

Fishery Management Report No. 15-20

**Upper Cook Inlet Commercial Fisheries Annual
Management Report, 2014**

by

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and

Aaron Dupuis

April 2015

Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



Symbols and Abbreviations

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Weights and measures (metric)		General		Mathematics, statistics	
centimeter	cm	Alaska Administrative		<i>all standard mathematical</i>	
deciliter	dL	Code	AAC	<i>signs, symbols and</i>	
gram	g	all commonly accepted		<i>abbreviations</i>	
hectare	ha	abbreviations	e.g., Mr., Mrs.,	alternate hypothesis	H_A
kilogram	kg	AM, PM, etc.		base of natural logarithm	e
kilometer	km	all commonly accepted		catch per unit effort	CPUE
liter	L	professional titles	e.g., Dr., Ph.D.,	coefficient of variation	CV
meter	m		R.N., etc.	common test statistics	(F, t, χ^2 , etc.)
milliliter	mL	at	@	confidence interval	CI
millimeter	mm	compass directions:		correlation coefficient	
		east	E	(multiple)	R
		north	N	correlation coefficient	
		south	S	(simple)	r
Weights and measures (English)		west	W	covariance	cov
cubic feet per second	ft ³ /s	copyright	©	degree (angular)	°
foot	ft	corporate suffixes:		degrees of freedom	df
gallon	gal	Company	Co.	expected value	E
inch	in	Corporation	Corp.	greater than	>
mile	mi	Incorporated	Inc.	greater than or equal to	≥
nautical mile	nmi	Limited	Ltd.	harvest per unit effort	HPUE
ounce	oz	District of Columbia	D.C.	less than	<
pound	lb	et alii (and others)	et al.	less than or equal to	≤
quart	qt	et cetera (and so forth)	etc.	logarithm (natural)	ln
yard	yd	exempli gratia		logarithm (base 10)	log
		(for example)	e.g.	logarithm (specify base)	log ₂ , etc.
Time and temperature		Federal Information		minute (angular)	'
day	d	Code	FIC	not significant	NS
degrees Celsius	°C	id est (that is)	i.e.	null hypothesis	H_0
degrees Fahrenheit	°F	latitude or longitude	lat or long	percent	%
degrees kelvin	K	monetary symbols		probability	P
hour	h	(U.S.)	\$, ¢	probability of a type I error	
minute	min	months (tables and		(rejection of the null	
second	s	figures): first three		hypothesis when true)	α
		letters	Jan,...,Dec	probability of a type II error	
Physics and chemistry		registered trademark	®	(acceptance of the null	
all atomic symbols		trademark	™	hypothesis when false)	β
alternating current	AC	United States		second (angular)	"
ampere	A	(adjective)	U.S.	standard deviation	SD
calorie	cal	United States of		standard error	SE
direct current	DC	America (noun)	USA	variance	
hertz	Hz	U.S.C.	United States	population	Var
horsepower	hp	Code		sample	var
hydrogen ion activity	pH	U.S. state	use two-letter		
(negative log of)		abbreviations (e.g., AK, WA)			
parts per million	ppm				
parts per thousand	ppt,				
	‰				
volts	V				
watts	W				

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

April 2015

The Fishery Management Reports series was established in 1989 by the Division of Sport Fish for the publication of an overview of management activities and goals in a specific geographic area, and became a joint divisional series in 2004 with the Division of Commercial Fisheries. Fishery Management Reports are intended for fishery and other technical professionals, as well as lay persons. Fishery Management Reports are available through the Alaska State Library and on the Internet: <http://www.adfg.alaska.gov/sf/publications/> This publication has undergone regional peer review.

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This document should be cited as:

Shields, P., and A. Dupuis. 2015. Upper Cook Inlet commercial fisheries annual management report, 2014. Alaska Department of Fish and Game, Fishery Management Report No. 15-20, Anchorage.

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ABSTRACT

The 2014 Upper Cook Inlet (UCI) area management report describes commercial fishing activities monitored by the Alaska Department of Fish and Game, Division of Commercial Fisheries, in Soldotna. The UCI management area consists of that portion of Cook Inlet north of the latitude of Anchor Point and is divided into the Central and Northern districts. The Central District is comprised of 6 subdistricts, while the Northern District includes 2 subdistricts. At present, 5 species of Pacific salmon (sockeye *Oncorhynchus nerka*, Chinook *O. tshawytscha*, chum *O. keta*, coho *O. kisutch*, and pink *O. gorbuscha*), razor clams (*Siliqua patula*), Pacific herring (*Clupea pallasii*), and eulachon or smelt (*Thaleichthys pacificus*) are subject to commercial harvest in UCI. The 2014 UCI commercial harvest of 3.2 million salmon was approximately 21% less than the 1966–2013 average annual harvest of 4.1 million fish, while the commercial sockeye salmon harvest of 2.3 million fish was approximately 20% less than the 1966–2013 average annual harvest of 2.9 million fish. The 2014 estimated exvessel value of \$35.1 million was 24% more than the 2004–2013 average annual exvessel value of \$28.3 million and approximately 34% more than the 1966–2013 average annual exvessel value of \$26.1 million. For the 2014 season, 3 of 7 sockeye salmon enumeration estimates fell within the established escapement goal ranges, while 2 systems were above and 2 were below their goal objectives. The timing of the 2014 sockeye salmon run was estimated to be 1 day early.

Key words: sockeye *Oncorhynchus nerka*, Chinook *Oncorhynchus tshawytscha*, chum *Oncorhynchus keta*, coho *Oncorhynchus kisutch*, pink *Oncorhynchus gorbuscha*, salmon, Pacific herring *Clupea pallasii*, smelt, eulachon *Thaleichthys pacificus*, razor clam *Siliqua patula*, commercial fishery, personal use fishery, gillnet, escapement, Upper Cook Inlet, Annual Management Report, AMR.

INTRODUCTION

The Upper Cook Inlet (UCI) commercial fisheries management area consists of that portion of Cook Inlet north of the latitude of the Anchor Point Light (59° 46.15'N lat) and is divided into the Central and Northern districts (Figures 1 and 2). The Central District is approximately 75 miles long, averages 32 miles in width, and is divided into 6 subdistricts. The Northern District is 50 miles long, averages 20 miles in width, and is divided into 2 subdistricts. At present, 5 species of Pacific salmon (*Oncorhynchus* spp.), razor clams (*Siliqua patula*), Pacific herring (*Clupea pallasii*), and eulachon or smelt (*Thaleichthys pacificus*) are subject to commercial harvest in UCI. Harvest statistics are gathered and reported by 5-digit statistical areas and subareas (Figures 3 and 4).

SALMON

Since the inception of a commercial fishery in 1882, many gear types, including fish traps, gillnets, and seines have been employed with varying degrees of success to harvest salmon in UCI. Currently, set (fixed) gillnets are the only gear permitted in the Northern District, while both set and drift gillnets are used in the Central District. The use of seine gear is restricted to the Chinitna Bay Subdistrict, where it may be operated via emergency order (EO) only. Seine gear was last fished in Chinitna Bay in 1982. The run timing and migration routes used by all species overlap to such a degree that the commercial fishery is mostly mixed stock and mixed species in nature. Typically, the UCI salmon harvest represents approximately 5% of the statewide catch. Nearly 10% of all salmon permits issued statewide are for the Cook Inlet area.

Detailed commercial salmon harvest statistics for UCI specific to gear type and area are available only back to 1966 (Appendices B1–B6). Since 1966, drift gillnets have accounted for approximately 6% of the average annual harvest of Chinook salmon (*O. tshawytscha*), as well as 56% of sockeye (*O. nerka*), 48% of coho (*O. kisutch*), 45% of pink (*O. gorbuscha*), and 88% of chum salmon (*O. keta*) (Appendices B1–B5); set gillnets have harvested virtually all of the remainder. However, in the last 10 years (2004–2013), the proportion of the total annual coho, pink, and chum salmon harvest taken by drift gillnets has increased, while the average annual

drift gillnet harvest (proportion of the total harvest) of sockeye salmon has not changed. For Chinook salmon, the average annual harvest during the last 10 years has remained fairly stable between commercial gear types. In terms of their recent economic value, sockeye salmon are the most important component of the UCI commercial salmon harvest, followed by coho, Chinook, chum, and pink salmon (Appendix B7).

HERRING

Commercial herring fishing began in UCI in 1973 (Flagg 1974) with a modest harvest of bait-quality fish along the east side of the Central District, which was expanded in the late 1970s to include small-scale sac roe fisheries in Chinitna and Tuxedni bays (Appendix B8). Beginning in 1988, significant decreases in herring abundance were observed in Tuxedni Bay, as well as a shift towards older herring, resulting in the closure of Tuxedni Bay to commercial herring fishing prior to the 1992 season. In Chinitna Bay and along the eastside beaches, similar declines began to materialize after the 1990 season.

As a result of these declines, the Alaska Department of Fish and Game (ADF&G) submitted a proposal to the Alaska Board of Fisheries (BOF) to open the UCI herring fishery by EO only. This proposal passed and became regulation for the 1993 season, ending a long period with fixed opening dates of April 15 on the east side, and April 22 on the west side of Cook Inlet. This action effectively closed these fisheries to provide time for herring stocks to recover.

In 1998, the Upper Subdistrict of the Central District and the Eastern Subdistrict of the Northern District were opened to commercial herring fishing to assess the status of the herring population. The herring fisheries on the west side of Cook Inlet remained closed until the status of the east side stocks was determined. Prior to the 1999 season, ADF&G again submitted proposals to the BOF, seeking to restructure the herring fishery to two 30-hour periods per week on Mondays and Thursdays. These proposals included the condition that fishermen register their intent to participate in the fishery prior to April 10, as well as the requirement that they report their harvests within 12 hours of the closure of a fishing period.

The proposals were passed in the form of a management plan, 5 AAC 27.409. *Central District Herring Recovery Management Plan*, which became active prior to the 1999 season, and limited herring fishing in UCI to the waters of the Upper, Western, and Chinitna Bay subdistricts. In the Upper Subdistrict, fishing for herring is not allowed closer than 600 feet of the mean high tide mark on the Kenai Peninsula in order to reduce the incidental harvest of salmon. The management plan was amended by the BOF prior to the 2002 fishing season, extending the closing date for the fishery from May 20 to May 31.

In 2001, samples of herring were collected in Chinitna and Tuxedni bays. Age, sex, and size distribution of the samples revealed that the years of closed fishing in these areas had resulted in an increase of younger-aged fish being recruited into the population. As a result of these analyses, and in accordance with the herring recovery management plan, the commercial fishery was reopened in 2002 in both the Chinitna Bay and Western Subdistrict. The management plan allows for a very conservative harvest quota, not to exceed 40 tons in Chinitna Bay and 50 tons in the Western Subdistrict. There has been very little participation in either fishery since they were reopened (Appendix B8).

The herring management plan was further modified by the BOF in 2005 and 2008. The Kalgin Island Subdistrict was included in legal waters in 2005, and fishing periods in the Upper

Subdistrict were expanded to 108 hours per week, or from Monday at 6:00 AM until Friday at 6:00 PM. Additionally, in 2005, the mesh size for herring gillnets was modified to no smaller than 2.0 inches or no greater than 2.5 inches. In 2008, the 108-hour weekly fishing period went into effect for all areas open to herring fishing, and the registration deadline of April 10 was amended to state that fishermen must register any time prior to fishing.

Because the glacial waters of UCI preclude the use of aerial surveys to estimate the biomass of herring stocks, management of these fisheries has departed from the standard techniques employed in the more traditional herring fisheries. Gillnets are the only legal gear allowed in the UCI herring fisheries, with set gillnets being used almost exclusively. This gear type is significantly less efficient at capturing herring than purse seines. Moreover, conservative guideline harvest levels have been set, which provide for a low-level commercial fishery on these stocks. In the Upper Subdistrict, harvests are generally concentrated in the Clam Gulch area, with very little or no participation in either the Western Subdistrict (Tuxedni Bay), Chinitna Bay, or Kalgin Island subdistricts.

SMELT

Smelt return to many of the larger river systems in UCI, with particularly large runs to the Susitna and Kenai rivers. Both longfin smelt *Spirinchus thaleichthys* and eulachon *Thaleichthys pacificus* (referred to as smelt in this report, while often identified in local vernacular as hooligan) are documented in Cook Inlet. Smelt begin returning to spawning areas in Cook Inlet generally from mid-May to mid-June and return in quantities large enough to support a limited commercial fishery. Longfin smelt return to Cook Inlet in the fall of the year and are not targeted because of their small run size.

Prior to adoption of 5 AAC 39.212. *Forage Fish Management Plan*, the entire UCI area was open to smelt fishing from October 1 to June 1 (Shields 2005). The only documented commercial harvests of smelt occurred in 1978 (300 pounds), 1980 (4,000 pounds), 1998 (18,900 pounds), and 1999 (100,000 pounds). Prior to 1998, fishermen were mistakenly advised that gillnets were the only legal gear for the harvest of smelt. Because primary markets at the time required undamaged fish for bait or marine mammal food, this harvest method was unacceptable. When the interpretation of the regulation was reviewed in 1998, and subsequently changed to allow dip nets to be used, the 1999 harvest increased to 100,000 pounds, which was the harvest cap at the time. All harvests occurred in salt water near the Susitna River. There has been no quantitative assessment of Susitna River smelt stocks, but participants in the fishery report significant numbers of smelt migrating up the Susitna River.

At the 1998 BOF meeting, the commercial smelt fishery was closed, but the regulation did not take effect until after the 1999 season. In 2000, as part of its draft *Forage Fish Management Plan*, ADF&G recommended that smelt fishing be restricted to the General Subdistrict of the Northern District. Legal gear would be dip nets only, which had the benefit of eliminating the harvest of non-target species. The area opened to fishing was designed to target Susitna River smelt stocks. In this draft policy, ADF&G recommended that active forage fish fisheries be allowed to take place in a tightly controlled and closely monitored manner through the use of a commissioner's permit, while not allowing any "new" fisheries to develop. The intent was to allow an active, low-level fishery to continue; however, when the BOF adopted the current *Forage Fish Management Plan*, they chose to close the entire commercial smelt fishery. At the 2005 BOF meeting, proposals were submitted to reopen the fishery, which the BOF accepted,

authorizing a commercial smelt fishery beginning with the 2005 season. The fishery is conducted under 5 AAC 21.505. *Cook Inlet Smelt Fishery Management Plan* (Appendix D1). This fishery is allowed in salt water only, from May 1 to June 30, specifically in that area of Cook Inlet from the Chuitna River to the Little Susitna River and in the Susitna River south of 61° 21.50'N lat. Legal gear for the fishery is limited to a hand-operated dip net, as defined in 5 AAC 39.105, with the total harvest not to exceed 100 tons of smelt. Any salmon caught during the fishery are to be immediately returned to the water unharmed. To participate in this fishery, a miscellaneous finfish permit is required, as well as a commissioner's permit, which can be obtained from the ADF&G office in Soldotna.

RAZOR CLAMS

The commercial harvest of razor clams from UCI beaches dates back to 1919 (Appendix B9). Harvest levels have fluctuated from no fishery to production in excess of a half-million pounds. The sporadic nature of the fishery was more a function of limited market opportunities than limited availability of the resource. Razor clams are present in many areas of Cook Inlet, with particularly dense concentrations occurring near Polly Creek on the western shore and from Clam Gulch to Ninilchik on the eastern shore (Nickerson 1975). The eastern shoreline has been set aside for sport harvest exclusively since 1959, and all commercial harvests since that time have come from the west shore; principally from the Polly Creek and Crescent River sandbar areas. A large portion of the Polly Creek beach is approved by the Alaska Department of Environmental Conservation for the harvest of clams for the human food market. Within this approved area, a limit of 10% shell breakage is allowed, with broken-shelled clams required to be dyed prior to being sold as bait clams. No overall commercial harvest limits are in place for any area in regulation; however, ADF&G manages the commercial razor clam fishery to achieve a harvest of no more than 350,000 to 400,000 pounds (in the shell) annually. Virtually all of the commercial harvest has come by hand-digging, although regulations prior to 1990 allowed the use of mechanical harvesters (dredges) south of Spring Point, or within a 1-mile section of the Polly Creek beach. Numerous attempts to develop feasible dredging operations were largely unsuccessful due to excessive shell breakage or the limited availability of clams in the area open to this gear. Mechanical means of harvesting is no longer permitted in any area of Cook Inlet.

2014 COMMERCIAL SALMON FISHERY

The 2014 UCI commercial harvest of 3.2 million salmon was approximately 21% less than the 1966–2013 average annual harvest of 4.1 million fish (Appendix B6). The 2014 sockeye salmon harvest estimate of 2.3 million fish was 20% less than the 1966–2013 average annual harvest of 2.9 million fish. Sockeye salmon harvested in test and cost recovery fisheries are not included in commercial harvest statistics; other sources of sockeye salmon harvest occur in sport, personal use, educational, and subsistence fisheries (Appendix A22). The estimated exvessel value of the 2014 UCI commercial fishery of \$35.1 million was approximately 24% more than the average annual exvessel value of \$28.4 million from the previous 10 years (2004–2013) and approximately 34% more than the 1966–2013 average annual exvessel value of \$26.1 million (Appendix B7).

The average price paid per pound for UCI salmon has remained fairly stable in recent years (Appendix B11). However, estimating the average annual price per pound for each species is challenging because more fishermen are selling some or all of their harvest to niche markets, where they often receive higher prices. In addition, a trend observed for the past few seasons

continued; that is, early-season pricing for Chinook and sockeye salmon is much higher than what is paid later in the season. The price paid for sockeye salmon was approximately \$0.75 per pound above 2012 prices. This increase in price contributed significantly to the higher-than-average exvessel value of the 2014 UCI commercial salmon harvest.

Currently, there are 7 sockeye salmon systems with escapement/inriver goals that are monitored in UCI (Table 1, Appendix A2, and Appendix B10). In 2014, 3 of 7 enumeration estimates fell within established goal ranges, while 2 were above and 2 were below their goal range. It is anticipated that the Kenai River will be within its sustainable escapement goal (SEG) when the 2014 sport harvest is included. This marked the 6th year that sockeye salmon escapement in the Susitna River was assessed at 2 lakes in the Yentna River drainage (Chelatna and Judd lakes) and 1 lake in the Susitna River drainage (Larson Lake, which drains into the Talkeetna River). These lakes are the major producers of sockeye salmon in the Susitna watershed. Escapements were monitored at these lakes with weirs operated by ADF&G. Sockeye salmon escapement was monitored at Packers Lake on Kalgin Island using a remote video system.

Table 1.—Upper Cook Inlet sockeye salmon escapement goals and passage estimates, 2014.

System	Goal type	Goal range		2014 Passage
		Lower	Upper	
Fish Creek	SEG	20,000	70,000	43,915
Kasilof River	BEG	160,000	340,000	439,977
Kenai River	Inriver	1,000,000	1,200,000	1,524,707
Larson Lake	SEG	15,000	50,000	12,430
Chelatna Lake	SEG	20,000	65,000	26,287
Judd Lake	SEG	25,000	55,000	22,229
Packers Creek	SEG	15,000	30,000	19,242

Note: Passage estimates do not account for any harvest above counting sites. BEG = biological escapement goal; SEG = sustainable escapement goal; Inriver = inriver goal.

UCI commercial harvest statistics refined to gear type, area, and date are available back to 1966 (Appendix B1–B6). All commercially-harvested salmon, whether sold or kept for home use, are legally required to be recorded on fish tickets (5 AAC 39.130), which are then entered into the statewide fish ticket database. The 2014 commercial harvest by species, gear type, area, and date can be found in Appendices A3–A7. Total harvest by statistical area and average catch per permit are reported in Appendices A8 and A9. A summary of EOs issued in 2014 can be found in Appendix A10, and a summary of fishing periods by gear type and area can be found in Appendix A11.

REGULATORY CHANGES

The BOF’s regular triennial meeting to deliberate UCI finfish proposals occurred in Anchorage from January 31 to February 13, 2014. During the meeting, there were numerous regulatory changes, which will be presented here in way of summary. For a complete listing of regulations for the UCI area, please see Chapter 21 of the Alaska Administrative Code.

Upper Subdistrict Set Gillnet Fishery

Set gillnet permit stacking. In Cook Inlet, 1 person may own 2 set gillnet permits (S04H) and operate 2 full complements of gear. However, in the Upper Subdistrict only, if 1 person owns and operates 2 permits, 105 fathoms of the 210 fathoms of total gear must be fished with nets that are not more than 29 meshes in depth and marked with a blue buoy on either end of the net. The buoy must be at least 9.5 inches in diameter.

One-percent rule. The one-percent rule in the Upper Subdistrict was changed so that it applies separately to the Kasilof Section and the combined Kenai and East Foreland sections. Drifters are restricted to fishing only in Drift Areas 3 and 4 (Figure 5) beginning on August 11 if the entire Upper Subdistrict is closed under the one percent rule.

24 hour Tuesday window. For Kenai River sockeye salmon runs of 2.3 million to 4.6 million fish, the 24 hour window that was fixed in time on Tuesdays may now be started anytime between 7:00 PM on Mondays and 7:00 AM on Wednesdays. The window is still 24 hours in duration.

Kasilof River Special Harvest Area (KRSHA): Boundaries were modified where set and drift gillnetting occurs in the KRSHA. Set gillnetting is now opened within the first 1,200 feet from mean high tide, instead of the first 600 feet. Drift gillnetting is now opened only beyond 1,200 feet from the mean high tide mark.

Kasilof River Sockeye Salmon Biological Escapement Goal (BEG): The BOF clarified that ADF&G should manage Kasilof River sockeye salmon to attain the BEG of 160,000–340,000 fish, unless the lower end of the Kenai River sockeye salmon escapement goal is not being achieved. In this situation, the department will manage to achieve the Kasilof River sockeye salmon optimal escapement goal (OEG) of 160,000-390,000 fish.

Kenai River Late-Run King Salmon Management Plan (KRLKSMP): Restrictive actions were paired in the Kenai River Chinook salmon (king salmon) sport fishery, personal use fishery, and the Upper Subdistrict commercial set gillnet fishery. Specifically from July 1 to 31, if the inriver run of late-run Chinook salmon is projected to be less than 22,500 fish, in order to achieve the sustainable escapement goal (SEG), the sport fishery may be restricted to fishing with no bait or to no bait and no retention of Chinook salmon. If the sport fishery is prosecuted under a no-bait restriction, then the Upper Subdistrict set gillnet fishery will be managed as follows:

- No Monday/Thursday regular fishing periods.
- No mandatory 24 hour window per week, but the 36 hour “Friday” window remains.
- No more than 36 hours of fishing time per week with the following options:
 - no additional restrictions on amount of gear and depth of nets;
 - gear restrictions where fishermen would be allowed to fish 3 set gillnets that are each not more than 35 fathoms in length and 29 meshes in depth or 2 set gillnets that are each not more than 35 fathoms in length and 45 meshes in depth;
 - gear restrictions where fishermen would be allowed to fish 2 set gillnets that are each not more than 35 fathoms in length and 29 meshes in depth or 1 set gillnet that is not more than 35 fathoms in length and 45 meshes in depth;

If the sport fishery is restricted to no bait and no retention, then the Upper Subdistrict set gillnet fishery is open for no more than 12 hours per week, with a 36 hour “Friday” window. No additional restrictions on gear would occur during this time period.

From July 1 to 31, both the inriver sport fishery and the commercial set gillnet fishery are to be managed to meet a Kenai River late-run Chinook salmon SEG of 15,000–30,000 fish.

Beginning August 1, if Kenai River late-run Chinook salmon escapement is projected to be less than 16,500 fish, the Upper Subdistrict set gillnet fishery will be closed. If the Kenai River late-run Chinook salmon escapement is projected to be 16,500–22,500 fish, the Upper Subdistrict set gillnet fishery may be opened for no more than 36 hours during August 1 to 15. If Chinook salmon escapement is projected to exceed 22,500 fish, then management of the Upper Subdistrict set gillnet fishery will be based on Kenai and Kasilof rivers sockeye salmon run strength.

Marking of 29 mesh nets. All set gillnets that are 29 meshes in depth or less that are being fished under the restrictive provisions in the KRLRKSMP or as part of dual permit operations in the Upper Subdistrict must be marked with a blue buoy on either end of the net. The buoy must be at least 9.5 inches in diameter, which is the size of an A-0 buoy.

Central District Drift Gillnet

Dual drift fishing (D-boat). The option to D-boat fish was retained in regulation, meaning 2 separate permit holders may fish on 1 boat with a total complement of gear not to exceed 200 fathoms. As of 2014, D-boat fishermen no longer need to register with ADF&G prior to fishing.

One-percent rule. A new one-percent rule for drift gillnetting was passed, which is similar to the one-percent rule in the Upper Subdistrict set gillnet fishery. The drift rule states that after August 1 drifting will be restricted to Drift Gillnet Areas 3 and 4, if the drift fleet harvests less than one-percent of their total sockeye salmon harvest for 2 consecutive fishing periods. The set gillnet one-percent rule also impacts the drift fishery during the August 11 to 15 time frame, but only if the entire Upper Subdistrict set gillnet fishery is closed under the one-percent rule.

Drift Gillnet Fishery Management Plan. Changes were made in how the drift fleet is to be fished during the following 2 time periods in July:

- From July 9 to 15:
 - Both regular fishing periods will be restricted to the Expanded Kenai and Expanded Kasilof sections (Figure 6) and Drift Gillnet Area 1 (Figure 7).
 - At Kenai River run strengths greater than 2.3 million fish, a third 12 hour fishing period during this time may be allowed in the Expanded Kenai and Expanded Kasilof sections and Drift Gillnet Area 1.
- From July 16 to 31:
 - At run strengths less than 2.3 million Kenai River sockeye salmon, fishing during all regular 12 hour fishing periods will be restricted to the Expanded Kenai and Expanded Kasilof sections.
 - At run strengths of 2.3 million to 4.6 million Kenai River sockeye salmon, fishing during one 12 hour regular fishing period per week will be restricted to any or all of the following areas: Expanded Kenai Section, Expanded Kasilof Section, Anchor Point Section (Figure 4), and Drift Area 1. The remaining weekly 12 hour regular fishing period will be restricted to 1 or more of the following: Expanded Kenai, Expanded Kasilof, or Anchor Point sections.

- At run strengths greater than 4.6 million Kenai River sockeye salmon, fishing during one 12 hour fishing period per week will be restricted to the Expanded Kenai, Expanded Kasilof, and Anchor Point sections. There are no mandatory restrictions on the remaining 12 hour regular fishing period.
- All additional fishing time, other than regular fishing periods, is allowed in any or all of the following: Expanded Kenai, Expanded Kasilof and Anchor Point sections.
- Added the "Anchor Point Section" to the list of corridors.

GENERAL PROVISIONS

Pink Salmon Management Plan: Some provisions within this plan were changed. Based upon the number of pink salmon that are harvested by Upper Subdistrict set gillnetters from August 6 to 10, in even years only, a pink salmon fishery may be opened for up to 2 fishing periods from August 11 to 15. If opened, the pink salmon fishery is only provided to setnetters in the Upper Subdistrict and to drift gillnetters in the Kenai Section (narrow Kenai corridor). The second fishing period may only be opened if more than 50,000 pink salmon and less than 2,500 coho salmon are harvested by setnetters during the first fishing period. Set gillnetting is no longer limited to more than 600 feet from shore during the pink salmon fishery, but both set and drift gillnets must still use nets with a mesh size no larger than 4 ¾ inches.

Set gillnet registration: Registration requirements, including the purchase of buoy stickers in the Upper Subdistrict, was amended to allow for electronic (Internet based) registration and buoy sticker purchase.

CHINOOK SALMON

The 2014 UCI harvest of 4,660 Chinook salmon was the third smallest since 1966 and was approximately 67% less than the previous 10-year (2004–2013) average annual harvest of 14,140 fish (Appendices A3, B1, and B6). The exvessel value for UCI Chinook salmon in 2014 was estimated at \$206,119, which represented approximately 0.6% of the total exvessel value for all salmon (Appendix B7).

Chinook salmon were harvested in appreciable numbers in 2 fisheries: the set gillnet fisheries in the Northern District and in the Upper Subdistrict of the Central District. The decline in Chinook salmon harvest observed during the 2014 season was the result of lower abundance of Chinook salmon in UCI and subsequent restrictions placed upon commercial fisheries for the conservation of this species.

Northern District

The *Northern District King Salmon Management Plan* (5 AAC 21.366) was created by the BOF in 1986 and was most recently modified in 2011. This plan provides direction to ADF&G regarding management of the Northern District of UCI for the commercial harvest of Chinook salmon. The fishing season opens on the first Monday on or after May 25 and remains open for all Mondays through June 24. The most productive waters for harvesting Chinook salmon, which occur from 1 mile south of the Theodore River to the mouth of the Susitna River, are open to fishing for the second regular Monday period only; however, if the Theodore, Ivan, or Lewis rivers are closed to sport fishing, the area from 1 mile south of the Theodore River to the Susitna River will be closed to commercial fishing. The plan further specifies that if the Chuitna River is closed to sport fishing, commercial fishing shall close for the remainder of the directed Chinook

salmon fishery in that portion of the Northern District from a point at the wood chip dock (located approximately 2 miles south of Tyonek), to the Susitna River. Finally, if the Deshka River is closed to sport fishing, the Chinook salmon commercial fishery in the entire Northern District will close for all periods provided for under this plan.

Each permit holder is allowed to fish only one 35-fathom set gillnet, with a minimum separation of 1,200 feet between nets, which is twice the normal separation between nets. The commercial fishery is also limited to an annual harvest not to exceed 12,500 Chinook salmon. Fishing periods are 12 hours per day, or from 7:00 AM to 7:00 PM

At the 2011 BOF meeting, Chuitna River Chinook salmon were found to be a stock of management concern, resulting in the closure of the sport fishery on this river beginning with the 2011 season. In compliance with the *Northern District King Salmon Management Plan*, the Northern District set gillnet fishery was closed from the wood chip dock to the Susitna River. Since 2011 this area has remained closed to commercial fishing during the Northern District directed Chinook salmon fishery. In 2012, ADF&G took even more restrictive actions by reducing all 12-hour fishing periods to 6 hours in duration, and then in 2013 and 2014, the first fishing period of the year was also closed. All of these actions have been taken in response to below-average Chinook salmon runs throughout northern Cook Inlet. In 2014, when inseason escapement estimates revealed that the Deshka River Chinook salmon minimum escapement goal was projected to be met, fishing time was returned to the standard 12-hour periods for the July 16 and July 23 fishing periods.

Table 2.–Chinook salmon harvest during the directed fishery in the Northern District, 1986–2014.

Year	Chinook	Permits	Period	Year	Chinook	Permits	Period
1986	13,771	135	3	2001	1,616	43	3
1987	11,541	129	4	2002	1,747	36	3
1988	11,122	142	3	2003	1,172	29	3
1989	11,068	137	3	2004	1,819	44	3
1990	8,072	130	3	2005	3,144	52	3
1991	6,305	140	4	2006	3,849	59	3
1992	3,918	137	3	2007	3,132	64	3
1993	3,072	80	4	2008	3,855	74	4
1994	3,014	73	2	2009	1,266	55	3
1995	3,837	65	1	2010	1,674	51	4
1996	1,690	45	1	2011	2,187	61	4
1997	894	51	2	2012	1,030	38	4
1998	2,240	56	2	2013	1,134	40	4
1999	2,259	51	2	2014	1,377	41	4
2000	2,046	47	3				

Forty-one commercial permit holders participated in the 2014 Northern District Chinook salmon fishery, with an estimated harvest of 1,377 fish (Table 2 and Appendix A3). This was the 4th smallest harvest in this fishery since its inception in 1986. The number of permit holders participating in this fishery rapidly declined beginning in 1993, which is the year that set gillnet

fishermen were required to register (prior to fishing) to fish in 1 of 3 areas (Northern District, Upper Subdistrict, or Greater Cook Inlet) for the entire year. The registration requirement served to eliminate a common practice of fishing in multiple areas in UCI during the same year.

Upper Subdistrict

Approximately 50% of UCI Chinook salmon commercial harvest in 2014 occurred in the Upper Subdistrict set gillnet fishery (Appendix B1). The estimated harvest of 2,301 Chinook salmon was the second smallest recorded harvest in this fishery since 1966. The 1966–2013 average Chinook salmon harvest in this fishery was 9,605 fish (Appendix B1).

Following the 2012 season, a new SEG of 15,000–30,000 late-run Kenai River Chinook salmon was recommended by ADF&G (Fleischman and McKinley 2013), to be enumerated with dual frequency identification sonar (DIDSON). During the 2013 season, 5 abundance indices were used to corroborate the DIDSON estimates of passage (Eskelin and Miller 2010; R. Begich, Sport Fish Biologist, ADF&G, Soldotna; personal communication). At the 2014 BOF meeting, the Kenai River late-run Chinook salmon SEG was reviewed, but no changes were made. However, the BOF did implement numerous changes to the KRLKSMP (see the Regulatory Changes section of this report for a detailed description of those changes) for the 2014 season.

The 2014 preseason outlook for Kenai River late-run Chinook salmon projected a total run of only 19,700 fish. This outlook indicated that ADF&G would likely need to implement restrictive actions in both sport and commercial fisheries to meet the minimum SEG of 15,000 fish for this stock. The preseason outlook for the early run of Chinook salmon to the Kenai River of only 2,230 fish resulted in the sport fishery being closed to start the season, and it remained closed for the entire season. The estimated total run of 5,311 fish meant the minimum OEG of 5,300 fish was met but not until June 30, the last day of early run enumeration. While the early run was larger than preseason expectations, the weak late-run forecast of Kenai River Chinook salmon was justification for starting the sport fishery on July 1 under a restriction of no bait (EO 2-KS-1-26-14). Throughout most of July, the DIDSON estimates and inseason projections of run strength for late-run Chinook salmon indicated the run was well below average. By mid-July, projections of run strength indicated achieving the SEG was doubtful. Therefore, the Kenai River Chinook salmon sport fishery was restricted to catch and release fishing beginning on July 19 (EO 2-KS-1-40-14). A week later (July 26) the sport fishery was closed entirely (EO 2-KS-1-42-14). Restrictive measures were also implemented in the Upper Subdistrict set gillnet fishery to conserve Kenai River late-run Chinook salmon, including a closure of the fishery on July 24 (EO 2S-36-14). Fortunately, during the last few days of July, and then continuing into the early part of August, Chinook salmon passage into the Kenai River improved. By August 2, projections of the final run size had exceeded 16,500 fish, which allowed the set gillnet fishery to reopen on August 2, albeit under restrictive regulations. The final Kenai River Chinook salmon passage estimate for the 2014 season was approximately 16,670 fish, and after inriver mortality was subtracted, the final estimate of escapement was approximately 16,000 fish.

SOCKEYE SALMON

Management of the UCI sockeye salmon fishery integrates information received from a variety of programs, which together provide an inseason model of the actual annual run. These programs include: offshore test fishing (OTF); escapement enumeration by sonar, weir, remote camera, and various mark–recapture studies (Shields and Dupuis 2013); comparative analyses of historical commercial harvest and effort levels; genetic stock identification (GSI); and age composition

studies. Beginning in 2005, a comprehensive sampling program was initiated to estimate the stock composition of sockeye salmon harvested in UCI commercial fisheries using improved GSI analyses. For a complete review of the GSI data, see Habicht et al. (2007), which summarized the UCI sockeye salmon catch allocation from 2005 to 2007; Barclay et al. (2010a), which updated the 2005 to 2007 report and also included analyses of data collected in 2008; and Barclay et al. (2010b), which summarized the GSI analysis of the 2009 UCI commercial harvest.

A chartered gillnet vessel fished 6 fixed stations along a transect crossing Cook Inlet from Anchor Point to the Red River delta (Shields et al. 2013) as part of the OTF studies. The program provided an inseason estimate of sockeye salmon run strength by determining the passage rate, which was an estimate of the number of sockeye salmon that enter the district per index point or CPUE. The cumulative CPUE curve was then compared to historical run timing profiles so that an estimate could be made of the final CPUE, which in turn provided for an inseason estimate of the total run of sockeye salmon to UCI. The timing of the 2014 sockeye salmon run was estimated to be approximately 1 day early (Mark Willette, Commercial Fisheries Biologist, ADF&G, Soldotna; personal communication). Beginning in 2012, an additional OTF transect was fished in Cook Inlet, near the north end of Kalgin Island. The Kalgin Island transect line was further north in the inlet, and its purpose was to gather sockeye and coho salmon tissue samples for GSI analysis (Dupuis and Willette 2014). In 2014, the Kalgin Island test fish transect was bifurcated into 2 separate transects running from near the north and south end of Kalgin Island to the eastern shore of Cook Inlet. This change was made in response to low catches of salmon west of Kalgin Island in 2012–2013. The additional transect was added with the hope of providing additional samples to more efficiently address the spatial and temporal distributions and migratory patterns of Kenai/Kasilof sockeye and Northern District sockeye and coho salmon in the Central District of UCI.

Hydroacoustic technology is used to quantify sockeye salmon escapement into glacial rivers and was first employed in UCI in the Kenai and Kasilof rivers in 1968, then expanded to the Susitna River in 1978 and Crescent River in 1979 (Westerman and Willette 2011). In recent years, ADF&G has transitioned escapement monitoring projects from older Bendix sonar systems to DIDSON (Westerman and Willette 2011). DIDSON is currently used at escapement monitoring projects on the Kenai and Kasilof rivers. The Crescent River sonar project, which had been operational since 1979, was discontinued in 2013.

DIDSON is also used to enumerate sockeye salmon in the Yentna River as part of an ongoing research project; however, a comprehensive sockeye salmon mark–recapture study in the Susitna River drainage verified that sockeye salmon passage estimates in the Yentna River were biased low (Appendix A12; Yanusz et al. 2007). The likely cause for the biased sonar counts was fish wheel species selectivity. Because of this, in 2009, the Yentna River SEG was replaced with 3 lake-based SEGs monitored via weir at Chelatna Lake (20,000–65,000 fish) and Judd Lake (25,000–55,000 fish) in the Yentna River drainage, and Larson Lake (15,000–50,000 fish) in the Susitna River drainage (Fair et al. 2009).

In addition to the 3 weirs in the Susitna River drainage, an adult salmon weir was operated by the Division of Sport Fish at Fish Creek (Knik Arm) and provided daily sockeye salmon escapement counts. Historically, a counting weir has also been employed at the outlet of Packers Lake (on Kalgin Island), but has since been replaced by a remote video camera system (Appendix B10; Shields and Dupuis 2012). The camera system was in operation from 2005 to 2006 and 2009 through 2014. However, in 2006, an electronic malfunction did not allow for a complete census

of the escapement. From 2010 to 2013, technical difficulties prevented retrieval of all of the data. A complete enumeration of the escapement into Packers Lake was obtained in 2014.

Inseason analyses of the age composition of sockeye salmon escapement into the principal watersheds of UCI provided information necessary for estimating the stock contribution in various commercial fisheries by comparing age and size data in the escapement with that in the commercial harvest (Tobias and Tarbox 1999). There were 21,858 sockeye salmon examined for age, length, and sex determination from catch and escapement samples in 2014 (Wendy Gist, Commercial Fisheries Biologist, ADF&G, Soldotna; personal communication). The age composition of adult sockeye salmon returning to monitored systems is provided in Appendix A13.

For the 2014 season, approximately 6.1 million sockeye salmon were expected to return to UCI (Table 3; Appendix C1). The actual run estimate totaled 5.3 million fish, which was 12% less than the preseason projection. It should be noted that at the time this report was published, harvest data from the 2014 sport fisheries were not available; therefore, sport fishery harvests were estimated by comparing previous year’s catches from similar sized runs. Of the expected run of 6.1 million sockeye salmon, approximately 1.8 million fish were required for escapement objectives, which left 4.3 million sockeye salmon available for harvest to all users. Assuming that sport and personal use harvests in 2014 would be similar in proportion to that observed in 2013 (because of similar sized runs), the commercial catch in 2014 was projected to be approximately 3.4 million sockeye salmon. The actual commercial sockeye salmon harvest of 2.3 million fish was, therefore, 32% less than preseason expectations. Drift gillnet fishermen accounted for approximately 64% of the 2014 commercial sockeye salmon harvest, or 1.5 million fish, while set gillnet fishermen caught 36% of the commercial harvest, or 842,000 fish (Appendix B2). The 2014 run was allocated to individual river systems inseason using a weighted age-composition catch allocation method, as described by Tobias and Tarbox (1999). GSI samples were collected from the 2014 commercial harvest and will be analyzed at a later date. The last reported commercial fishing activity in any area of UCI in 2014 was September 9.

Table 3.–2014 Upper Cook Inlet sockeye salmon forecast and actual run.

System	Forecast	Actual ^a	Difference
Crescent River ^b	92,000	72,921	-21%
Fish Creek	79,000	65,296	-17%
Kasilof River	1,062,000	1,128,505	6%
Kenai River	3,792,000	3,308,475	-13%
Susitna River	264,000	200,410	-24%
Minor Systems	793,000	551,750	-30%
All Systems	6,082,000	5,327,357	-12%

^a These results are preliminary and will change when GSI information is available.

^b Crescent River sonar program was not operation in 2014.

In 2014, the total sockeye salmon harvest from commercial, sport, personal use, subsistence, and educational fisheries was estimated at 3.3 million fish (Appendix A22). This amount was approximately 11% less than the 1996–2013 average annual harvest of 3.7 million fish (for the Kenai River; these data include late-run sockeye salmon only) and 24% less than preseason expectations (Appendix B14). The 2014 sport harvest was estimated based on harvest from

similar sized runs. The annual Statewide Harvest Survey report for 2014 that details harvest results for sport harvest of all salmon will not be finalized until later in 2015 (Jennings et al. 2011). The 2014 personal use harvest estimate of approximately 506,000 sockeye salmon was nearly 54% greater than the average annual harvest of 328,000 fish from 1996 to 2013. For more details on the specifics of personal use harvests, including demographics, see Reimer and Sigurdsson (2004), Dunker and Lafferty (2007), and Dunker (2010).

The average price paid per pound for all commercially harvested salmon remained fairly stable throughout the 2014 season (Appendix B11). Based on these estimated prices, the total exvessel value of the 2014 salmon fishery was approximately \$35.1 million (Appendix B7). Using an average price of \$2.25/lb, the exvessel value for sockeye salmon was estimated to be \$32.8 million, which was 23% greater than the previous 10-year (2004–2013) value of \$26.6 million.

Big River

The first commercial sockeye salmon fishery to open in UCI in 2014 was the Big River fishery, which is managed under the *Big River Sockeye Salmon Management Plan* (5 AAC 21.368). This plan was adopted in 1989 and allows for a small set gillnet fishery in the northwest corner of the Central District. At the 2005 BOF meeting, the plan was modified by expanding the area open to fishing to include the waters along the west side of Kalgin Island. Between June 1 and June 24, fishing is allowed each Monday, Wednesday, and Friday from 7:00 AM to 7:00 PM. Permit holders are limited to a single 35-fathom set gillnet, and the minimum distance between nets is 1,800 feet, which is 3 times the normal separation of gear. While targeting an early run of sockeye salmon returning to Big River, this fishery also encounters Chinook salmon migrating through the area. The management plan limits the harvest of Chinook salmon to no more than 1,000 fish per year. Since 2005, when the management plan was changed, the average annual Chinook salmon harvest has been 496 fish, which is well below the 1,000-fish cap. The average annual sockeye salmon harvest since 2005 has been 16,660 fish. The 2014 fishery began on Monday, June 2, with harvests reported from 10 different days, yielding a total harvest of 10,405 sockeye and 377 Chinook salmon. Of the total harvest, 82% of the sockeye and 69% of the Chinook salmon were caught in the Kalgin Island west side waters, which is Statistical Area 246-10 (Figure 3). There were 28 permit holders that reported participating in the fishery, which was up from recent years but less than the peak effort of 41 permit holders in 1992 (Appendices A3 and A4).

Western Subdistrict

The next commercial fishery to open in 2014 was the set gillnet fishery in the Western Subdistrict of the Central District. This fishery opens on the first Monday or Thursday on or after June 16, and the regular fishing schedule consists of two 12-hour weekly fishing periods (Mondays and Thursdays) throughout the season, unless modified by EO. The fishery primarily targets sockeye salmon bound for Crescent Lake.

Since 2013, the Crescent River sonar project has not been in operation. When it was, however, the set gillnet fishery in this area was often expanded to fishing 24 hours per day, 7 days per week in an attempt to keep escapements into the Crescent River from exceeding the escapement goal range of 30,000–70,000 fish. Early in the 2014 season, sockeye salmon harvest rates in the set gillnet fishery near the Crescent River were similar to those years when escapements fell within or exceeded the escapement goal range. Therefore, EO No. 9 was issued on July 4, opening that portion of the Western Subdistrict south of the latitude of Redoubt Point from 6:00

AM until 10:00 PM on Mondays, Thursdays, and Saturdays. This fishing schedule remained in place until 10:00 PM on Monday, August 4, when EO No. 49 was issued, returning the fishery to its regular schedule of 2 fishing periods per week. Approximately 37,000 sockeye salmon were harvested by 19 permit holders fishing in the Western Subdistrict set gillnet fishery in 2014 (Appendix A8).

Northern District

The set gillnet fishery in the Northern District opens by regulation on or after June 25 for regular Monday and Thursday 12-hour periods. This fishery is primarily managed by 5 AAC 21.358. *Northern District Salmon Management Plan* (NDSMP) and the *Susitna River Sockeye Salmon Action Plan* (SSSAP). The intent of these plans is to allow a commercial fishery while minimizing the harvest of Northern District coho salmon and conserving Susitna River sockeye salmon.

At the 2008 BOF meeting, Susitna River sockeye salmon were found to be a stock of yield concern. No change was made to this assessment during the 2011 UCI BOF meeting. At the 2013 BOF work session, ADF&G recommended that Susitna River sockeye salmon remain classified as a stock of yield concern because 1) 5 of the lake escapement goals (out of 15 total) have been below the minimum goal, and 2) harvests in Central and Northern districts from 2008 through 2013 were generally less than long-term averages. Research studies are ongoing to better understand sockeye salmon abundance and distribution. According to the *Policy for the Management of Sustainable Salmon Fisheries* (5 AAC 39.222), a stock of yield concern is defined as “a concern arising from a chronic inability, despite the use of specific management measures, to maintain expected yields, or harvestable surpluses, above a stock’s escapement needs; a yield concern is less severe than a management concern, which is less severe than a conservation concern.” As a result of this finding, an action plan was developed by ADF&G and the BOF to identify conservative management measures in both the sport and commercial fisheries targeting Susitna River sockeye salmon stocks. Adopted by the BOF at the 2008 meeting, the SSSAP included the following statement: “In light of recent ADF&G data revealing concerns about the validity of Yentna River sockeye salmon enumeration data, it is the intent of the BOF that Susitna River sockeye salmon stocks will be conservatively managed while ADF&G continues its studies in this drainage.”

In 2014, management of the Northern District set gillnet fishery was guided by provisions within the NDSMP and the SSSAP. These plans allow ADF&G to reduce the total allowable gear in the Northern District from July 20 through August 6 in order to conserve Susitna River sockeye salmon. Thus, EO No. 27 was issued on July 19, reducing legal gear to 1 set gillnet per permit, measuring no more than 35 fathoms in length, for all regular Monday and Thursday fishing periods, beginning at 7:00 AM on Monday, July 21, 2014. On Wednesday, July 30, EO No. 44 was released, which modified EO No. 27 and changed legal gear for that portion of the General Subdistrict of the Northern District, south of the Susitna River, to no more than 2 set gillnets per permit, with either net measuring no more than 35 fathoms in length. The periods affected by this EO were July 31 and August 4. Legal gear in the remainder of the Northern District remained limited to no more than 1 set gillnet per permit. On Thursday, August 7, gear restrictions imposed by the NDSMP and the SSSAP expired and a full complement of gear became legal for the remainder of the season. For the 2014 season, 37,687 sockeye salmon were harvested by 79 permit holders in the Northern District set gillnet fishery (Appendices A4 and A8). This harvest

was approximately 28% greater than the previous 10-year average annual harvest of 27,233 sockeye salmon.

Upper Subdistrict Set Gillnet and Central District Drift Gillnet

At the 2014 BOF meeting, significant changes to management of the Upper Subdistrict set gillnet fishery during years of low Kenai River Chinook salmon abundance were adopted. Management of this fishery is now guided not only by 5 AAC 21.365. *Kasilof River Salmon Management Plan* (KRSMP) and 5 AAC 21.360. *Kenai River Late-Run Sockeye Salmon Management Plan* (KRLSSMP), but also by 5 AAC 21.359. *Kenai River Late-Run King Salmon Management Plan* (KRLKSMP). In addition, the BOF also made fairly substantive changes to 5 AAC 21.353. *Central District Drift Gillnet Fishery Management Plan* (CDDGFMP) in an attempt to pass more coho salmon to northern Cook Inlet streams.

There are 2 principal restrictions to the set gillnet fishery within the KRSMP and KRLSSMP: 1) a limit on the number of additional hours that may be fished each week beyond the 2 regular 12-hour fishing periods, and 2) implementation of closed fishing times (windows) each week. By regulation, a week is defined as a period of time beginning at 12:01 AM Sunday and ending at 12:00 midnight the following Saturday (5 AAC 21.360 (i)). Weekly hour limitations vary according to the time of year and the size of the sockeye salmon run returning to the Kenai River. Restrictions on the fisheries must be balanced with meeting escapement goals, as provided for in 5 AAC 21.363. *Upper Cook Inlet Salmon Management Plan*, which states, that while in most circumstances, ADF&G should adhere to the management plans in the chapter, no provision within a specific management plan was intended to limit the commissioner's use of EO authority, under AS 16.06.060, to achieve established escapement goals in the management plans.

The Kasilof Section set gillnet fishery is open from June 25 through August 15. However, if 50,000 sockeye salmon are in the Kasilof River before June 25, the season may begin as early as June 20. The Kenai and East Forelands Sections are open from July 8 through August 15. Beginning July 8, the Kasilof Section is managed in concert with the Kenai and East Forelands sections per the KRLSSMP. Drifting in UCI opens on the third Monday in June, or June 19, whichever is later.

The regular season for drift gillnetting began on Thursday, June 19, as provided for in the CDDGFMP. The harvest of 6,205 sockeye salmon from 100 boats was typical for early-season drift catches (Appendix A4). For the week of June 22 to 28, the drift gillnet fleet fished 2 regular periods and one 9-hour period in the regular Kasilof Section, harvesting a total of 34,172 sockeye salmon. The number of vessels participating in the fishery in June was above average, with 168 boats making deliveries on June 23 and 242 boats on June 26. In part, the above average number of vessels fishing in June was a response to very strong Kasilof River sockeye salmon escapement. The Kasilof River sockeye salmon sonar enumeration project began on June 15, and by June 19, more than 52,000 sockeye salmon were estimated to have passed the sonar. While the set gillnet fishery in the Kasilof Section was not scheduled to open for the 2014 season until June 26, the conditions for opening the Kasilof Section early, based on the 50,000-fish trigger, were met on June 19. However, similar to 2013, concerns over a weak run of Kenai River early-run Chinook salmon delayed this early setnet opening by a few days. A 9-hour period was opened to setnetters in the Kasilof Section on June 23, with approximately 22,500 sockeye salmon being harvested. This fishery was open for a regular 12-hour period on Thursday, June 26, and then again for 9 hours on Saturday, June 28. For the week, approximately 81,000 sockeye salmon were harvested in

the Kasilof Section setnet fishery. Through June 28, more than 136,000 sockeye salmon had been enumerated at the Kasilof River sonar site, which was the most fish ever estimated through this date since passage estimates began in the late 1970s. Moreover, this estimate was approximately 154% greater than the average cumulative passage for this date (Appendix A2). The total commercial sockeye salmon harvest through June 28 by both the set and drift gillnet fisheries was 121,261 fish (Appendix A4).

For the management week of June 29 to July 5, the drift gillnet fleet fished the regularly scheduled 12-hour districtwide fishing periods on June 30 and July 3, with a 2-hour extension on June 30 and a 3-hour extension on July 3, both in the regular Kasilof Section. Drifting was also opened for a 9-hour fishing period in the regular Kasilof Section on Saturday, July 5 (Figure 8). The Kasilof Section set gillnet fishery was opened for the same schedule during the week as the drift gillnet fishery. Beginning on July 1, management of the set gillnet fishery now fell within the new provisions of the KRLKSMP, as the Kenai River late-run Chinook salmon sport fishery began the season on July 1 under a no-bait restriction. The restriction to the sport fishery invoked a “paired” restriction that required the Upper Subdistrict set gillnet fishery to be open for no more than 36 hours per week, with a 36-hour continuous closure per week beginning between 9:00 PM on Thursday and 7:00 AM on Friday. The newly modified KRLSSMP also provided ADF&G with the authority to reduce gear in the set gillnet fishery, if needed, as explained in the Regulatory Changes section of this report. During the week, concerns about Chinook salmon passage in the Kenai River limited the hours the set gillnet fishery was open to as few hours as necessary to maximize harvest opportunity of Kasilof River sockeye salmon. The very strong run of sockeye salmon into the Kasilof River, combined with the weak run of Chinook salmon into the Kenai River, heightened the importance of decisions about when to fish the set gillnet fishery. For the week, the drift gillnet fishery harvested about 128,000 sockeye salmon, while the set gillnet fishery caught 85,000 fish; 37 hours of total fishing time was allowed in the set gillnet fishery (Table 4; Figure 9) during the week and the 36-hour “Friday” no fishing window was fulfilled. Sockeye salmon escapement into the Kasilof River through July 5 had reached 173,185 fish, which was the second highest escapement ever measured through that date. Typically, escapement into the Kasilof River through July 5 is about 31% complete, so an escapement of more than 170,000 fish on this date meant the upper end of the BEG of 340,000 fish would most likely be exceeded. The Kenai River sockeye salmon sonar project began enumeration activities on July 1; the total passage estimate through July 5 was 51,288 fish.

Table 4.–Upper Subdistrict set gillnet fishing hours and mandatory closures, 2014

Week	Kasilof section				Kenai and East Forelands sections			
	Hours in plan	Hours Used	Window hours in plan	Window hours observed	Hours in plan	Hours used	Window hours in plan	Window hours observed
Jun 22–28	48	30	36	36	Closed	Closed	Closed	Closed
June 29–Jul 5 ^a	84	37	36	36	Closed	Closed	Closed	Closed
Jul 6–12	36	30	36	36	36	12	36	36
Jul 13–19	36	21	36	36	36	12	36	36
Jul 20–26	12	12	36	36	12	12	36	36
Jul 27–31	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Aug 1–Aug 15	36	24	0	0	36	36	0	0
Total	252	154	180	180	120	72	108	108

^a Available hours included those provided by the KRSMP and the KRLKSMP.

During the management week of July 6 to July 12, the drift fishery was open 5 different days. On Monday, July 7, drifting was open for 1 hour in the regular Kasilof Section, followed by a 12-hour districtwide fishing period. On July 9 and July 11, the drift fleet was opened for 12 hours each day in the Expanded Kenai and Expanded Kasilof sections. The regular fishing period on Thursday, July 10, was restricted to Drift Area 1 and the Expanded Kenai/Kasilof sections per the CDDGFMP. In addition, the drift gillnet management plan provided for an optional fishing period between July 9 and July 15 in Drift Area 1 and Expanded Kenai/Kasilof sections. This extra fishing period was utilized on Saturday, July 12, in order to harvest additional Kenai and Kasilof sockeye salmon. During the management week, the set gillnet fishery operated entirely under the provisions of the KRLKSMP, which limited the fishery to no more than 36 hours of fishing time for the week, as the Kenai River inriver run of Chinook salmon was projected to be less than 22,500 fish, and the sport fishery was still restricted to no bait. The Kasilof Section set gillnet fishery was open for a 9-hour fishing period on Monday, July 7. The first fishing period of the year for setnetting in the Kenai and East Foreland sections occurred on Wednesday, July 9, when a 12-hour fishing period was allowed in the entire Upper Subdistrict. On Saturday, July 12, the Kasilof Section was opened for 9 hours, but was restricted to within 1 half-mile of shore. This action was taken to target harvest on Kasilof River sockeye salmon stocks, while reducing the harvest of Kenai River late-run Chinook salmon. During the week, the drift gillnet fishery harvested approximately 425,000 sockeye salmon, while the setnet fishery harvested an additional 90,000 fish. Sockeye salmon passage in the Kenai River through July 12 was estimated to be approximately 208,000 fish, while the Kasilof River passage estimate now stood at 237,000 fish, which was the highest passage estimate ever measured through that date.

The week of July 13 to 19 played out much the same as the previous week, specifically, strong sockeye salmon passage into the Kasilof River and weak passage of Chinook salmon into the Kenai River. During the week, the drift fleet fished on 6 different days. The drift periods on Monday, July 14, and Thursday, July 17, were both restricted to Drift Area 1 and the Expanded Kenai/Kasilof sections per the CDDGFMP. The other 4 drift fishing days were opened in the Expanded Kenai/Kasilof sections on July 13 and July 15, and in the Expanded Kenai/Kasilof sections and the newly formed Anchor Point Section (Figure 4) on July 18 and July 19. Setnetters fished a very restrictive schedule during the week due to lagging Chinook salmon passage in the Kenai River. On Monday, July 15, the Kasilof Section only was opened for 9 hours, but held to within one half-mile of shore. The entire Upper Subdistrict was open for a 12-hour period on Thursday, July 17. For the July 17 fishing period, setnet gear was restricted to either 1) 3 set gillnets that were each not more than 35 fathoms in length and up to 29 meshes in depth, or 2) 2 set gillnets that were each not more than 35 fathoms in length and up to 45 meshes in depth. During the week, drifters harvested nearly 599,000 sockeye salmon, while setnetters harvested about 251,000 fish. The failure of Chinook salmon passage to improve during the week resulted in further restrictions in the Kenai River sport fishery, specifically, on Saturday, July 19, the sport fishery was restricted to catch and release fishing only. Therefore, to slow down the strong sockeye salmon escapement that continued in the Kasilof River, the Kasilof River Special Harvest Area (KRSHA) was opened to drift and set gillnetting beginning on Wednesday, July 16. For the first time since this area has been fished, the boundary between the set and drift fishery was defined by a series of waypoints (see EO No. 19 for a detailed description). In addition, the BOF expanded the area where setnetting could occur out to 1,200 feet from the mean high tide mark. The KRSHA was opened for parts or all of each day from July 16 to July 19. Of the total weekly harvest for both gear types in the KRSHA, approximately

69,000 sockeye and 173 Chinook salmon, or more than 90% of the harvest, came from the setnet fishery. During the week, another 85,000 sockeye salmon were estimated to have passed the Kasilof River sonar counter, bringing the season total through July 19 to 321,923 fish, which was the third largest passage ever measured through that date. This put the passage estimate in the Kasilof River within about 18,000 fish of the upper end of the BEG for this system, with approximately 35% of the run, on average, yet to come. In the Kenai River, sockeye salmon passage had reached 396,000 fish, a figure that projected a final passage near the upper end of the inriver goal for the expected total run size.

Because the projected total run of Kenai River Chinook salmon continued to be less than 22,500 fish and the Kenai River sport fishery was restricted to catch and release fishing, the Upper Subdistrict set gillnet fishery “paired” restriction meant this fishery was limited to no more than 12 hours of fishing time for the week of July 20 to 26. Similar to the previous 2 weeks, additional fishing time was granted to the drift gillnet fleet to harvest Kenai and Kasilof River sockeye salmon. During the week, drifting was open for 6 different days in the Expanded Kenai/Kasilof/Anchor Point sections and 1 day (July 21) in Drift Area 1 and the Expanded Kenai/Kasilof sections. Outside of the KRSHA, the set gillnet fishery was open only 1 day during the week, that being for 12 hours on Wednesday, July 23. For the week, drifters harvested approximately 241,000 sockeye salmon, while setnetters harvested about 45,000 fish. The KRSHA was open for part or all of each day of the management week, with a total weekly harvest by both drift and set gillnet of 100,081 sockeye and 262 Chinook salmon. Nearly all of this harvest was taken by setnetters. Continued poor passage of Kenai River Chinook salmon resulted in the closure of the sport fishery, beginning on Saturday, July 26, which in turn closed the Upper Subdistrict set gillnet fishery, other than in the KRSHA. Sockeye salmon passage into the Kasilof River had exceeded the upper end of the BEG of 340,000 fish, with an estimated total passage through July 26 of 387,000 fish. In the Kenai River, the sockeye salmon passage estimate through July 26 had reached 676,000 fish, which projected a season final passage at the bottom end of the inriver goal range of 1.0–1.2 million fish.

With the Upper Subdistrict set gillnet fishery closed because of low Kenai River Chinook salmon passage, and with Kasilof River sockeye salmon escapement already in excess of the BEG, use of the KRSHA was warranted to reduce sockeye salmon escapement into the Kasilof River. Thus, the KRSHA was opened to drift and set gillnetting for 6 days during the week of July 27 to August 2. Drift gillnetting was also opened for 3 days during the week in the Expanded Kenai/Kasilof/Anchor Point sections, producing a total harvest from these 3 days of about 46,000 sockeye salmon. The drift period on Monday, July 28, could have been fished in Drift Area 1, but was held to the 3 corridors as the total estimated sockeye salmon passage into the Kenai River of approximately 698,000 through July 27 projected a final passage of less than 1.0 million fish. In addition, the Anchor Point test fishery did not indicate a large body of fish entering Cook Inlet prior to the July 27 fishing period. In the KRSHA, the weekly harvest was approximately 41,000 sockeye and 226 Chinook salmon, with setnetters taking 94% of the sockeye salmon and 92% of the Chinook salmon. August 2 was the last day the KRSHA was fished. In total, the KRSHA was fished for part or all of 17 days between July 16 and August 2, producing a cumulative harvest of nearly 210,000 sockeye salmon and 661 Chinook salmon. During the week, Chinook salmon passage into the Kenai River increased to the point where the final escapement projection exceeded 16,500 fish. This was enough fish to allow the set gillnet fishery to reopen, albeit for no more than 36 hours in August. On Saturday, August 2, the Upper Subdistrict set gillnet fishery was opened for a 12-hour fishing period, which produced a daily catch of approximately 18,000 sockeye

salmon. The total estimated Kasilof River sockeye salmon escapement through August 2 was more than 428,000 fish, or 88,000 fish above the upper end of the BEG. In the Kenai River, sockeye salmon passage increased during the week, reaching an estimated total passage through August 2 of 962,000 fish. Using inriver passage data from 1979 to 2013, sockeye salmon passage into the Kenai River was typically 86% complete through August 2, which meant a passage of 962,000 fish through this date, if run timing was average, would put the final passage within the inriver goal of 1.0–1.2 million fish.

The final management week of the year for Upper Subdistrict set gillnetting was August 3–9. Chinook salmon passage continued to project a final escapement in excess of 16,500 fish, so the set gillnet fishery was opened for 2 days, given only 24 hours of fishing time was available for the remainder of the season. A 12-hour opening was allowed on Monday, August 4, as well as a 12-hour period on Wednesday, August 6. The fishing period on August 6 was only opened in the Kenai and East Foreland sections because the newly modified one-percent rule closed the Kasilof Section set gillnet fishery after the August 4 period. In the drift gillnet fishery, the entire Central District was opened for the 12-hour regular periods on Monday, August 4, and Thursday, August 7. At the 2014 BOF meeting, a new one-percent rule had been adopted for the drift fishery that stated from August 1 to 15, if the drift fishery caught less than 1% of the season total sockeye salmon harvest for 2 consecutive fishing periods, the drift fishery was to be restricted to Drift Areas 3 and 4. Because drift sockeye salmon catches were less than 1% of the season total on both August 4 and 7, EO No. 51 was issued, restricting the drift gillnet regular periods on August 11 and 15 to Drift Areas 3 and 4. Sockeye salmon catches had diminished in both the set and drift fisheries, with total weekly harvests by setnetters totaling approximately 36,500 fish, while drifters caught about 15,000 fish.

For the 2014 season, approximately 724,000 sockeye salmon were harvested by the Upper Subdistrict set gillnet fishery, with nearly 200,000 of that total coming from the KRSHA. The drift gillnet sockeye salmon harvest through August 9 was approximately 1.5 million fish. The total sockeye salmon harvest after August 9 by the drift fleet was only 758 fish.

Sockeye salmon escapement monitoring in the Kasilof River continued through August 7, with a final sonar estimate of 439,977 fish. This estimate was approximately 100,000 fish above the upper end of the BEG for this system. In the Kenai River, large numbers of pink salmon passing by the river mile (RM) 19 sonar project caused significant challenges to daily apportionment of DIDSON measured fish passage. Fish wheel catches are used to apportion the total sonar count to species when the proportion of non-sockeye salmon species is greater than 5% for 3 consecutive days and is judged to be an increasing trend. Applying this criterion, all sonar counts were apportioned to sockeye salmon prior to August 1. Beginning on August 1, however, fish wheel and gillnet catches were used to apportion the total sonar count to species. From August 1 to 14, a total of 1,327,308 salmon were estimated to pass the sonar site, with 632,029 of this total estimated to be sockeye salmon and 660,564 estimated to be pink salmon. The sonar project was terminated on August 14 because the daily sockeye salmon passage estimates were less than 1% of the total sockeye salmon passage for 3 consecutive days. The final sockeye salmon estimate of passage, after apportionment of sonar counts to non-sockeye salmon species, was 1,524,707 fish. This was approximately 325,000 above the upper end of the inriver goal, but after harvest above the sonar is accounted for, it is likely the spawning escapement will fall within the SEG range of 700,000–1,200,000 fish. Large numbers of pink salmon in the lower Kenai River also presented challenges to sonar estimates of daily Chinook salmon passage. This project was terminated on August 11 with a final

2014 passage estimate of 16,671 fish. After accounting for inriver harvest above the sonar site, the final estimate of escapement was approximately 16,000 fish, or about 1,000 fish above the lower end of the SEG of 15,000 Chinook salmon.

By management plan, the drift fleet is restricted to Drift Gillnet Areas 3 and 4 for the remainder of the season after August 15 (Figure 5). Chinitna Bay may open to drift gillnetting by emergency order, which it did in 2014 on Tuesdays and Fridays from 7:00 AM until 7:00 PM, beginning on Friday, August 29, 2014 (EO No. 53). For the 2014 season, the drift gillnet fishery harvested 1,500,676 sockeye salmon in all of UCI (Appendix A4).

Kalgin Island Subdistrict

The estimated sockeye salmon harvest in the Kalgin Island Subdistrict in 2014 was 41,059 fish, with roughly 8,600 fish, or 21%, being taken on the west side of the island (Statistical Area 246-10) during the Big River sockeye salmon fishery, which occurs from June 1 to June 24 (Appendix A4). The 2014 total catch was the lowest harvest in the past 10 years and 36% less than the average annual harvest of approximately 64,000 fish from this subdistrict during that time frame. A remote video system was used to estimate sockeye salmon escapement into Packers Lake. Technical issues prevented complete counts in recent years, but in 2014, the video camera was operational from June 16 through September 8, producing an estimated escapement of 19,242 sockeye salmon. The SEG for Packers Lake sockeye salmon is 15,000–30,000 fish. Based on these data, 1 additional opening beyond the Monday and Thursday regular periods was provided in the Kalgin Island Subdistrict in 2014, on Wednesday, August 13. However, high winds prevented many fishermen from operating their gear that day, and only 477 sockeye salmon were caught during the extra period, all from the west side of the island.

COHO SALMON

The 2014 UCI commercial coho salmon harvest of 137,200 fish was approximately 27% less than the recent 10-year (2004–2013) average annual harvest of approximately 189,000 fish and approximately 54% less than the 1966–2013 average annual harvest of 297,000 coho salmon (Appendix B3). Coho salmon harvests were reduced by restrictions in the Upper Subdistrict set gillnet fishery and by modifications made to the CDDGFMP at the 2014 BOF meeting.

Drift gillnetting was restricted to regular 12-hour fishing periods in Drift Areas 3 and 4 only beginning on Monday, August 11. Chinitna Bay was opened to drifting on Tuesdays and Fridays beginning on Friday, August 29. The estimated coho salmon harvest by drift gillnetters was approximately 12,500 fish (Appendix A5). The total coho salmon harvest in the UCI drift gillnet fishery for 2014 was 76,885 fish, which was 32% less than the 2004–2013 average of 113,362 fish (Appendix B3).

The exvessel value of coho salmon from the 2014 UCI commercial fishery was \$777,000 or 2.2% of the total exvessel value (Appendix B7). The average price paid for coho salmon was estimated at \$0.90/lb (Appendix B11), which was the fourth highest price since 1970. Due to a significant increase in the price paid for coho salmon in August, it is possible the exvessel value was even higher than what was estimated here.

PINK SALMON

Pink salmon runs in UCI are even-year dominant, with odd-year average annual harvests typically less than one-sixth of even-year harvests (Appendices A6 and B4). The 2014 UCI

commercial pink salmon harvest of 642,754 fish was 78% greater than the average annual harvest of nearly 361,000 fish from the previous 10 years of even-year harvests. Interestingly, the 2014 pink salmon harvest would have been even larger had the Upper Subdistrict set gillnet fishery fished a more regular schedule. While pink salmon escapements are not specifically monitored in UCI, based on commercial harvest data, the 2014 run appears to have been very strong and very early in run timing. Based on an average price of \$0.25/lb, the estimated exvessel value for the 2014 pink salmon harvest was \$588,000, or 1.7% of the total exvessel value

CHUM SALMON

A total of 116,083 chum salmon were harvested by UCI commercial fishermen in 2014, which was 8% less than the previous 10-year average annual harvest of 126,000 fish (Appendix B5). Assessing chum salmon stocks based only on recent harvest trends is problematic. For example, the drift gillnet fleet is the primary harvester of chum salmon, but drift gillnet fishing time in the Central District varies greatly from year to year. Restrictions to the drift gillnet fleet are implemented primarily to conserve northern bound sockeye and coho salmon, but these restrictions also result in harvest reductions of chum salmon. In 2014, the drift fleet was often restricted to fishing in the Expanded Kenai and Expanded Kasilof sections, which are not productive waters for harvesting chum salmon. The estimated chum salmon harvest in the Expanded Corridors during 2014 was only 24,828 fish (Appendix A7). Chinitna Bay was opened by EO (No. 53) to set and drift gillnetting for 12-hour fishing periods on Tuesdays and Fridays, beginning on Friday, August 29, after it was determined that the chum salmon run was nearly complete. Only 65 chum salmon were harvested by drift and set gillnets in Chinitna Bay after August 29 (Appendix A7).

The 2014 exvessel value for chum salmon was \$686,954, or 2.0% of the overall exvessel value of the 2014 fishery (Appendix B7). The average price paid for chum salmon in 2014 was estimated to be \$0.80/lb (Appendix B11).

PRICE, AVERAGE WEIGHT, AND PARTICIPATION

The estimated average price per pound paid to UCI commercial fishermen for their harvest in 2014 was similar to prices paid in 2013 (Appendix B11). The estimate of \$2.25/lb for sockeye salmon was the same as 2013 and represents the second highest price ever paid. Calculating the average price for what fishermen receive for their harvest is a difficult task (Shields and Dupuis 2013). Average prices reported here are generated from inseason grounds prices and do not reflect any postseason adjustments. It is unknown whether this occurred to any significant degree for fish harvested in 2014.

The average weight by species calculated from the 2014 UCI commercial harvest was very comparable to historical averages, other than for Chinook salmon (Appendices A14 and B12). The 15.8 pound average weight of Chinook salmon from all commercial fisheries in 2014 was 38% less than the 1970–2013 average of 25.2 pounds and was the second smallest average weight since 1970 (only the 2013 average of 13.9 lb per fish was smaller). Even when compared to the most recent 10-year (2004–2013) average weight of 20.2 lb for commercially harvested Chinook salmon, the 2014 average was 22% smaller. The explanation for small average weight for Chinook salmon in 2014 can largely be attributed to the age of the fish in the harvest. From 2001 to 2013, the average annual commercial harvest of Chinook salmon taken in the Upper

Subdistrict set gillnet fishery of fish that had spent 2 years or less in salt water was 44%, which is twice the 1987–2000 annual average of 22% (Figure 10; Appendix A15). In 2014, the proportion of younger aged Chinook salmon was higher than the historical average, with approximately 50% of the Upper Subdistrict set gillnet harvest comprised of fish that had spent 2 years or less in salt water. The 2014 harvest was comprised of nearly 18% one-ocean jacks, which was significantly greater than the historical average of about 7%. This unusually high proportion of younger, smaller fish in the Upper Subdistrict set gillnet harvest helps to explain the lower than average weight of commercially harvested Chinook salmon in UCI in 2014.

The Commercial Fisheries Entry Commission (CFEC) reported that 569 active drift gillnet permits were issued in 2014, with 415 (73%) issued to Alaskan residents (Appendix B13). In the setnet fishery, CFEC reported that 735 permits were issued, with 624 (85%) issued to Alaskan residents. In 2014, 496 drift gillnet permit holders, as well as 496 set gillnet permit holders, reported fishing in UCI (Appendix A8). In the drift fishery, 65 vessels and 78 different permit holders reported harvest as part of a dual-permit operation. For detailed information about dual-permit fishing operations in the Cook Inlet drift gillnet fishery, please see the CFEC report *Dual-permit fishing operations in the Cook Inlet Salmon Drift Gillnet Fishery* (Farrington et al. 2014). A total of 18 shore-based processors purchased UCI fishery products in 2014, as well as 8 direct marketing vessels, 1 catcher-exporter, 1 buyer-exporter, and 29 catcher-sellers. A catcher-seller is defined in 5 AAC 39.130(k) as a “commercial fisherman who sells or attempts to sell unprocessed fish that were legally taken by the catcher-seller.” These fish may be sold 1) to the general public for use for noncommercial purposes; 2) for use as bait for commercial or noncommercial purposes; 3) to restaurants, grocery stores, and established fish markets; or 4) by shipping the fish to a licensed buyer, processor, or exporter within the state.

Direct marketing means selling a product directly to a user at a higher point on the distribution chain than the primary processor. For more information, please visit <http://www.adfg.alaska.gov/index.cfm?adfg=fishlicense.marketers>. A list of the major fishery processors that purchased salmon in UCI in 2014 can be found in Appendix A16.

SALMON ENHANCEMENT

Salmon enhancement through hatchery stocking has been a part of UCI salmon production since the early 1970s. Currently, there is a single private hatchery that is fully operational in UCI, the Trail Lakes facility operated by CIAA. Trail Lakes hatchery is located in the upper Kenai River drainage near Moose Pass. This hatchery was originally built and operated by ADF&G’s Fisheries Rehabilitation and Enhancement Division, but was subsequently leased to CIAA in 1990, as State operating budgets declined. Trail Lakes hatchery has functioned primarily to produce sockeye salmon, with minor production of coho and Chinook salmon. Most of the production from this facility benefits Lower Cook Inlet fishermen.

The only lake in UCI currently stocked with sockeye salmon fry is Hidden Lake, which is located on the Kenai Peninsula. Production from this enhancement program contributes to the UCI commercial, personal use, educational, and recreational fisheries. In 2014, CIAA released approximately 1,540,000 unfed sockeye salmon fry (0.08 g) into Hidden Lake (<http://www.ciaa.net.org>). These fry were otolith-marked, which allowed for identification and enumeration of hatchery stocks when the smolt emigrated to sea. From May 19 to July 1, 2014, CIAA enumerated approximately 273,000 sockeye salmon smolt emigrating Hidden Lake, of which approximately 76% were estimated to be of hatchery origin, with 97% of the emigrants

being age-1 smolt (Wendy Gist, Commercial Fisheries Biologist, ADF&G, Soldotna, Alaska; personal communication). Adult salmon are also sampled and examined for hatchery otolith marks when they swim through the weir at Hidden Creek. In 2014, CIAA enumerated approximately 21,800 adult sockeye salmon escaping into Hidden Lake, of which 72% were estimated to be of hatchery origin.

From 1975 to 2008, a sockeye salmon enhancement project was conducted at Big Lake, located in the Matanuska-Susitna Valley, approximately 15 miles west of Wasilla (Figure 1). AFD&G directed the stocking program from 1975 through 1992; beginning in 1993, CIAA took over the program and was responsible for gamete collection, incubation, and release activities. As a result of poor fry survival in Big Lake, CIAA ceased their involvement in salmon enhancement activities there after the 2008 season (see the stock status section of this report for further details on Big Lake sockeye salmon). Because the fry/smolt stocking program was terminated, CIAA also ceased the smolt enumeration project at Fish Creek, the stream that runs out of Big Lake. After CIAA terminated their involvement in the smolt enumeration project, ADF&G was able to secure funding to take the project over. In 2014, approximately 279,385 sockeye salmon smolt were estimated to have emigrated from Big Lake (Table 5). CIAA conducts other activities that benefit wild salmon production, such as trapping and netting of northern pike *Esox lucius*, removal of beaver dams, installation and monitoring of flow control structures, and other seasonal barrier modifications.

Table 5.—Production of sockeye salmon in Big Lake, 1997–2014.

Year	Total run	Weir	Spawners	Spring fry release	Fall fry release	Smolt release	Smolt emigration	
							Age-1	Age-2
1997	131,814	54,656	48,513	4,018,000				
1998	45,622	22,859	18,789	5,000,000				
1999	45,714	26,749	25,199		197,000			
2000	37,635	19,533	16,704	846,000				
2001	70,013	43,486	39,093					
2002	133,640	90,483	86,181	4,316,000			44,467	4,398
2003	149,586	91,743	86,858	3,589,000			114,654	2,340
2004	42,160	22,157	20,065	5,000,000			230,689	25,632
2005	21,967	14,215	12,140	1,742,300			128,198	22,623
2006	36,567	32,562	26,712	444,200	426,000		222,028	19,307
2007	48,277	27,948	23,845	3,812,400	702,500	315,700	278,403	30,934
2008	26,872	19,339	19,313	3,610,000		433,000	593,802	37,902
2009	121,965	83,477	74,245					
2010	209,000	126,826	126,333					
2011	119,528	66,183	66,591				269,020	23,722
2012	32,460	18,813	18,713				177,875	11,854
2013	25,082	18,912	18,315				422,258	8,241
2014	65,296	43,915	43,824				271,557	7,828

STOCK STATUS AND OUTLOOK

Overall, the status of UCI monitored salmon stocks is positive; however, some stocks warrant additional review. These stocks include Susitna River and Fish Creek (Big Lake) sockeye salmon and 7 Northern District Chinook salmon stocks.

Sockeye Salmon

Table 6.—Upper Cook Inlet sockeye salmon run, 2014.

System	Commercial harvest	Escapement	Other harvest	Total
Crescent River	33,760	39,156	5	72,921
Fish Creek	15,035	43,824	6,437	65,296
Kasilof River	570,792	438,023	119,690	1,128,505
Kenai River	1,393,855	1,151,629	762,991	3,308,475
Susitna River	66,350	126,922	7,138	200,410
All others	211,335	318,348	22,067	551,750
Total	2,291,127	2,117,902	918,328	5,327,357

Susitna River

Since 1976, Susitna River sockeye salmon total annual run estimates have ranged from 147,000 to 773,000 fish (Fair et al. 2009). As a result of data revealing that sockeye salmon were being undercounted at the Yentna River sockeye salmon sonar site (Shields and Dupuis 2013), ADF&G initiated an out-of-cycle Susitna River sockeye salmon escapement goal review in late 2008 (Fair et al. 2009). This analysis concluded that the existing escapement goal for the Susitna River drainage was inappropriate. The report from these analyses recommended the Yentna River sockeye salmon SEG be eliminated and replaced with 3 lake SEGs. The 2007 UCI annual management report (Shields 2007) provided additional details about the declining sockeye salmon runs to the Susitna River drainage over the past decade.

The sockeye salmon total run forecast for the Susitna River in 2014 was only 276,000 fish (Table 3), which is 31% less than the 9-year average run of 402,000 fish. This forecast was derived using mean return per spawner by age class for brood years 2006–2010 and mark–recapture estimates of spawner abundance in 2009 through 2011. Sonar and age composition catch allocation models were not used because of the undercounting bias summarized above. This was the third year this forecast method has been used, so mean absolute percent error (MAPE) between the forecast and actual runs is not available. The 9-year average run (2006–2014) was calculated using mark–recapture estimates of inriver run and genetic estimates of commercial harvests.

The 2014 sockeye salmon actual run to the Susitna River was estimated at 200,000 fish (using the escapement and the mean harvest rate estimated from genetic stock composition of the commercial harvest in 2007–2010; Table 6). The 2014 run was about 24% below preseason expectations. The sockeye salmon escapement estimate at Chelatna Lake was 26,287 fish (escapement goal of 20,000–65,000); 22,229 fish at Judd Lake (escapement goal is 25,000–55,000); and 12,430 sockeye salmon at Larson Lake (escapement goal is 15,000–30,000; Table 1).

In 2008, Susitna River sockeye salmon were first found to be a stock of yield concern; in 2013, ADF&G recommended that Susitna River sockeye salmon remain classified as a stock of yield concern because 1) 5 of the lake escapement estimates (out of 15 total) were below the minimum

objectives and 2) harvests in Central and Northern districts from 2008 through 2013 were generally less than long-term averages. As a result of the initial classification of stock of concern in 2008, an action plan was developed by ADF&G and the BOF to identify conservative management measures in both the sport and commercial fisheries targeting Susitna River sockeye salmon stocks. These restrictions have likely reduced the harvest of Susitna sockeye salmon. However, even with the reduction in harvest, Susitna sockeye salmon remain a stock of concern.

A number of other factors or activities have been identified that are likely to negatively impact the production of salmonids in the Matanuska-Susitna (Mat-Su) basin (Hughes¹). Potential impacts can be characterized in 2 different categories: natural and anthropogenic. Natural threats include natural loss or alteration of wetland and riparian habitats, alteration in water quality and quantity, and beaver dams blocking fish migration. Anthropogenic impacts include urbanization that increases loss or alteration of wetlands and riparian habitats and decreases water quantity and quality; culverts that block or impair fish passage; ATV impacts to spawning habitats, stream channels, wetlands and riparian habitats; and introduction of invasive northern pike.

In summary, Susitna River sockeye salmon stocks warrant close monitoring. Within the Susitna River drainage, sockeye salmon production from Judd, Chelatna, and Larson lakes appears to be stable. However, there are other lakes within the drainage that are producing fewer adults than they once did and some are now void of sockeye salmon altogether. Other lakes experiencing marked reductions in sockeye salmon production in the Susitna River drainage include Whiskey, Hewett, Shell, and Red Shirt lakes. Continued research is needed to better understand sockeye salmon abundance and distribution within the Susitna River drainage.

Fish Creek

Sockeye salmon runs to Fish Creek, which drains Big Lake and flows into Knik Arm, have been highly variable. There have been inconsistencies in achieving the escapement goal for this system (Appendix B10) and in total run size. Since 1998 (17 years), escapements have been below the goal 8 years, within the goal range 5 years, and exceeded the goal in 4 years. Additionally, from 1980 to 1996, the average total run was 212,000 fish; from 1997 to 2001 and 2004 to 2008 (8 total years), the average total run fell to 42,000 fish (Tobias and Willette 2004), while the total sockeye salmon run to Fish Creek in 1997, 2002–2003, and 2009–2013 (7 total years) averaged nearly 115,000 fish. The 2014 total run forecast for Fish Creek sockeye salmon was 79,000 fish (Table 3; Appendix C1); the actual estimated total run was approximately 65,000 fish (Tables 5 and 6). The escapement goal at Fish Creek is an SEG of 20,000–70,000 fish; the final escapement in 2014 was estimated at approximately 44,000 fish (Table 1). Using an age-composition allocation method of allocating the commercial harvest to stock of origin, the commercial fishery harvest rate of Fish Creek sockeye salmon averages approximately 34% per year. In 2014, approximately 15,000 Fish Creek sockeye salmon were estimated to have been harvested commercially, which equates to a harvest rate of 23% for this stock.

A decline in sockeye salmon numbers in the late 1990s led to a technical review assessing Fish Creek sockeye salmon production. This review was completed prior to the 2002 BOF meeting (Litchfield and Willette 2001). The report proposed 2 likely causes for the decline in sockeye salmon production: 1) degradation of spawning habitat as a result of questionable hatchery

¹ Hughes, D. W. *Unpublished*. A comprehensive inventory of impaired anadromous fish habitats in the Matanuska-Susitna basin, with recommendations for restoration, 2013. Alaska Department of Fish and Game, Division of Habitat Research and Restoration. http://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2013-2014/uci/anadromous_fish.pdf (Accessed: January 2014).

practices; and 2) placement of a coffer dam at the outlet of the lake, which prevented many wild fry from being able to recruit into the lake, as well as causing a productive spawning area at the lake outlet to be filled in with silt and mud. At the 2002 BOF meeting, Fish Creek sockeye salmon were found to be a stock of yield concern, and ADF&G proposed additional studies to more clearly define limitations to sockeye salmon production in this system. As a result of identifying the coffer dam as a barrier to upstream migration of juvenile sockeye salmon fry, modifications were made at the lake outlet that allowed fry to more easily recruit into Big Lake. It was expected that more adults would again utilize this productive spawning area. Fish hatchery culture methods and stocking procedures were also modified in the hope that these changes, combined with the modifications at the lake outlet, would improve sockeye salmon production in Big Lake. In response to improved runs, Fish Creek sockeye salmon were removed as a stock of yield concern at the 2005 BOF meeting.

CIAA historically stocked Big Lake with sockeye salmon fry, but fry-to-smolt survival was very poor (Dodson 2006). The number of smolt emigrating Big Lake from 2003 to 2008 ranged from 117,000 to 632,000 fish (<http://www.ciaa.net.org/>). In an attempt to try and isolate the mechanisms leading to poor juvenile survival, CIAA released fish at 3 different time intervals and juvenile life history stage: spring fry, fall fry, and spring smolt. However, the number of smolt emigrating Big Lake did not increase, even with the stocking of larger juveniles. As a result of the poor sockeye salmon smolt emigrations from Big Lake, CIAA ceased enhancement activities after the fry release in 2008. From 2002 to 2012, the average annual hatchery proportion of the run to Big Lake was 40%, ranging from 2% in 2002 to 73% in 2006 (Wendy Gist, Commercial Fisheries Biologist, ADF&G, Soldotna; personal communication).

2015 Sockeye Salmon Outlook

A run of 6.1 million sockeye salmon is forecasted to return to UCI in 2015, with a harvest by all user groups of 3.7 million fish (Appendix C2). The forecasted harvest in 2015 is equal to 20-year average annual harvest of 3.7 million fish by all user groups.

The run forecast for the Kenai River is approximately 3.6 million, which is 0.2 million less than the 20-year average run of 3.8 million. Age-1.3 salmon typically comprise about 57% of the Kenai River run. A sibling model based upon the return of age-1.2 salmon in 2014 (315,000; 411,000 20-year average) predicted a return of 1.8 million age-1.3 salmon. Age-2.3 salmon typically comprise about 18% of the Kenai River run. A sibling model based upon the return of age-2.2 salmon in 2014 (215,000; 254,000 20-year average) predicted a return of 404,000 age-2.3 salmon in 2015. The forecasted age-2.3 return is 46% greater than the 20-year average return for this age class (695,000). The predominant age classes in the 2015 run should be age 1.3 (52%), age 1.2 (11%), and age 2.3 (29%). The 10-year MAPE for the set of models used for the 2015 Kenai sockeye salmon run forecast was 19% (Appendix C2).

The Kasilof River sockeye salmon run forecast is 1,092,000 fish, which is 12% greater than the 20-year average of 953,000. Age-1.3 salmon typically comprise about 34% of the Kasilof River run. The forecast for age-1.3 salmon is 374,000, which is 17% greater than the 20-year average return (321,000) for this age class. A sibling model based upon the abundance of age-1.2 salmon in 2014 was used to forecast the return of age-1.3 salmon in 2015. Age-1.2 salmon typically comprise about 32% of the run. The forecast for age-1.2 salmon is 328,000, which is 6% greater than the 20-year average return (308,000) for this age class. The forecast for age-2.2 salmon is 250,000, which is 9% greater than the 20-year average return (230,000) for this age class. A sibling model based upon the abundance of age-2.1 salmon in 2014 was used to forecast the

return of age-2.2 salmon in 2015. The predominant age classes in the 2015 run should be age 1.2 (30%), age 1.3 (34%), and age 2.2 (23%). The 10-year MAPE for the set of models used for the 2015 Kasilof sockeye salmon run forecast was 19% (Appendix C2).

The Susitna River sockeye salmon run forecast is 276,000, which is 31% less than the 9-year average of 402,000. This forecast was derived using mean return per spawner by age class for brood years 2006–2010 and mark–recapture estimates of spawner abundance in 2009–2011. Sonar and age composition catch allocation models were not used, because mark–recapture studies have shown that the Yentna sonar project underestimated sockeye salmon escapement, causing estimates of adult returns to also be underestimated. This was the third year this forecast method has been used, so MAPE is not available. The 9-year average run (2006–2014) was calculated using mark–recapture estimates of inriver run and genetic estimates of commercial harvests (Appendix C2).

The sockeye salmon run forecast for Fish Creek is 61,000 fish, which is 38% less than the 20-year average of 98,000. Age-1.2 and -1.3 salmon typically comprise 87% of the Fish Creek run. A smolt model based upon the abundance of age-1 smolt emigrating from Fish Creek in 2013 (422,000; 419,000 14-year average) predicted a return of 46,000 age-1.2 salmon. A smolt model based upon the abundance of age-1 smolt in 2012 (178,000) predicted a return of 6,500 age-1.3 salmon in 2015. The age-1.2 forecast is 7% less than the 20-year average return (50,000) for this age class, while the age-1.3 forecast is 73% less than the 20-year average return (24,000) for this age class. The predominant age classes in the 2015 run should be age 1.2 (76%) and age 1.3 (11%; Appendix C2).

Pink Salmon

Pink salmon runs in UCI are even-year dominant, with odd-year average annual harvests about one-seventh of even-year harvests (Appendix B4). Pink salmon are generally harvested in significant quantities in UCI beginning in late July and early August. The 2014 UCI harvest of nearly 643,000 pink salmon was 88% greater than the 1996–2012 average even-year harvest of 342,000 fish (Table 7).

Table 7.—Upper Cook Inlet pink salmon commercial harvest and Deshka River escapement, 1996–2014.

Year	UCI pink salmon			
	Commercial harvest		Deshka River enumeration	
	Even year	Odd year	Even year	Odd year
1996	242,911		37,482	
1997		70,945		1,101
1998	551,737		541,946	
1999		16,176		766
2000	146,482		1,248,498	
2001		72,560		3,845
2002	446,960		946,255	
2003		48,789		9,214
2004	357,939		390,087	
2005		48,419		7,088
2006	404,111		83,454	
2007		147,020		3,954
2008	169,368		12,947	
2009		214,321		26,077
2010	292,706		9,328	
2011		34,123		4,489 ^a
2012	469,598		78,853	
2013		48,275		27,926
2014	642,754		78,111	

^a No counts from August 8 to August 14 due to high water.

Prior to 2009, a weir on the Deshka River enumerated the majority of the pink salmon run (Table 7). Although pink salmon are still counted there, the weir is now removed prior to the end of the pink salmon run. Additionally, there are no escapement goals in UCI for this species. Thus, the only data collected on pink salmon stocks are from commercial fisheries harvests, recreational fishing surveys, and some information collected at projects that are designed to enumerate other species (i.e., the Deshka River weir). In general, pink salmon stocks in UCI have maintained their even-year dominance; however, the 2007 and 2009 harvests were above average for odd-year runs. Although pink salmon enumeration data are limited, ADF&G did conduct a marine tagging project designed to estimate the total population size, escapement, and exploitation rates for coho, pink, and chum salmon returning to UCI in 2002 (Willette et al. 2003). This study estimated the harvest rate of pink salmon by the UCI commercial fishery to range between 1% and 12%, with a point estimate of 2%, indicating pink salmon are harvested at very low rates in UCI.

Chum Salmon

Chum salmon runs to UCI are concentrated predominately in the western and northern watersheds, with the most significant harvest coming from the Central District drift gillnet fleet. The 2014 UCI commercial chum salmon harvest of approximately 116,000 fish was 8% less than the 2004–2013 average annual harvest of 126,000 fish (Appendix B5). However, the 2014 harvest was approximately 73% less than the 1966–2013 average annual harvest of 436,000 fish (Appendix B5). An evaluation of chum salmon runs is made difficult because of a lack of information other than commercial harvest data. Chum salmon are no longer enumerated at either

the Deshka River or Little Susitna River weirs. They are captured in the Anchor Point OTF project, but this project was designed temporally and spatially to assess UCI sockeye salmon stocks. The only chum salmon escapement goal in all of UCI is an aerial survey SEG in Chinitna Bay (Clearwater Creek) set at 3,800–8,400 fish (Fair et al. 2007). This SEG has been met or exceeded every year from 2002 through 2013. As a result, drift gillnetting has been opened by EO in Chinitna Bay each of the past 8 years per 5 AAC 21.320(c)(1). Due to inclement weather in 2014, an aerial survey of streams draining into Chinitna Bay could not be conducted until late in August, well after the peak of the chum salmon run. During this survey, approximately 3,500 chum salmon were observed in Clearwater Creek and the Chinitna River, including spawned out fish.

While ADF&G lacks long-term quantitative chum salmon escapement information, escapements to streams throughout UCI have benefited by management actions or regulatory changes aimed principally at other species. These actions have included 1) significant reductions in the offshore drift gillnet and Northern District set gillnet fisheries to conserve Susitna River sockeye salmon; 2) adoption of the NDSMP (5 AAC 21.358), which states that its primary purpose is to minimize the harvest of coho salmon bound for the Northern District; 3) the lack of participation in the directed chum salmon fishery in Chinitna Bay; and 4) harvest avoidance by the drift fishery as a result of lower prices being paid for chum salmon than for sockeye salmon. Other than aerial counts in Chinitna Bay, most of the sporadic chum salmon data available to assess annual runs can be used to make general conclusions (i.e., the run was below average, average, or above average). It appears the 2014 chum salmon run was likely an average sized run. Based on the 2002 tagging study, which estimated the commercial fishing harvest rate on chum salmon at approximately 6%, and considering the escapement objective in Chinitna Bay has been consistently achieved, these limited data reveal no concerns for chum salmon stocks in UCI.

Coho Salmon

Commercial coho salmon harvests in UCI during the 1980s and early 1990s were much higher than the long-term average (Appendix B3). This can be attributed to good coho salmon production, but also due to additional fishing time on strong sockeye salmon runs to UCI. Recent coho salmon harvest data, however, may or may not be a true indication of run strength, largely due to regulatory changes that were made to reduce the commercial harvest rate on coho salmon. For example, coho salmon runs in 1997 and 1999 were viewed as mediocre to poor, prompting BOF actions in 1997, 1999, and 2000 that placed restrictions on sport and commercial fishermen in much of UCI. From 2000 to 2004, the commercial set gillnet fishery in the Upper Subdistrict was closed no later than August 7, and no more than 1 EO, not to exceed 24 hours in duration, was allowed during the month of August. These actions resulted in marked reductions in commercial coho salmon harvests. At the same time, however, coho salmon runs in 2000 and 2001 were much improved, with the 2002 run being exceptional; perhaps even a record run² (Table 8). Therefore, at the 2005 BOF meeting, restrictions on fishing in August in the Upper Subdistrict set gillnet fishery and Central District drift gillnet fishery were relaxed. Both fisheries' closing dates were changed to no later than August 10, with the set gillnet fishery to be managed under the same set of weekly guidelines in August that were applicable in July. In 2008, the BOF extended the Upper Subdistrict set gillnet and districtwide drift gillnet fishing seasons to no later than August 15. These changes

² Yanusz, R., J. Carlon, D. Bosch, and R. Clark. *Unpublished*. Stock status of coho salmon in Upper Cook Inlet, a report to the Alaska Board of Fisheries. Located at: Alaska Department of Fish and Game, Division of Sport Fish, 333 Raspberry Road, Anchorage.

were made largely in light of data revealing good coho salmon runs and low Kenai River coho salmon exploitation by commercial fishermen during this extended time period.

Northern District

The Division of Sport Fish has used coho salmon weir counts at the Little Susitna River as a surrogate of escapement for all Knik Arm coho salmon stocks since 2005. The SEG for this system was set in 2000 at 10,100–17,700 fish (Fair et al. 2007). The SEG was met or exceeded each year from 2000 to 2008 and 2013 to 2014. However, the SEG was not achieved from 2009 to 2012 (Table 8). It should be noted that the weir washed out early in 2006, but based on the inriver sport fishing performance, the 2006 coho salmon run in the Little Susitna River was categorized as “very early and very, very strong” and the SEG was likely achieved (Sam Ivey, Sport Fish Biologist, ADF&G, Palmer; personal communication). The weir also washed out early in 2005, which means the estimated passage of 16,839 fish was less than the actual escapement. In 2012, the Little Susitna River weir was moved downstream approximately 40 miles to its current location at RM 32.5. This provided managers with timelier inseason information of coho salmon passage.

In most years since 1969, ADF&G has enumerated coho salmon at a weir at Fish Creek (Fair et al. 2010). In 1994, an escapement goal of 2,700 (point goal) was established, which was changed in 2002 to an SEG of 1,200–4,400 (Bue and Hasbrouck³). However, this goal was dropped in 2005 (Hasbrouck and Edmundson 2007) because the weir was not operated during the entire coho salmon run. In 2009 and 2010, funding obtained by a grant from the U.S. Fish and Wildlife Service allowed the weir to be operated through the entire coho salmon run. At the 2011 BOF meeting, the previous SEG of 1,200–4,400 fish was reinstated. Since the goal was reinstated, it has been met or exceeded every year (Table 8).

While there are several regulatory management plans pertinent to the Susitna River that provide direction to ADF&G about management of coho salmon, there are no escapement goals or comprehensive sustained yield objectives for Susitna River drainage coho salmon. Sustained yield is thought to be provided for by basic bag limits and seasons in the sport fishery and inseason management of the commercial fishery⁴. In 2014, coho salmon runs in many Northern Cook Inlet watersheds, especially the Little Susitna River and Knik Arm streams, appear to have been well above average.

³ Bue, B. G., and J. J. Hasbrouck. *Unpublished*. Escapement goal review of salmon stocks of Upper Cook Inlet. Alaska Department of Fish and Game, Report to the Alaska Board of Fisheries, November 2001 (and February 2002). Located at: Alaska Department of Fish and Game, Division of Sport Fish, 333 Raspberry Road, Anchorage.

⁴ Lafferty, R., R. Massengill, T. Namtvedt, D. Bosch, and J. Hasbrouck. *Unpublished*. Stock status of coho salmon in Upper Cook Inlet, Alaska. Alaska Department of Fish and Game, Report to the Alaska Board of Fisheries, 2005. Located at: Alaska Department of Fish and Game, Division of Sport Fish, 333 Raspberry Road, Anchorage.

Table 8.–Coho salmon escapement and enumeration, 1996–2014.

Year	Cottonwood Creek	Fish Creek	L. Susitna River	Wasilla Creek	Deep Creek	OTF CPUE
1996			15,803			534
1997	936	2,578 ^a	9,894	670	2,017	362
1998	2,114	5,463	15,159	3,777	1,541	403
1999	478	1,766	3,017	1,587	2,267	294
2000	1,888	5,979	14,436	6,154	3,408	766
2001	3,525	10,047	30,587	6,784	3,747	838
2002	4,270	15,187	47,938	12,657	6,132	798
2003	791	2,142	10,877	2,962		368
2004	2,004	3,255 ^a	40,199			785
2005		3,836 ^a	16,839 ^b			367
2006		5,723 ^a	8,786 ^b			1,034
2007		9,618 ^a	17,573			482
2008		9,603 ^a	18,485			718
2009		8,666	9,523			283
2010		7,034	9,214			454
2011		1,428 ^a	4,826			264
2012		1,237	6,770			154
2013		7,593	13,583 ^b			494
2014		10,283	24,211			661

^a Represents a partial count, the weir was pulled before the coho salmon run was complete.

^b Weir washed out, count incomplete.

In summary, when coho salmon runs are viewed over a long period of time in Northern Cook Inlet, there are no significant concerns about the sustainability of these stocks. The Little Susitna River coho salmon escapement goal was first established in 1990, and since that time, there have been 20 years when a complete census of the escapement has been completed. Of those 20 years, the goal was achieved or exceeded 16 years (80%) and not achieved 4 years (20%). At Fish Creek, a coho salmon escapement goal was first adopted in 1994. From 1994 to 2001, it was a point goal of 2,700 fish. In 2002, the goal was changed to an SEG of 1,200–4,400 fish. The coho salmon escapement goal at Fish Creek has been achieved or exceeded 17 years out of the 20 years (85%) it has been in existence, including every year for the past 15 years. And finally, there is a coho salmon single foot-survey escapement goal at Jim Creek. From 1994 to 1999, it was a point goal of 830 fish. Since 2000, the goal was changed to an SEG of 400–700 fish. During the 20 years that a coho salmon goal has been in place at Jim Creek, it has been achieved or exceeded 11 times (55%).

Kenai River

From 1999 to 2004, the total run of Kenai River adult coho salmon was estimated annually by 1) population-specific harvest in marine commercial fisheries, 2) inriver sport and personal use harvest, and 3) spawning escapement (Carlson and Evans 2007; Massengill and Evans 2007). The sum of these 3 components provided the estimates of annual adult production, although no escapement goal exists for this system. Smolt enumeration studies were conducted in the Moose River, a Kenai River tributary that has been shown to be a very important rearing environment for

juvenile coho salmon, from 1992 to 2007 (Massengill and Carlon 2007). As a result of increasing sport and commercial harvest levels in the early 1990s, combined with a decreasing trend in Moose River smolt production from 1993 to 1997, the BOF implemented conservation measures at its 1997 and 2000 meetings to reduce sport and commercial harvest of Kenai River coho salmon. Since 1997, the drainagewide coho salmon smolt emigrations have stabilized. The 1999 record low adult escapement estimate of 7,364 fish produced a smolt emigration in 2001 that was only slightly below the historical average. Conversely, the record low smolt emigration in 1997 of 374,225 fish produced what was believed to be a very weak return of adults in 1998, although the total return strength for that year is unknown.

Since 2000, Kenai River adult coho salmon runs have been considered good to excellent. In response to an emergency petition from the Kenai-Soldotna Fish and Game Advisory Committee in 2004, the BOF extended the Kenai River sport fishing season for coho salmon from September 30 to October 31. This decision was based upon ADF&G data that projected an escapement of Kenai River coho salmon above the 1999–2003 average. In 2005, the BOF repealed the *Kenai River Coho Salmon Conservation Management Plan* (5 AAC 21.357) and extended the Kenai River coho salmon sport fishing season in regulation through October 31. This latter change was based on an expectation of low October fishing effort and recent (2000–2004) exploitation estimates, which indicated that Kenai River coho salmon returns were exploited at a rate deemed sustainable. Unfortunately, 2004 was the final year that mark–recapture abundance estimates were generated for Kenai River adult coho salmon. In 2008, the BOF extended the Upper Subdistrict set gillnet fishing season from a closing date of August 10 to no later than August 15, with the caveat that from August 11 to August 15, the fishery was to be open for regular periods only. The Central District drift gillnet fishery was also extended to August 15 with the same regular period restriction only from August 11 to August 15. This additional commercial fishing time was granted in response to reports the BOF received at its 2008 meeting showing that during the 6 years that the total annual run of Kenai River coho salmon was estimated, the Upper Subdistrict set gillnet fishery harvested between 0.3% to 6.0% of the run annually. Estimates were also provided to the BOF that showed the combined additional daily exploitation rate by both set and drift gillnet fisheries on Kenai River coho salmon stocks at this time in August was estimated to range between 0.78% to 1.43% for each additional day fished. The BOF has also adopted one-percent sockeye salmon rules in both the Upper Subdistrict set gillnet and Central District drift gillnet fisheries, that have further reduced Kenai River coho salmon harvest by these fisheries in August.

Beginning in 2005, fish wheel catch rate data provided a tool to index Kenai River coho salmon abundance into 1 of 3 general classes (low<50K; 50K<med<120K; high>120K) by utilizing inseason fish wheel catch rate data plotted into a regression of historical fish wheel catch rates to abundance estimates. The index level assigned to the 2005 and 2006 Kenai River adult coho salmon returns arriving at the fish wheel site (RM 28) was characterized as “medium,” while the 2007 run was characterized as “low;” however, the 2007 index may have been biased low as an unexpected drop in fish wheel efficiency for sockeye salmon was detected (Massengill⁵). This project was last active in 2007. Current regulations for Kenai River coho salmon are believed to be providing for sustainable harvest and the most recent inriver harvest estimates (2007–2009) were stable and near the historical average.

⁵ Massengill, R. L. *Unpublished*. Smolt abundance and summary statistics for Kenai River coho salmon, 2007. Located at: Alaska Department of Fish and Game, Division of Sport Fish, 333 Raspberry Road, Anchorage.

Chinook Salmon

Northern District

The Northern District has approximately 345 streams and rivers where Chinook salmon are present, and the estimated total annual run is between 100,000 and 200,000 fish (<http://www.adfg.alaska.gov/static-sf/Region2/pdfpubs/MatSuKingSalmon.pdf>). In response to the proposed Susitna-Watana hydroelectric project, efforts are underway to understand salmon abundance in the Susitna drainage. In 2013, the estimated Chinook salmon abundance in the Susitna River upstream of the Yentna River was approximately 89,463 fish (Alaska Energy Authority 2014). Abundance estimates for 2014 were not available at the time this report was prepared. The average harvest in the Northern District commercial fishery for the last 10 years (2004–2013) is approximately 2,300 fish (Table 2), or about 10% of the total Northern District Chinook salmon harvest (including sport harvest), which equates to an annual harvest rate of between 1.2% and 2.4%.

In an ADF&G memo (RC 6) to the BOF dated October 1, 2010, a summary of results from the stock of concern evaluation for UCI salmon was presented. ADF&G's recommendation stated that despite sport fishery restrictions already in place and recent commercial fishery restrictions and closures on westside fisheries, Chuitna, Theodore, and Lewis rivers' Chinook salmon escapement goals had not been achieved for 4 consecutive years. Escapements were evaluated with a single aerial census flight each year. ADF&G recommended that the BOF consider these systems for stock of management concern status. In addition, ADF&G recommended Alexander Creek Chinook salmon as a stock of management concern because runs to this system had declined drastically over the previous 5 years despite closure of the sport fishery beginning in 2008. The ADF&G memo also recommended that Willow and Goose creeks' Chinook salmon be considered as stocks of yield concern in response to the SEGs not being met over several consecutive years. The BOF reviewed these ADF&G recommendations at the 2011 UCI finfish meeting in Anchorage and agreed with ADF&G staff to list Chinook salmon stocks in Alexander, Willow, and Goose creeks, and the Chuitna, Theodore, and Lewis rivers, as stocks of concern. At the 2014 BOF meeting, additional stock status information was presented, including repeated failure to meet the SEG at Goose Creek. As a result, this system was elevated to a stock of management concern; additionally, Sheep Creek was added as a stock of management concern.

As a result of the decision to list the Theodore, Lewis, and Chuitna rivers as stocks of concern, the sport fishery was closed by regulation during the 2011–2014 seasons. In response to the sport fishing closures, commercial fishing in the area from the wood chip dock to the Susitna River was closed for the directed Chinook salmon set gillnet fishery per the *Northern District King Salmon Management Plan*. Prior to the 2012 season, additional restrictions to sport and commercial fisheries, beyond those taken in 2011, were implemented. In the commercial fishery, all fishing periods were reduced in duration from 12 hours to 6 hours. Then, in 2013 and 2014, because of continued low Chinook salmon escapements and a below average forecasts, the first fishing period of the year was closed (please refer to the Chinook salmon commercial fishery section for actions taken in 2014; Shields and Dupuis 2013).

Deshka River

After experiencing a marked decline in abundance in the early to mid-1990s, Northern District Chinook salmon stocks rebounded, with exceptional runs measured at the Deshka River weir, the

only site where Chinook salmon are totally enumerated in the Northern District (Table 9). From 1999 through 2006, the upper end of the Deshka River BEG of 13,000–28,000 fish (Fair et al. 2007) was exceeded. As a result of strong runs during this time, there were numerous liberalizations to the inriver sport fishery through inseason EOs. In addition, in 2005, the BOF lengthened fishing periods for the commercial fishery from 6 hours to 12 hours and in 2008, allowed the commercial fishery to remain open through June 24 (Monday periods only). The commercial fishery harvest cap of 12,500 Chinook salmon remained in effect. The 2007 Deshka River run, albeit less than originally anticipated, fell within the BEG range. The 2008 and 2009 runs, which were projected to be smaller than average, were both poor runs, resulting in closures to both sport and commercial fisheries. The lower end of the BEG was not achieved either year.

The poor runs that were experienced in 2008, 2009, and 2010 resulted in restrictions to the sport and commercial fisheries that harvest Chinook salmon throughout northern Cook Inlet (Shields and Dupuis 2012). While recent forecasts for Deshka River Chinook salmon have projected below average runs, restrictive actions taken in both sport and commercial fisheries have resulted in the SEG being met for the past 5 consecutive years. In 2014, the final Chinook salmon escapement estimate of more than 18,000 fish was well within the SEG range of 13,000–28,000 fish (Table 9).

Table 9.–Deshka River Chinook salmon passage, 1995–2014.

Year	Passage	Year	Passage
1995	10,044	2005	37,725
1996	14,349	2006	31,150
1997	35,587	2007	18,714
1998	15,409	2008	7,533
1999	29,649	2009	11,960
2000	35,242	2010	18,594
2001	29,004	2011	19,026
2002	29,427	2012	14,088
2003	40,069	2013	18,532
2004	57,934	2014	16,335

Note: BEG = 13,000–28,000; in 2011 the BEG was changed to an SEG with the same escapement range.

The forecast for Deshka River Chinook salmon in 2015 is for a total run of 20,500 fish, which is below average. The projected 2014 harvest of Deshka River Chinook salmon in all fisheries is around 2,600 fish (2009–2013 average). If this level of harvest is achieved, it would result in a 2014 escapement of about 17,900 fish, again, well within the SEG range of 13,000–28,000 fish.

Although Chinook salmon stocks throughout Cook Inlet are experiencing a period of lower abundance, the escapement goal at the Deshka River has been met or achieved in 17 of the past 20 years. However, in recent years, restrictive actions in both commercial and sport fisheries were needed to ensure escapement objectives were met.

Kenai River

The early-run of Kenai River Chinook salmon migrates through Cook Inlet in May and June, and therefore receives very little commercial exploitation.

Beginning in 1986, Kenai River late-run Chinook salmon estimates of inriver passage have been completed via traditional target-strength sonar (TS-sonar) by the Division of Sport Fish. The original escapement goal was developed in 1989 and set a minimum goal of 15,500 fish and an

optimum escapement of 22,300 (McBride et al. 1989). In 1999, this goal was revised to a BEG of 17,800–35,700 (Fried 1999). In 2011, ADF&G changed the escapement goal from a BEG to an SEG (still 17,800–35,700 fish) because of the uncertainty in the estimates of escapement and lack of stock-specific information in the commercial harvest. In addition, ADF&G informed the public that it would discontinue use of TS-based estimates of inriver run in favor of 5 abundance indices and would also continue development of the new DIDSON-based assessment (Shields and Dupuis 2013). In 2011, ADF&G managed the Kenai River late-run Chinook salmon fishery primarily on these indices of abundance, rather than use of traditional sonar technology. For the 2012 season, the TS-based sonar was replaced with the newer DIDSON technology. Since the escapement goals were not DIDSON-based goals, estimation of late-run Chinook salmon passage was completed using several indices of abundance.

After the 2012 season, the BOF, at their annual work session meeting in October, formed the Cook Inlet Task Force, with the objective of reviewing the *Kenai River Late-Run Chinook Salmon Management Plan*. The mission of the task force was to identify a set of recommended adjustments to the management plan that would result in the best mix of inriver and Upper Subdistrict set gillnet fishing opportunity, while providing the best means of attaining the escapement goal for Kenai River Chinook salmon during times of low Chinook salmon abundance, as experienced in the 2012 season. The 11-member task force (9 members of the public along with BOF members Vince Webster and Tom Kluberton) met 3 different times (November 2012, January 2013, and February 2013) to address proposals submitted by task force members suggesting modifications to the Chinook salmon management plan. A list of suggested changes was developed, but there was no consensus from the panel on how to proceed. This list of changes formed the basis of a full BOF review at the statewide meeting in March of 2013.

In March 2013, ADF&G released a new DISON-based interim escapement goal for Kenai River late-run Chinook salmon (Fleischman and McKinley 2013). The new goal was developed, in part, to facilitate the change in sonar technology and to address the confusion over assessment methods that was experienced in 2011 and 2012. An age-structured state-space model and Bayesian statistical methods were used to develop the new goal. It was recommended that an interim SEG of 15,000–30,000 fish be adopted for the Kenai River late-run Chinook salmon. The BOF adopted the recommended SEG at the March 2013 meeting, but left the rest of the *Kenai River Late-Run Chinook Salmon Management Plan* intact.

For the 2013 season, DIDSON was the primary method of Chinook salmon assessment. Two DIDSON sites were operational during the 2013 season, but only counts from the RM 9 project were used for inseason management. Because the forecast for late-run Chinook salmon indicated that the run would be below average, the Upper Subdistrict set gillnet fishery and the sport fishery in the Kenai River were prosecuted conservatively (Shields and Dupuis 2013). There were numerous restrictions and even closures to both commercial and sport fisheries during the 2013 season, resulting in an estimated late-run Chinook salmon escapement of approximately 15,400 fish.

As noted earlier in this report, there were numerous changes made to the KRLKSMP that impacted prosecution of sport and commercial fisheries in 2014. Similar to 2013, both fisheries were restricted and eventually closed altogether to reduce the harvest of this stock. The Upper Subdistrict set gillnet fishery was able to reopen in early August, with no more than 36 hours of

fishing time allowed in all of August. The estimated final escapement of late-run Kenai River Chinook salmon in 2014 was approximately 16,000 fish.

In a memo dated February 9, 2015, the Division of Sport Fish announced that Chinook salmon sonar operations in the Kenai River at RM 8.6 (RM 9) would be discontinued, with assessment now being based on sonar estimates of abundance at RM 13.7 (RM 14). While the current escapement goal for the early and late runs will not change for the 2015 season, ADF&G had previously recommended a reevaluation of the current escapement goals if the sonar project was moved. This likely will occur prior to the 2017 UCI BOF meeting.

In summary, the Kenai River Chinook salmon late-run stock has never failed to achieve its minimum escapement objective since enumeration began in 1986. In addition, the upper end of the escapement goal was exceeded in 15 years out of 28 years. However, similar to other Chinook salmon stocks in Cook Inlet, Kenai River Chinook salmon are experiencing a period of lower abundance, with the 2014 run being 1 of the lowest on record.

COMMERCIAL HERRING FISHERY

The 2014 UCI herring fishery produced a harvest of 29.0 tons, with all of the harvest coming from the Upper Subdistrict (Appendix B8). This was the second largest herring harvest in UCI since the fishery reopened in 1998. A total of 11 permit holders reported fishing, which was very close to the average annual number of participants from the previous 10 years (2004–2013). Although open to both set and drift gillnets, all of the harvest was taken by set gillnets. Samples of the harvest are obtained annually to assess age, weight, size and sex distribution (Appendix A19). In the Upper Subdistrict, 4 age classes dominated the population in 2014, comprising 94% of the 266 samples collected from 4 sample dates. The average by age-class was age 4 (2%), age 5 (16%), age 6 (49%), age 7 (17%), age 8 (13%), age 9 (3%) and age 10 (1%). No samples were collected from Chinitna Bay in 2014 as there was no harvest from this area. It should be noted that the samples used for these analyses are obtained from the set gillnet fishery and may reflect biases in the gear type used to collect the samples.

All of the herring harvested in UCI were used exclusively for personal use or sold as bait. Because Prince William Sound and Kamishak Bay herring fisheries have remained closed for many years, bait herring from UCI has risen in value. Demand by commercial and sport halibut fishermen has resulted in an average price of at least \$1.00/lb or \$2,000/ton. Based on this price, the estimated exvessel value of the 2014 commercial herring fishery was approximately \$58,000.

COMMERCIAL SMELT FISHERY

Commercial smelt harvests in UCI have ranged from 300 pounds to 100.8 tons (Table 10). For more details about the history of smelt fishing in UCI, see Shields (2005). The fishery is prosecuted under 5 AAC 21.505. *Cook Inlet Smelt Fishery Management Plan*. In 2014, 11 people obtained commissioner's permits enabling them to participate in the fishery, with 4 CFEC permit holders reporting harvests on fish tickets. The total smelt harvest in UCI in 2014 was approximately 99.4 tons. The harvest cap for this fishery is 100 tons. The amount of smelt harvested in this fishery is limited by market demand and the logistics of getting the harvest to a location where the smelt can be processed (boxed and frozen) prior to shipment, rather than abundance of fish. On Wednesday, May 28, 2014, an EO was issued closing the commercial smelt fishery for the 2014 season as the total harvest was very close to the 100 ton limit.

Table 10.—Commercial smelt harvest, 1978, 1980, 1998–1999, and 2006–2014.

Year	Pounds	Tons	Permits
1978	300	0.2	NA
1980	4,000	2	NA
1998	18,610	9.3	2
1999	100,000	50	NA
2006	90,783	45.4	8
2007	125,044	62.5	11
2008	127,365	63.7	6
2009	78,258	39.1	6
2010	126,135	63.1	3
2011	201,570	100.8	5
2012	195,910	98.0	4
2013	190,830	95.4	4
2014	198,814	99.4	4

Estimating the exvessel value of this fishery is difficult. Participants catch and market all of their harvest. Most of the product is transported by boat to the Kenai River, where it is boxed and frozen for shipment to the west coast of the U.S. The vast majority of the harvest is sold as bait, with smaller amounts marketed for human consumption. The final value of the smelt fishery is unknown, but it likely exceeds \$1.00/lb, for an exvessel value approaching \$200,000.

Age-composition analyses (determined from otoliths) of samples collected from the 2006 to 2014 harvests show that age-4 smelt are the most abundant age class, ranging from 45% to 84% of the population (Appendix A20). Fork length from the 2014 harvest ranged from an average of 196 mm to 219 mm, with an overall average of 207 mm, which was very similar to the average lengths from previous years. In 2014, the percent female was 44%, which matched the 2006 to 2013 average of 44% female. It should be noted that samples collected for age and size data were from a single date and therefore would not reflect temporal changes in these parameters.

COMMERCIAL RAZOR CLAM FISHERY

The razor clam fishery on the west side of Cook Inlet has historically been confined to the area between Crescent River and Redoubt Creek (Figure 11). All clams harvested in this area are directed, by regulation, to be sold for human consumption, except for the small percentage (less than 10% of the total harvest) of broken clams, which may be sold for bait. Razor clams are present throughout this area, with dense concentrations in the Polly Creek and Crescent River areas. In the remainder of the UCI Management Area, there are no restrictions on the amount of clams that can be sold for bait. Currently, though, there is no directed effort to harvest razor clams for the bait market. The minimum legal size for razor clams is 4.5 inches (114 mm) in shell length (5 AAC 38.075).

The 2014 harvest, taken primarily from the Polly Creek/Crescent River area, was approximately 348,000 pounds in the shell (Appendices A23 and B9). A total of approximately 19 diggers participated in the fishery. Harvest was reported from 61 different days spanning the time period from May 11 to July 30. Diggers were paid an average of \$0.65/lb for their harvest, resulting in an exvessel value for this fishery of approximately \$226,000. The average clam size from the 2014 harvest was 140 mm, or 5.4 inches (Figure 12). The 2014 summer tide schedule can be found in Appendix A21.

SUBSISTENCE AND PERSONAL USE FISHERIES

There is a long history of Alaskans harvesting fish and game for their personal consumptive needs under sport, personal use, subsistence, and commercial fishing regulations in the Cook Inlet area (Braund 1982). Since 1978, when the State of Alaska passed its first subsistence statute (AS 16.05.258), many changes have occurred in the regulations governing the harvest of fish and game for personal consumption in Cook Inlet. Beginning in 1981, a new category of fisheries was established. Personal use fishing was created to provide for the personal consumptive needs of state residents not able to meet their needs in other fisheries. Since their creation, numerous changes have occurred in the personal use and subsistence fisheries in Cook Inlet, with many of the changes coming as a result of challenges in the State of Alaska court system, the Alaska State Legislature, or the BOF process. The only personal use or subsistence fishery that has occurred consistently in Cook Inlet during this entire period is the Tyonek Subdistrict subsistence fishery. A review of the various personal use and subsistence fisheries that have been conducted in Cook Inlet are reported in Brannian and Fox (1996), Reimer and Sigurdsson (2004), Dunker and Lafferty (2007), and Holen and Fall (2011).

TYONEK SUBSISTENCE SALMON FISHERY

The subsistence fishery in the Tyonek Subdistrict was mandated by an Anchorage Superior Court order in May 1980. In March 1981, the BOF adopted permanent regulations for this fishery (Stanek et al. 2007). Originally open only to those individuals living in the community of Tyonek, court decisions ruled all Alaska residents are eligible to participate. According to 5AAC 01.560. *Fishing Seasons and Daily Fishing Periods*, subsistence fishing is allowed in the Tyonek Subdistrict of the Northern District during 2 distinct time periods, with a separate permit required for each period. The early-season permit allows for fishing from 4:00 AM to 8:00 PM each Tuesday, Thursday, and Friday from May 15 to June 15. The late-season permit allows for fishing from 6:00 AM to 6:00 PM each Saturday after June 15. Both permits allow for 25 salmon per permit holder and 10 salmon for each additional member. However, 5 AAC 01.595(a)(3) allows for up to 70 Chinook salmon per permit holder in the Tyonek Subdistrict subsistence fishery, which are mostly caught during the early season. At the 2011 BOF meeting in Anchorage, a report was given to BOF members by the Division of Subsistence (Holen and Fall 2011), which the BOF relied upon to specify the amounts necessary for subsistence of Chinook salmon and other salmon in the Tyonek Subdistrict as 700–2,700 Chinook salmon and 150–500 other salmon. Each permit holder is allowed a single 10-fathom gillnet, with a mesh size no greater than 6.0 inches. The early-season permit, focusing on the annual Chinook run, is the most popular fishery. Few late-season permits are issued.

The 2014 harvest estimates for the Tyonek subsistence salmon fishery are summarized in Appendix B15.

UPPER YENTNA RIVER SUBSISTENCE SALMON FISHERY

A subsistence salmon fishery (5 AAC 01.593) is allowed in the Yentna River drainage outside the Anchorage-Matsu-Kenai Non-Subsistence Area, which is described in 5 AAC 99.015(a)(3). The BOF has determined that 400–700 salmon, other than Chinook salmon, are reasonably necessary for subsistence uses in the Yentna River (5 AAC 01.566(e)). The provisions of this fishery allow for the harvest of 25 salmon per head of household, plus 10 more for each dependent. All Chinook salmon and rainbow trout must be returned to the water alive. The

specific area open for the fishery is in the mainstem Yentna River from its confluence with Martin Creek upstream to its confluence with the Skwentna River. Legal gear consists of fish wheels only. The subsistence fishing season occurs from July 15 through July 31 from 4:00 AM to 8:00 PM each Monday, Wednesday, and Friday during this timeframe. The 2014 Yentna River subsistence fisheries harvest was below average and included 294 sockeye, 78 coho, 15 pink, and 30 chum salmon taken by 22 permit holders (Appendix B15).

EDUCATIONAL FISHERIES

Educational fisheries first began in UCI in 1989 with the federal court-ordered subsistence fishery for the Kenaitze Indian Tribe (Sweet et al. 2004). The fishery was labeled as a subsistence fishery due to differences in interpretations of subsistence. The Alaska Superior Court ordered ADF&G to issue educational fishing permits beginning with the 1993 fishing season. The objectives for educational fisheries are specified in 5 AAC 93.235 as “educating persons concerning historic, contemporary, or experimental methods for locating, harvesting, handling, or processing fishery resources.” The present standards for educational fisheries are established by the BOF under 5 AAC 93.200 and include the following: 1) instructors must be qualified to teach the subject matter; 2) there must be students enrolled in the fishery; 3) there are minimum attendance requirements; 4) procedures for testing a student’s knowledge of the subject matter or the student’s proficiency in performing learned tasks must be administered; and 5) standards for successful completion of the program must be set. According to 5 AAC 93.210, the commissioner will issue a nontransferable, no-cost educational fishery permit to an applicant who proposes to operate an educational fishery program that meets the above standards, except in the following cases: 1) when the commissioner determines that the educational objective of the program can be accomplished under existing fisheries statutes and regulations; 2) the sustained yield of any fishery resource would be jeopardized or the fishery resource would be significantly reallocated among existing users; 3) the applicant failed to provide the information required by the permit; 4) the applicant violated a condition or requirement of an educational fishery permit; or 5) the applicant failed to comply with the reporting requirements of the permit.

The total harvest from all educational fisheries in 2014 was 9,573 fish. The average annual harvest from 1994 through 2013 was approximately 6,534 fish (Appendix B16).

CENTRAL DISTRICT EDUCATIONAL FISHERIES

In the Central District of UCI, there currently are 8 groups permitted to conduct educational fisheries, including the Kenaitze Tribal Group, Ninilchik Traditional Council, Ninilchik Native Descendants, Ninilchik Emergency Services, Anchor Point VFW, Homer VFW, Kasilof Historical Association, and the Southcentral Foundation.

In 1993, a state court ordered ADF&G to create an educational fishery for the Kenaitze Indian Tribe, pending final court rulings on other subsistence cases. In 2014, the Kenaitze Tribe harvested 2 Chinook, 6,115 sockeye, 399 coho, and 352 pink salmon, for a total of 6,868 salmon. From 1994 through 2013, the average annual harvest of all salmon by the Kenaitze Indian Tribe was 4,683 fish. The total fish harvest quota for this group is 8,000 fish (Appendix B16).

In 1993, the Ninilchik Traditional Council (NTC) applied for and was granted a permit for an educational fishery (Szarzi and Begich 2004). In 1998, a group of NTC members formed a new organization, the Ninilchik Native Descendants (NND), and requested a separate permit with similar goals of passing on traditional knowledge and providing food for needy tribal members.

Initially 1 permit was issued for both groups, but this was not acceptable to the NTC and both groups were allowed to fish concurrently. There have been a number of changes to the annual harvest limits allowed under these permits, but the total salmon quota more than tripled in 2007 from 850 to 2,800 fish for both the NTC and NND groups. In 2014, the NTC harvested 62 Chinook, 800 sockeye, 155 coho, 221 pink, and 2 chum salmon. The NND reported a harvest of 21 Chinook, 108 sockeye, 79 coho, 10 pink, and 0 chum salmon in 2014 (Appendix B16).

In 2003, another group from Ninilchik, the Ninilchik Emergency Services (NES), applied for and was granted an educational fishery. In 2014, the NES harvested 22 Chinook salmon, 163 sockeye salmon, 50 coho, and 6 pink salmon (Appendix B16).

The Anchor Point VFW applied for and was granted an educational fishery permit in 2007. They reported the following harvest from their 2014 fishing activities: 44 sockeye, 48 coho, and 40 pink salmon. In 2011, the Homer VFW applied for and was granted an educational fishery permit. The Homer VFW group reported a harvest of 45 sockeye and 31 coho salmon in 2014 (Appendix B16).

The Kasilof Historical Association applied for an educational permit beginning with the 2008 season. For 2014, they reported the following harvest: 18 sockeye and 28 coho salmon (Appendix B16).

Finally, the Southcentral Foundation (SCF) applied for an educational permit beginning in 2010. They are an Alaska Native-owned, nonprofit health care organization serving nearly 60,000 Alaska Native and American Indian people living in Anchorage, the Matanuska-Susitna Valley, and 60 rural villages in the Anchorage Service Unit. This fishery occurs on the west side of Cook Inlet, in the Silver Salmon Creek area. The SCF harvest in 2014 was 44 sockeye salmon, 35 coho salmon, and 2 pink salmon (Appendix B16).

NORTHERN DISTRICT EDUCATIONAL FISHERIES

In the Northern District of UCI, 5 groups have received permits for educational fisheries, these being 1) the Knik Tribal Council, 2) Big Lake Cultural Outreach, 3) Eklutna Village, 4) Tyonek Village, and 5) Territorial Homestead Lodge, operated by Tim O'Brien (Appendix B16).

The Knik Tribal Council began an educational fishery in 1994 (Sweet et al. 2004). Its harvest in 2014 totaled 14 sockeye salmon and 62 coho salmon. The peak harvest from this group of 823 fish occurred in 2003 (Appendix B16).

In 2014, Big Lake Cultural Outreach group reported harvesting 7 sockeye salmon, 35 coho salmon, and 6 chum salmon (Appendix B16).

The Eklutna Village group was also issued an educational fisheries permit beginning in 1994. They reported a harvest in 2014 of 248 sockeye salmon, 48 coho salmon, 13 pink salmon, and 24 chum salmon (Appendix B16).

The village of Tyonek did not report any harvest in their educational fishery in 2014.

The Territorial Homestead Lodge (O'Brien) also applied for and received an educational fishery permit beginning in 2007. This fishery is located near Moose Point in the Eastern Subdistrict of the Northern District. In 2014, the harvest from this fishery was 8 Chinook salmon, 118 sockeye salmon, 25 coho salmon, and 51 pink salmon, for a total of 202 fish (Appendix B16).

PERSONAL USE SALMON FISHERY

Operating under the *Upper Cook Inlet Personal Use Salmon Fishery Management Plan* (5 AAC 77.540), personal use fishing is allowed in limited areas in Cook Inlet. The management plan received substantial changes at the BOF meeting in January of 1996. In 1995, personal use fishing was allowed with set gillnets in most areas of Cook Inlet normally open to commercial set gillnet fishing. Most of this area was closed in 1996, but to compensate for the lost opportunity, dip net fisheries were expanded to allow for approximately the same level of harvest that had occurred with gillnets in 1995. Personal use fishing using gillnets is now only open near the Kasilof River in the waters of UCI normally closed to commercial set gillnet fishing. This area encompasses approximately 1 mile on either side of the Kasilof River terminus, extending out from shore for 1 mile. In addition, personal use fishing with dip nets is allowed at the terminus of the Kenai and Kasilof rivers, and in some years, at Fish Creek. The personal use management plan was again amended at the 2002 BOF meeting, modifying how the dip net fishery at Fish Creek in Knik Arm was to be managed, as well as making time changes to both the Kenai and Kasilof personal use fisheries. The Fish Creek dip net fishery was continued in regulation, but per 5 AAC 77.540(d)(1), it is open only from July 10 through July 31 and only if ADF&G projects that the escapement of sockeye salmon into Fish Creek will exceed 50,000 fish. All salmon other than Chinook salmon may be retained. The Kasilof River gillnet fishery was also modified by the BOF in 2002, expanding the days and hours that the fishery was open. The fishery now opens on June 15 and takes place from 6:00 AM until 11:00 PM daily. Instead of being managed for a harvest goal of 10,000–20,000 fish, the fishery remains open until 11:00 PM on June 24, regardless of how many fish are harvested. The Kasilof River dip net personal use fishery occurs from June 25 through August 7, 24 hours per day. The BOF-amended management plan also changed how the Kenai River dip net fishery was prosecuted. This fishery is open from July 10 through July 31, 7 days per week, but only from 6:00 AM to 11:00 PM daily, subject to the requirement of achieving the lower end of the Kenai River late-run sockeye salmon OEG. However, if ADF&G determines that the abundance of Kenai River late-run sockeye salmon is greater than 2.3 million fish, this fishery may be extended by EO to 24 hours per day.

In 2008, the BOF authorized a new UCI personal use fishery. Referred to as the *Beluga River Senior Citizen Personal Use Dip Net Fishery* (5 AAC 77.540(g)), salmon may be taken by dip net only by persons 60 years of age or older (no proxy fishing is allowed). The fishery is open 24 hours per day from the Beluga River Bridge downstream to an ADF&G regulatory marker located approximately 1 mile below the bridge. The annual limit in this fishery is the same as for other personal use fisheries, except that within the total annual limit 1 Chinook salmon may be retained per household. The fishery will close, by EO, when 500 salmon, other than Chinook salmon, have been harvested. Permit holders are required to report their harvests weekly to ADF&G as specified in the permit.

A permit issued by ADF&G, along with a valid Alaska resident sport fishing license, or an exemption from licensing under AS 16.05.400, is required to participate in any of the personal use fisheries. The annual limits are 25 salmon per head of household, with an additional 10 salmon for each household member. In the Kasilof River dip net fishery, Chinook salmon may not be retained and must be released immediately to the water unharmed. In the Kenai River dip net fishery, 1 Chinook salmon may be retained per household. There are no Chinook salmon harvest restrictions in the Kasilof River gillnet personal use fisheries. Legal gear under the management plan are set gillnets and dip nets. A set gillnet cannot exceed 10 fathoms (60 feet) in

length or 45 meshes in depth. Mesh size must be greater than 4 inches, but may not exceed 6 inches. Gillnets must be set at least 100 feet apart at all times. A legal dip net has been defined in regulation (5 AAC 39.105) as a bag-shaped net supported on all sides by a rigid frame. The maximum straight-line distance between any 2 points on the net frame, as measured through the net opening, may not exceed 5 feet. The depth of the bag must be at least one-half of the greatest straight-line distance, as measured through the net opening. No portion of the bag may be constructed of webbing that exceeds a stretched measurement of 4.5 inches; the frame must be attached to a single rigid handle and be operated by hand.

The 2014 personal use harvest data can be found in Appendices A17 and A18, while all UCI personal use salmon harvests since 1996 are summarized in Appendix B17.

KASILOF RIVER GILLNET

The personal use fishery using gillnets at the mouth of the Kasilof River opened on Sunday, June 15, 2014. Because of concerns over Kasilof River Chinook salmon escapement, EO No. 2 was issued, which reduced the number of hours the fishery was open from 6:00 AM to 11:00 PM to 6:00 AM to 3:00 PM daily, from Sunday, June 15, 2014 through Tuesday, June 24, 2014. In 2014, 22,567 sockeye, 50 Chinook, 30 coho, 105 pink, and 18 chum salmon were harvested in this fishery. From 2004 to 2013, the average annual Chinook salmon harvest was 161 fish in this fishery (Appendix B17). From 2004 to 2013, the average annual sockeye salmon harvest has been 22,470 fish.

KASILOF RIVER DIP NET

The Kasilof River dip net fishery was open 24 hours per day from June 25 through August 7, 2014 (44 days). The 2004–2013 average annual harvest of sockeye salmon was 59,700 fish. As the season progressed, it became apparent that the upper end of the Kasilof River sockeye salmon BEG (160,000–340,000) would likely be exceeded. Therefore, on Saturday, July 13, the Division of Sport Fish issued an EO (2-RS-1-35-14) expanding the area that salmon may be harvested in this fishery. Dipnetting from shore was allowed upstream in the Kasilof River to the Sterling Highway Bridge and dipnetting from a boat was allowed upstream to RM 3. In 2014, 88,513 sockeye salmon were harvested in this fishery, which was the largest sockeye salmon catch in the history of this fishery. Moreover, it was estimated that 10,236 household days were fished in the 2014 dip net fishery. This too was the largest effort ever measured in this fishery, and exceeded the 2004–2013 annual average of 6,178 by 4,058 days.

KENAI RIVER DIP NET

The personal use dip net fishery located at the mouth of the Kenai River opened by regulation on July 10. The fishery was open from 6:00 AM to 11:00 PM daily through July 31. Prior to the season opening, the Division of Sport Fish issued EO No. 2-KS-1-26-14, which prohibited the retention of Chinook salmon in this fishery in 2014. According to the KRLKSMP, if from July 1 to July 31, the projected inriver run of late-run Chinook salmon is less than 22,500 fish, the retention of Chinook salmon in the personal use fishery is prohibited. The sockeye salmon harvest in 2014 was approximately 379,823 fish. The entry pattern of sockeye salmon into the Kenai River was not conducive to large dip net harvest as no large passage events took place as in previous years (Appendix A2; Appendix A18). In 2011 and 2012, large pulses of sockeye salmon entered the Kenai River on weekend days in mid-July; weekends typically see higher

levels of effort and harvest than mid-week days. The average annual sockeye salmon harvest from 1996 to 2013 was approximately 248,700 fish.

FISH CREEK DIP NET FISHERY

During the 2014 season, the Division of Sport Fish issued an EO opening the Fish Creek personal use dip net fishery from July 25 to July 31. As stated in the EO, more than 20,200 sockeye salmon were estimated to have passed through the Fish Creek weir through July 23. Based on that weir count, a total escapement of more than 50,000 sockeye salmon was projected. According to 5 AAC 77.540 (d), *Upper Cook Inlet Personal Use Salmon Fishery Management Plan*, the Fish Creek dip net fishery may be opened from July 10 through July 31 if ADF&G projects that the escapement of sockeye salmon into Fish Creek will be more than 50,000 fish. The estimated harvest in 2014 fishery was 5,829 sockeye salmon. By the end of the season, approximately 44,000 sockeye salmon were estimated to have escaped Big Lake in 2014.

BELUGA RIVER SENIOR CITIZEN DIP NET FISHERY

In 2014, 10 permit holders participated in the Beluga River senior citizen dip net fishery. The total harvest was 46 salmon (32 sockeye, 12 coho, 1 pink, and 1 chum salmon; Appendix A17).

ACKNOWLEDGEMENTS

The authors would like to acknowledge and thank the following Division of Commercial Fisheries staff for their tireless efforts and various contributions that were vitally important to UCI management during the 2014 season.

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We would also like to acknowledge the staff of Cook Inlet Aquaculture Association for their involvement in numerous other salmon enumeration and research projects in the UCI area.

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FIGURES

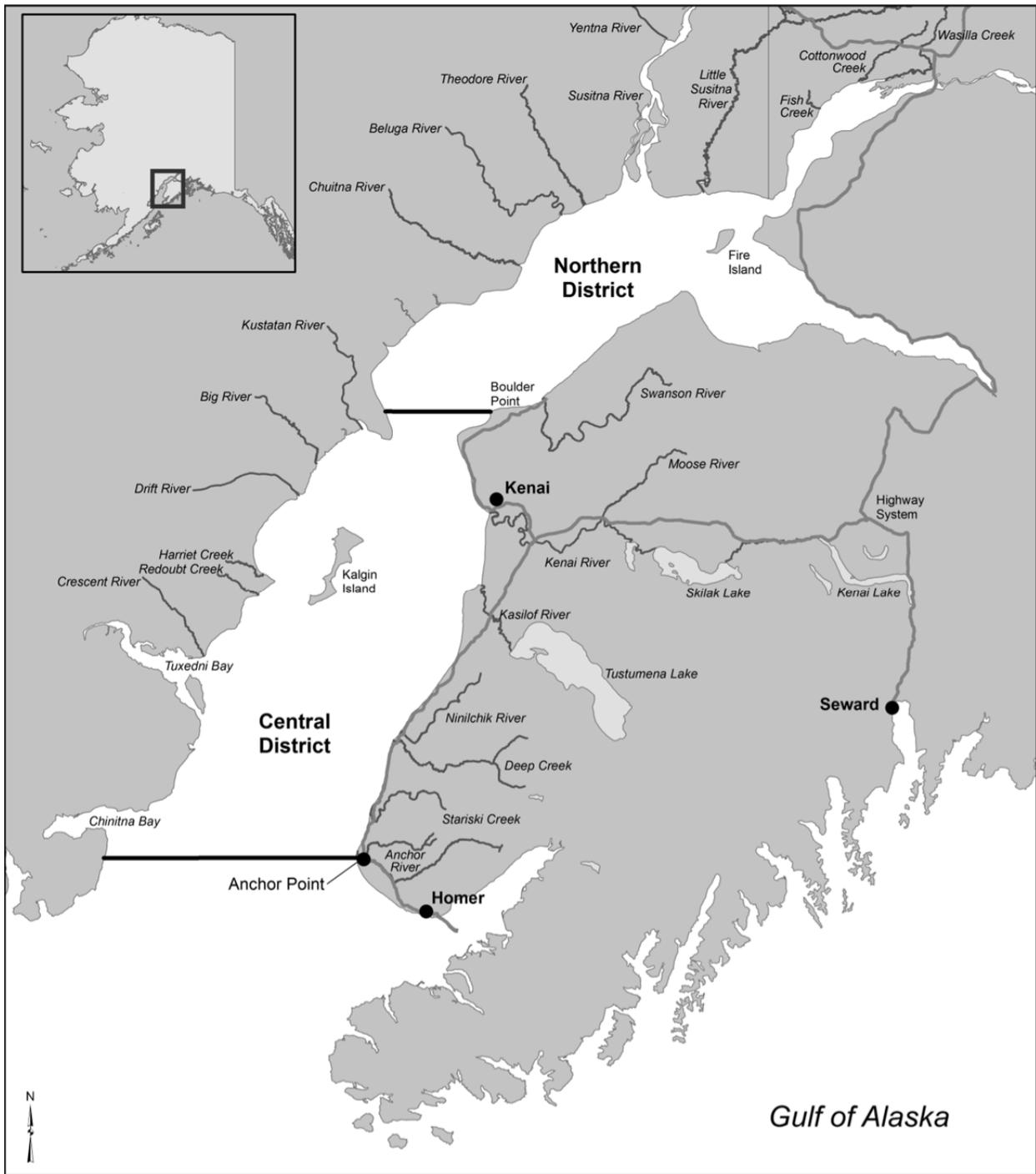


Figure 1.—Major tributaries of the Cook Inlet basin.

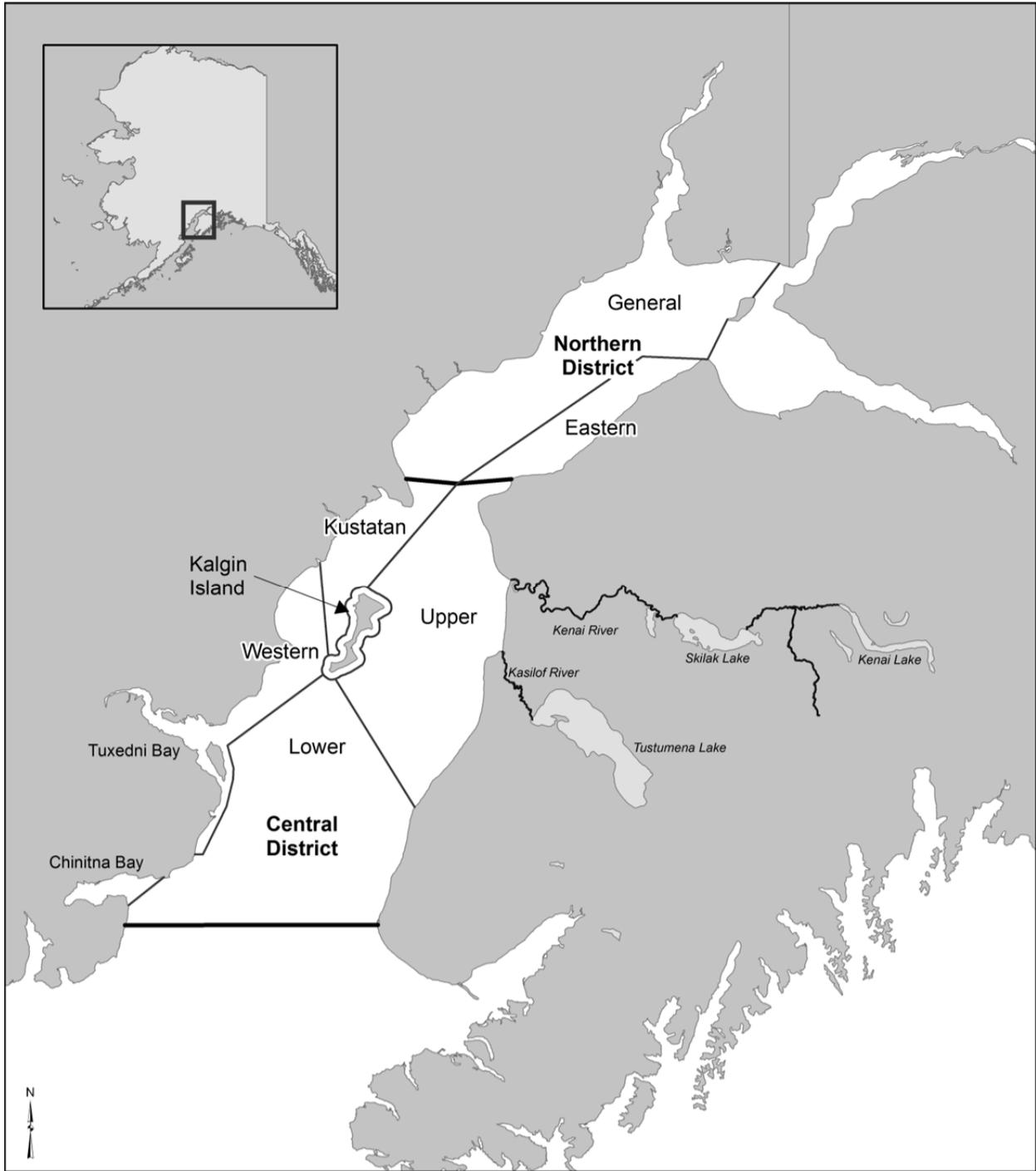


Figure 2.—Upper Cook Inlet commercial fisheries subdistrict fishing boundaries.

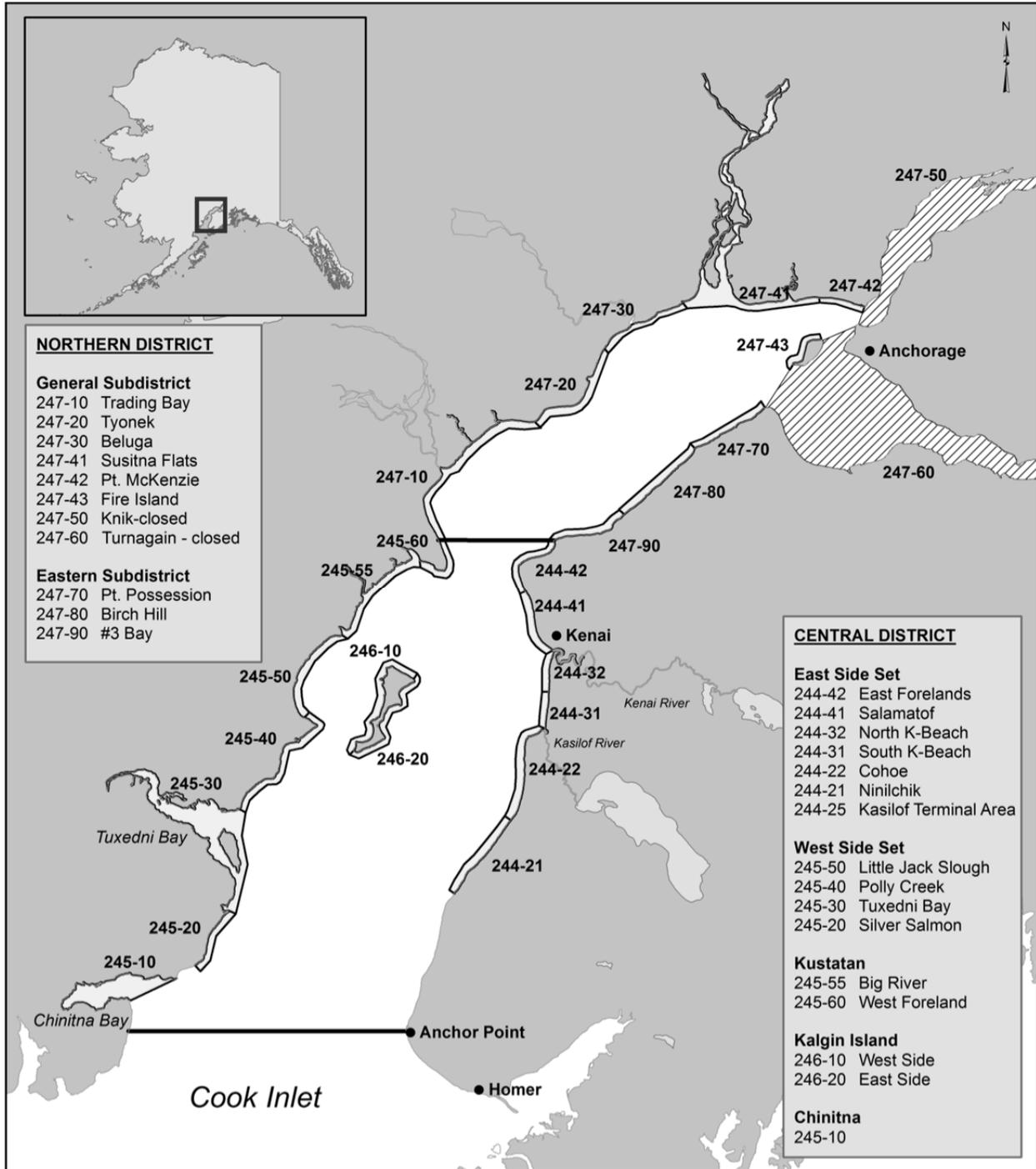


Figure 3.—Upper Cook Inlet commercial set gillnet statistical areas.

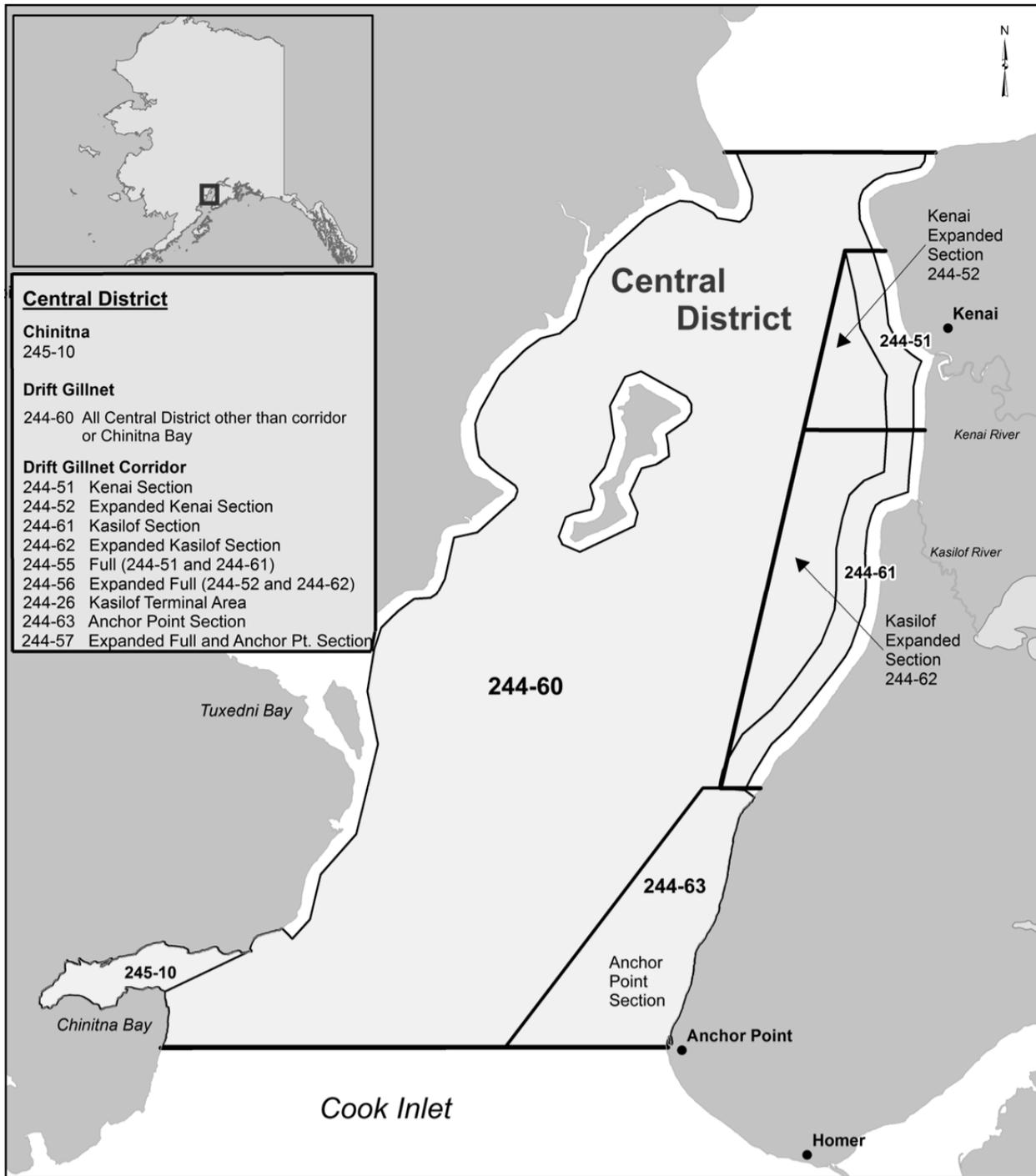


Figure 4.—Upper Cook Inlet commercial drift gillnet statistical areas.

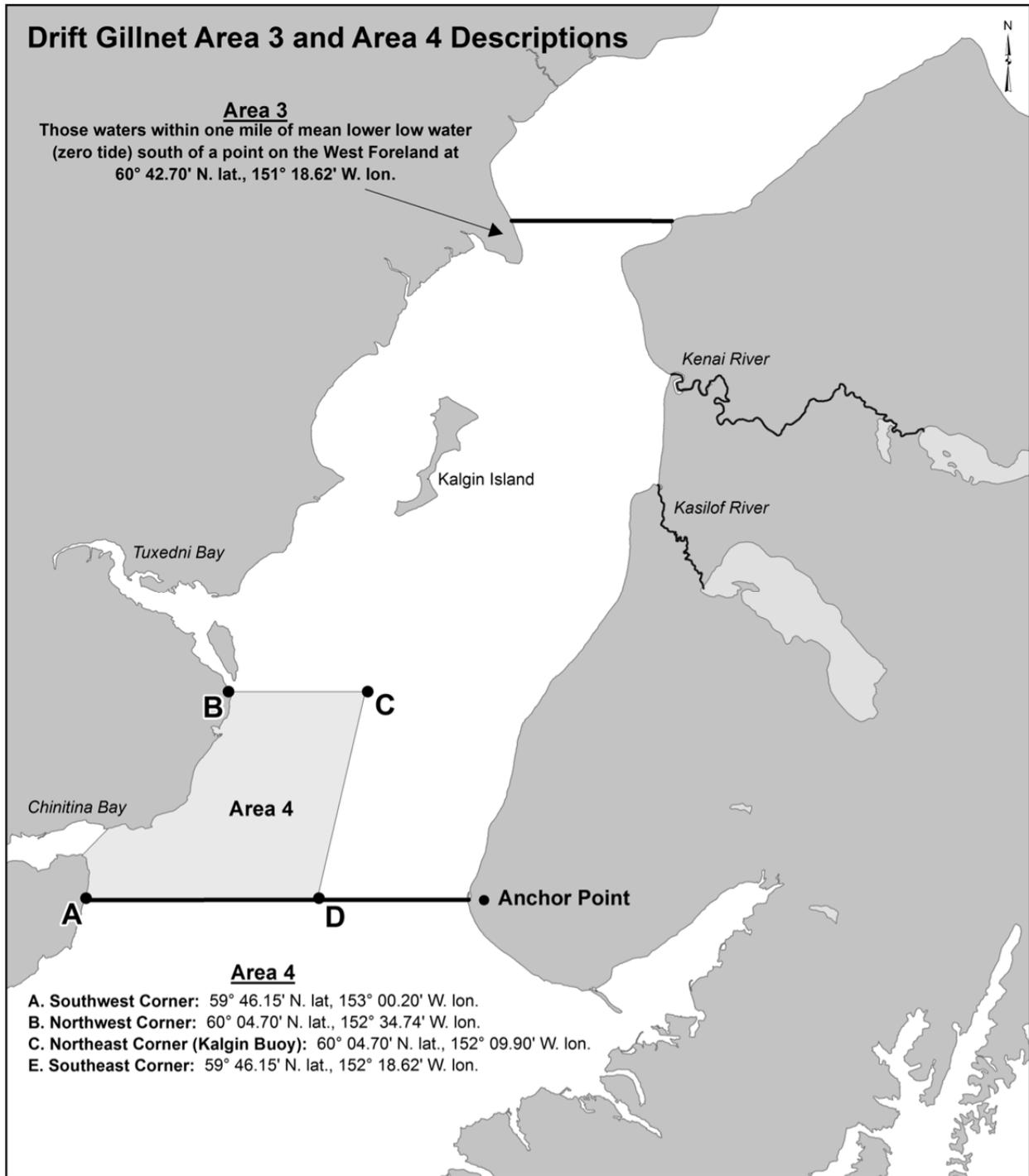


Figure 5.—Map of drift gillnet Areas 3 and 4.

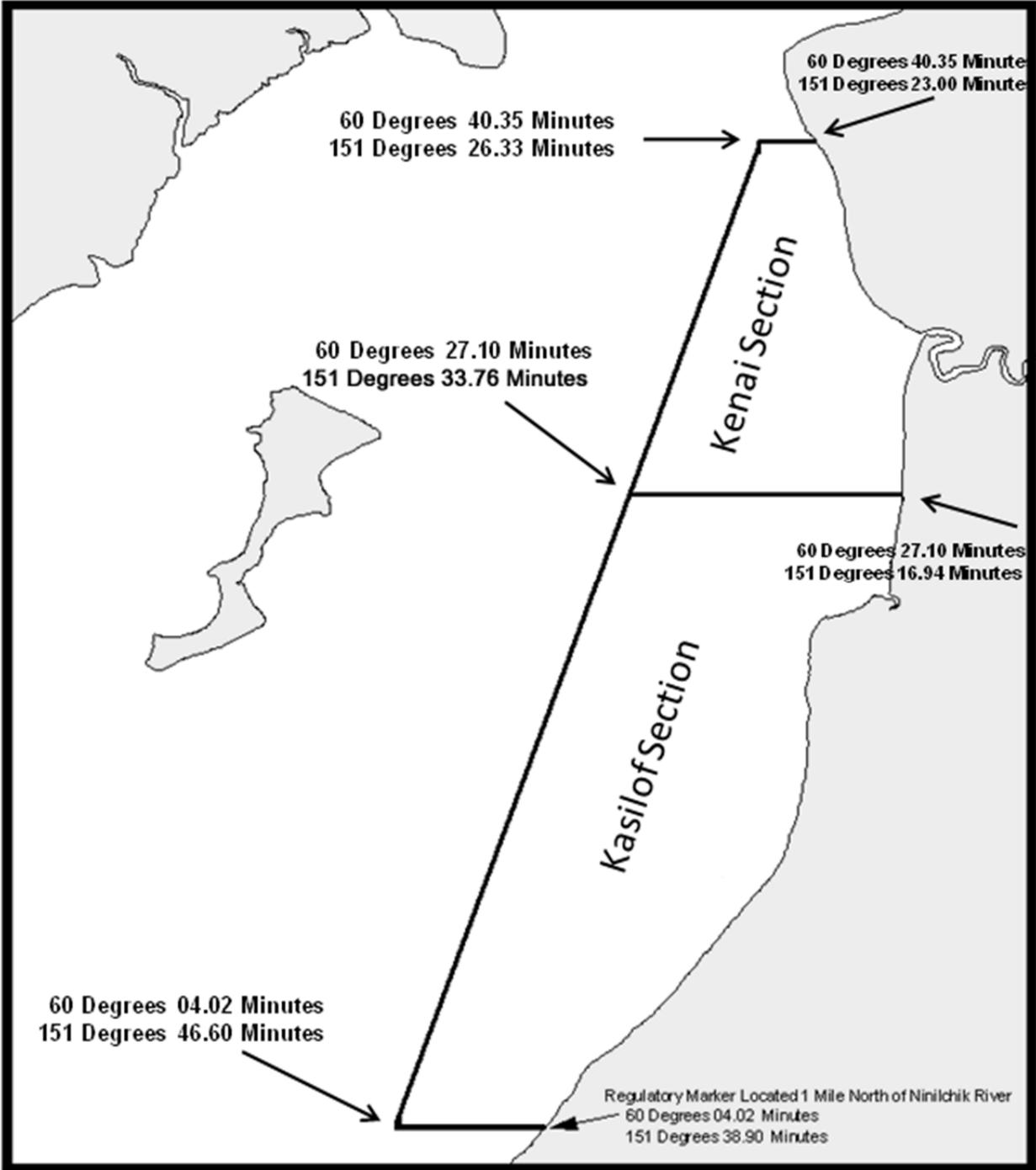


Figure 6.—Map of the Expanded Kenai and Expanded Kasilof Sections with waypoint descriptions.

Drift Gillnet Area 1 and Area 2 Descriptions

Area 2 Description and Coordinates

- A. Southwest Corner: 60° 20.43' N. lat, 151° 54.83' W. lon.
- B. Northwest Corner: 60° 41.08' N. lat., 151° 39.00' W. lon.
- C. Northeast Corner: 60° 41.08' N. lat., 151° 24.00' W. lon.
- D. Blanchard Line Corridor Boundary: 60° 27.10' N. lat., 151° 25.70' W. lon.
- E. Southeast Corner: 60° 20.43' N. lat., 151° 28.00' W. lon.

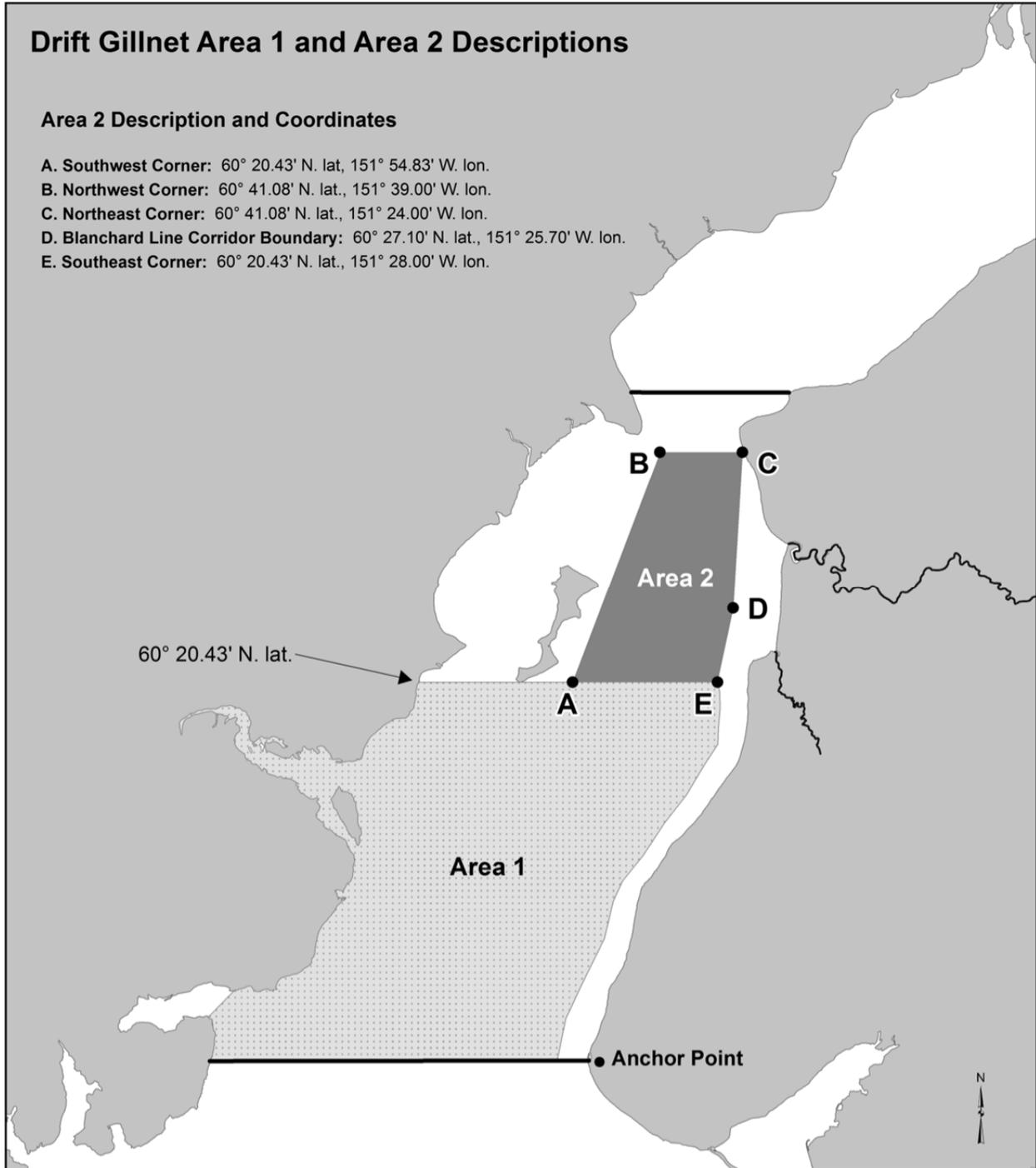


Figure 7.—Drift gillnet boundaries for fishing Areas 1 and 2.

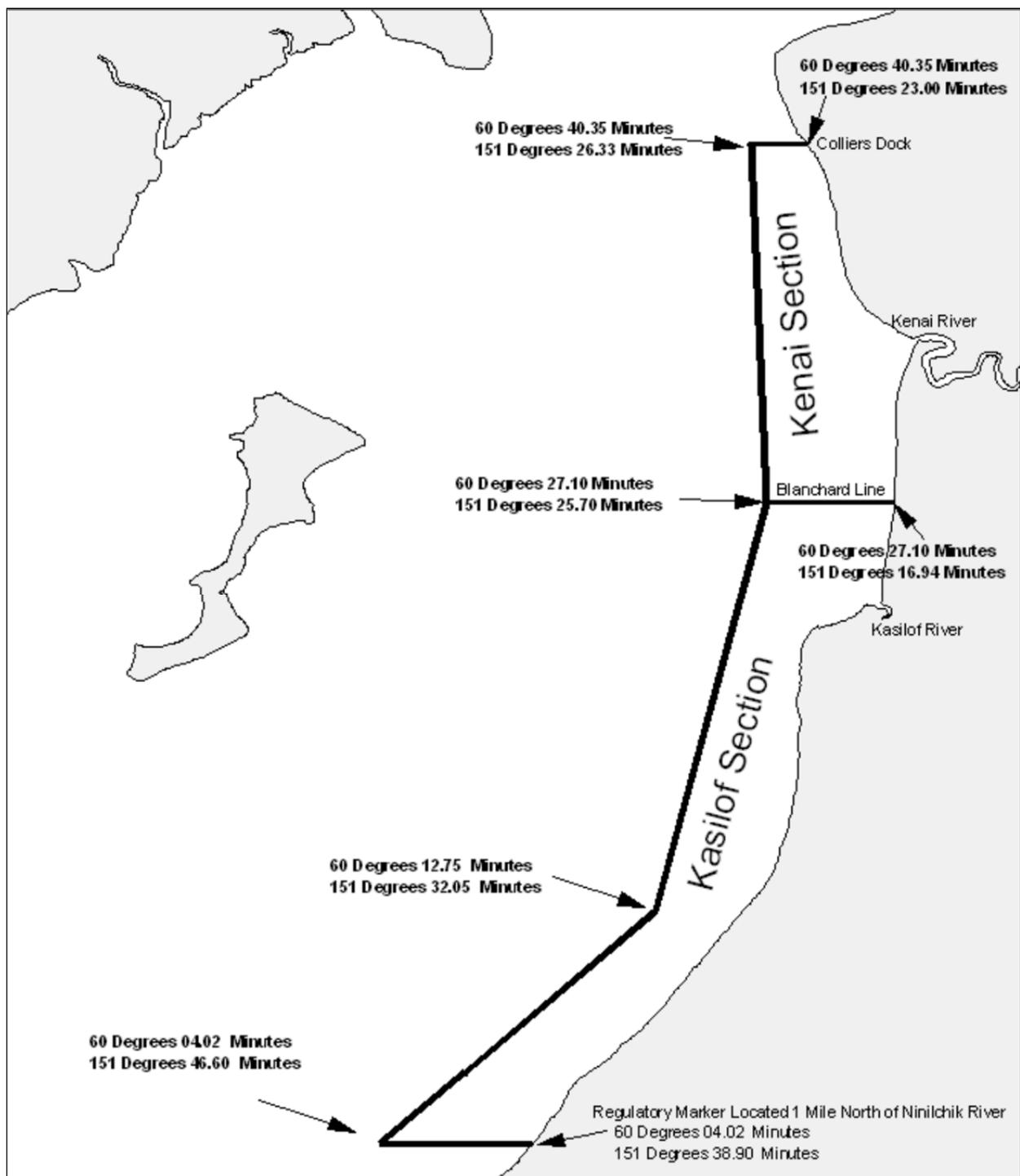


Figure 8.—Map of the Kenai and Kasilof Sections with waypoint descriptions.

		Week of June 22 - 28						
		Sun 22	Mon 23	Tue 24	Wed 25	Thu 26	Fri 27	Sat 28
Midnight								
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
Noon								
1								
2								
3			EO #4					
4								
5								
6								
7								EO #6
8								
9								
10								
11								

EO #4 Kasilof Section from 7am to 4pm on June 23
 EO #6 Kasilof Section from 11am to 8pm on June 28

Regular Fishing Periods
Additional Fishing Time
No Commercial Fishing

		Week of June 29 - July 5						
		Sun 29	Mon 30	Tue 1	Wed 2	Thu 3	Fri 4	Sat 5
Midnight								
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
Noon								
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								

EO #7 Kasilof Section from 7pm to 9pm on June 30
 EO #8 Kasilof Section from 8am to 10pm on July 3
 EO #10 Kasilof Section from 3pm to midnight on July 4

Regular Fishing Periods
Additional Fishing Time
No Commercial Fishing

-continued-

Figure 9.–Hours fished in the Upper Subdistrict set gillnet fishery, 2014.

		Week of July 6 - 12						
		Sun	Mon	Tue	Wed	Thu	Fri	Sat
		6	7	8	9	10	11	12
Midnight								
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
Noon								
1								
2			EO #11					
3								
4								
5								
6								EO #15
7				EO #12				
8								
9								
10								
11								

- EO #11 Kasilof Section 6am to 3pm on July 7
- EO #12 Upper Subdistrict from 8am to 8pm on July 9
- EO #15 Kasilof 1/2 mile from 10am to 7pm on July 12

Regular Fishing Periods
Additional Fishing Time
No Commercial Fishing

		Week of July 13 - 19						
		Sun	Mon	Tue	Wed	Thu	Fri	Sat
		13	14	15	16	17	18	19
Midnight								
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
Noon								
1								
2								
3								
4								
5								
6								
7								
8				EO #18				
9								
10						EO #21		
11								

- EO #18 Kasilof 1/2 mile from 12pm to 9pm on July 15
- EO #21 Upper Subdistrict from 11am to 11pm on July 17

Regular Fishing Periods
Additional Fishing Time
No Commercial Fishing

-continued-

Figure 9.-Page 2 of 4.

		Week of July 20 - 26									Week of July 27 - August 2							
		Sun	Mon	Tue	Wed	Thu	Fri	Sat			Sun	Mon	Tue	Wed	Thu	Fri	Sat	
		20	21	22	23	24	25	26			27	28	29	30	31	1	2	
Midnight									Midnight									
	1									1								
	2									2								
	3									3								
	4									4								
	5									5								
	6									6								
	7									7								
	8									8								
	9									9								
	10									10								
	11									11								
Noon									Noon									
	1									1								
	2									2								
	3									3								
	4									4								
	5									5								
	6									6								
	7									7								
	8									8								
	9									9								
	10									10								
	11									11								

EO #34 Upper Subdistrict from 10am to 10pm on July 23

Regular Fishing Periods
Additional Fishing Time
No Commercial Fishing

Upper Subdistrict from 9am to 9pm on August 2

EO #47

Regular Fishing Periods
Additional Fishing Time
No Commercial Fishing

-continued-

Figure 9.-Page 3 of 4.

		Week of August 3 - 9						
		Sun 3	Mon 4	Tue 5	Wed 6	Thu 7	Fri 8	Sat 9
Midnight								
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
Noon								
1								
2								
3								
4								
5			EO #48					
6								
7					EO #50			
8								
9								
10								
11								

EO #48 Upper Subdistrict from 6am to 6pm on August 4
 EO #50 Kenai and E. Foreland sections from 8am to 8pm on August 6

Regular Fishing Periods
Additional Fishing Time
No Commercial Fishing

Figure 9.–Page 4 of 4.

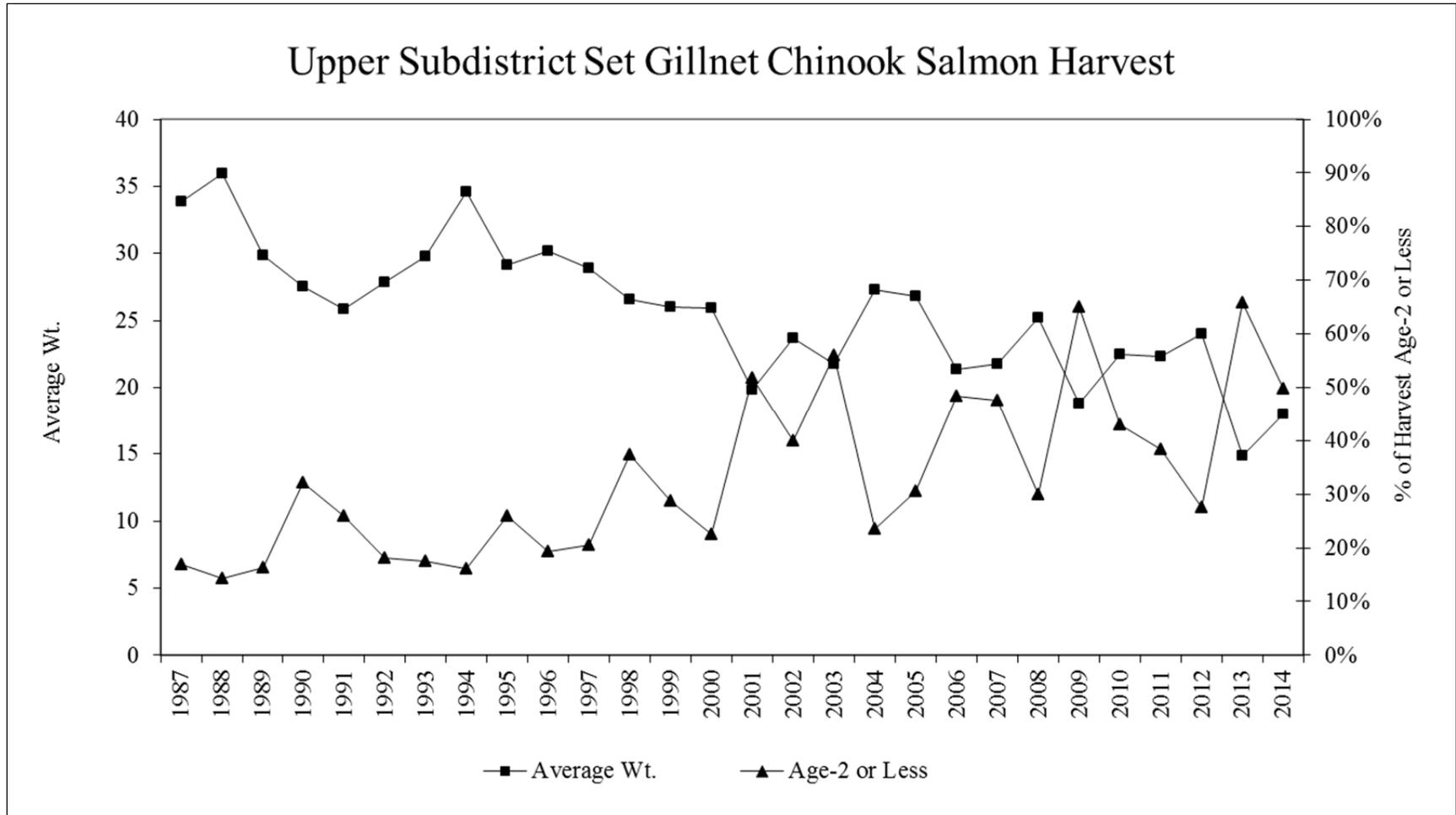


Figure 10.—Chinook salmon average weight (all fish) and percentage of the harvest comprised of ocean-age-2 or less fish in the Upper Subdistrict set gillnet commercial fishery, 1987–2014.

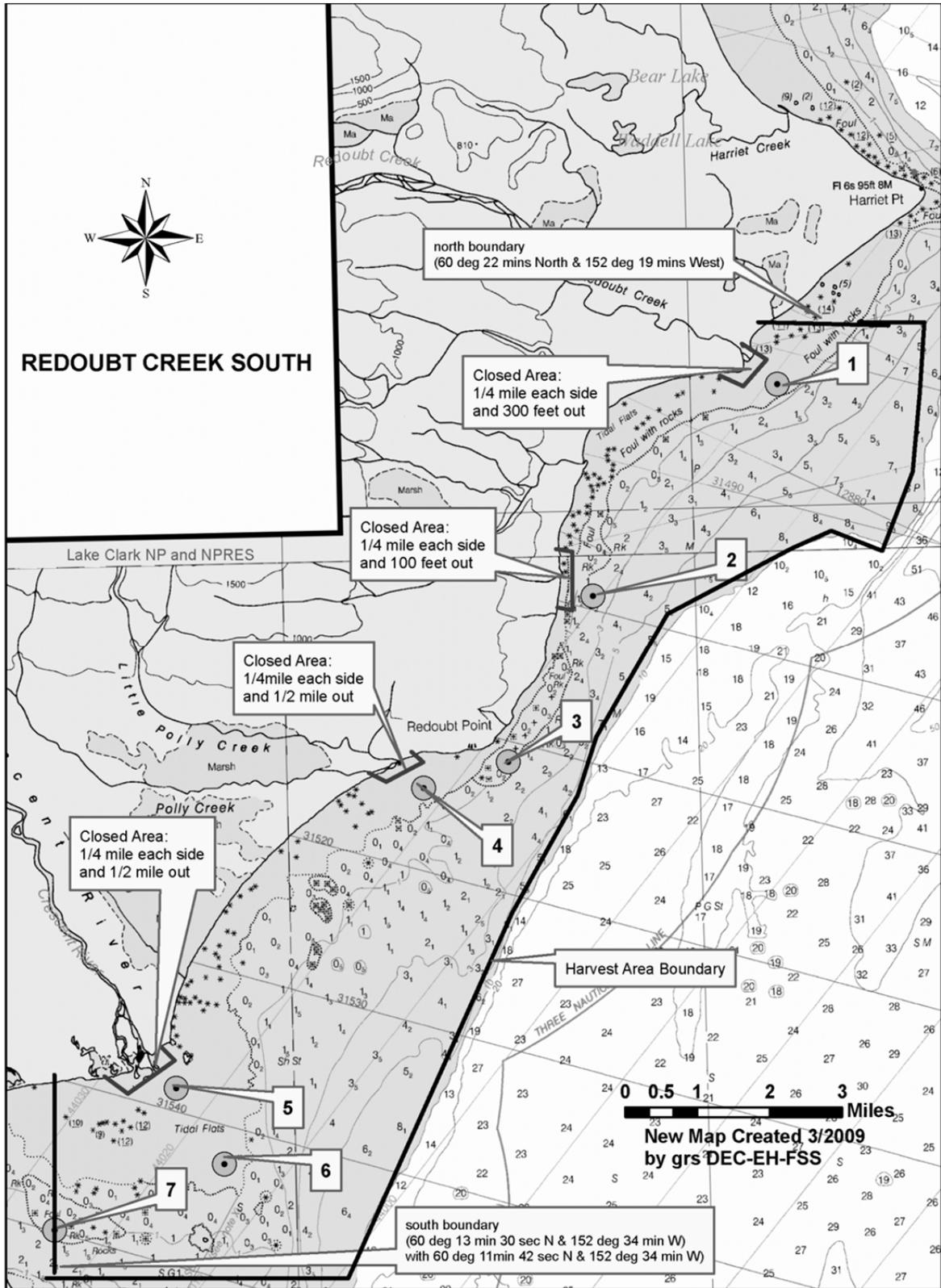


Figure 11.—Area open to the commercial razor clam fishery on the west side of Cook Inlet, Alaska.

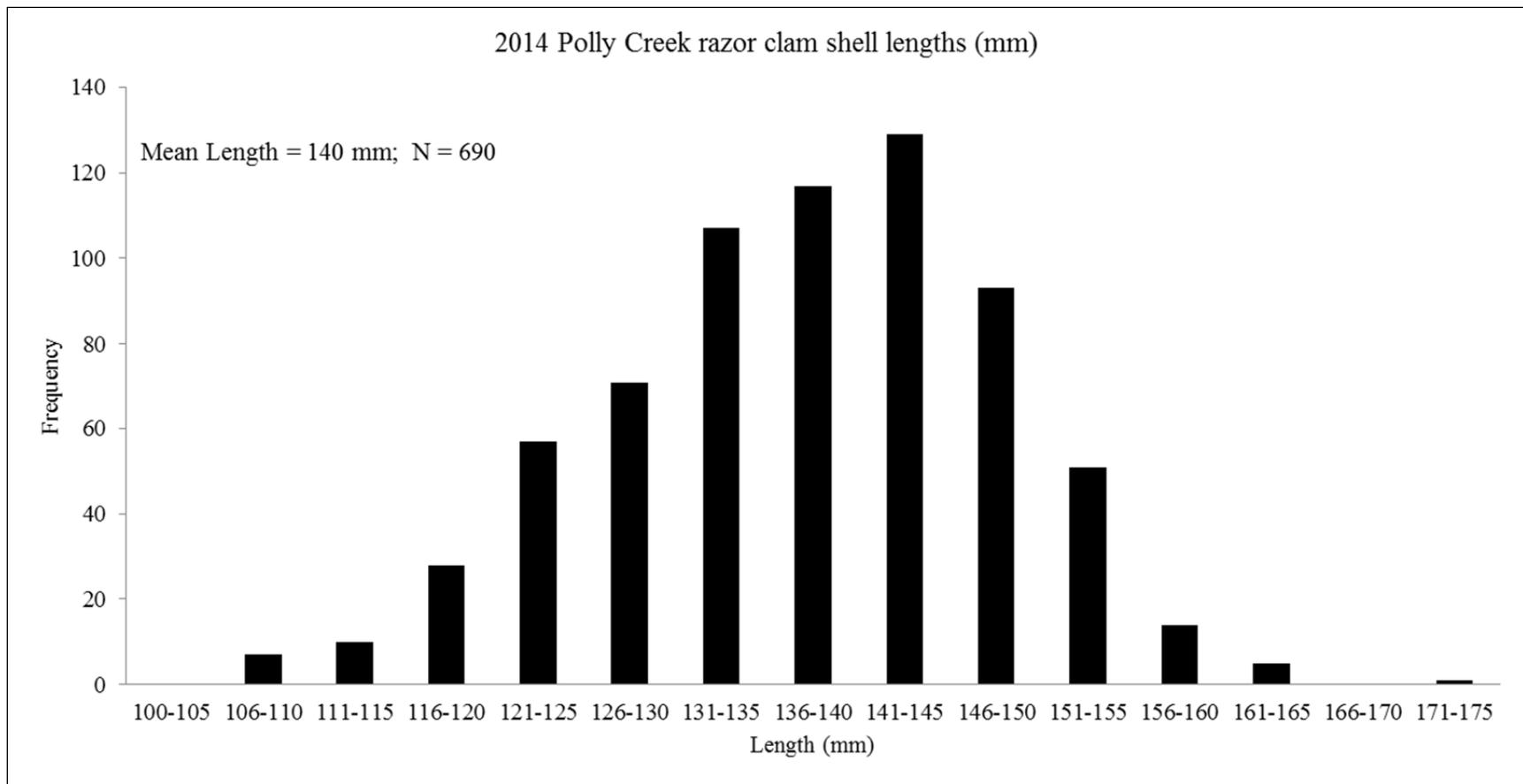


Figure 12.—Length frequency of razor clam shells sampled from the 2014 Polly Creek commercial razor clam fishery.

APPENDIX A: 2014 SEASON DATA

Appendix A1.–Offshore test fish sockeye salmon catch results and environmental data, 2014.

Date	No. of Stations	Fishing Time (min)	Catch		Index		Mean Length (mm)	Water Temp (c)	Air Temp (c)	Salinity (ppm)	Beginning Wind		Ending Wind	
			Daily	Cum	Daily	Cum					Vel	Dir	Vel	Dir
7/1	6	232.5	60	60	40	40	560	10.2	12.4	29.9	6	SW	6	SW
7/2	6	221.5	29	89	23	63	544	9.8	15.6	30.2	1	S	0	NW
7/3	6	227.5	55	144	42	105	555	10.1	12.9	30.1	5	SE	3	SE
7/4	6	243.0	148	292	103	208	556	10.1	13.3	29.8	3	SW	2	S
7/5	6	244.0	180	472	116	324	560	10.3	12.6	32.3	8	S	15	S
7/6	6	236.0	117	589	87	411	569	10.8	13.6	31.6	7	SW	6	SW
7/7	6	253.0	368	957	216	627	567	10.5	12.7	31.0	4	NE	9	N
7/8	6	219.0	16	973	13	640	555	10.6	13.2	31.8	5	SW	2	S
7/9	6	228.0	101	1,074	91	731	560	10.6	12.9	31.4	5	SE	1	NE
7/10	6	204.5	57	1,131	42	772	557	10.7	11.7	31.5	5	N	10	N
7/11	6	240.5	64	1,195	47	819	562	9.3	15.2	32.9	5	NE	11	N
7/12	6	220.0	27	1,222	19	838	563	10.3	12.7	32.0	7	SE	6	N
7/13	6	219.5	273	1,495	240	1,078	561	10.2	15.3	32.7	5	N	3	SW
7/14	6	224.0	24	1,519	18	1,096	559	9.9	12.9	32.7	6	SW	2	S
7/15	6	216.0	113	1,632	75	1,171	551	10.1	13.1	32.0	10	S	3	SE
7/16	6	253.0	157	1,789	116	1,287	554	10.1	11.3	32.8	8	SE	8	S
7/17	6	253.0	321	2,110	174	1,462	562	10.9	12.3	565.3	11	SW	8	SW
7/18	6	233.5	327	2,437	216	1,677	564	10.7	11.8	32.3	10	SW	11	S
7/19	6	219.5	211	2,648	169	1,846	552	11.2	13.4	31.8	10	SW	7	SW
7/20	6	240.5	54	2,702	40	1,886	552	12.6	15.6	30.4	5	SE	0	SE
7/21	6	237.0	109	2,811	76	1,962	553	11.8	13.3	31.3	6	SE	3	E
7/22	6	124.0	87	2,898	125	2,087	560	11.6	11.7	31.1	12	S	11	SW
7/23	6	221.5	71	2,969	51	2,138	566	12.5	14.4	29.7	3	S	3	SW
7/24	6	115.5	77	3,046	113	2,251	562	11.8	12.6	31.0	14	SW	13	SE
7/25	6	191.0	40	3,086	35	2,286	564	11.9	13.7	30.9	7	S	9	NW
7/26	6	220.5	44	3,130	33	2,320	564	11.9	13.2	30.8	1	NW	8	N
7/27	6	219.0	10	3,140	8	2,328	544	11.6	15.0	31.8	2	W	7	NW
7/28	6	189.5	35	3,175	32	2,360	568	11.6	12.9	31.6	4	SW	6	SE
7/29	6	202.0	15	3,190	19	2,379	556	11.6	13.1	31.7	3	N	5	N
7/30	6	227.5	90	3,280	65	2,444	562	11.8	13.4	31.8	3	SW	4	S
7/31	6	206.0	24	3,304	19	2,463	561	11.8	13.5	32.0	8	SW	9	SW
8/1	6	238.0	62	3,366	43	2,505	561	12.2	13.6	31.8	10	SW	6	SW

Appendix A2.–Upper Cook Inlet sockeye salmon enumeration by watershed and date, 2014.

Date	Kenai River		Kasilof River		Fish Creek		Chelatna Lake		Judd Lake		Larson Lake	
	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
15 Jun			7,587	7,587								
16 Jun			6,352	13,939								
17 Jun			7211	21,150								
18 Jun			13,296	34,446								
19 Jun			17,850	52,296								
20 Jun			16,206	68,502								
21 Jun			9,720	78,222								
22 Jun			7,830	86,052								
23 Jun			7,554	93,606								
24 Jun			3,887	97,493								
25 Jun			10,620	108,113								
26 Jun			19,794	127,907								
27 Jun			4,050	131,957								
28 Jun			4,194	136,151								
29 Jun			2,652	138,803								
30 Jun			7,256	146,059								
1 Jul	10,392	10,392	3,096	149,155								
2 Jul	9,240	19,632	6,810	155,965								
3 Jul	10,794	30,426	6,606	162,571								
4 Jul	9,288	39,714	3,174	165,745								
5 Jul	11,574	51,288	7,440	173,185								
6 Jul	29,490	80,778	10,140	183,325								
7 Jul	29,052	109,830	11,334	194,659	0	0						
8 Jul	16,872	126,702	6,810	201,469	158	158						
9 Jul	24,201	150,903	11,052	212,521	0	158						
10 Jul	20,312	171,216	4,560	217,081	0	158					0	0

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Date	Kenai River		Kasilof River		Fish Creek		Chelatna Lake		Judd Lake		Larson Lake	
	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
11 Jul	12,606	183,822	10,386	227,467	949	1,107					0	0
12 Jul	23,779	207,601	9,540	237,007	25	1,132					0	0
13 Jul	31,889	239,490	4,318	241,325	611	1,743					0	0
14 Jul	23,118	262,608	8,310	249,635	798	2,541					0	0
15 Jul	23,863	286,471	17,310	266,945	1,129	3,670					0	0
16 Jul	20,934	307,405	12,282	279,227	532	4,202	0	0	0	0	0	0
17 Jul	33,144	340,549	10,566	289,793	658	4,860	10	10	0	0	0	0
18 Jul	39,024	379,573	21,720	311,513	1,599	6,459	88	98	0	0	89	89
19 Jul	16,608	396,181	10,410	321,923	1,663	8,122	145	243	6	6	91	180
20 Jul	34,104	430,285	9,762	331,685	3,287	11,409	147	390	14	20	433	613
21 Jul	63,954	494,239	16,926	348,611	3,797	15,206	488	878	13	33	111	724
22 Jul	44,241	538,480	8,310	356,921	5,011	20,217	754	1,632	19	52	6	730
23 Jul	37,492	575,972	9,246	366,167	3,733	23,950	957	2,589	62	114	799	1,529
24 Jul	37,812	613,784	9,649	375,816	2,898	26,848	1,286	3,875	293	407	48	1,577
25 Jul	29,844	643,628	5,712	381,528	943	27,791	1,686	5,561	662	1069	1,106	2,683
26 Jul	32,013	675,641	5,194	386,722	235	28,026	2,506	8,067	913	1,982	543	3,226
27 Jul	22,073	697,714	4,218	390,940	1,029	29,055	1,982	10,049	713	2,695	539	3,765
28 Jul	31,590	729,304	4,411	395,351	220	29,275	2,206	12,255	1,281	3,976	1,000	4,765
29 Jul	38,565	767,869	6,462	401,813	349	29,624	1,586	13,841	1,838	5,814	120	4,885
30 Jul	58,024	825,893	5,340	407,153	1,574	31,198	1,644	15,485	1,744	7,558	268	5,153
31 Jul	66,786	892,679	10,110	417,263	550	31,748	1,365	16,850	1,459	9,017	1,353	6,506
1 Aug	35,535	928,214	7,037	424,300	1,322	33,070	905	17,755	1,812	10,829	244	6,750
2 Aug	33,971	962,185	4,022	428,322	1,177	34,247	963	18,718	1,221	12,050	748	7,498

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Appendix A2.–Page 3 of 4.

Date	Kenai River		Kasilof River		Fish Creek		Chelatna Lake		Judd Lake		Larson Lake	
	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
3 Aug	50,791	1,012,976	1,422	429,744	605	34,852	986	19,704	1,309	13,359	53	7,551
4 Aug	54,803	1,067,779	3,199	432,943	1185	36,037	758	20,462	884	14,243	51	7,602
5 Aug	112,175	1,179,954	1,954	434,897	1,818	37,855	795	21,257	1044	15,287	1,277	8,879
6 Aug	63,682	1,243,636	2,990	437,887	1803	39,658	826	22,083	1638	16,925	123	9,002
7 Aug	58,124	1,301,760	2,090	439,977	622	40,280	575	22,658	637	17,562	479	9,481
8 Aug	55,101	1,356,861			219	40,499	801	23,459	571	18,133	261	9,742
9 Aug	53,381	1,410,242			603	41,102	570	24,029	726	18,859	176	9,918
10 Aug	58,086	1,468,328			471	41,573	481	24,510	658	19,517	198	10,116
11 Aug	30,430	1,498,758			314	41,887	328	24,838	767	20,284	668	10,784
12 Aug	15,417	1,514,175			224	42,111	258	25,096	303	20,587	227	11,011
13 Aug	4,484	1,518,659			353	42,464	214	25,310	791	21,378	78	11,089
14 Aug	6,048	1,524,707			293	42,757	274	25,584	268	21,646	166	11,255
15 Aug					189	42,946	187	25,771	219	21,865	201	11,456
16 Aug					164	43,110	222	25,993	126	21,991	158	11,614
17 Aug					45	43,155	219	26,212	200	22,191	110	11,724
18 Aug					251	43,406	75	26,287	38	22,229	71	11,795
19 Aug					94	43,500					156	11,951
20 Aug					94	43,594					89	12,040
21 Aug					58	43,652					132	12,172
22 Aug					36	43,688					120	12,292
23 Aug					24	43,712					76	12,368
24 Aug					9	43,721					62	12,430
25 Aug					50	43,771						
26 Aug					24	43,795						
27 Aug					48	43,843						
28 Aug					8	43,851						

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Date	Kenai River		Kasilof River		Fish Creek		Chelatna Lake		Judd Lake		Larson Lake	
	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
29 Aug					33	43,884						
30 Aug					1	43,885						
31 Aug					6	43,891						
1 Sep					1	43,892						
2 Sep					0	43,892						
3 Sep					3	43,895						
4 Sep					0	43,895						
5 Sep					9	43,904						
6 Sep					7	43,911						
7 Sep					3	43,914						
8 Sep					0	43,914						
9 Sep					0	43,914						
10 Sep					0	43,914						
11 Sep					1	43,915						
12 Sep												
13 Sep												

Note: Days without data indicate time periods where the projects were not operational.

Appendix A3.–Commercial Chinook salmon harvest by area and date, Upper Cook Inlet, 2014.

Upper Subdistrict Set Gillnet																
Date	244-21		244-22		244-25		244-31		244-32		244-41		244-42		Total	
	Ninilchik		Cohoe		Kasilof Terminal		South K-Beach		North K-Beach		Salamatof		E. Forelands		Daily	Cum
	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
23 Jun	5	5	10	10			3	3							18	18
26 Jun	9	14	27	37			15	18							51	69
28 Jun	15	29	21	58			4	22							40	109
30 Jun	27	56	46	104			17	39							90	199
3 Jul	57	113	63	167			12	51							132	331
5 Jul	20	133	54	221			7	58							81	412
7 Jul	22	155	19	240			15	73							56	468
9 Jul	17	172	27	267			24	97	20	20	69	69	2	2	159	627
12 Jul	9	181	49	316			30	127							88	715
15 Jul	47	228	86	402			23	150							156	871
16 Jul					28	28									28	899
17 Jul	39	267	62	464	51	79	32	182	58	78	96	165	3	5	341	1,240
18 Jul					13	92									13	1,253
19 Jul					65	157									65	1,318
20 Jul					39	196									39	1,357

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Upper Subdistrict Set Gillnet																	
Date	244-21		244-22		244-25		244-31		244-32		244-41		244-42		Total		
	Daily	Cum	Daily	Cum													
21 Jul					39	235										39	1,396
22 Jul					61	296										61	1,457
23 Jul	13	280	35	499	16	312	68	250	22	100	155	320	2	7	311	1,768	
24 Jul					35	347										35	1,803
25 Jul					46	393										46	1,849
26 Jul					23	416										23	1,872
27 Jul					42	458										42	1,914
28 Jul					35	493										35	1,949
29 Jul					52	545										52	2,001
30 Jul					26	571										26	2,027
1 Aug					30	601										30	2,057
2 Aug	2	282		499	24	625	25	275	18	118	48	368	6	13	123	2,180	
4 Aug	2	284	3	502			15	290	6	124	50	418	4	17	80	2,260	
6 Aug									5	129	35	453	1	18	41	2,301	

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Central District - West Side Set Gillnet																							
		245-10		245-20		245-30		245-40		245-50		245-55		245-60		246-10		246-20		Total			
		Chinitna Bay		Silv. Salmon		Tuxedni Bay		Polly Cr.		L. J. Slough		Big River		W. Forelands		Kalgin - West		Kalgin - East					
Date	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	
2 Jun												8	8			115	115					123	123
4 Jun												24	32			39	154					63	186
6 Jun												72	104			34	188					106	292
9 Jun												8	112			34	222					42	334
11 Jun																10	232					10	344
13 Jun												1	113			2	234					3	347
16 Jun					41	41						5	118			11	245					57	404
18 Jun																5	250					5	409
19 Jun					9	50																9	418
20 Jun																5	255					5	423
23 Jun					9	59										4	259					13	436
26 Jun					8	67																8	444
30 Jun					5	72																5	449
3 Jul					14	86													1	1		15	464
5 Jul					8	94																8	472
7 Jul					10	104													1	2		11	483
10 Jul																						0	483
12 Jul																						0	483
14 Jul					2	106																2	485
17 Jul					1	107										1	260	1	3			3	488

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Central District West Side Set Gillnet																						
Date	245 10		245 20		245 30		245 40		245 50		245 55		245 60		246 10		246 20		Total			
	Day	Cum	Day	Cum																		
19 Jul					2	109														2	490	
21 Jul					3	112														3	493	
24 Jul					2	114														2	495	
26 Jul					2	116														2	497	
28 Jul					2	118										1	261			3	500	
31 Jul																1	262			1	501	
2 Aug					1	119														1	502	
4 Aug					1	120										2	264			3	505	
7 Aug					1	121										1	265			2	507	
11 Aug																				0	507	
13 Aug																				0	507	
14 Aug																				0	507	
18 Aug																				0	507	
21 Aug																				0	507	
25 Aug																				0	507	
29 Aug																				0	507	
2 Sep																				0	507	
5 Sep																				0	507	
9 Sep																				0	507	

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Northern District Set Gillnet

Date	247-10		247-20		247-30		247-41		247-42		247-43		247-70		247-80		247-90		Total	
	Day	Cum	Day	Cum																
2 Jun	125	125	38	38			39	39	40	40	43	43	92	92	74	74	30	30	481	481
9 Jun	263	388					37	76	45	85	71	114	22	114	10	84	3	33	451	932
16 Jun	103	491					15	91	39	124	32	146	48	162	14	98	6	39	257	1,189
23 Jun	41	532	95	133			8	99	23	147	5	151	10	172	3	101	3	42	188	1,377
26 Jun	8	540	23	156	2	2							3	175	2	103			38	1,415
30 Jun	2	542	8	164	2	4	1	100					4	179	2	105			19	1,434
3 Jul	4	546	9	173	4	8							3	182					20	1,454
7 Jul			2	175					1	148	3	154			1	106			7	1,461
10 Jul					1	9													1	1,462
14 Jul			1	176							1	155					1	43	3	1,465
17 Jul																			0	1,465
21 Jul									1	149			1	183					2	1,467
24 Jul																	1	44	1	1,468

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Northern District Set Gillnet

Date	247-10		247-20		247-30		247-41		247-42		247-43		247-70		247-80		247-90		Total		
	Day	Cum	Day	Cum																	
28 Jul																				0	1,468
31 Jul							1	101												1	1,469
4 Aug																				0	1,469
7 Aug																				0	1,469
11 Aug			1	177																1	1,470
14 Aug																				0	1,470
18 Aug																				0	1,470
21 Aug																				0	1,470
25 Aug																				0	1,470
28 Aug																				0	1,470
1 Sep																				0	1,470
4 Sep																				0	1,470
8 Sep																				0	1,470

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Central District Drift Gillnet																
Date	Deliveries	244-26		244-56		244-57		244-60		244-61		245-10		Total		
		Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	
19 Jun	100							6,205	6,205					6,205	6,205	
23 Jun	168							10,986	17,191					10,986	17,191	
26 Jun	242							21,389	38,580					21,389	38,580	
28 Jun	71									1,797	1,797			1,797	40,377	
30 Jun	347							45,773	84,353					45,773	86,150	
3 Jul	405							77,565	161,918					77,565	163,715	
5 Jul	74									5,009	6,806			5,009	168,724	
7 Jul	322							94,594	256,512					94,594	263,318	
9 Jul	331			31,097	31,097									31,097	294,415	
10 Jul	228							110,177	366,689					110,177	404,592	
11 Jul	310			77,531	108,628									77,531	482,123	
12 Jul	329							111,215	477,904					111,215	593,338	
13 Jul	168			9,013	117,641									9,013	602,351	
14 Jul	441							193,187	671,091					193,187	795,538	
15 Jul	355			38,405	156,046									38,405	833,943	
16 Jul	15	2,079	2,079											2,079	836,022	
17 Jul	448	1,341	3,420					250,423	921,514					251,764	1,087,786	
18 Jul	373	1,232	4,652			52,437	52,437							53,669	1,141,455	
19 Jul	297	958	5,610			50,347	102,784							51,305	1,192,760	
20 Jul	251	1,433	7,043			40,859	143,643							42,292	1,235,052	
21 Jul	452	182	7,225					105,225	1,026,739					105,407	1,340,459	
22 Jul	279	1,551	8,776			18,644	162,287							20,195	1,360,654	
23 Jul	307	53	8,829			22,170	184,457							22,223	1,382,877	
24 Jul	321	70	8,899			25,064	209,521							25,134	1,408,011	

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Central District Drift Gillnet																
Date	Deliveries	244-26		244-56		244-57		244-60		244-61		245-10		Total		
		KRSHA		Exp. Ken/Kas		Exp. Ken/Kas & A.P.		Districtwide		Kas. Section		Chinitna Bay		Day	Cum	
		Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	
25 Jul	284	77	8,976			18,257	227,778							18,334	1,426,345	
26 Jul	213	130	9,106			10,459	238,237							10,589	1,436,934	
27 Jul	82	65	9,171			5,053	243,290							5,118	1,442,052	
28 Jul	222	528	9,699			27,346	270,636							27,874	1,469,926	
29 Jul	14	779	10,478											779	1,470,705	
30 Jul	10	541	11,019											541	1,471,246	
31 Jul	285					13,514	284,150							13,514	1,484,760	
1 Aug	14	504	11,523											504	1,485,264	
2 Aug	4	153	11,676											153	1,485,417	
4 Aug	258							10,369	1,037,108					10,369	1,495,786	
7 Aug	133							4,128	1,041,236					4,128	1,499,914	
11 Aug	38							241	1,041,477					241	1,500,155	
14 Aug	15							128	1,041,605					128	1,500,283	
18 Aug	13							59	1,041,664					59	1,500,342	
21 Aug	12							128	1,041,792					128	1,500,470	
25 Aug	7							57	1,041,849					57	1,500,527	
28 Aug	<4							18	1,041,867					18	1,500,545	
29 Aug	<4											2	2	2	1,500,547	
1 Sep	7							62	1,041,929					62	1,500,609	
2 Sep	<4											1	3	1	1,500,610	
4 Sep	6							62	1,041,991					62	1,500,672	
5 Sep	<4											1	4	1	1,500,673	
8 Sep	<4							3	1,041,994					3	1,500,676	
9 Sep	<4													0	1,500,676	

Note: Days without data indicate days when there was no harvest.

Appendix A4.—Commercial sockeye salmon harvest by area and date, Upper Cook Inlet, 2014.

Upper Subdistrict Set Gillnet																
Date	244-21 Ninilchik		244-22 Cohoe		244-25 Kasilof Terminal		244-31 South K-Beach		244-32 North K-Beach		244-41 Salamatof		244-42 E. Forelands		Total	
	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
23 Jun	12,407	12,407	6,711	6,711			3,441	3,441							22,559	22,559
26 Jun	15,750	28,157	8,981	15,692			11,210	14,651							35,941	58,500
28 Jun	12,976	41,133	5,827	21,519			3,581	18,232							22,384	80,884
30 Jun	13,966	55,099	9,281	30,800			7,952	26,184							31,199	112,083
3 Jul	16,744	71,843	8,273	39,073			5,836	32,020							30,853	142,936
5 Jul	10,398	82,241	8,440	47,513			4,192	36,212							23,030	165,966
7 Jul	11,498	93,739	3,912	51,425			4,086	40,298							19,496	185,462
9 Jul	10,448	104,187	3,639	55,064			3,851	44,149	5,820	5,820	13,609	13,609	2,346	2,346	39,713	225,175
12 Jul	10,155	114,342	12,650	67,714			8,446	52,595							31,251	256,426
15 Jul	18,987	133,329	15,921	83,635			8,862	61,457							43,770	300,196
16 Jul					12,393	12,393									12,393	312,589
17 Jul	37,333	170,662	33,961	117,596	14,657	27,050	12,387	73,844	16,657	22,477	38,739	52,348	5,005	7,351	158,739	471,328
18 Jul					10,337	37,387									10,337	481,665
19 Jul					25,681	63,068									25,681	507,346
20 Jul					37,982	101,050									37,982	545,328

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Upper Subdistrict Set Gillnet																
Date	244-21		244-22		244-25		244-31		244-32		244-41		244-42		Total	
	Ninilchik		Cohoe		Kasilof Terminal		South K-Beach		North K-Beach		Salamatof		E. Forelands		Daily	Cum
21 Jul					12,576	113,626									12,576	557,904
22 Jul					17,354	130,980									17,354	575,258
23 Jul	5,869	176,531	5,827	123,423	2,728	133,708	7,948	81,792	4,841	27,318	16,181	68,529	4,854	12,205	48,248	623,506
24 Jul					4,821	138,529									4,821	628,327
25 Jul					11,221	149,750									11,221	639,548
26 Jul					9,903	159,653									9,903	649,451
27 Jul					10,239	169,892									10,239	659,690
28 Jul					9,800	179,692									9,800	669,490
29 Jul					7,604	187,296									7,604	677,094
30 Jul					6,975	194,271									6,975	684,069
1 Aug					3,197	197,468									3,197	687,266
2 Aug	969	177,500	509	123,932	663	198,131	1,347	83,139	3,197	30,515	9,250	77,779	2,432	14,637	18,367	705,633
4 Aug	1,012	178,512	578	124,510			1,297	84,436	1,725	32,240	4,227	82,006	838	15,475	9,677	715,310
6 Aug									1,844	34,084	5,448	87,454	1,796	17,271	9,088	724,398

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Central District - West Side Set Gillnet																				
Date	245-10		245-20		245-30		245-40		245-50		245-55		245-60		246-10		246-20		Total	
	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
2 Jun											358	358			1,084	1,084			1,442	1,442
4 Jun											690	1,048			1,442	2,526			2,132	3,574
6 Jun											365	1,413			419	2,945			784	4,358
9 Jun											195	1,608			506	3,451			701	5,059
11 Jun											94	1,702			381	3,832			475	5,534
13 Jun											43	1,745			229	4,061			272	5,806
16 Jun					278	278					97	1,842			432	4,493			807	6,613
18 Jun															468	4,961			468	7,081
19 Jun					990	1,268			140	140									1,130	8,211
20 Jun															711	5,672			711	8,922
23 Jun					1,880	3,148			246	386					2,891	8,563			5,017	13,939
26 Jun					953	4,101									412	8,975	92	92	1,457	15,396
30 Jun					1,627	5,728			116	502					2,400	11,375	194	286	4,337	19,733
3 Jul					1,628	7,356			194	696					3,032	14,407	896	1,182	5,750	25,483
5 Jul					3,070	10,426													3,070	28,553
7 Jul					2,593	13,019			63	759					1,181	15,588	470	1,652	4,307	32,860
10 Jul					449	13,468													449	33,309
12 Jul					1,417	14,885													1,417	34,726
14 Jul					1,680	16,565			278	1,037					2,828	18,416	444	2,096	5,230	39,956
17 Jul					3,380	19,945			335	1,372					2,753	21,169	720	2,816	7,188	47,144

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Central District West Side Set Gillnet																					
		245 10		245 20		245 30		245 40		245 50		245 55		245 60		246 10		246 20			
		Chinitna Bay		Silv. Salmon		Tuxedni Bay		Polly Cr.		L. J. Slough		Big River		W. Forelands		Kalgin West		Kalgin East		Total	
Date	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	
19 Jul					3,665	23,610														3,665	50,809
21 Jul					3,466	27,076				832	2,204			90	90	2,863	24,032	1,189	4,005	8,440	59,249
24 Jul					1,175	28,251				337	2,541			107	197	1,949	25,981	778	4,783	4,346	63,595
26 Jul					1,392	29,643														1,392	64,987
28 Jul					1,403	31,046				554	3,095			150	347	2,223	28,204	345	5,128	4,675	69,662
31 Jul					778	31,824				953	4,048					2,242	30,446	217	5,345	4,190	73,852
2 Aug					317	32,141														317	74,169
4 Aug					332	32,473				261	4,309					1,065	31,511	699	6,044	2,357	76,526
7 Aug					109	32,582				84	4,393					836	32,347	656	6,700	1,685	78,211
11 Aug										43	4,436					817	33,164	89	6,789	949	79,160
13 Aug																477	33,641			477	79,637
14 Aug					5	32,587										88	33,729	51	6,840	144	79,781
18 Aug																82	33,811	70	6,910	152	79,933
21 Aug																93	33,904			93	80,026
25 Aug																245	34,149			245	80,271
29 Aug																				0	80,271
2 Sep																				0	80,271
5 Sep																				0	80,271
9 Sep																				0	80,271

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Northern District Set Gillnet																					
Date	247-10		247-20		247-30		247-41		247-42		247-43		247-70		247-80		247-90		Total		
	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	
2 Jun	40	40	1	1			4	4	6	6	2	2	113	113	133	133	239	239	538	538	
9 Jun	26	66					22	26	13	19	6	8	78	191	26	159	52	291	223	761	
16 Jun	16	82							3	22	2	10	65	256	29	188	105	396	220	981	
23 Jun	63	145	244	245			7	33	15	37	6	16	448	704	94	282	448	844	1,325	2,306	
26 Jun	181	326	312	557	13	13							356	1,060	700	982	391	1,235	1,953	4,259	
30 Jun	374	700	641	1,198	40	53	34	67					628	1,688	254	1,236	797	2,032	2,768	7,027	
3 Jul	220	920	1,119	2,317	89	142							641	2,329	271	1,507	393	2,425	2,733	9,760	
7 Jul			1,281	3,598	201	343	7	74	9	46	33	49	968	3,297	752	2,259	360	2,785	3,611	13,371	
10 Jul	11	931	373	3,971	467	810	234	308	100	146			105	3,402	80	2,339			1,370	14,741	
14 Jul	366	1,297	361	4,332	275	1,085	66	374	246	392	123	172	451	3,853	141	2,480	322	3,107	2,351	17,092	
17 Jul	370	1,667	2,012	6,344	910	1,995	217	591	132	524	94	266	295	4,148	391	2,871	898	4,005	5,319	22,411	
21 Jul	458	2,125	855	7,199	690	2,685	512	1,103	237	761	232	498	509	4,657	329	3,200	900	4,905	4,722	27,133	
24 Jul	126	2,251	539	7,738	92	2,777	146	1,249	138	899	95	593	354	5,011	365	3,565	148	5,053	2,003	29,136	

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Northern District Set Gillnet																					
Date	247-10		247-20		247-30		247-41		247-42		247-43		247-70		247-80		247-90		Total		
	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum									
28 Jul	609	2,860	438	8,176	110	2,887	40	1,289	126	1,025	69	662	405	5,416	532	4,097	122	5,175	2,451	31,587	
31 Jul	522	3,382	522	8,698	132	3,019	174	1,463	107	1,132	56	718	234	5,650	640	4,737	292	5,467	2,679	34,266	
4 Aug	133	3,515	114	8,812	22	3,041	39	1,502	79	1,211	43	761	178	5,828	147	4,884	96	5,563	851	35,117	
7 Aug	420	3,935	52	8,864			34	1,536	46	1,257	33	794	201	6,029	379	5,263	125	5,688	1,290	36,407	
11 Aug	5	3,940	1	8,865			25	1,561	36	1,293	28	822	154	6,183			73	5,761	322	36,729	
14 Aug	7	3,947	15	8,880			2	1,563	18	1,311	24	846	24	6,207	4	5,267			94	36,823	
18 Aug	19	3,966	11	8,891					22	1,333	18	864	74	6,281	254	5,521	194	5,955	592	37,415	
21 Aug	11	3,977					7	1,570	5	1,338			23	6,304	36	5,557	38	5,993	120	37,535	
25 Aug	50	4,027	3	8,894			1	1,571	4	1,342			15	6,319	2	5,559	13	6,006	88	37,623	
28 Aug	9	4,036					2	1,573	7	1,349			9	6,328					27	37,650	
1 Sep	2	4,038											9	6,337	5	5,564	19	6,025	35	37,685	
4 Sep													1	6,338	1	5,565			2	37,687	
8 Sep																			0	37,687	

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Central District Drift Gillnet															
Date	Deliveries	244-26		244-56		244-57		244-60		244-61		245-10		Total	
		KRSHA		Exp. Ken/Kas		Exp. Ken/Kas & A.P.		Districtwide		Kas. Section		Chinitna Bay			
		Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
19 Jun	100							6,205	6,205					6,205	6,205
23 Jun	168							10,986	17,191					10,986	17,191
26 Jun	242							21,389	38,580					21,389	38,580
28 Jun	71									1,797	1,797			1,797	40,377
30 Jun	347							45,773	84,353					45,773	86,150
3 Jul	405							77,565	161,918					77,565	163,715
5 Jul	74									5,009	6,806			5,009	168,724
7 Jul	322							94,594	256,512					94,594	263,318
9 Jul	331			31,097	31,097									31,097	294,415
10 Jul	228							110,177	366,689					110,177	404,592
11 Jul	310			77,531	108,628									77,531	482,123
12 Jul	329							111,215	477,904					111,215	593,338
13 Jul	168			9,013	117,641									9,013	602,351
14 Jul	441							193,187	671,091					193,187	795,538
15 Jul	355			38,405	156,046									38,405	833,943
16 Jul	15	2,079	2,079											2,079	836,022
17 Jul	448	1,341	3,420					250,423	921,514					251,764	1,087,786
18 Jul	373	1,232	4,652			52,437	52,437							53,669	1,141,455
19 Jul	297	958	5,610			50,347	102,784							51,305	1,192,760
20 Jul	251	1,433	7,043			40,859	143,643							42,292	1,235,052
21 Jul	452	182	7,225					105,225	1,026,739					105,407	1,340,459
22 Jul	279	1,551	8,776			18,644	162,287							20,195	1,360,654
23 Jul	307	53	8,829			22,170	184,457							22,223	1,382,877
24 Jul	321	70	8,899			25,064	209,521							25,134	1,408,011

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Central District Drift Gillnet															
Date	Deliveries	244-26		244-56		244-57		244-60		244-61		245-10		Total	
		KRSHA	Day	Cum	Exp. Ken/Kas	Day	Cum	Exp. Ken/Kas & A.P.	Day	Cum	Districtwide	Day	Cum	Kas. Section	Day
25 Jul	284	77	8,976			18,257	227,778							18,334	1,426,345
26 Jul	213	130	9,106			10,459	238,237							10,589	1,436,934
27 Jul	82	65	9,171			5,053	243,290							5,118	1,442,052
28 Jul	222	528	9,699			27,346	270,636							27,874	1,469,926
29 Jul	14	779	10,478											779	1,470,705
30 Jul	10	541	11,019											541	1,471,246
31 Jul	285					13,514	284,150							13,514	1,484,760
1 Aug	14	504	11,523											504	1,485,264
2 Aug	4	153	11,676											153	1,485,417
4 Aug	258							10,369	1,037,108					10,369	1,495,786
7 Aug	133							4,128	1,041,236					4,128	1,499,914
11 Aug	38							241	1,041,477					241	1,500,155
14 Aug	15							128	1,041,605					128	1,500,283
18 Aug	13							59	1,041,664					59	1,500,342
21 Aug	12							128	1,041,792					128	1,500,470
25 Aug	7							57	1,041,849					57	1,500,527
28 Aug	<4							18	1,041,867					18	1,500,545
29 Aug	<4											2	2	2	1,500,547
1 Sep	7							62	1,041,929					62	1,500,609
2 Sep	<4											1	3	1	1,500,610
4 Sep	6							62	1,041,991					62	1,500,672
5 Sep	<4											1	4	1	1,500,673
8 Sep	<4							3	1,041,994					3	1,500,676
9 Sep	<4													0	1,500,676

Note: Days without data indicate days when there was no harvest.

Appendix A5.—Commercial coho salmon harvest by area and date, Upper Cook Inlet, 2014.

Upper Subdistrict Set Gillnet																
Date	244-21		244-22		244-25		244-31		244-32		244-41		244-42		Total	
	Ninilchik		Cohoe		Kasilof Terminal		South K-Beach		North K-Beach		Salamatof		E. Forelands		Daily	Cum
	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
23 Jun			1	1											1	1
26 Jun			1	2											1	2
28 Jun	1	1		2											1	3
30 Jun		1		2			1	1							1	4
3 Jul	3	4	2	4			1	2							6	10
5 Jul	1	5		4				2							1	11
7 Jul	9	14	6	10			2	4							17	28
9 Jul	4	18	5	15			1	5	3	3	10	10	28	28	51	79
12 Jul	18	36	6	21			5	10							29	108
15 Jul	9	45	35	56			3	13							47	155
16 Jul					2	2									2	157
17 Jul	9	54	10	66	8	10	8	21	22	25	141	151	106	134	304	461
18 Jul					3	13									3	464
19 Jul					42	55									42	506
20 Jul					11	66									11	517

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Upper Subdistrict Set Gillnet																
Date	244-21		244-22		244-25		244-31		244-32		244-41		244-42		Total	
	Ninilchik		Cohoe		Kasilof Terminal		South K-Beach		North K-Beach		Salamatof		E. Forelands		Daily	Cum
21 Jul					17	83									17	534
22 Jul					16	99									16	550
23 Jul	50	104	69	135	3	102	7	28	20	45	74	225	91	225	314	864
24 Jul					6	108									6	870
25 Jul					34	142									34	904
26 Jul					26	168									26	930
27 Jul					16	184									16	946
28 Jul					36	220									36	982
29 Jul					31	251									31	1,013
30 Jul					41	292									41	1,054
1 Aug					43	335									43	1,097
2 Aug	135	239	54	189	10	345	41	69	78	123	343	568	197	422	858	1,955
4 Aug	144	383	96	285			115	184	95	218	503	1,071	315	737	1,268	3,223
6 Aug									406	624	1,362	2,433	745	1,482	2,513	5,736

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Central District - West Side Set Gillnet																						
Date	245-10		245-20		245-30		245-40		245-50		245-55		245-60		246-10		246-20		Total			
	Day	Cum	Day	Cum																		
2 Jun																				0	0	
4 Jun																					0	0
6 Jun																					0	0
9 Jun																					0	0
11 Jun																					0	0
13 Jun																					0	0
16 Jun																					0	0
18 Jun																					0	0
19 Jun																					0	0
20 Jun																					0	0
23 Jun																					0	0
26 Jun															4	4					4	4
30 Jun					2	2									19	23	3	3			24	28
3 Jul					16	18									89	112	5	8			110	138
5 Jul					21	39															21	159
7 Jul					18	57									83	195	45	53			146	305
10 Jul					19	76															19	324
12 Jul					111	187															111	435
14 Jul					80	267			6	6					118	313	17	70			221	656
17 Jul					132	399			8	14					602	915	249	319			991	1,647

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Central District - West Side Set Gillnet																					
Date	245-10		245-20		245-30		245-40		245-50		245-55		245-60		246-10		246-20		Total		
	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	
19 Jul					284	683														284	1,931
21 Jul					573	1,256			54	68			63	63	2,061	2,976	640	959	3,391	5,322	
24 Jul					496	1,752			32	100			103	166	2,172	5,148	923	1,882	3,726	9,048	
26 Jul					625	2,377														625	9,673
28 Jul					454	2,831			90	190			214	380	1,285	6,433	252	2,134	2,295	11,968	
31 Jul					737	3,568			83	273					1,047	7,480	73	2,207	1,940	13,908	
2 Aug					547	4,115														547	14,455
4 Aug					372	4,487			269	542					1,085	8,565	500	2,707	2,226	16,681	
7 Aug					336	4,823			69	611					404	8,969	353	3,060	1,162	17,843	
11 Aug									173	784					627	9,596	47	3,107	847	18,690	
13 Aug															299	9,895			299	18,989	
14 Aug					35	4,858									3	9,898			38	19,027	
18 Aug															106	10,004	37	3,144	143	19,170	
21 Aug															152	10,156			152	19,322	
25 Aug															57	10,213			57	19,379	
29 Aug																				0	19,379
2 Sep																				0	19,379
5 Sep																				0	19,379
9 Sep																				0	19,379

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Northern District Set Gillnet

Date	247-10		247-20		247-30		247-41		247-42		247-43		247-70		247-80		247-90		Total			
	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum		
2 Jun																				0	0	
9 Jun																					0	0
16 Jun																					0	0
23 Jun				1		1				1		1									2	2
26 Jun	5	5	1	2										2	2	1	1				9	11
30 Jun	11	16	12	14	1	1	3	3						6	8	1	2	1	1		35	46
3 Jul	8	24	57	71	10	11								13	21	1	3	2	3		91	137
7 Jul			144	215	30	41	1	4	3	4	8	8	55	76	61	64	1	4		303	440	
10 Jul	1	25	91	306	26	67	29	33	22	26				12	88	13	77				194	634
14 Jul	36	61	124	430	74	141	48	81	59	85	46	54	41	129	6	83	7	11		441	1,075	
17 Jul	59	120	727	1,157	287	428	134	215	53	138	98	152	64	193	30	113	36	47		1,488	2,563	
21 Jul	90	210	624	1,781	909	1,337	687	902	244	382	440	592	225	418	61	174	88	135		3,368	5,931	
24 Jul	88	298	1,071	2,852	466	1,803	285	1,187	204	586	336	928	461	879	187	361	30	165		3,128	9,059	

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Northern District Set Gillnet																					
Date	247-10		247-20		247-30		247-41		247-42		247-43		247-70		247-80		247-90		Total		
	Day	Cum	Day	Cum																	
28 Jul	170	468	384	3,236	180	1,983	130	1,317	465	1,051	372	1,300	156	1,035	112	473	27	192	1,996	11,055	
31 Jul	415	883	1,624	4,860	808	2,791	985	2,302	505	1,556	529	1,829	231	1,266	237	710	140	332	5,474	16,529	
4 Aug	267	1,150	714	5,574	164	2,955	397	2,699	439	1,995	715	2,544	478	1,744	269	979	70	402	3,513	20,042	
7 Aug	235	1,385	651	6,225			519	3,218	542	2,537	568	3,112	479	2,223	637	1,616	207	609	3,838	23,880	
11 Aug	316	1,701	111	6,336			233	3,451	276	2,813	225	3,337	381	2,604			152	761	1,694	25,574	
14 Aug	128	1,829	210	6,546			7	3,458	183	2,996	225	3,562	192	2,796	24	1,640			969	26,543	
18 Aug	305	2,134	557	7,103					140	3,136	309	3,871	410	3,206	1,031	2,671	257	1,018	3,009	29,552	
21 Aug	29	2,163	327	7,430			155	3,613	52	3,188	278	4,149	282	3,488	867	3,538	270	1,288	2,260	31,812	
25 Aug	315	2,478	148	7,578			25	3,638	31	3,219	57	4,206	242	3,730	579	4,117	280	1,568	1,677	33,489	
28 Aug	131	2,609	43	7,621			26	3,664	34	3,253			65	3,795					299	33,788	
1 Sep	53	2,662	82	7,703					12	3,265			192	3,987	497	4,614	319	1,887	1,155	34,943	
4 Sep			70	7,773									13	4,000	144	4,758			227	35,170	
8 Sep			30	7,803															30	35,200	

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Central District Drift Gillnet															
Date	Deliveries	244-26		244-56		244-57		244-60		244-61		245-10		Total	
		Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
19 Jun	100							3	3					3	3
23 Jun	168							18	21					18	21
26 Jun	242							222	243					222	243
28 Jun	71													0	243
30 Jun	347							459	702					459	702
3 Jul	405							1,124	1,826					1,124	1,826
5 Jul	74									13	13			13	1,839
7 Jul	322							901	2,727					901	2,740
9 Jul	331			167	167									167	2,907
10 Jul	228							846	3,573					846	3,753
11 Jul	310			313	480									313	4,066
12 Jul	329							1,735	5,308					1,735	5,801
13 Jul	168			82	562									82	5,883
14 Jul	441							2,899	8,207					2,899	8,782
15 Jul	355			246	808									246	9,028
16 Jul	15	2	2											2	9,030
17 Jul	448	1	3					12,891	21,098					12,892	21,922
18 Jul	373	11	14			1,234	1,234							1,245	23,167
19 Jul	297	3	17			1,189	2,423							1,192	24,359
20 Jul	251	0	17			1,005	3,428							1,005	25,364
21 Jul	452	0	17					12,544	33,642					12,544	37,908
22 Jul	279	5	22			910	4,338							915	38,823
23 Jul	307					1,462	5,800							1,462	40,285
24 Jul	321					1,567	7,367							1,567	41,852

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Central District Drift Gillnet																
Date	Deliveries	244-26		244-56		244-57		244-60		244-61		245-10		Total		
		KRSHA	Day	Cum	Exp. Ken/Kas	Day	Cum	Exp. Ken/Kas & A.P.	Day	Cum	Districtwide	Kas. Section	Day	Cum	Chinitna Bay	Day
25 Jul	284		2	24			1,547	8,914							1,549	43,401
26 Jul	213						287	9,201							287	43,688
27 Jul	82						123	9,324							123	43,811
28 Jul	222		1	25			1,888	11,212							1,889	45,700
29 Jul	14		11	36											11	45,711
30 Jul	10		11	47											11	45,722
31 Jul	285						1,678	12,890							1,678	47,400
1 Aug	14		9	56											9	47,409
2 Aug	4		5	61											5	47,414
4 Aug	258								11,142	44,784					11,142	58,556
7 Aug	133								5,816	50,600					5,816	64,372
11 Aug	38								2,878	53,478					2,878	67,250
14 Aug	15								1,468	54,946					1,468	68,718
18 Aug	13								961	55,907					961	69,679
21 Aug	12								1,003	56,910					1,003	70,682
25 Aug	7								794	57,704					794	71,476
28 Aug	<4								138	57,842					138	71,614
29 Aug	<4												519	519	519	72,133
1 Sep	7								1,936	59,778					1,936	74,069
2 Sep	<4												1,361	1,880	1,361	75,430
4 Sep	6								903	60,681					903	76,333
5 Sep	<4												375	2,255	375	76,708
8 Sep	<4								140	60,821					140	76,848
9 Sep	<4												37	2,292	37	76,885

Note: Days without data indicate days when there was no harvest.

Appendix A6.—Commercial pink salmon harvest by area and date, Upper Cook Inlet, 2014.

Upper Subdistrict Set Gillnet																	
Date	244-21		244-22		244-25		244-31		244-32		244-41		244-42		Total		
	Ninilehik		Cohoe		Kasilof Terminal		South K-Beach		North K-Beach		Salamatof		E. Forelands				
	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	
23 Jun	1	1														1	1
26 Jun		1	1	1			1	1								2	3
28 Jun	2	3					1	2								3	6
30 Jun	6	9	2	3												8	14
3 Jul	31	40	21	24			3	5								55	69
5 Jul	35	75	13	37			1	6								49	118
7 Jul	121	196	64	101			5	11								190	308
9 Jul	110	306	36	137			7	18	13	13	35	35	63	63		264	572
12 Jul	387	693	258	395			37	55								682	1,254
15 Jul	348	1,041	427	822			193	248								968	2,222
16 Jul					37	37										37	2,259
17 Jul	396	1,437	545	1,367	100	137	173	421	428	441	1,213	1,248	1,160	1,223		4,015	6,274
18 Jul					15	152										15	6,289
19 Jul					105	257										105	6,394
20 Jul					64	321										64	6,458

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Upper Subdistrict Set Gillnet

Date	244-21		244-22		244-25		244-31		244-32		244-41		244-42		Total	
	Daily	Cum	Daily	Cum	Daily	Cum										
21 Jul					247	568									247	6,705
22 Jul					427	995									427	7,132
23 Jul	2,769	4,206	1,614	2,981	77	1,072	957	1,378	1,066	1,507	2,672	3,920	959	2,182	10,114	17,246
24 Jul					187	1,259									187	17,433
25 Jul					1,285	2,544									1,285	18,718
26 Jul					1,916	4,460									1,916	20,634
27 Jul					4,962	9,422									4,962	25,596
28 Jul					3,803	13,225									3,803	29,399
29 Jul					1,930	15,155									1,930	31,329
30 Jul					3,332	18,487									3,332	34,661
1 Aug					2,061	20,548									2,061	36,722
2 Aug	23,300	27,506	7,132	10,113	656	21,204	4,753	6,131	14,038	15,545	26,082	30,002	3,102	5,284	79,063	115,785
4 Aug	15,847	43,353	7,969	18,082			6,969	13,100	10,116	25,661	25,400	55,402	2,221	7,505	68,522	184,307
6 Aug									13,485	39,146	14,537	69,939	1,287	8,792	29,309	213,616

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Central District - West Side Set Gillnet

Date	245-10		245-20		245-30		245-40		245-50		245-55		245-60		246-10		246-20		Total			
	Day	Cum	Day	Cum																		
2 Jun																				0	0	
4 Jun																					0	0
6 Jun																					0	0
9 Jun																					0	0
11 Jun																					0	0
13 Jun																					0	0
16 Jun																					0	0
18 Jun																					0	0
19 Jun																					0	0
20 Jun																					0	0
23 Jun																					0	0
26 Jun																					0	0
30 Jun															2	2					2	2
3 Jul					6	6									7	9	3	3			16	18
5 Jul					10	16															10	28
7 Jul					17	33									66	75	8	11			91	119
10 Jul					4	37															4	123
12 Jul					9	46															9	132
14 Jul					4	50			1	1					156	231					161	293
17 Jul					17	67			1	2					619	850	141	152			778	1,071

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Central District - West Side Set Gillnet																				
Date	245-10		245-20		245-30		245-40		245-50		245-55		245-60		246-10		246-20		Total	
	Day	Cum	Day	Cum	Day	Cum														
19 Jul					33	100													33	1,104
21 Jul					106	206			23	25					561	1,411	137	289	827	1,931
24 Jul					105	311			8	33					213	1,624	46	335	372	2,303
26 Jul					99	410													99	2,402
28 Jul					80	490			51	84			24	24	187	1,811	5	340	347	2,749
31 Jul					113	603			20	104					180	1,991	7	347	320	3,069
2 Aug					131	734													131	3,200
4 Aug					50	784			69	173					290	2,281	98	445	507	3,707
7 Aug					15	799			11	184					165	2,446	118	563	309	4,016
11 Aug									5	189					214	2,660	15	578	234	4,250
13 Aug															53	2,713			53	4,303
14 Aug					2	801									3	2,716			5	4,308
18 Aug															4	2,720			4	4,312
21 Aug															15	2,735			15	4,327
25 Aug															4	2,739			4	4,331
29 Aug																			0	4,331
2 Sep																			0	4,331
5 Sep																			0	4,331
9 Sep																			0	4,331

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Northern District Set Gillnet

Date	247-10		247-20		247-30		247-41		247-42		247-43		247-70		247-80		247-90		Total				
	Trading Bay		Tyonek		Beluga		Su. Flats		Pt. McKenzie		Fire Island		Pt. Possesion		Birch Hill		#3 Bay						
	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	
2 Jun																					0	0	
9 Jun																						0	0
16 Jun																						0	0
23 Jun																						0	0
26 Jun																						0	0
30 Jun														3	3				1	1		4	4
3 Jul	4	4				1	1							21	24							26	30
7 Jul			9	9	3	4								340	364	153	153	19	20			524	554
10 Jul					11	15	2	2	1	1				31	395	77	230					122	676
14 Jul	4	8	10	19	12	27	23	25	33	34	1	1	281	676	76	306	44	64			484	1,160	
17 Jul			577	596	192	219	123	148	24	58	6	7	434	1,110	283	589	389	453			2,028	3,188	
21 Jul	21	29	5	601	128	347	35	183	79	137			943	2,053	285	874	245	698			1,741	4,929	
24 Jul	17	46	22	623	7	354	8	191	54	191			357	2,410	298	1,172	68	766			831	5,760	

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Northern District Set Gillnet

Date	247-10		247-20		247-30		247-41		247-42		247-43		247-70		247-80		247-90		Total	
	Day	Cum	Day	Cum	Day	Cum	Day	Cum												
28 Jul	8	54	20	643					69	260			150	2,560	73	1,245	49	815	369	6,129
31 Jul	8	62	15	658			45	236	22	282			178	2,738	160	1,405	104	919	532	6,661
4 Aug	8	70	3	661			6	242	21	303			73	2,811	13	1,418	90	1,009	214	6,875
7 Aug	11	81					3	245	7	310			52	2,863	77	1,495	89	1,098	239	7,114
11 Aug									1	311			36	2,899			79	1,177	116	7,230
14 Aug									2	313			9	2,908	1	1,496			12	7,242
18 Aug	5	86							3	316			86	2,994	155	1,651	85	1,262	334	7,576
21 Aug							1	246	2	318			21	3,015	6	1,657	38	1,300	68	7,644
25 Aug	13	99							1	319			4	3,019			26	1,326	44	7,688
28 Aug									1	320			4	3,023					5	7,693
1 Sep																	2	1,328	2	7,695
4 Sep																			0	7,695
8 Sep																			0	7,695

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Central District Drift Gillnet															
Date	Deliveries	244-26		244-56		244-57		244-60		244-61		245-10		Total	
		Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
19 Jun	100							12	12					12	12
23 Jun	168							24	36					24	36
26 Jun	242							27	63					27	63
28 Jun	71													0	63
30 Jun	347							131	194					131	194
3 Jul	405							869	1,063					869	1,063
5 Jul	74									38	38			38	1,101
7 Jul	322							3,220	4,283					3,220	4,321
9 Jul	331			1,026	1,026									1,026	5,347
10 Jul	228							9,194	13,477					9,194	14,541
11 Jul	310			4,418	5,444									4,418	18,959
12 Jul	329							22,354	35,831					22,354	41,313
13 Jul	168			3,409	8,853									3,409	44,722
14 Jul	441							44,137	79,968					44,137	88,859
15 Jul	355			9,924	18,777									9,924	98,783
16 Jul	15	62	62											62	98,845
17 Jul	448	159	221					63,695	143,663					63,854	162,699
18 Jul	373	309	530			16,746	16,746							17,055	179,754
19 Jul	297	10	540			12,830	29,576							12,840	192,594
20 Jul	251	6	546			10,088	39,664							10,094	202,688
21 Jul	452	5	551					38,141	181,804					38,146	240,834
22 Jul	279	84	635			7,011	46,675							7,095	247,929
23 Jul	307	2	637			12,315	58,990							12,317	260,246
24 Jul	321	12	649			13,600	72,590							13,612	273,858

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Central District Drift Gillnet															
Date	Deliveries	244-26		244-56		244-57		244-60		244-61		245-10		Total	
		KRSHA		Exp. Ken/Kas		Exp. Ken/Kas & A.P.		Districtwide		Kas. Section		Chinitna Bay		Day	Cum
		Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
25 Jul	284	41	690			12,106	84,696							12,147	286,005
26 Jul	213	14	704			14,567	99,263							14,581	300,586
27 Jul	82	32	736			5,663	104,926							5,695	306,281
28 Jul	222	582	1,318			16,567	121,493							17,149	323,430
29 Jul	14	839	2,157											839	324,269
30 Jul	10	446	2,603											446	324,715
31 Jul	285					62,420	183,913							62,420	387,135
1 Aug	14	832	3,435											832	387,967
2 Aug	4	529	3,964											529	388,496
4 Aug	258							20,319	202,123					20,319	408,815
7 Aug	133							8,038	210,161					8,038	416,853
11 Aug	38							127	210,288					127	416,980
14 Aug	15							22	210,310					22	417,002
18 Aug	13							28	210,338					28	417,030
21 Aug	12							62	210,400					62	417,092
25 Aug	7							15	210,415					15	417,107
28 Aug	<4							1	210,416					1	417,108
29 Aug	<4													0	417,108
1 Sep	7							2	210,418					2	417,110
2 Sep	<4													0	417,110
4 Sep	6							2	210,420					2	417,112
5 Sep	<4													0	417,112
8 Sep	<4													0	417,112
9 Sep	<4													0	417,112

Note: Days without data indicate days when there was no harvest.

Appendix A7.—Commercial chum salmon harvest by area and date, Upper Cook Inlet, 2014.

Upper Subdistrict Set Gillnet																	
Date	244-21		244-22		244-25		244-31		244-32		244-41		244-42		Total		
	Daily	Cum	Daily	Cum													
23 Jun																0	0
26 Jun																0	0
28 Jun							2	2								2	2
30 Jun							3	5								3	5
3 Jul																0	5
5 Jul							1	6								1	6
7 Jul	5	5					7	13								12	18
9 Jul	4	9					2	15			7	7				13	31
12 Jul	2	11														2	33
15 Jul	5	16					86	101								91	124
16 Jul					8	8										8	132
17 Jul	3	19	2	2	4	12	5	106	1	1	18	25	14	14		47	179
18 Jul					6	18										6	185
19 Jul					32	50										32	217
20 Jul					2	52										2	219

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Upper Subdistrict Set Gillnet																
Date	244-21		244-22		244-25		244-31		244-32		244-41		244-42		Total	
	Ninilchik		Cohoe		Kasilof Terminal		South K-Beach		North K-Beach		Salamatof		E. Forelands		Daily	Cum
21 Jul					6	58									6	225
22 Jul					1	59									1	226
23 Jul	4	23	1	3			2	108	1	2	3	28	8	22	19	245
24 Jul					11	70									11	256
25 Jul					4	74									4	260
26 Jul					2	76									2	262
27 Jul					1	77									1	263
28 Jul					2	79									2	265
29 Jul					5	84									5	270
30 Jul															0	270
1 Aug					1	85									1	271
2 Aug	2	25			1	86	2	110	3	5	8	36	12	34	28	299
4 Aug	27	52	4	7					3	8	53	89	103	137	190	489
6 Aug									3	11	31	120	25	162	59	548

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Central District - West Side Set Gillnet

Date	245-10		245-20		245-30		245-40		245-50		245-55		245-60		246-10		246-20		Total		
	Chinitna Bay		Silv. Salmon		Tuxedni Bay		Polly Cr.		L. J. Slough		Big River		W. Forelands		Kalgin - West		Kalgin - East		Day	Cum	
	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	
2 Jun																			0	0	
4 Jun																			0	0	
6 Jun																			0	0	
9 Jun																			0	0	
11 Jun																			0	0	
13 Jun																			0	0	
16 Jun																			0	0	
18 Jun																			0	0	
19 Jun																			0	0	
20 Jun																1	1		1	1	
23 Jun					1	1													1	2	
26 Jun																2	3		2	4	
30 Jun					5	6													5	9	
3 Jul					11	17										6	9		17	26	
5 Jul					10	27													10	36	
7 Jul					27	54										6	15		33	69	
10 Jul					3	57													3	72	
12 Jul					41	98													41	113	
14 Jul					27	125			2	2						11	26	1	1	41	154
17 Jul					96	221										155	181	31	32	282	436

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Central District - West Side Set Gillnet																					
Date	245-10		245-20		245-30		245-40		245-50		245-55		245-60		246-10		246-20		Total		
	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	
19 Jul					122	343														122	558
21 Jul					554	897			1	3					46	227	3	35		604	1,162
24 Jul					507	1,404			4	7					178	405	80	115		769	1,931
26 Jul					293	1,697														293	2,224
28 Jul					236	1,933			1	8					136	541	12	127		385	2,609
31 Jul					515	2,448			2	10					270	811	1	128		788	3,397
2 Aug					579	3,027														579	3,976
4 Aug					307	3,334			13	23					63	874	40	168		423	4,399
7 Aug					127	3,461			3	26					46	920	94	262		270	4,669
11 Aug									1	27					60	980	6	268		67	4,736
13 Aug															58	1,038				58	4,794
14 Aug					3	3,464														3	4,797
18 Aug															8	1,046				8	4,805
21 Aug															15	1,061				15	4,820
25 Aug															8	1,069				8	4,828
29 Aug																				0	4,828
2 Sep																				0	4,828
5 Sep																				0	4,828
9 Sep																				0	4,828

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Northern District Set Gillnet

Date	247-10		247-20		247-30		247-41		247-42		247-43		247-70		247-80		247-90		Total				
	Trading Bay		Tyonek		Beluga		Su. Flats		Pt. McKenzie		Fire Island		Pt. Possesion		Birch Hill		#3 Bay						
	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	
2 Jun																					0	0	
9 Jun																						0	0
16 Jun																						0	0
23 Jun																						0	0
26 Jun														1	1	2	2					3	3
30 Jun			4	4	2	2								1	2							7	10
3 Jul	1	1	7	11										2	4							10	20
7 Jul			26	37	1	3			1	1	1	1	25	29	9	11	1	1			64	84	
10 Jul					14	17	15	15	8	9				29	5	16						42	126
14 Jul	1	2	13	50	19	36	19	34	103	112	26	27	7	36	1	17					189	315	
17 Jul			101	151	110	146	86	120	42	154	28	55	20	56	4	21	3	4			394	709	
21 Jul	1	3	4	155	54	200	209	329	50	204	22	77	34	90	4	25	1	5			379	1,088	
24 Jul			17	172	13	213	41	370	40	244			53	143	10	35					174	1,262	

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Northern District Set Gillnet

Date	247-10		247-20		247-30		247-41		247-42		247-43		247-70		247-80		247-90		Total	
	Day	Cum	Day	Cum																
28 Jul	1	4	15	187	10	223	37	407	109	353			21	164	5	40	2	7	200	1,462
31 Jul	9	13	13	200	29	252	84	491	42	395	1	78	47	211	5	45	4	11	234	1,696
4 Aug	1	14	7	207			48	539	80	475			32	243	2	47	8	19	178	1,874
7 Aug	13	27	1	208			59	598	50	525	6	84	129	372	46	93	5	24	309	2,183
11 Aug	1	28	1	209			7	605	31	556			2	374			2	26	44	2,227
14 Aug			3	212			4	609	19	575									26	2,253
18 Aug	3	31							15	590			25	399	3	96	2	28	48	2,301
21 Aug							27	636	11	601			6	405	2	98	3	31	49	2,350
25 Aug	12	43					4	640	2	603			11	416	3	101	1	32	33	2,383
28 Aug	7	50					6	646	1	604									14	2,397
1 Sep	2	52							1	605			3	419	2	103	1	33	9	2,406
4 Sep																			0	2,406
8 Sep																			0	2,406

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Central District Drift Gillnet															
Date	Deliveries	244-26		244-56		244-57		244-60		244-61		245-10		Total	
		Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
19 Jun	100							348	348					348	348
23 Jun	168							360	708					360	708
26 Jun	242							666	1,374					666	1,374
28 Jun	71													0	1,374
30 Jun	347							3,033	4,407					3,033	4,407
3 Jul	405							4,034	8,441					4,034	8,441
5 Jul	74									15	15			15	8,456
7 Jul	322							3,669	12,110					3,669	12,125
9 Jul	331			570	570									570	12,695
10 Jul	228							5,932	18,042					5,932	18,627
11 Jul	310			2,393	2,963									2,393	21,020
12 Jul	329							7,908	25,950					7,908	28,928
13 Jul	168			536	3,499									536	29,464
14 Jul	441							18,568	44,518					18,568	48,032
15 Jul	355			1,939	5,438									1,939	49,971
16 Jul	15	39	39											39	50,010
17 Jul	448	41	80					20,718	65,236					20,759	70,769
18 Jul	373	44	124			2,865	2,865							2,909	73,678
19 Jul	297					2,456	5,321							2,456	76,134
20 Jul	251					2,274	7,595							2,274	78,408
21 Jul	452							9,884	75,120					9,884	88,292
22 Jul	279	11	135			767	8,362							778	89,070
23 Jul	307					2,005	10,367							2,005	91,075
24 Jul	321	1	136			2,251	12,618							2,252	93,327

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Central District Drift Gillnet															
Date	Deliveries	244-26		244-56		244-57		244-60		244-61		245-10		Total	
		Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
25 Jul	284	3	139			2,005	14,623							2,008	95,335
26 Jul	213					632	15,255							632	95,967
27 Jul	82					394	15,649							394	96,361
28 Jul	222	7	146			2,284	17,933							2,291	98,652
29 Jul	14	12	158											12	98,664
30 Jul	10	5	163											5	98,669
31 Jul	285					1,457	19,390							1,457	100,126
1 Aug	14	1	164											1	100,127
2 Aug	4													0	100,127
4 Aug	258							6,106	81,226					6,106	106,233
7 Aug	133							1,545	82,771					1,545	107,778
11 Aug	38							106	82,877					106	107,884
14 Aug	15							27	82,904					27	107,911
18 Aug	13							83	82,987					83	107,994
21 Aug	12							108	83,095					108	108,102
25 Aug	7							43	83,138					43	108,145
28 Aug	<4							19	83,157					19	108,164
29 Aug	<4													0	108,164
1 Sep	7							38	83,195					38	108,202
2 Sep	<4											44	44	44	108,246
4 Sep	6							29	83,224					29	108,275
5 Sep	<4											20	64	20	108,295
8 Sep	<4							5	83,229					5	108,300
9 Sep	<4											1	65	1	108,301

Note: Days without data indicate days when there was no harvest.

Appendix A8.–Commercial salmon harvest by gear, statistical area and species, Upper Cook Inlet, 2014.

Gear	District	Subdistrict	Stat Area	Permits ^a	Chinook	Sockeye	Coho	Pink	Chum	Total		
Drift	Central	All	All	496	382	1,500,676	76,885	417,112	108,301	2,103,356		
Setnet	Central	Upper	24421	99	284	178,512	383	43,353	52	222,584		
			24422	74	502	124,510	285	18,082	7	143,386		
			24425	132	625	198,131	345	21,204	86	220,391		
			24431	59	290	84,436	184	13,100	110	98,120		
			24432	51	129	34,084	624	39,146	11	73,994		
			24441	58	453	87,454	2,433	69,939	120	160,399		
			24442	21	18	17,271	1,482	8,792	162	27,725		
			All	364	2,301	724,398	5,736	213,616	548	946,599		
		Kalgin Is.	24610	24	265	34,149	10,213	2,739	1,069	48,435		
			24620	<4	3	6,910	3,144	578	268	10,903		
			All	26	268	41,059	13,357	3,317	1,337	59,338		
		Chinitna	24510	0	0	0	0	0	0	0		
			Western	24520	0	0	0	0	0	0		
		Western	24530	16	121	32,587	4,858	801	3,464	41,831		
			24540	0	0	0	0	0	0	0		
			24550	<4	0	4,436	784	189	27	5,436		
			All	19	121	37,023	5,642	990	3,491	47,267		
			Kustatan	24555	8	118	1,842	0	0	0	1,960	
		24560		<4	0	347	380	24	0	751		
		All		10	118	2,189	380	24	0	2,711		
All	All	All	415	2,808	804,669	25,115	217,947	5,376	1,055,915			
Northern	General	24710	13	546	4038	2662	99	52	7,397			
		24720	12	177	8894	7,803	661	212	17,747			
		24730	5	9	3,041	2,955	354	252	6,611			
		24741	10	101	1,573	3,664	246	646	6,230			
		24742	6	149	1,349	3,265	320	605	5,688			
		24743	6	155	864	4,206	7	84	5,316			
		All	49	1,137	19,759	24,555	1,687	1,851	48,989			
		Eastern	24770	18	183	6,338	4,000	3023	419	13,963		
			24780	15	106	5565	4,758	1657	103	12,189		
			24790	8	44	6,025	1,887	1328	33	9,317		
			All	32	333	17,928	10,645	6,008	555	35,469		
		All	All	All	81	1,470	37,687	35,200	7,695	2,406	84,458	
		All	All	All	All	496	4,278	842,356	60,315	225,642	7,782	1,140,373
		Seine	All	All	All	0	0	0	0	0	0	
All	All	All	All	992	4,660	2,343,032	137,200	642,754	116,083	3,243,729		

^a Permit totals may be less than the sum of individual statistical areas if some permits were fished in multiple statistical areas.

Appendix A9.–Commercial salmon harvest per permit by statistical area, Upper Cook Inlet, 2014.

Gear	District	Subdistrict	Stat Area	Permits ^a	Chinook	Sockeye	Coho	Pink	Chum	Total	
Drift	Central	All	All	496	1	3,026	155	841	218	4,241	
Set	Central	Upper	24421	99	3	1,803	4	438	1	2,248	
			24422	74	7	1,683	4	244	0	1,938	
			24425	132	5	1,501	3	161	1	1,670	
			24431	59	5	1,431	3	222	2	1,663	
			24432	51	3	668	12	768	0	1,451	
			24441	58	8	1,508	42	1,206	2	2,766	
			24442	21	1	822	71	419	8	1,320	
			All	364	6	1,990	16	587	2	2,601	
		Kalgin Is.	24610	24	11	1,423	426	114	45	2,018	
			24620	<4	na	na	na	na	na	na	
			All	26	10	1,579	514	128	51	2,282	
		Chinitna	24510	0	na	na	na	na	na	na	
			Western	24520	0	na	na	na	na	na	
		Western	24530	16	8	2,037	304	50	217	2,614	
			24540	0	na	na	na	na	na	na	
			24550	<4	na	na	na	na	na	na	
			All	19	6	1,949	297	52	184	2,488	
			Kustatan	24555	8	15	230	0	0	0	245
		24560		<4	na	na	na	na	na	na	
		All		10	12	219	38	2	0	271	
		All	All	415	7	1,939	61	525	13	2,544	
		Northern	General	24710	13	42	311	205	8	4	569
				24720	12	15	741	650	55	18	1,479
24730	5			2	608	591	71	50	1,322		
24741	10			10	157	366	25	65	623		
24742	6			25	225	544	53	101	948		
24743	6			26	144	701	1	14	886		
All	49			23	403	501	34	38	1,000		
Eastern	24770			18	10	352	222	168	23	776	
	24780			15	7	371	317	110	7	813	
	24790			8	6	753	236	166	4	1,165	
	All			32	10	560	333	188	17	1,108	
All	All			81	18	465	435	95	30	1,043	
All	All			All	496	9	1,698	122	455	16	2,299
Seine	All			All	All	-	-	-	-	-	-
All	All	All	All	992	5	2,362	138	648	117	3,270	

^a Permit totals may be less than the sum of individual statistical areas if some permits were fished in multiple statistical areas.

Appendix A10.—Commercial fishing emergency orders issued during the 2014 Upper Cook Inlet fishing season.

Emergency Order No.	Effective Date	Action	Reason
2S-01-14	26-May	Closed commercial salmon fishing in the Northern District of Upper Cook Inlet on Monday, May 26, 2014. Reduced the open fishing time from twelve to six hours per day for the four remaining commercial king salmon fishing periods scheduled in the Northern District of Upper Cook Inlet for the 2014 season. This Emergency Order also closed that portion of the General Subdistrict of the Northern District from a point at the wood chip dock located approximately three miles south of Tyonek at 61° 02.77' N. lat., 151° 10.04' W. long., to the Susitna River to commercial king salmon fishing for the 2014 directed king salmon fishery. The fishing periods affected by this announcement were June 2, June 9, June 16, and June 23, 2014.	The AK Board of Fisheries found Chuitna River king salmon to be a stock of management concern. As a result, sport fishing in the Chuitna River was closed, which, according to the N. Dist. King Salmon Mngt. Plan, required a closure of the commercial fishery from the wood chip dock to the Susitna River. Additionally, predicted low abundance of Northern District king salmon stocks required conservative management for the 2014 season.
2G-01-14	28-May	Closed the Cook Inlet commercial smelt fishery for the 2014 season at 9:00 AM on Wednesday, May 28, 2014.	To comply with the Cook Inlet Smelt FMP; the fishery is to close when harvest meets the 100 ton limit.
2S-02-14	15-Jun	Reduced the hours the personal use set gillnet fishery at the mouth of the Kasilof River is open from 6:00 AM to 11:00 PM to 6:00 AM to 3:00 PM daily, from Sunday, June 15, 2014 through Tuesday, June 24, 2014.	To reduce the harvest of Kasilof River king salmon.
2S-03-14	16-Jun	Modified fishing time from 6 hours per day to 12 hours per day, or from 7:00 AM until 7:00 PM for the remaining two fishing periods in the directed king salmon commercial set gillnet fishery in the Northern District of Upper Cook Inlet. The fishing periods affected by this announcement occurred on Monday, June 16, 2014 and Monday, June 23, 2014.	To allow opportunity in the fishery based on the likelihood of achieving the Deshka River king salmon SEG

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Emergency Order No.	Effective Date	Action	Reason
2S-04-14	23-Jun	Opened commercial fishing with set gillnets in the Kasilof Section of the Upper Subdistrict from 7:00 AM until 4:00 PM on Monday, June 23, 2014.	To reduce the escapement rate of Kasilof River sockeye salmon.
2S-05-14	1-Jul	Removed regularly scheduled fishing periods in the Upper Subdistrict set gillnet fishery on Mondays and Thursdays beginning 12:01 AM on July 1, 2014.	To comply with the Kenai River Late-Run King Salmon Management Plan.
2S-06-14	28-Jun	Opened commercial fishing with set gillnets in the Kasilof Section of the Upper Subdistrict from 11:00 AM until 8:00 PM on Saturday, June 28, 2014. Opened drift gillnetting in the Kasilof Section of the Upper Subdistrict from 11:00 AM until 8:00 PM on Saturday, June 28, 2014.	To reduce the escapement rate of Kasilof River sockeye salmon.
2S-07-14	30-Jun	Extended commercial fishing with set gillnets in the Kasilof Section of the Upper Subdistrict from 7:00 PM until 9:00 PM on Monday, June 30, 2014. Opened drift gillnetting in the Kasilof Section of the Upper Subdistrict from 7:00 PM until 9:00 PM on Monday, June 30, 2014.	To reduce the escapement rate of Kasilof River sockeye salmon.
2S-08-14	3-Jul	Opened commercial fishing with set gillnets in the Kasilof Section of the Upper Subdistrict from 8:00 AM until 10:00 PM on Thursday, July 3, 2014. Opened drift gillnetting in the Kasilof Section of the Upper Subdistrict from 7:00 PM until 10:00 PM on Thursday, July 3, 2014.	To reduce the escapement rate of Kasilof River sockeye salmon.
2S-09-14	5-Jul	Opened commercial fishing with set gillnets in that portion of the Western Subdistrict of the Central District south of the latitude of Redoubt Point from 6:00 AM until 10:00 PM on Mondays, Thursdays, and Saturdays each week until further notice, effective beginning at 6:00 AM on Saturday, July 5, 2014.	To allow for reasonable fishing opportunity and to provide adequate sockeye salmon passage in the Crescent River.
2S-10-14	5-Jul	Opened commercial fishing with set and drift gillnets in the Kasilof Section of the Upper Subdistrict from 3:00 PM until 12:00 midnight on Saturday, July 5, 2014.	To reduce the escapement rate of Kasilof River sockeye salmon.

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Emergency Order No.	Effective Date	Action	Reason
2S-11-14	7-Jul	Opened commercial fishing with set gillnets in the Kasilof Section of the Upper Subdistrict from 6:00 AM until 3:00 PM on Monday, July 7, 2014. Opened drift gillnetting in the Kasilof Section from 6:00 AM until 7:00 AM on Monday, July 7, 2014.	To reduce the escapement rate of Kasilof River sockeye salmon.
2S-12-14	9-Jul	Opened commercial fishing with set gillnets in the Kenai, Kasilof, and East Foreland sections of the Upper Subdistrict from 8:00 AM until 8:00 PM on Wednesday, July 9, 2014. Opened drift gillnetting in the Expanded Kenai and Expanded Kasilof sections of the Upper Subdistrict from 8:00 AM until 8:00 PM on Wednesday, July 9, 2014.	To reduce the escapement rate of Kenai River and Kasilof River sockeye salmon.
2S-13-14	11-Jul	Opened commercial fishing with drift gillnets in the Expanded Kenai and Expanded Kasilof sections of the Upper Subdistrict from 8:00 AM until 8:00 PM on Friday, July 11, 2014.	To reduce the escapement rate of Kenai River and Kasilof River sockeye salmon.
2S-14-14	12-Jul	Opened commercial fishing with drift gillnets in Drift Gillnet Area 1 and the Expanded Kenai and Expanded Kasilof sections of the Upper Subdistrict from 7:00 AM until 7:00 PM on Saturday, July 12, 2014.	To reduce the escapement rate of Kenai River and Kasilof River sockeye salmon.
2S-15-14	12-Jul	Opened set gillnetting in that portion of the Kasilof Section of the Upper Subdistrict within ½ mile of the mean high tide mark on the Kenai Peninsula shoreline from 10:00 AM until 7:00 PM on Saturday, July 12, 2014.	To reduce the escapement rate of Kasilof River sockeye salmon and to conserve Kenai River king salmon.
2S-16-14	13-Jul	Opened commercial fishing with drift gillnets in the Expanded Kenai and Expanded Kasilof sections of the Upper Subdistrict from 6:00 AM until 8:00 PM on Sunday, July 13, 2014.	To reduce the escapement rate of Kenai River and Kasilof River sockeye salmon.
2S-17-14	15-Jul	Opened commercial fishing with drift gillnets in the Expanded Kenai and Expanded Kasilof sections of the Upper Subdistrict from 6:00 AM until 8:00 PM on Tuesday, July 15, 2014.	To reduce the escapement rate of Kenai River and Kasilof River sockeye salmon.

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Emergency Order No.	Effective Date	Action	Reason
2S-18-14	15-Jul	Opened set gillnetting in that portion of the Kasilof Section of the Upper Subdistrict within ½ mile of the mean high tide mark on the Kenai Peninsula shoreline from 12:00 PM until 9:00 PM on Tuesday, July 15, 2014.	To reduce the escapement rate of Kasilof River sockeye salmon and to conserve Kenai River king salmon.
2S-19-14	16-Jul	Opened set and drift gillnetting in the Kasilof River Special Harvest Area (KRSHA) from 5:00 PM on Wednesday, July 16, 2014 until 10:00 AM on Thursday, July 17, 2014.	To reduce the escapement rate of Kasilof River sockeye salmon.
2S-20-14	17-Jul	Opened drift gillnetting in Drift Gillnet Area 1 and the Expanded Kenai and Expanded Kasilof sections of the Upper Subdistrict from 7:00 AM until 7:00 PM on Thursday, July 17, 2014.	To comply with the Central District Drift Gillnet Fishery Management Plan.
2S-21-14	17-Jul	Opened commercial fishing with set gillnets in the Kenai, Kasilof, and East Foreland sections of the Upper Subdistrict from 11:00 AM until 11:00 PM on Thursday, July 17, 2014; gear in this period was restricted to either 1) three set gillnets that are each not more than 35 fathoms in length and up to 29 meshes in depth, or 2) two set gillnets that are each not more than 35 fathoms in length and up to 45 meshes in depth. Opened drift gillnetting in the Expanded Kenai, Expanded Kasilof, and Anchor Point sections from 7:00 PM until 11:00 PM on Thursday, July 17, 2014.	To harvest Kenai River and Kasilof River sockeye salmon and to conserve king salmon.
2S-22-14	18-Jul	Opened drift gillnetting in the Expanded Kenai and Expanded Kasilof sections of the Upper Subdistrict and the Anchor Point Section of the Lower Subdistrict from 10:00 AM until 10:00 PM on Friday, July 18, 2014	To harvest Kenai River and Kasilof River sockeye salmon.
2S-23-14	18-Jul	Opened set gillnetting in the KRSHA from 6:00 PM on Friday, July 18, 2014 until 10:00 AM on Saturday, July 19, 2014. Opened drift gillnetting in the KRSHA from 6:00 PM until 11:00 pm on Friday, July 18, 2014 and from 5:00 AM until 10:00 AM on Saturday, July 19, 2014.	To reduce the escapement rate of Kasilof River sockeye salmon.

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Emergency Order No.	Effective Date	Action	Reason
2S-24-14	19-Jul	Opened drift gillnetting in the Expanded Kenai and Expanded Kasilof sections of the Upper Subdistrict and the Anchor Point Section of the Lower Subdistrict from 7:00 AM until 7:00 PM on Saturday, July 19, 2014.	To harvest Kenai River and Kasilof River sockeye salmon.
2S-25-14	19-Jul	Extended set and drift gillnetting in the KRSHA from 10:00 AM until 11:00 PM on Saturday, July 19, 2014.	To reduce the escapement rate of Kasilof River sockeye salmon.
2S-26-14	19-Jul	Opened drift gillnetting in the Expanded Kenai and Expanded Kasilof sections of the Upper Subdistrict and the Anchor Point Section of the Lower Subdistrict from 8:00 AM until 8:00 PM on Sunday, July 20, 2014. Extended commercial fishing with set gillnets in the KRSHA from 11:00 PM on Saturday, July 19, 2014 until 5:00 PM on Sunday, July 20, 2014. Opened drift gillnetting in the KRSHA from 5:00 AM until 5:00 PM on Sunday, July 20, 2014.	To harvest Kenai River and Kasilof River sockeye salmon.
2S-27-14	21-Jul	Reduced legal gear to one set gillnet per permit, measuring no more than 35 fathoms in length, in the Northern District of Upper Cook Inlet from 7:00 AM until 7:00 PM on Monday, July 21, 2014, from 7:00 AM until 7:00 PM on Thursday, July 24, 2014, and from 7:00 AM until 7:00 PM on Monday, July 28, 2014.	To comply with the Northern District Salmon Management Plan and the Susitna River Sockeye Salmon Action Plan.
2S-28-14	20-Jul	Extended commercial fishing with set and drift gillnets in the KRSHA from 5:00 PM until 11:59 PM on Sunday, July 20, 2014.	To reduce the escapement rate of Kasilof River sockeye salmon.
2S-29-14	21-Jul	Opened drift gillnetting in Drift Gillnet Area 1 and the Expanded Kenai and Expanded Kasilof Sections of the Upper Subdistrict from 7:00 AM until 7:00 PM on Monday, July 21, 2014.	To comply with the Central District Drift Gillnet Fishery Management Plan.
2S-30-14	21-Jul	Opened commercial fishing with set gillnets in the KRSHA from 10:00 AM on Monday, July 21, 2014 until 1:00 PM on Tuesday, July 22, 2014. Opened commercial fishing with drift gillnets in the KRSHA from 10:00 AM until 11:00 PM on Monday, July 21, 2014 and from 5:00 AM until 1:00 PM on Tuesday, July 22, 2014.	To reduce the escapement rate of Kasilof River sockeye salmon.

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Emergency Order No.	Effective Date	Action	Reason
2S-31-14	22-Jul	Opened drift gillnetting in the Expanded Kenai and Expanded Kasilof sections of the Upper Subdistrict and the Anchor Point Section of the Lower Subdistrict from 7:00 AM until 7:00 PM on Tuesday, July 22, 2014.	To harvest Kenai River and Kasilof River sockeye salmon.
2S-32-14	22-Jul	Extended commercial fishing with set gillnets in the KRSHA from 1:00 PM on Tuesday, July 22 until 3:00 PM on Wednesday, July 23, 2014. Extended commercial fishing with drift gillnets in the KRSHA from 1:00 PM until 11:00 PM on Tuesday, July 22, 2014 and from 5:00 AM until 3:00 PM on Wednesday, July 23, 2014.	To reduce the escapement rate of Kasilof River sockeye salmon.
2S-33-14	23-Jul	Opened drift gillnetting in the Expanded Kenai and Expanded Kasilof sections of the Upper Subdistrict and the Anchor Point Section of the Lower Subdistrict from 7:00 AM until 7:00 PM on Wednesday, July 23, 2014, and from 7:00 AM until 7:00 PM on Thursday, July 24, 2014.	To harvest Kenai River and Kasilof River sockeye salmon and to comply with the Central District Drift Gillnet Fishery Management Plan.
2S-34-14	23-Jul	Opened set gillnetting in the Kenai, Kasilof, and East Foreland sections of the Upper Subdistrict from 10:00 AM until 10:00 PM on Wednesday, July 23, 2014. Rescinded Emergency Order No. 2S-32-14 and closed the KRSHA at 10:00 AM on Wednesday, July 23, 2014.	To harvest Kenai River and Kasilof River sockeye salmon.
2S-35-14	24-Jul	Opened commercial fishing with set gillnets in the KRSHA from 1:00 PM on Thursday, July 24 until 6:00 PM on Friday, July 25, 2014. Opened commercial fishing with drift gillnets in the KRSHA from 1:00 PM until 11:00 PM on Thursday, July 24, 2014 and from 5:00 AM until 6:00 PM on Friday, July 25, 2014.	To reduce the escapement rate of Kasilof River sockeye salmon.
2S-36-14	24-Jul	Closed set gillnetting in the Kenai, Kasilof, and East Foreland Sections of the Upper Subdistrict until further notice.	To comply with the Kenai River Late-Run King Salmon Management Plan.
2S-37-14	25-Jul	Opened drift gillnetting in the Expanded Kenai and Expanded Kasilof sections of the Upper Subdistrict and the Anchor Point Section of the Lower Subdistrict from 7:00 AM until 7:00 PM on Friday, July 25, 2014, from 7:00 AM until 7:00 PM on Saturday, July 26, 2014, and from 7:00 AM until 7:00 PM on Sunday, July 27, 2014.	To harvest Kenai River and Kasilof River sockeye salmon.

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Emergency Order No.	Effective Date	Action	Reason
2S-38-14	25-Jul	Extended commercial fishing with set gillnets in the KRSHA from 6:00 PM on Friday, July 25, 2014 until 6:00 PM on Saturday, July 26, 2014. Extended commercial fishing with drift gillnets in the KRSHA from 6:00 PM until 11:00 PM on Friday, July 25, 2014 and from 5:00 AM until 6:00 PM on Saturday, July 26, 2014.	To reduce the escapement rate of Kasilof River sockeye salmon.
2S-39-14	26-Jul	Extended commercial fishing with set gillnets in the KRSHA from 6:00 PM on Saturday, July 26, 2014 until 6:00 PM on Sunday, July 27, 2014. Extended commercial fishing with drift gillnets in the KRSHA from 6:00 PM until 11:00 PM on Saturday, July 26, 2014 and from 5:00 AM until 6:00 PM on Sunday, July 27, 2014.	To reduce the escapement rate of Kasilof River sockeye salmon.
2S-40-14	27-Jul	Extended commercial fishing with set gillnets in the KRSHA from 6:00 PM on Sunday, July 27, 2014 until 6:00 PM on Monday, July 28, 2014. Extended commercial fishing with drift gillnets in the KRSHA from 6:00 PM until 11:00 PM on Sunday, July 27, 2014 and from 5:00 AM until 6:00 PM on Monday, July 28, 2014.	To reduce the escapement rate of Kasilof River sockeye salmon.
2S-41-14	28-Jul	Opened drift gillnetting in the Expanded Kenai and Expanded Kasilof sections of the Upper Subdistrict and in the Anchor Point Section of the Lower Subdistrict on Monday, July 28, 2014 from 7:00 AM until 7:00 PM	To comply with the Central District Drift Gillnet Fishery Management Plan.
2S-42-14	28-Jul	Extended commercial fishing with set gillnets in the KRSHA from 6:00 PM on Monday, July 28, 2014 until 7:00 PM on Tuesday, July 29, 2014. Extended commercial fishing with drift gillnets in the KRSHA from 6:00 PM until 11:00 PM on Monday, July 28, 2014 and from 5:00 AM until 7:00 PM on Tuesday, July 29, 2014.	To reduce the escapement rate of Kasilof River sockeye salmon.
2S-43-14	29-Jul	Extended commercial fishing with set gillnets in the KRSHA from 7:00 PM on Tuesday, July 29, 2014 until 7:00 PM on Wednesday, July 30, 2014. extends commercial fishing with drift gillnets in the KRSHA from 7:00 PM until 11:00 PM on Tuesday, July 29, 2014 and from 5:00 AM until 7:00 PM on Wednesday, July 30, 2014.	To reduce the escapement rate of Kasilof River sockeye salmon.

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Emergency Order No.	Effective Date	Action	Reason
2S-44-14	31-Jul	Modified Emergency Order No. 2S-27-14, which reduced legal gear to one set gillnet per permit, measuring no more than 35 fathoms in length, in the Northern District of Upper Cook Inlet beginning at 7:00 AM on Monday, July 21, 2014. Legal gear for that portion of the General Subdistrict of the Northern District, south of the Susitna River, was limited to no more than two set gillnets per permit, with the aggregate length not to exceed 70 fathoms, from 7:00 AM until 7:00 PM on Thursday, July 31, 2014 and from 7:00 AM until 7:00 PM on Monday, August 4, 2014. Legal gear in the remainder of the Northern District was limited to no more than one set gillnet per permit, measuring no more than 35 fathoms in length, for both the July 31 and August 4 regular fishing periods.	To comply with the Northern District Salmon Management Plan and the Susitna River Sockeye Salmon Action Plan.
2S-45-14	31-Jul	Opened drift gillnetting in the Expanded Kenai and Expanded Kasilof sections of the Upper Subdistrict and the Anchor Point Section of the Lower Subdistrict from 7:00 AM until 7:00 PM on Thursday, July 31, 2014.	To conserve Kenai River sockeye salmon
2S-46-14	1-Aug	Opened commercial fishing with set gillnets in the KRSHA from 5:00 AM on Friday, August 1, 2014 until 12:00 noon on Saturday, August 2, 2014. Opened commercial fishing with drift gillnets in the KRSHA from 5:00 AM until 11:00 PM on Friday, August 1, 2014 and from 5:00 AM until 12:00 noon on Saturday, August 2, 2014.	To reduce the escapement rate of Kasilof River sockeye salmon.
2S-47-14	2-Aug	Opened commercial fishing with set gillnets in the Kenai, Kasilof, and East Foreland sections of the Upper Subdistrict from 9:00 AM until 9:00 PM on Saturday, August 2, 2014.	To harvest Kenai River and Kasilof River sockeye salmon.
2S-48-14	4-Aug	Opened commercial fishing with set gillnets in the Kenai, Kasilof, and East Foreland sections of the Upper Subdistrict from 6:00 AM until 6:00 PM on Monday, August 4, 2014.	To harvest Kenai River and Kasilof River sockeye salmon.
2S-49-14	4-Aug	Rescinded Emergency Order 2S-09-14 and closed set gillnetting in that portion of the Western Subdistrict south of the latitude of Redoubt Point at 10:00 PM on Monday, August 4, 2014. This area reopened to set gillnetting during regular fishing periods only, on Mondays and Thursdays from 7:00 AM until 7:00 PM, beginning on Thursday, August 7, 2014.	To reduce the harvest of Crescent Lake sockeye salmon.
2S-50-14	6-Aug	Opened commercial fishing with set gillnets in the Kenai and East Foreland sections of the Upper Subdistrict from 8:00 AM until 8:00 PM on Wednesday, August 6, 2014.	To harvest Kenai River and Kasilof River sockeye salmon.

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Emergency Order No.	Effective Date	Action	Reason
2S-51-14	11-Aug	Restricted commercial fishing with drift gillnets to Drift Gillnet Areas 3 and 4 from 7:00 AM until 7:00 PM on Monday, August 11, 2014 and Thursday, August 14, 2014.	To comply with the Central District Drift Gillnet Fishery Management Plan.
2S-52-14	13-Aug	Opened commercial fishing with set gillnets in the Kalgin Island Subdistrict from 8:00 AM until 8:00 PM on Wednesday, August 13, 2014.	To harvest Packers Creek sockeye salmon.
2S-53-14	29-Aug	Opened set and drift gillnetting in the Chinitna Bay Subdistrict of the Central District from 7:00 AM until 7:00 PM on Tuesdays and Fridays, beginning on Friday, August 29, 2014, for the remainder of the 2014 season.	To provide fishing opportunity in the Chinitna Bay Subdistrict.

Appendix A11.—Commercial salmon fishing periods, Upper Cook Inlet, 2014.

Date	Day	Time	Set Gill Net	Drift Gill Net
2 Jun	Mon	0700-1900	Kustatan - Big River - Kalgin Island	
		0700-1300	Northern District	
4 Jun	Wed	0700-1900	Kustatan - Big River - Kalgin Island	
6 Jun	Fri	0700-1900	Kustatan - Big River - Kalgin Island	
9 Jun	Mon	0700-1900	Kustatan - Big River - Kalgin Island	
		0700-1300	Northern District	
11 Jun	Wed	0700-1900	Kustatan - Big River - Kalgin Island	
13 Jun	Fri	0700-1900	Kustatan - Big River - Kalgin Island	
16 Jun	Mon	0700-1900	Kustatan - Big River - Kalgin Isl - W Subdist.	
		0700-1900	Northern District	
18 Jun	Wed	0700-1900	Kustatan - Big River - Kalgin Island	
19 Jun	Thu	0700-1900	Kustatan - Big River - Kalgin Isl - W Subdist.	All
20 Jun	Fri	0700-1900	Kustatan - Big River - Kalgin Island	
23 Jun	Mon	0700-1900	Kustatan - Big River - Kalgin Isl - W Subdist.	All
		0700-1900	Northern District	
		0700-1600	Kasilof Section	
26 Jun	Thu	0700-1900	All except Kenai & E. Forelands Sections	All
28 Jun	Sat	1100-2000	Kasilof Section	Kasilof Section
30 Jun	Mon	0700-1900	All except Kenai & E. Forelands Sections	All
		1900-2100	Kasilof Section	Kasilof Section
3 Jul	Thu	0700-1900	All except Upper Subdistrict	All
		0800-2200	Kasilof Section	
		1900-2200		Kasilof Section
5 Jul	Sat	0600-2200	Western Subdistrict south of Redoubt Pt.	
		1500-2400	Kasilof Section	Kasilof Section
7 Jul	Mon	0600-2200	Western Subdistrict south of Redoubt Pt.	
		0700-1900	All except Upper Subdistrict	All
		0600-0700		Kasilof Section
		0600-1500	Kasilof Section	
9 Jul	Wed	0800-2000	Kenai, Kasilof, and E. Forelands	Expanded Kenai/Kasilof Sections
10 Jul	Thu	0600-2200	Western Subdistrict south of Redoubt Pt.	
		0700-1900	All except Upper Subdistrict	Drift Area 1 & Expanded Corridor
11 Jul	Fri	0800-2000		Expanded Kenai/Kasilof Sections
12 Jul	Sat	0600-2200	Western Subdistrict south of Redoubt Pt.	
		0700-1900		Drift Area 1 & Expanded Corridor
		1000-1900	Kasilof Section 1/2 mile	
13 Jul	Sun	0600-2000		Expanded Kenai/Kasilof Sections

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Date	Day	Time	Set Gill Net	Drift Gill Net
14 Jul	Mon	0600-2200	Western Subdistrict south of Redoubt Pt.	
		0700-1900	All except Upper Subdistrict	Drift Area 1 & Expanded Corridor
15 Jul	Tue	0600-2000		Expanded Kenai/Kasilof Sections
		1200-2100	Kasilof Section 1/2 mile	
16 Jul	Wed	1700-2400	Kasilof River Special Harvest Area	Kasilof River Special Harvest Area
17 Jul	Thu	0000-1000	Kasilof River Special Harvest Area	Kasilof River Special Harvest Area
		0600-2200	Western Subdistrict south of Redoubt Pt.	
		0700-1900	All except Upper Subdistrict	Drift Area 1 & Expanded Corridor
		1100-2300	Kenai, Kasilof, and E. Forelands	
		1900-2300		Exp. Ken/Kas, and Anchor Pt.
18 Jul	Fri	1000-2200		Exp. Ken/Kas, and Anchor Pt.
		1800-2400	Kasilof River Special Harvest Area	
		1800-2300		Kasilof River Special Harvest Area
19 Jul	Sat	0600-2200	Western Subdistrict south of Redoubt Pt.	
		0000-2400	Kasilof River Special Harvest Area	
		0500-2300		Kasilof River Special Harvest Area
		0700-1900		Exp. Ken/Kas, and Anchor Pt.
20 Jul	Sun	0000-2359	Kasilof River Special Harvest Area	
		0500-2359		Kasilof River Special Harvest Area
		0800-2000		Exp. Ken/Kas, and Anchor Pt.
21 Jul	Mon	0600-2200	Western Subdistrict south of Redoubt Pt.	
		0700-1900	All except Upper Subdistrict	Drift Area 1 & Expanded Corridor
		1000-2400	Kasilof River Special Harvest Area	
		1000-2300		Kasilof River Special Harvest Area
22 Jul	Tue	0000-2400	Kasilof River Special Harvest Area	
		0500-2300		Kasilof River Special Harvest Area
		0700-1900		Exp. Ken/Kas, and Anchor Pt.
23 Jul	Wed	0000-1000	Kasilof River Special Harvest Area	
		0500-1000		Kasilof River Special Harvest Area
		0700-1900		Exp. Ken/Kas, and Anchor Pt.
		1000-2200	Kenai, Kasilof, and E. Forelands	
24 Jul	Thu	0600-2200	Western Subdistrict south of Redoubt Pt.	
		0700-1900	All except Upper Subdistrict	Exp. Ken/Kas, and Anchor Pt.
		1300-2400	Kasilof River Special Harvest Area	
		1300-2300		Kasilof River Special Harvest Area
25 Jul	Fri	0000-2400	Kasilof River Special Harvest Area	
		0500-2300		Kasilof River Special Harvest Area
		0700-1900		Exp. Ken/Kas, and Anchor Pt.

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Date	Day	Time	Set Gill Net	Drift Gill Net
26 Jul	Sat	0000-2400	Kasilof River Special Harvest Area	
		0500-2300		Kasilof River Special Harvest Area
		0600-2200	Western Subdistrict south of Redoubt Pt.	
		0700-1900		Exp. Ken/Kas, and Anchor Pt.
27 Jul	Sun	0000-2400	Kasilof River Special Harvest Area	
		0500-2300		Kasilof River Special Harvest Area
		0700-1900		Exp. Ken/Kas, and Anchor Pt.
28 Jul	Mon	0000-2400	Kasilof River Special Harvest Area	
		0500-2300		Kasilof River Special Harvest Area
		0600-2200	Western Subdistrict south of Redoubt Pt.	
		0700-1900	All except Upper Subdistrict	Exp. Ken/Kas, and Anchor Pt.
29 Jul	Tue	0000-2400	Kasilof River Special Harvest Area	
		0500-2300		Kasilof River Special Harvest Area
30 Jul	Wed	0000-1900	Kasilof River Special Harvest Area	
		0500-1900		Kasilof River Special Harvest Area
31 Jul	Thu	0600-2200	Western Subdistrict south of Redoubt Pt.	
		0700-1900	All except Upper Subdistrict	Exp. Ken/Kas, and Anchor Pt.
1 Aug	Fri	0500-2400	Kasilof River Special Harvest Area	
		0500-2300		Kasilof River Special Harvest Area
2 Aug	Sat	0000-1200	Kasilof River Special Harvest Area	
		0500-1200		Kasilof River Special Harvest Area
		0600-2200	Western Subdistrict south of Redoubt Pt.	
		0900-2100	Kenai, Kasilof, and E. Forelands	
4 Aug	Mon	0600-2200	Western Subdistrict south of Redoubt Pt.	
		0600-1800	Kenai, Kasilof, and E. Forelands	
		0700-1900	All except Upper Subdistrict	All
6 Aug	Wed	0800-2000	Kenai and E. Forelands	
7 Aug	Thu	0700-1900	All except Upper Subdistrict	All
11 Aug	Mon	0700-1900	All except Upper Subdistrict	Drift Areas 3 & 4
13 Aug	Wed	0800-2000	Kalgin Island	
14 Aug	Thu	0700-1900	All except Upper Subdistrict	Drift Areas 3 & 4
18 Aug	Mon	0700-1900	All except Upper Subdistrict	Drift Areas 3 & 4
21 Aug	Thu	0700-1900	All except Upper Subdistrict	Drift Areas 3 & 4
25 Aug	Mon	0700-1900	All except Upper Subdistrict	Drift Areas 3 & 4
28 Aug	Thu	0700-1900	All except Upper Subdistrict	Drift Areas 3 & 4
29 Aug	Fri	0700-1900	Chinitna Bay	Chinitna Bay
1 Sep	Mon	0700-1900	All except Upper Subdistrict	Drift Areas 3 & 4
2 Sep	Tue	0700-1900	Chinitna Bay	Chinitna Bay

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Date	Day	Time	Set Gill Net	Drift Gill Net
4 Sep	Thu	0700-1900	All except Upper Subdistrict	Drift Areas 3 & 4
5 Sep	Fri	0700-1900	Chinitna Bay	Chinitna Bay
8 Sep	Mon	0700-1900	All except Upper Subdistrict	Drift Areas 3 & 4
9 Sep	Tue	0700-1900	Chinitna Bay	Chinitna Bay
11 Sep	Thu	0700-1900	All except Upper Subdistrict	Drift Areas 3 & 4
12 Sep	Fri	0700-1900	Chinitna Bay	Chinitna Bay

Appendix A12.–Susitna River sockeye salmon studies, 2006–2014.

Yentna River Passage	2006	2007	2008	2009	2010	2011	2012	2013	2014
Bendix	92,051	79,901	90,146	28,428					
DIDSON-adjusted	166,697	125,146	131,772	43,972–153,910	53,399–144,949	62,231–140,445	30,462–89,957	76,227–212,125	55,759–137,256
Weir Data	2006	2007	2008	2009	2010	2011	2012	2013	2014
Chelatna	18,433	41,290	73,469	17,865	37,784	70,353	36,577	70,555	26,287
Judd	40,633	58,134	54,304	43,153	18,361	39,997	18,303	14,088	22,229
Larson	57,411	47,736	35,040	41,929	20,324	12,413	16,708	21,821	12,430
Weir Totals	116,477	147,160	162,813	102,947	76,469	122,763	71,588	106,464	60,946
Susitna Pop. Est.	2006	2007	2008	2009	2010	2011	2012	2013 ^a	2014 ^b
Mark Recapture	418,197	327,732	304,449	219,041	190,460	314,447	141,804	228,536	NA
MR : Weirs ratio	3.6	2.2	1.9	2.1	2.5	2.6	2.0	2.1	NA
MR : Bendix ratio	4.5	4.1	3.4	9.7	ND	ND	ND	ND	ND

^a Mark–recapture estimates from 2013 are preliminary values.

^b Data not available at the time this report was published.

Appendix A13.—Age composition (in percent) of sockeye salmon escapements, Upper Cook Inlet, 2014.

Stream	Age Group												Total	
	0.2	0.3	1.1	1.2	2.1	1.3	2.2	1.4	2.3	2.4	3.1	3.2		3.3
Kenai River		0.4	0.4	12.3	0.8	63.5	7.2		15.3				0.2	100.0
Kasilof River	0.4		1.7	42.4	2.7	29.4	20.6		2.9					100.0
Yentna River	1.9	1.7	0.3	39.4		33.3	12.4	0.8	10.2					100.0
Fish Creek			13.3	71.4	0.4	8.2	5.2		1.5					100.0
Hidden Creek				79.1		11.5	8.8		0.7					100.0

Appendix A14.–Upper Cook Inlet salmon average weights (in pounds) by area, 2014.

Fishery	Chinook	Sockeye	Coho	Pink	Chum
Upper Cook Inlet Total	15.8	6.2	6.3	3.7	7.4
A. Northern District Total	12.6	5.8	6.2	3.6	6.8
1. Northern District West	12.9	5.8	6.1	3.5	6.9
a. Trading Bay 247-10	12.2	6.0	6.3	3.8	6.7
b. Tyonek 247-20	14.6	6.0	5.6	3.6	7.1
c. Beluga 247-30	15.4	5.8	6.0	3.5	7.4
d. Susitna Flat 247-41	12.3	5.0	6.3	2.5	6.1
e. Pt. Mackenzie 247-42	14.7	4.5	6.4	3.8	7.1
f. Fire Island 247-43	12.0	5.2	6.5	4.0	9.5
2. Northern District East	11.8	5.9	6.5	3.6	6.3
a. Pt. Possession 247-70	12.0	5.9	6.5	3.6	6.4
b. Birch Hill 247-80	11.5	5.7	6.7	3.8	6.1
c. Number 3 Bay 247-90	11.2	6.1	6.2	3.7	6.5
B. Central District Total	17.3	6.2	6.3	3.7	7.4
1. East Side Set Total	17.9	5.6	6.2	3.8	6.2
a. Salamatof/EastForelands	20.9	6.7	6.1	4.0	6.0
1. Salamatof 244-41	20.8	6.8	6.1	4.0	6.4
2. East Forelands 244-42	21.8	6.1	6.1	4.1	5.8
b. Kalifonsky Beach	19.9	5.0	6.5	3.8	6.3
1. South K. Beach 244-31	17.6	5.0	6.4	3.7	6.7
2. North K. Beach 244-32	20.4	6.0	6.6	3.8	6.6
c. Kasilof Terminal 244-25	20.9	4.8	6.4	3.9	5.7
d. Cohoe/Ninilchik	13.5	5.8	6.1	3.5	6.4
1. Cohoe 244-22	12.4	5.6	5.9	3.8	6.3
2. Ninilchik 244-21	15.4	5.9	6.3	3.4	6.4

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Fishery	Chinook	Sockeye	Coho	Pink	Chum
2. West Side Set Total	14.8	5.7	6.1	3.5	6.7
a. Little Jack Slough 245-50		4.8	5.9	2.8	7.0
b. Polly Creek 245-40					
c. Tuxedni Bay 245-30	14.8	5.9	6.2	3.7	6.7
3. Kustatan Total	21.8	5.4	5.3	3.0	
a. Big River 245-55	21.8	5.2			
b. West Foreland 245-60		6.4	5.3	3.0	
4. Kalgin Island Total	19.9	5.7	6.3	3.8	6.7
a. West Side 246-10	19.7	5.7	6.3	3.7	6.7
b. East Side 246-20	29.3	5.7	6.3	4.0	6.6
5. Chinitna Bay Total		6.0	7.0		5.8
a. Set 245-10					
b. Drift 245-10		6.0	7.0		5.8
5. Central District Set Total	18.1	5.6	6.2	3.8	6.7
6. Central District Drift Total	11.0	6.6	6.3	3.6	7.4
a. Districtwide 244-60	8.6	6.6	6.4	3.6	7.5
b. Kasilof Section 244-61	8.8	6.5	5.2	3.8	8.1
c. Expanded Corridor 244-56	8.2	6.7	5.8	3.5	7.4
d. Exp. Corridor & A.P. 244-57	16.2	6.5	5.9	3.6	7.3
e. Kasilof Terminal 244-26	20.3	5.9	6.5	3.9	5.9

Note: Average weights determined from total pounds of fish divided by numbers of fish from commercial harvest tickets.

Appendix A15.–Age composition of Chinook salmon harvested in the Upper Subdistrict set gillnet fishery, UCI, Alaska, 1990–2014.

Year	Sample Size	Percent Composition by Age Class (%)														Total
		0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	1.5	2.4	2.5	1.6	
1990	437	0.2	1.1	0.2	29.5	0.9	0.5	29.0	0.5	32.7	0.4	3.4	1.6			100
1991	446	0.2	0.7		24.9	0.2	0.5	32.1		38.5	0.7	2.0	0.2			100
1992	688		2.5		15.0			27.6	0.6	49.6	0.9	3.8	0.2			100
1993	992		3.3		14.0			20.8	0.1	56.5	0.8	4.0	0.5			100
1994	1,502		3.5		12.3	0.1		14.7	0.3	61.3	0.5	5.8	1.6		0.1	100
1995	1,508		2.7		22.4	0.1		32.9	0.8	35.0	0.1	5.9	0.2	0.1		100
1996	2,186		3.3		15.8	0.1		34.9	0.2	42.3	1.6	1.5	0.5			100
1997	1,691		6.4		13.5	0.3		31.1	0.3	45.6	0.7	0.7	1.4			100
1998	911	0.5	11.8	0.2	23.2	0.3	0.1	21.1	1.6	38.4	0.5	1.9	0.6			100
1999	1,818	0.1	2.3		26.3	0.2		24.5		43.5	0.4	2.8				100
2000	991		9.2	0.1	12.2	0.9		38.7	0.3	37.6	0.3	0.8	0.1			100
2001	989		11.7		40.0			14.5		32.5		1.2				100
2002	1,224		10.6	0.0	29.3			36.7		22.6		0.7	0.1			100
2003	678		3.8		51.8			23.6	0.3	18.7		1.8				100
2004	1,409		3.5		19.8	0.1		48.2		27.6	0.0	0.7				100
2005	482	0.2	2.9		27.0			20.1	0.4	47.5		1.7	0.2			100
2006	560		12.9		35.4			22.0	0.2	27.1		2.5				100
2007	789		4.8		42.7			22.4	0.1	28.5		1.3	0.1			100
2008	380		10.3		19.7			27.6		40.8		1.6				100
2009	487		13.8		51.3			12.3		22.0		0.6				100
2010	743		18.3		24.6			36.0	0.1	20.1	0.2	0.8				100
2011	1,187		4.6		33.7			25.2		35.3	0.1	1.2				100
2012	167		9.6		18.0			36.6		35.8						100
2013	668		22.4		43.5			15.5		18.6						100
2014	462		17.7		32.1			29.1		20.9		0.1				100
Mean		0.05	7.7	0.02	27.1	0.1	0.04	27.1	0.2	35.2	0.3	1.9	0.3	0.0	0.0	100

Appendix A16.–Major buyers and processors of Upper Cook Inlet fishery products, 2014.

Buyer/Processor	Code	Plant Site	Contact	Address
Alaska Salmon Purchasers Inc.	F4665	Kenai	Mark Powell	46655 Kenai Spur Hwy. Kenai, AK 99611
Alldrin & Sons Alaska Salmon	F9820	Soldotna	Lance Alldrin	36251 Solid Rock Road #3 Soldotna, AK 99669
Beach M Fishery	F7424	Kasilof	Liz Chase	PO Box 39 Kasilof, AK 99610
Blue Ox Fisheries	F7452	Fritz Creek	Matthew Oxford	PO Box 15201 Fritz Creek, AK 99603
Copper River Seafoods	F6426	Anchorage	Shelly Lamb	1118 E. 5th Ave. Anchorage, AK 99501
Favco Inc	F0398	Anchorage	Bill Buck	PO Box 190968 Anchorage, AK 99519
Fishhawk Fisheries	F1540	Kenai	Steve Fick	PO Box 715 Astoria, OR 97103
Great Pacific Seafoods Inc.	F9207	Kenai	Danny DeMatteis	PO Box 81165 Seattle, WA 98108
Icicle Seafoods Inc.	F0135	Seward	Kelly Glidden	842 Fish Dock Rd. Homer, AK 99603
Inlet Fish Producers	F2806	Kenai	Robert Utrup	PO Box 114 Kenai, Ak 99611
Inlet Fisheries Inc.	F4682	Kenai	Perry Hendricks	PO Box 114 Kenai, Ak 99611
Pacific Star Seafoods Inc.	F1834	Kenai	Steve Lee	PO Box 190 Kenai, AK 99611
Peninsula Processing	F6618	Soldotna	Ariel Vail	720 K. Beach Rd. Soldotna, AK 99669
Robert J Wolfe	F10078	Girdwood	Robert Wolfe	PO Box 1125 Girdwood, AK 99587
Snug Harbor Seafoods	F3894	Kenai	Brenda Stoops	PO Box 701 Kenai, AK 99611
Taylor Fish Co.	F7901	Kasilof	Nancy Taylor	PO Box 359 Kasilof, AK 99610
The Auction Block Co.	F8162	Homer	Heather Brinster	4501 Ice Dock Rd. Homer, AK 99603
The Fish Factory LLC.	F4449	Homer	Mike McCune	800 Fish Dock Rd. Homer, AK 99603
Wild Alaska Salmon Products Inc.	F7524	Big Lake	Brenda Charles	PO Box 521131 Big Lake, AK 99652

Appendix A17.—Number of salmon harvested by gear, area, and species in personal use fisheries, Upper Cook Inlet, 2014.

Fishery	Harvest					Total
	Chinook	Sockeye	Coho	Pink	Chum	
Kasilof Gillnet	50	22,567	30	105	18	22,770
Kasilof Dip Net	0	88,513	2,606	2,769	342	94,230
Kenai Dip Net	0	379,823	4,710	19,140	1,194	404,867
Fish Creek Dip Net	0	5,829	1,895	4,218	227	12,169
Beluga Dip Net	0	32	12	1	1	46
No Site Reported	0	9,315	129	563	78	10,085
Total	50	506,079	9,382	26,796	1,860	544,167

Note: Preliminary estimates.

Appendix A18.–Personal use sockeye salmon harvest by day, 2014.

Date	Kasilof Gillnet		Kasilof Dip Net		Kenai Dip Net		Fish Creek Dip Net	
	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
15 Jun	1,383	1,383						
16 Jun	1,668	3,051						
17 Jun	2,067	5,118						
18 Jun	3,399	8,517						
19 Jun	3,445	11,962						
20 Jun	2,636	14,598						
21 Jun	1,946	16,544						
22 Jun	1,213	17,757						
23 Jun	344	18,101						
24 Jun	1,098	19,199						
25 Jun			2,428	2,428				
26 Jun			1,296	3,724				
27 Jun			973	4,697				
28 Jun			1,029	5,726				
29 Jun			949	6,675				
30 Jun			658	7,333				
1 Jul			738	8,071				
2 Jul			1,314	9,385				
3 Jul			878	10,263				
4 Jul			2,329	12,592				
5 Jul			2,111	14,703				
6 Jul			1,618	16,321				
7 Jul			692	17,013				
8 Jul			1,528	18,541				
9 Jul			873	19,414				

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Date	Kasilof Gillnet		Kasilof Dip Net		Kenai Dip Net		Fish Creek Dip Net	
	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
10 Jul			1,379	20,793	1,846	1,846		
11 Jul			3,502	24,295	7,745	9,591		
12 Jul			2,725	27,020	11,659	21,250		
13 Jul			2,243	29,263	9,519	30,769		
14 Jul			3,987	33,250	10,525	41,294		
15 Jul			5,005	38,255	19,312	60,606		
16 Jul			3,381	41,636	18,548	79,154		
17 Jul			3,402	45,038	31,467	110,621		
18 Jul			6,750	51,788	22,089	132,710		
19 Jul			3,532	55,320	25,838	158,548		
20 Jul			2,697	58,017	23,339	181,887		
21 Jul			2,272	60,289	21,065	202,952		
22 Jul			1,378	61,667	15,528	218,480		
23 Jul			1,146	62,813	12,135	230,615		
24 Jul			1,300	64,113	12,003	242,618		
25 Jul			826	64,939	12,294	254,912	918	918
26 Jul			901	65,840	9,961	264,873	671	1,589
27 Jul			631	66,471	9,945	274,818	477	2,066
28 Jul			572	67,043	8,334	283,152	549	2,615
29 Jul			543	67,586	10,906	294,058	608	3,223
30 Jul			334	67,920	9,871	303,929	523	3,746
31 Jul			552	68,472	6,650	310,579	659	4,405
1 Aug			378	68,850				
2 Aug			335	69,185				
3 Aug			547	69,732				
4 Aug			185	69,917				
5 Aug			460	70,377				
6 Aug			486	70,863				
7 Aug			380	71,243				

Note: Data presented are for “known” permits during legal harvest dates only.

Appendix A19.–Age, weight, sex, and size distribution of Pacific herring sampled by gillnet in Upper Cook Inlet, 2014.

Sample date = May 13, 2014

Sample Period	Age	No. of Fish						Percent of Total	Weight		Length				
		Male	Imm. Female	Ripe Female	Spawnd Female	Unknown	Total		Mean (g)	SD	Number Weighed	Mean (mm)	SD	Number Measured	
ESSN	3	–	–	–	–	–	0	0	–	–	0	–	–	0	
	4	2	–	–	–	–	2	3	162	54.0	2	233	8.5	2	
	5	7	–	10	–	–	17	23	123	20.2	17	212	9.3	17	
	6	20	–	13	–	–	33	45	134	23.7	33	216	18.6	33	
	7	3	–	5	–	–	8	11	163	42.7	8	231	12.9	8	
	8	7	–	5	1	–	13	18	170	41.4	13	232	11.5	13	
	9	–	–	–	–	–	0	0	–	–	0	–	–	0	
	Sample Total		39	0	33	1	0	73	100	142	34.0	73	220	16.7	73
	Sex Composition		53%	0%	45%	1%	0%								

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Sample date = May 16, 2014

Sample Period	Age	No. of Fish						Percent of Total	Weight		Length				
		Male	Imm. Female	Ripe Female	Spawnd Female	Unknown	Total		Mean (g)	SD	Number Weighed	Mean (mm)	SD	Number Measured	
ESSN	3	–	–	–	–	–	0	–	–	–	–	–	–	–	
	4	1	–	–	–	–	1	1	102	–	1	206	–	1	
	5	3	–	2	1	–	6	7	136	24.3	6	218	9.5	6	
	6	29	4	2	14	–	49	59	140	20.1	49	224	8.4	49	
	7	8	–	–	8	–	16	19	156	31.1	16	231	10.1	16	
	8	7	–	1	–	–	8	10	177	31.1	8	237	9.3	8	
	9	–	–	1	2	–	3	4	220	27.9	3	250	4.2	3	
	Sample Total		48	4	6	25	0	83	100	149	30.1	83	227	11.2	83
	Sex Composition		58%	5%	7%	30%	0%								

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Sample date = May 21, 2014

Sample Period	Age	No. of Fish						Percent of Total	Weight		Length			
		Imm. Male	Imm. Female	Ripe Female	Spawnd Female	Unknown	Total		Mean (g)	SD	Number Weighed	Mean (mm)	SD	Number Measured
ESSN	3	–	–	–	–	–	0	0	–	–	0	–	–	0
	4	–	–	–	–	–	0	0	–	–	0	–	–	0
	5	7	–	2	3	–	12	19	117	7.9	12	213	6.5	12
	6	27	–	–	12	–	39	61	129	16.6	39	221	6.9	39
	7	3	–	–	5	–	8	13	151	19.0	8	231	6.1	8
	8	3	–	–	1	–	4	6	151	14.8	4	232	2.2	4
	9	1	–	–	–	–	1	2	140	–	1	225	–	1
Sample Total		41	0	2	21	0	64	100	131	18.6	64	222	8.6	64
Sex Composition		64%	0%	3%	33%	0%								

Sample date = May 30,2014

Sample Period	Age	No. of Fish						Percent of Total	Weight		Length			
		Imm. Male	Imm. Female	Ripe Female	Spawnd Female	Unknown	Total		Mean (g)	SD	Number Weighed	Mean (mm)	SD	Number Measured
ESSN	4	1	2	–	–	–	3	7	118	16.9	3	207	9.8	3
	5	5	–	2	–	–	7	15	118	12.2	7	215	5.7	7
	6	8	–	–	2	–	10	22	128	17.7	10	226	9.5	10
	7	10	1	–	1	–	12	26	132	18.6	12	223	7.2	12
	8	7	–	–	2	–	9	20	149	31.6	9	234	12.3	9
	9	3	–	–	–	–	3	7	144	28.8	3	227	9.5	3
	10	1	–	–	1	–	2	4	158	5.2	2	238	10.6	2
Sample Total		35	3	2	6	0	46	100	133	23.2	46	225	11.5	46
Sex Composition		76%	7%	4%	13%	0%								

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Sample date = All, 2014

Sample Period	Age	No. of Fish						Percent of Total	Weight		Length			
		Male	Imm. Female	Ripe Female	Spawnd Female	Unknown	Total		Mean (g)	SD	Number Weighed	Mean (mm)	SD	Number Measured
ESSN	4	4	2	–	–	–	6	2	130	36.7	6	216	15.3	6
	5	22	–	16	4	–	42	16	122	17.5	42	214	8.0	42
	6	84	4	15	28	–	131	49	134	20.4	131	221	11.9	131
	7	24	1	5	14	–	44	17	150	30.3	44	229	9.7	44
	8	24	–	6	4	–	34	13	164	35.0	34	234	10.4	34
	9	4	–	1	2	–	7	3	176	47.1	7	237	14.2	7
	10	1	–	–	1	–	2	1	158	5.2	2	238	10.6	2
Sample Total		163	7	43	53	0	266	100	140	28.7	266	223	12.7	266
Sex Composition		61%	3%	16%	20%	0%								

Appendix A20.–Age, sex, and size distribution of eulachon (smelt) from Upper Cook Inlet commercial dip net fishery, 2006–2014.

2006					2007				
Age	Sex	Length (mm)	No. Sampled	%	Age	Sex	Length (mm)	No. Sampled	%
3	Male	185	1	1%	3	Male	179	10	9%
	Female	–	–	–		Female	174	5	5%
4	Male	194	46	54%	4	Male	188	65	60%
	Female	186	22	26%		Female	186	23	21%
5	Male	200	14	16%	5	Male	201	4	4%
	Female	203	2	2%		Female	192	1	1%
Avg	Male	196	61	72%	Avg	Male	188	79	73%
	Female	187	24	28%		Female	184	29	27%
Avg - All		193	85		Avg - All		187	108	

2008					2009				
Age	Sex	Length (mm)	No. Sampled	%	Age	Sex	Length (mm)	No. Sampled	%
3	Male	194	3	3%	3	Male	195	12	7%
	Female	185	10	10%		Female	191	18	10%
4	Male	201	37	37%	4	Male	203	74	41%
	Female	193	36	36%		Female	194	58	32%
5	Male	208	12	12%	5	Male	203	13	7%
	Female	206	3	3%		Female	203	5	3%
Avg	Male	202	52	51%	Avg	Male	202	99	55%
	Female	192	49	49%		Female	194	81	45%
Avg - All		197	101		Avg - All		198	180	

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2010				
Age	Sex	Length (mm)	No. Sampled	%
3	Male	189.4	14	7%
	Female	193.6	10	5%
4	Male	197.2	61	31%
	Female	204.1	105	53%
5	Male	204.0	3	2%
	Female	203.2	6	3%
Avg	Male	196	78	39%
	Female	203	121	61%
Avg - All		200	199	

2011				
Age	Sex	Length (mm)	No. Sampled	%
3	Male	192	25	13%
	Female	185	47	24%
4	Male	205	48	24%
	Female	203	41	21%
5	Male	210	28	14%
	Female	208	11	6%
Avg	Male	203	101	51%
	Female	195	99	50%
Avg - All		199	200	

2012				
Age	Sex	Length (mm)	No. Sampled	%
3	Male	191	20	11%
	Female	198	19	10%
4	Male	204	50	27%
	Female	207	88	47%
5	Male	208	2	1%
	Female	215	7	4%
Avg	Male	201	72	39%
	Female	206	114	61%
Avg - All		204	186	

2013				
Age	Sex	Length (mm)	No. Sampled	%
3	Male	212	7	4%
	Female	216	7	4%
4	Male	219	78	50%
	Female	212	37	24%
5	Male	224	22	14%
	Female	217	5	3%
Avg	Male	220	107	69%
	Female	213	49	31%
Avg - All		218	156	

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2014				
Age	Sex	Length (mm)	No. Sampled	%
3	Male	196	16	12%
	Female	194	22	16%
4	Male	211	51	37%
	Female	209	37	27%
5	Male	219	10	7%
	Female	218	2	1%
Avg	Male	209	77	56%
	Female	202	61	44%
Avg - All		207	138	

All Years (2006-2014)				
Age	Sex	Length (mm)	No. Sampled	%
3	Male	193	108	8%
	Female	192	138	10%
4	Male	202	510	38%
	Female	199	447	33%
5	Male	209	108	8%
	Female	207	42	3%
Avg	Male	202	726	54%
	Female	197	627	46%
Avg - All		200	1,353	

Appendix A21.--Seldovia District tide tables, May through August, 2014.

MAY											
HIGH TIDES						LOW TIDES					
Date	Day	AM		PM		Date	Day	AM		PM	
		Time	Feet	Time	Feet			Time	Feet	Time	Feet
1	Thu	4:14	20.0	5:05	18.2	1	Thu	10:38	-3.1	10:47	1.8
2	Fri	4:49	19.1	5:45	17.2	2	Fri	11:16	-2.1	11:26	3.0
3	Sat	5:26	17.8	6:28	16.0	3	Sat	11:55	-0.7	-	-
4	Sun	6:05	16.3	7:15	14.8	4	Sun	12:08	4.2	12:38	0.8
5	Mon	6:49	14.8	8:09	13.9	5	Mon	12:56	5.4	1:25	2.3
6	Tue	7:45	13.4	9:11	13.4	6	Tue	1:53	6.3	2:21	3.5
7	Wed	8:58	12.5	10:17	13.5	7	Wed	3:05	6.7	3:28	4.3
8	Thu	10:20	12.4	11:14	14.1	8	Thu	4:24	6.2	4:36	4.5
9	Fri	11:32	13.0	-	-	9	Fri	5:33	5.0	5:36	4.1
10	Sat	12:01	15.1	12:30	14.0	10	Sat	6:24	3.4	6:25	3.5
11	Sun	12:41	16.2	1:18	15.3	11	Sun	7:06	1.6	7:08	2.8
12	Mon	1:18	17.4	2:02	16.5	12	Mon	7:45	-0.1	7:49	2.0
13	Tue	1:55	18.6	2:44	17.5	13	Tue	8:23	-1.8	8:29	1.4
14	Wed	2:32	19.7	3:26	18.3	14	Wed	9:02	-3.1	9:09	1.1
15	Thu	3:11	20.4	4:09	18.7	15	Thu	9:41	-4.0	9:50	1.0
16	Fri	3:51	20.6	4:52	18.7	16	Fri	10:22	-4.3	10:33	1.2
17	Sat	4:33	20.4	5:38	18.4	17	Sat	11:05	-4.0	11:19	1.8
18	Sun	5:19	19.6	6:27	17.8	18	Sun	11:51	-3.2	-	-
19	Mon	6:09	18.4	7:21	17.1	19	Mon	12:10	2.5	12:42	-1.9
20	Tue	7:07	16.9	8:21	16.6	20	Tue	1:08	3.3	1:38	-0.4
21	Wed	8:17	15.5	9:26	16.4	21	Wed	2:15	3.7	2:42	1.0
22	Thu	9:37	14.6	10:32	16.6	22	Thu	3:31	3.5	3:52	2.0
23	Fri	10:59	14.6	11:32	17.2	23	Fri	4:47	2.6	5:01	2.4
24	Sat	-	-	12:11	15.1	24	Sat	5:56	1.2	6:03	2.5
25	Sun	12:25	18.0	1:12	16.0	25	Sun	6:53	-0.2	6:57	2.3
26	Mon	1:12	18.7	2:04	16.8	26	Mon	7:41	-1.5	7:45	2.2
27	Tue	1:55	19.2	2:50	17.4	27	Tue	8:24	-2.5	8:28	2.0
28	Wed	2:35	19.5	3:32	17.7	28	Wed	9:04	-3.0	9:09	2.0
29	Thu	3:13	19.4	4:12	17.8	29	Thu	9:42	-3.1	9:48	2.2
30	Fri	3:50	19.1	4:50	17.6	30	Fri	10:19	-2.8	10:27	2.6
31	Sat	4:27	18.5	5:28	17.1	31	Sat	10:55	-2.2	11:06	3.2

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JUNE											
HIGH TIDES						LOW TIDES					
Date	Day	AM		PM		Date	Day	AM		PM	
		Time	Feet	Time	Feet			Time	Feet	Time	Feet
1	Sun	5:04	17.6	6:05	16.5	1	Sun	11:33	-1.1	11:47	3.9
2	Mon	5:43	16.5	6:46	15.8	2	Mon	-	-	12:11	0.1
3	Tue	6:25	15.3	7:29	15.1	3	Tue	12:31	4.7	12:51	1.3
4	Wed	7:13	14.0	8:16	14.6	4	Wed	1:19	5.3	1:35	2.6
5	Thu	8:11	12.9	9:07	14.4	5	Thu	2:16	5.7	2:26	3.7
6	Fri	9:20	12.3	10:00	14.5	6	Fri	3:23	5.6	3:25	4.5
7	Sat	10:36	12.3	10:54	15.1	7	Sat	4:32	4.8	4:29	4.9
8	Sun	11:47	12.9	11:45	16.0	8	Sun	5:35	3.5	5:30	4.7
9	Mon	-	-	12:47	14.1	9	Mon	6:27	1.9	6:25	4.2
10	Tue	12:32	17.2	1:39	15.4	10	Tue	7:13	0.1	7:15	3.5
11	Wed	1:18	18.4	2:25	16.7	11	Wed	7:56	-1.7	8:02	2.6
12	Thu	2:03	19.6	3:10	17.9	12	Thu	8:39	-3.2	8:48	1.8
13	Fri	2:48	20.5	3:54	18.7	13	Fri	9:22	-4.4	9:34	1.2
14	Sat	3:34	21.0	4:39	19.2	14	Sat	10:06	-4.9	10:21	0.8
15	Sun	4:22	20.9	5:25	19.3	15	Sun	10:51	-4.9	11:10	0.8
16	Mon	5:11	20.3	6:12	19.1	16	Mon	11:38	-4.2	-	-
17	Tue	6:03	19.1	7:02	18.6	17	Tue	12:02	1.0	12:26	-2.9
18	Wed	7:00	17.5	7:55	18.0	18	Wed	12:58	1.4	1:18	-1.3
19	Thu	8:04	15.9	8:52	17.5	19	Thu	2:00	1.8	2:15	0.4
20	Fri	9:16	14.6	9:53	17.1	20	Fri	3:10	1.9	3:19	2.0
21	Sat	10:35	14.0	10:54	17.0	21	Sat	4:24	1.6	4:26	3.2
22	Sun	11:54	14.2	11:53	17.2	22	Sun	5:34	0.9	5:33	3.7
23	Mon	-	-	1:01	14.8	23	Mon	6:35	0.0	6:34	3.8
24	Tue	12:47	17.6	1:55	15.7	24	Tue	7:26	-0.9	7:26	3.6
25	Wed	1:34	18.0	2:40	16.4	25	Wed	8:10	-1.6	8:11	3.3
26	Thu	2:16	18.4	3:19	17.0	26	Thu	8:50	-2.1	8:52	3.0
27	Fri	2:54	18.6	3:55	17.5	27	Fri	9:26	-2.3	9:31	2.8
28	Sat	3:32	18.7	4:30	17.6	28	Sat	10:01	-2.2	10:09	2.8
29	Sun	4:08	18.5	5:04	17.6	29	Sun	10:35	-1.9	10:47	2.9
30	Mon	4:45	18.0	5:38	17.3	30	Mon	11:09	-1.2	11:24	3.2

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JULY											
HIGH TIDES						LOW TIDES					
Date	Day	AM		PM		Date	Day	AM		PM.	
		Time	Feet	Time	Feet			Time	Feet	Time	Feet
1	Tue	5:22	17.2	6:13	16.9	1	Tue	11:43	-0.3	-	-
2	Wed	6:01	16.1	6:49	16.4	2	Wed	12:04	3.7	12:18	0.8
3	Thu	6:44	15.0	7:27	15.9	3	Thu	12:45	4.1	12:55	2.0
4	Fri	7:32	13.8	8:09	15.5	4	Fri	1:32	4.5	1:37	3.3
5	Sat	8:32	12.8	8:57	15.3	5	Sat	2:27	4.7	2:27	4.4
6	Sun	9:45	12.2	9:53	15.4	6	Sun	3:32	4.5	3:29	5.3
7	Mon	11:04	12.5	10:53	15.9	7	Mon	4:42	3.7	4:39	5.6
8	Tue	12:16 PM	13.4	11:53	16.9	8	Tue	5:48	2.2	5:47	5.2
9	Wed	-	-	1:16	14.9	9	Wed	6:44	0.4	6:47	4.3
10	Thu	12:50	18.3	2:07	16.5	10	Thu	7:34	-1.5	7:40	3.1
11	Fri	1:42	19.6	2:53	18.0	11	Fri	8:21	-3.2	8:31	1.8
12	Sat	2:33	20.8	3:37	19.3	12	Sat	9:06	-4.5	9:19	0.6
13	Sun	3:22	21.6	4:21	20.2	13	Sun	9:51	-5.2	10:07	-0.3
14	Mon	4:11	21.7	5:04	20.6	14	Mon	10:35	-5.2	10:55	-0.7
15	Tue	5:00	21.2	5:49	20.6	15	Tue	11:20	-4.4	11:45	-0.6
16	Wed	5:51	20.0	6:34	20.0	16	Wed	-	-	12:05	-2.9
17	Thu	6:45	18.3	7:22	19.2	17	Thu	12:38	-0.1	12:53	-1.0
18	Fri	7:44	16.4	8:14	18.1	18	Fri	1:35	0.7	1:45	1.1
19	Sat	8:51	14.7	9:12	17.1	19	Sat	2:39	1.5	2:44	3.1
20	Sun	10:10	13.7	10:17	16.4	20	Sun	3:52	2.0	3:52	4.6
21	Mon	11:36	13.5	11:24	16.2	21	Mon	5:09	1.9	5:06	5.4
22	Tue	-	-	12:49	14.2	22	Tue	6:18	1.3	6:15	5.4
23	Wed	12:26	16.5	1:44	15.1	23	Wed	7:12	0.5	7:11	4.9
24	Thu	1:18	17.0	2:27	16.0	24	Thu	7:57	-0.2	7:57	4.2
25	Fri	2:02	17.7	3:02	16.9	25	Fri	8:34	-0.8	8:37	3.5
26	Sat	2:40	18.3	3:34	17.6	26	Sat	9:08	-1.3	9:14	2.9
27	Sun	3:16	18.7	4:05	18.1	27	Sun	9:40	-1.5	9:49	2.4
28	Mon	3:51	18.9	4:35	18.4	28	Mon	10:11	-1.4	10:24	2.2
29	Tue	4:26	18.7	5:05	18.4	29	Tue	10:42	-1.0	10:59	2.2
30	Wed	5:01	18.1	5:36	18.1	30	Wed	11:14	-0.2	11:34	2.5
31	Thu	5:38	17.2	6:07	17.7	31	Thu	11:46	0.8	-	-

-continued-

AUGUST											
HIGH TIDES						LOW TIDES					
Date	Day	AM		PM		Date	Day	AM		PM	
		Time	Feet	Time	Feet			Time	Feet	Time	Feet
1	Fri	6:16	16.1	6:40	17.1	1	Fri	12:11	2.9	12:20	2.0
2	Sat	7:00	14.8	7:18	16.5	2	Sat	12:51	3.4	12:58	3.4
3	Sun	7:53	13.6	8:03	16.0	3	Sun	1:39	3.8	1:43	4.7
4	Mon	9:03	12.7	9:02	15.6	4	Mon	2:39	4.0	2:43	5.9
5	Tue	10:29	12.6	10:12	15.8	5	Tue	3:55	3.8	4:00	6.4
6	Wed	11:51	13.5	11:25	16.7	6	Wed	5:13	2.7	5:20	6.0
7	Thu	-	-	12:56	15.1	7	Thu	6:20	1.0	6:27	4.7
8	Fri	12:31	18.1	1:47	17.0	8	Fri	7:15	-1.0	7:25	2.9
9	Sat	1:29	19.8	2:33	18.8	9	Sat	8:03	-2.7	8:16	1.1
10	Sun	2:21	21.2	3:15	20.4	10	Sun	8:48	-4.1	9:04	-0.5
11	Mon	3:11	22.2	3:57	21.5	11	Mon	9:32	-4.7	9:51	-1.7
12	Tue	3:59	22.4	4:38	22.0	12	Tue	10:15	-4.5	10:37	-2.2
13	Wed	4:47	21.9	5:19	21.8	13	Wed	10:57	-3.6	11:24	-2.0
14	Thu	5:35	20.6	6:02	21.0	14	Thu	11:41	-2.0	-	-
15	Fri	6:26	18.9	6:46	19.8	15	Fri	12:13	-1.2	12:25	0.0
16	Sat	7:20	16.8	7:34	18.2	16	Sat	1:05	0.1	1:14	2.3
17	Sun	8:24	14.9	8:30	16.7	17	Sun	2:04	1.6	2:09	4.4
18	Mon	9:42	13.6	9:37	15.5	18	Mon	3:15	2.7	3:19	6.1
19	Tue	11:15	13.3	10:56	15.1	19	Tue	4:39	3.2	4:43	6.8
20	Wed	-	-	12:33	14.0	20	Wed	5:57	2.8	6:02	6.4
21	Thu	12:10	15.4	1:27	15.1	21	Thu	6:55	2.1	6:59	5.5
22	Fri	1:05	16.3	2:05	16.1	22	Fri	7:38	1.2	7:43	4.4
23	Sat	1:47	17.2	2:37	17.2	23	Sat	8:12	0.5	8:20	3.4
24	Sun	2:24	18.2	3:05	18.1	24	Sun	8:44	-0.1	8:53	2.4
25	Mon	2:58	18.9	3:33	18.8	25	Mon	9:14	-0.5	9:26	1.6
26	Tue	3:32	19.3	4:00	19.3	26	Tue	9:43	-0.5	9:59	1.1
27	Wed	4:06	19.3	4:29	19.5	27	Wed	10:13	-0.2	10:31	1.0
28	Thu	4:40	18.9	4:57	19.3	28	Thu	10:44	0.4	11:04	1.1
29	Fri	5:16	18.2	5:27	18.9	29	Fri	11:16	1.4	11:39	1.5
30	Sat	5:53	17.1	5:59	18.2	30	Sat	11:49	2.6	-	-
31	Sun	6:35	15.7	6:35	17.4	31	Sun	12:17	2.0	12:27	3.9

Appendix A22.—Total sockeye salmon harvest from all sources in Upper Cook Inlet, 1996–2014.

Year	Commercial			Sport ^{a,b,c}			Personal Use				Subsistence/Educational		Total		
	Drift	Set	Test	Kenai River	All Other UCI	Kas.	Kas.	Ken.	Other ^d	All	Subsist. ^e	Educ. ^e			
			Fishery			All	Gillnet	Dipnet						Dipnet	
1996	2,205,067	1,683,855	2,424	3,891,346	205,959	16,863	222,822	9,506	11,197	102,821	22,021	145,545	259	2,405	4,262,377
1997	2,197,961	1,979,034	2,301	4,179,296	190,629	23,591	214,220	17,997	9,737	114,619	6,587	148,940	593	3,076	4,546,125
1998	599,396	620,121	5,456	1,224,973	189,885	23,477	213,362	15,975	45,161	103,847	11,598	176,581	636	3,567	1,619,119
1999	1,413,995	1,266,523	11,766	2,692,284	233,768	26,078	259,846	12,832	37,176	149,504	9,077	208,589	599	3,037	3,164,355
2000	656,427	666,055	9,450	1,331,932	261,779	32,194	293,973	14,774	23,877	98,262	12,354	149,267	442	2,933	1,778,547
2001	846,275	980,576	3,381	1,830,232	219,478	30,953	250,431	17,201	37,612	150,766	13,109	218,688	686	4,633	2,304,670
2002	1,367,251	1,405,867	37,983	2,811,101	259,733	21,770	281,503	17,980	46,769	180,028	14,846	259,623	623	3,722	3,356,572
2003	1,593,638	1,882,523	13,968	3,490,129	314,408	36,076	350,484	15,706	43,870	223,580	15,675	298,831	544	5,993	4,145,981
2004	2,529,642	2,397,442	10,677	4,937,761	317,233	28,823	346,056	25,417	48,315	262,831	13,527	350,090	484	5,237	5,639,628
2005	2,520,327	2,718,372	12,064	5,250,763	312,835	21,826	334,661	26,609	43,151	295,496	4,520	369,776	238	7,134	5,962,572
2006	784,771	1,407,959	10,698	2,203,428	203,602	24,517	228,119	28,867	56,144	127,630	3,406	216,047	408	5,444	2,653,446
2007	1,823,481	1,493,298	10,649	3,327,428	326,325	28,504	354,829	14,943	43,293	291,270	6,729	356,235	567	5,773	4,044,832
2008	983,303	1,396,832	16,957	2,397,092	254,359	30,155	284,514	23,432	54,051	234,109	6,890	318,482	450	4,761	3,005,299
2009	968,075	1,077,719	13,948	2,059,742	287,806	29,790	317,596	26,646	73,035	339,993	18,006	457,680	253	7,064	2,842,335
2010	1,587,657	1,240,685	6,670	2,835,012	316,213	23,589	339,802	21,924	70,774	389,552	32,052	514,302	865	5,652	3,695,633
2011	3,201,035	2,076,960	5,660	5,283,655	410,709	22,507	433,216	26,780	49,766	537,765	16,068	630,379	700	11,166	6,359,116
2012	2,924,144	209,695	11,839	3,145,678	471,008	20,168	491,176	15,638	73,419	526,992	13,304	629,353	441	4,370	4,271,018
2013	1,662,561	1,020,663	5,283	2,688,507	458,522	30,173	488,695	14,439	85,528	347,222	7,126	454,315	333	8,012	3,639,862
2014	1,500,676	842,356	5,648	2,348,680	373,234	24,751	397,985	22,567	88,513	379,823	15,176	506,079	587	7,724	3,261,055

^a Sport harvest in the Kenai River includes late-run stock only; early-run Russian River sockeye salmon harvest is excluded.

^b Sport harvest is estimated from annual harvest surveys.

^c Sport harvest in 2014 is unknown until harvest surveys are finalized; these figures are estimates based on size of 2014 sockeye salmon run.

^d Area of harvest not identified on permits, other than Fish Creek dip net, which was open from 1996-2001, 2009-2011, and 2014, and Beluga dip net (2008–2013).

^e See Appendices B15 and B16 for individual fishery harvests.

Appendix A23.–Daily commercial harvest of razor clams, Upper Cook Inlet, 2014.

Date	lb	No. Diggers	Date	lb	No. Diggers
5/11/2014	4,890	17	6/27/2014	5,010	18
5/12/2014	6,396	19	6/28/2014	4,933	18
5/14/2014	7,878	19	6/29/2014	4,122	17
5/15/2014	8,246	19	6/30/2014	5,313	18
5/16/2014	7,147	19	7/1/2014	6,398	18
5/17/2014	7,233	19	7/2/2014	4,211	18
5/18/2014	7,361	18	7/3/2014	3,631	18
5/19/2014	7,440	19	7/8/2014	1,873	12
5/20/2014	6,387	19	7/9/2014	6,247	18
5/21/2014	6,183	19	7/10/2014	4,142	15
5/24/2014	5,172	19	7/11/2014	2,084	9
5/25/2014	6,076	19	7/12/2014	6,193	18
5/26/2014	6,409	19	7/13/2014	5,719	18
5/27/2014	7,228	19	7/14/2014	6,192	18
5/29/2014	6,961	19	7/15/2014	6,165	18
5/31/2014	3,938	19	7/16/2014	7,149	18
6/2/2014	5,280	19	7/17/2014	4,070	17
6/3/2014	7,568	19	7/18/2014	3,277	18
6/4/2014	4,680	19	7/21/2014	2,039	13
6/9/2014	4,247	18	7/22/2014	4,989	18
6/10/2014	7,372	19	7/23/2014	3,960	16
6/11/2014	8,537	19	7/24/2014	4,648	18
6/12/2014	8,492	18	7/25/2014	4,950	18
6/14/2014	9,349	18	7/26/2014	5,907	18
6/15/2014	6,306	18	7/27/2014	6,796	18
6/16/2014	6,267	18	7/28/2014	5,967	18
6/17/2014	5,484	18	7/29/2014	6,965	18
6/18/2014	4,343	17	7/30/2014	5,809	18
6/19/2014	5,507	18			
6/23/2014	6,433	18			
6/24/2014	5,380	18			
6/25/2014	4,352	18			
6/26/2014	4,993	18			
Total for Year = 348,294 lbs					

APPENDIX B: HISTORICAL DATA

Appendix B1.—Upper Cook Inlet commercial Chinook salmon harvest by gear type and area, 1966–2014.

Year	Central District						Northern District		Total
	Drift Gillnet		Upper Subdistrict Set		Kalgin/West Side Set		Set Gillnet		
	Number	%	Number	%	Number	%	Number	%	
1966	392	4.6	7,329	85.8	401	4.7	422	4.9	8,544
1967	489	6.2	6,686	85.1	500	6.4	184	2.3	7,859
1968	182	4.0	3,304	72.8	579	12.8	471	10.4	4,536
1969	362	2.9	5,834	47.1	3,286	26.5	2,904	23.4	12,386
1970	356	4.3	5,368	64.4	1,152	13.8	1,460	17.5	8,336
1971	237	1.2	7,055	35.7	2,875	14.5	9,598	48.6	19,765
1972	375	2.3	8,599	53.5	2,199	13.7	4,913	30.5	16,086
1973	244	4.7	4,411	84.9	369	7.1	170	3.3	5,194
1974	422	6.4	5,571	84.5	434	6.6	169	2.6	6,596
1975	250	5.2	3,675	76.8	733	15.3	129	2.7	4,787
1976	690	6.4	8,249	75.9	1,469	13.5	457	4.2	10,865
1977	3,411	23.1	9,730	65.8	1,084	7.3	565	3.8	14,790
1978	2,072	12.0	12,468	72.1	2,093	12.1	666	3.8	17,299
1979	1,089	7.9	8,671	63.1	2,264	16.5	1,714	12.5	13,738
1980	889	6.4	9,643	69.9	2,273	16.5	993	7.2	13,798
1981	2,320	19.0	8,358	68.3	837	6.8	725	5.9	12,240
1982	1,293	6.2	13,658	65.4	3,203	15.3	2,716	13.0	20,870
1983	1,125	5.5	15,042	72.9	3,534	17.1	933	4.5	20,634
1984	1,377	13.7	6,165	61.3	1,516	15.1	1,004	10.0	10,062
1985	1,998	8.3	17,723	73.7	2,427	10.1	1,890	7.9	24,038
1986	1,834	4.7	19,826	50.5	2,108	5.4	15,488	39.5	39,256
1987	4,552	11.5	21,159	53.6	1,029	2.6	12,700	32.2	39,440
1988	2,237	7.7	12,859	44.2	1,148	3.9	12,836	44.1	29,080
1989	0	0.0	10,914	40.8	3,092	11.6	12,731	47.6	26,737
1990	621	3.9	4,139	25.7	1,763	10.9	9,582	59.5	16,105
1991	246	1.8	4,893	36.1	1,544	11.4	6,859	50.6	13,542
1992	615	3.6	10,718	62.4	1,284	7.5	4,554	26.5	17,171

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Year	Central District						Northern District		Total
	Drift Gillnet		Upper Subdistrict Set		Kalgin/West Side Set		Set Gillnet		
	Number	%	Number	%	Number	%	Number	%	
1993	765	4.1	14,079	74.6	720	3.8	3,307	17.5	18,871
1994	464	2.3	15,575	78.0	730	3.7	3,193	16.0	19,962
1995	594	3.3	12,068	67.4	1,101	6.2	4,130	23.1	17,893
1996	389	2.7	11,564	80.8	395	2.8	1,958	13.7	14,306
1997	627	4.7	11,325	85.2	207	1.6	1,133	8.5	13,292
1998	335	4.1	5,087	62.6	155	1.9	2,547	31.4	8,124
1999	575	4.0	9,463	65.8	1,533	10.7	2,812	19.6	14,383
2000	270	3.7	3,684	50.1	1,089	14.8	2,307	31.4	7,350
2001	619	6.7	6,009	64.6	856	9.2	1,811	19.5	9,295
2002	415	3.3	9,478	74.5	926	7.3	1,895	14.9	12,714
2003	1,240	6.7	14,810	80.0	770	4.2	1,683	9.1	18,503
2004	1,104	4.1	21,684	80.5	2,208	8.2	1,926	7.2	26,922
2005	1,958	7.1	21,597	78.1	739	2.7	3,373	12.2	27,667
2006	2,782	15.4	9,956	55.2	1,030	5.7	4,261	23.6	18,029
2007	912	5.2	12,292	69.7	603	3.4	3,818	21.7	17,625
2008	653	4.9	7,573	56.8	1,124	8.4	3,983	29.9	13,333
2009	859	9.8	5,588	63.9	672	7.7	1,631	18.6	8,750
2010	538	5.4	7,059	71.3	553	5.6	1,750	17.7	9,900
2011	593	5.3	7,697	68.4	659	5.9	2,299	20.4	11,248
2012	218	8.6	705	27.9	555	22.0	1,049	41.5	2,527
2013	493	9.1	2,988	55.4	590	10.9	1,327	24.6	5,398
2014	382	8.2	2,301	49.4	507	10.9	1,470	31.5	4,660
1966-2013 Avg ^a	982	6.5	9,605	65.2	1,262	9.4	3,113	19.0	14,961
2004-2013 Avg	1,011	7.5	9,714	62.7	873	8.0	2,542	21.7	14,140

Note: Harvest data prior to 2014 reflect minor adjustments to historical catch database.

^a 1989 not used in average because the drift fleet did not fish due to the *Exxon Valdez* oil spill; this had an effect on all other fisheries.

Appendix B2.—Upper Cook Inlet commercial sockeye salmon harvest by gear type and area, 1966–2014.

Year	Central District						Northern District		Total
	Drift Gillnet		Upper Subdistrict Set		Kalgin/West Side Set		Set Gillnet		
	Number	%	Number	%	Number	%	Number	%	
1966	1,103,261	59.6	485,330	26.2	132,443	7.2	131,080	7.1	1,852,114
1967	890,152	64.5	305,431	22.1	66,414	4.8	118,065	8.6	1,380,062
1968	561,737	50.8	317,535	28.7	85,049	7.7	140,575	12.7	1,104,896
1969	371,747	53.7	210,834	30.5	71,184	10.3	38,050	5.5	691,815
1970	460,690	62.9	142,701	19.5	62,723	8.6	66,458	9.1	732,572
1971	423,107	66.5	111,505	17.5	61,144	9.6	40,533	6.4	636,289
1972	506,281	57.5	204,599	23.3	83,176	9.5	85,755	9.7	879,811
1973	375,695	56.1	188,816	28.2	59,973	8.9	45,614	6.8	670,098
1974	265,771	53.5	136,889	27.5	52,962	10.7	41,563	8.4	497,185
1975	368,124	53.8	177,336	25.9	73,765	10.8	65,526	9.6	684,751
1976	1,055,786	63.4	476,376	28.6	62,338	3.7	69,649	4.2	1,664,149
1977	1,073,098	52.3	751,178	36.6	104,265	5.1	123,750	6.0	2,052,291
1978	1,803,479	68.8	660,797	25.2	105,767	4.0	51,378	2.0	2,621,421
1979	454,707	49.2	247,359	26.8	108,422	11.7	113,918	12.3	924,406
1980	770,247	48.9	559,812	35.6	137,882	8.8	105,647	6.7	1,573,588
1981	633,380	44.0	496,003	34.5	60,217	4.2	249,662	17.3	1,439,262
1982	2,103,429	64.5	971,423	29.8	66,952	2.1	118,060	3.6	3,259,864
1983	3,222,428	63.8	1,508,511	29.9	134,575	2.7	184,219	3.6	5,049,733
1984	1,235,337	58.6	490,273	23.3	162,139	7.7	218,965	10.4	2,106,714
1985	2,031,995	50.1	1,561,200	38.5	285,081	7.0	181,191	4.5	4,059,467
1986	2,837,857	59.2	1,658,671	34.6	153,714	3.2	141,830	3.0	4,792,072
1987	5,638,916	59.5	3,457,724	36.5	208,036	2.2	164,572	1.7	9,469,248
1988	4,139,358	60.5	2,428,385	35.5	146,377	2.1	129,713	1.9	6,843,833
1989	5	0.0	4,543,492	90.7	186,828	3.7	280,801	5.6	5,011,126
1990	2,305,742	64.0	1,117,621	31.0	84,949	2.4	96,398	2.7	3,604,710
1991	1,118,138	51.3	844,603	38.8	99,855	4.6	116,201	5.3	2,178,797
1992	6,069,495	66.6	2,838,076	31.2	131,304	1.4	69,478	0.8	9,108,353

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Year	Central District						Northern District		Total
	Drift Gillnet		Upper Subdistrict Set		Kalgin/West Side Set		Set Gillnet		
	Number	%	Number	%	Number	%	Number	%	
1993	2,558,732	53.8	1,941,798	40.8	108,181	2.3	146,633	3.1	4,755,344
1994	1,901,475	53.3	1,458,162	40.9	85,830	2.4	120,142	3.4	3,565,609
1995	1,773,873	60.1	961,227	32.6	107,898	3.7	109,098	3.7	2,952,096
1996	2,205,067	56.7	1,483,008	38.1	96,719	2.5	104,128	2.7	3,888,922
1997	2,197,961	52.6	1,832,856	43.9	48,723	1.2	97,455	2.3	4,176,995
1998	599,396	49.2	512,306	42.0	47,165	3.9	60,650	5.0	1,219,517
1999	1,413,995	52.8	1,092,946	40.8	114,454	4.3	59,123	2.2	2,680,518
2000	656,427	49.6	529,747	40.1	92,477	7.0	43,831	3.3	1,322,482
2001	846,275	46.3	870,019	47.6	59,709	3.3	50,848	2.8	1,826,851
2002	1,367,251	49.3	1,303,158	47.0	69,609	2.5	33,100	1.2	2,773,118
2003	1,593,638	45.8	1,746,841	50.3	87,193	2.5	48,489	1.4	3,476,161
2004	2,529,642	51.3	2,235,810	45.4	134,356	2.7	27,276	0.6	4,927,084
2005	2,520,327	48.1	2,534,345	48.4	157,612	3.0	26,415	0.5	5,238,699
2006	784,771	35.8	1,301,275	59.3	94,054	4.3	12,630	0.6	2,192,730
2007	1,823,481	55.0	1,353,407	40.8	122,424	3.7	17,467	0.5	3,316,779
2008	983,303	41.3	1,303,236	54.8	67,366	2.8	26,230	1.1	2,380,135
2009	968,075	47.3	905,853	44.3	131,214	6.4	40,652	2.0	2,045,794
2010	1,587,657	56.1	1,085,789	38.4	114,719	4.1	40,177	1.4	2,828,342
2011	3,201,035	60.6	1,877,939	35.6	163,539	3.1	35,482	0.7	5,277,995
2012	2,924,144	93.3	96,675	3.1	90,440	2.9	22,580	0.7	3,133,839
2013	1,662,561	62.0	921,533	34.3	75,707	2.8	23,423	0.9	2,683,224
2014	1,500,676	64.0	724,398	30.9	80,271	3.4	37,687	1.6	2,343,032
1966-13 Avg ^a	1,657,872	55.8	1,057,381	34.8	103,619	4.9	86,248	4.5	2,905,121
2004-13 Avg	1,898,500	55.1	1,361,586	41.3	115,143	3.5	27,233	0.9	3,402,462

Note: Harvest data prior to 2014 reflect minor adjustments to historical catch database.

^a 1989 not used in average because the drift fleet did not fish due to the *Exxon Valdez* oil spill; this had an effect on all other fisheries.

Appendix B3.—Upper Cook Inlet commercial coho salmon harvest by gear type and area, 1966–2014.

Year	Central District						Northern District		Total
	Drift Gillnet		Upper Subdistrict Set		Kalgin/West Side Set		Set Gillnet		
	Number	%	Number	%	Number	%	Number	%	
1966	80,901	27.9	68,877	23.8	59,509	20.5	80,550	27.8	289,837
1967	53,071	29.9	40,738	22.9	40,066	22.5	43,854	24.7	177,729
1968	167,383	35.8	80,828	17.3	63,301	13.5	156,648	33.5	468,160
1969	33,053	32.8	18,988	18.9	28,231	28.0	20,412	20.3	100,684
1970	110,070	40.0	30,114	10.9	52,299	19.0	82,722	30.1	275,205
1971	35,491	35.4	16,589	16.5	26,188	26.1	22,094	22.0	100,362
1972	21,577	26.7	24,673	30.5	15,300	18.9	19,346	23.9	80,896
1973	31,784	30.4	23,901	22.9	24,784	23.7	23,951	22.9	104,420
1974	75,640	37.8	36,837	18.4	40,610	20.3	47,038	23.5	200,125
1975	88,579	39.0	46,209	20.3	59,537	26.2	33,051	14.5	227,376
1976	80,712	38.7	47,873	22.9	42,243	20.2	37,835	18.1	208,663
1977	110,184	57.2	23,693	12.3	38,093	19.8	20,623	10.7	192,593
1978	76,259	34.8	34,134	15.6	61,711	28.2	47,089	21.5	219,193
1979	114,496	43.2	29,284	11.0	68,306	25.8	53,078	20.0	265,164
1980	89,510	33.0	40,281	14.8	51,527	19.0	90,098	33.2	271,416
1981	226,366	46.7	36,024	7.4	88,390	18.2	133,625	27.6	484,405
1982	416,274	52.5	108,393	13.7	182,205	23.0	85,352	10.8	792,224
1983	326,965	63.3	37,694	7.3	97,796	18.9	53,867	10.4	516,322
1984	213,423	47.4	37,166	8.3	84,618	18.8	114,786	25.5	449,993
1985	337,066	53.6	70,657	10.6	147,331	22.1	91,837	13.8	646,891
1986	506,818	66.9	76,495	10.1	85,932	11.4	88,108	11.6	757,353
1987	202,506	44.8	74,981	16.6	74,930	16.6	97,062	21.9	449,479
1988	278,828	49.6	54,975	9.9	77,403	13.8	149,742	26.7	560,948
1989	856	0.2	82,333	24.1	81,004	23.9	175,738	51.8	339,931
1990	247,453	49.3	40,351	8.0	73,429	14.6	140,506	28.0	501,739
1991	176,245	41.2	30,436	7.1	87,515	20.6	132,302	31.0	426,498
1992	267,300	57.0	57,078	12.2	53,419	11.4	91,133	19.4	468,930

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Year	Central District						Northern District		Total
	Drift Gillnet		Upper Subdistrict Set		Kalgin/West Side Set		Set Gillnet		
	Number	%	Number	%	Number	%	Number	%	
1993	121,829	39.7	43,098	14.0	35,661	11.6	106,294	34.6	306,882
1994	310,114	52.7	68,449	11.9	61,166	10.5	144,064	24.8	583,793
1995	241,473	54.0	44,751	10.0	71,606	16.0	89,300	20.0	447,130
1996	171,434	53.3	40,724	12.6	31,405	9.8	78,105	24.3	321,668
1997	78,666	51.6	19,668	12.9	16,705	11.0	37,369	24.5	152,408
1998	83,338	51.9	18,677	11.6	24,286	15.1	34,387	21.4	160,688
1999	64,814	51.5	11,923	9.3	17,725	14.1	31,643	25.1	126,105
2000	131,478	55.5	11,078	4.7	22,840	9.6	71,475	30.2	236,871
2001	39,418	34.8	4,246	3.7	23,719	20.9	45,928	40.5	113,311
2002	125,831	51.1	35,153	14.3	35,005	14.2	50,292	20.4	246,281
2003	52,432	51.5	10,171	10.0	15,138	14.9	24,015	23.6	101,756
2004	199,587	64.2	30,154	9.7	36,498	11.7	44,819	14.4	311,058
2005	144,753	64.4	19,543	8.7	29,502	13.1	30,859	13.7	224,657
2006	98,473	55.4	22,167	12.5	36,845	20.7	20,368	11.5	177,853
2007	108,703	61.3	23,610	13.3	23,495	13.2	21,531	12.1	177,339
2008	89,428	52.0	21,823	12.7	18,441	10.7	42,177	24.5	171,869
2009	82,096	53.6	11,435	7.5	22,050	14.4	37,629	24.6	153,210
2010	110,275	53.2	32,683	15.8	26,281	12.7	38,111	18.4	207,350
2011	40,858	42.9	15,560	16.3	16,760	17.6	22,113	23.2	95,291
2012	74,678	69.9	6,537	6.1	12,354	11.6	13,206	12.4	106,775
2013	184,771	70.8	2,266	0.9	31,513	12.1	42,413	16.3	260,963
2014	76,885	56.0	5,736	4.2	19,379	14.1	35,200	25.7	137,200
1966-13 Avg ^a	147,718	47.9	35,766	13.0	49,653	17.2	63,464	22.0	296,597
2004-13 Avg	113,362	58.8	18,578	10.3	25,374	13.8	31,323	17.1	188,637

Note: Harvest data prior to 2014 reflect minor adjustments to historical catch database.

^a 1989 not used in average because the drift fleet did not fish due to the *Exxon Valdez* oil spill; this had an effect on all other fisheries.

Appendix B4.-Upper Cook Inlet commercial pink salmon harvest by gear type and area, 1966–2014.

Year	Central District						Northern District		Total
	Drift Gillnet		Upper Subdistrict Set		Kalgin/West Side Set		Set Gillnet		
	Number	%	Number	%	Number	%	Number	%	
1966	593,654	29.6	969,624	48.3	70,507	3.5	371,960	18.5	2,005,745
1967	7,475	23.2	13,038	40.5	3,256	10.1	8,460	26.2	32,229
1968	880,512	38.7	785,887	34.5	75,755	3.3	534,839	23.5	2,276,993
1969	8,233	25.3	10,968	33.7	5,711	17.6	7,587	23.3	32,499
1970	334,737	41.1	281,067	34.5	24,763	3.0	174,193	21.4	814,760
1971	6,433	18.1	18,097	50.8	2,637	7.4	8,423	23.7	35,590
1972	115,117	18.3	403,706	64.2	18,913	3.0	90,830	14.5	628,566
1973	91,901	28.2	80,596	24.7	16,437	5.0	137,250	42.1	326,184
1974	140,432	29.0	291,408	60.2	9,014	1.9	42,876	8.9	483,730
1975	113,868	33.9	112,423	33.4	19,086	5.7	90,953	27.0	336,330
1976	599,594	47.7	479,024	38.1	30,030	2.4	148,080	11.8	1,256,728
1977	286,308	51.7	125,817	22.7	25,212	4.6	116,518	21.0	553,855
1978	934,442	55.3	372,601	22.1	54,785	3.2	326,614	19.3	1,688,442
1979	19,554	26.8	19,983	27.4	7,061	9.7	26,382	36.1	72,980
1980	964,526	54.0	299,444	16.8	47,963	2.7	474,488	26.6	1,786,421
1981	53,888	42.4	15,654	12.3	4,276	3.4	53,325	41.9	127,143
1982	270,380	34.2	432,715	54.7	14,242	1.8	73,307	9.3	790,644
1983	26,629	37.9	18,309	26.0	3,785	5.4	21,604	30.7	70,327
1984	273,565	44.3	220,895	35.8	16,708	2.7	106,284	17.2	617,452
1985	34,228	39.0	17,715	20.2	5,653	6.4	30,232	34.4	87,828
1986	615,522	47.3	530,974	40.8	15,460	1.2	139,002	10.7	1,300,958
1987	38,714	35.4	47,243	43.2	5,229	4.8	18,203	16.6	109,389
1988	227,885	48.4	176,043	37.4	12,938	2.7	54,210	11.5	471,076
1989	2	0.0	37,982	56.3	5,580	8.3	23,878	35.4	67,442
1990	323,955	53.7	225,429	37.3	10,302	1.7	43,944	7.3	603,630
1991	5,791	39.5	2,670	18.2	1,049	7.2	5,153	35.1	14,663
1992	423,738	60.9	244,068	35.1	4,250	0.6	23,805	3.4	695,861

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Year	Central District						Northern District		Total
	Drift Gillnet		Upper Subdistrict Set		Kalgin/West Side Set		Set Gillnet		
	Number	%	Number	%	Number	%	Number	%	
1993	46,463	46.0	41,690	41.3	2,313	2.3	10,468	10.4	100,934
1994	256,248	49.0	234,827	44.9	3,178	0.6	29,181	5.6	523,434
1995	64,632	48.4	53,420	40.0	3,813	2.9	11,713	8.8	133,578
1996	122,728	50.5	95,717	39.4	3,792	1.6	20,674	8.5	242,911
1997	29,920	42.2	32,055	45.2	4,701	6.6	4,269	6.0	70,945
1998	200,382	36.3	332,484	60.3	7,231	1.3	11,640	2.1	551,737
1999	3,552	22.0	9,357	57.8	2,674	16.5	593	3.7	16,176
2000	90,508	61.8	23,746	16.2	11,983	8.2	20,245	13.8	146,482
2001	31,219	43.0	32,998	45.5	3,988	5.5	4,355	6.0	72,560
2002	224,229	50.2	214,771	48.1	1,736	0.4	6,224	1.4	446,960
2003	30,376	62.3	16,474	33.8	375	0.8	1,564	3.2	48,789
2004	235,524	65.8	107,838	30.1	12,560	3.5	2,017	0.6	357,939
2005	31,230	64.5	13,619	28.1	2,747	5.7	823	1.7	48,419
2006	212,808	52.7	184,990	45.8	4,684	1.2	1,629	0.4	404,111
2007	67,398	45.8	69,918	47.6	6,177	4.2	3,527	2.4	147,020
2008	103,867	61.3	59,620	35.2	2,357	1.4	3,524	2.1	169,368
2009	139,676	65.2	55,845	26.1	12,246	5.7	6,554	3.1	214,321
2010	164,005	56.0	121,817	41.6	3,106	1.1	3,778	1.3	292,706
2011	15,333	44.9	15,527	45.5	2,424	7.1	839	2.5	34,123
2012	303,216	64.6	159,003	33.9	3,376	0.7	4,003	0.9	469,598
2013	30,605	63.4	14,671	30.4	1,014	2.1	1,985	4.1	48,275
2014	417,112	64.9	213,616	33.2	4,331	0.7	7,695	1.2	642,754
1966-13 Avg ^a	208,404	44.7	172,038	37.2	12,798	4.3	69,747	13.8	462,987
2004-13 Avg	130,366	58.4	80,285	36.4	5,069	3.0	2,868	1.9	218,588

Note: Harvest data prior to 2014 reflect minor adjustments to historical catch database.

^a 1989 not used in average because the drift fleet did not fish due to the *Exxon Valdez* oil spill; this had an effect on all other fisheries.

Appendix B5.—Upper Cook Inlet commercial chum salmon harvest by gear type and area, 1966–2014.

Year	Central District						Northern District		Total
	Drift Gillnet		Upper Subdistrict Set		Kalgin/West Side Set		Set Gillnet		
	Number	%	Number	%	Number	%	Number	%	
1966	424,972	79.8	7,461	1.4	64,725	12.1	35,598	6.7	532,756
1967	233,041	78.5	399	0.1	25,013	8.4	38,384	12.9	296,837
1968	1,002,900	90.5	1,563	0.1	44,986	4.1	58,454	5.3	1,107,903
1969	238,497	89.1	399	0.1	16,954	6.3	11,836	4.4	267,686
1970	678,448	90.4	1,228	0.2	48,591	6.5	22,507	3.0	750,774
1971	274,567	84.8	128	0.0	32,647	10.1	16,603	5.1	323,945
1972	564,726	90.2	1,727	0.3	40,179	6.4	19,782	3.2	626,414
1973	605,738	90.7	1,965	0.3	29,019	4.3	30,851	4.6	667,573
1974	344,496	86.8	506	0.1	15,346	3.9	36,492	9.2	396,840
1975	886,474	93.2	980	0.1	33,347	3.5	30,787	3.2	951,588
1976	405,769	86.5	1,484	0.3	47,882	10.2	14,045	3.0	469,180
1977	1,153,454	93.5	1,413	0.1	54,708	4.4	23,861	1.9	1,233,436
1978	489,119	85.5	4,563	0.8	40,946	7.2	37,151	6.5	571,779
1979	609,239	93.8	867	0.1	30,342	4.7	9,310	1.4	649,758
1980	339,970	87.7	2,147	0.6	28,970	7.5	16,728	4.3	387,815
1981	756,922	91.0	2,386	0.3	26,461	3.2	46,208	5.6	831,977
1982	1,348,510	94.1	4,777	0.3	36,647	2.6	43,006	3.0	1,432,940
1983	1,044,636	93.7	2,822	0.3	38,079	3.4	29,321	2.6	1,114,858
1984	568,097	83.5	3,695	0.5	34,207	5.0	74,727	11.0	680,726
1985	700,848	90.7	4,133	0.5	31,746	4.1	36,122	4.7	772,849
1986	1,012,669	89.2	7,030	0.6	39,078	3.4	76,040	6.7	1,134,817
1987	211,745	60.7	16,733	4.8	53,558	15.3	66,901	19.2	348,937
1988	582,699	82.0	11,763	1.7	40,425	5.7	75,728	10.7	710,615
1989	72	0.1	12,326	10.1	27,705	22.7	81,948	67.1	122,051
1990	289,521	82.4	4,611	1.3	21,355	6.1	35,710	10.2	351,197
1991	215,476	76.9	2,387	0.9	22,974	8.2	39,393	14.1	280,230
1992	232,955	84.9	2,867	1.0	13,180	4.8	25,301	9.2	274,303

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Year	Central District						Northern District		Total
	Drift Gillnet		Upper Subdistrict Set		Kalgin/West Side Set		Set Gillnet		
	Number	%	Number	%	Number	%	Number	%	
1993	88,826	72.4	2,977	2.4	5,566	4.5	25,401	20.7	122,770
1994	249,748	82.4	2,927	1.0	10,443	3.4	40,059	13.2	303,177
1995	468,224	88.4	3,711	0.7	13,826	2.6	43,667	8.2	529,428
1996	140,987	90.1	1,448	0.9	2,314	1.5	11,771	7.5	156,520
1997	92,163	89.4	1,222	1.2	1,770	1.7	7,881	7.6	103,036
1998	88,080	92.0	688	0.7	2,953	3.1	3,983	4.2	95,704
1999	166,612	95.5	373	0.2	3,567	2.0	4,002	2.3	174,554
2000	118,074	92.9	325	0.3	4,386	3.5	4,284	3.4	127,069
2001	75,599	89.5	248	0.3	6,445	7.6	2,202	2.6	84,494
2002	224,587	94.4	1,790	0.8	6,671	2.8	4,901	2.1	237,949
2003	106,468	88.2	1,933	1.6	7,883	6.5	4,483	3.7	120,767
2004	137,041	93.8	2,019	1.4	4,957	3.4	2,148	1.5	146,165
2005	65,671	94.2	710	1.0	2,632	3.8	727	1.0	69,740
2006	59,965	93.6	347	0.5	3,241	5.1	480	0.7	64,033
2007	74,836	96.9	521	0.7	1,275	1.7	608	0.8	77,240
2008	46,010	91.4	433	0.9	2,243	4.5	1,629	3.2	50,315
2009	77,073	93.1	319	0.4	2,339	2.8	3,080	3.7	82,811
2010	216,977	94.8	3,035	1.3	4,947	2.2	3,904	1.7	228,863
2011	111,082	85.8	1,612	1.2	9,995	7.7	6,718	5.2	129,407
2012	264,513	98.1	49	0.0	2,872	1.1	2,299	0.9	269,733
2013	132,172	94.8	102	0.1	4,854	3.5	2,237	1.6	139,365
2014	108,301	93.3	548	0.5	4,828	4.2	2,406	2.1	116,083
1966-13 Avg ^a	387,664	88.5	2,486	0.7	21,629	5.0	23,985	5.7	435,763
2004-13 Avg	118,534	93.7	915	0.8	3,936	3.6	2,383	2.0	125,767

Note: Harvest data prior to 2014 reflect minor adjustments to historical catch database.

^a 1989 not used in average because the drift fleet did not fish due to the *Exxon Valdez* oil spill; this had an effect on all other fisheries.

Appendix B6.—Upper Cook Inlet commercial salmon harvest by species, 1966–2014.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1966	8,544	1,852,114	289,837	2,005,745	532,756	4,688,996
1967	7,859	1,380,062	177,729	32,229	296,837	1,894,716
1968	4,536	1,104,904	469,850	2,278,197	1,119,114	4,976,601
1969	12,397	692,175	100,777	33,383	269,847	1,108,579
1970	8,336	732,605	275,399	814,895	776,229	2,607,464
1971	19,765	636,303	100,636	35,624	327,029	1,119,357
1972	16,086	879,824	80,933	628,574	630,103	2,235,520
1973	5,194	670,098	104,420	326,184	667,573	1,773,469
1974	6,596	497,185	200,125	483,730	396,840	1,584,476
1975	4,787	684,752	227,379	336,333	951,796	2,205,047
1976	10,865	1,664,150	208,695	1,256,728	469,802	3,610,240
1977	14,790	2,052,291	192,599	553,855	1,233,722	4,047,257
1978	17,299	2,621,421	219,193	1,688,442	571,779	5,118,134
1979	13,738	924,415	265,166	72,982	650,357	1,926,658
1980	13,798	1,573,597	271,418	1,786,430	389,675	4,034,918
1981	12,240	1,439,277	484,411	127,164	833,542	2,896,634
1982	20,870	3,259,864	793,937	790,648	1,433,866	6,299,185
1983	20,634	5,049,733	516,322	70,327	1,114,858	6,771,874
1984	10,062	2,106,714	449,993	617,452	680,726	3,864,947
1985	24,088	4,060,429	667,213	87,828	772,849	5,612,407
1986	39,256	4,792,072	757,353	1,300,958	1,134,817	8,024,456
1987	39,440	9,469,248	449,750	109,389	349,150	10,416,977
1988	29,080	6,843,833	561,048	471,080	710,615	8,615,656
1989	26,738	5,011,159	339,931	67,443	122,051	5,567,322
1990	16,105	3,604,710	501,739	603,630	351,197	5,077,381

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Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1991	13,542	2,178,797	426,498	14,663	280,230	2,913,730
1992	17,171	9,108,353	468,930	695,861	274,303	10,564,618
1993	18,871	4,755,344	306,882	100,934	122,770	5,304,801
1994	19,962	3,565,609	583,793	523,434	303,177	4,995,975
1995	17,893	2,952,096	447,130	133,578	529,428	4,080,125
1996	14,306	3,888,922	321,668	242,911	156,520	4,624,327
1997	13,292	4,176,995	152,408	70,945	103,036	4,516,676
1998	8,124	1,219,517	160,688	551,737	95,704	2,035,770
1999	14,383	2,680,518	126,105	16,176	174,554	3,011,736
2000	7,350	1,322,482	236,871	146,482	127,069	1,840,254
2001	9,295	1,826,851	113,311	72,560	84,494	2,106,511
2002	12,714	2,773,118	246,281	446,960	237,949	3,717,022
2003	18,503	3,476,161	101,756	48,789	120,767	3,765,976
2004	26,922	4,927,084	311,058	357,939	146,165	5,769,168
2005	27,667	5,238,699	224,657	48,419	69,740	5,609,182
2006	18,029	2,192,730	177,853	404,111	64,033	2,856,756
2007	17,625	3,316,779	177,339	147,020	77,240	3,736,003
2008	13,333	2,380,135	171,869	169,368	50,315	2,785,020
2009	8,750	2,045,794	153,210	214,321	82,811	2,504,886
2010	9,900	2,828,342	207,350	292,706	228,863	3,567,161
2011	11,248	5,277,995	95,291	34,123	129,407	5,548,064
2012	2,527	3,133,839	106,775	469,598	269,733	3,982,472
2013	5,398	2,683,224	260,963	48,275	139,365	3,137,225
2014	4,660	2,343,032	137,200	642,754	116,083	3,243,729
1966-2013 Avg ^a	14,961	2,905,121	296,608	462,988	435,768	4,115,445
2004-2013 Avg	14,140	3,402,462	188,637	218,588	125,767	3,949,594

Note: Harvest statistics prior to 2014 reflect minor adjustments to catch database.

^a 1989 not used in average because the drift fleet did not fish due to the *Exxon Valdez* oil spill; this had an effect on all other fisheries.

Appendix B7.—Approximate exvessel value of Upper Cook Inlet commercial salmon harvest by species, 1960–2014.

Year	Chinook	%	Sockeye	%	Coho	%	Pink	%	Chum	%	Total
1960	\$ 140,000	5.0%	\$ 1,334,000	47.9%	\$ 307,000	11.0%	\$ 663,000	23.8%	\$ 343,000	12.3%	\$ 2,787,000
1961	\$ 100,000	4.7%	\$ 1,687,000	79.4%	\$ 118,000	5.6%	\$ 16,000	0.8%	\$ 204,000	9.6%	\$ 2,125,000
1962	\$ 100,000	2.5%	\$ 1,683,000	42.3%	\$ 342,000	8.6%	\$ 1,274,000	32.0%	\$ 582,000	14.6%	\$ 3,981,000
1963	\$ 89,000	4.6%	\$ 1,388,000	72.3%	\$ 193,000	10.1%	\$ 13,000	0.7%	\$ 236,000	12.3%	\$ 1,919,000
1964	\$ 20,000	0.5%	\$ 1,430,000	38.9%	\$ 451,000	12.3%	\$ 1,131,000	30.8%	\$ 646,000	17.6%	\$ 3,678,000
1965	\$ 50,000	2.0%	\$ 2,099,000	82.1%	\$ 109,000	4.3%	\$ 70,000	2.7%	\$ 230,000	9.0%	\$ 2,558,000
1966	\$ 50,000	1.2%	\$ 2,727,000	64.4%	\$ 295,000	7.0%	\$ 823,000	19.4%	\$ 338,000	8.0%	\$ 4,233,000
1967	\$ 49,000	1.9%	\$ 2,135,000	82.6%	\$ 187,000	7.2%	\$ 13,000	0.5%	\$ 202,000	7.8%	\$ 2,586,000
1968	\$ 30,000	0.7%	\$ 1,758,000	40.4%	\$ 515,000	11.8%	\$ 1,209,000	27.8%	\$ 843,000	19.4%	\$ 4,355,000
1969	\$ 70,000	4.0%	\$ 1,296,697	73.9%	\$ 134,003	7.6%	\$ 18,291	1.0%	\$ 236,404	13.5%	\$ 1,755,394
1970	\$ 89,382	3.0%	\$ 1,190,303	39.9%	\$ 468,179	15.7%	\$ 456,354	15.3%	\$ 780,622	26.2%	\$ 2,984,840
1971	\$ 189,504	9.2%	\$ 1,250,771	61.0%	\$ 137,815	6.7%	\$ 18,402	0.9%	\$ 454,483	22.2%	\$ 2,050,974
1972	\$ 224,396	6.3%	\$ 1,863,177	52.6%	\$ 137,315	3.9%	\$ 478,246	13.5%	\$ 840,057	23.7%	\$ 3,543,192
1973	\$ 121,156	2.0%	\$ 3,225,847	52.3%	\$ 318,950	5.2%	\$ 362,658	5.9%	\$ 2,135,025	34.6%	\$ 6,163,635
1974	\$ 209,712	3.2%	\$ 3,072,221	46.8%	\$ 843,048	12.8%	\$ 919,916	14.0%	\$ 1,517,637	23.1%	\$ 6,562,535
1975	\$ 63,990	1.0%	\$ 2,628,036	39.2%	\$ 838,859	12.5%	\$ 419,173	6.3%	\$ 2,752,555	41.1%	\$ 6,702,612
1976	\$ 274,172	2.0%	\$ 8,668,095	63.4%	\$ 819,006	6.0%	\$ 1,874,915	13.7%	\$ 2,041,225	14.9%	\$ 13,677,413
1977	\$ 523,776	2.4%	\$ 13,318,720	61.8%	\$ 932,540	4.3%	\$ 767,273	3.6%	\$ 5,995,611	27.8%	\$ 21,537,920
1978	\$ 661,375	2.0%	\$ 26,167,741	80.3%	\$ 1,380,312	4.2%	\$ 2,154,176	6.6%	\$ 2,217,510	6.8%	\$ 32,581,114
1979	\$ 616,360	4.2%	\$ 8,093,280	55.3%	\$ 1,640,277	11.2%	\$ 82,339	0.6%	\$ 4,199,765	28.7%	\$ 14,632,021
1980	\$ 414,771	3.2%	\$ 7,937,699	61.7%	\$ 891,098	6.9%	\$ 2,114,283	16.4%	\$ 1,513,960	11.8%	\$ 12,871,810
1981	\$ 424,390	2.3%	\$ 11,080,411	60.1%	\$ 2,623,598	14.2%	\$ 170,038	0.9%	\$ 4,150,158	22.5%	\$ 18,448,596
1982	\$ 763,267	2.4%	\$ 25,154,115	80.0%	\$ 4,080,570	13.0%	\$ 553,635	1.8%	\$ 886,129	2.8%	\$ 31,437,716
1983	\$ 590,730	2.0%	\$ 24,016,294	81.8%	\$ 1,601,976	5.5%	\$ 41,338	0.1%	\$ 3,109,814	10.6%	\$ 29,360,152
1984	\$ 310,899	1.8%	\$ 12,450,532	71.8%	\$ 2,039,681	11.8%	\$ 522,795	3.0%	\$ 2,011,253	11.6%	\$ 17,335,160
1985	\$ 799,318	2.3%	\$ 27,497,929	80.0%	\$ 3,359,824	9.8%	\$ 57,412	0.2%	\$ 2,644,995	7.7%	\$ 34,359,478
1986	\$ 915,189	2.0%	\$ 38,683,950	83.3%	\$ 2,909,043	6.3%	\$ 724,367	1.6%	\$ 3,197,973	6.9%	\$ 46,430,522
1987	\$ 1,609,777	1.6%	\$ 95,915,522	94.9%	\$ 2,373,254	2.3%	\$ 84,439	0.1%	\$ 1,116,165	1.1%	\$ 101,099,156

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Year	Chinook	%	Sockeye	%	Coho	%	Pink	%	Chum	%	Total
1988	\$ 1,120,885	0.9%	\$ 111,537,736	91.3%	\$ 4,738,463	3.9%	\$ 650,931	0.5%	\$ 4,129,002	3.4%	\$ 122,177,017
1989	\$ 803,494	1.4%	\$ 56,194,753	95.0%	\$ 1,674,393	2.8%	\$ 86,012	0.1%	\$ 415,535	0.7%	\$ 59,174,188
1990	\$ 436,822	1.1%	\$ 35,804,485	88.0%	\$ 2,422,214	6.0%	\$ 512,591	1.3%	\$ 1,495,827	3.7%	\$ 40,671,938
1991	\$ 348,522	2.3%	\$ 12,249,200	80.4%	\$ 1,996,049	13.1%	\$ 5,478	0.0%	\$ 643,400	4.2%	\$ 15,242,649
1992	\$ 634,466	0.6%	\$ 96,026,864	96.0%	\$ 2,261,862	2.3%	\$ 404,772	0.4%	\$ 740,294	0.7%	\$ 100,068,258
1993	\$ 617,092	2.1%	\$ 27,969,409	93.1%	\$ 1,081,175	3.6%	\$ 36,935	0.1%	\$ 322,205	1.1%	\$ 30,026,815
1994	\$ 642,291	1.9%	\$ 29,441,442	85.5%	\$ 3,297,865	9.6%	\$ 240,545	0.7%	\$ 831,121	2.4%	\$ 34,453,264
1995	\$ 474,475	2.2%	\$ 19,168,077	87.1%	\$ 1,295,353	5.9%	\$ 53,114	0.2%	\$ 1,023,926	4.7%	\$ 22,014,944
1996	\$ 402,980	1.4%	\$ 28,238,578	95.0%	\$ 800,423	2.7%	\$ 44,386	0.1%	\$ 225,751	0.8%	\$ 29,712,117
1997	\$ 365,316	1.1%	\$ 31,439,536	97.1%	\$ 434,327	1.3%	\$ 12,004	0.0%	\$ 143,244	0.4%	\$ 32,394,427
1998	\$ 181,318	2.1%	\$ 7,686,993	88.5%	\$ 497,050	5.7%	\$ 187,759	2.2%	\$ 132,025	1.5%	\$ 8,685,145
1999	\$ 337,482	1.6%	\$ 20,095,838	95.5%	\$ 329,164	1.6%	\$ 5,995	0.0%	\$ 265,026	1.3%	\$ 21,033,505
2000	\$ 183,400	2.2%	\$ 7,148,625	87.3%	\$ 626,072	7.6%	\$ 47,075	0.6%	\$ 186,344	2.3%	\$ 8,191,516
2001	\$ 169,593	2.2%	\$ 7,138,845	92.3%	\$ 297,387	3.8%	\$ 20,313	0.3%	\$ 111,028	1.4%	\$ 7,737,165
2002	\$ 326,077	2.8%	\$ 10,679,780	91.7%	\$ 329,198	2.8%	\$ 84,859	0.7%	\$ 224,011	1.9%	\$ 11,643,925
2003	\$ 358,886	2.8%	\$ 12,275,919	95.3%	\$ 132,059	1.0%	\$ 8,663	0.1%	\$ 99,783	0.8%	\$ 12,875,310
2004	\$ 673,088	3.3%	\$ 19,416,495	93.8%	\$ 416,071	2.0%	\$ 65,884	0.3%	\$ 129,791	0.6%	\$ 20,701,330
2005	\$ 688,993	2.2%	\$ 30,165,827	95.2%	\$ 708,620	2.2%	\$ 12,796	0.0%	\$ 101,106	0.3%	\$ 31,677,341
2006	\$ 617,278	4.4%	\$ 12,311,850	88.5%	\$ 679,463	4.9%	\$ 174,522	1.3%	\$ 121,265	0.9%	\$ 13,904,377
2007	\$ 629,643	2.7%	\$ 21,916,852	93.6%	\$ 682,747	2.9%	\$ 53,029	0.2%	\$ 141,097	0.6%	\$ 23,423,367
2008	\$ 544,042	3.3%	\$ 15,530,144	93.0%	\$ 482,298	2.9%	\$ 64,466	0.4%	\$ 75,766	0.5%	\$ 16,696,717
2009	\$ 266,548	1.8%	\$ 13,720,051	94.1%	\$ 399,704	2.7%	\$ 71,582	0.5%	\$ 115,969	0.8%	\$ 14,573,854
2010	\$ 349,222	1.0%	\$ 32,111,915	93.1%	\$ 944,025	2.7%	\$ 236,306	0.7%	\$ 837,593	2.4%	\$ 34,479,060
2011	\$ 634,836	1.2%	\$ 51,363,720	96.7%	\$ 406,726	0.8%	\$ 27,548	0.1%	\$ 688,878	1.3%	\$ 53,121,708
2012	\$ 121,626	0.4%	\$ 32,008,304	92.3%	\$ 480,119	1.4%	\$ 622,809	1.8%	\$ 1,458,873	4.2%	\$ 34,691,730
2013	\$ 210,638	0.5%	\$ 37,787,069	93.9%	\$ 1,362,395	3.4%	\$ 53,754	0.1%	\$ 828,113	2.1%	\$ 40,241,970
2014	\$ 206,119	0.6%	\$ 32,805,061	93.6%	\$ 777,431	2.2%	\$ 588,197	1.7%	\$ 686,954	2.0%	\$ 35,063,761

Appendix B8.—Commercial herring harvest by fishery, Upper Cook Inlet, 1975–2014.

Year	Harvest (Tons)				Total
	Upper Subdistrict	Chinitna Bay	Tuxedni Bay	Kalgin Isl	
1975	6.2	—	—	—	6.2
1976	5.8	—	—	—	5.8
1977	17.3	—	—	—	17.3
1978	8.3	55.3	—	—	63.6
1979	67.3	96.2	24.8	—	188.3
1980	37.4	20.0	86.5	—	143.9
1981	86.2	50.5	84.9	—	221.6
1982	60.2	91.8	50.2	—	202.2
1983	165.3	49.2	238.2	—	452.7
1984	117.5	90.6	159.0	—	367.1
1985	136.3	46.1	215.9	—	398.4
1986	142.6	111.1	191.9	—	445.6
1987	126.5	65.1	152.5	—	344.1
1988	50.7	23.4	14.1	—	88.1
1989	55.2	122.3	34.3	—	211.8
1990	55.4	55.9	16.1	—	127.5
1991	13.4	15.7	1.6	—	30.7
1992	24.7	10.4	—	—	35.2
1993	—	—	—	—	—
1994	—	—	—	—	—
1995	—	—	—	—	—
1996	—	—	—	—	—
1997	—	—	—	—	—
1998	19.5	—	—	—	19.4
1999	10.4	—	—	—	10.4
2000	14.7	—	—	—	16.3
2001	9.9	—	—	—	10.4
2002	16.2	1.9	0.0	—	18.1
2003	3.7	0.0	0.0	—	3.7
2004	6.7	0.1	0.0	—	6.8
2005	17.1	0.2	0.0	0.0	17.3
2006	14.4	0.0	0.0	0.0	14.4
2007	12.6	0.0	0.0	0.0	12.6
2008	13.5	0.0	0.0	0.0	13.5
2009	9.2	0.0	0.0	0.0	9.2
2010	16.4	0.2	0.0	0.0	16.6
2011	13.7	2.5	0.0	0.0	16.2
2012	16.7	7.0	0.0	0.0	23.8
2013	29.6	6.0	0.0	0.0	35.6
2014	29.0	0.0	0.0	0.0	29.0

Note: For years where fisheries were closed, harvest is reported as a dash.

Appendix B9.—Commercial harvest of razor clams in Upper Cook Inlet, 1919–2014.

Year	Pounds	Year	Pounds
1919	76,963	1967	0
1920	11,952	1968	0
1921	72,000	1969	0
1922	510,432	1970	0
1923	470,280	1971	14,755
1924	156,768	1972	31,360
1925	0	1973	34,415
1926	0	1974	0
1927	25,248	1975	10,020
1928	0	1976	0
1929	0	1977	1,762
1930	0	1978	45,931
1931	No Record	1979	144,358
1932	93,840	1980	140,420
1933	No Record	1981	441,949
1934	No Record	1982	460,639
1935	No Record	1983	269,618
1936	No Record	1984	261,742
1937	8,328	1985	319,034
1938	No Record	1986	258,632
1939	No Record	1987	312,349
1940	No Record	1988	399,376
1941	0	1989	222,747
1942	0	1990	323,602
1943	0	1991	201,320
1944	0	1992	296,727
1945	15,000	1993	310,481
1946	11,424	1994	355,165
1947	11,976	1995	248,358
1948	2,160	1996	355,448
1949	9,672	1997	366,532
1950	304,073	1998	371,877
1951	112,320	1999	352,910
1952	0	2000	369,397
1953	0	2001	348,917
1954	0	2002	338,938
1955	0	2003	411,403
1956	0	2004	419,697
1957	0	2005	371,395
1958	0	2006	368,953
1959	0	2007	283,085
1960	372,872	2008	390,999
1961	277,830	2009	361,388
1962	195,650	2010	379,547
1963	0	2011	189,172
1964	0	2012	307,409
1965	0	2013	380,912
1966	0	2014	348,294

Appendix B10.—Enumeration goals and counts of sockeye salmon in selected streams of Upper Cook Inlet, 1978–2014.

Year	Kenai River		Kasilof River		Fish Creek	
	Enumeration Goal ^{a,b}	Enumeration Estimate ^{a,c}	Enumeration Goal ^{a,c}	Enumeration Estimate ^b	Enumeration Goal	Enumeration Estimate ^{c,d}
1978	350,000–500,000	398,900	75,000–150,000	116,600	–	3,555
1979	350,000–500,000	285,020	75,000–150,000	152,179	–	68,739
1980	350,000–500,000	464,038	75,000–150,000	184,260	–	62,828
1981	350,000–500,000	407,639	75,000–150,000	256,625	–	50,479
1982	350,000–500,000	619,831	75,000–150,000	180,239	50,000	28,164
1983	350,000–500,000	630,340	75,000–150,000	210,271	50,000	118,797
1984	350,000–500,000	344,571	75,000–150,000	231,685	50,000	192,352
1985	350,000–500,000	502,820	75,000–150,000	505,049	50,000	68,577
1986	350,000–500,000	501,157	75,000–150,000	275,963	50,000	29,800
1987	400,000–700,000	1,596,871	150,000–250,000	249,250	50,000	91,215
1988	400,000–700,000	1,021,469	150,000–250,000	204,000 ^c	50,000	71,603
1989	400,000–700,000	1,599,959	150,000–250,000	158,206	50,000	67,224
1990	400,000–700,000	659,520	150,000–250,000	144,289	50,000	50,000
1991	400,000–700,000	647,597	150,000–250,000	238,269	50,000	50,500
1992	400,000–700,000	994,798	150,000–250,000	184,178	50,000	71,385
1993	400,000–700,000	813,617	150,000–250,000	149,939	50,000	117,619
1994	400,000–700,000	1,003,446	150,000–250,000	205,117	50,000	95,107
1995	450,000–700,000	630,447	150,000–250,000	204,935	50,000	115,000
1996	550,000–800,000	797,847	150,000–250,000	249,944	50,000	63,160
1997	550,000–825,000	1,064,818	150,000–250,000	266,025	50,000	54,656
1998	550,000–850,000	767,558	150,000–250,000	273,213	50,000	22,853
1999	750,000–950,000	803,379	150,000–250,000	312,587	50,000	26,667
2000	600,000–850,000	624,578	150,000–250,000	256,053	50,000	19,533
2001	600,000–850,000	650,036	150,000–250,000	307,570	50,000	43,469
2002	750,000–950,000	957,924	150,000–250,000	226,682	20,000–70,000	90,483
2003	750,000–950,000	1,181,309	150,000–250,000	359,633	20,000–70,000	92,298
2004	850,000–1,100,000	1,385,981	150,000–250,000	577,581	20,000–70,000	22,157
2005	850,000–1,100,000	1,376,452	150,000–250,000	348,012	20,000–70,000	14,215
2006	750,000–950,000	1,499,692	150,000–250,000	368,092	20,000–70,000	32,566
2007	750,000–950,000	867,572	150,000–250,000	336,866	20,000–70,000	27,948
2008	650,000–850,000	614,946	150,000–250,000	301,469	20,000–70,000	19,339
2009	650,000–850,000	745,170	150,000–250,000	297,125	20,000–70,000	83,477
2010	750,000–950,000	970,662	150,000–250,000	267,013	20,000–70,000	126,829
2011	1,100,000–1,350,000	1,599,217	160,000–390,000	245,721	20,000–70,000	66,678
2012	1,100,000–1,350,000	1,581,555	160,000–390,000	374,523	20,000–70,000	18,813
2013	1,000,000–1,200,000	1,359,893	160,000–390,000	489,654	20,000–70,000	18,912
2014	1,000,000–1,200,000	1,524,707	160,000–340,000	439,977	20,000–70,000	43,915

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Year	Yentna River		Crescent River		Packers Creek	
	Enumeration Goal ^f	Enumeration Estimate ^{a,f}	Enumeration Goal	Enumeration Estimate ^{c,h}	Enumeration Goal	Enumeration Estimate ^{c,i}
1978	100,000	–	–	–	–	–
1979	100,000	–	50,000	86,654	–	–
1980	100,000	–	50,000	90,863	–	16,477
1981	100,000	139,401	50,000	41,213	–	13,024
1982	100,000	113,847	50,000	58,957	–	15,687
1983	100,000	104,414	50,000	92,122	–	18,403
1984	100,000	149,375	50,000	118,345	–	30,684
1985	100,000	107,124	50,000	128,628	–	36,850
1986	100,000–150,000	92,076	50,000	20,385 ^e	–	29,604
1987	100,000–150,000	66,054	50,000–100,000	120,219	15,000–25,000	35,401
1988	100,000–150,000	52,330	50,000–100,000	57,716	15,000–25,000	18,607
1989	100,000–150,000	96,269	50,000–100,000	71,064	15,000–25,000	22,304
1990	100,000–150,000	140,290	50,000–100,000	52,238	15,000–25,000	31,868
1991	100,000–150,000	109,632	50,000–100,000	44,578	15,000–25,000	41,275
1992	100,000–150,000	66,054	50,000–100,000	58,229	15,000–25,000	28,361
1993	100,000–150,000	141,694	50,000–100,000	37,556	15,000–25,000	40,869
1994	100,000–150,000	128,032	50,000–100,000	30,355	15,000–25,000	30,788
1995	100,000–150,000	121,479	50,000–100,000	52,311	15,000–25,000	29,473
1996	100,000–150,000	90,781	50,000–100,000	28,729	15,000–25,000	19,095
1997	100,000–150,000	157,822	50,000–100,000	70,768	15,000–25,000	33,846
1998	100,000–150,000	119,623	50,000–100,000	62,257	15,000–25,000	17,732
1999	100,000–150,000	99,029	25,000–50,000	66,519	15,000–25,000	25,648
2000	100,000–150,000	133,094	25,000–50,000	56,599	15,000–25,000	20,151
2001	100,000–150,000	83,532	25,000–50,000	78,081	15,000–25,000	–
2002	90,000–160,000	78,591	25,000–50,000	62,833	15,000–30,000	–
2003	90,000–160,000	180,813	25,000–50,000	122,457	15,000–30,000	–
2004	90,000–160,000	71,281	25,000–50,000	103,201	15,000–30,000	–
2005	75,000–180,000	36,921	30,000–70,000	125,623	–	22,000
2006	90,000–160,000	92,896	30,000–70,000	92,533	–	–
2007	90,000–160,000	79,901	30,000–70,000	79,406	15,000–30,000	46,637
2008	90,000–160,000	90,146	30,000–70,000	90,684	15,000–30,000	25,247
2009	– ^g	– ^g	30,000–70,000	–	15,000–30,000	16,473 ⁱ
2010	– ^g	– ^g	30,000–70,000	86,333	15,000–30,000	–
2011	– ^g	– ^g	30,000–70,000	81,952	15,000–30,000	–
2012	– ^g	– ^g	30,000–70,000	58,838	15,000–30,000	–
2013	– ^g	– ^g	30,000–70,000	ND	15,000–30,000	–
2014	– ^g	– ^g	30,000–70,000	ND	15,000–30,000	19,242 ^j

^a From 1978 to 2010 enumeration and goals were derived from Bendix sonar; from 2011 to 2014 enumeration and goals were derived from DIDSON.

^b Inriver goal

^c Enumeration estimates prior to 2014 reflect minor adjustments to the escapement database.

^d Weir counts.

^e Combined counts from weirs on Bear and Glacier Flat Creeks and surveys of remaining spawning streams; Bendix sonar count was 151,856.

^f Yentna River escapement goal only.

^g Yentna River SEG replaced with lake goals at Judd, Chelatna, and Larson Lakes.

^h Derived from Bendix sonar.

ⁱ Escapement estimates via remote camera; an unknown number of salmon escaped into the lake after the camera was removed.

^j Counts through 16 July only.

Appendix B11.—Average price for commercially-harvested salmon, Upper Cook Inlet, 1975–2014.

Year	Chinook	Sockeye	Coho	Pink	Chum
1975	0.54	0.63	0.54	0.35	0.41
1976	0.92	0.76	0.61	0.37	0.54
1977	1.26	0.86	0.72	0.38	0.61
1978	1.16	1.32	0.99	0.34	0.51
1979	1.63	1.41	0.98	0.34	0.88
1980	1.15	0.85	0.57	0.34	0.53
1981	1.46	1.20	0.83	0.38	0.65
1982	1.27	1.10	0.72	0.18	0.49
1983	0.97	0.74	0.45	0.18	0.36
1984	1.08	1.00	0.64	0.21	0.39
1985	1.20	1.20	0.70	0.20	0.45
1986	0.90	1.40	0.60	0.15	0.38
1987	1.40	1.50	0.80	0.22	0.45
1988	1.30	2.47	1.20	0.37	0.76
1989	1.25	1.70	0.75	0.40	0.47
1990	1.20	1.55	0.75	0.25	0.60
1991	1.20	1.00	0.77	0.12	0.35
1992	1.50	1.60	0.75	0.15	0.40
1993	1.20	1.00	0.60	0.12	0.45
1994	1.00	1.45	0.80	0.12	0.40
1995	1.00	1.15	0.45	0.12	0.27
1996	1.00	1.15	0.40	0.05	0.19
1997	1.00	1.15	0.45	0.05	0.19
1998	1.00	1.15	0.45	0.09	0.19
1999	1.00	1.30	0.45	0.12	0.19
2000	1.10	0.85	0.40	0.09	0.19
2001	1.00	0.65	0.40	0.08	0.19
2002	1.15	0.60	0.20	0.05	0.12
2003	0.95	0.60	0.20	0.05	0.12
2004	1.00	0.65	0.20	0.05	0.12
2005	1.00	0.95	0.50	0.08	0.20
2006	1.75	1.10	0.60	0.10	0.25
2007	1.75	1.05	0.60	0.10	0.25
2008	1.75	1.10	0.40	0.10	0.20
2009	1.75	1.10	0.40	0.10	0.20
2010	1.75	1.75	0.80	0.25	0.55
2011	2.80	1.50	0.75	0.25	0.80
2012	2.80	1.50	0.75	0.35	0.80
2013	2.80	2.25	0.85	0.35	0.80
2014	2.80	2.25	0.90	0.25	0.80

Note: Price is expressed as dollars per pound. Data source: 1969–1983: Commercial Fisheries Entry Commission; 1984–2012: random fish ticket averages, which do not include bonuses or postseason adjustments.

Appendix B12.—Average weight (pounds) of commercially-harvested salmon, Upper Cook Inlet, 1970–2014.

Year	Chinook	Sockeye	Coho	Pink	Chum
1970	26.8	5.8	6.8	4.0	7.2
1971	25.9	6.6	6.5	3.4	9.3
1972	29.7	6.2	6.3	4.0	6.7
1973	37.6	7.4	6.1	3.7	7.6
1974	36.1	6.8	6.4	4.1	7.2
1975	24.8	6.1	6.8	3.6	7.1
1976	27.4	6.9	6.4	4.0	8.1
1977	28.1	7.6	6.7	3.7	8.0
1978	33.0	7.6	6.4	3.8	7.6
1979	27.5	6.2	6.3	3.3	7.3
1980	26.1	5.9	5.8	3.5	7.3
1981	23.8	6.4	6.5	3.5	7.7
1982	28.8	7.0	7.1	3.9	8.2
1983	29.5	6.4	6.9	3.3	7.8
1984	28.6	5.9	7.1	4.0	7.6
1985	27.7	5.6	7.2	3.3	7.6
1986	25.9	5.8	6.4	3.7	7.4
1987	29.0	6.7	6.6	3.5	7.1
1988	29.7	6.6	7.0	3.7	7.7
1989	24.1	6.6	6.6	3.2	7.2
1990	22.6	6.4	6.4	3.4	7.1
1991	21.5	5.6	6.1	3.1	6.6
1992	23.6	6.6	6.4	3.9	6.7
1993	25.8	5.9	5.9	3.0	5.7
1994	31.6	5.7	7.1	3.9	6.9
1995	25.5	5.6	6.4	3.3	7.2
1996	28.3	6.3	6.2	3.7	7.6
1997	27.6	6.5	6.3	3.4	7.3
1998	22.8	5.5	6.9	3.8	7.3
1999	23.9	5.7	5.8	3.1	8.0
2000	22.7	6.3	6.6	3.6	7.7
2001	18.2	6.0	6.6	3.5	6.9
2002	22.3	6.4	6.7	3.8	7.8
2003	20.4	5.9	6.5	3.6	6.9
2004	25.0	6.1	6.7	3.7	7.4
2005	24.9	6.1	6.3	3.3	7.2
2006	19.6	5.1	6.4	4.3	7.6
2007	20.4	6.3	6.4	3.6	7.3
2008	23.3	5.9	7.0	3.8	7.5
2009	17.4	6.1	6.5	3.3	7.0
2010	20.7	6.2	6.6	4.3	6.8
2011	20.2	6.5	5.7	3.2	6.7
2012	17.2	6.8	6.0	3.8	8.0
2013	13.9	6.3	6.1	3.2	7.4
1970-2013 Avg	25.2	6.3	6.5	3.6	7.4
2014	15.8	6.2	6.3	3.7	7.4

Note: Total poundage divided by numbers of fish from fish ticket totals.

Appendix B13.—Registered units of gillnet fishing effort by gear type in Cook Inlet, 1974–2012.

Year	Drift gillnet			Set gillnet			Total
	Resident	Non-Resident	Subtotal	Resident	Non-Resident	Subtotal	
1974	436	149	585	698	54	752	1,337
1975	539	245	784	695	63	758	1,542
1976	410	186	596	675	44	719	1,315
1977	387	188	575	690	43	733	1,308
1978	401	190	591	701	46	747	1,338
1979	410	189	599	705	44	749	1,348
1980	407	190	597	699	48	747	1,344
1981	412	186	598	687	60	747	1,345
1982	413	178	591	695	53	748	1,339
1983	415	172	587	684	61	745	1,332
1984	423	165	588	670	74	744	1,332
1985	418	173	591	669	76	745	1,336
1986	412	176	588	665	78	743	1,331
1987	415	171	586	662	81	743	1,329
1988	421	164	585	660	83	743	1,328
1989	415	170	585	645	98	743	1,328
1990	412	173	585	644	99	743	1,328
1991	412	172	584	642	103	745	1,329
1992	404	179	583	636	109	745	1,328
1993	398	185	583	633	112	745	1,328
1994	395	187	582	628	117	745	1,327
1995	393	189	582	622	123	745	1,327
1996	392	190	582	621	124	745	1,327
1997	392	189	581	621	124	745	1,326
1998	393	186	579	621	124	745	1,324
1999	390	185	575	621	124	745	1,320
2000	394	182	576	621	124	745	1,321
2001	395	179	574	625	119	744	1,318
2002	396	176	572	620	123	743	1,315
2003	400	172	572	617	125	742	1,314
2004	402	169	571	616	123	739	1,310
2005	404	167	571	609	128	737	1,308
2006	400	169	570	614	124	738	1,308
2007	400	171	571	609	129	738	1,309
2008	405	166	571	613	125	738	1,309
2009	401	169	570	608	130	738	1,308
2010	407	162	569	604	132	736	1,305
2011	409	160	569	609	127	736	1,305
2012	410	159	569	620	116	736	1,305
2013	409	160	569	624	112	736	1,305
2014	415	154	569	624	111	735	1,304

Source: 1974–2012 Commercial Fisheries Entry Commission. <http://www.cfec.state.ak.us/pstatus/14052014.htm>

Appendix B14.–Forecast and projected commercial harvests of salmon by species, Upper Cook Inlet, 1985–2014.

Year	Sockeye			Coho			Pink			Chum			Chinook		
	Forecast ^a	Actual ^{b,c}	Error	Projected	Actual ^{c,d}	Error									
1985	3,700,000	4,248,506	15%	250,000	667,213	167%	112,500	87,828	-22%	700,000	772,849	10%	17,500	24,088	38%
1986	4,200,000	4,981,255	14%	450,000	757,353	68%	1,250,000	1,300,958	4%	900,000	1,134,817	26%	32,500	39,256	21%
1987	4,800,000	9,859,418	98%	500,000	449,750	-10%	150,000	109,389	-27%	1,000,000	349,150	-65%	30,000	39,440	32%
1988	5,300,000	7,087,976	29%	400,000	561,048	40%	400,000	471,080	17%	800,000	710,615	-11%	35,000	29,080	-17%
1989	2,500,000	5,443,946	100%	400,000	339,931	-15%	100,000	67,443	-33%	800,000	122,051	-85%	30,000	26,738	-11%
1990	4,300,000	3,822,864	-16%	250,000	502,331	101%	600,000	603,643	1%	400,000	353,958	-12%	25,000	16,106	-36%
1991	3,200,000	2,472,589	-32%	400,000	426,874	7%	90,000	14,693	-84%	500,000	280,230	-44%	20,000	13,545	-32%
1992	3,600,000	9,502,392	153%	400,000	469,134	17%	400,000	695,983	74%	350,000	275,176	-21%	20,000	18,295	-9%
1993	2,500,000	5,042,799	90%	450,000	307,224	-32%	25,000	100,935	304%	350,000	134,783	-61%	15,000	20,475	37%
1994	2,000,000	3,826,508	78%	400,000	584,112	46%	600,000	523,434	-13%	250,000	327,993	31%	15,000	19,962	33%
1995	2,700,000	3,224,087	9%	400,000	447,147	12%	100,000	133,580	34%	250,000	560,645	124%	15,000	19,282	29%
1996	3,300,000	4,262,377	18%	400,000	321,839	-20%	600,000	242,921	-60%	350,000	163,102	-53%	15,000	14,306	-5%
1997	5,300,000	4,546,125	-21%	400,000	152,591	-62%	100,000	70,945	-29%	250,000	103,730	-59%	15,000	13,292	-11%
1998	2,500,000	1,619,119	-51%	300,000	160,692	-46%	300,000	551,741	84%	200,000	95,810	-52%	17,000	8,124	-52%
1999	2,000,000	3,164,355	58%	300,000	126,105	-58%	75,000	16,176	-78%	200,000	174,554	-13%	16,000	14,383	-10%
2000	3,000,000	1,778,547	-41%	150,000	236,886	58%	500,000	146,482	-71%	200,000	127,069	-36%	15,000	7,350	-51%
2001	2,700,000	2,304,670	-15%	300,000	113,311	-62%	50,000	72,560	45%	250,000	84,494	-66%	13,000	9,295	-29%
2002	2,200,000	3,356,572	53%	160,000	246,281	54%	170,000	446,960	163%	120,000	237,949	98%	10,000	12,714	27%
2003	2,400,000	4,145,981	73%	170,000	101,756	-40%	80,000	48,789	-39%	140,000	120,767	-14%	10,000	18,503	85%
2004	3,700,000	5,639,628	52%	160,000	311,058	94%	380,000	357,939	-6%	150,000	146,165	-3%	10,000	26,922	169%
2005	4,100,000	5,962,572	45%	200,000	224,657	12%	70,000	48,419	-31%	140,000	69,740	-50%	10,000	27,667	177%
2006	2,100,000	2,653,446	26%	200,000	177,853	-11%	350,000	404,111	15%	140,000	64,033	-54%	20,000	18,029	-10%
2007	3,300,000	4,044,832	23%	210,000	177,339	-16%	50,000	147,020	194%	130,000	77,240	-41%	20,000	17,625	-12%
2008	3,900,000	3,005,299	-23%	200,000	171,869	-14%	380,000	169,368	-55%	100,000	50,315	-50%	20,000	13,333	-33%
2009	3,000,000	2,842,335	-5%	210,000	153,210	-27%	70,000	214,321	206%	80,000	82,811	4%	20,000	8,750	-56%
2010	2,300,000	3,695,633	61%	179,000	207,350	16%	305,000	292,706	-4%	70,000	228,863	227%	17,000	9,900	-42%
2011	4,600,000	6,359,116	38%	178,000	95,291	-46%	106,000	34,123	-68%	101,000	129,407	28%	14,000	11,248	-20%
2012	4,400,000	4,271,018	-3%	159,000	106,775	-33%	334,000	469,598	41%	113,000	269,733	139%	12,000	2,527	-79%
2013	4,900,000	3,639,862	-26%	147,000	260,963	78%	99,000	48,275	-51%	152,000	139,365	-8%	9,000	5,398	-40%
2014	4,300,000	3,329,970	-23%	165,000	137,200	-17%	338,000	642,754	90%	170,000	116,083	-32%	7,600	4,660	-39%
Avg.	3,426,667	4,337,793	26%	282,933	299,838	9%	272,817	284,472	20%	311,867	250,117	-5%	17,520	17,010	2%

^a Harvest forecasts have typically been prepared using average return per spawner values, parent-year escapements, and average marine maturity schedules or time series modeling tempered by available juvenile production data or combinations of these data sets.

^b Sockeye salmon harvest estimates include commercial, sport, personal use, educational, and subsistence fisheries.

^c Actual harvests prior to 2014 reflect minor adjustments to the harvest database.

^d Harvest projections are prepared using subjective estimates of parent-year escapements, gross trends in harvest, and expected intensity of fishery.

Appendix B15.—Upper Cook Inlet state subsistence fisheries salmon harvest, 1980–2014.

Tyonek Subsistence Fishery								
Year	No. of Permits		Chinook	Sockeye	Coho	Pink	Chum	Total
	Issued	Returned						
1980	67	NA	1,757	235	0	0	0	1,992
1981	70	NA	2,002	269	64	32	15	2,382
1982	69	NA	1,590	310	113	14	4	2,031
1983	75	NA	2,665	187	59	0	6	2,917
1984	75	NA	2,200	266	79	3	23	2,571
1985	76	NA	1,472	164	91	0	10	1,737
1986	65	NA	1,676	203	223	50	46	2,198
1987	64	61	1,610	166	149	10	24	1,959
1988	47	42	1,587	91	253	8	12	1,951
1989	49	47	1,250	85	115	0	1	1,451
1990	42	37	781	66	352	20	12	1,231
1991	57	54	902	26	58	0	0	986
1992	57	44	907	75	234	7	19	1,242
1993	62	54	1,370	57	77	19	17	1,540
1994	58	49	770	85	101	0	22	978
1995	70	55	1,317	45	153	0	15	1,530
1996	73	49	1,039	68	137	21	7	1,272
1997	70	42	639	101	137	0	8	885
1998	74	49	978	163	64	1	2	1,208
1999	77	54	1,230	144	94	32	11	1,511
2000	60	59	1,157	63	87	6	0	1,313
2001	84	58	976	172	49	4	6	1,207
2002	101	71	1,080	209	115	9	4	1,417
2003	87	74	1,183	111	44	7	10	1,355
2004	97	75	1,345	93	130	0	0	1,568
2005	78	66	982	61	139	0	2	1,184
2006	82	55	943	20	14	0	1	978
2007	84	67	1,281	200	123	3	2	1,609
2008	94	76	1,509	140	196	15	10	1,870
2009	89	69	636	184	258	1	2	1,081
2010	97	74	890	190	155	0	4	1,239
2011	116	56	554	102	19	7	7	689
2012	106	48	565	162	46	1	0	774
2013	108	58	817	173	204	20	0	1,214
2014	106	65	683	293	362	4	10	1,352

-continued-

Yentna Subsistence Fishery								
Year	No. of Permits		Chinook	Sockeye	Coho	Pink	Chum	Total
	Issued	Returned						
Personal Use								
1996	NR	14	0	191	36	88	40	355
1997	NR	21	0	492	61	21	8	582
Subsistence								
1998	28	21	0	473	147	33	20	673
1999	NR	21	0	455	43	15	11	524
2000	NR	20	0	379	92	4	7	482
2001	NR	16	0	514	47	9	4	574
2002	NR	25	0	414	116	14	28	572
2003	NR	15	0	433	76	2	13	524
2004	NR	22	0	391	132	0	2	525
2005	NR	21	0	177	42	24	25	268
2006	26	23	0	388	178	15	27	608
2007	22	22	0	367	66	17	18	468
2008	16	16	0	310	57	23	7	397
2009	17	16	0	253	14	0	6	273
2010	20	18	0	675	52	41	18	786
2011	25	25	0	598	90	3	21	712
2012	24	24	0	279	24	21	19	343
2013	23	23	0	160	92	128	32	412
2014	22	22	0	294	78	15	30	417

Note: Harvest estimated from returned permits only, not expanded for non-returned permits.

Appendix B16.–Upper Cook Inlet educational fisheries salmon harvest, 2014.

Year	Fishery	Chinook	Sockeye	Coho	Pink	Chum	Total
2014	Kenaitze	2	6,115	399	352	0	6,868
	NTC	62	800	155	221	2	1,240
	NND	21	108	79	10	0	218
	NES	22	163	50	6	9	250
	Homer VFW	0	45	31	0	0	76
	APVFW	0	44	48	40	0	132
	Kasilof H.A.	0	18	28	0	0	46
	SCF	0	44	35	2	3	84
	Knik	0	14	62	0	0	76
	Big Lake	0	7	35	0	6	48
	Eklutna	0	248	48	13	24	333
	Tyonek	-	-	-	-	-	0
	O'Brien	8	118	25	51	0	202
	Total	115	7,724	995	695	44	9,573

Note: Harvest data include both early- and late-run Kenai River Chinook and sockeye salmon.

Appendix B17.—Effort and harvest in Upper Cook Inlet personal use salmon fisheries, 1996–2014.

Kasilof River Gillnet															
Year	Days Open	Days Fished		Sockeye		Chinook		Coho		Pink		Chum		Total	
		Est.	SE	Est.	SE	Est.	SE	Est.	SE	Est.	SE	Est.	SE	Est.	SE
1996	5	582	16	9,506	156	46	3	0	0	8	0	1	0	9,561	157
1997	5	815	26	17,997	231	65	2	1	0	102	7	3	1	18,168	233
1998	5	1,075	24	15,975	425	126	7	0	0	15	4	12	10	16,128	426
1999	10	1,287	39	12,832	371	442	27	25	2	10	0	10	0	13,319	374
2000	13	1,252	23	14,774	275	514	15	9	0	17	2	10	0	15,324	276
2001	8	1,001	20	17,201	394	174	6	6	0	11	0	7	5	17,399	397
2002	10	1,025	16	17,980	274	192	5	12	0	30	2	13	4	18,227	277
2003	10	1,206	17	15,706	277	400	13	107	0	9	0	4	0	16,226	284
2004	10	1,272	10	25,417	203	163	4	58	13	6	1	0	0	25,644	205
2005	11	1,506	6	26,609	104	87	1	326	5	16	1	1	0	27,039	104
2006	10	1,724	5	28,867	91	287	2	420	16	11	0	6	0	29,591	94
2007	10	1,570	7	14,943	66	343	3	68	4	2	0	0	0	15,356	66
2008	10	1,534	7	23,432	107	151	2	65	3	35	4	23	3	23,706	107
2009	10	1,761	9	26,646	167	127	2	165	0	14	1	11	2	26,963	167
2010	10	1,855	13	21,924	170	136	3	23	5	23	5	1	0	22,106	170
2011	10	1,864	16	26,780	244	167	4	47	10	23	1	3	0	27,020	244
2012	10	1,696	21	15,638	197	103	3	161	19	53	19	15	1	15,970	199
2013	5	1,082	13	14,439	187	46	2	129	32	3	0	5	1	14,621	187
2014	10	1,386	17	22,567	302	50	2	30	10	105	44	18	0	22,770	306
Min.	5	582		9,506		46		0		2		0		9,561	
Mean	9	1,342		19,433		190		87		26		8		19,744	
Max.	13	1,864		28,867		514		420		105		23		29,591	

Kasilof River Dip Net															
Year	Days Open	Days Fished		Sockeye		Chinook		Coho		Pink		Chum		Total	
		Est.	SE	Est.	SE	Est.	SE	Est.	SE	Est.	SE	Est.	SE	Est.	SE
1996	27	1,300	23	11,197	127	50	1	334	18	103	2	17	0	11,701	130
1997	27	1,091	32	9,737	150	35	2	90	3	19	2	19	1	9,900	153
1998	27	3,421	33	45,161	525	134	3	731	18	610	25	74	32	46,710	528
1999	27	3,611	43	37,176	507	127	5	286	50	264	12	52	8	37,905	511
2000	27	2,622	36	23,877	403	134	7	1,004	16	841	39	34	0	25,890	407
2001	27	3,382	37	37,612	505	138	6	766	25	307	14	23	0	38,846	511
2002	44	4,020	38	46,769	530	106	6	1,197	59	1,862	73	139	7	50,073	553
2003	44	3,874	28	43,870	440	57	4	592	49	286	21	30	1	44,835	447
2004	44	4,432	19	48,315	259	44	3	668	21	396	15	90	5	49,513	263
2005	44	4,500	9	43,151	100	16	1	538	16	658	12	102	2	44,465	103
2006	44	5,763	10	56,144	113	55	1	1,057	15	992	8	105	4	58,353	117
2007	44	4,627	9	43,293	105	35	1	487	8	383	6	136	2	44,334	106
2008	44	5,552	14	54,051	153	46	3	509	11	787	10	143	4	55,536	154
2009	44	7,650	21	73,035	246	34	1	1,441	30	1,274	19	173	3	75,957	248
2010	44	7,588	27	70,774	303	31	2	1,768	45	974	24	279	9	73,826	307
2011	44	6,571	35	49,766	351	24	3	977	39	652	40	144	14	51,562	355
2012	44	6,536	32	73,419	448	16	1	1,170	42	896	38	147	11	75,648	452
2013	44	8,556	36	85,528	473	18	1	1,666	84	683	19	339	15	88,233	481
2014	44	10,236	51	88,513	547	0	0	2,606	106	2,769	66	342	15	94,230	561
Min.	27	1,091		9,737		0		90		19		17		9,900	
Mean	38	5,017		49,547		58		941		777		126		51,448	
Max.	44	10,236		88,513		138		2,606		2,769		342		94,230	

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Kenai River Dip Net															
Year	Days Open	Days Fished		Sockeye		Chinook		Coho		Pink		Chum		Total	
		Est.	SE	Est.	SE	Est.	SE	Est.	SE	Est.	SE	Est.	SE	Est.	SE
1996	27	10,503	60	102,821	367	295	5	1,932	29	2,404	33	175	10	107,627	375
1997	22	11,023	87	114,619	439	364	13	559	21	619	14	58	5	116,219	448
1998	18	10,802	59	103,847	716	254	10	1,011	62	1,032	62	85	3	106,229	724
1999	22	13,738	79	149,504	1,084	488	13	1,009	108	1,666	64	102	13	152,769	1,094
2000	22	12,354	69	98,262	752	410	18	1,449	62	1,457	75	193	31	101,771	762
2001	22	14,772	66	150,766	909	638	15	1,555	105	1,326	37	155	19	154,440	926
2002	22	14,840	56	180,028	844	606	11	1,721	64	5,662	102	551	36	188,568	874
2003	22	15,263	50	223,580	891	1,016	18	1,332	68	1,647	98	249	22	227,824	905
2004	22	18,513	35	262,831	583	792	7	2,661	66	2,103	27	387	12	268,774	905
2005	22	20,977	18	295,496	273	997	3	2,512	24	1,806	12	321	2	301,132	275
2006	20	12,685	16	127,630	183	1,034	3	2,235	15	11,127	37	551	9	142,577	203
2007	22	21,908	23	291,270	335	1,509	4	2,111	24	1,939	23	472	17	297,301	337
2008	22	20,772	27	234,109	338	1,362	10	2,609	21	10,631	49	504	8	249,215	343
2009	22	26,171	35	339,993	524	1,189	7	2,401	29	5,482	27	285	7	349,350	525
2010	22	28,342	44	389,552	702	865	7	2,870	56	3,655	28	508	15	397,451	705
2011	22	32,818	60	537,765	1,105	1,243	10	4,745	107	3,914	86	915	47	548,583	1,115
2012	22	34,374	61	526,992	1,109	40	3	4,008	117	3,770	102	425	15	535,235	1,120
2013	22	33,193	63	347,222	821	11	16	3,169	74	3,625	49	701	29	354,727	827
2014	22	36,380	81	379,823	1,023	0	0	4,710	157	19,140	184	1,194	51	404,866	1,053
Min.	18	10,503		98,262		0		559		619		58		101,771	
Mean	22	20,496		255,585		690		2,347		4,369		412		263,403	
Max.	27	36,380		537,765		1,509		4,745		19,140		1,194		548,583	

Unknown Fishery															
Year	Days Open	Days Fished		Sockeye		Chinook		Coho		Pink		Chum		Total	
		Est.	SE	Est.	SE	Est.	SE	Est.	SE	Est.	SE	Est.	SE	Est.	SE
1996	-	472	33	4,761	463	24	7	131	37	127	37	4	3	5,047	467
1997	-	1,003	50	3,310	276	0	0	64	14	51	21	4	3	3,429	282
1998	-	921	39	7,562	287	34	5	294	77	196	19	20	0	8,106	301
1999	-	684	20	7,994	352	51	5	76	7	126	2	4	0	8,251	353
2000	-	648	23	5,429	274	44	13	218	60	84	11	24	15	5,799	282
2001	-	1,339	34	12,673	380	188	17	292	30	175	24	90	34	13,418	394
2002	-	1,339	26	14,846	353	166	10	341	25	916	81	54	8	16,323	380
2003	-	1,325	21	15,675	247	238	25	219	14	140	9	88	9	16,360	254
2004	-	1,143	13	13,527	179	99	3	366	25	210	10	25	4	14,227	185
2005	-	270	2	4,520	38	32	1	39	1	40	2	4	0	4,635	38
2006	-	371	2	3,406	34	29	1	47	2	304	16	84	0	3,870	41
2007	-	534	3	6,729	52	37	1	61	3	28	1	6	0	6,861	52
2008	-	622	4	6,890	63	41	2	66	3	412	9	58	3	7,467	64
2009	-	719	7	7,968	84	25	1	144	10	133	4	57	5	8,327	85
2010	-	760	8	8,300	125	15	1	168	7	109	2	12	1	8,605	125
2011	-	836	11	10,695	136	17	1	80	5	135	17	72	7	10,962	137
2012	-	937	14	13,295	219	4	1	173	25	127	9	36	5	13,635	221
2013	-	867	15	7,126	154	9	2	155	17	113	8	8	2	7,411	154
2014		1,022	14	9,315	131	0	0	129	18	563	22	78	15	10,085	135
Min.		270		3,310		0		39		28		4		3,429	
Mean		832		8,633		55		161		210		38		9,096	
Max.		1,339		15,675		238		366		916		90		16,360	

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Fish Creek Dip Net															
Year	Days Open	Days Fished		Sockeye		Chinook		Coho		Pink		Chum		Total	
		Est.	SE	Est.	SE	Est.	SE	Est.	SE	Est.	SE	Est.	SE	Est.	SE
1996	22	3,749	41	17,260	161	37	8	2,414	25	331	9	153	5	20,195	168
1997	13	991	34	3,277	76	0	0	63	5	53	7	4	1	3,397	84
1998	15	1,141	21	4,036	113	1	0	649	19	80	10	29	2	4,795	117
1999	16	432	16	1,083	138	0	0	17	3	12	7	0	0	1,112	139
2000	16	1,054	25	6,925	211	0	0	958	72	83	12	29	3	7,995	225
2001	3	131	7	436	40	0	0	18	7	2	0	1	0	457	41
2009	7	1,436	8	9,898	73	10	0	53	6	66	3	33	5	10,060	73
2010	8	2,843	14	23,705	161	12	2	3,576	84	1,721	28	290	9	29,303	184
2011	3	1,379	14	5,236	86	2	0	905	29	155	10	72	7	6,371	92
2014	7	1,792	22	5,829	113	0	0	1,895	48	4,218	74	227	8	12,170	144
Min.	3	131		436		0		17		2		0		457	
Mean	11	1,495		7,769		6		1,055		672		84		9,586	
Max.	22	3,749		23,705		37		3,576		4,218		290		29,303	

Note: fishery not open 2001-2008, 2012, and 2013.

Beluga River Dip Net															
Year	Days Open	Days Fished		Sockeye		Chinook		Coho		Pink		Chum		Total	
		Est.	SE	Est.	SE	Est.	SE	Est.	SE	Est.	SE	Est.	SE	Est.	SE
2008	43			31		0		35		0		0		66	
2009	43			140		0		78		7		0		225	
2010	43			47		0		1		0		5		53	
2011	43			137		0		17		0		5		159	
2012	43			9		0		7		0		0		16	
2013	43			30		0		55		2		0		88	
2014	43			32		0		12		1		1		46	
Min.	43			9		0		1		0		0		16	
Mean	43			61		0		29		1		2		93	
Max.	43			140		0		78		7		5		225	

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Upper Cook Inlet Personal Use Fisheries Total

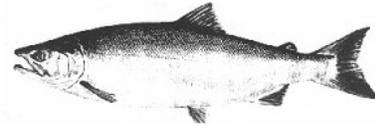
Year	Days Open	Days Fished		Sockeye		Chinook		Coho		Pink		Chum		Total	
		Est.	SE	Est.	SE	Est.	SE	Est.	SE	Est.	SE	Est.	SE	Est.	SE
1996	-	16,606	85	145,545	644	452	12	4,811	56	2,973	50	350	12	154,131	655
1997	-	14,923	114	148,940	592	464	13	777	26	844	27	88	6	151,113	604
1998	-	17,360	84	176,581	1,032	549	14	2,685	102	1,933	70	220	34	181,968	1,043
1999	-	19,752	101	208,589	1,309	1,108	31	1,413	119	2,078	66	168	15	213,356	1,320
2000	-	17,930	88	149,267	961	1,102	28	3,638	114	2,482	86	290	35	156,779	976
2001	-	20,625	86	218,688	1,176	1,138	24	2,637	112	1,821	46	276	39	224,560	1,197
2002	-	21,224	74	259,623	1,092	1,070	17	3,271	91	8,470	149	757	38	273,191	1,136
2003	-	21,668	63	298,831	1,061	1,711	34	2,250	85	2,082	101	371	24	305,245	1,079
2004	-	25,360	43	350,091	678	1,098	9	3,754	75	2,715	32	502	14	358,158	689
2005	-	27,253	21	369,776	311	1,132	3	3,415	29	2,520	17	428	3	377,271	314
2006	-	20,543	20	216,047	236	1,405	4	3,759	27	12,434	41	746	10	234,391	242
2007	-	28,677	29	356,717	386	1,924	5	2,727	26	2,352	24	614	17	364,334	388
2008	-	28,491	34	318,513	412	1,600	11	3,284	24	11,865	52	728	10	335,990	416
2009	-	37,754	46	457,680	629	1,385	7	4,282	45	6,976	34	559	13	470,882	631
2010	-	41,387	56	514,302	808	1,059	8	8,406	113	6,482	47	1,095	20	531,344	818
2011	-	43,450	72	630,379	1,176	1,453	11	6,754	122	4,880	100	1,169	50	644,635	1,187
2012	-	43,543	74	629,344	1,232	164	5	5,512	128	4,846	111	623	19	640,489	1,244
2013	-	43,698	73	454,314	958	83	16	5,119	122	4,424	53	1,053	35	464,992	968
2014		50,819	94	506,079	1,164	50	2	9,382	199	26,796	217	1,860	56	544,167	1,202
Min.		14,923		145,545		50		777		844		88		151,113	
Mean		28,477		337,332		997		4,099		5,735		626		348,789	
Max.		50,819		630,379		1,924		9,382		26,796		1,860		644,635	

APPENDIX C: SALMON OUTLOOK AND FORECAST

ALASKA DEPARTMENT OF FISH AND GAME
DIVISION OF COMMERCIAL FISHERIES
NEWS RELEASE



Cora Campbell, Commissioner
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Date Issued: 4/14/2014

UPPER COOK INLET
2014 OUTLOOK FOR COMMERCIAL SALMON FISHING

SOCKEYE SALMON

A run of approximately 6.1 million sockeye salmon is forecasted to return to Upper Cook Inlet (UCI) in 2014, with a harvest by all user groups of 4.3 million. The forecasted harvest in 2014 is 0.6 million fish above the 20-year average harvest of 3.7 million by all user groups.

The Kenai River sockeye salmon forecast is approximately 3.8 million fish, which is equal to the 20-year average run for this system. Age-1.3 salmon typically comprise about 57% of the run; in 2014 the predominant age classes are projected to be age 1.3 (47%), age 1.2 (11%), and age 2.3 (28%). The 5-year mean absolute percent error (MAPE) for the set of models used for the 2014 Kenai River sockeye salmon forecast is 11%.

The Kasilof River sockeye salmon forecast is 1,062,000 fish, which is 11% greater than the 20-year average run of 953,000. Age-1.3 salmon typically comprise about 34% of the run; the 2014 Kasilof River predominate age classes are projected to be age 1.2 (26%), age 1.3 (35%), and age 2.2 (25%). The 10-year MAPE for the set of models used for the 2014 Kasilof River sockeye salmon forecast is 24%.

The Susitna River sockeye salmon forecast is 264,000, which is 39% less than the 7-year average run of 430,000 fish. This forecast was derived using mean return per spawner by age class for brood years 2006–2009 and mark–recapture estimates of spawner abundance in 2006–2010. Sonar and age composition catch allocation models were not used because mark-recapture studies have shown that the Yentna River sonar project underestimated sockeye salmon escapement causing estimates of adult returns to also be underestimated. This is the second year this forecast method has been used therefore the MAPE is not available. The 7-year average run (2006–2012) was calculated using mark–recapture estimates of inriver run and genetic estimates of commercial harvests.

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The Fish Creek sockeye salmon forecast is 79,000 fish, which is 26% less than the 20-year average run of 107,000. Age-1.2 and -1.3 salmon typically comprise 72% of the run; the predominant age classes in 2014 should be age 1.2 (50%) and age 1.3 (25%).

The Crescent River sockeye salmon forecast is 92,000 fish, which is 17% less than the 20-year average. Age-1.3 and -2.3 salmon typically comprise 75% of the run, with the predominant age classes in expected to be age 1.3 (42%) and age 2.3 (36%).

Forecast runs to individual freshwater systems are as follows:

System	Run	Goals ^a
Crescent River	92,000	
Fish Creek	79,000	20,000–70,000
Kasilof River ^{b,c}	1,062,000	160,000–340,000
Kenai River ^{b,d}	3,792,000	1,000,000–1,200,000
Susitna River	264,000	
Larson Lake	N/A	15,000–50,000
Chelatna Lake	N/A	20,000–65,000
Judd Lake	N/A	25,000–55,000
Unmonitored Systems ^e	793,000	N/A
Total	6,082,000	

^a Goals listed here are as follows: Fish Creek: Sustainable Escapement Goal (SEG); Kasilof River: Biological Escapement Goal (BEG); Kenai River: Inriver; and Susitna River: SEG (weir goals).

^b Kasilof and Kenai rivers escapement goals are now DIDSON-based.

^c Kasilof River optimal escapement goal is 160,000 to 390,000 sockeye salmon.

^d Kenai River optimal escapement goal is 700,000 to 1,400,000.

^e Unmonitored systems are estimated to be 15% of monitored systems.

2014 REGULATORY CHANGES

There were several regulatory changes made by the Alaska Board of Fisheries (board) during the January-February 2014 meeting that will be implemented during the 2014 fishing season. The following summary is for informational purposes only and is not a comprehensive review. Regulatory booklets will be published after the new regulations become law, which should occur by early June. Once published, booklets will be available to allow fishermen to become familiar with the new regulations prior to fishing. Please consult the new regulations prior to fishing. Regulation language will be available from department offices prior to booklets being published.

Upper Subdistrict Set Gillnet

- **Set gillnet permit stacking:** One person may own two set gillnet permits (S04H) and operate two full complements of gear. However, in the Upper Subdistrict only, if one person owns and operates two permits, 105 fathoms of the 210 fathoms of total gear must be fished with nets that are not more than 29 meshes in depth and marked with a blue buoy on either end of the net. The buoy must be at least 9.5 inches in diameter.

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- **One-percent rule:** The one-percent rule in the Upper Subdistrict was changed so that it applies separately to the Kasilof Section and the combined Kenai and East Foreland sections. Drifters are restricted to Drift Areas 3 and 4 (Figure 6) from August 11–15 only if the entire Upper Subdistrict is closed under the one-percent rule.
- **24-hour Tuesday window:** For Kenai River sockeye salmon runs of 2.3 million to 4.6 million fish, the 24-hour window that was fixed in time on Tuesdays may now be started anytime between 7:00 PM on Mondays and 7:00 AM on Wednesdays. The window is still 24 hours in duration.
- **Kasilof River Special Harvest Area (KRSHA):** Boundaries were modified where set and drift gillnetting occurs in the KRSHA. Set gillnetting is now opened within the first 1,200 feet from mean high tide, instead of the first 600 feet. Drift gillnetting is now opened only beyond 1,200 feet from the mean high tide mark.
- **Kasilof River Sockeye Salmon Biological Escapement Goal (BEG):** The board clarified that the department should manage Kasilof River sockeye salmon to attain the BEG of 160,000–340,000 fish, unless the lower end of the Kenai River sockeye salmon escapement goal is not being achieved. In this situation, the department will manage to achieve the Kasilof River sockeye salmon optimal escapement goal (OEG) of 160,000-390,000 fish.
- **Kenai River Late-Run King Salmon Management Plan:** Restrictive actions were paired in the Kenai River king salmon sport fishery, personal use fishery, and the Upper Subdistrict commercial set gillnet fishery. Specifically from July 1–31, if the inriver run of late-run king salmon is projected to be less than 22,500 fish, in order to achieve the sustainable escapement goal (SEG), the sport fishery may be restricted to fishing with no bait or to no bait and no retention of king salmon. If the sport fishery is prosecuted under a no-bait restriction, then the Upper Subdistrict set gillnet fishery must be managed as follows:
 - No Monday/Thursday regular fishing periods.
 - No mandatory 24-hour window per week, but the 36-hour “Friday” window remains.
 - No more than 36 hours of fishing time per week with the following options:
 - a. no additional restrictions on amount of gear and depth of nets;
 - b. gear restrictions where fishermen would be allowed to fish three set gillnets that are each not more than 35 fathoms in length and 29 meshes in depth or two set gillnets that are each not more than 35 fathoms in length and 45 meshes in depth;
 - c. gear restrictions where fishermen would be allowed to fish two set gillnets that are each not more than 35 fathoms in length and 29 meshes in depth or one set gillnet that is not more than 35 fathoms in length and 45 meshes in depth;
- If the sport fishery is restricted to no bait and no retention, then the Upper Subdistrict set gillnet fishery is open for no more than 12 hours per week, with a 36-hour “Friday” window. No additional restrictions on gear would occur during this time period.
- From July 1–31, both the inriver sport fishery and the commercial set gillnet fishery are to be managed to meet a Kenai River late-run king salmon SEG of 15,000–30,000 fish.

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- Beginning August 1, if Kenai River late-run king salmon escapement is projected to be less than 16,500 fish, the Upper Subdistrict set gillnet fishery will be closed. If the Kenai River late-run king salmon escapement is projected to be 16,500–22,500 fish, the Upper Subdistrict set gillnet fishery may be opened for no more than 36 hours during August 1–15. If king salmon escapement is projected to exceed 22,500 fish, then management of the Upper Subdistrict set gillnet fishery will be based on Kenai and Kasilof rivers sockeye salmon run strength.
- **Marking of 29 mesh nets:** All nets 29 meshes in depth or less must be marked with a blue buoy on either end of the net. The buoy must be at least 9.5 inches in diameter, which is the size of an A-0 buoy.

Central District Drift Gillnet

- **Dual drift fishing (D-boat):** The option to D-boat fish was retained in regulation, meaning two separate permit holders may fish on one boat with a total complement of gear not to exceed 200 fathoms. As of 2014, D-boat fishermen no longer need to register with the department prior to fishing.
- **One-percent rule:** A new one-percent rule for drift gillnetting was passed, which is similar to the one-percent rule in the Upper Subdistrict set gillnet fishery. The drift rule states that after August 1 drifting will be restricted to Drift Gillnet Areas 3 and 4, if the drift fleet harvests less than one-percent of their total sockeye salmon harvest for two consecutive fishing periods. The set gillnet one-percent rule also impacts the drift fishery during the August 11–15 time frame, but only if the entire Upper Subdistrict set gillnet fishery is closed under the one-percent rule.
- **Drift Gillnet Fishery Management Plan:** Changes were made in how the drift fleet is to be fished during the following two time periods in July:
 - From July 9–15, both regular fishing periods will be restricted to the Expanded Kenai and Expanded Kasilof sections and Drift Gillnet Area 1. At Kenai River run strengths greater than 2.3 million fish, a third 12-hour fishing period during this time may be allowed in the Expanded Kenai and Expanded Kasilof sections and Drift Gillnet Area 1.
 - From July 16–31,
 - At run strengths less than 2.3 million Kenai River sockeye salmon, fishing during all regular 12-hour fishing periods will be restricted to the Expanded Kenai and Expanded Kasilof sections.
 - At run strengths of 2.3 million to 4.6 million Kenai River sockeye salmon, fishing during one 12-hour regular fishing period per week will be restricted to any or all of the following areas: Expanded Kenai Section, Expanded Kasilof Section, Anchor Point Section (Figures 3 and 4), and Drift Area 1. The remaining weekly 12-hour regular fishing period will be restricted to one or more of the following: Expanded Kenai, Expanded Kasilof, or Anchor Point sections.
 - At run strengths greater than 4.6 million Kenai River sockeye salmon, fishing during one 12-hour fishing period per week will be restricted to the Expanded Kenai, Expanded Kasilof, and Anchor Point sections. There are no mandatory restrictions on the remaining 12-hour regular fishing period.

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- All additional fishing time, other than regular fishing periods, is allowed in any or all of the following: Expanded Kenai, Expanded Kasilof and Anchor Point sections.
- Added the "Anchor Point Section" to the list of corridors.

General Provisions

- ***Pink Salmon Management Plan:*** Some provisions within this plan were changed. Based upon the number of pink salmon that are harvested by Upper Subdistrict set gillnetters from August 6–10, in even years only, a pink salmon fishery may be opened for up to two fishing periods from August 11–15. If opened, the pink salmon fishery is only provided to setnetters in the Upper Subdistrict and to drift gillnetters in the Kenai Section (narrow Kenai corridor). The second fishing period may only be opened if more than 50,000 pink salmon and less than 2,500 coho salmon are harvested by setnetters during the first fishing period. Set gillnetting is no longer limited to more than 600 feet from shore during the pink salmon fishery, but both set and drift gillnets must still use nets with a mesh size no larger than 4 ¾ inches.

2014 FISHING STRATEGY

Northern District Set Gillnet

- Management strategies implemented by the board in 2011, in combination with actions taken by the department through emergency orders (EO) during the 2013 fishing season, resulted in achievement of 11 of 16 king salmon escapement objectives in Northern Cook Inlet waters during the 2013 season. Therefore, a similar management strategy will be followed in 2014. In the directed king salmon commercial set gillnet fishery, the first period of the 2014 season, which occurs on Monday, May 26, will be closed. In addition, that area of beach from a point at the wood chip dock north to the Susitna River will remain closed to commercial king salmon fishing. Finally, the remaining four commercial king salmon fishing periods will be reduced in duration from 12 hours to 6 hours per fishing period. These fishing periods will occur on June 2, 9, 16, and 23. All of the Northern District is expected to return to a regular fishing schedule beginning on Thursday, June 26.
- Susitna River sockeye salmon remain a stock of yield concern. As a result of this designation, restrictive actions to fisheries that harvest this stock were retained in regulation. *The Northern District Salmon Management Plan* permits the department to reduce the legal complement of gear in the Northern District set gillnet fishery to no more than one net per permit from July 20 through August 6. However, in that portion of the General Subdistrict south of the Susitna River, the department may allow the use of no more than two nets per permit after July 30. In 2014, all areas in the Northern District return to a full complement of gear beginning on Thursday, August 7.

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Central District Fisheries

Upper Subdistrict Set Gillnet Fishery – Overview

The 2014 Kenai River late-run king salmon forecast projects a total run of approximately 19,700 fish. If realized, the 2014 run would be the lowest run in the 29 years of record, similar to the 2013 run, and would be less than one-half of the 1986–2013 average of approximately 57,000 fish. The management strategy for the 2014 season will be similar to how the fishery was prosecuted in 2013; that is, fishing periods will be based on assessments of sockeye salmon abundance, while ensuring adequate king salmon escapement relative to the SEG of 15,000–30,000 late-run king salmon.

Upper Subdistrict Set Gillnet Fishery – Management

Kasilof Section Prior to July 1

- The Kasilof Section opens on the first regular period on or after June 25, unless the department estimates that 50,000 sockeye salmon are in the Kasilof River prior to that date, at which time the commissioner may open the fishery by EO; however, the fishery may not open earlier than June 20. Opening the fishery prior to June 25 would be dependent on inseason assessment of Kenai River early-run king salmon abundance.
- From June 25 through June 30, the department may not allow more than 48 hours of additional fishing time per week (Sunday through Saturday) and must close the fishery for 36 consecutive hours per week, which will begin between 7:00 PM Thursday and 7:00 AM Friday.

Kasilof Section After July 1

- If the projected inriver run of late-run Kenai River king salmon is more than 22,500 fish, the Kasilof Section set gillnet fishery will be prosecuted through July 7 under the same guidelines as it was prior to July 1. If the king salmon run is projected to be less than 22,500 fish, management of the Kasilof Section set gillnet fishery may be tied to actions taken in the Kenai River king salmon sport fishery (see following section).

Kenai, Kasilof and East Forelands Sections

- The Kenai and East Forelands sections fishing season opens on or after July 8.
- Management of the Upper Subdistrict set gillnet fishery will be based on the abundance of Kenai River late-run king salmon, as well as the run size of Kenai River sockeye salmon and sockeye salmon escapement levels in both the Kenai and Kasilof rivers. In July, if the inriver run of Kenai River late-run king salmon is projected to exceed 22,500 fish, then management of the Upper Subdistrict set gillnet fishery would follow the guidelines for the size of the sockeye salmon run to the Kenai River. For the 2014 season, the Kenai River run projection is 3.8 million sockeye salmon. Therefore, the season would be managed following guidelines outlined below for runs between 2.3 million and 4.6 million fish. The Kenai River sockeye salmon run will be reassessed after July 20 to determine inseason run strength.

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- a. For runs **between 2.3 million and 4.6 million Kenai River sockeye salmon**, the department may allow up to 51 hours of additional fishing time per week and will close the Upper Subdistrict set gillnet fishery for a 36-hour period per week, which will begin between 7:00 PM Thursday and 7:00 AM Friday. In addition, there will be a second 24-hour closed period per week that will begin between 7:00 PM on Monday and 7:00 AM on Wednesday. If the Kenai and East Forelands Sections are not fished, the department may limit regular and extra periods in the Kasilof Section to within one-half mile of shore.
- From July 1–31, if the projected inriver run of Kenai River late-run king salmon is less than 22,500 fish, management of the Upper Subdistrict set gillnet fishery will be “paired” to actions taken in the Kenai River late-run king salmon sport fishery. If the sport fishery is restricted to fishing with no bait, then the Upper Subdistrict set gillnet fishery will be managed as described in the KRLKSMP on pages 3-4 of this document.
- If the escapement of Kenai River late-run king salmon is projected to exceed 22,500 fish, all restrictions and additional time regulations for the Upper Subdistrict set gillnet fishery from July carry over into August, except that the fishery is restricted to regular periods only from August 11–15, and will close no later than August 15. However, the season will close any time after July 31, if during two consecutive fishing periods (defined as a calendar day) the sockeye salmon harvest is less than one-percent of the season total. The one-percent rule now applies separately to the Kasilof Section and the Kenai/East Foreland Sections, which means one of the areas could close under the one-percent rule, while the other area remained open.

Central District Drift Gillnet Fishery – Overview

The department manages the UCI drift gillnet fleet primarily under the guidance of 5 AAC 21.353. *Central District Drift Gillnet Fishery Management Plan*. The purpose of this management plan is to ensure adequate escapement of salmon into the Northern District drainages and to provide management guidelines to the department. To meet these directives, there are two timeframes in July when drift fleet restrictions are implemented to pass fish through the Central District. At the 2014 board meeting, there were substantial changes made to the drift gillnet fishery (please see the 2014 Regulatory Changes section of this document for a detailed description of these changes).

Central District Drift Gillnet Fishery – Management

- The drift gillnet fishery opens the third Monday in June or June 19, whichever is later.
- From July 9 through July 15:
 - Drift gillnet fishing is restricted for both regular fishing periods to the Expanded Kenai and Expanded Kasilof Sections (Figure 1) and Drift Gillnet Area 1 (Figure 3) described below.
 - In runs of over 2.3 million Kenai River sockeye salmon, there may be one additional 12-hour period in the Expanded Kenai and Expanded Kasilof Sections and Drift Gillnet Area 1.

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- From July 16 through July 31:
 - In runs less than 2.3 million Kenai River sockeye salmon, all regular 12-hour fishing periods will be restricted to the Expanded Kenai and Expanded Kasilof Sections.
 - In runs between 2.3 million and 4.6 million Kenai River sockeye salmon, fishing during one 12-hour regular fishing period per week will be restricted to any or all of the following areas: Expanded Kenai Section, Expanded Kasilof Section, Anchor Point Section, or Drift Area 1. The remaining weekly 12-hour regular fishing period will be restricted to one or more of the following: Expanded Kenai, Expanded Kasilof, or Anchor Point sections. All additional fishing time is allowed only in the Expanded Kenai, Expanded Kasilof and Anchor Point sections.
 - In runs greater than 4.6 million Kenai River sockeye salmon, fishing during one 12-hour fishing period per week will be restricted to the Expanded Kenai, Expanded Kasilof, and Anchor Point sections. There are no mandatory restrictions on the remaining 12-hour regular fishing period. All additional fishing time outside regular fishing periods is allowed only in one or more of the following: the Expanded Kenai, Expanded Kasilof and Anchor Point sections.
- From August 1 through August 15:
 - Two one-percent rules apply during this time period, the Upper Subdistrict set gillnet one-percent rule and the Central District drift gillnet one-percent rule (see the 2014 Regulatory Changes section of this document).
- From August 16 until closed by EO:
 - Drift Areas 3 & 4 (Figure 5) are open for regular periods.
 - Chinitna Bay may be opened by EO if chum salmon escapement objectives are achieved in Clearwater Creek.

Drift Gillnet Fishing Areas

1. Expanded Kenai Section: all waters enclosed by a line from a point located on the shore at 60° 40.35' N. lat., 151° 23.00' W. long. then west to a point located at 60° 40.35' W. long., south to a point at the latitude of the Blanchard line located at 60° 27.10' N. lat., 151° 33.76' W. long. east to a point on the beach at 60° 27.10' N. lat., 151° 16.94' W. long.
2. Expanded Kasilof Section: all waters enclosed by a line from a point on the beach at 60° 27.10' N. lat., 151° 16.94' W. long., west to a point at the Blanchard line located at 60° 27.10' N. lat., 151° 33.76' W. long., south to a point located at 60° 04.02' N. lat., 151° 46.60' W. long., east to an ADF&G regulatory marker located at 60° 04.02' N. lat., 151° 38.90' W. long.
3. Anchor Point Section: all waters enclosed by a line from an ADF&G regulatory marker located at a point on the beach at 60° 04.02' N. lat., 151° 38.90' W. long., west to a point located at 60° 04.02' N. lat., 151° 49.00' W. long., south to a point located at 59° 46.15' N. lat., 152° 15.80' W. long., and east to a point on shore at 59° 46.15' N. lat., 151° 52.06' W. long.;

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Other regulations

- After July 8, the Kasilof River Special Harvest Area may be fished up to 48 hours, followed by a 24-hour closure, without an escapement trigger, if fish are present in sufficient numbers.
- The sockeye salmon escapement trigger to open the Kasilof River Special Harvest Area to commercial fishing without limitation is 365,000 fish.
- In the Kasilof Section, beginning on July 8, if further restrictions beyond the one-half mile fishery are necessary to aid in achieving the lower end of the Kenai River sockeye and king salmon escapement goals, this area may be further restricted to fishing within 600 feet of the high tide mark in the Kasilof Section.
- The Upper Subdistrict set gillnet fishery may close after July 31 based on the one-percent rule. A fishing period is defined as a time period open to commercial fishing not to exceed 24-hours per calendar day.

SET NET REGISTRATION AND BUOY STICKERS

All Cook Inlet setnet fishermen are required to register prior to fishing for one of three areas of Cook Inlet: 1) the Upper Subdistrict of the Central District; 2) the Northern District; or, 3) all remaining areas of Cook Inlet (Greater Cook Inlet). Once registered for one of these three areas, fishermen may fish only in the area for which they are registered for the remainder of the year. No transfers will be permitted. Set gillnet permit holders fishing in the Northern District or the Greater Cook Inlet area can register at ADF&G offices in Soldotna, Homer, or Anchorage or by mail. Forms are available at area offices or on the department's homepage at <http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareauci.salmon#/management> Fishermen wishing to register in person for the Upper Subdistrict must register in the **Soldotna ADF&G office only** and must purchase buoy stickers at the time of registering. Electronic registration with the option to pay for buoy stickers online may be available for the 2014 season but will be available for the 2015 season.

SEASON OPENING DATES

Season opening dates in 2014 for the various fisheries around the inlet are as follows:

- *Big River Fishery*: June 2 and continuing through June 23, unless the 1,000 king salmon harvest limit is reached prior to that date. Weekly fishing periods are Mondays, Wednesdays, and Friday from 7:00 AM to 7:00 PM
- *Northern District King Salmon Fishery*: June 2. As explained earlier in this document, the fishing period originally scheduled for Monday, May 26, will be closed in 2014 to reduce the harvest of king salmon throughout the Northern District. The remaining fishing periods for the 2014 season will occur on June 2, 9, 16, and 23. Each fishing period will be open for 6 hours. The area from a point at the wood chip dock to the Susitna River remains closed for the directed king salmon fishery in 2014.
- *Northern District Regular Season Salmon Fishery*: June 26.
- *Western Subdistrict Set Gillnet Fishery*: June 16.

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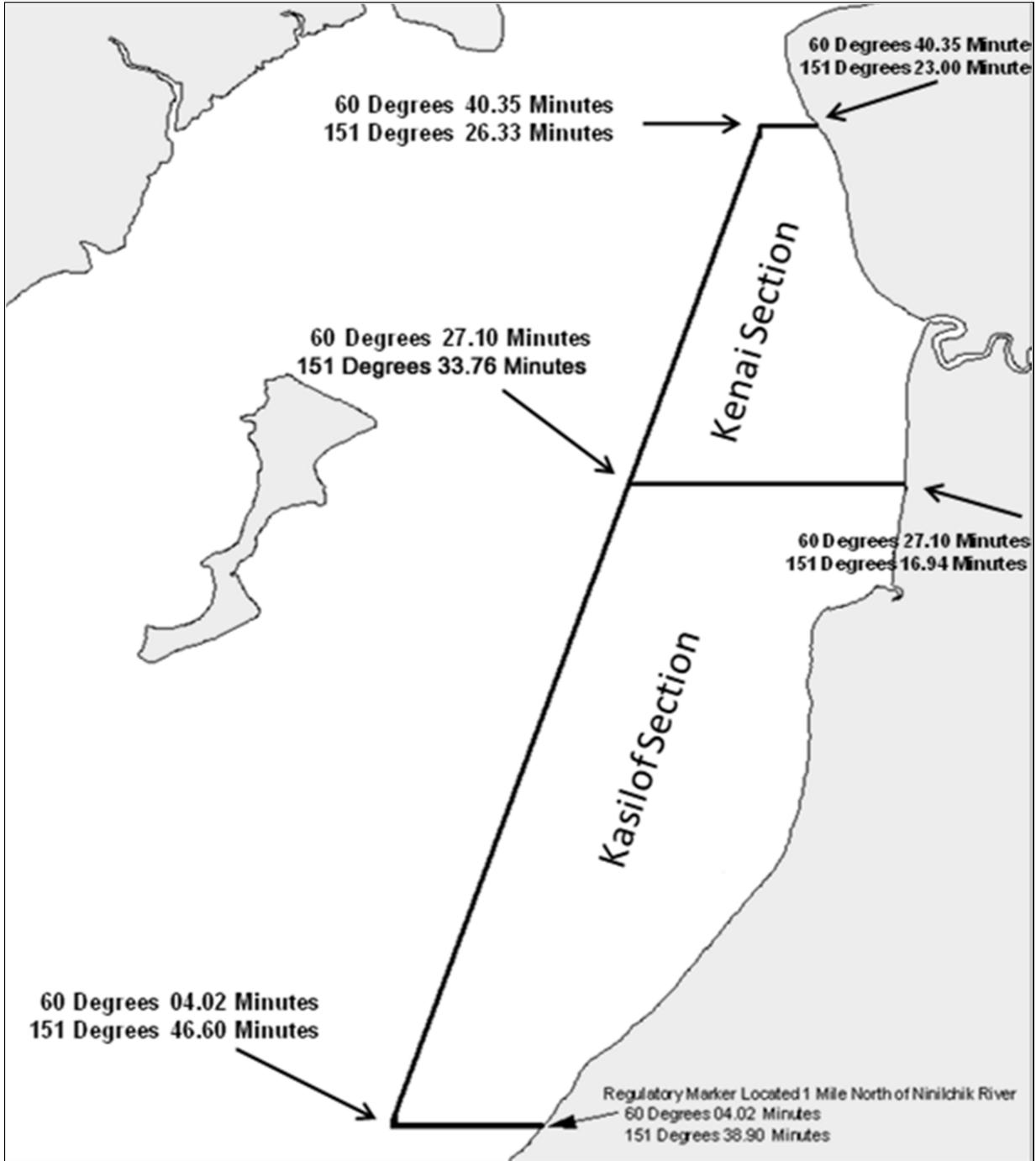
- *All remaining set gillnet fisheries, except the Upper Subdistrict:* June 26.
- *Upper Subdistrict Set Gillnet Fishery:* June 26 for the Kasilof Section (that portion south of the Blanchard Line), unless opened earlier by EO (based on an inriver estimate of 50,000 Kasilof River sockeye salmon before the June 26 opener), but will not open before June 20. The Kenai and East Forelands Sections (that portion of the Upper Subdistrict north of the Blanchard Line) may open on or after July 8. All Sections of the Upper Subdistrict will close for the season on or before August 15.
- *Drift Gillnet Fishery:* June 19.

GENERAL INFORMATION

The UCI commercial fisheries information line will again be available by calling 262-9611. The most recent emergency order announcement is always available on the recorded message line and harvest, escapement and test fishing information is included whenever possible. All emergency order announcements are also faxed or emailed to processors as quickly as possible and posted to the UCI web page at <http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareauci.salmon>. For very general information, we invite you to visit the Commercial Fisheries web page on the Internet at <http://www.adfg.alaska.gov/index.cfm?adfg=fishingCommercial.main>.

If, during the summer, fishermen have information or questions concerning the commercial fishery, the Soldotna Division of Commercial Fisheries staff can be reached by phone at 262-9368, by fax at 262-4709, or by mail at 43961 Kalifornsky Beach Road, Suite B, Soldotna, 99669.

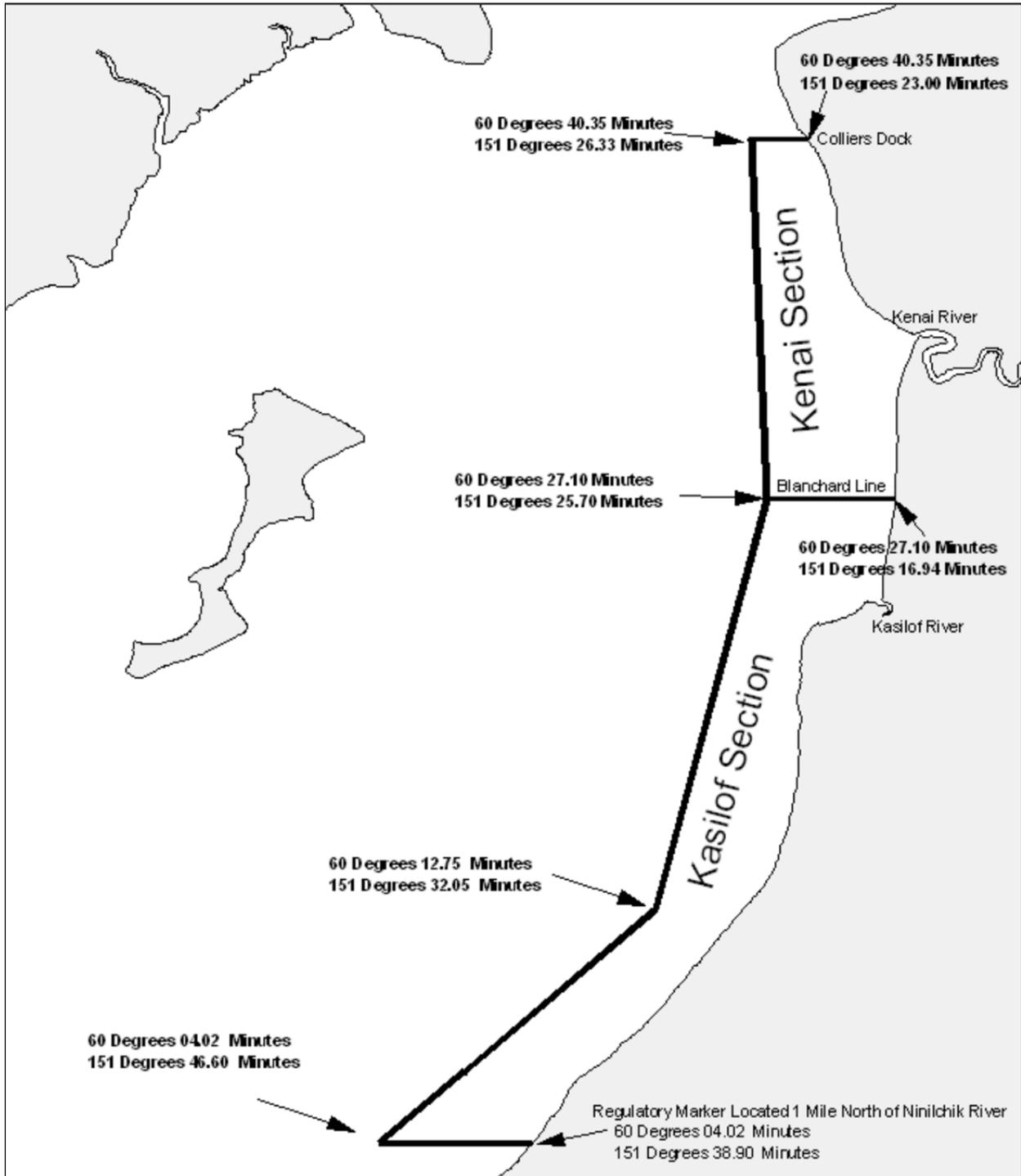
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Latitude and Longitude are based on the North American Datum of 1983 (NAD 83), equivalent to the World Geodetic System 1984 (WGS 84).

Figure1.–Map of the Expanded Kenai and Expanded Kasilof Sections with waypoint descriptions.

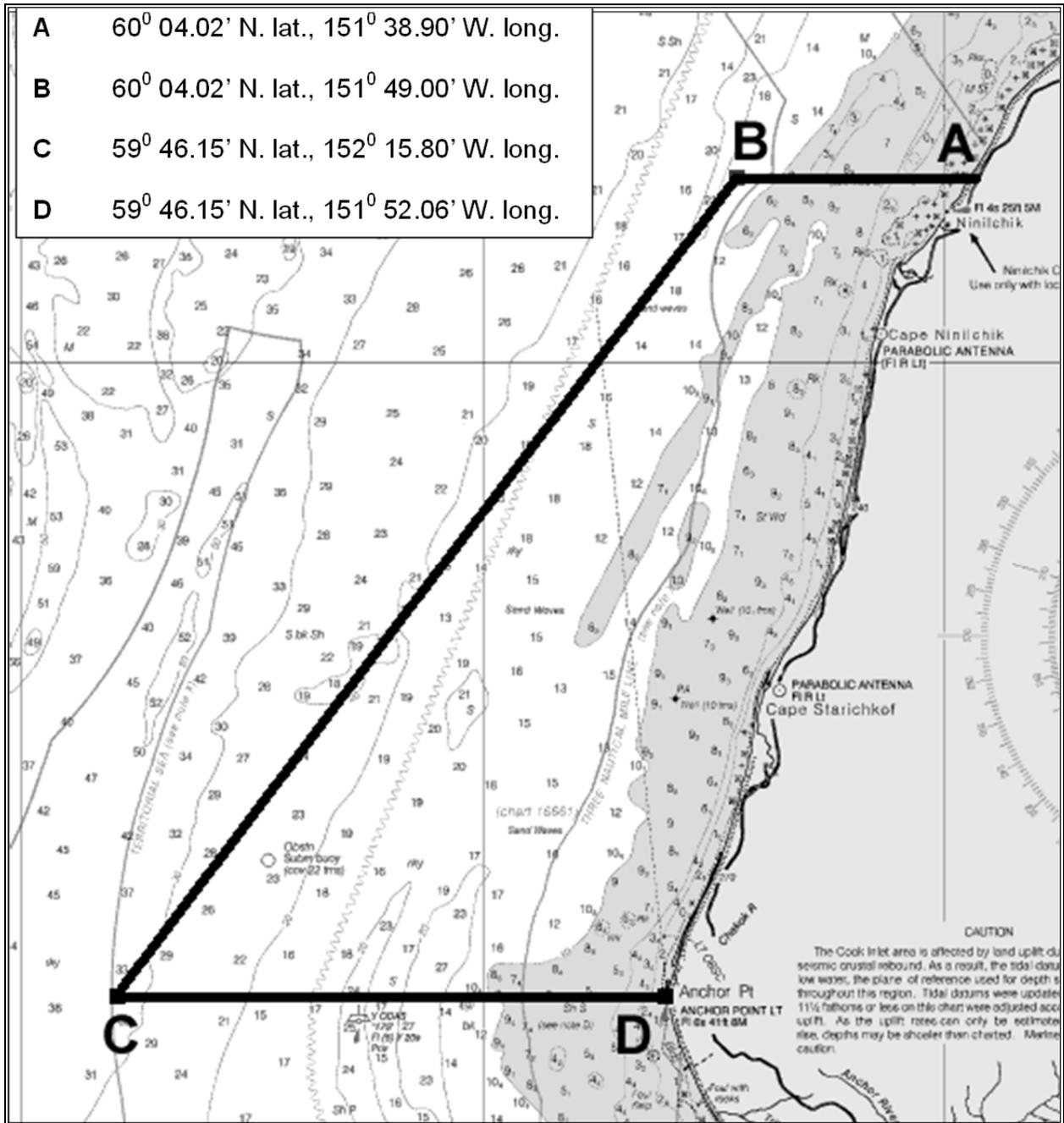
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Latitude and Longitude are based on the North American Datum of 1983 (NAD 83), equivalent to the World Geodetic System 1984 (WGS 84).

Figure 2.–Map of the Kenai and Kasilof Sections with waypoint descriptions.

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Latitude and Longitude are based on the North American Datum of 1983 (NAD 83), equivalent to the World Geodetic System 1984 (WGS 84).

Figure 3.–Map of the Anchor Point Section with waypoint descriptions.

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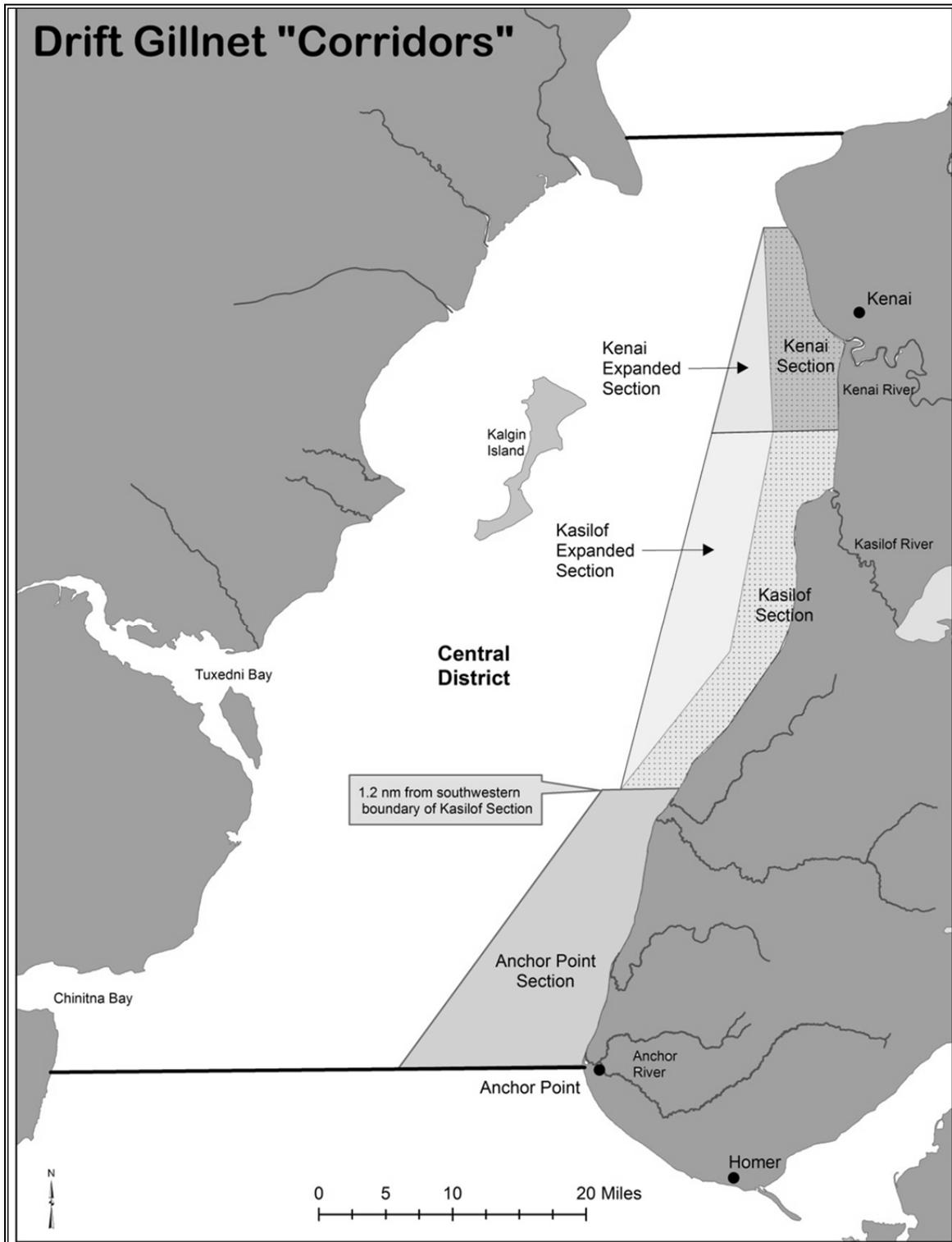
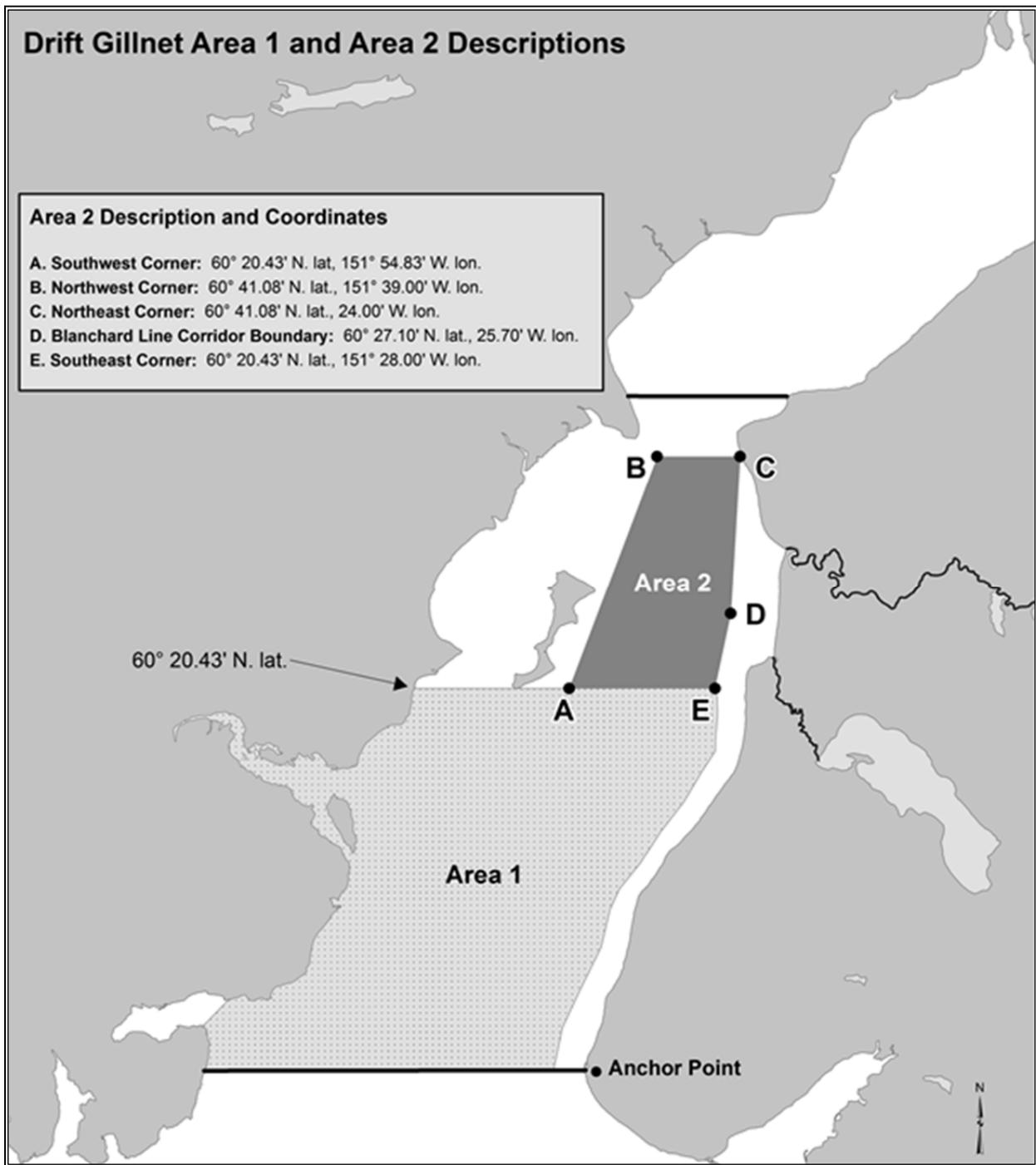


Figure 4.-Map of all drift gillnet "corridors" in Upper Cook Inlet.

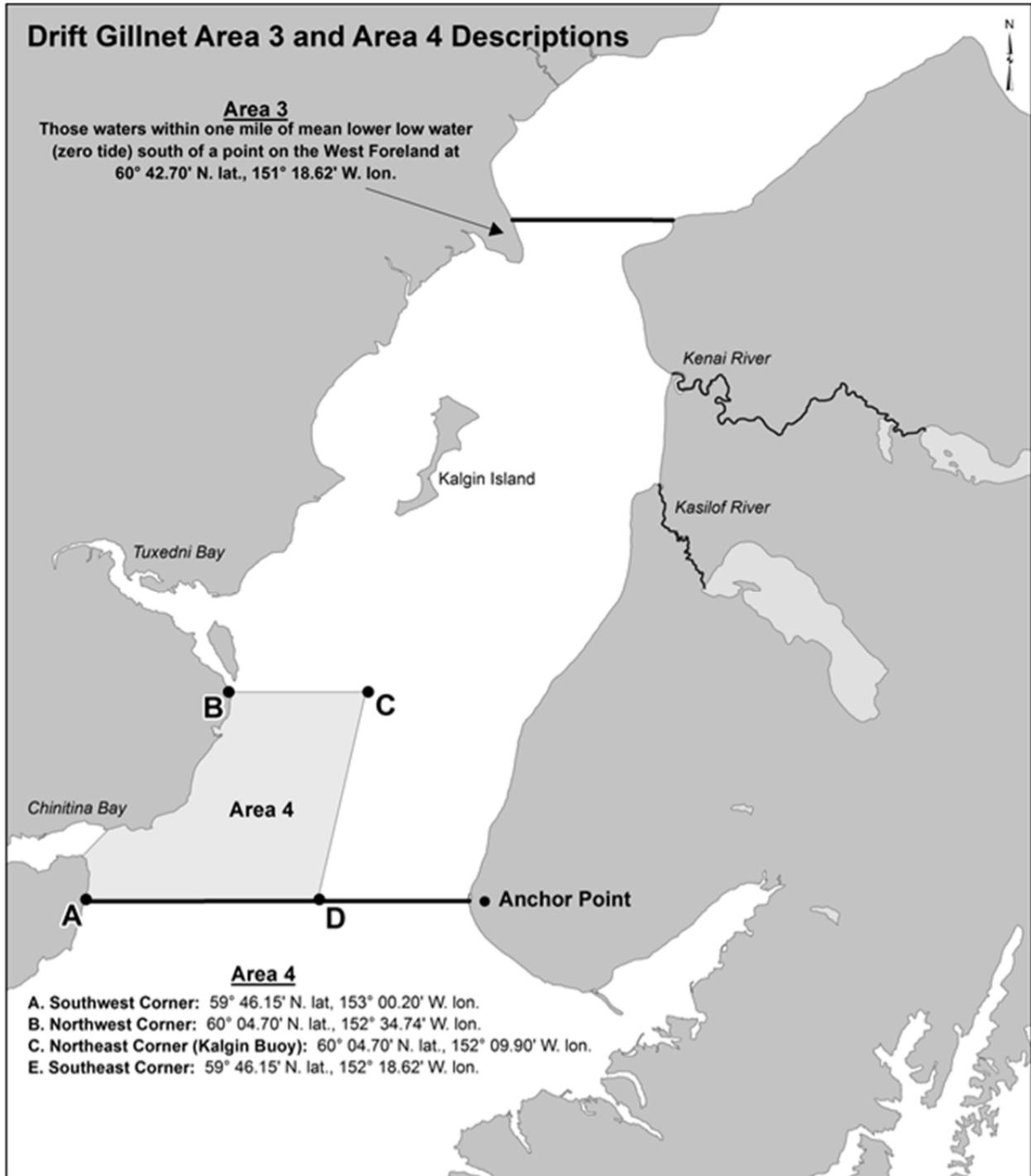
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Latitude and Longitude are based on the North American Datum of 1983 (NAD 83), equivalent to the World Geodetic System 1984 (WGS 84).

Figure 5.–Map of drift gillnet fishing areas one and two.

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Latitude and Longitude are based on the North American Datum of 1983 (NAD 83), equivalent to the World Geodetic System 1984 (WGS 84).

Figure 6.–Map of the drift gillnet areas open beginning August 16.

ALASKA DEPARTMENT OF FISH AND GAME
DIVISION OF COMMERCIAL FISHERIES NEWS
RELEASE



Sam Cotten, Acting Commissioner
Jeff Regnart, Director



Contact:	Soldotna ADF&G
Mark Willette, Research Project Leader	43961 Kalifornsky Beach Rd.
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2015 UPPER COOK INLET SOCKEYE SALMON FORECAST

The forecast of the 2015 Upper Cook Inlet sockeye salmon run is as follows:

	Forecast Estimate (millions)	Forecast Range (millions)
TOTAL PRODUCTION:		
Total Run	5.8	4.4-7.2
Escapement	2.1	
Harvest	3.7	

Forecast Methods

The major sockeye salmon systems in Upper Cook Inlet (UCI) are the Kenai, Kasilof, Susitna, and Crescent rivers, and Fish Creek. Escapement (spawner abundance), return, sibling, fry, and smolt data, if available, were examined for each system. Four models were evaluated to forecast the run of sockeye salmon to UCI in 2015: (1) the relationship between adult returns and spawners, (2) the relationship between adult returns and fall fry, (3) the relationship between adult returns and smolts and (4) the relationship between sibling adult returns. Several forecast models were evaluated for each stock and age class. Models providing the smallest mean absolute percent error (MAPE) between the forecast and actual runs over the past 10 years were generally used. Forecast model predictions based on spawners, fry, smolt, or siblings were compared to evaluate uncertainty.

The return of age-1.3 Kenai River sockeye salmon in 2015 was forecasted using a sibling model. For example, the sibling-model prediction of the return of age-1.3 salmon was

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based on the abundance of age-1.2 salmon in 2014. A spawner-recruit model prediction of the age-1.2 salmon return was based upon escapement in 2011. The Kenai River return of age-2.3 salmon was forecasted using a smolt model based upon age-2 smolt abundances available after brood year 2002 and age-1 fall fry abundances available for brood years 1984-2002. The returns of Kasilof River age-1.3 and 2.2 sockeye salmon were forecasted using sibling models based upon the abundance of age-1.2 and 2.1 salmon in 2014. A spawner-recruit model was used to forecast the return of Kasilof River age-1.2 salmon, and a smolt model was used to forecast the return of Kasilof River age-2.3 salmon.

The total run of Susitna River sockeye salmon was forecasted using mean return per spawner by age class for brood years 2006–2010. Mark–recapture estimates of inriver run and genetic estimates of commercial harvest were available for these brood years.

The sockeye salmon forecast for unmonitored systems in UCI was estimated as 17% of the aggregate forecast for the 4 monitored stocks. The fraction of the total run destined for unmonitored systems was estimated using genetic estimates of the stock composition of offshore test fishery harvests. In 2015, a forecast was not developed for the Crescent River sockeye salmon run, because the escapement for this river is no longer monitored.

The 2015 total harvest by all user groups was estimated using the average harvest rate in all fisheries from 2012-2014. The total run forecast range was calculated by multiplying the forecast by the MAPE of the actual runs from published forecast runs from 2005 through 2014.

Forecast Discussion

In 2014, the harvest of sockeye salmon by all user groups in UCI (3.2 million) was 1.1 million less than the preseason forecast of 4.3 million. In 2014, the total run was 3.3 million to the Kenai River; 1,105,000 to the Kasilof River; 201,000 to the Susitna River; 73,000 to the Crescent River; and 65,000 to Fish Creek. The 2014 run forecast was 3.8 million to the Kenai River; 1,062,000 to the Kasilof River; 264,000 to the Susitna River; 92,000 to the Crescent River; and 79,000 to Fish Creek.

A run of approximately 5.8 million sockeye salmon is forecasted to return to UCI in 2015, with a harvest by all user groups of 3.7 million. The forecasted harvest in 2015 is equal to the 20-year average harvest.

The run forecast for the Kenai River is approximately 3.6 million, which is 0.2 million less than the 20-year average run of 3.8 million. Age-1.3 salmon typically comprise about 57% of the Kenai River run. A sibling model based upon the return of age-1.2 salmon in 2014 (315,000; 411,000 20-year average) predicted a return of 1.8 million age-1.3 salmon. A fry model based upon the abundance of age-0 fry rearing in Skilak and Kenai lakes in the fall of 2011 (11.8 million; 17.9 million 20-year average) predicted a return of 1.4 million age-1.3 salmon. The sibling model was used for this forecast because the 10-year MAPE was lower for the sibling model (24%) than the fry model (46%). Age-2.3 salmon typically comprise about 18% of the Kenai River run. A sibling model based upon the return of age-2.2 salmon in 2014 (215,000; 254,000 20-year average) predicted a return of 404,000 age-2.3 salmon in 2015. A smolt model based upon the abundance of age-2 smolt emigrating

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from the Kenai River in spring 2012 (7.6 million) predicted a return of 1.0 million age-2.3 salmon. The smolt model was used for this forecast due to the high age-2 smolt abundance in 2012 and the failure of the sibling model to accurately predict large returns of age-2.3 salmon like those seen in 2011–2013. The forecasted age-2.3 return is 46% greater than the 20-year average return for this age class (695,000). The predominant age classes in the 2015 run should be age 1.3 (52%), age 1.2 (11%), and age 2.3 (29%). The 10-year MAPE for the set of models used for the 2015 Kenai sockeye salmon run forecast was 19%.

The Kasilof River sockeye salmon run forecast is 1,092,000, which is 12% greater than the 20-year average of 953,000. Age-1.3 salmon typically comprise about 34% of the Kasilof River run. The forecast for age-1.3 salmon is 374,000, which is 17% greater than the 20-year average return (321,000) for this age class. A sibling model based upon the abundance of age-1.2 salmon in 2014 was used to forecast the return of age-1.3 salmon in 2015. The abundance of age-1.2 salmon in 2014 was 419,000, which is 36% greater than the 20-year average abundance (308,000) for this age class. A smolt model predicted a return of 322,000 age-1.3 salmon. The sibling model was used for this forecast, because the 10-year MAPE was lower for the sibling model (33%) than the smolt model (58%). Age-1.2 salmon typically comprise about 32% of the run. The forecast for age-1.2 salmon is 328,000, which is 6% greater than the 20-year average return (308,000) for this age class. A spawner-recruit model based upon spawner abundance (244,000) in 2011 was used to forecast the return of age-1.2 salmon in 2015. A smolt model based upon the abundance of age-1 smolt (4.0 million) in 2013 forecasted a return of 248,000 age-1.2 salmon. The spawner-recruit model was used for this forecast because the 10-year MAPE was lower for the spawner-recruit model (42%) than the smolt model (50%). Age-2.2 salmon typically comprise about 24% of the run. The forecast for age-2.2 salmon is 250,000, which is 9% greater than the 20-year average return (230,000) for this age class. A sibling model based upon the abundance of age-2.1 salmon in 2014 was used to forecast the return of age-2.2 salmon in 2015. The spawner-recruit model forecast for age-2.2 salmon was 314,000. The sibling model was used for this forecast, because the 5-year MAPE was lower for the sibling model (7%) than the spawner-recruit model (19%). The predominant age classes in the 2015 run should be age 1.2 (30%), age 1.3 (34%), and age 2.2 (23%). The 10-year MAPE for the set of models used for the 2015 Kasilof sockeye salmon run forecast was 19%.

The Susitna River sockeye salmon run forecast is 276,000, which is 31% less than the 9-year average of 402,000. This forecast was derived using mean return per spawner by age class for brood years 2006–2010 and mark–recapture estimates of spawner abundance in 2009–2011. Sonar and age composition catch allocation models were not used, because mark–recapture studies have shown that the Yentna sonar project underestimated sockeye salmon escapement, causing estimates of adult returns to also be underestimated. This is the third year this forecast method has been used, so MAPE is not available. The 9-year average run (2006–2014) was calculated using mark–recapture estimates of inriver run and genetic estimates of commercial harvests.

The Fish Creek sockeye salmon run forecast is 61,000, which is 38% less than the 20-year average of 98,000. Age-1.2 and -1.3 salmon typically comprise 87% of the Fish Creek run. A smolt model based upon the abundance of age-1 smolt emigrating from Fish Creek in 2013

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(422,000; 419,000 14-year average) predicted a return of 46,000 age-1.2 salmon. A smolt model based upon the abundance of age-1 smolt in 2012 (178,000) predicted a return of 6,500 age-1.3 salmon in 2015. The age-1.2 forecast is 7% less than the 20-year average return (50,000) for this age class, while the age-1.3 forecast is 73% less than the 20-year average return (24,000) for this age class. The predominant age classes in the 2015 run should be age 1.2 (76%) and age 1.3 (11%).

Run forecasts to individual freshwater systems are as follows:

System	Run	Goals ^a
Kenai River	3,550,000	1,000,000–1,200,000 ^b
Kasilof River	1,092,000	160,000–340,000
Susitna River	276,000	NA ^c
Larson Lake	NA	15,000–50,000
Chelatna Lake	NA	20,000–65,000
Judd Lake	NA	25,000–55,000
Fish Creek	61,000	20,000–70,000
Unmonitored Systems	851,000	NA
Total	5,830,000	

Note: BEG = Biological Escapement Goal, SEG = Sustainable Escapement Goal.

^a Goals listed here are as follows, Kenai River: Inriver; Kasilof River: BEG; Susitna River: SEG (weir goals); and Fish Creek: SEG.

^b This is the inriver sockeye salmon goal measured using sonar at RM 19 on the Kenai River.

^c Susitna sockeye salmon are managed to achieve escapement goals at Larson, Chelatna, and Judd lakes.

OTHER SALMON SPECIES

The preliminary forecast of the 2015 commercial harvest of other salmon species is as follows:

Commercial Harvest Forecasts	
Natural Production:	
Pink Salmon	98,000
Chum Salmon	176,000
Coho Salmon	161,000
Chinook Salmon	6,700

Forecast Methods

The recent 5-year average commercial harvest was used to forecast the harvest of chum, coho, and Chinook salmon in 2015. The forecast for pink salmon was based upon the average harvest during the past 5 odd-numbered years.

Forecast Discussion

The recent 5-year average commercial harvest was used in the forecast, because regulatory changes have substantially restricted harvests of these species in recent years.

For more information contact Mark Willette or Pat Shields at the Soldotna ADF&G office at (907) 262-9368.

APPENDIX D: COMMERCIAL SMELT AND HERRING

ALASKA DEPARTMENT OF FISH AND GAME
DIVISION OF COMMERCIAL FISHERIES
NEWS RELEASE



Cora Campbell, Commissioner
Jeff Regnart, Director



Contact: Pat Shields, Area Mgmt. Biologist; Aaron Dupuis, Asst. Area Mgmt. Biologist
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Date Issued: April 4, 2014 Time: 10:00 AM

**2014 UPPER COOK INLET COMMERCIAL SMELT (HOOLIGAN)
AND HERRING FISHING SEASONS**

5 AAC 21.505 *Cook Inlet Smelt Fishery Management Plan* allows for a small commercial fishery for smelt in the Northern District of Upper Cook Inlet. This fishery occurs in those waters located between the Chuit River and the Little Susitna River (in salt water only). The season is open from May 1 to June 30. Legal gear for the fishery is a hand-operated dip net, as defined in 5 AAC 39.105. The total harvest may not exceed 100 tons of smelt. Any salmon caught must be released immediately and returned to the water unharmed. To participate in this fishery, a miscellaneous finfish permit is required, as well as a commissioner's permit, which can be obtained from the ADF&G office in Soldotna. The commissioner's permit must be obtained prior to applying for the miscellaneous finfish permit.

The *Central District Herring Management Plan* (5 AAC 27.409) provides for a commercial herring fishery in the Central District of Upper Cook Inlet, including the Kalgin Island Subdistrict, Upper Subdistrict, Western Subdistrict, and Chinitna Bay Subdistrict, as described in 5 AAC 21.200(b)(2), (b)(3), (b)(5), and (b)(6). The legal gillnet mesh size can be no smaller than 2.0 inches or no greater than 2.5 inches. The season is open from April 20 to May 31 with one fishing period per week, from 6:00 AM on Monday until 6:00 PM on Friday; however, a fishing period may extend beyond May 31 if the fishing period began before May 31. In 2014, commercial fishing for herring will open at 6:00 AM on Monday, April 21 and close no later than 6:00 PM on Friday, May 30. In the Upper Subdistrict, the guideline harvest range is 0-40 tons and fishing for herring is not allowed any closer than 600 feet of the mean high tide mark on the Kenai Peninsula. In the Chinitna Bay Subdistrict, the department is to manage for a guideline harvest of 0-40 tons; in the Western Subdistrict, the guideline harvest range is 0-50 tons, and in the Kalgin Island Subdistrict, the guideline harvest range is 0-20 tons.

In the Central District, herring may be taken only by gillnet, as defined in 5 AAC 27.431, except that in the Chinitna Bay and Kalgin Island Subdistricts, herring may only be taken by set gillnets (5 AAC 27.430 (b)). Prior to fishing, all participants are required to register at the department's Soldotna office. Fishermen are also required to report fishing time and the amount of smelt and herring harvested, whether sold or retained for personal use, to the Soldotna office by 12:00 noon of the next day for each day fished. Fishermen are also reminded that fish tickets are to be filled out and either mailed or dropped off at the Soldotna ADF&G office within seven days of the time of landing (5 AAC 39.130 (c)). If you intend to sell your catch directly from your fishing site (beach or vessel), you must first obtain a catcher-seller permit from ADF&G.