	8	35
	Ayakulik / Frazer	8.0	5.3	11.3	0.00	8.1	1.8	2,394	1,591	3,369	2,425	543
	Karluk	49.9	45.0	54.8	0.00	49.9	3.0	14,921	13,456	16,380	14,922	891
	Uganik	0.0	0.0	0.3	0.71	0.0	0.2	0	0	79	13	57
	Northwest Kodiak	0.0	0.0	1.1	0.43	0.3	0.4	1	0	332	76	122
	Afognak	1.7	0.6	3.2	0.00	1.8	0.8	495	192	962	525	238
	Eastside Kodiak	1.0	0.3	2.2	0.00	1.1	0.6	299	104	651	328	173
	Saltery	6.4	4.2	9.2	0.00	6.5	1.5	1,921	1,249	2,751	1,950	458
Cook Inlet	Other Cook Inlet	6.1	3.9	8.7	0.00	6.2	1.4	1,815	1,181	2,601	1,844	433
	Susitna	5.7	3.7	8.2	0.00	5.8	1.4	1,707	1,100	2,457	1,732	413
	Kenai	12.5	9.2	16.1	0.00	12.5	2.1	3,725	2,755	4,824	3,749	632
	Kasilof	4.6	2.8	6.8	0.00	4.7	1.2	1,369	840	2,047	1,397	369

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A31.–Karluk-Sturgeon (statistical areas 255-10, 20; 256-40), temporal stratum 3 ("Late"; August 2–29; Harvest = 63,532; *n* = 375), 2015. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.0	0.91	0.0	0.1	0	0	2	4	37
Chignik		0.0	0.0	0.1	0.83	0.0	0.1	0	0	33	12	76
Kodiak		89.7	86.6	92.4	0.00	89.6	1.7	56,987	55,031	58,682	56,940	1,112
Cook Inlet		9.0	6.5	11.9	0.00	9.1	1.7	5,714	4,115	7,568	5,764	1,052
Prince William Sound		0.1	0.0	0.9	0.25	0.2	0.4	66	0	570	149	234
South of Cape Suckling		0.8	0.0	2.9	0.02	1.0	0.9	517	28	1,811	663	570
										Total	63,532	
Chignik	Black Lake	0.0	0.0	0.0	0.91	0.0	0.1	0	0	2	4	37
	Chignik Lake	0.0	0.0	0.0	0.91	0.0	0.1	0	0	3	8	66
Kodiak	Upper Station / Akalura	3.9	1.9	6.6	0.00	4.1	1.4	2,498	1,235	4,176	2,575	899
	Ayakulik / Frazer	0.3	0.0	1.8	0.20	0.5	0.7	162	0	1,168	322	416
	Karluk	78.8	74.6	82.7	0.00	78.7	2.5	50,056	47,369	52,530	50,016	1,564
	Uganik	0.0	0.0	0.6	0.84	0.1	0.3	0	0	412	54	219
	Northwest Kodiak	0.0	0.0	0.0	0.92	0.0	0.0	0	0	1	2	25
	Afognak	0.0	0.0	0.0	0.88	0.0	0.0	0	0	5	3	24
	Eastside Kodiak	0.0	0.0	1.2	0.83	0.1	0.5	0	0	785	91	335
	Saltery	6.0	3.9	8.6	0.00	6.1	1.5	3,821	2,459	5,483	3,876	924
Cook Inlet	Other Cook Inlet	0.6	0.1	1.9	0.00	0.8	0.6	412	51	1,206	490	369
	Susitna	1.7	0.6	3.5	0.00	1.9	0.9	1,101	378	2,227	1,176	572
	Kenai	6.4	4.2	9.0	0.00	6.4	1.5	4,038	2,663	5,721	4,093	933
	Kasilof	0.0	0.0	0.0	0.88	0.0	0.1	0	0	6	5	37

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A32.–Karluk-Sturgeon (statistical areas 255-10, 20; 256-40), 2015, all strata. Annual regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.2	0.0	0.8	0.08	0.2	0.3	194	0	986	295	326
Chignik		0.1	0.0	0.6	0.25	0.2	0.2	121	0	742	215	264
Kodiak		85.9	83.9	87.7	0.00	85.9	1.1	110,481	107,973	112,814	110,449	1,473
Cook Inlet		11.4	9.7	13.2	0.00	11.4	1.0	14,608	12,493	16,920	14,644	1,349
Prince William Sound		1.8	1.1	2.7	0.00	1.8	0.5	2,299	1,374	3,478	2,350	648
South of Cape Suckling		0.4	0.0	1.4	0.02	0.5	0.5	530	32	1,844	679	580
										Total	128,630	
Chignik	Black Lake	0.0	0.0	0.5	0.43	0.1	0.2	10	0	624	150	226
	Chignik Lake	0.0	0.0	0.3	0.65	0.1	0.1	0	0	431	65	167
Kodiak	Upper Station / Akalura	3.1	2.0	4.6	0.00	3.2	0.8	4,045	2,588	5,879	4,113	1,005
	Ayakulik / Frazer	11.7	10.2	13.4	0.00	11.8	1.0	15,081	13,132	17,225	15,118	1,244
	Karluk	62.8	60.0	65.6	0.00	62.8	1.7	80,839	77,210	84,333	80,816	2,165
	Uganik	1.0	0.5	1.6	0.00	1.0	0.3	1,266	702	2,116	1,320	446
	Northwest Kodiak	1.0	0.5	1.7	0.00	1.1	0.4	1,311	589	2,251	1,351	509
	Afognak	0.9	0.5	1.5	0.00	1.0	0.3	1,217	678	1,949	1,253	390
	Eastside Kodiak	0.3	0.1	1.4	0.00	0.5	0.4	427	126	1,856	646	578
	Saltery	4.5	3.3	5.9	0.00	4.5	0.8	5,779	4,223	7,609	5,831	1,030
Cook Inlet	Other Cook Inlet	1.8	1.2	2.6	0.00	1.8	0.4	2,302	1,493	3,367	2,350	575
	Susitna	2.2	1.4	3.2	0.00	2.3	0.5	2,849	1,848	4,160	2,909	707
	Kenai	6.1	4.7	7.7	0.00	6.1	0.9	7,851	6,092	9,841	7,893	1,140
	Kasilof	1.1	0.7	1.7	0.00	1.2	0.3	1,452	878	2,234	1,491	416

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A33.–Karluk-Sturgeon (statistical areas 255-10, 20; 256-40), temporal stratum 1 ("Early"; June 1–27; Harvest = 13,856; n = 378), 2016. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		3.0	1.7	4.8	0.00	3.1	1.0	414	230	666	426	134
Chignik		1.3	0.4	2.7	0.01	1.4	0.7	178	55	378	192	100
Kodiak		90.6	87.5	93.2	0.00	90.5	1.8	12,550	12,120	12,917	12,539	243
Cook Inlet		0.0	0.0	0.0	0.89	0.0	0.1	0	0	5	3	16
Prince William Sound		2.6	0.9	6.5	0.00	3.1	1.8	363	120	895	431	256
South of Cape Suckling		2.0	0.0	5.1	0.40	1.9	1.9	277	0	704	266	265
										Total	13,856	
Chignik	Black Lake	0.0	0.0	0.6	0.82	0.1	0.3	0	0	89	11	43
	Chignik Lake	1.2	0.1	2.7	0.04	1.3	0.8	170	10	370	181	105
Kodiak	Upper Station / Akalura	4.9	3.0	7.2	0.00	5.0	1.3	674	416	1,004	687	180
	Ayakulik / Frazer	22.2	17.9	26.8	0.00	22.2	2.7	3,073	2,484	3,713	3,083	373
	Karluk	56.0	50.7	61.2	0.00	56.0	3.2	7,760	7,021	8,485	7,757	445
	Uganik	5.6	3.6	8.2	0.00	5.7	1.4	778	492	1,132	790	196
	Northwest Kodiak	0.4	0.0	2.2	0.21	0.7	0.8	58	0	309	94	107
	Afognak	0.4	0.0	1.6	0.22	0.5	0.5	58	0	221	75	76
	Eastside Kodiak	0.0	0.0	2.0	0.65	0.4	0.7	0	0	274	51	102
	Saltery	0.0	0.0	0.0	0.91	0.0	0.1	0	0	1	2	15
Cook Inlet	Other Cook Inlet	*	*	*	*	*	*	*	*	*	*	*
	Susitna	*	*	*	*	*	*	*	*	*	*	*
	Kenai	*	*	*	*	*	*	*	*	*	*	*
	Kasilof	*	*	*	*	*	*	*	*	*	*	*

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A34.–Karluk-Sturgeon (statistical areas 255-10, 20; 256-40), temporal stratum 2 ("Middle"; June 28–July 25; Harvest = 10,700; *n* = 366), 2016. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.5	0.73	0.1	0.4	0	0	55	10	48
Chignik		0.0	0.0	0.7	0.74	0.1	0.4	0	0	77	10	38
Kodiak		76.5	72.1	80.6	0.00	76.4	2.6	8,185	7,714	8,622	8,178	276
Cook Inlet		10.8	7.7	14.4	0.00	10.9	2.0	1,157	828	1,544	1,168	218
Prince William Sound		12.4	8.9	16.2	0.00	12.4	2.2	1,322	952	1,737	1,331	238
South of Cape Suckling		0.0	0.0	0.1	0.83	0.0	0.2	0	0	7	3	20
										Total	10,700	
Chignik	Black Lake	0.0	0.0	0.5	0.85	0.1	0.3	0	0	57	8	34
	Chignik Lake	0.0	0.0	0.0	0.88	0.0	0.2	0	0	3	2	17
Kodiak	Upper Station / Akalura	1.2	0.3	2.8	0.00	1.4	0.8	132	36	302	146	83
	Ayakulik / Frazer	17.1	13.4	21.2	0.00	17.2	2.4	1,826	1,432	2,271	1,835	255
	Karluk	32.3	27.5	37.3	0.00	32.3	3.0	3,455	2,937	3,986	3,457	318
	Uganik	7.0	4.2	10.3	0.00	7.1	1.9	745	453	1,102	757	198
	Northwest Kodiak	0.0	0.0	0.0	0.89	0.0	0.1	0	0	3	2	14
	Afognak	1.0	0.3	2.3	0.01	1.1	0.6	109	31	248	120	68
	Eastside Kodiak	0.9	0.3	2.2	0.00	1.0	0.6	100	28	231	111	64
	Saltery	16.3	12.7	20.3	0.00	16.3	2.3	1,740	1,354	2,177	1,749	250
Cook Inlet	Other Cook Inlet	1.4	0.0	4.0	0.07	1.6	1.3	154	0	432	175	137
	Susitna	2.9	1.4	5.0	0.00	3.0	1.1	311	147	530	321	118
	Kenai	2.9	1.2	5.3	0.00	3.0	1.2	306	131	562	321	133
	Kasilof	3.2	1.8	5.1	0.00	3.3	1.0	341	189	544	350	109

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A35.–Karluk-Sturgeon (statistical areas 255-10, 20; 256-40), temporal stratum 3 ("Late"; July 26–August 29; Harvest = 113,445; *n* = 375), 2016. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.2	0.86	0.0	0.2	0	0	218	38	182
Chignik		0.0	0.0	0.1	0.82	0.0	0.1	0	0	89	23	123
Kodiak		97.8	96.0	99.0	0.00	97.7	0.9	110,921	108,906	112,285	110,800	1,039
Cook Inlet		1.3	0.1	3.3	0.00	1.4	1.0	1,471	123	3,749	1,638	1,145
Prince William Sound		0.1	0.0	1.8	0.19	0.5	0.7	125	0	2,097	527	748
South of Cape Suckling		0.3	0.0	1.1	0.02	0.4	0.4	302	14	1,222	419	402
										Total	113,445	
Chignik	Black Lake	0.0	0.0	0.0	0.90	0.0	0.1	0	0	15	15	103
	Chignik Lake	0.0	0.0	0.0	0.91	0.0	0.1	0	0	4	8	68
Kodiak	Upper Station / Akalura	2.6	0.0	4.9	0.07	2.6	1.4	2,976	0	5,610	2,984	1,580
	Ayakulik / Frazer	0.0	0.0	1.2	0.17	0.3	0.5	42	0	1,387	293	514
	Karluk	91.0	87.6	94.1	0.00	90.9	2.0	103,210	99,420	106,783	103,164	2,228
	Uganik	0.0	0.0	0.2	0.56	0.0	0.1	0	0	176	31	116
	Northwest Kodiak	0.2	0.0	0.8	0.00	0.3	0.3	213	16	914	306	305
	Afognak	0.0	0.0	0.0	0.91	0.0	0.0	0	0	2	5	42
	Eastside Kodiak	0.0	0.0	0.0	0.91	0.0	0.1	0	0	4	11	99
	Saltery	3.4	1.9	5.4	0.00	3.5	1.1	3,904	2,184	6,175	4,007	1,223
Cook Inlet	Other Cook Inlet	*	*	*	*	*	*	*	*	*	*	*
	Susitna	*	*	*	*	*	*	*	*	*	*	*
	Kenai	*	*	*	*	*	*	*	*	*	*	*
	Kasilof	*	*	*	*	*	*	*	*	*	*	*

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A36.–Karluk-Sturgeon (statistical areas 255-10, 20; 256-40), 2016, all strata. Annual regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.3	0.2	0.6	0.00	0.3	0.2	434	237	811	475	231
Chignik		0.1	0.0	0.3	0.00	0.2	0.1	195	61	466	225	163
Kodiak		95.4	93.9	96.5	0.00	95.3	0.8	131,624	129,528	133,131	131,517	1,103
Cook Inlet		1.9	0.9	3.6	0.00	2.0	0.8	2,645	1,242	4,947	2,808	1,168
Prince William Sound		1.5	1.0	2.9	0.00	1.7	0.6	2,078	1,339	3,937	2,288	822
South of Cape Suckling		0.5	0.0	1.1	0.01	0.5	0.4	628	43	1,587	688	485
										Total	138,001	
Chignik	Black Lake	0.0	0.0	0.1	0.66	0.0	0.1	0	0	191	34	117
	Chignik Lake	0.1	0.0	0.3	0.04	0.1	0.1	175	19	393	191	126
Kodiak	Upper Station / Akalura	2.8	0.6	4.7	0.00	2.8	1.2	3,810	879	6,462	3,818	1,592
	Ayakulik / Frazer	3.7	3.1	4.7	0.00	3.8	0.5	5,115	4,294	6,476	5,210	684
	Karluk	82.9	80.1	85.6	0.00	82.9	1.7	114,421	110,544	118,099	114,378	2,291
	Uganik	1.1	0.8	1.5	0.00	1.1	0.2	1,558	1,124	2,090	1,577	301
	Northwest Kodiak	0.2	0.0	0.7	0.00	0.3	0.2	323	47	1,033	403	324
	Afognak	0.1	0.0	0.3	0.00	0.1	0.1	184	56	394	200	110
	Eastside Kodiak	0.1	0.0	0.3	0.00	0.1	0.1	133	34	435	173	156
	Saltery	4.1	2.8	5.8	0.00	4.2	0.9	5,661	3,894	7,963	5,758	1,248
Cook Inlet	Other Cook Inlet	0.1	0.0	0.6	0.04	0.2	0.2	195	2	804	268	300
	Susitna	0.2	0.1	0.7	0.00	0.3	0.2	337	158	938	406	300
	Kenai	1.2	0.2	2.9	0.00	1.3	0.8	1,591	344	3,936	1,782	1,164
	Kasilof	0.2	0.1	0.4	0.00	0.3	0.1	342	189	550	353	114

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A37.–Ayakulik-Halibut Bay (statistical areas 256-10, 15, 20, 25, 30), temporal stratum 1 ("Early"; June 1–27; Harvest = 162,984; *n* = 378), 2014. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		1.5	0.6	3.0	0.00	1.6	0.8	2,479	900	4,964	2,648	1,258
Chignik		0.0	0.0	0.8	0.22	0.2	0.3	26	0	1,238	251	468
Kodiak		87.4	84.3	90.2	0.00	87.4	1.8	142,494	137,343	147,040	142,379	2,951
Cook Inlet		7.1	5.0	9.7	0.00	7.2	1.4	11,585	8,095	15,822	11,723	2,360
Prince William Sound		2.4	1.2	4.1	0.00	2.5	0.9	3,866	1,944	6,639	4,019	1,451
South of Cape Suckling		1.0	0.0	3.3	0.09	1.2	1.1	1,625	0	5,303	1,964	1,719
										Total	162,984	
Chignik	Black Lake	0.0	0.0	0.6	0.43	0.1	0.2	1	0	958	165	381
	Chignik Lake	0.0	0.0	0.3	0.52	0.1	0.2	0	0	528	86	290
Kodiak	Upper Station / Akalura	2.8	1.5	4.6	0.00	2.9	1.0	4,539	2,421	7,484	4,692	1,555
	Ayakulik / Frazer	71.3	66.8	75.6	0.00	71.3	2.7	116,247	108,932	123,180	116,180	4,340
	Karluk	10.2	7.0	13.9	0.00	10.3	2.1	16,588	11,405	22,595	16,741	3,417
	Uganik	0.5	0.0	1.8	0.10	0.6	0.6	768	0	2,856	991	958
	Northwest Kodiak	0.0	0.0	0.7	0.48	0.1	0.3	0	0	1,151	173	485
	Afognak	0.0	0.0	0.1	0.56	0.0	0.1	0	0	213	37	137
	Eastside Kodiak	0.2	0.0	1.0	0.05	0.3	0.3	348	0	1,603	519	562
	Saltery	1.8	0.7	3.4	0.00	1.9	0.8	2,897	1,145	5,476	3,046	1,337
Cook Inlet	Other Cook Inlet	0.8	0.1	2.5	0.00	1.0	0.8	1,223	215	4,147	1,596	1,274
	Susitna	0.0	0.0	0.0	0.81	0.0	0.1	0	0	56	18	109
	Kenai	1.0	0.4	2.1	0.00	1.1	0.5	1,601	600	3,370	1,739	865
	Kasilof	5.0	3.3	7.3	0.00	5.1	1.2	8,228	5,355	11,867	8,371	1,990

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A38.–Ayakulik-Halibut Bay (statistical areas 256-10, 15, 20, 25, 30), temporal stratum 2 ("Middle"; June 28–July 25; Harvest = 175,205; *n* = 379), 2014. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		4.1	1.8	6.6	0.00	4.2	1.4	7,202	3,234	11,617	7,294	2,535
Chignik		0.0	0.0	0.2	0.80	0.0	0.2	0	0	281	59	295
Kodiak		71.2	67.0	75.2	0.00	71.2	2.5	124,764	117,354	131,810	124,708	4,398
Cook Inlet		23.6	19.5	28.0	0.00	23.6	2.6	41,313	34,191	49,084	41,434	4,525
Prince William Sound		0.5	0.1	2.6	0.00	0.8	0.8	958	175	4,502	1,424	1,469
South of Cape Suckling		0.0	0.0	1.1	0.75	0.2	0.5	0	0	1,940	286	898
										Total	175,205	
Chignik	Black Lake	0.0	0.0	0.0	0.91	0.0	0.1	0	0	6	14	119
	Chignik Lake	0.0	0.0	0.1	0.88	0.0	0.2	0	0	90	45	271
Kodiak	Upper Station / Akalura	2.0	0.7	3.8	0.00	2.1	0.9	3,428	1,272	6,658	3,625	1,660
	Ayakulik / Frazer	51.7	47.0	56.3	0.00	51.7	2.8	90,666	82,374	98,721	90,621	4,971
	Karluk	1.0	0.0	4.0	0.10	1.3	1.3	1,725	0	6,995	2,338	2,362
	Uganik	0.0	0.0	0.0	0.90	0.0	0.1	0	0	16	27	207
	Northwest Kodiak	0.0	0.0	0.0	0.89	0.0	0.1	0	0	32	21	141
	Afognak	0.0	0.0	0.3	0.83	0.0	0.2	0	0	588	83	328
	Eastside Kodiak	2.6	1.4	4.7	0.00	2.8	1.1	4,617	2,426	8,175	4,880	1,846
	Saltery	13.1	10.0	16.6	0.00	13.2	2.0	22,990	17,579	29,057	23,113	3,487
Cook Inlet	Other Cook Inlet	1.6	0.5	3.9	0.00	1.8	1.1	2,775	839	6,752	3,166	1,934
	Susitna	0.7	0.0	2.8	0.28	0.9	1.0	1,173	0	4,985	1,602	1,741
	Kenai	16.8	13.3	20.6	0.00	16.8	2.2	29,413	23,265	36,079	29,518	3,895
	Kasilof	4.0	2.4	6.1	0.00	4.1	1.1	6,987	4,186	10,662	7,148	1,982

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A39.–Ayakulik-Halibut Bay (statistical areas 256-10, 15, 20, 25, 30), temporal stratum 3 ("Late"; July 26–August 29; Harvest = 57,066; *n* = 374), 2014. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.7	0.1	2.0	0.01	0.9	0.6	423	86	1,169	499	348
Chignik		0.7	0.1	2.0	0.00	0.9	0.6	427	80	1,163	499	345
Kodiak		92.0	89.2	94.3	0.00	91.9	1.6	52,483	50,895	53,825	52,439	894
Cook Inlet		5.2	3.2	7.6	0.00	5.3	1.4	2,959	1,825	4,359	3,006	772
Prince William Sound		0.2	0.0	0.9	0.10	0.3	0.3	95	0	509	155	194
South of Cape Suckling		0.7	0.2	1.8	0.00	0.8	0.5	412	119	1,007	469	285
										Total	57,066	
Chignik	Black Lake	0.0	0.0	0.4	0.83	0.1	0.2	0	0	248	32	125
	Chignik Lake	0.7	0.0	2.0	0.07	0.8	0.6	401	0	1,146	466	356
Kodiak	Upper Station / Akalura	21.6	17.6	25.8	0.00	21.6	2.5	12,307	10,071	14,719	12,341	1,410
	Ayakulik / Frazer	52.1	47.0	57.2	0.00	52.1	3.1	29,735	26,842	32,618	29,735	1,758
	Karluk	12.7	9.0	16.8	0.00	12.8	2.4	7,239	5,161	9,593	7,287	1,352
	Uganik	0.0	0.0	0.1	0.88	0.0	0.1	0	0	53	15	82
	Northwest Kodiak	0.0	0.0	0.0	0.92	0.0	0.0	0	0	1	2	18
	Afognak	0.0	0.0	0.0	0.92	0.0	0.0	0	0	1	3	25
	Eastside Kodiak	0.7	0.1	3.1	0.00	1.1	1.0	398	70	1,778	602	558
	Saltery	4.2	2.5	6.4	0.00	4.3	1.2	2,403	1,424	3,664	2,455	685
Cook Inlet	Other Cook Inlet	1.0	0.1	2.4	0.00	1.1	0.7	548	85	1,381	614	408
	Susitna	0.0	0.0	0.7	0.42	0.1	0.3	0	0	382	67	153
	Kenai	4.0	2.2	6.2	0.00	4.1	1.2	2,270	1,275	3,558	2,323	697
	Kasilof	0.0	0.0	0.0	0.91	0.0	0.0	0	0	1	3	23

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A40.–Ayakulik-Halibut Bay (statistical areas 256-10, 15, 20, 25, 30), 2014, all strata. Annual regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		2.6	1.5	3.9	0.00	2.6	0.7	10,318	5,939	15,360	10,444	2,852
Chignik		0.2	0.0	0.5	0.00	0.2	0.2	637	131	2,083	808	653
Kodiak		80.9	78.6	83.0	0.00	80.8	1.4	319,597	310,580	328,170	319,518	5,362
Cook Inlet		14.2	12.1	16.4	0.00	14.2	1.3	56,044	47,899	64,818	56,166	5,149
Prince William Sound		1.3	0.7	2.4	0.00	1.4	0.5	5,280	2,882	9,457	5,601	2,066
South of Cape Suckling		0.6	0.1	1.6	0.00	0.7	0.5	2,300	347	6,512	2,718	1,972
										Total	395,255	
Chignik	Black Lake	0.0	0.0	0.3	0.36	0.1	0.1	8	0	1,077	211	419
	Chignik Lake	0.1	0.0	0.4	0.03	0.2	0.1	474	12	1,561	597	535
Kodiak	Upper Station / Akalura	5.2	4.2	6.4	0.00	5.2	0.7	20,529	16,497	25,273	20,658	2,673
	Ayakulik / Frazer	59.9	57.0	62.6	0.00	59.8	1.7	236,602	225,238	247,620	236,531	6,813
	Karluk	6.6	5.0	8.6	0.00	6.7	1.1	26,103	19,613	33,984	26,365	4,373
	Uganik	0.2	0.0	0.7	0.09	0.3	0.2	807	0	2,944	1,033	984
	Northwest Kodiak	0.0	0.0	0.3	0.44	0.0	0.1	1	0	1,229	197	504
	Afognak	0.0	0.0	0.2	0.47	0.0	0.1	0	0	750	122	358
	Eastside Kodiak	1.5	0.8	2.4	0.00	1.5	0.5	5,751	3,263	9,550	6,005	1,996
	Saltery	7.2	5.7	8.9	0.00	7.2	1.0	28,484	22,539	35,047	28,608	3,805
Cook Inlet	Other Cook Inlet	1.3	0.6	2.4	0.00	1.4	0.6	5,057	2,262	9,632	5,383	2,306
	Susitna	0.3	0.0	1.3	0.11	0.4	0.4	1,259	0	5,081	1,685	1,747
	Kenai	8.5	6.9	10.2	0.00	8.5	1.0	33,461	27,146	40,343	33,572	4,029
	Kasilof	3.9	2.8	5.2	0.00	3.9	0.7	15,374	11,174	20,396	15,526	2,807

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A41.–Ayakulik-Halibut Bay (statistical areas 256-10, 15, 20, 25, 30), temporal stratum 1 ("Early"; June 1–July 3; Harvest = 203,170; *n* = 377), 2015. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.1	0.84	0.0	0.2	0	0	175	62	389
Chignik		1.8	0.7	3.6	0.00	1.9	0.9	3,700	1,405	7,224	3,930	1,802
Kodiak		61.7	57.2	66.0	0.00	61.6	2.7	125,280	116,205	134,152	125,239	5,446
Cook Inlet		28.2	24.2	32.5	0.00	28.3	2.5	57,347	49,106	66,103	57,446	5,177
Prince William Sound		7.9	5.2	11.2	0.00	8.0	1.8	16,111	10,540	22,728	16,307	3,716
South of Cape Suckling		0.0	0.0	0.8	0.82	0.1	0.3	0	0	1,536	185	686
										Total	203,170	
Chignik	Black Lake	1.8	0.7	3.5	0.00	1.9	0.9	3,628	1,341	7,120	3,853	1,789
	Chignik Lake	0.0	0.0	0.2	0.87	0.0	0.2	0	0	337	78	401
Kodiak	Upper Station / Akalura	4.0	2.4	6.2	0.00	4.1	1.2	8,193	4,842	12,610	8,388	2,371
	Ayakulik / Frazer	44.8	40.2	49.4	0.00	44.8	2.8	91,015	81,732	100,396	91,027	5,669
	Karluk	9.4	6.3	13.0	0.00	9.5	2.1	19,035	12,748	26,392	19,234	4,170
	Uganik	2.1	0.9	4.0	0.00	2.2	0.9	4,314	1,818	8,063	4,540	1,920
	Northwest Kodiak	0.0	0.0	1.5	0.55	0.3	0.5	0	0	3,064	574	1,108
	Afognak	0.5	0.0	2.1	0.31	0.7	0.7	1,064	0	4,351	1,420	1,523
	Eastside Kodiak	0.0	0.0	0.0	0.91	0.0	0.1	0	0	8	20	193
	Saltery	0.0	0.0	0.0	0.84	0.0	0.1	0	0	84	34	219
Cook Inlet	Other Cook Inlet	4.1	1.9	7.0	0.00	4.2	1.6	8,289	3,884	14,221	8,565	3,170
	Susitna	0.0	0.0	0.1	0.80	0.0	0.1	0	0	149	41	241
	Kenai	4.9	3.3	7.0	0.00	5.0	1.1	9,964	6,665	14,155	10,128	2,300
	Kasilof	19.0	15.6	22.7	0.00	19.1	2.1	38,593	31,767	46,038	38,712	4,342

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A42.–Ayakulik-Halibut Bay (statistical areas 256-10, 15, 20, 25, 30), temporal stratum 2 ("Middle"; July 4–August 1; Harvest = 384,390; *n* = 377), 2015. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.2	0.87	0.1	0.3	0	0	860	250	1,278
Chignik		0.0	0.0	0.1	0.78	0.0	0.1	0	0	321	78	423
Kodiak		51.3	46.7	55.8	0.00	51.3	2.8	197,016	179,638	214,474	197,033	10,580
Cook Inlet		48.2	43.6	52.7	0.00	48.2	2.8	185,118	167,476	202,725	185,100	10,684
Prince William Sound		0.3	0.0	1.8	0.00	0.5	0.6	1,056	74	6,765	1,881	2,414
South of Cape Suckling		0.0	0.0	0.0	0.90	0.0	0.1	0	0	36	47	395
										Total	384,390	
Chignik	Black Lake	0.0	0.0	0.0	0.85	0.0	0.1	0	0	86	44	305
	Chignik Lake	0.0	0.0	0.0	0.91	0.0	0.1	0	0	15	34	295
Kodiak	Upper Station / Akalura	0.0	0.0	0.5	0.66	0.1	0.3	0	0	1,787	267	990
	Ayakulik / Frazer	40.7	36.3	45.2	0.00	40.8	2.7	156,626	139,595	173,832	156,652	10,389
	Karluk	4.6	2.4	7.5	0.00	4.7	1.6	17,586	9,091	29,021	18,142	6,106
	Uganik	0.0	0.0	1.3	0.69	0.2	0.5	0	0	4,886	669	1,902
	Northwest Kodiak	0.0	0.0	0.0	0.88	0.0	0.1	0	0	186	72	424
	Afognak	0.0	0.0	0.0	0.91	0.0	0.1	0	0	10	24	221
	Eastside Kodiak	0.5	0.1	1.5	0.00	0.6	0.5	1,991	419	5,761	2,397	1,769
	Saltery	4.8	2.9	7.2	0.00	4.9	1.3	18,453	11,034	27,836	18,811	5,128
Cook Inlet	Other Cook Inlet	7.4	4.7	10.5	0.00	7.5	1.8	28,391	18,049	40,444	28,723	6,856
	Susitna	3.7	2.0	6.0	0.00	3.8	1.2	14,172	7,682	23,027	14,603	4,714
	Kenai	27.0	22.7	31.5	0.00	27.0	2.7	103,596	87,278	120,975	103,805	10,241
	Kasilof	9.8	7.1	12.9	0.00	9.9	1.8	37,658	27,294	49,734	37,969	6,841

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A43.–Ayakulik-Halibut Bay (statistical areas 256-10, 15, 20, 25, 30), temporal stratum 3 ("Late"; August 2–29; Harvest = 20,619; *n* = 379), 2015. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.2	0.0	0.9	0.05	0.3	0.3	40	0	186	60	63
Chignik		0.0	0.0	0.0	0.84	0.0	0.1	0	0	5	2	15
Kodiak		89.5	86.5	92.2	0.00	89.5	1.7	18,462	17,834	19,002	18,446	356
Cook Inlet		8.3	5.9	11.2	0.00	8.4	1.6	1,717	1,218	2,313	1,736	333
Prince William Sound		1.1	0.0	2.9	0.14	1.2	1.0	232	0	593	247	196
South of Cape Suckling		0.0	0.0	2.5	0.53	0.6	0.9	0	0	513	128	188
										Total	20,619	
Chignik	Black Lake	0.0	0.0	0.0	0.92	0.0	0.0	0	0	0	1	9
	Chignik Lake	0.0	0.0	0.0	0.92	0.0	0.1	0	0	0	1	12
Kodiak	Upper Station / Akalura	15.9	12.5	19.7	0.00	15.9	2.2	3,271	2,573	4,053	3,286	451
	Ayakulik / Frazer	24.8	20.6	29.2	0.00	24.8	2.6	5,105	4,254	6,012	5,116	536
	Karluk	24.4	20.0	29.1	0.00	24.4	2.8	5,030	4,121	6,001	5,040	572
	Uganik	0.2	0.0	1.5	0.34	0.4	0.5	38	0	317	84	113
	Northwest Kodiak	0.2	0.0	1.0	0.00	0.3	0.3	41	3	196	63	71
	Afognak	0.0	0.0	0.0	0.92	0.0	0.0	0	0	0	1	7
	Eastside Kodiak	1.7	0.8	3.1	0.00	1.8	0.7	352	168	635	370	145
	Saltery	21.7	18.1	25.6	0.00	21.7	2.3	4,475	3,724	5,279	4,484	473
Cook Inlet	Other Cook Inlet	0.6	0.1	1.6	0.00	0.7	0.5	116	20	337	139	102
	Susitna	0.0	0.0	0.4	0.28	0.1	0.2	1	0	77	14	36
	Kenai	7.5	5.2	10.3	0.00	7.6	1.6	1,542	1,063	2,118	1,560	321
	Kasilof	0.0	0.0	0.6	0.56	0.1	0.2	0	0	125	23	49

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A44.–Ayakulik-Halibut Bay (statistical areas 256-10, 15, 20, 25, 30), 2015, all strata. Annual regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.3	0.04	0.1	0.2	53	1	1,905	372	1,333
Chignik		0.6	0.2	1.2	0.00	0.7	0.3	3,764	1,435	7,399	4,010	1,849
Kodiak		56.0	52.8	59.3	0.00	56.0	2.0	340,744	321,037	360,357	340,718	11,938
Cook Inlet		40.2	37.0	43.4	0.00	40.2	2.0	244,316	224,759	263,868	244,282	11,886
Prince William Sound		3.0	2.0	4.3	0.00	3.0	0.7	18,038	11,900	26,256	18,436	4,458
South of Cape Suckling		0.0	0.0	0.3	0.40	0.1	0.1	62	0	1,908	361	814
										Total	608,179	
Chignik	Black Lake	0.6	0.2	1.2	0.00	0.6	0.3	3,666	1,358	7,209	3,897	1,813
	Chignik Lake	0.0	0.0	0.1	0.76	0.0	0.1	0	0	697	113	501
Kodiak	Upper Station / Akalura	1.9	1.3	2.7	0.00	2.0	0.4	11,691	8,151	16,556	11,942	2,618
	Ayakulik / Frazer	41.6	38.4	44.8	0.00	41.6	2.0	252,727	233,283	272,379	252,796	11,902
	Karluk	6.9	5.1	9.1	0.00	7.0	1.2	41,959	30,985	55,342	42,416	7,441
	Uganik	0.8	0.3	1.7	0.00	0.9	0.4	4,783	2,008	10,423	5,293	2,710
	Northwest Kodiak	0.0	0.0	0.5	0.00	0.1	0.2	122	6	3,331	709	1,189
	Afognak	0.2	0.0	0.7	0.27	0.2	0.3	1,087	0	4,398	1,445	1,539
	Eastside Kodiak	0.4	0.1	1.0	0.00	0.5	0.3	2,386	777	6,187	2,788	1,787
	Saltery	3.8	2.5	5.3	0.00	3.8	0.8	22,969	15,503	32,412	23,329	5,153
Cook Inlet	Other Cook Inlet	6.1	4.2	8.3	0.00	6.2	1.2	37,114	25,658	50,324	37,427	7,514
	Susitna	2.3	1.3	3.8	0.00	2.4	0.8	14,228	7,730	23,087	14,658	4,721
	Kenai	19.0	16.2	21.9	0.00	19.0	1.7	115,289	98,566	133,082	115,493	10,501
	Kasilof	12.6	10.5	14.9	0.00	12.6	1.3	76,450	63,868	90,474	76,704	8,096

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A45.–Ayakulik-Halibut Bay (statistical areas 256-10, 15, 20, 25, 30), temporal stratum 1 ("Early"; June 1–27; Harvest = 3,937; *n* = 219), 2016. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.0	0.92	0.0	0.0	0	0	0	0	2
Chignik		0.0	0.0	0.0	0.79	0.0	0.1	0	0	2	1	3
Kodiak		99.5	98.3	99.9	0.00	99.4	0.5	3,917	3,869	3,935	3,912	22
Cook Inlet		0.4	0.0	1.6	0.00	0.6	0.5	17	2	63	23	20
Prince William Sound		0.0	0.0	0.2	0.52	0.0	0.1	0	0	9	1	5
South of Cape Suckling		0.0	0.0	0.0	0.92	0.0	0.1	0	0	0	0	2
										Total	3,937	
Chignik	Black Lake	0.0	0.0	0.0	0.86	0.0	0.1	0	0	1	0	2
	Chignik Lake	0.0	0.0	0.0	0.92	0.0	0.0	0	0	0	0	2
Kodiak	Upper Station / Akalura	0.0	0.0	0.2	0.69	0.0	0.2	0	0	7	1	6
	Ayakulik / Frazer	98.0	95.7	99.3	0.00	97.8	1.2	3,859	3,766	3,911	3,851	45
	Karluk	0.7	0.0	3.0	0.07	1.0	1.0	28	0	117	39	39
	Uganik	0.2	0.0	1.8	0.33	0.5	0.7	7	0	72	19	26
	Northwest Kodiak	0.0	0.0	0.0	0.91	0.0	0.1	0	0	0	0	4
	Afognak	0.0	0.0	0.0	0.92	0.0	0.0	0	0	0	0	2
	Eastside Kodiak	0.0	0.0	0.0	0.90	0.0	0.1	0	0	0	0	4
	Saltery	0.0	0.0	0.0	0.92	0.0	0.1	0	0	0	0	2
Cook Inlet	Other Cook Inlet	*	*	*	*	*	*	*	*	*	*	*
	Susitna	*	*	*	*	*	*	*	*	*	*	*
	Kenai	*	*	*	*	*	*	*	*	*	*	*
	Kasilof	*	*	*	*	*	*	*	*	*	*	*

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A46.–Ayakulik-Halibut Bay (statistical areas 256-10, 15, 20, 25, 30), temporal stratum 2 ("Middle"; June 28–July 25; Harvest = 120,068; *n* = 377), 2016. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	1.7	0.77	0.2	0.6	0	0	1,994	265	759
Chignik		0.0	0.0	1.1	0.69	0.2	0.4	0	0	1,329	191	503
Kodiak		55.7	51.1	60.2	0.00	55.6	2.8	66,823	61,328	72,239	66,814	3,314
Cook Inlet		42.2	37.6	46.9	0.00	42.2	2.8	50,694	45,100	56,310	50,699	3,409
Prince William Sound		0.0	0.0	3.0	0.50	0.8	1.1	0	0	3,582	947	1,323
South of Cape Suckling		0.3	0.0	3.7	0.44	1.0	1.4	317	0	4,472	1,151	1,631
										Total	120,068	
Chignik	Black Lake	0.0	0.0	0.0	0.90	0.0	0.1	0	0	9	14	111
	Chignik Lake	0.0	0.0	1.1	0.76	0.1	0.4	0	0	1,291	176	493
Kodiak	Upper Station / Akalura	0.9	0.2	2.2	0.00	1.0	0.6	1,083	275	2,601	1,214	736
	Ayakulik / Frazer	47.0	42.5	51.5	0.00	47.0	2.7	56,389	51,032	61,790	56,397	3,269
	Karluk	3.7	1.8	6.4	0.00	3.9	1.4	4,487	2,217	7,647	4,650	1,668
	Uganik	1.3	0.0	3.4	0.13	1.5	1.1	1,611	0	4,140	1,745	1,319
	Northwest Kodiak	0.0	0.0	0.0	0.92	0.0	0.0	0	0	2	6	54
	Afognak	0.2	0.0	0.9	0.02	0.3	0.3	242	10	1,073	352	361
	Eastside Kodiak	0.2	0.0	1.3	0.01	0.4	0.6	252	16	1,609	472	745
	Saltery	1.6	0.0	3.4	0.09	1.6	1.0	1,912	0	4,137	1,978	1,239
Cook Inlet	Other Cook Inlet	2.9	1.6	5.1	0.00	3.1	1.1	3,507	1,941	6,073	3,698	1,347
	Susitna	5.9	3.2	9.0	0.00	6.0	1.8	7,055	3,886	10,822	7,173	2,117
	Kenai	30.5	25.9	35.3	0.00	30.5	2.9	36,642	31,066	42,418	36,677	3,444
	Kasilof	2.5	1.1	4.6	0.00	2.6	1.1	3,005	1,304	5,508	3,152	1,295

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A47.–Ayakulik-Halibut Bay (statistical areas 256-10, 15, 20, 25, 30), temporal stratum 3 ("Late"; July 26–August 29; Harvest = 33,721; *n* = 378), 2016. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.2	0.82	0.0	0.1	0	0	84	12	49
Chignik		0.0	0.0	0.0	0.84	0.0	0.1	0	0	10	4	26
Kodiak		69.0	64.6	73.2	0.00	69.0	2.6	23,274	21,794	24,682	23,261	877
Cook Inlet		28.5	24.3	32.9	0.00	28.6	2.6	9,615	8,201	11,097	9,629	881
Prince William Sound		1.1	0.2	4.8	0.00	1.7	1.5	383	84	1,612	589	506
South of Cape Suckling		0.6	0.0	1.9	0.23	0.7	0.6	191	0	629	225	217
										Total	33,721	
Chignik	Black Lake	0.0	0.0	0.0	0.92	0.0	0.0	0	0	0	1	10
	Chignik Lake	0.0	0.0	0.0	0.91	0.0	0.1	0	0	1	3	24
Kodiak	Upper Station / Akalura	8.8	5.9	12.3	0.00	8.9	1.9	2,976	2,002	4,142	3,011	651
	Ayakulik / Frazer	6.0	3.6	9.0	0.00	6.1	1.7	2,027	1,205	3,027	2,060	558
	Karluk	47.3	42.1	52.6	0.00	47.3	3.2	15,965	14,210	17,723	15,965	1,065
	Uganik	0.0	0.0	0.1	0.85	0.0	0.2	0	0	40	12	63
	Northwest Kodiak	0.0	0.0	0.0	0.92	0.0	0.1	0	0	1	2	17
	Afognak	0.4	0.0	1.3	0.09	0.5	0.4	120	0	441	156	146
	Eastside Kodiak	0.5	0.0	2.5	0.19	0.7	0.9	153	0	854	246	287
	Saltery	5.3	3.0	8.0	0.00	5.4	1.5	1,780	1,023	2,699	1,810	510
Cook Inlet	Other Cook Inlet	3.5	1.9	5.8	0.00	3.7	1.2	1,196	631	1,950	1,232	406
	Susitna	1.4	0.3	3.2	0.00	1.5	0.9	470	111	1,065	514	297
	Kenai	20.5	16.8	24.6	0.00	20.6	2.4	6,918	5,658	8,288	6,938	800
	Kasilof	2.7	1.4	4.5	0.00	2.8	1.0	914	474	1,525	946	323

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A48.–Ayakulik-Halibut Bay (statistical areas 256-10, 15, 20, 25, 30), 2016, all strata. Annual regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	1.3	0.62	0.2	0.5	0	0	2,018	278	760
Chignik		0.0	0.0	0.8	0.52	0.1	0.3	0	0	1,329	195	504
Kodiak		59.6	56.0	63.1	0.00	59.6	2.2	93,985	88,323	99,588	93,982	3,426
Cook Inlet		38.3	34.6	42.0	0.00	38.3	2.2	60,351	54,597	66,171	60,356	3,517
Prince William Sound		0.7	0.1	2.7	0.00	1.0	0.9	1,156	115	4,301	1,539	1,417
South of Cape Suckling		0.4	0.0	3.0	0.08	0.9	1.0	656	0	4,731	1,377	1,652
										Total	157,726	
Chignik	Black Lake	0.0	0.0	0.0	0.78	0.0	0.1	0	0	29	16	112
	Chignik Lake	0.0	0.0	0.8	0.67	0.1	0.3	0	0	1,287	179	494
Kodiak	Upper Station / Akalura	2.6	1.8	3.8	0.00	2.7	0.6	4,142	2,769	5,972	4,225	983
	Ayakulik / Frazer	39.5	36.0	43.0	0.00	39.5	2.1	62,295	56,841	67,759	62,307	3,320
	Karluk	13.0	11.2	15.3	0.00	13.1	1.3	20,533	17,620	24,084	20,653	1,978
	Uganik	1.0	0.0	2.6	0.04	1.1	0.8	1,645	1	4,169	1,775	1,319
	Northwest Kodiak	0.0	0.0	0.0	0.81	0.0	0.0	0	0	21	8	57
	Afognak	0.3	0.0	0.8	0.00	0.3	0.2	414	75	1,262	508	388
	Eastside Kodiak	0.3	0.0	1.3	0.00	0.5	0.5	503	75	1,989	718	796
	Saltery	2.4	1.1	3.9	0.00	2.4	0.9	3,723	1,680	6,104	3,788	1,341
Cook Inlet	Other Cook Inlet	3.0	1.9	4.7	0.00	3.1	0.9	4,757	3,030	7,400	4,932	1,406
	Susitna	4.8	2.8	7.2	0.00	4.9	1.4	7,572	4,376	11,360	7,686	2,134
	Kenai	27.6	24.0	31.4	0.00	27.7	2.2	43,577	37,871	49,520	43,624	3,545
	Kasilof	2.5	1.4	4.1	0.00	2.6	0.8	3,973	2,183	6,520	4,114	1,335

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A49.–Alitak (statistical areas 257-10, 20, 50, 60, 70), temporal stratum 2 (“Middle”; June 28–July 25; Harvest = 115,998; *n* = 375), 2014. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.1	0.0	2.4	0.27	0.6	0.8	139	0	2,746	694	976
Chignik		1.1	0.0	3.0	0.05	1.2	1.0	1,284	0	3,455	1,404	1,122
Kodiak		64.9	60.6	69.2	0.00	64.9	2.6	75,315	70,301	80,213	75,296	3,009
Cook Inlet		32.3	28.1	36.7	0.00	32.3	2.6	37,463	32,567	42,514	37,488	3,022
Prince William Sound		0.7	0.1	1.9	0.00	0.8	0.6	768	115	2,207	913	674
South of Cape Suckling		0.0	0.0	0.9	0.34	0.2	0.4	10	0	1,004	204	415
										Total	115,998	
Chignik	Black Lake	0.0	0.0	0.3	0.52	0.1	0.2	0	0	390	64	220
	Chignik Lake	1.0	0.0	2.9	0.11	1.2	1.0	1,217	0	3,402	1,339	1,124
Kodiak	Upper Station / Akalura	4.6	2.8	7.0	0.00	4.7	1.3	5,383	3,280	8,113	5,498	1,476
	Ayakulik / Frazer	56.5	52.1	60.8	0.00	56.5	2.7	65,573	60,442	70,571	65,550	3,086
	Karluk	0.0	0.0	0.5	0.51	0.1	0.2	0	0	542	86	290
	Uganik	0.0	0.0	1.1	0.39	0.2	0.4	2	0	1,243	232	458
	Northwest Kodiak	0.0	0.0	0.2	0.54	0.0	0.1	0	0	224	37	129
	Afognak	0.0	0.0	0.2	0.55	0.0	0.1	0	0	209	35	129
	Eastside Kodiak	2.2	1.1	4.4	0.00	2.4	1.1	2,579	1,265	5,135	2,800	1,220
	Saltery	0.8	0.0	2.2	0.05	0.9	0.7	935	0	2,537	1,056	792
Cook Inlet	Other Cook Inlet	3.7	2.0	5.8	0.00	3.7	1.2	4,239	2,268	6,757	4,340	1,370
	Susitna	1.0	0.0	3.4	0.24	1.2	1.2	1,194	0	3,903	1,397	1,354
	Kenai	16.1	12.8	19.7	0.00	16.1	2.1	18,640	14,818	22,891	18,717	2,457
	Kasilof	11.1	8.5	14.3	0.00	11.2	1.8	12,932	9,833	16,569	13,034	2,054

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A50.–Alitak (statistical areas 257-10, 20, 50, 60, 70), temporal stratum 3 ("Late"; July 26–August 29; Harvest = 5,437; *n* = 375), 2014. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.0	0.92	0.0	0.0	0	0	0	0	3
Chignik		0.4	0.0	1.7	0.32	0.5	0.6	20	0	94	29	33
Kodiak		92.7	90.2	94.9	0.00	92.7	1.4	5,043	4,902	5,161	5,039	79
Cook Inlet		5.2	3.4	7.5	0.00	5.3	1.2	284	186	408	288	67
Prince William Sound		0.2	0.0	0.8	0.10	0.2	0.3	9	0	43	13	15
South of Cape Suckling		1.1	0.4	2.4	0.00	1.2	0.6	62	23	130	67	33
										Total	5,437	
Chignik	Black Lake	0.0	0.0	0.0	0.92	0.0	0.0	0	0	0	0	3
	Chignik Lake	0.4	0.0	1.7	0.35	0.5	0.6	19	0	94	29	33
Kodiak	Upper Station / Akalura	63.4	58.8	67.9	0.00	63.4	2.8	3,449	3,197	3,694	3,448	151
	Ayakulik / Frazer	25.1	21.1	29.4	0.00	25.2	2.5	1,366	1,147	1,600	1,369	138
	Karluk	0.0	0.0	0.0	0.89	0.0	0.1	0	0	1	1	8
	Uganik	0.0	0.0	0.9	0.76	0.1	0.3	0	0	47	7	18
	Northwest Kodiak	0.0	0.0	0.0	0.92	0.0	0.0	0	0	0	0	2
	Afognak	0.0	0.0	0.0	0.92	0.0	0.0	0	0	0	0	2
	Eastside Kodiak	3.7	2.3	5.6	0.00	3.8	1.0	203	127	303	208	54
	Saltery	0.0	0.0	0.8	0.73	0.1	0.3	0	0	43	6	16
Cook Inlet	Other Cook Inlet	0.0	0.0	1.0	0.26	0.2	0.4	0	0	52	10	19
	Susitna	0.0	0.0	0.6	0.33	0.1	0.2	0	0	31	6	12
	Kenai	4.9	3.2	7.1	0.00	5.0	1.2	268	174	387	272	65
	Kasilof	0.0	0.0	0.0	0.87	0.0	0.1	0	0	1	0	3

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A51.–Alitak (statistical areas 257-10, 20, 50, 60, 70), 2014, all strata. Annual regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.1	0.0	2.3	0.26	0.6	0.8	139	0	2,746	694	976
Chignik		1.1	0.0	2.9	0.02	1.2	0.9	1,313	12	3,486	1,432	1,123
Kodiak		66.2	62.0	70.2	0.00	66.2	2.5	80,356	75,339	85,254	80,334	3,010
Cook Inlet		31.1	27.1	35.2	0.00	31.1	2.5	37,751	32,851	42,805	37,776	3,023
Prince William Sound		0.6	0.1	1.8	0.00	0.8	0.6	782	128	2,222	926	674
South of Cape Suckling		0.1	0.0	0.9	0.00	0.2	0.3	105	30	1,071	272	417
										Total	121,435	
Chignik	Black Lake	0.0	0.0	0.3	0.49	0.1	0.2	0	0	390	65	220
	Chignik Lake	1.0	0.0	2.8	0.04	1.1	0.9	1,246	1	3,433	1,368	1,124
Kodiak	Upper Station / Akalura	7.3	5.5	9.5	0.00	7.4	1.2	8,829	6,712	11,579	8,946	1,486
	Ayakulik / Frazer	55.1	50.9	59.3	0.00	55.1	2.5	66,942	61,797	71,950	66,919	3,091
	Karluk	0.0	0.0	0.4	0.47	0.1	0.2	0	0	543	88	290
	Uganik	0.0	0.0	1.0	0.30	0.2	0.4	15	0	1,251	239	458
	Northwest Kodiak	0.0	0.0	0.2	0.51	0.0	0.1	0	0	224	37	129
	Afognak	0.0	0.0	0.2	0.52	0.0	0.1	0	0	209	36	129
	Eastside Kodiak	2.3	1.2	4.4	0.00	2.5	1.0	2,787	1,470	5,342	3,008	1,222
	Saltery	0.8	0.0	2.1	0.04	0.9	0.7	942	1	2,541	1,062	792
Cook Inlet	Other Cook Inlet	3.5	1.9	5.6	0.00	3.6	1.1	4,248	2,278	6,767	4,350	1,371
	Susitna	1.0	0.0	3.2	0.11	1.2	1.1	1,200	0	3,910	1,403	1,354
	Kenai	15.6	12.4	19.1	0.00	15.6	2.0	18,912	15,085	23,158	18,989	2,458
	Kasilof	10.7	8.1	13.6	0.00	10.7	1.7	12,933	9,833	16,570	13,034	2,054

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A52.–Alitak (statistical areas 257-10, 20, 50, 60, 70), temporal stratum 1 (“Early”; June 1–July 3; Harvest = 28,723; *n* = 368), 2015. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.2	0.0	2.3	0.27	0.6	0.9	50	0	669	168	247
Chignik		1.1	0.3	2.6	0.00	1.3	0.7	327	89	740	359	203
Kodiak		63.9	59.5	68.3	0.00	63.9	2.7	18,363	17,083	19,612	18,358	769
Cook Inlet		26.8	22.1	31.9	0.00	26.9	3.0	7,710	6,344	9,158	7,723	856
Prince William Sound		7.2	4.1	10.8	0.00	7.3	2.1	2,068	1,163	3,095	2,092	590
South of Cape Suckling		0.0	0.0	0.4	0.53	0.1	0.3	0	0	113	22	100
										Total	28,723	
Chignik	Black Lake	1.0	0.1	2.4	0.02	1.1	0.7	290	37	684	317	197
	Chignik Lake	0.0	0.0	0.9	0.47	0.1	0.4	0	0	265	42	108
Kodiak	Upper Station / Akalura	6.3	4.2	8.9	0.00	6.4	1.4	1,801	1,199	2,544	1,828	411
	Ayakulik / Frazer	53.4	48.8	57.9	0.00	53.4	2.8	15,333	14,007	16,642	15,330	798
	Karluk	0.4	0.0	2.5	0.20	0.7	0.9	110	0	706	202	249
	Uganik	0.0	0.0	1.1	0.40	0.2	0.4	0	0	330	62	123
	Northwest Kodiak	0.0	0.0	0.4	0.51	0.1	0.2	0	0	120	19	54
	Afognak	0.8	0.2	2.0	0.00	0.9	0.5	242	66	568	270	157
	Eastside Kodiak	1.5	0.5	4.0	0.00	1.8	1.1	429	149	1,155	512	319
	Saltery	0.3	0.0	1.5	0.17	0.5	0.5	93	0	434	136	151
Cook Inlet	Other Cook Inlet	6.9	3.5	10.7	0.00	7.0	2.2	1,970	1,009	3,087	1,999	635
	Susitna	0.0	0.0	0.0	0.81	0.0	0.1	0	0	14	5	32
	Kenai	3.0	1.4	5.2	0.00	3.1	1.2	858	405	1,497	892	336
	Kasilof	16.7	13.4	20.4	0.00	16.8	2.1	4,809	3,852	5,867	4,828	614

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A53.–Alitak (statistical areas 257-10, 20, 50, 60, 70), temporal stratum 2 (“Middle”; July 4–August 1; Harvest = 165,894; *n* = 373), 2015. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.1	0.88	0.0	0.2	0	0	177	56	312
Chignik		0.0	0.0	0.3	0.79	0.0	0.2	0	0	436	71	312
Kodiak		21.7	18.1	25.6	0.00	21.7	2.3	35,957	30,019	42,412	36,055	3,776
Cook Inlet		77.0	72.9	80.7	0.00	76.9	2.4	127,717	121,009	133,837	127,611	3,900
Prince William Sound		1.1	0.4	2.6	0.00	1.3	0.7	1,857	690	4,231	2,092	1,214
South of Cape Suckling		0.0	0.0	0.0	0.92	0.0	0.1	0	0	3	9	92
										Total	165,894	
Chignik	Black Lake	0.0	0.0	0.0	0.88	0.0	0.1	0	0	77	32	191
	Chignik Lake	0.0	0.0	0.0	0.89	0.0	0.1	0	0	52	39	248
Kodiak	Upper Station / Akalura	0.0	0.0	0.5	0.50	0.1	0.2	0	0	878	140	368
	Ayakulik / Frazer	17.2	14.1	20.6	0.00	17.3	2.0	28,542	23,392	34,215	28,632	3,292
	Karluk	0.0	0.0	0.0	0.89	0.0	0.2	0	0	49	43	282
	Uganik	0.0	0.0	0.1	0.88	0.0	0.2	0	0	171	56	313
	Northwest Kodiak	0.0	0.0	0.0	0.92	0.0	0.0	0	0	2	5	52
	Afognak	0.0	0.0	0.0	0.92	0.0	0.0	0	0	2	6	63
	Eastside Kodiak	3.4	2.1	5.3	0.00	3.5	1.0	5,691	3,462	8,814	5,860	1,662
	Saltery	0.5	0.0	2.6	0.36	0.8	0.9	810	0	4,355	1,313	1,542
Cook Inlet	Other Cook Inlet	4.7	2.5	8.2	0.00	4.9	1.8	7,796	4,103	13,603	8,192	2,933
	Susitna	8.9	5.8	12.7	0.00	9.1	2.1	14,845	9,647	21,095	15,041	3,493
	Kenai	60.8	55.8	65.6	0.00	60.7	3.0	100,790	92,500	108,853	100,744	4,957
	Kasilof	2.1	0.9	3.9	0.00	2.2	0.9	3,438	1,518	6,423	3,634	1,519

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A54.–Alitak (statistical areas 257-10, 20, 50, 60, 70), temporal stratum 3 (“Late”; August 2–29; Harvest = 31,294; *n* = 373), 2015. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.0	0.90	0.0	0.1	0	0	2	4	28
Chignik		0.0	0.0	0.0	0.83	0.0	0.1	0	0	12	5	30
Kodiak		96.1	93.5	97.9	0.00	96.0	1.3	30,079	29,272	30,635	30,032	418
Cook Inlet		2.8	1.3	4.7	0.00	2.9	1.0	864	419	1,475	895	324
Prince William Sound		0.5	0.1	2.3	0.01	0.7	0.7	160	21	704	229	225
South of Cape Suckling		0.0	0.0	2.6	0.71	0.4	0.9	0	0	803	130	283
										Total	31,294	
Chignik	Black Lake	0.0	0.0	0.0	0.91	0.0	0.1	0	0	1	3	25
	Chignik Lake	0.0	0.0	0.0	0.92	0.0	0.1	0	0	1	2	16
Kodiak	Upper Station / Akalura	34.3	29.8	38.9	0.00	34.3	2.8	10,719	9,326	12,161	10,731	861
	Ayakulik / Frazer	37.2	32.6	41.9	0.00	37.2	2.8	11,648	10,216	13,115	11,655	883
	Karluk	0.0	0.0	2.3	0.80	0.3	0.9	0	0	721	86	280
	Uganik	0.0	0.0	1.5	0.67	0.3	0.6	0	0	480	83	175
	Northwest Kodiak	0.0	0.0	1.3	0.66	0.2	0.5	0	0	421	77	153
	Afognak	0.0	0.0	0.0	0.92	0.0	0.0	0	0	0	1	12
	Eastside Kodiak	16.4	13.0	20.3	0.00	16.5	2.2	5,127	4,063	6,343	5,154	693
	Saltery	7.1	4.7	10.0	0.00	7.2	1.6	2,214	1,464	3,127	2,245	507
Cook Inlet	Other Cook Inlet	*	*	*	*	*	*	*	*	*	*	*
	Susitna	*	*	*	*	*	*	*	*	*	*	*
	Kenai	*	*	*	*	*	*	*	*	*	*	*
	Kasilof	*	*	*	*	*	*	*	*	*	*	*

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A55.–Alitak (statistical areas 257-10, 20, 50, 60, 70), 2015, all strata. Annual regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.4	0.25	0.1	0.2	82	0	877	228	398
Chignik		0.2	0.0	0.4	0.00	0.2	0.2	356	97	980	435	373
Kodiak		37.3	34.6	40.3	0.00	37.4	1.7	84,343	78,216	90,965	84,446	3,882
Cook Inlet		60.3	57.3	63.1	0.00	60.3	1.8	136,314	129,466	142,645	136,229	4,010
Prince William Sound		1.9	1.2	3.0	0.00	2.0	0.6	4,221	2,627	6,771	4,412	1,363
South of Cape Suckling		0.0	0.0	0.4	0.40	0.1	0.1	1	0	865	161	311
										Total	225,911	
Chignik	Black Lake	0.1	0.0	0.3	0.02	0.2	0.1	305	43	776	352	275
	Chignik Lake	0.0	0.0	0.2	0.44	0.0	0.1	0	0	408	83	270
Kodiak	Upper Station / Akalura	5.6	4.9	6.4	0.00	5.6	0.5	12,665	11,078	14,425	12,699	1,024
	Ayakulik / Frazer	24.6	22.1	27.2	0.00	24.6	1.6	55,537	49,990	61,508	55,618	3,504
	Karluk	0.1	0.0	0.5	0.16	0.1	0.2	173	0	1,223	331	472
	Uganik	0.0	0.0	0.3	0.27	0.1	0.2	49	0	766	200	379
	Northwest Kodiak	0.0	0.0	0.2	0.36	0.0	0.1	5	0	462	101	170
	Afognak	0.1	0.0	0.3	0.00	0.1	0.1	247	67	586	277	170
	Eastside Kodiak	5.0	3.9	6.5	0.00	5.1	0.8	11,379	8,803	14,715	11,525	1,828
	Saltery	1.5	0.8	3.0	0.00	1.6	0.7	3,278	1,778	6,837	3,694	1,626
Cook Inlet	Other Cook Inlet	4.4	2.6	7.0	0.00	4.5	1.3	9,878	5,982	15,767	10,253	3,016
	Susitna	6.6	4.3	9.4	0.00	6.7	1.5	14,928	9,733	21,185	15,124	3,495
	Kenai	45.3	41.6	48.9	0.00	45.3	2.2	102,338	94,031	110,431	102,288	4,979
	Kasilof	3.7	2.7	5.1	0.00	3.8	0.7	8,396	6,186	11,542	8,564	1,645

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A56.–Alitak (statistical areas 257-10, 20, 50, 60, 70), temporal stratum 1 (“Early”; June 1–27; Harvest = 11,118; *n* = 375), 2016. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.4	0.83	0.1	0.2	0	0	44	6	23
Chignik		2.1	1.0	3.8	0.00	2.2	0.9	232	107	422	244	97
Kodiak		74.3	70.2	78.1	0.00	74.2	2.4	8,260	7,804	8,688	8,255	270
Cook Inlet		23.3	19.4	27.3	0.00	23.3	2.4	2,586	2,159	3,038	2,591	267
Prince William Sound		0.0	0.0	1.2	0.45	0.2	0.5	0	0	135	21	53
South of Cape Suckling		0.0	0.0	0.0	0.92	0.0	0.1	0	0	0	1	7
										Total	11,118	
Chignik	Black Lake	2.1	1.0	3.8	0.00	2.2	0.9	231	106	420	243	97
	Chignik Lake	0.0	0.0	0.0	0.90	0.0	0.1	0	0	1	2	12
Kodiak	Upper Station / Akalura	13.9	10.9	17.3	0.00	14.0	1.9	1,548	1,217	1,920	1,555	214
	Ayakulik / Frazer	54.2	49.5	58.7	0.00	54.1	2.8	6,022	5,500	6,530	6,018	313
	Karluk	0.0	0.0	3.4	0.63	0.7	1.2	0	0	378	73	135
	Uganik	2.2	0.8	4.1	0.01	2.3	1.0	244	89	457	254	113
	Northwest Kodiak	0.0	0.0	0.0	0.92	0.0	0.0	0	0	0	0	4
	Afognak	0.5	0.1	1.5	0.01	0.6	0.4	56	8	163	67	49
	Eastside Kodiak	2.4	1.3	4.0	0.00	2.5	0.9	265	142	449	276	95
	Saltery	0.0	0.0	0.7	0.79	0.1	0.3	0	0	80	11	35
Cook Inlet	Other Cook Inlet	10.3	7.0	13.8	0.00	10.4	2.1	1,151	780	1,537	1,154	230
	Susitna	0.0	0.0	0.8	0.30	0.2	0.3	2	0	85	18	33
	Kenai	6.9	4.6	9.8	0.00	7.0	1.6	773	512	1,086	782	175
	Kasilof	5.6	3.6	8.1	0.00	5.7	1.4	627	405	903	637	152

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A57.–Alitak (statistical areas 257-10, 20, 50, 60, 70), temporal stratum 2 ("Middle"; June 28–July 25; Harvest = 61,930; *n* = 372), 2016. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.0	0.92	0.0	0.1	0	0	1	3	32
Chignik		2.8	1.3	5.1	0.00	2.9	1.2	1,713	779	3,159	1,809	735
Kodiak		29.9	26.0	34.1	0.00	30.0	2.5	18,535	16,071	21,098	18,552	1,524
Cook Inlet		66.4	62.0	70.7	0.00	66.4	2.7	41,151	38,370	43,778	41,122	1,642
Prince William Sound		0.5	0.1	1.4	0.00	0.6	0.5	294	56	888	364	303
South of Cape Suckling		0.0	0.0	0.7	0.85	0.1	0.6	0	0	420	79	392
										Total	61,930	
Chignik	Black Lake	1.9	0.0	3.9	0.10	1.9	1.2	1,172	0	2,425	1,168	746
	Chignik Lake	0.0	0.0	4.2	0.56	1.0	1.5	0	0	2,620	641	957
Kodiak	Upper Station / Akalura	2.8	1.5	4.8	0.00	2.9	1.0	1,761	911	2,961	1,825	629
	Ayakulik / Frazer	25.5	21.7	29.5	0.00	25.5	2.4	15,768	13,450	18,244	15,799	1,458
	Karluk	0.0	0.0	0.0	0.90	0.0	0.1	0	0	7	10	79
	Uganik	0.0	0.0	0.1	0.80	0.0	0.2	0	0	72	18	98
	Northwest Kodiak	0.0	0.0	0.0	0.92	0.0	0.0	0	0	1	2	19
	Afognak	0.0	0.0	0.0	0.92	0.0	0.0	0	0	1	2	18
	Eastside Kodiak	1.3	0.5	2.5	0.00	1.4	0.6	789	331	1,545	845	378
	Saltery	0.0	0.0	0.6	0.84	0.1	0.3	0	0	390	51	209
Cook Inlet	Other Cook Inlet	3.0	1.0	5.8	0.00	3.1	1.5	1,839	599	3,564	1,928	908
	Susitna	5.5	2.7	9.0	0.00	5.6	1.9	3,406	1,662	5,556	3,480	1,185
	Kenai	55.0	49.9	60.0	0.00	55.0	3.1	34,067	30,881	37,182	34,056	1,913
	Kasilof	2.6	1.0	4.8	0.01	2.7	1.2	1,588	598	2,962	1,658	727

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A58.–Alitak (statistical areas 257-10, 20, 50, 60, 70), temporal stratum 3 ("Late"; July 26–August 29; Harvest = 21,243; *n* = 368), 2016. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.7	0.79	0.1	0.3	0	0	148	20	63
Chignik		0.0	0.0	0.9	0.68	0.1	0.4	0	0	190	26	78
Kodiak		92.3	89.5	94.6	0.00	92.2	1.6	19,612	19,014	20,097	19,591	332
Cook Inlet		7.1	4.9	9.8	0.00	7.2	1.5	1,517	1,046	2,092	1,537	319
Prince William Sound		0.2	0.0	1.0	0.07	0.3	0.3	42	0	204	64	70
South of Cape Suckling		0.0	0.0	0.1	0.87	0.0	0.1	0	0	29	6	28
										Total	21,243	
Chignik	Black Lake	0.0	0.0	0.0	0.85	0.0	0.1	0	0	6	3	18
	Chignik Lake	0.0	0.0	0.9	0.80	0.1	0.4	0	0	181	23	76
Kodiak	Upper Station / Akalura	65.5	60.8	70.1	0.00	65.5	2.8	13,918	12,915	14,882	13,910	599
	Ayakulik / Frazer	13.1	9.7	16.8	0.00	13.1	2.2	2,777	2,067	3,570	2,792	459
	Karluk	4.4	2.1	7.5	0.01	4.5	1.7	936	446	1,589	965	354
	Uganik	0.0	0.0	0.0	0.91	0.0	0.1	0	0	1	2	14
	Northwest Kodiak	0.0	0.0	0.0	0.91	0.0	0.1	0	0	1	1	12
	Afognak	0.0	0.0	0.0	0.91	0.0	0.1	0	0	1	1	11
	Eastside Kodiak	0.9	0.3	2.4	0.00	1.0	0.7	185	56	509	221	153
	Saltery	7.9	5.5	10.7	0.00	8.0	1.6	1,681	1,174	2,282	1,698	337
Cook Inlet	Other Cook Inlet	0.5	0.1	1.8	0.00	0.7	0.6	114	13	375	144	118
	Susitna	0.3	0.0	1.7	0.06	0.5	0.6	62	0	354	104	122
	Kenai	5.5	3.5	8.1	0.00	5.6	1.4	1,178	753	1,715	1,198	294
	Kasilof	0.3	0.0	1.5	0.26	0.4	0.5	54	0	310	91	109

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A59.–Alitak (statistical areas 257-10, 20, 50, 60, 70), 2016, all strata. Annual regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.2	0.62	0.0	0.1	0	0	176	29	74
Chignik		2.1	1.1	3.7	0.00	2.2	0.8	1,986	1,026	3,448	2,079	745
Kodiak		49.2	46.5	52.0	0.00	49.2	1.7	46,380	43,821	49,038	46,398	1,583
Cook Inlet		48.0	45.0	50.9	0.00	48.0	1.8	45,279	42,421	47,990	45,250	1,694
Prince William Sound		0.4	0.1	1.1	0.00	0.5	0.3	383	108	991	450	315
South of Cape Suckling		0.0	0.0	0.5	0.70	0.1	0.4	0	0	430	86	392
										Total	94,291	
Chignik	Black Lake	1.5	0.2	2.8	0.00	1.5	0.8	1,414	215	2,678	1,413	752
	Chignik Lake	0.0	0.0	2.8	0.42	0.7	1.0	16	0	2,650	666	961
Kodiak	Upper Station / Akalura	18.3	16.8	19.9	0.00	18.3	0.9	17,264	15,868	18,804	17,291	894
	Ayakulik / Frazer	26.1	23.4	28.9	0.00	26.1	1.7	24,579	22,101	27,209	24,609	1,557
	Karluk	1.1	0.5	1.8	0.00	1.1	0.4	1,014	488	1,730	1,048	387
	Uganik	0.3	0.1	0.5	0.00	0.3	0.2	253	93	506	274	150
	Northwest Kodiak	0.0	0.0	0.0	0.80	0.0	0.0	0	0	14	4	23
	Afognak	0.1	0.0	0.2	0.01	0.1	0.1	58	9	171	70	54
	Eastside Kodiak	1.4	0.8	2.2	0.00	1.4	0.4	1,289	755	2,108	1,342	419
	Saltery	1.8	1.3	2.6	0.00	1.9	0.4	1,722	1,194	2,448	1,760	398
Cook Inlet	Other Cook Inlet	3.3	1.9	5.2	0.00	3.4	1.0	3,143	1,824	4,915	3,225	946
	Susitna	3.7	1.9	6.0	0.00	3.8	1.3	3,529	1,775	5,687	3,603	1,190
	Kenai	38.2	34.8	41.6	0.00	38.2	2.1	36,045	32,820	39,211	36,036	1,945
	Kasilof	2.5	1.4	4.0	0.00	2.5	0.8	2,321	1,275	3,725	2,386	751

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A60.–Igvak (statistical areas 262-75, 80, 90, 95), temporal stratum 2 ("Middle"; July 4–August 1; Harvest = 6,595; *n* = 370), 2015. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		1.4	0.4	3.9	0.00	1.7	1.1	93	27	256	110	76
Chignik		31.2	26.8	36.0	0.00	31.3	2.8	2,059	1,765	2,371	2,062	185
Kodiak		6.9	4.2	10.2	0.00	7.0	1.8	454	276	673	461	121
Cook Inlet		54.0	48.7	59.2	0.00	54.0	3.2	3,560	3,211	3,904	3,559	211
Prince William Sound		5.8	2.7	9.4	0.00	5.9	2.1	384	178	621	390	136
South of Cape Suckling		0.0	0.0	1.4	0.50	0.2	0.6	0	0	93	13	40
										Total	6,595	
Chignik	Black Lake	11.0	7.2	15.5	0.00	11.1	2.5	727	473	1,020	734	167
	Chignik Lake	20.1	15.2	25.3	0.00	20.1	3.1	1,324	1,004	1,668	1,328	202
Kodiak	Upper Station / Akalura	0.0	0.0	0.3	0.52	0.1	0.2	0	0	21	3	10
	Ayakulik / Frazer	0.0	0.0	0.6	0.28	0.1	0.3	0	0	41	7	18
	Karluk	2.3	0.7	4.5	0.00	2.4	1.2	152	46	295	159	76
	Uganik	0.8	0.0	2.9	0.13	1.0	1.0	54	0	188	66	64
	Northwest Kodiak	1.1	0.2	2.7	0.02	1.2	0.8	74	11	179	82	52
	Afognak	0.0	0.0	0.8	0.50	0.1	0.3	0	0	51	8	23
	Eastside Kodiak	0.0	0.0	0.8	0.50	0.1	0.4	0	0	52	8	24
	Saltery	1.8	0.6	3.7	0.00	1.9	1.0	119	39	245	127	64
Cook Inlet	Other Cook Inlet	19.2	15.0	23.7	0.00	19.3	2.6	1,268	992	1,565	1,271	174
	Susitna	3.3	0.9	6.6	0.01	3.5	1.7	220	57	432	229	115
	Kenai	23.7	19.2	28.5	0.00	23.7	2.8	1,560	1,264	1,877	1,564	186
	Kasilof	7.4	5.0	10.4	0.00	7.5	1.6	489	330	684	495	108

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A61.–Igvak (statistical areas 262-75, 80, 90, 95), 2015, all strata. Annual regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		1.4	0.4	3.9	0.00	1.7	1.1	93	27	256	110	76
Chignik		31.2	26.8	36.0	0.00	31.3	2.8	2,059	1,765	2,371	2,062	185
Kodiak		6.9	4.2	10.2	0.00	7.0	1.8	454	276	673	461	121
Cook Inlet		54.0	48.7	59.2	0.00	54.0	3.2	3,560	3,211	3,904	3,559	211
Prince William Sound		5.8	2.7	9.4	0.00	5.9	2.1	384	178	621	390	136
South of Cape Suckling		0.0	0.0	1.4	0.50	0.2	0.6	0	0	93	13	40
										Total	6,595	
Chignik	Black Lake	11.0	7.2	15.5	0.00	11.1	2.5	727	473	1,020	734	167
	Chignik Lake	20.1	15.2	25.3	0.00	20.1	3.1	1,324	1,004	1,668	1,328	202
Kodiak	Upper Station / Akalura	0.0	0.0	0.3	0.52	0.1	0.2	0	0	21	3	10
	Ayakulik / Frazer	0.0	0.0	0.6	0.28	0.1	0.3	0	0	41	7	18
	Karluk	2.3	0.7	4.5	0.00	2.4	1.2	152	46	295	159	76
	Uganik	0.8	0.0	2.9	0.13	1.0	1.0	54	0	188	66	64
	Northwest Kodiak	1.1	0.2	2.7	0.02	1.2	0.8	74	11	179	82	52
	Afognak	0.0	0.0	0.8	0.50	0.1	0.3	0	0	51	8	23
	Eastside Kodiak	0.0	0.0	0.8	0.50	0.1	0.4	0	0	52	8	24
	Saltery	1.8	0.6	3.7	0.00	1.9	1.0	119	39	245	127	64
Cook Inlet	Other Cook Inlet	19.2	15.0	23.7	0.00	19.3	2.6	1,268	992	1,565	1,271	174
	Susitna	3.3	0.9	6.6	0.01	3.5	1.7	220	57	432	229	115
	Kenai	23.7	19.2	28.5	0.00	23.7	2.8	1,560	1,264	1,877	1,564	186
	Kasilof	7.4	5.0	10.4	0.00	7.5	1.6	489	330	684	495	108

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A62.–Igvak (statistical areas 262-75, 80, 90, 95), temporal stratum 1 ("Early"; June 1–27; Harvest = 154,318; *n* = 376), 2016. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		7.7	5.3	10.6	0.00	7.8	1.6	11,843	8,114	16,357	11,987	2,521
Chignik		74.1	69.8	78.1	0.00	74.1	2.5	114,412	107,790	120,550	114,324	3,887
Kodiak		9.5	6.7	12.9	0.00	9.6	1.9	14,660	10,354	19,905	14,834	2,914
Cook Inlet		6.0	3.9	8.5	0.00	6.1	1.4	9,249	6,090	13,080	9,366	2,126
Prince William Sound		2.1	0.4	4.3	0.00	2.2	1.2	3,307	687	6,690	3,451	1,806
South of Cape Suckling		0.0	0.0	1.3	0.39	0.2	0.5	4	0	1,932	356	831
										Total	154,318	
Chignik	Black Lake	70.9	64.8	76.4	0.00	70.8	3.5	109,455	100,003	117,939	109,277	5,472
	Chignik Lake	3.1	0.0	8.0	0.10	3.3	2.6	4,762	0	12,303	5,047	4,084
Kodiak	Upper Station / Akalura	0.0	0.0	1.4	0.36	0.3	0.5	13	0	2,199	465	797
	Ayakulik / Frazer	2.7	1.3	4.6	0.00	2.8	1.0	4,166	1,985	7,169	4,316	1,590
	Karluk	4.7	2.7	7.2	0.00	4.8	1.4	7,224	4,135	11,082	7,366	2,122
	Uganik	1.0	0.0	3.2	0.08	1.2	1.1	1,565	0	5,011	1,879	1,627
	Northwest Kodiak	0.0	0.0	1.3	0.38	0.3	0.5	5	0	2,050	407	745
	Afognak	0.0	0.0	0.2	0.56	0.0	0.1	0	0	306	51	185
	Eastside Kodiak	0.0	0.0	1.4	0.48	0.2	0.6	0	0	2,092	302	860
	Saltery	0.0	0.0	0.2	0.56	0.0	0.1	0	0	284	48	180
Cook Inlet	Other Cook Inlet	1.3	0.3	2.9	0.00	1.4	0.8	2,079	410	4,539	2,234	1,259
	Susitna	0.0	0.0	0.0	0.83	0.0	0.1	0	0	35	13	84
	Kenai	0.2	0.0	0.9	0.01	0.3	0.3	301	18	1,368	449	483
	Kasilof	4.2	2.6	6.3	0.00	4.3	1.1	6,542	4,087	9,690	6,671	1,718

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A63.–Igvak (statistical areas 262-75, 80, 90, 95), temporal stratum 2 ("Middle"; June 28–July 25; Harvest = 177,315; *n* = 374), 2016. Regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.0	0.0	0.6	0.47	0.1	0.3	0	0	1,137	175	525
Chignik		5.6	3.6	8.2	0.00	5.7	1.4	10,006	6,405	14,556	10,185	2,489
Kodiak		0.8	0.2	2.3	0.00	1.0	0.7	1,498	341	4,090	1,763	1,221
Cook Inlet		93.2	90.3	95.5	0.00	93.1	1.6	165,214	160,117	169,270	165,015	2,796
Prince William Sound		0.0	0.0	0.5	0.58	0.1	0.2	0	0	937	166	380
South of Cape Suckling		0.0	0.0	0.0	0.91	0.0	0.1	0	0	3	12	135
										Total	177,315	
Chignik	Black Lake	0.2	0.0	1.3	0.00	0.4	0.4	440	12	2,326	709	792
	Chignik Lake	5.2	3.2	7.8	0.00	5.3	1.4	9,300	5,706	13,848	9,475	2,486
Kodiak	Upper Station / Akalura	0.0	0.0	0.0	0.91	0.0	0.1	0	0	4	10	90
	Ayakulik / Frazer	0.6	0.0	1.6	0.10	0.6	0.5	1,008	0	2,860	1,151	911
	Karluk	0.0	0.0	1.0	0.56	0.2	0.4	0	0	1,784	267	692
	Uganik	0.0	0.0	0.1	0.87	0.0	0.2	0	0	118	58	353
	Northwest Kodiak	0.0	0.0	0.0	0.92	0.0	0.0	0	0	3	8	75
	Afognak	0.0	0.0	0.0	0.91	0.0	0.0	0	0	4	10	87
	Eastside Kodiak	0.0	0.0	0.7	0.80	0.1	0.3	0	0	1,168	148	485
	Saltery	0.0	0.0	0.3	0.87	0.1	0.3	0	0	458	111	559
Cook Inlet	Other Cook Inlet	11.7	8.0	15.8	0.00	11.8	2.4	20,696	14,139	28,004	20,849	4,222
	Susitna	5.2	2.0	9.0	0.00	5.3	2.2	9,174	3,526	15,904	9,328	3,831
	Kenai	74.2	69.2	78.9	0.00	74.2	2.9	131,637	122,786	139,924	131,533	5,213
	Kasilof	1.7	0.6	3.6	0.01	1.9	0.9	3,087	1,007	6,360	3,304	1,659

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A64.–Igvak (statistical areas 262-75, 80, 90, 95), 2016, all strata. Annual regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		3.6	2.5	5.0	0.00	3.7	0.8	12,001	8,215	16,617	12,162	2,576
Chignik		37.5	35.3	39.8	0.00	37.5	1.4	124,510	116,903	132,074	124,509	4,614
Kodiak		4.9	3.5	6.7	0.00	5.0	1.0	16,406	11,745	22,104	16,597	3,160
Cook Inlet		52.6	50.8	54.3	0.00	52.6	1.1	174,456	168,492	180,000	174,381	3,505
Prince William Sound		1.0	0.2	2.1	0.00	1.1	0.6	3,469	823	6,883	3,617	1,834
South of Cape Suckling		0.0	0.0	0.6	0.38	0.1	0.3	7	0	1,972	368	840
										Total	331,633	
Chignik	Black Lake	33.2	30.3	35.8	0.00	33.2	1.7	110,155	100,628	118,755	109,986	5,526
	Chignik Lake	4.3	2.2	6.9	0.00	4.4	1.4	14,168	7,441	22,872	14,523	4,764
Kodiak	Upper Station / Akalura	0.0	0.0	0.7	0.35	0.1	0.2	22	0	2,211	475	801
	Ayakulik / Frazer	1.6	0.8	2.6	0.00	1.6	0.6	5,316	2,744	8,705	5,468	1,826
	Karluk	2.3	1.3	3.5	0.00	2.3	0.7	7,468	4,266	11,543	7,634	2,229
	Uganik	0.5	0.0	1.5	0.07	0.6	0.5	1,612	0	5,130	1,937	1,667
	Northwest Kodiak	0.0	0.0	0.6	0.37	0.1	0.2	10	0	2,062	415	749
	Afognak	0.0	0.0	0.1	0.55	0.0	0.1	0	0	367	61	205
	Eastside Kodiak	0.0	0.0	0.8	0.41	0.1	0.3	2	0	2,569	450	977
	Saltery	0.0	0.0	0.3	0.52	0.0	0.2	0	0	899	159	586
Cook Inlet	Other Cook Inlet	6.9	4.8	9.2	0.00	7.0	1.3	22,950	16,027	30,592	23,083	4,423
	Susitna	2.8	1.1	4.8	0.00	2.8	1.2	9,191	3,536	15,917	9,341	3,832
	Kenai	39.8	37.1	42.3	0.00	39.8	1.6	132,088	123,200	140,429	131,982	5,233
	Kasilof	3.0	1.9	4.3	0.00	3.0	0.7	9,811	6,351	14,169	9,975	2,386

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Note: Results for Cook Inlet subregional reporting groups are only reported if the overall contribution to the Cook Inlet group in the stratum or any contributing strata is greater than 5%.

Appendix A65.–Kodiak Management Area, 2014, all strata. Annual regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Note that these annual summaries only include strata sampled for this study, which account for 46.7% of the KMA commercial sockeye salmon harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		1.3	1.0	1.8	0.00	1.4	0.2	20,559	15,247	26,909	20,752	3,564
Chignik		1.2	0.9	1.6	0.00	1.2	0.2	18,737	14,350	23,831	18,864	2,889
Kodiak		87.9	87.1	88.8	0.00	87.9	0.5	1,339,346	1,326,335	1,351,950	1,339,256	7,782
Cook Inlet		7.5	6.8	8.2	0.00	7.5	0.4	113,972	103,374	125,010	114,076	6,594
Prince William Sound		1.6	1.2	2.0	0.00	1.6	0.2	23,716	18,425	30,133	23,940	3,574
South of Cape Suckling		0.4	0.2	0.8	0.00	0.4	0.2	5,656	2,451	11,589	6,154	2,825
										Total	1,523,042	
Chignik	Black Lake	0.5	0.3	0.7	0.00	0.5	0.1	7,016	4,045	10,628	7,133	2,010
	Chignik Lake	0.8	0.5	1.1	0.00	0.8	0.2	11,579	7,456	16,499	11,730	2,762
Kodiak	Upper Station / Akalura	4.3	3.8	4.8	0.00	4.3	0.3	65,196	57,158	73,786	65,302	5,074
	Ayakulik / Frazer	26.0	25.0	27.0	0.00	26.0	0.6	396,083	381,001	411,043	396,063	9,149
	Karluk	32.4	31.5	33.4	0.00	32.4	0.6	493,692	479,039	508,589	493,705	8,987
	Uganik	3.1	2.7	3.7	0.00	3.1	0.3	47,797	40,614	55,692	47,926	4,584
	Northwest Kodiak	0.8	0.5	1.1	0.00	0.8	0.2	11,895	8,362	16,207	12,038	2,402
	Afognak	0.5	0.3	0.7	0.00	0.5	0.1	7,057	4,709	9,991	7,163	1,614
	Eastside Kodiak	0.7	0.5	1.1	0.00	0.8	0.2	11,300	7,527	16,541	11,573	2,779
	Saltery	20.1	19.2	20.9	0.00	20.1	0.5	305,476	292,784	318,335	305,486	7,764
Cook Inlet	Other Cook Inlet	0.8	0.5	1.2	0.00	0.8	0.2	11,908	7,714	17,552	12,175	3,028
	Susitna	0.3	0.1	0.6	0.00	0.3	0.2	4,466	1,022	9,263	4,723	2,520
	Kenai	4.0	3.5	4.6	0.00	4.0	0.3	60,973	52,922	69,483	61,049	5,023
	Kasilof	2.4	2.0	2.8	0.00	2.4	0.3	36,019	30,013	42,595	36,130	3,828

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Appendix A66.–Kodiak Management Area, 2015, all strata. Annual regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Note that these annual summaries only include strata sampled for this study, which account for 55.0% of the KMA commercial sockeye salmon harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		0.1	0.0	0.2	0.00	0.1	0.1	873	248	3,791	1,297	1,540
Chignik		1.4	1.0	1.9	0.00	1.4	0.3	24,109	17,722	31,891	24,360	4,316
Kodiak		57.9	56.4	59.4	0.00	57.9	0.9	990,025	963,643	1,016,152	989,956	15,999
Cook Inlet		36.6	35.1	38.2	0.00	36.6	0.9	626,472	600,901	652,412	626,550	15,664
Prince William Sound		3.6	2.9	4.4	0.00	3.6	0.5	61,815	49,731	75,147	62,028	7,729
South of Cape Suckling		0.3	0.1	0.8	0.00	0.3	0.2	4,500	1,381	14,190	5,592	3,968
										Total	1,709,784	
Chignik	Black Lake	0.6	0.5	0.9	0.00	0.6	0.1	10,848	7,726	15,216	11,080	2,305
	Chignik Lake	0.8	0.4	1.2	0.00	0.8	0.2	13,014	7,649	19,837	13,280	3,733
Kodiak	Upper Station / Akalura	1.7	1.5	2.1	0.00	1.7	0.2	29,702	25,088	35,358	29,902	3,158
	Ayakulik / Frazer	19.3	18.1	20.5	0.00	19.3	0.7	329,848	309,163	350,795	329,913	12,637
	Karluk	14.7	13.8	15.8	0.00	14.8	0.6	252,170	235,753	269,990	252,436	10,416
	Uganik	2.7	2.2	3.3	0.00	2.7	0.3	46,650	38,410	56,583	46,953	5,547
	Northwest Kodiak	0.6	0.4	0.8	0.00	0.6	0.1	9,569	6,750	14,077	9,884	2,270
	Afognak	0.4	0.3	0.7	0.00	0.5	0.1	7,648	5,363	11,332	7,916	1,872
	Eastside Kodiak	0.9	0.7	1.2	0.00	0.9	0.2	15,339	11,706	20,598	15,649	2,803
	Saltery	17.4	16.3	18.5	0.00	17.4	0.6	297,204	279,274	315,740	297,302	11,105
Cook Inlet	Other Cook Inlet	4.7	3.9	5.7	0.00	4.7	0.6	80,698	66,064	96,924	81,025	9,407
	Susitna	4.4	3.7	5.3	0.00	4.5	0.5	75,989	63,257	90,183	76,274	8,183
	Kenai	21.4	20.0	22.8	0.00	21.4	0.8	365,335	342,121	389,425	365,497	14,412
	Kasilof	6.1	5.2	7.0	0.00	6.1	0.5	103,539	89,366	118,980	103,754	9,008

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.

Appendix A67.–Kodiak Management Area, 2016, all strata. Annual regional and subregional (within Chignik, Kodiak, and Cook Inlet) estimates of stock composition (%) and stock-specific harvest. Note that these annual summaries only include strata sampled for this study, which account for 62.7% of the KMA commercial sockeye salmon harvest. Estimates include median, 90% credibility interval (CI), the probability that the group estimate is equal to zero (P = 0), mean, and standard deviation (SD).

Reporting Group		Stock Composition						Stock-specific Harvest				
			90% CI						90% CI			
Regional	Subregional	Median	5%	95%	P = 0	Mean	SD	Median	5%	95%	Mean	SD
West of Chignik		1.0	0.7	1.4	0.00	1.0	0.2	13,398	9,280	18,461	13,568	2,807
Chignik		9.8	9.2	10.4	0.00	9.8	0.4	127,576	119,780	135,358	127,570	4,738
Kodiak		57.8	56.8	58.8	0.00	57.8	0.6	749,249	736,233	762,328	749,258	7,947
Cook Inlet		29.6	28.6	30.7	0.00	29.6	0.6	384,089	370,845	397,390	384,099	8,059
Prince William Sound		1.2	0.9	1.7	0.00	1.3	0.3	15,986	11,414	22,056	16,265	3,252
South of Cape Suckling		0.4	0.2	0.8	0.00	0.4	0.2	4,949	2,072	10,438	5,433	2,630
										Total	1,296,193	
Chignik	Black Lake	8.6	7.9	9.3	0.00	8.6	0.4	112,103	102,447	120,839	111,948	5,595
	Chignik Lake	1.2	0.6	1.9	0.00	1.2	0.4	15,267	8,281	24,250	15,622	4,901
Kodiak	Upper Station / Akalura	2.2	1.8	2.5	0.00	2.2	0.2	27,924	23,950	32,339	28,003	2,552
	Ayakulik / Frazer	8.2	7.6	8.8	0.00	8.2	0.4	106,364	99,008	114,025	106,428	4,571
	Karluk	25.4	24.5	26.3	0.00	25.4	0.5	328,862	317,245	340,694	328,890	7,119
	Uganik	7.4	6.8	8.1	0.00	7.4	0.4	96,205	88,398	104,564	96,318	4,921
	Northwest Kodiak	0.3	0.2	0.5	0.00	0.3	0.1	3,938	2,081	6,679	4,104	1,422
	Afognak	0.4	0.3	0.6	0.00	0.4	0.1	5,330	3,432	7,859	5,447	1,360
	Eastside Kodiak	0.2	0.1	0.8	0.00	0.3	0.2	2,988	1,511	10,280	4,058	2,815
	Saltery	13.6	12.7	14.5	0.00	13.6	0.5	175,968	164,726	187,446	176,010	6,910
Cook Inlet	Other Cook Inlet	3.8	3.1	4.6	0.00	3.8	0.4	49,536	40,678	59,206	49,689	5,642
	Susitna	3.0	2.3	3.8	0.00	3.1	0.5	39,440	30,195	49,539	39,600	5,869
	Kenai	21.0	19.9	22.1	0.00	21.0	0.7	272,160	258,311	286,074	272,161	8,434
	Kasilof	1.7	1.3	2.2	0.00	1.7	0.3	22,501	17,467	28,337	22,648	3,316

Note: Stock composition estimates may not sum to 100% and stock-specific harvest estimates may not sum to the total harvest due to rounding error.