Fishery Management Report No. 16-14

Upper Cook Inlet Commercial Fisheries Annual Management Report, 2015

by

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and

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

Symbols and Abbreviations

The following symbols and abbreviations, and others approved for the Système International d'Unités (SI), are used without definition in the following reports by the Divisions of Sport Fish and of Commercial Fisheries: Fishery Manuscripts, Fishery Data Series Reports, Fishery Management Reports, and Special Publications. All others, including deviations from definitions listed below, are noted in the text at first mention, as well as in the titles or footnotes of tables, and in figure or figure captions.

Weights and measures (metric)

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

Weights and measures (English)

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

Time and temperature

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

Physics and chemistry

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

General

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

Mathematics, statistics

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

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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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ABSTRACT

The 2015 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 2015 UCI commercial harvest of 3.2 million salmon was approximately 23% less than the 1966–2014 average annual harvest of 4.1 million fish, and the commercial sockeye salmon harvest of 2.6 million fish was approximately 10% less than the 1966–2014 average annual harvest of 2.9 million fish. The 2015 estimated exvessel value of $24.1 million was 19% less than the 2005–2014 average annual exvessel value of $29.7 million, and approximately 8% less than the 1966–2014 average annual exvessel value of $26.3 million. For the 2015 season, 3 of 7 sockeye salmon enumeration estimates fell within the established escapement goal ranges, and estimates in the other 4 systems exceeded their goal objectives. The timing of the 2015 sockeye salmon run was estimated to be 10 days late, which represents the latest run-timing ever observed in UCI.

Key words: sockeye *Oncorhynchus nerka*, Chinook *O. tshawytscha*, chum *O. keta*, coho *O. kisutch*, pink *O. 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, and 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 commercial harvest. 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, from 2005 to 2014, the proportion of the total annual coho, pink, and chum salmon harvest taken by drift gillnets has increased, but 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 of Cook Inlet, 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. In the Central District, herring may be taken only by gillnets, except that in the Chinitna Bay and Kalgin Island Subdistricts herring may only be taken by set gillnets. Herring in UCI have been harvested exclusively by set gillnets. 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, although 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. Recently, the Alaska Energy Authority contracted HDR Alaska, Inc. and LGL Alaska Research Associates, Inc. to evaluate life history, run timing, abundance, distribution, and habitat of eulachon as part of Susitna-Watana Hydro feasibility studies (Alaska Energy Authority 2014).

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.

2015 COMMERCIAL SALMON FISHERY

The 2015 UCI commercial harvest of 3.2 million salmon was approximately 23% less than the 1966–2014 average annual harvest of 4.1 million fish (Appendix B6). The 2015 sockeye salmon harvest estimate of 2.6 million fish was 10% less than the 1966–2014 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 2015 UCI commercial fishery of $24.1 million was approximately 19% less than the 2005–2014

average annual exvessel value of $29.7 million, and approximately 8% less than the average annual exvessel value of $26.3 million from 1966 to 2014 (Appendix B7).

Estimating the average annual price paid per pound (Appendix B11) for UCI salmon is challenging because an increasing number of 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 in 2015 was estimated to be $0.65 per pound less than the previous 2 years. This decrease in price contributed significantly to the less-than-average exvessel value of the 2015 UCI commercial salmon harvest when compared to the previous decade.

Currently, there are 7 sockeye salmon systems with escapement/inriver goals that are monitored in UCI (Table 1, Appendix A2, and Appendix B10). In 2015, 3 of 7 enumeration estimates fell within established goal ranges, and estimates in the other 4 systems exceeded their goal objectives. After harvest of sockeye salmon above the sonar is accounted for in the Kenai River, it is expected that escapement will exceed the sustainable escapement goal (SEG) and be within the optimum escapement goal (OEG) in 2015. This marked the seventh year that sockeye salmon escapement in the Susitna River drainage 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, 2015.

		Goal range		
System	Goal type	Lower	Upper	2015 Passage
Fish Creek	SEG	20,000	70,000	102,296
Kasilof River	BEG	160,000	340,000	470,667
Kenai River	Inriver	1,000,000	1,200,000	1,704,767
Larson Lake	SEG	15,000	50,000	23,214
Chelatna Lake	SEG	20,000	65,000	69,750
Judd Lake	SEG	25,000	55,000	47,684
Packers Creek	SEG	15,000	30,000	28,072

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 2015 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 2015 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 that were summarized in Shields and Dupuis 2015.

CHINOOK SALMON

The 2015 UCI harvest of 10,798 Chinook salmon was the 17th smallest since 1966 (50 years) and was approximately 9% less than the previous 10-year (2005–2014) average annual harvest of 11,914 fish (Appendices A3, B1, and B6). The exvessel value for UCI Chinook salmon in 2015 was estimated at $360,000, which represented approximately 1.5% of the total exvessel value for all salmon (Appendix B7).

Chinook salmon were commercially 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 moderate decline in Chinook salmon harvest observed during the 2015 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 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. Beginning in 2012, ADF&G began taking even more restrictive actions by reducing all 12 hour commercial fishing periods to 6 hours in duration, and then from 2013 to 2015, 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 2015, when inseason escapement estimates revealed that the Deshka River Chinook salmon minimum escapement goal was projected to be met, fishing time was returned to 12 hour periods for the June 15 and June 22 fishing periods.

Table 2.–Chinook salmon harvest during the directed fishery in the Northern District, 1986–2015.

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	2015	1,560	40	4

Forty commercial permit holders participated in the 2015 Northern District Chinook salmon fishery, with an estimated harvest of 1,560 fish (Table 2 and Appendix A3). This was the seventh 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 (5 AAC 21.345). The registration requirement served to eliminate a common practice of fishing in multiple areas in UCI during the same year.

Upper Subdistrict

Approximately 72% of UCI Chinook salmon commercial harvest in 2015 occurred in the Upper Subdistrict set gillnet fishery (Appendix B1). The 2015 estimated harvest of 7,781 Chinook salmon was nearly identical to the previous 10-year average annual harvest, but approximately 18% less than the 1966–2014 average annual harvest in this fishery of 9,452 fish.

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). 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 *Kenai River Late-Run King Salmon Management Plan* (KRLKSMP; Shields and Dupuis 2015) for the 2014 season.

The 2015 preseason outlook for Kenai River late-run Chinook salmon projected a total run of 22,000 fish[1]. Based on this estimate of total run size, it was anticipated that some level of restrictive actions would be necessary in both sport and commercial fisheries per the KRLRKSMP. The preseason outlook for the early-run of Chinook salmon to the Kenai River of approximately 5,300 fish[2] resulted in the sport fishery being closed to start the season, and it remained closed for the entire season. The estimated total run of early-run Kenai River Chinook salmon of 6,190 fish meant the minimum OEG of 5,300 fish was met. Although the early run was larger than preseason expectations, provisions within the KRLKSMP required both sport and commercial fisheries to be prosecuted with restrictions when the inriver run of late-run Kenai River Chinook salmon was expected to be less than 22,500 fish. Therefore, the Kenai River sport fishery for late-run Chinook salmon began the season on July 1 with a prohibition on the use of bait (EO 2-KS-1-35-15). As was the case in the previous 2 years, DIDSON estimates of daily passage were closely monitored so that inseason projections of total run strength and inriver passage could be made. By the latter part of July, passage estimates indicated the inriver run would probably exceed 22,500 fish. Because of this, EO 2-KS-1-46-15 was issued, allowing for bait to be used in the sport fishery starting on July 25. From July 1 to 24, the Upper Subdistrict set gillnet fishery operated under the restrictive provisions in the KRLKSMP that limited the fishery to no more than 36 hours of fishing time per week. The set gillnet fishery returned to a regular fishing schedule, as defined in the *Kenai River Late-Run Sockeye Salmon Management Plan* (KRLSSMP), from July 25 through August 5. However, estimates of daily passage now indicated the final escapement of late-run Chinook salmon into the Kenai River would probably fall between 16,500 and 22,500 fish, which returned the set gillnet fishery to a schedule of no more than 36 hours of fishing time for all of August, as required in the KRLSSMP. The final Kenai River Chinook salmon passage estimate for the 2015 season was approximately 23,700 fish, and after inriver mortality was subtracted, the final estimate of escapement was approximately 22,500 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); passage and escapement enumeration by sonar, weir, remote camera, and various mark–recapture studies (Shields and Dupuis 2015); 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. GSI data describing the UCI sockeye salmon catch allocation are available for the years 2005–2011 (Habicht et al. 2007; Barclay et al. 2010a, 2010b, 2013, and 2014).

A chartered gillnet vessel fished 6 fixed stations along a transect across Cook Inlet from Anchor Point to the Red River delta (Dupuis and Willette *In prep*) as part of the OTF studies. The

[1] http://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2014-2015/uci/rc3_tab5_uci1.pdf
[2] http://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2014-2015/uci/rc3_tab5_uci2.pdf

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 catch per unit of effort (CPUE) (Appendix A1). 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 2015 sockeye salmon run was estimated to be approximately 10 days late (Dupuis and Willette *In prep*), which is the latest run ever measured by the Anchor Point OTF project. Beginning in 2012, an additional OTF transect was fished in Cook Inlet, near the north end of Kalgin Island. Located further north in the inlet, the objective of fishing this new OTF transect 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 to provide additional samples to more efficiently estimate 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. The test fishery located north of Kalgin Island was not operated in 2015 due to a lack of funding.

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 due to a lack of funding.

DIDSON was 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 sockeye salmon 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 2015. 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 and 2015.

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 23,821 sockeye salmon examined for age, length, and sex determination from catch and escapement samples in 2015 (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.

Table 3.–2015 Upper Cook Inlet sockeye salmon forecast and actual run.

System	Forecast	Actual	Difference
Kenai River	3,550,000	3,896,000	10%
Kasilof River	1,092,000	1,173,000	7%
Susitna River	276,000	434,000	57%
Fish Creek	61,000	142,000	133%
Minor Systems	851,000	703,000	-17%
Overall Total	5,830,000	6,300,000	8%

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

For the 2015 season, approximately 5.8 million sockeye salmon were expected to return to UCI (Table 3; Appendix C1). The actual run estimate totaled nearly 6.3 million fish, which was 8% greater than the preseason forecast. It should be noted that at the time this report was published, harvest data from the 2015 sport fisheries were not available; therefore, sport fishery harvests were estimated by comparing previous years' catches from similar sized runs. Of the expected run of 5.8 million sockeye salmon, approximately 2.1 million fish were required for escapement objectives, which left 3.7 million sockeye salmon available for harvest to all users. Assuming that sport and personal use harvests in 2015 would be similar in proportion to that observed in 2013 (because of similar sized runs), the commercial catch in 2015 was projected to be approximately 2.9 million sockeye salmon. The actual commercial sockeye salmon harvest of 2.6 million fish was, therefore, 9% less than preseason expectations. Drift gillnet fishermen accounted for approximately 38% of the 2015 commercial sockeye salmon harvest, or 1.0 million fish, whereas set gillnet fishermen caught 62% of the commercial harvest, or 1.6 million fish (Appendix B2). The 2015 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 2015 commercial harvest and will be analyzed at a later date. The last reported commercial fishing activity in any area of UCI in 2015 was September 28.

In 2015, the total sockeye salmon harvest from commercial, sport, personal use, subsistence, and educational fisheries was estimated at 3.7 million fish (Appendix A22). This amount was approximately equal to the 1996–2014 average annual harvest of 3.7 million fish (for the Kenai River; these data include late-run sockeye salmon only) and nearly equal to preseason expectations (Appendix B14). The 2015 sport harvest was estimated based on harvest from similar sized runs. The 2015 personal use harvest estimate of approximately 522,000 sockeye salmon was nearly 55% greater than the average annual harvest of 337,000 fish from 1996 to 2014. 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 2015 season (Appendix B11). Based on these estimated prices, the total exvessel value of the 2015 salmon fishery was approximately $24.1 million (Appendix B7). Using an average price of $1.60/lb, the exvessel value for sockeye salmon was estimated to be $22.3 million, which was 20% less than the previous 10-year (2005–2014) value of $27.8 million.

Big River

The first commercial sockeye salmon fishery to open in UCI in 2015 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 three 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 481 fish, which is well below the 1,000 fish cap. The average annual sockeye salmon harvest since 2005 has been 15,805 fish. The 2015 fishery began on Monday, June 1, with harvests reported from 11 different days, yielding a total harvest of 7,259 sockeye and 328 Chinook salmon (Appendices A3 and A4). Of the total harvest, 77% of the sockeye and 76% of the Chinook salmon were caught in the Kalgin Island west side waters, which is Statistical Area 246-10 (Figure 3). There were 30 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 (Appendix A8).

Western Subdistrict

The next commercial fishery to open in 2015 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 escapement into the Crescent River from exceeding the goal range of 30,000–70,000 fish. In 2015, the Western Subdistrict set gillnet fishery opened for the season on Thursday, June 18, and remained open for all regular Monday and Thursday fishing periods through Thursday, July 9. An examination of sockeye salmon harvest near the Crescent River was similar to harvest in years when escapements fell within or exceeded the escapement goal range. Therefore, EO No. 17 was issued on July 11, 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, beginning on Monday, July 13. This fishing schedule remained in place until 10:00 PM on Monday, August 10, when EO No. 51 was issued, returning the fishery to its regular schedule of 2 fishing periods per week. Approximately 37,500 sockeye salmon

were harvested by 21 permit holders fishing in the Western Subdistrict set gillnet fishery in 2015 (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 managed primarily 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) were 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 2015, 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. 24 was issued on July 18, 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 from Monday, July 20, through Thursday, July 30. On Sunday, August 2, EO No. 42 was released, which modified EO No. 24 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 August 2 and August 6. Legal gear in the remainder of the Northern District remained limited to no more than 1 set gillnet per permit. On Monday, August 10, 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 2015 season, 55,876 sockeye salmon were harvested by 80 permit holders in the Northern District set gillnet fishery (Appendices A4 and A8). This harvest was approximately 98% greater than the previous 10-year average annual harvest of 28,274 sockeye salmon and was also the highest harvest in the Northern District since 1999 (Appendix B2).

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 by 5 AAC 21.365. *Kasilof River Salmon Management Plan* (KRSMP), 5 AAC 21.360. *Kenai River Late-Run Sockeye Salmon Management Plan* (KRLSSMP), and 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 streams in northern Cook Inlet.

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* (UCISMP), 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 2015 regular season for drift gillnetting began on Monday, June 22, as provided for in the CDDGFMP. Early-season drift harvests are typically fairly small, yet the harvest of 2,469 sockeye salmon from 94 boats was only about half the average catch per boat from recent opening periods. (Appendix A4). For the week of June 21–27, the drift gillnet fleet fished 2 regular periods and 2 additional days in the regular Kasilof Section (Figure 5); harvesting a total of 6,671 sockeye salmon. Again, although early-season drift harvests are typically low, this harvest from 4 days of fishing was below average. The Kasilof River sockeye salmon sonar enumeration project began on June 15, and by June 20, more than 56,000 sockeye salmon were estimated to have passed the sonar. Although the set gillnet fishery in the Kasilof Section was not scheduled to open for the 2015 season until June 25, the conditions for opening the Kasilof Section early, based on the 50,000 fish trigger, had been met. However, similar to 2013 and 2014, concerns for Kenai River early-run Chinook salmon delayed an opening in the Kasilof Section set gillnet fishery until June 22. On that day, a 9 hour period was opened, with approximately 18,000 sockeye salmon being harvested. This fishery was open for an 8 hour period on Wednesday, June 24, then the regular 12 hour period on Thursday, June 25 that included a 2 hour addition to the period, and then again for 14 hours on Saturday, June 27. For the week, approximately 78,000 sockeye salmon were harvested in the Kasilof Section set gillnet fishery. Through June 27, more than 123,000 sockeye salmon had been enumerated at the

Kasilof River sonar site, which was the third highest passage estimate through this date since passage estimates began in the late 1970s (Appendix A2). The total commercial sockeye salmon harvest through June 27, by both the set and drift gillnet fisheries, was 84,786 fish (Appendix A4).

Table 4.–Upper Subdistrict set gillnet fishing hours and mandatory closures, 2015.

	Kasilof Section				Kenai & East Forelands Sections			
Week	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 21–27	48	36	36	36	Closed	Closed	Closed	Closed
June 28–Jul 4	84[a]	39	36	36	Closed	Closed	Closed	Closed
Jul 5–11	36	35	36	36	36	27	36	36
Jul 12–18	36	48[b]	36	36	36	22	36	36
Jul 19–25	36[c]	93[d]	36	36	36[c]	43	36	36
Jul 26–Aug 1	51	74[e]	60	60	51	51	60	60
Aug 2–8	51[f]	43	60	57	51[f]	58	60	57
Aug 9–15	36	24	0	0	36	36	0	0
Total	255	153	300	297	123	201	228	225

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

[b] 12 hours were fished in the Kasilof Section within 600 feet of mean high tide.

[c] Hours allowed switched from 36 to 51 on July 25.

[d] Included 53 hours in the Kasilof Section within 600 feet of mean high tide and 43 hours in the Kenai/Kasilof/EF sections.

[e] 23 hours were fished in the Kasilof Section within 600 feet of mean high tide.

[f] On August 6 hours switched from 51 to 36 for all of August.

For the management week of June 28 to July 4, the drift gillnet fleet fished the regularly scheduled 12 hour districtwide fishing periods on June 29 and July 2, with a 4 hour extension in the Kasilof Section on July 2. Drifting was also opened for a 9 hour fishing period in the regular Kasilof Section on Tuesday, June 30, and again for 14 hours on Saturday, July 4. 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. Because the Kenai River late-run Chinook salmon sport fishery began the season on July 1 under a no-bait restriction, this action invoked a "paired" restriction in the Upper Subdistrict set gillnet fishery that allowed for no more than 36 hours of fishing time per week, including a 36 hour continuous closure each week beginning between 7:00 PM on Thursday and 7:00 AM on Friday. As was the case in 2014, a strong run of sockeye salmon into the Kasilof River, combined with a below average 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 26,000 sockeye salmon, and the set gillnet fishery caught 113,000 fish. During the week, 39 hours of additional fishing time (beyond the June 29 regular period) was allowed in the set gillnet fishery (Table 4; Figure 6); the 36 hour "Friday" no fishing window was fulfilled. Sockeye salmon passage into the Kasilof River through July 4 had reached

170,015 fish, which was the second highest passage ever measured through that date. Typically, passage into the Kasilof River through July 4 is about 30% complete, so passage of more than 170,000 fish on this date meant the upper end of the BEG of 340,000 fish would probably be exceeded. The Kenai River sockeye salmon sonar project began enumeration activities on July 1; the total passage estimate through July 4 was 25,785 fish.

During the management week of July 5–11, the drift fishery was open 3 days in part or all of the Central District and 3 days in the Kasilof River Special Harvest Area (KRSHA). On Monday, July 6, drifting was open for a 12 hour districtwide period followed by 4 hours in the regular Kasilof Section. On July 7 and July 18, drifting was opened for a total of 24 hours in the KRSHA, with a 3 hour period in the KRSHA on July 10. The regular fishing period on Thursday, July 9, was restricted to Drift Area 1 and the Expanded Kenai/Kasilof sections per the CDDGFMP (Figures 7 and 8). Finally, a 15 hour fishing period was provided in the Expanded Kenai/Kasilof sections on Saturday, July 11. 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 6. The KRSHA was open to set gillnetting for 29 hours on July 7–8 and again for 8 hours on July 10–11. The first fishing period of the year for set gillnetting in the Kenai and East Foreland sections occurred on Thursday, July 9, when a 12 hour period was allowed in the entire Upper Subdistrict. On Saturday, July 11, the Upper Subdistrict was again open for 15 hours. During the week, the drift gillnet fishery harvested approximately 53,000 sockeye salmon in areas outside the KRSHA, with approximately 5,000 sockeye salmon taken in the KRSHA (Appendix A4). In the Upper Subdistrict setnet fishery, approximately 110,000 sockeye salmon were harvested outside the KRSHA, with 28,000 fish taken in the KRSHA (Appendix A4). Sockeye salmon passage in the Kenai River through July 11 was estimated to be approximately 122,000 fish, and the Kasilof River passage estimate now stood at 228,000 fish, which was the highest passage estimate ever measured through that date (Appendix A2).

The week of July 12–18 was managed similarly to the previous week, with most EO action taken with the intent of slowing the rate of sockeye salmon passage into the Kasilof River. The setnet fishery was still being prosecuted under a 36 hour weekly limitation due to a below average Chinook salmon run into the Kenai River. During the week, the drift fleet fished on 6 different days. By regulation, the drift period on Monday, July 14 was restricted to Drift Area 1 and the Expanded Kenai/Kasilof sections. The Expanded Kenai/Kasilof sections were opened for 10 hours on July 14 and the Expanded Kenai/Kasilof and Anchor Point sections (Figure 4) were open for 12 hours on July 16. The KRSHA was open to drifting for a total of 36 hours over 4 different days during the week. In the setnet fishery, the entire Upper Subdistrict was open for 10 hours on July 14 and 12 hours on July 16. The Kasilof Section was opened for 12 hours on July 15, but limited to fishing within 600 feet from the mean high tide mark, which was the first time this fishery was ever opened in this limited area. On Saturday, July 18, the Kasilof Section only was opened for 12 hours, but held to within 1 half-mile of shore. The 600 foot and half-mile fisheries were opened to focus harvest on Kasilof River sockeye salmon while limiting the harvest of Kenai River Chinook salmon. The KRSHA was opened to set gillnetting for a total of 46 hours on 4 different days during the week. Additionally, during the week, a total of 48 hours of setnet fishing time was provided outside the KRSHA, with 12 of those hours occurring in the Kasilof Section within 600 feet of shore (Table 4). While this exceeded the 36 hours of fishing

time provided for in the KRLKSMP, the UCISMP (5 AAC 21.363(e)) allows for a departure from specific provisions in management plans to achieve established escapement goals. During the week, drifters harvested only 117,000 sockeye salmon outside the KRSHA and 10,000 fish in the KRSHA (Appendix A4). Setnetters harvested about 168,000 sockeye salmon outside the KRSHA and 39,000 in the KRSHA (Appendix A4). Sockeye salmon passage estimates in the Kenai River for the week showed about 128,000 fish entered the river for a cumulative passage estimate through July 18 of 250,000 fish (Appendix A2). Typically, Kenai River sockeye salmon passage is about 30% complete by this date, which projected a final passage of 825,000 fish, well short of the 1,000,000 minimum inriver target for the expected run size. In the Kasilof River, approximately 63,000 sockeye salmon were enumerated at the sonar site, for a season total through July 18 of 292,000 fish (Appendix A2). Based on these data, which showed the Kasilof River sockeye salmon run to be 59% complete on average through July 18, the projected final sonar passage would surpass 490,000 fish, which is substantially above the upper end of the both the BEG (340,000) and OEG (390,000).

Similar to the previous 2 weeks, management actions taken during the week of July 19–25 were again aimed primarily at slowing the rate of sockeye salmon escapement into the Kasilof River while closely monitoring Kenai River Chinook salmon passage. During the week, drift gillnetting was open on 6 different days. The regularly scheduled period on Monday, July 20, was restricted to Drift Area 1 and the Expanded Kenai/Kasilof sections, which fulfilled the CDDGFMP that restricts drifting to no more than this area during 1 of the 2 regularly scheduled fishing periods during the week. On July 23 and July 25 additional dayswere opened in the Expanded Kenai/Kasilof/Anchor Point sections, and 3 days of fishing (41 hours) were opened in the KRSHA. The entire Upper Subdistrict set gillnet fishery was open on 3 days (July 20, July 23, and July 25) for a total of 40 hours, but the Kasilof Section only was allowed to fish within 600 feet of shore on 3 days (July 19, July 21, and July 22) for a total of 53 hours. Finally, the KRSHA was open to set gillnetting on 3 days during the week for a total of 60 hours. Late in the management week, an assessment of Chinook salmon passage into the Kenai River indicated the inriver run would exceed 22,500 fish, which allowed for bait to be introduced back into the sport fishery, beginning Saturday, July 25 (Robert Begich, Sport Fish Biologist, ADF&G, Soldotna; personal communication). This assessment of Chinook salmon abundance also returned management of the Upper Subdistrict set gillnet fishery to provisions of the KRLRSMP, which allowed for Monday and Thursday regular 12 hour fishing periods, plus up to 51 additional fishing hours per week. During the week, the drift gillnet fishery harvested 297,000 sockeye salmon outside the KRSHA and 13,000 fish inside the KRSHA (Appendix A4). The set gillnet fishery harvested 294,000 sockeye salmon outside the KRSHA and 22,000 inside the KRSHA (Appendix A4). Sockeye salmon passage estimates in the Kenai River reached 617,000 fish through July 25 (Appendix A2). With the run typically 55% complete by this date, the final projection of inriver passage was approximately 1.1 million sockeye salmon, which was very near the midpoint of the inriver goal of 1.0–1.2 million fish. In the Kasilof River, sonar estimates of passage reached 367,000 fish through July 25, which projected a final passage estimate of nearly 477,000 fish and was above the upper end of the BEG of 340,000 sockeye salmon (Appendix A2). Again, similar to the previous week, the total number of hours fished by the Kasilof Section set gillnet fishery outside the KRSHA exceeded the 36 hour maximum provided for in the KRLKSMP, or even the 75 hours provided for in the KRLSSMP. However, of the total of 93 hours fished in the Kasilof Section, 53 hours were fished in those waters within 600 feet of

mean high tide, and met with the intent of the UCISMP of managing to established escapement goals as the primary objective.

During the week of July 26–August 1, drift gillnetting was open all 7 days, with 5 of the 7 fishing days occurring in the Expanded Kenai/Kasilof/Anchor Point sections. For the other 2 days, drift gillnetting was allowed in a broader area of the Central District in response to strong Kenai and Kasilof river sockeye salmon passage. On Monday, July 27, drifting was open in Drift Gillnet Area 1 and the Expanded Kenai/Kasilof sections, and on Saturday, August 1, a 12 hour districtwide fishing period was allowed. This was the first districtwide period since July 6. Management of the Upper Subdistrict set gillnet fishery was benefitted by additional fishing hours available in the KRLSSMP as a result of Chinook salmon passage estimates in the Kenai River that indicated the run would exceed 22,500 fish. The entire Upper Subdistrict set gillnet fishery was open on 5 different days during the week, fishing both 12 hour regular periods on July 27 and July 30, plus all 51 additional fishing hours encompassing three 15-hour days on July 26, July 29, and August 1, with 3 hour extensions to each of the regular fishing periods. The Kasilof Section only was opened for 8 hours on July 28 and again for 15 hours on July 31, with both of these fishing periods held to within 600 feet of mean high tide. Finally, the KRSHA was open to set gillnetting for a total of 72 hours and was open to drift gillnetting for a total of 43 hours on parts or all of the 7 days during the week. The estimated weekly sockeye salmon harvest from drift gillnetting during the week outside the KRSHA was 278,000 fish, with 526 fish being harvested in the KRSHA (Appendix A4). The Upper Subdistrict set gillnet fishery harvested approximately 342,000 sockeye salmon outside the KRSHA, with about 8,100 fish inside the KRSHA (Appendix A4). Sockeye salmon passage in the Kenai River through Saturday, August 1, had reached 933,000 fish; the estimated passage in the Kasilof River through the same date was 414,000 fish (Appendix A2). Final projections of the total inriver passage into the Kenai River now suggested the upper end of the inriver goal of 1.2 million fish would be exceeded.

The next to last management week of the season occurred from August 2 to 8. During the week, the drift fishery was opened on 6 days, with 12 hour districtwide periods occurring on August 3, August 6, and August 8. The extra districtwide drift period opened on Saturday, August 8, was in response to strong sockeye salmon passage in both the Kenai and Kasilof rivers, as well as adequate coho salmon enumeration in Northern Cook Inlet watersheds. The Expanded Kenai/Kasilof/Anchor Point sections were opened for a total of 42 hours over 3 days, August 2, August 5, and August 7. Drifting was open in the KRSHA on August 2 for August 17 hours. The Upper Subdistrict set gillnet fishery was open for 5 different days during the week for a total of 70 hours. However, the 15 hour fishing period on August 2 was only opened in the Kenai and East Foreland sections, as harvest reports from various fishermen during the day on August 1 in the Kasilof Section indicated fairly slow fishing. In order to slow the passage of sockeye salmon into the Kasilof River, the KRSHA was also open for set gillnetting for 17 hours on August 2. The 12 hour regular period on August 3 was extended 4 hours and fishing was open in all of the Upper Subdistrict on August 5, August 6, and August 8. On August 4, estimates of the final escapement of Chinook salmon in the Kenai River suggested the final escapement (not inriver passage) might fall below 22,500 fish, which moved management of the set gillnet fishery back to the KRLKSMP. Based on these escapement projections, provisions in the management plan allowed for no more than 36 hours of fishing for the remainder of the year (beginning on August 5). Regular Monday–Thursday set gillnet fishing periods were also no longer in effect. Thus, the 24 hours of total fishing time allowed on August 6 and August 8 fell within the guidelines of the

KRLKSMP. For the week, drifters harvested 187,000 sockeye salmon outside the KRSHA and only 295 fish in the KRSHA (Appendix A4). Upper Subdistrict setnetters harvested approximately 206,000 sockeye salmon outside the KRSHA and 3,500 fish inside the KRSHA (Appendix A4). Sockeye salmon passage estimates in the Kenai River had grown to 1.2 million through August 8, and were at 447,000 in the Kasilof River (Appendix A2). All run timing models continued to show the UCI 2015 sockeye salmon run would be one of the latest runs on record.

The final management week of the 2015 season was August 9–15. By regulation, drift gillnetting is restricted to Drift Areas 3 and 4 (Figure 9) after August 15 and the Upper Subdistrict set gillnet fishery closes no later than August 15. Drift gillnetting was opened for the 2 scheduled 12 hour regular fishing periods on August 10 and August 13 plus 2 additional 12 hour days in the Expanded Kenai/Kasilof/Anchor Point sections on August 9 and 12. Kenai River Chinook salmon passage at the beginning of the week had improved enough that projections indicated the final escapement would achieve 22,500 fish. Thus, management of the fishery returned to provisions of the KRLSSMP. Three 12-hour fishing periods were opened for set gillnetting in the Upper Subdistrict, with the final period of the year occurring Wednesday, August 12. The August 12 fishing period was opened only in the Kenai and East Foreland sections, as the previous 2 fishing periods in the Kasilof Section produced sockeye salmon harvests that were less than one-percent of the season total harvest in this area, thus closing the season in the Kasilof Section after the fishing period on August 10. According to 5 AAC 21.310(c)(ii) *Fishing Seasons.*, from August 11 through August 15, the set gillnet fishery is open for regular periods only. Emergency Order No. 50 moved the regular fishing period that would have been fished on Thursday, August 13, to Wednesday, August 12, to maximize sockeye salmon harvest opportunity. The entire Upper Subdistrict set gillnet fishery closed for the season after the August 12 fishing period. During the week, drift gillnetters harvested 14,000 sockeye salmon and setnetters harvested approximately 69,000 fish (Appendix A4).

The season total sockeye salmon harvest for drift gillnetters was approximately 1.01 million fish, which represented 38% of the UCI total sockeye salmon harvest. This was the second lowest proportion of the total harvest by the drift fleet since 1966 (Appendix B2). The Upper Subdistrict set gillnet total sockeye salmon harvest in 2015 was approximately 1.48 million fish, which was nearly 56% of the UCI total harvest. This represented the second highest percentage of the harvest taken by Upper Subdistrict setnetters since 1966 (not including 1989, the year of the Exxon Valdez oil spill). The total harvest from both gear types in the KRSHA was 130,047 sockeye salmon and 515 Chinook salmon (Appendices A3 and A4).

For the 2015 season, sockeye salmon passage was monitored in the Kasilof River through August 14, producing a final estimate of 470,677 fish, or the fourth highest passage ever measured (Appendix B10). In the Kenai River, sonar operations were conducted through August 26, producing a final passage estimate of 1,709,050 fish. Sockeye salmon passage was monitored through August 26, or the third latest date the sonar program was ever operated in the Kenai River. The final passage estimate of 1.71 million fish was the sixth highest sockeye salmon passage in the Kenai River since 1979 (Appendix B10). The Anchor Point offshore test fish project indicated the 2015 UCI sockeye salmon run was 10 days later than average, which meant the 2015 run was the latest run ever observed in Cook Inlet. Chinook salmon passage was monitored in the Kenai River through August 20, with a final passage estimate of 23,705 fish.

After sport harvest above the sonar site is subtracted, the final estimate of escapement is expected to be very close to 22,500 fish.

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 9). Chinitna Bay may open to drift gillnetting by EO, which it did in 2015 on Tuesdays and Fridays from 7:00 AM until 7:00 AM, beginning on Tuesday, August 18, 2015 (EO No. 53). For the 2015 season, the drift gillnet fishery harvested 628 sockeye salmon in Chinitna Bay (Appendix A4).

Kalgin Island Subdistrict

The estimated sockeye salmon harvest in the Kalgin Island Subdistrict in 2015 was 59,741 fish. Approximately 5,600 fish, or 9% of the season total, were 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 2015 Kalgin Island Subdistrict sockeye salmon harvest was 4% less than the average annual harvest of approximately 62,000 fish from the previous 10 years 2005–2014). In 2015, a remote video system was once again used to estimate sockeye salmon escapement into Packers Lake. The video system was in operation from June 17 through September 8 and produced a sockeye salmon escapement estimate of 28,072 fish. The SEG for Packers Lake sockeye salmon is 15,000–30,000 fish. Based on these data, 3 additional fishing periods (August 1, 8, and 15), beyond Monday and Thursday regular periods, were provided in the Kalgin Island Subdistrict; extra fishing time in the Kalgin Island Subdistrict is to be limited to no more than 1 additional fishing period per week per 5 AAC 21.370. *Packers Creek Sockeye Salmon Management Plan*. The sockeye salmon harvest from the 3 extra days of fishing was approximately 8,800 fish.

COHO SALMON

The 2015 UCI commercial coho salmon harvest of 216,032 fish was approximately 26% greater than the recent 10-year (2005–2014) average annual harvest of approximately 171,000 fish, but approximately 26% less than the 1966–2014 average annual harvest of 293,291 coho salmon (Appendix B3).

The total coho salmon harvest in the UCI drift gillnet fishery for 2015 was 130,720 fish, which was 29% greater than the 2005–2014 average annual harvest of 101,097 fish. Chinitna Bay was opened to drift gillnetting on Tuesdays and Fridays beginning on Tuesday, August 18. The estimated coho salmon harvest by drift gillnetters in Chinitna Bay was approximately 3,467 fish (Appendix A5).

The exvessel value of coho salmon from the 2015 UCI commercial fishery was $753,000 or 3.1% of the total exvessel value (Appendix B7). The average price paid for coho salmon was estimated at $0.60/lb (Appendix B11), which was fairly close to the average price paid per pound during the previous 10 years of $0.66/lb. Due to increases in the price paid for coho salmon in August, it is possible the exvessel value was greater than what was estimated here.

PINK SALMON

Pink salmon runs in UCI are even-year dominant, with odd-year average annual harvests typically about 15% of even-year harvests (Appendices A6 and B4). The 2015 UCI commercial pink salmon harvest of 48,004 fish was 42% less than the average annual harvest of 83,421 fish from the previous 10 years of odd-year harvests. Pink salmon harvest was probably affected by

management plan restrictions to both the Central District drift and the Upper Subdistrict set gillnet fisheries. Based on an average price of $0.25/lb (Appendix B11), the estimated exvessel value for the 2015 pink salmon harvest was $39,000, or 0.2% of the total exvessel value (Appendix B7).

CHUM SALMON

A total of 275,960 chum salmon were harvested by UCI commercial fishermen in 2015, which was 121% greater than the previous 10-year average annual harvest of 125,000 fish (Appendix B5) and the largest harvest since 1995. Even so, 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. Considering the fact that chum salmon harvests are affected when the drift fleet is restricted out of the center of the inlet, the 2015 harvest most likely indicates the 2015 chum salmon run was well above average.

Chinitna Bay was opened by EO No. 53 to set and drift gillnetting for 12 hour fishing periods on Tuesdays and Fridays, beginning on Tuesday, August 18, after it was determined that the chum salmon SEG of 3,800–8,400 fish in the Chinitna River had been exceeded. Approximately 1,200 chum salmon were harvested by drift and set gillnets in Chinitna Bay in 2015 (Appendix A7).

The 2015 exvessel value for chum salmon was $726,519, or 3.0% of the overall exvessel value of the 2015 fishery (Appendix B7). The average price paid for chum salmon in 2015 was estimated to be $0.40/lb (Appendix B11) or the lowest price in the past 6 years.

PRICE, AVERAGE WEIGHT, AND PARTICIPATION

The estimated average price per pound paid to UCI commercial fishermen for their harvest in 2015 reflected a reduction in pricing for all species other than pink salmon (Appendix B11). The estimate of $1.60/lb for sockeye salmon was less than the $2.25/lb paid in 2013–2014, but was still the second highest price paid from 1993 to 2012. Calculating the average price for what fishermen receive for their harvest is difficult (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 2015.

The average weights calculated from the 2015 UCI commercial harvest showed that all 5 species had average weights that were smaller than averages from the previous 10 years (Appendices A14 and B12). The 16.7 pound average weight of Chinook salmon from all commercial fisheries in 2015 was larger than the previous 2 years, but still 33% less than the 1970–2014 average of 24.9 pounds and 13% less than the average annual weight of 19.3 pounds from the previous 10 years. The smaller average weights for Chinook salmon in 2015 could be attributed to the age of the fish in the harvest. From 2001 to 2015, the age composition of Chinook salmon harvested in the Upper Subdistrict set gillnet fishery averaged 44% for fish that had spent 2 years or less in salt water. This is twice the 1987–2000 annual average of 22% for these age classes (Figure 10; Appendix A15). In 2015, the proportion of younger-aged Chinook salmon captured by Upper Subdistrict set gillnetters was 49% of their total harvest. This unusually high proportion of younger, smaller fish in the harvest helps explain the lower than average weight of all

commercially harvested Chinook salmon in UCI in 2015. For sockeye salmon, the average weight of 5.3 pounds was the second smallest harvest since 1970. Although it is unclear why sockeye salmon returned much smaller than average in 2015 (1970–2014 average was 6.3 pounds), smaller fish were observed throughout the state. Unlike Chinook salmon, the age-composition of the 2015 sockeye salmon run was not atypical, so the smaller sized fish were a reflection of a change in ocean rearing conditions. Moreover, the average size of coho, pink, and chum salmon were all smaller than both the recent 10-year average and long-term historical averages.

The Commercial Fisheries Entry Commission (CFEC) reported that 569 active drift gillnet permits were issued in 2015, with 409 (72%) issued to Alaskan residents (Appendix B13). In the setnet fishery, CFEC reported that 734 permits were issued, with 624 (85%) issued to Alaskan residents. In 2015, 492 drift gillnet permit holders and 507 set gillnet permit holders reported fishing in UCI (Appendix A8). In the drift fishery, 60 vessels and 79 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 24 shore-based processors purchased UCI fishery products in 2015, as well as 13 direct marketing vessels, 2 catcher-exporters, 2 buyer-exporters, 1 floating processor, and 49 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 2015 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 Cook Inlet Aquaculture Association (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 of Alaska 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 2015, CIAA released approximately 1,497,000 unfed sockeye salmon fry (0.09 g) into Hidden Lake (http://www.ciaanet.org). These fry were otolith-marked, which allowed for identification and enumeration of hatchery stocks when the smolt emigrated to sea. From May 18 to June 28, 2015, CIAA enumerated approximately 335,923 sockeye salmon smolt emigrating Hidden Lake, of

which approximately 55% were estimated to be of hatchery origin, with 95% of the emigrants being age-1 smolt (Wizik and Cherry 2016). Adult salmon are also sampled and examined for hatchery otolith marks when they swim through the weir at Hidden Creek. In 2015, CIAA enumerated approximately 19,400 adult sockeye salmon returning to Hidden Lake, of which 68% were estimated to be of hatchery origin. Of the 19,400 fish that returned to Hidden Lake, approximately 1,900 fish were retained for otolith collection and hatchery brood stock, leaving 17,500 fish to escape into the lake (Wizik and Cherry 2016).

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 2015, approximately 432,664 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, 1997–2015.

	Total			Spring fry	Fall fry	Smolt	Smolt emigration	
Year	run	Weir	Spawners	release	release	release	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				
2003	149,586	91,743	86,858	3,589,000			114,654	2,340
2004	42,160	22,157	20,065	5,000,000			251,195	25,632
2005	21,967	14,215	12,140	1,742,300			135,739	22,623
2006	36,567	32,562	26,712	444,200	426,000		205,135	19,307
2007	48,277	27,948	23,845	3,812,400	702,500	315,700	278,351	30,928
2008	26,872	19,339	19,314	3,610,000		433,000	592,919	38,785
2009	121,965	83,477	83,477					
2010	209,000	126,826	126,826					
2011	119,528	66,183	66,183				269,020	23,722
2012	32,460	18,813	18,713				178,081	11,857
2013	25,082	18,912	18,315				422,258	8,241
2014	64,729	43,915	43,824				271,557	7,828
2015	141,833	102,309	102,124				424,112	8,552

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

Susitna River

The sockeye salmon total run forecast for the Susitna River in 2015 was only 276,000 fish (Table 3), which was 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 was 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 2015 sockeye salmon actual run to the Susitna River was estimated at 427,000 fish (using the escapement and the mean harvest rate estimated from genetic stock composition of the commercial harvest in 2007–2010; Table 6). The 2015 run was about 57% greater than the preseason forecast (Table 3). All 3 sockeye salmon escapement goals in the drainage were met or exceeded; at Chelatna Lake, the estimate was 69,897 fish (escapement goal of 20,000–65,000); at Judd Lake 47,934 fish were enumerated (escapement goal is 25,000–55,000); and at Larson Lake, the weir count was 23,185 fish (escapement goal is 15,000–30,000; Table 1).

Table 6.–Upper Cook Inlet sockeye salmon run, 2015.

System	Commercial harvest	Escapement	Other harvest	Total
Crescent River	34,645	75,978	5	110,628
Fish Creek	19,841	102,309	19683	141,833
Kasilof River	557,988	484,138	131,284	1,173,410
Kenai River	1,699,862	1,329,385	867,216	3,896,463
Susitna River	119,152	312,751	1,824	433,727
All others	177,866	377,400	34,583	589,849
Unallocated				2,536
Total	2,609,354	2,681,961	1,054,595	6,348,446

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 undercounting sockeye salmon 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.

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 probably 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 (Hughes[3]). 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 (Table 5), ranging from as few as 25,000 fish to as many as 209,000. Consequently, achieving the escapement goal for this system has been inconsistent (Appendix B10). From 1982 to 2001 (20 years), the escapement goal was a point goal of 50,000 fish; during this time the goal was met 15 times (75%) and missed 5 times (25%). Beginning in 2002, the goal became an SEG of 20,000–70,000 fish, with escapements meeting or exceeding the goal range 9 times (64%), and failing to achieve the goal 5 times (36%). The 2015 total run forecast for Fish Creek sockeye salmon was 61,000 fish (Table 3; Appendix C1), and the actual run was approximately 121,000 fish (Tables 5 and 6). The 2015 escapement estimate of 102,000 fish was more than 30,000 fish above the upper end of the SEG (Table 1), even with the Fish Creek personal use dip net fishery opened from July 24 to July 31. Using the 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 2015, approximately 20,000 Fish Creek sockeye salmon were estimated to have been harvested commercially, which represents a harvest rate of 14% for this stock.

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[3] 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).

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 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 (Table 5). 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). In 2015, approximately 433,000 smolt were estimated to have emigrated Big Lake (Table 5).

2016 Sockeye Salmon Outlook

A run of 7.1 million sockeye salmon was forecasted to return to UCI in 2016, with a harvest by all user groups of 5.3 million fish and a commercial harvest expectation of approximately 4.1 million fish (Appendix C2). The forecasted commercial harvest in 2016 was 1.1 million greater than the 20-year average annual harvest.

The run forecast for the Kenai River was approximately 4.7 million, which was 1.0 million greater than the 20-year average annual run of 3.7 million. A sibling model based upon the return of age-1.2 salmon in 2015 (534,000; 404,000 20-year average) predicted a return of 3.1 million age-1.3 salmon. A smolt model based upon the abundance of age-2 smolt emigrating from the Kenai River in spring 2013 (5.6 million) predicted a return of 1.0 million age-2.3 salmon. The predominant age classes in the 2016 run forecast are age 1.3 (65%), age 1.2 (8%), and age 2.3 (21%). The 10-year MAPE for the set of models used for the 2016 Kenai sockeye salmon run forecast is 20% (Appendix C2).

The Kasilof River sockeye salmon run forecast was 861,000 fish, which was 13% less than the 20-year average of 987,000. Sibling models were used to forecast the major age-classes of the 2016 run because the MAPE for the sibling models were lower than all other models. The sibling model considered the abundance of age-1.2 salmon in 2015 to project a return of 215,000 age-1.3 salmon in 2016. The sibling model also forecasted a return of 262,000 age-1.2 salmon in 2016

based upon the abundance of age 1.1 salmon in 2015. And, the sibling model used the abundance of age-2.1 salmon in 2015 to project a return of 256,000 age-2.2 salmon in 2016. The predominant age classes in the 2016 run forecast were age 1.2 (31%), age 1.3 (25%), and age 2.2 (30%). The 10-year MAPE for the set of models used for the 2016 Kasilof sockeye salmon run forecast is 17%. (Appendix C2).

The Susitna River sockeye salmon run forecast was 372,000 fish, which was 12% less than the 10-year average of 421,000. This forecast was derived using mean return per spawner by age class for brood years 2006–2011 and mark–recapture estimates of spawner abundance in 2010–2012. Sonar estimates of spawner abundance 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. The 3 year MAPE for this forecast method is 21%. The predominant age classes in the 2016 Susitna sockeye salmon run forecast are age 1.2 (11%) and age 1.3 (67%) (Appendix C2).

The Fish Creek sockeye salmon run forecast was 110,000 fish, which was 31% greater than the 20-year average of 84,000. Sibling models were used to forecast the returns of age-1.2, -1.3, -2.2 and -2.3 salmon in 2016. The predominant age classes in the 2016 Fish Creek run forecast are age 1.2 (57%) and age 1.3 (29%). The 10-year MAPE for the Fish Creek sockeye salmon run forecast is 62% (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 2015 UCI harvest of nearly 48,000 pink salmon was 59% less than the 1997–2013 average odd-year harvest of 117,000 fish (Table 7). From 1967 to 2015, odd-year harvests have ranged from a low of 15,000 fish in 1991 to a high of 554,000 in 1977 (Appendix B4).

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.

Table 7.–Upper Cook Inlet pink salmon commercial harvest and Deshka River escapement, 1996–2015.

	UCI Pink Salmon			
	Commercial Harvest		Deshka River Enumeration	
Year	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	642,879		78,111	
2015		47,997		6,328

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

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 2015 UCI commercial chum salmon harvest of approximately 276,000 fish was 121% greater than the 2005–2014 average annual harvest of 125,000 fish (Appendix B5). However, the 2015 harvest was approximately 36% less than the 1966–2014 average annual harvest of 429,000 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 UCI is an aerial survey SEG in Clearwater Creek (Chinitna Bay) of 3,800–8,400 fish (Fair et al. 2007). This SEG has been met or exceeded in 13 of 14 years since 2002. As a result, drift gillnetting has been opened by EO in Chinitna Bay each of the past 9 years per 5 AAC 21.320(c)(1). An aerial survey of Clearwater Creek/Chinitna River on August 14, 2015, estimated that 10,790 fish had escaped, meaning the SEG had been exceeded. Therefore, EO No. 53 was issued opening set and drift gillnetting in the Chinitna Bay Subdistrict on Tuesdays and Fridays from 7:00 AM until 7:00 PM, beginning on Tuesday, August 18.

Although 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 2015 chum salmon run was likely an above average sized run; the 2015 chum salmon harvest of 276,000 fish was the largest since 1995 (Appendix B5). 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 of 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 run[4] (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 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. Recent years' coho salmon harvests have undoubtedly been affected as a result of restrictions to the Upper Subdistrict set gillnet fishery for Chinook salmon conservation and by modifications made to the CDDGFMP at the 2014 BOF meeting (Shields and Dupuis 2015).

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 2015. However, the SEG was not achieved from 2009

[4] 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.

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 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 (Ivey et al. 2009). In 2012, the Little Susitna River weir was moved downstream approximately 40 miles to its current location at river mile 32.5. This provided managers with timelier inseason information of coho salmon passage.

Table 8.–Coho salmon escapement and enumeration, 1996–2015.

Year	Cottonwood Creek	Fish Creek	L. Susitna River	Wasilla Creek	Deep Creek	OTF CPUE[c]
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
2015		7,912	12,756			277

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

[b] Weir washed out, count incomplete.

[c] OTF CPUE represents the number of fish caught in 100 fathoms of gillnet in one hour in the southern offshore test fishery.

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 Hasbrouck[5]). 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, grant funding obtained from the U.S. Fish and Wildlife Service allowed the weir to be operated through the entire coho salmon run. At the 2011 BOF

[5] 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.

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).

Although 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 fishery[6]. In 2015, coho salmon runs in many Northern Cook Inlet watersheds, especially the Little Susitna River and Knik Arm streams, appear to have been above average.

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 (26 years), the escapement goal has been met or exceeded 21 years, or 81% of the time. The coho salmon escapement goal at Fish Creek has been achieved or exceeded 18 years out of the 21 years (86%) it has been in existence, including every year for the past 16 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. In the year 2000, the goal was changed to an SEG of 400–700 fish; since then, the SEG has been achieved or exceeded 12 times (75%).

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 (Carlon 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.

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[6] 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.

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% and 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," and 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 (Massengill[7]). 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.

Chinook Salmon

Northern District

The Northern District has approximately 345 streams and rivers where Chinook salmon are present, with an estimated total annual run in the Susitna River drainage 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, studies are underway to document salmon abundance in the Susitna drainage. Based on these investigations, the estimated Chinook salmon abundance in the Susitna River upstream of the Yentna River was approximately 89,463 fish in 2013 and 68,225 fish in 2014 (Alaska Energy Authority 2014 and 2015). Additionally, the estimated Chinook salmon abundance in the Yentna River was approximately 22,267 fish in 2014 (Alaska Energy Authority 2015). The average harvest in the Northern District directed commercial Chinook salmon fishery for the previous 10 years (2005–2014) was approximately 2,300 fish (Table 2), or about 10% of the total Northern District Chinook salmon harvest (including sport harvest). Based on recent estimates of Chinook salmon abundance in the Susitna River only, the commercial fisheries average annual harvest rate would

[7] 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.

range between 1.2% and 2.4%. If all northern Cook Inlet Chinook salmon stocks were considered, the commercial fisheries harvest rate would be even less.

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 a failure to meet the SEG over several consecutive years. The BOF reviewed these ADF&G recommendations at the 2011 UCI BOF 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; and 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 2011–2015 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, from 2013 to 2015, the first fishing commercial fishing period of the year has been closed as well as a reduction in hours fished for the remaining fishing periods (please refer to the Chinook salmon commercial fishery section for actions taken in 2015; Shields and Dupuis 2013). However, in both 2014 and 2015, inseason run strength data from the Deshka River warranted a relaxation of the hour restrictions for the final 2 periods.

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 EO. 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.

Table 9.–Deshka River Chinook salmon passage, 1995–2015.

Year	Passage	Year	Passage
1995	10,044	2006	31,150
1996	14,349	2007	18,714
1997	35,587	2008	7,533
1998	15,409	2009	11,960
1999	29,649	2010	18,594
2000	35,242	2011	19,026
2001	29,004	2012	14,088
2002	29,427	2013	18,532
2003	40,069	2014	16,335
2004	57,934	2015	24,395
2005	37,725		

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

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). Although 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 6 consecutive years. In 2015, the final Chinook salmon escapement estimate of more than 24,000 fish was near the upper end of the SEG range of 13,000–28,000 fish (Table 9).

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 18 of the past 21 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.

At their annual work session meeting in October 2012, the BOF formed the Cook Inlet Task Force. The mission of the task force was to evaluate the *Kenai River Late-Run Chinook Salmon*

Management and try to come to consensus on a set of recommended adjustments that would allow for both sport and commercial fishing opportunity 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 management plan. A list of suggested changes was developed, but no consensus was reached on how to proceed. However, 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 (at RM9 and RM14), 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. 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 (Shields and Dupuis 2013).

The BOF made numerous changes to the KRLKSMP at their 2014 UCI finfish meeting (Shields and Dupuis 2015) that impacted prosecution of sport and commercial fisheries in 2014. Similar to 2013, both fisheries were restricted in order to reduce the harvest of late-run stocks. The estimated final escapement of late-run Kenai River Chinook salmon in 2014 was approximately 16,000 fish. As stated earlier in this report, the 2015 estimated escapement of Kenai River late-run Chinook salmon was approximately 22,500 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). The SEG of 15,000–30,000 fish was unchanged for the 2015 season. ADF&G will conduct an evaluation of the current escapement goals and present any recommended changes 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 has been exceeded in 15 out of the 29 years escapements have been monitored. However, similar to other Chinook salmon stocks in Cook Inlet, Kenai River Chinook salmon are currently experiencing a period of lower abundance.

COMMERCIAL HERRING FISHERY

The 2015 UCI herring fishery produced a harvest of 26.2 short tons[8], with 94% of the harvest coming from the Upper Subdistrict (Appendix B8). This was the third 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 (2005–2014). 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 2015, comprising 90% of the 266 samples collected from 4 sample dates. The average by age-class was age 4 (4%), age 5 (13%), age 6 (30%), age 7 (34%), age 8 (13%), age 9 (4%) and age 10 (1%). 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, and harvest of 26.2 short tons, the estimated exvessel value of the 2015 commercial herring fishery was approximately $52,000.

COMMERCIAL SMELT FISHERY

From 1978 to 2014, 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 2015, 16 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 2015 was approximately 107.0 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 Saturday, May 23, 2015, an EO was issued closing the commercial smelt fishery for the 2015 season as the total harvest reached the 100 ton limit.

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. Using this estimate of price per pound and the harvest of 213,934 pounds, the estimated exvessel value is approximately $200,000.

Age-composition analyses (determined from otoliths) of samples collected from the 2006 to 2015 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 2015 harvest ranged from an average of 179 mm to 214 mm, with an overall average of 194 mm, which was very similar to the average lengths from previous years. In 2015, the percent female was only 6%, which was significantly

[8] The Alaska Board of Fisheries requires that inseason catch and aerial survey biomass estimates be calculated and reported in short tons. The English short ton = 2,000 lb or 907.2 kg.

less than the average of 44% female from years 2006–2014 (Appendix A20). 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.

Table 10.–Commercial smelt harvest, 1978, 1980, 1998–1999, and 2006–2015.

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
2015	213,934	107.0	4

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 2015 harvest, taken primarily from the Polly Creek/Crescent River area, was approximately 319,000 pounds in the shell (Appendices A23 and B9). A total of 20 diggers participated in the fishery. Harvest was reported from 63 different days from May 14 to August 5. Diggers were paid an average of $0.66/lb for their harvest, resulting in an exvessel value for this fishery of approximately $210,000. The average clam size from the 2015 harvest was 137 mm, or 5.4 inches (Figure 12). The 2015 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 require 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 2015 harvest for the Tyonek subsistence salmon fishery included 744 Chinook, 237 sockeye, 331 coho, 41 pink, and 5 chum salmon taken by 46 permit holders (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 2015 Yentna River subsistence fisheries harvest was below average and included 563 sockeye, 147 coho, 44 pink, and 56 chum salmon taken by 28 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 2015 was 10,277 fish, which was the largest total harvest ever taken by the educational fisheries. The average annual harvest from 1994 through 2013 was approximately 6,679 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 Sons of the American Legion Post 16, Kasilof Regional 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 2015, the Kenaitze Tribe harvested 20 Chinook, 8,109 sockeye, 63 coho, and 4 pink salmon, for a total of 8,196 salmon (Appendix B16). From 1994 through 2015, the average annual harvest of all salmon by the Kenaitze Indian Tribe was 4,843 fish. The total fish harvest quota for this group is 8,000 fish.

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 2015, the NTC harvested 106

Chinook, 369 sockeye, 313 coho, and 51 pink, salmon The NND reported a harvest of 36 Chinook, 37 sockeye, and 45 coho salmon in 2015 (Appendix B16).

In 2003, another group from Ninilchik, the Ninilchik Emergency Services (NES), applied for and was granted an educational fishery. In 2015, the NES harvested 34 Chinook salmon, 58 sockeye salmon, 44 coho, and 8 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 2015 fishing activities: 50 sockeye, 32 coho, and 26 pink salmon (Appendix B16).

In 2011, the Sons of the American Legion Post 16 applied for and was granted an educational fishery permit. They reported a harvest of 45 sockeye, 3 coho salmon, and 2 pink salmon in 2015 (Appendix B16).

The Kasilof Regional Historical Association applied for an educational permit beginning with the 2008 season. For 2015, they reported the following harvest: 1 Chinook salmon, 32 sockeye, and 43 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 2015 was 13 sockeye salmon, 16 coho salmon, and 21 chum salmon (Appendix B16).

NORTHERN DISTRICT EDUCATIONAL FISHERIES

In the Northern District of UCI, 6 groups have received permits for educational fisheries, these being 1) the Knik Tribal Council, 2) Big Lake Cultural Outreach, 3) Native Village of Eklutna, 4) Native Village of Tyonek, 5) Alaska's Territorial Homestead Lodge, operated by Tim O'Brien, and 6) Chickaloon Native Village (Appendix B16).

The Knik Tribal Council began an educational fishery in 1994 (Sweet et al. 2004). Its harvest in 2015 totaled 43 sockeye salmon, 15 coho salmon, 1 pink salmon, and 21 chum salmon. The peak harvest from this group of 823 fish occurred in 2003 (Appendix B16).

In 2015, Big Lake Cultural Outreach group, which first received a permit in 2004, reported harvesting 25 sockeye salmon, 8 coho salmon, and 1 chum salmon (Appendix B16).

The Native Village of Eklutna was also issued an educational fisheries permit beginning in 1994. They reported a harvest in 2015 of 237 sockeye salmon, 41 coho salmon, 9 pink salmon, and 48 chum salmon (Appendix B16).

The Native Village of Tyonek began an educational fishery in 1997. This educational fishery was denied beginning in 2011 as a result of Chuitna, Theodore, and Lewis rivers Chinook salmon stocks being designated as stocks of management concern by the BOF.

There are 2 additional educational permits in the Northern District that are no longer fishing, these being the McLaughlin Youth Center (permitted in 2012–2013) and the Intertribal Native Leadership (permitted from 2005 to 2007).

Alaska's Territorial Homestead Lodge (Tim O'Brien) 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 2015, the harvest from this fishery was 2 Chinook salmon, 152 sockeye salmon, 29 coho salmon, 53 pink salmon, and 1 chum salmon, for a total of 237 fish (Appendix B16).

The Chickaloon Native Village applied for and received their first educational fishery permit in 2015. However, there was no fishing activity that took place under this permit.

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 4.0 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 2015 personal use harvest data can be found in Appendices A17 and A18, and 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 Monday, June 15, 2015. Because of concerns over Kasilof River Chinook salmon escapement (monitored at a weir located at Crooked Creek Hatchery), EO No. 3 was issued, which reduced the number of hours the fishery was open from 6:00 AM to 11:00 PM to 11:00 AM to 11:00 PM daily, from Monday, June 15, 2015 through Wednesday, June 24, 2015. For the 2015 season, 27,567 sockeye, 61 Chinook, 191 coho, 20 pink, and 2 chum salmon were harvested in this fishery. The average annual harvest during the previous 10 years (2005 to 2014) of Chinook salmon was 150 fish, and the average annual sockeye salmon harvest during this time period was 22,185 fish (Appendix B17)

KASILOF RIVER DIP NET

The Kasilof River dip net fishery was open 24 hours per day from June 25 through August 7, 2015 (44 days), producing an estimated harvest of 89,000 sockeye salmon, which is the largest harvest ever reported in this fishery. The previous 10-year (2005–2014) average annual harvest of sockeye salmon was 63,674 fish. The estimated number of household days fished of 10,346 was also the largest effort ever measured in this fishery, exceeding the 2004–2015 average annual household days fished by nearly 3,600 days. Early in the 2015 season, it became apparent that the upper end of the Kasilof River sockeye salmon BEG (160,000–340,000) would probably be exceeded. Therefore, on Tuesday, June 30, the Division of Sport Fish issued EO No. 2-RS-1-40-15 expanding the area that salmon may be harvested in this fishery beginning on July 1. 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.

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. Prior to the season opening, the Division of Sport Fish issued EO No. 2-KS-1-36-15, which prohibited the retention of Chinook salmon in this fishery in 2015. 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. However, during the latter part of July, Chinook salmon passage into the Kenai River had reached a level where it was estimated that the inriver run would meet or exceed 22,500 fish. Therefore, per EO No. 2-KS-1-47-15, retention of Chinook salmon in the Kenai River personal use dip net fishery was once again allowed beginning on July 25. A few days later, based on inseason assessments of the sockeye salmon run that projected the Kenai River run to exceed 2.3 million fish, EO No. 2-RS-1-51-15 was issued, expanding the hours the Kenai River dip net fishery was open to 24 hours per day, beginning on July 28. The sockeye salmon harvest in 2015 was estimated to be 377,532 fish (Appendix B17). 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 2015 was approximately 261,682 fish.

UNKNOWN FISHERY

Households that failed to indicate which fishery they participated in were estimated as "unknown fishery" (Dunker 2013). In 2015, the total sockeye salmon harvest from all personal use fisheries categorized as "unknown" was 8,626. This was approximately 2% of the total personal use harvest of 522,051 sockeye salmon (Appendix B17).

FISH CREEK DIP NET FISHERY

During the 2015 season, the Division of Sport Fish issued an EO opening the Fish Creek personal use dip net fishery from July 24 to July 31. As stated in the EO, more than 21,000 sockeye salmon were estimated to have passed through the Fish Creek weir through July 22. 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 2015 fishery was 19,260 sockeye salmon. By the end of the season, approximately 102,000 sockeye salmon were estimated to have escaped Big Lake in 2015 (Table 1; Appendix B10).

BELUGA RIVER SENIOR CITIZEN DIP NET FISHERY

In 2015, 10 permit holders participated in the Beluga River senior citizen dip net fishery. The total harvest was 82 salmon (65 sockeye and 17 coho salmon; Appendix A17).

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FIGURES

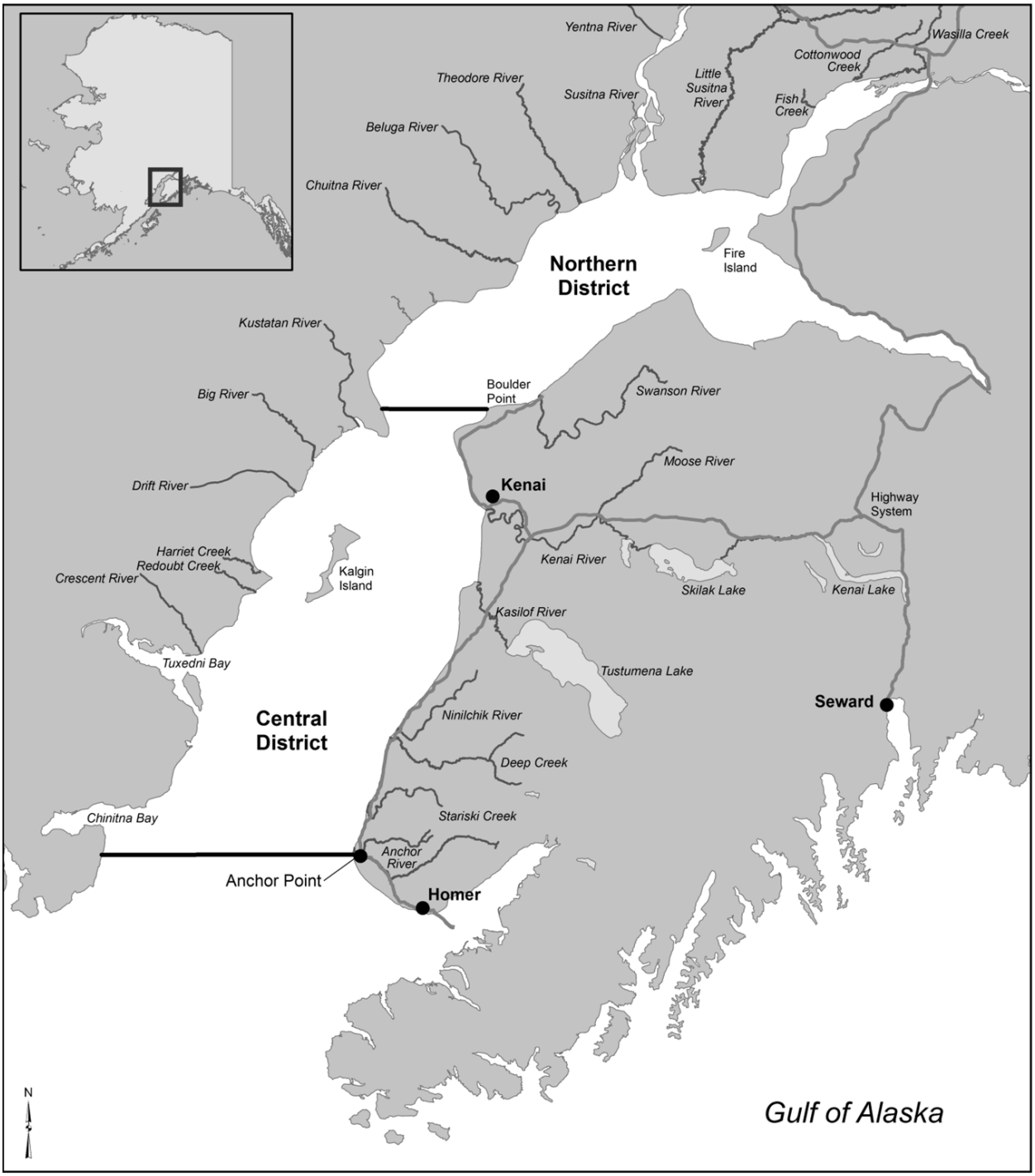


Figure 1.–Major tributaries of the Cook Inlet basin.

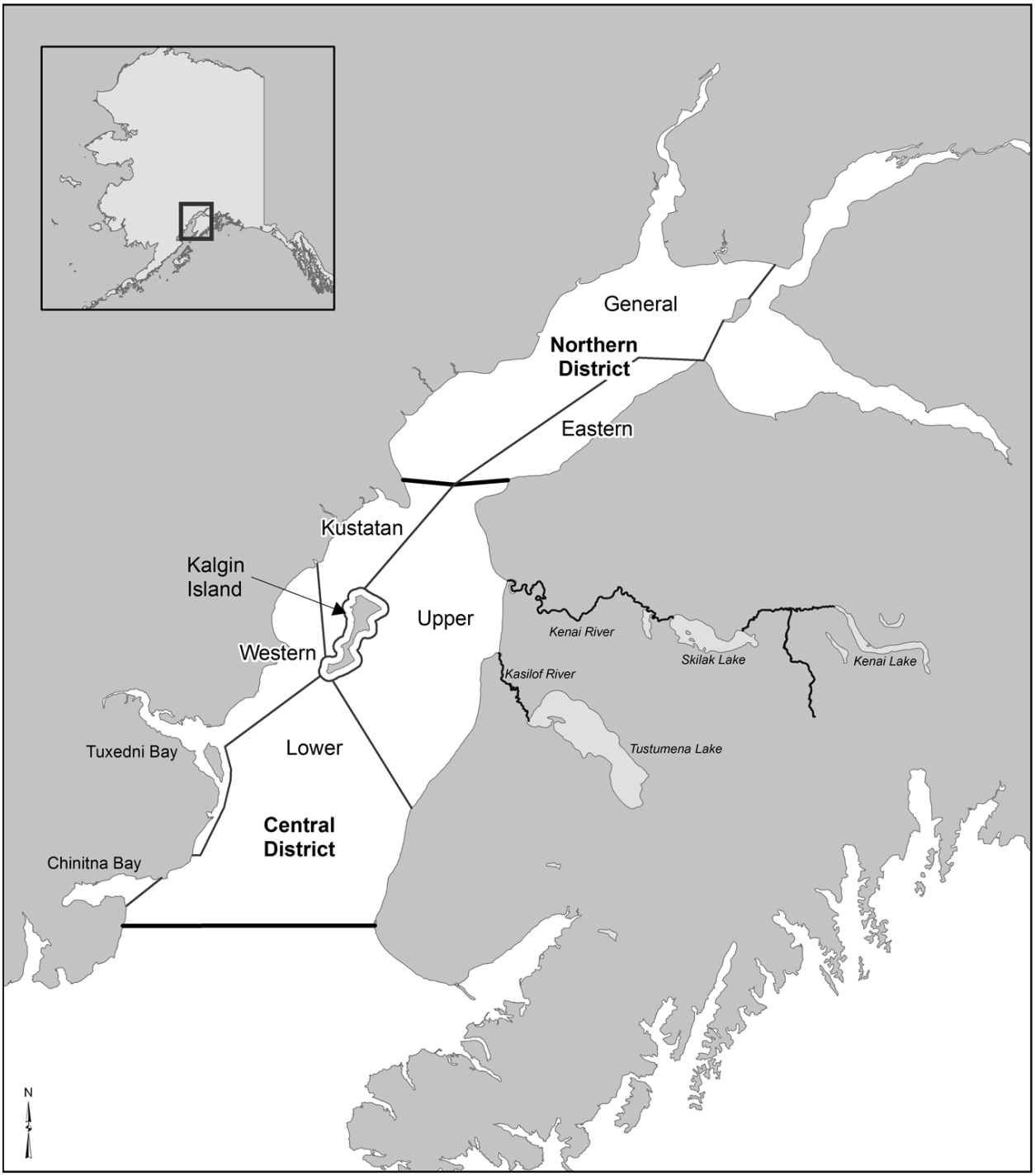


Figure 2.–Upper Cook Inlet commercial fisheries subdistrict fishing boundaries.

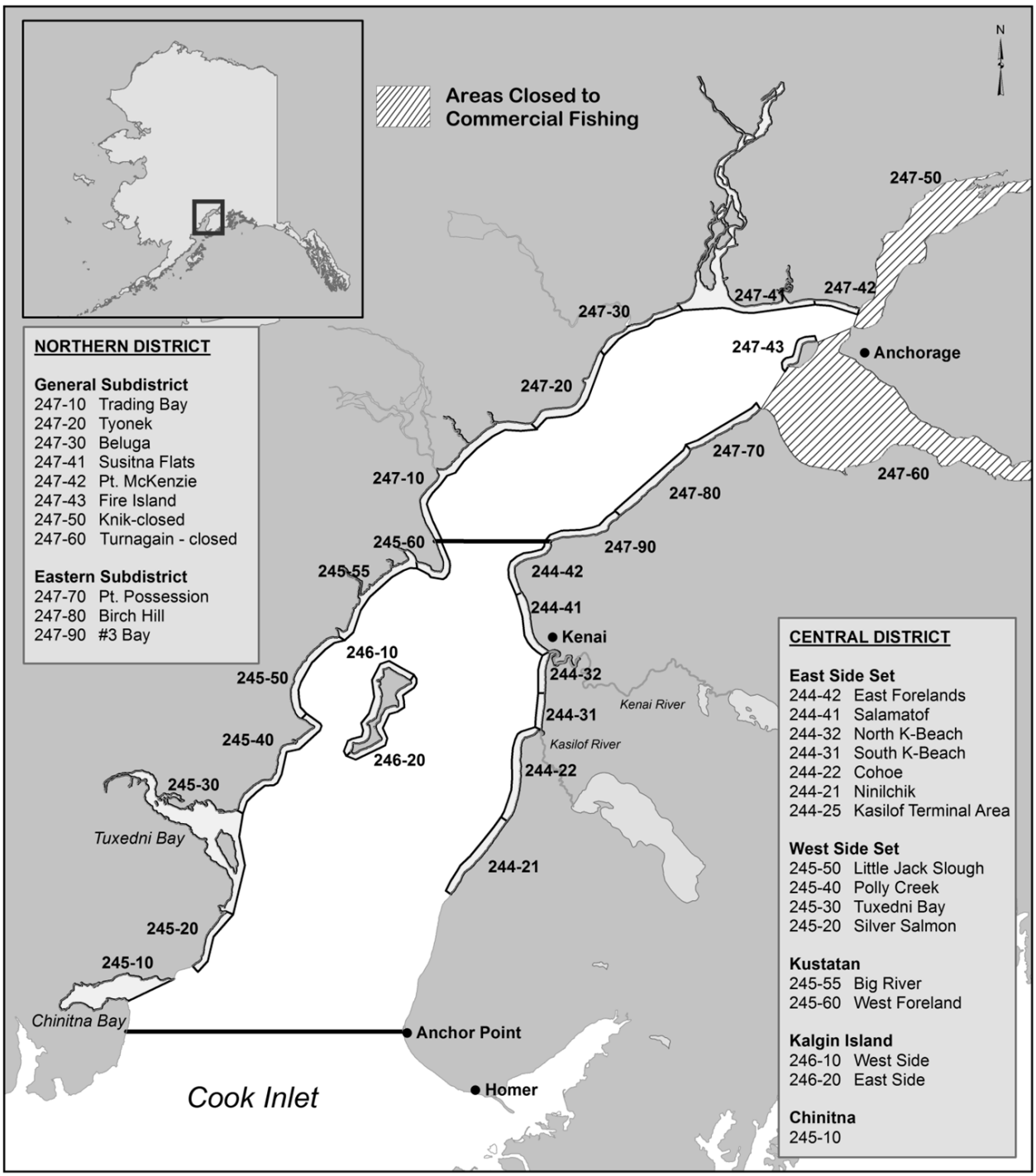


Figure 3.–Upper Cook Inlet commercial set gillnet statistical areas.

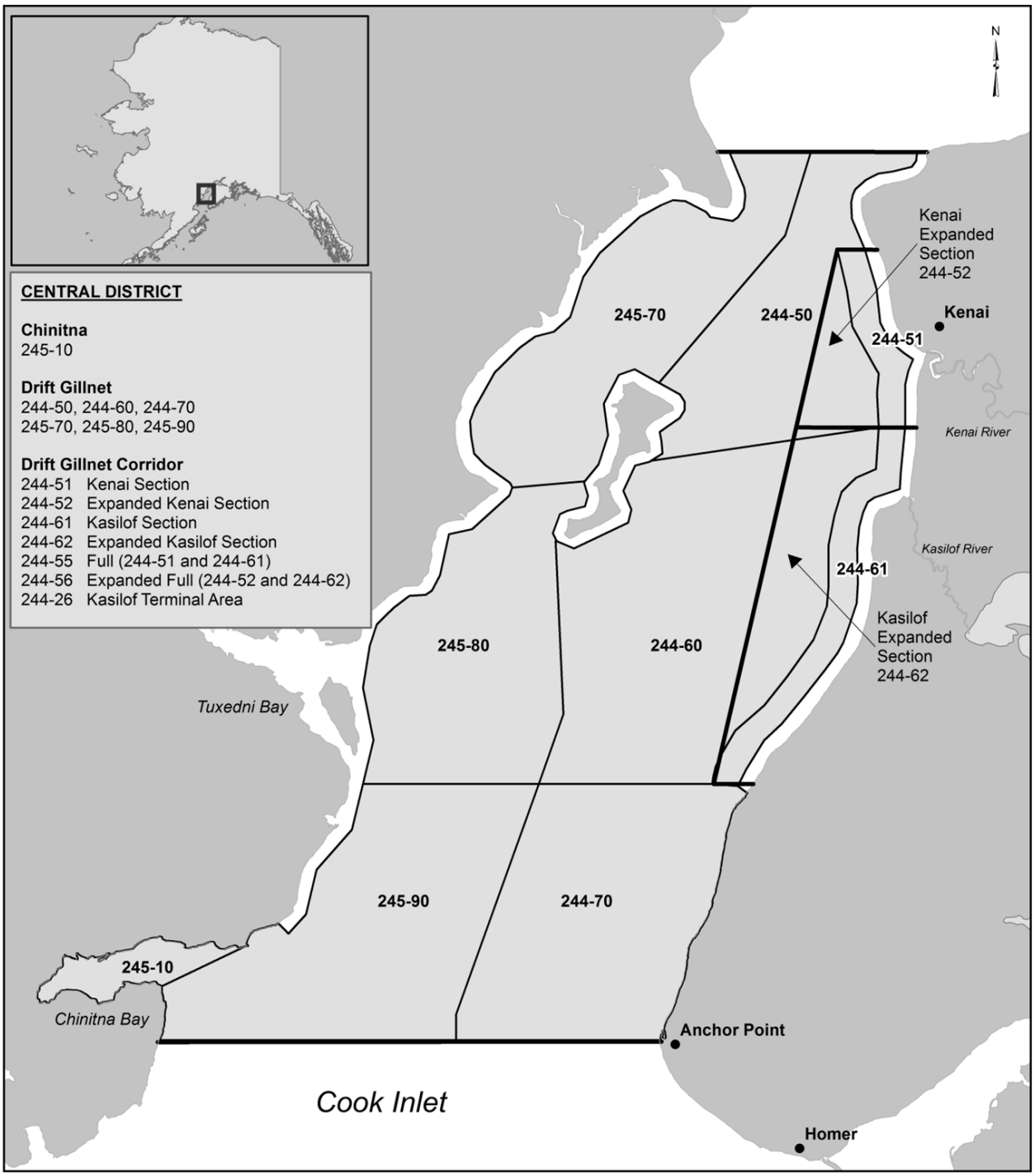


Figure 4.–Upper Cook Inlet commercial drift gillnet statistical areas.

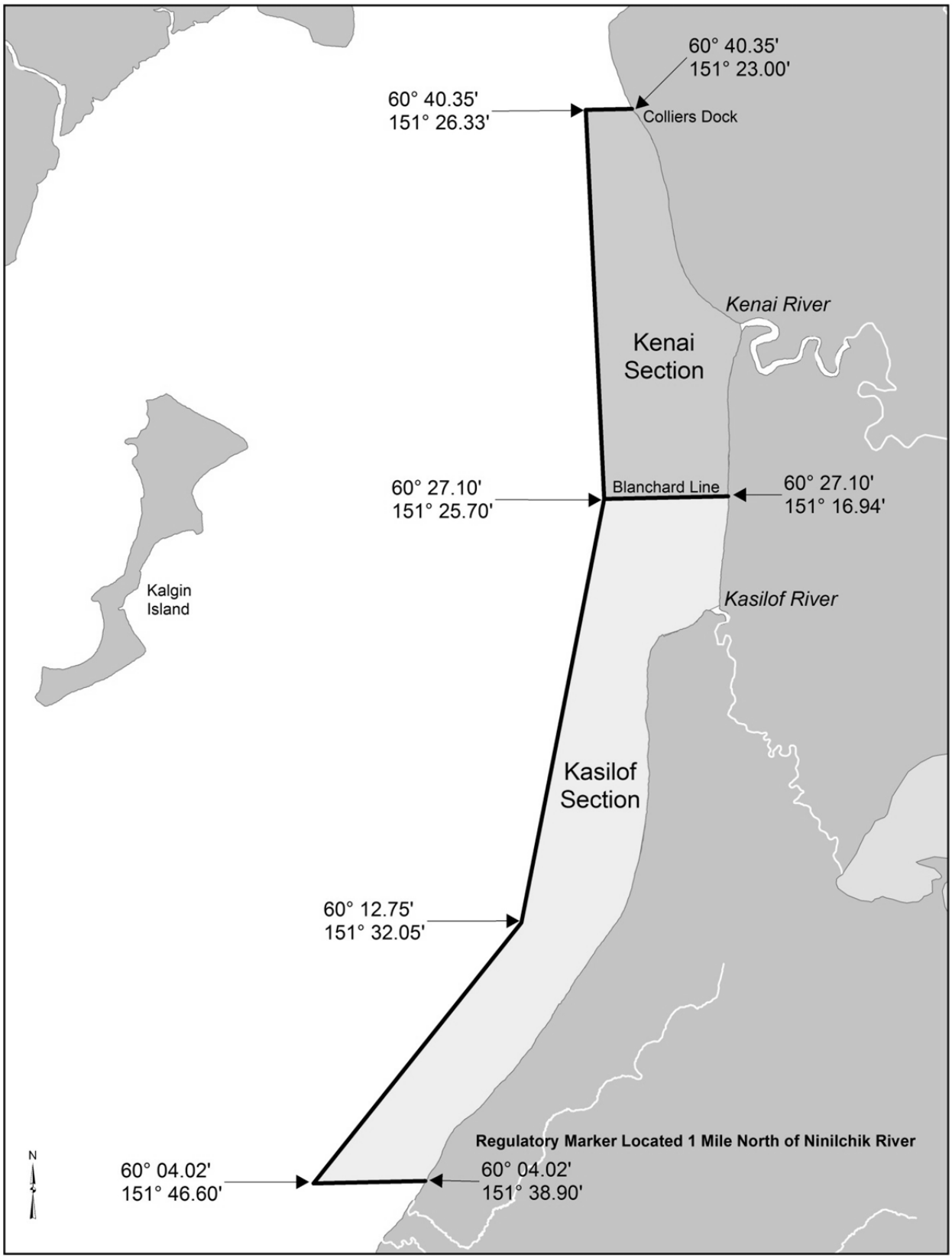
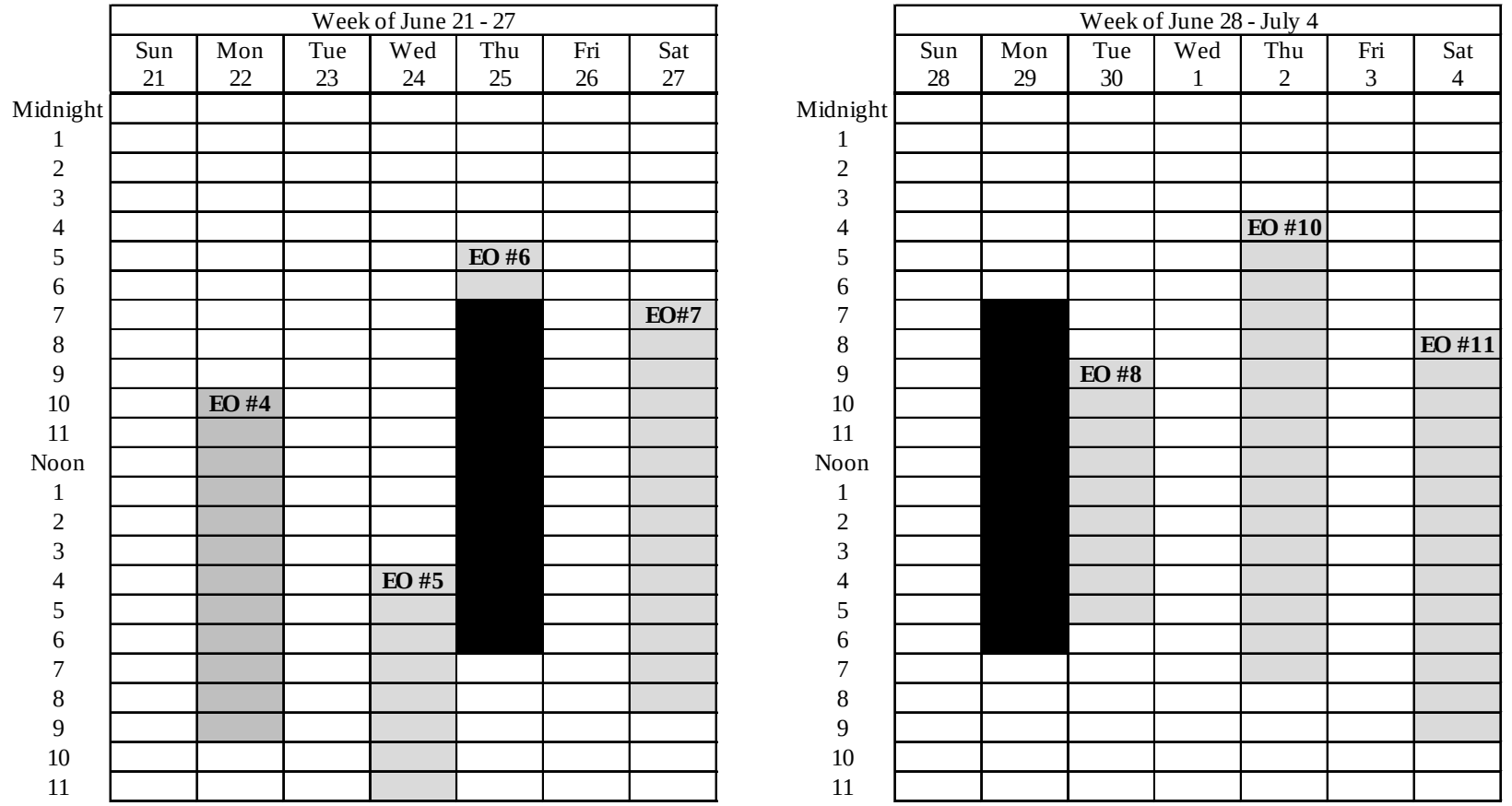


Figure 5.–Map of the Kenai and Kasilof Sections with waypoint descriptions.



EO #4 Kasilof Section from 10am to 10pm on June 22
EO #6 Kasilof Section from 4pm to midnight on June 28
EO #6 Kasilof Section from 5am to 7pm on June 25
EO #7 Kasilof Section from 7am to 9pm on June 27

Regular Fishing Periods
Emergency Order Fishing time
No Commercial Fishing

EO #8 Kasilof Section from 9am to 6pm on June 30
EO #10 Kasilof Section from 4am to 8pm on July 2
EO #11 Kasilof Section from 8am to 10pm on July 4

Regular Fishing Periods
Emergency Order Fishing time
No Commercial Fishing

Figure 6.–Hours fished in the Upper Subdistrict set gillnet fishery, 2015.

	Week of July 5 - 11						
	Sun 5	Mon 6	Tue 7	Wed 8	Thu 9	Fri 10	Sat 11
Midnight							
1							
2							
3							
4							
5							
6							
7					**EO #14**		**EO #16**
8							
9							
10							
11							
Noon							
1							
2		**EO #12**					
3							
4							
5							
6							
7							
8							
9							
10							
11							

EO #12 Kasilof Section from 2pm to 10pm on July 6
EO #14 Upper Subdistrict from 7am to 7pm on July 9
EO #16 Upper Subdistrict from 7am to 10pm on July 11

Regular Fishing Periods
Emergency Order Fishing time
No Commercial Fishing

	Week of July 12 - 18						
	Sun 12	Mon 13	Tue 14	Wed 15	Thu 16	Fri 17	Sat 18
Midnight							
1							
2							
3							
4							
5							
6							
7							
8					**EO #21**		**EO #23**
9			**EO #19**				
10							
11				**EO #20**			
Noon							
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							

EO #19 Upper Subdistrict from 9am to 7pm on July 14
EO #20 Kasilof Section (600 ft) from 11 am to 11pm on July 15
EO #21 Upper Subdistrict from 8am to 8pm
EO #23 Kasilof Section 1/2 mile from 8 am to 10 pm on July 18

Regular Fishing Periods
Emergency Order Fishing time
No Commercial Fishing

Figure 6.–Page 2 of 4.

	Week of July 19 - 25						
	Sun 19	Mon 20	Tue 21	Wed 22	Thu 23	Fri 24	Sat 25
Midnight							
1							
2							
3							
4							
5	**EO #25**		**EO #27**	**EO #28**	**EO #29**		
6							
7							**EO #32**
8							
9							
10							
11		**EO #26**					
Noon							
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							

	Week of July 26 - August 1						
	Sun 26	Mon 27	Tue 28	Wed 29	Thu 30	Fri 31	Sat 1
Midnight							
1							
2							
3							
4							
5					**EO#38**	**EO #39**	
6							
7	**EO #33**						
8				**EO #37**			**EO #40**
9							
10			**EO #36**				
11							
Noon							
1							
2							
3							
4							
5							
6							
7		**EO #35**					
8							
9							
10							
11							

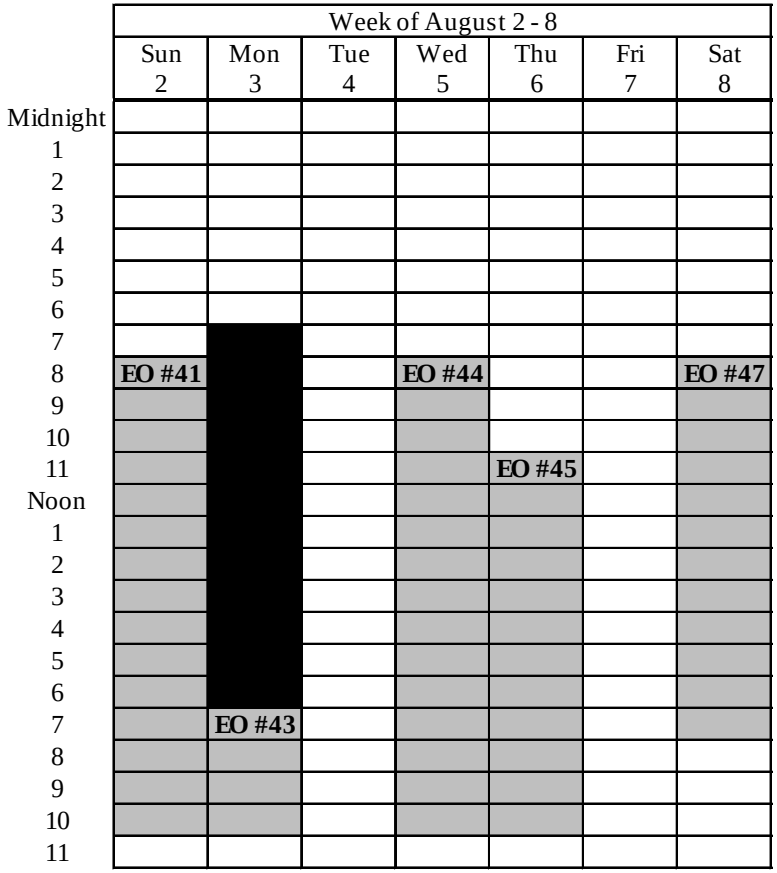
EO #25 Kasilof Section (600 ft) from 5am to 10pm on July 19
EO #26 Upper Subdistrict from 11am to 11pm on July 20
EO #27 Kasilof Section (600 ft) from 5am to 11pm on July 21
EO #28 Kasilof Section (600 ft) from 5am to 11pm on July 22
EO #29 Open Upper Subdistrict from 5am until 7pm on July 23
EO #32 Upper Subdistrict from 7am to 9pm on July 25

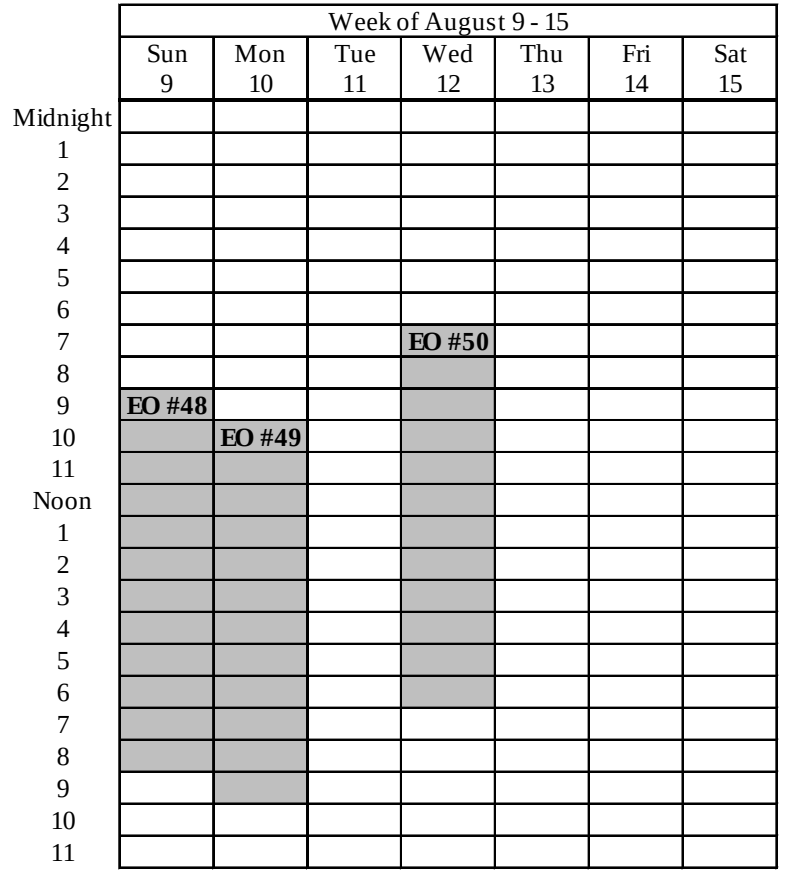
Regular Fishing Periods
Emergency Order Fishing time
No Commercial Fishing

EO #33 Opens Upper Subdistrict from 7am to 10 pm on July 26
EO #35 Upper Subdistrict from 7pm to 10pm on July 27
EO #36 Kasilof Section (600 ft) from 10am to 6pm on July 28
EO #37 Upper Subdistrict from 8am to 11pm on July 28
EO #38 Upper Subdistrict from 5 to 7am and 7pm to 8pm on July 30
EO #39 Kasilof Section (600 ft) from 5 am to 8pm on July 31
EO #40 Upper Subdistrict from 8am to 11pm on Aug 1

Regular Fishing Periods
Emergency Order Fishing time
No Commercial Fishing

Figure 6.–Page 3 of 4.





EO #41 Kenai/E. Forelands only from 8am to 11pm on Aug 2
EO #43 Extends Upper Subdistrict from 7pm to 11pm on Aug 2
EO #44 Upper Subdistrict from 8am to 11pm
EO #45 Upper Subdistrict from 11am to 11pm
EO #47 Upper Subdistrict from 8am to 8pm

Regular Fishing Periods
Emergency Order Fishing time
No Commercial Fishing

EO #48 Upper Subdistrict from 9am to 9pm
EO #49 Upper Subdistrict from 10am to 10pm
EO #50 Kenai/E. Forelands only from 7am to 7pm

Regular Fishing Periods
Emergency Order Fishing time
No Commercial Fishing

Figure 6.–Page 4 of 4.

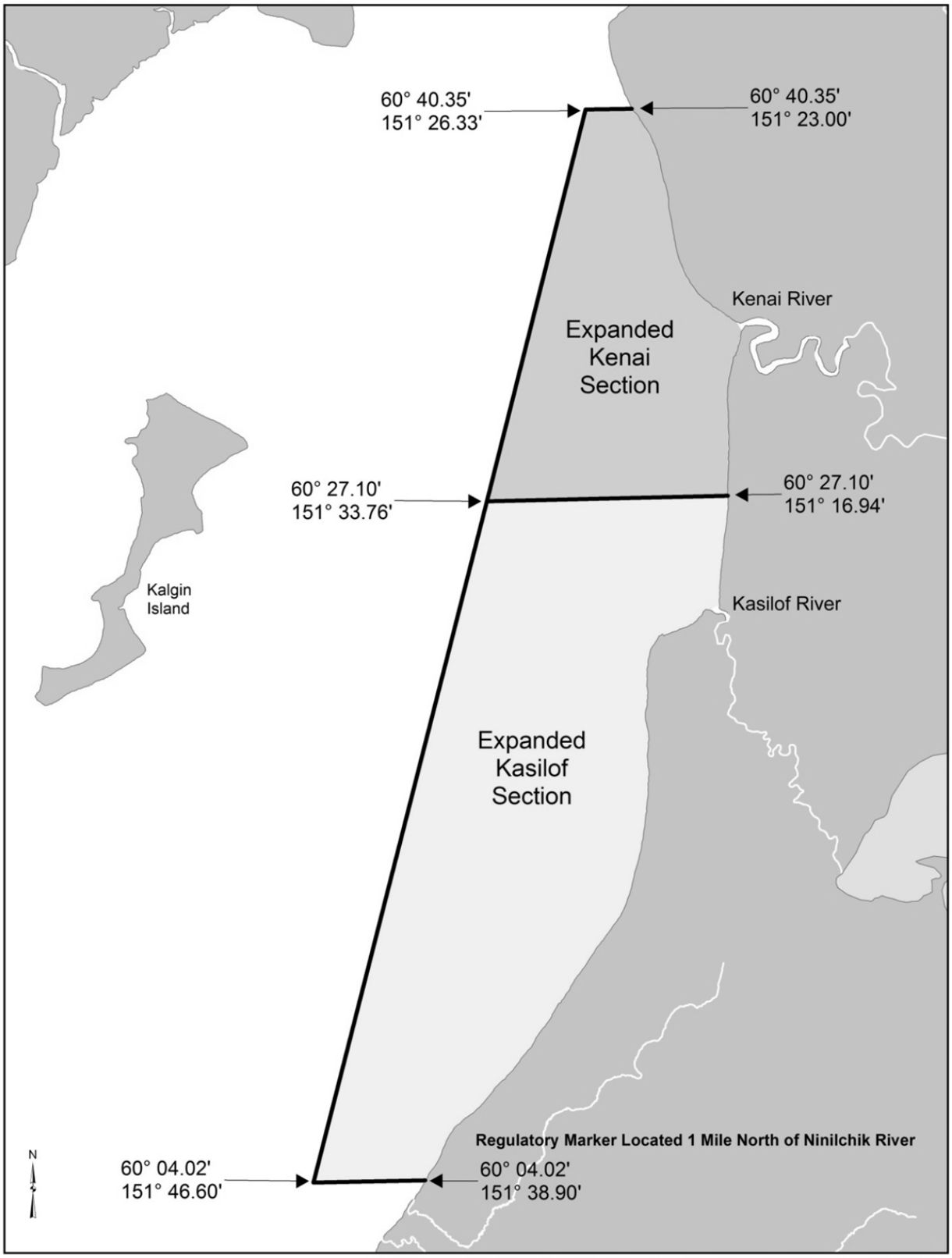


Figure 7.–Map of the Expanded Kenai and Expanded Kasilof Sections with waypoint descriptions.

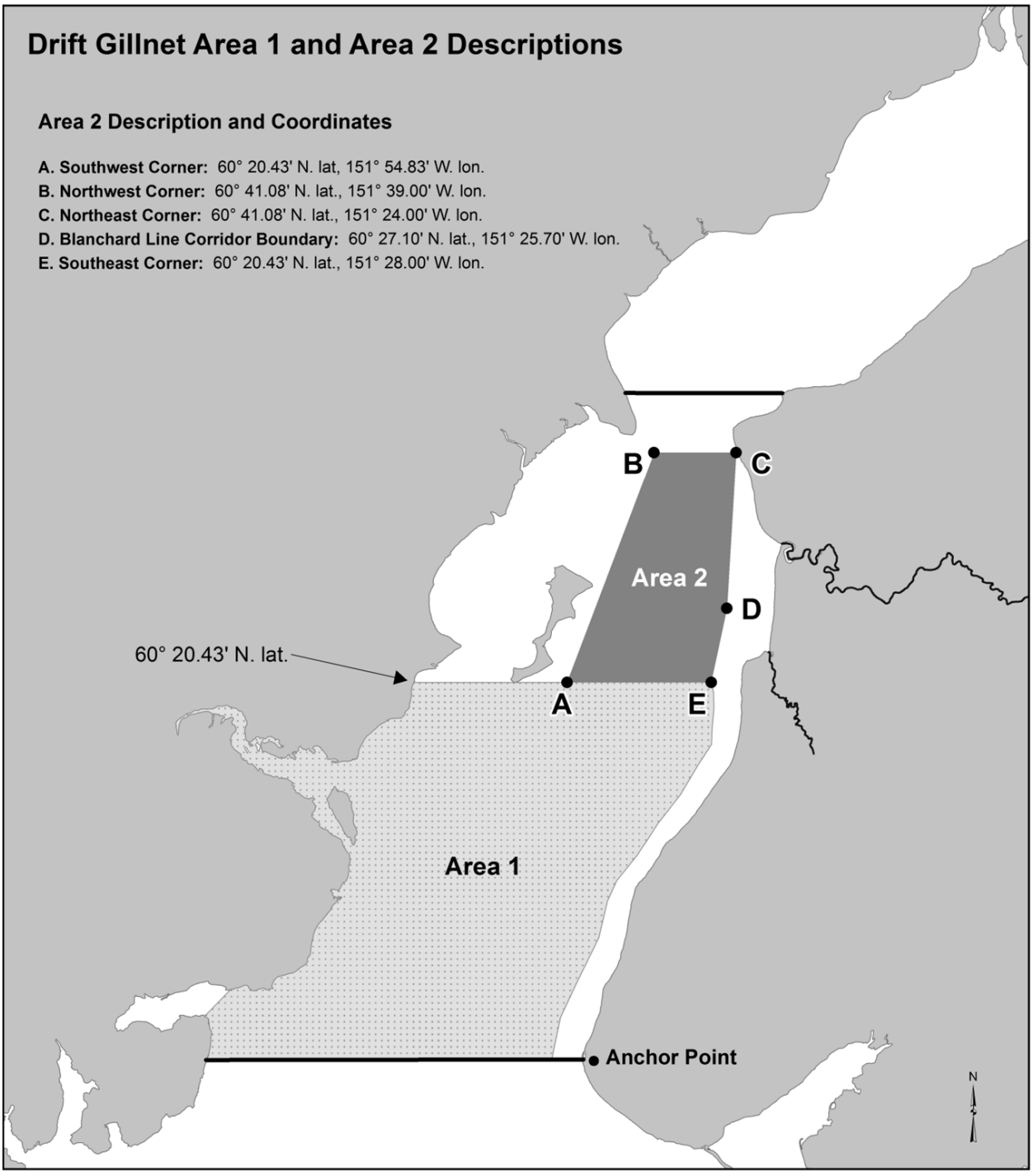


Figure 8.–Drift gillnet boundaries for fishing Areas 1 and 2.

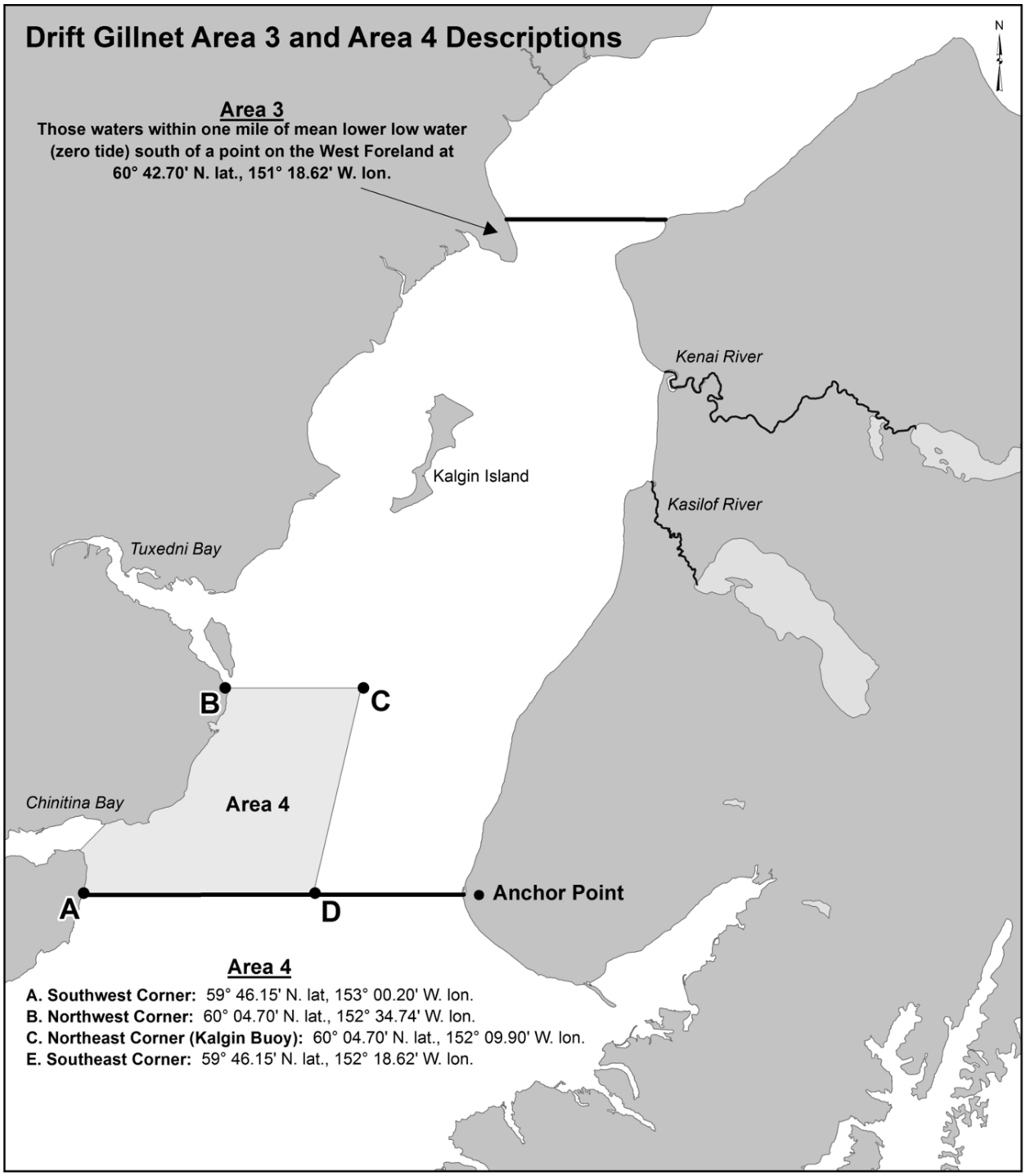


Figure 9.–Map of drift gillnet Areas 3 and 4.

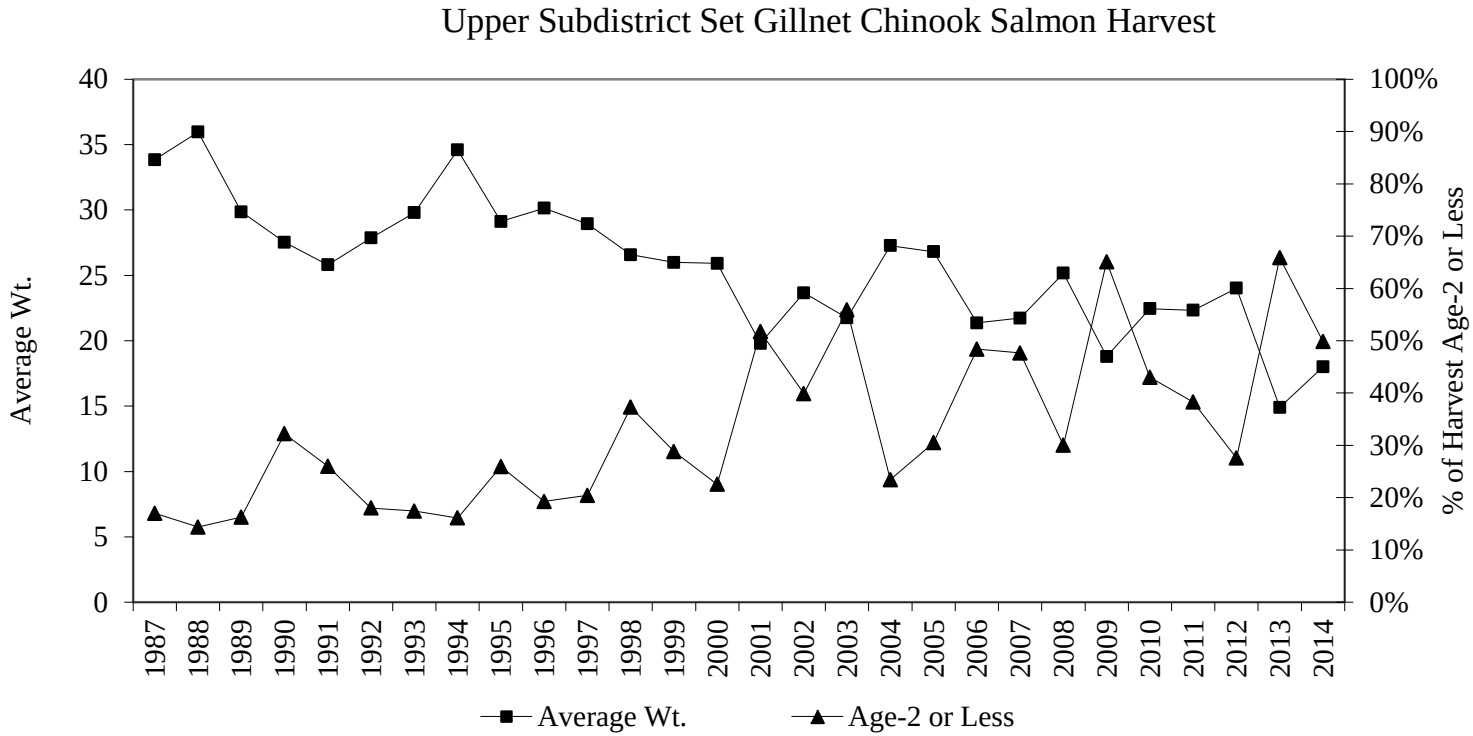


Figure 10.–Chinook salmon average weight (all fish) and percentage of the harvest comprised of ocean-age-2 or less fish in the Upper Subdistrict set gillnet commercial fishery, 1987–2015.

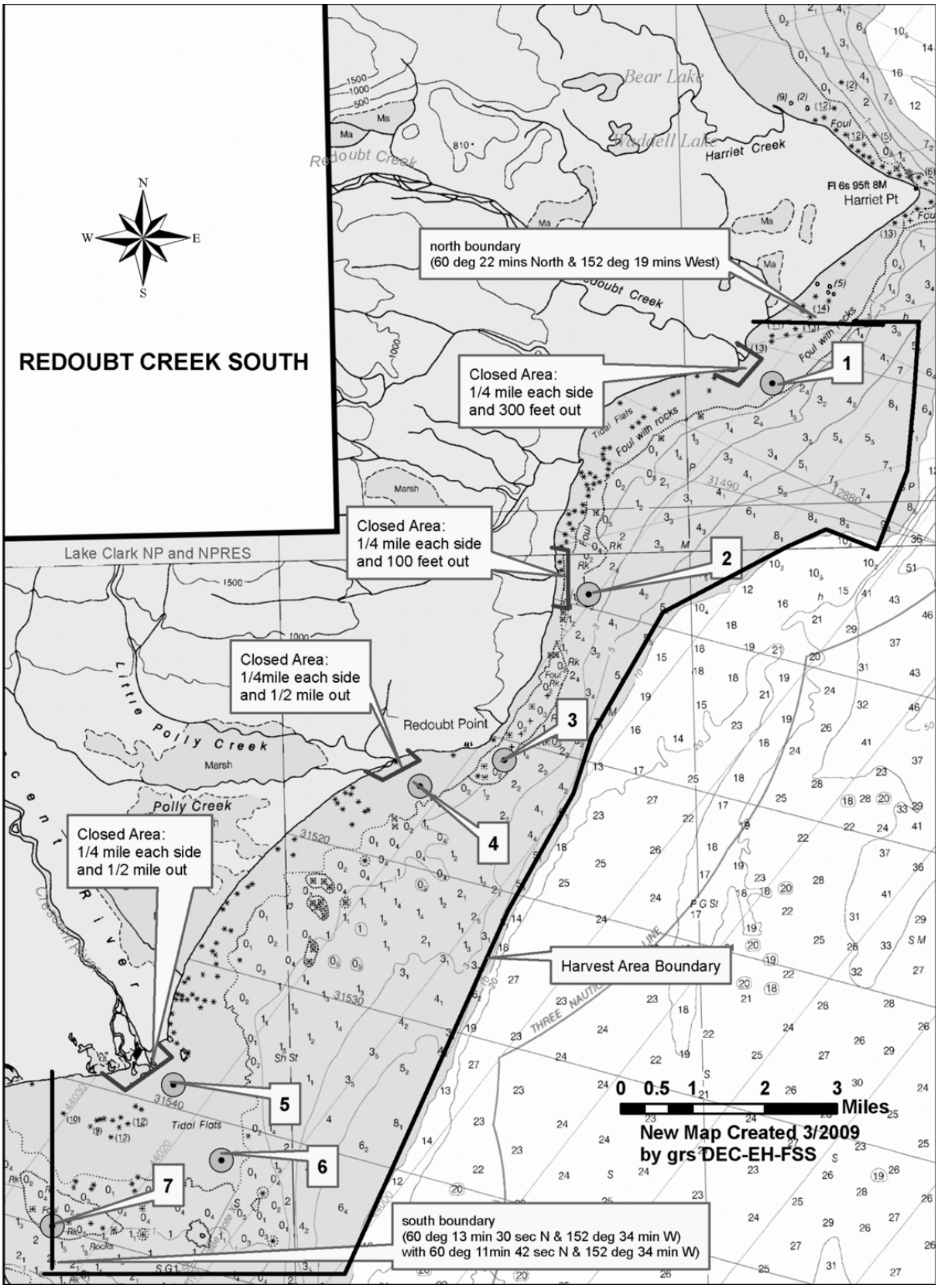


Figure 11.–Area open to the commercial razor clam fishery on the west side of Cook Inlet, Alaska.

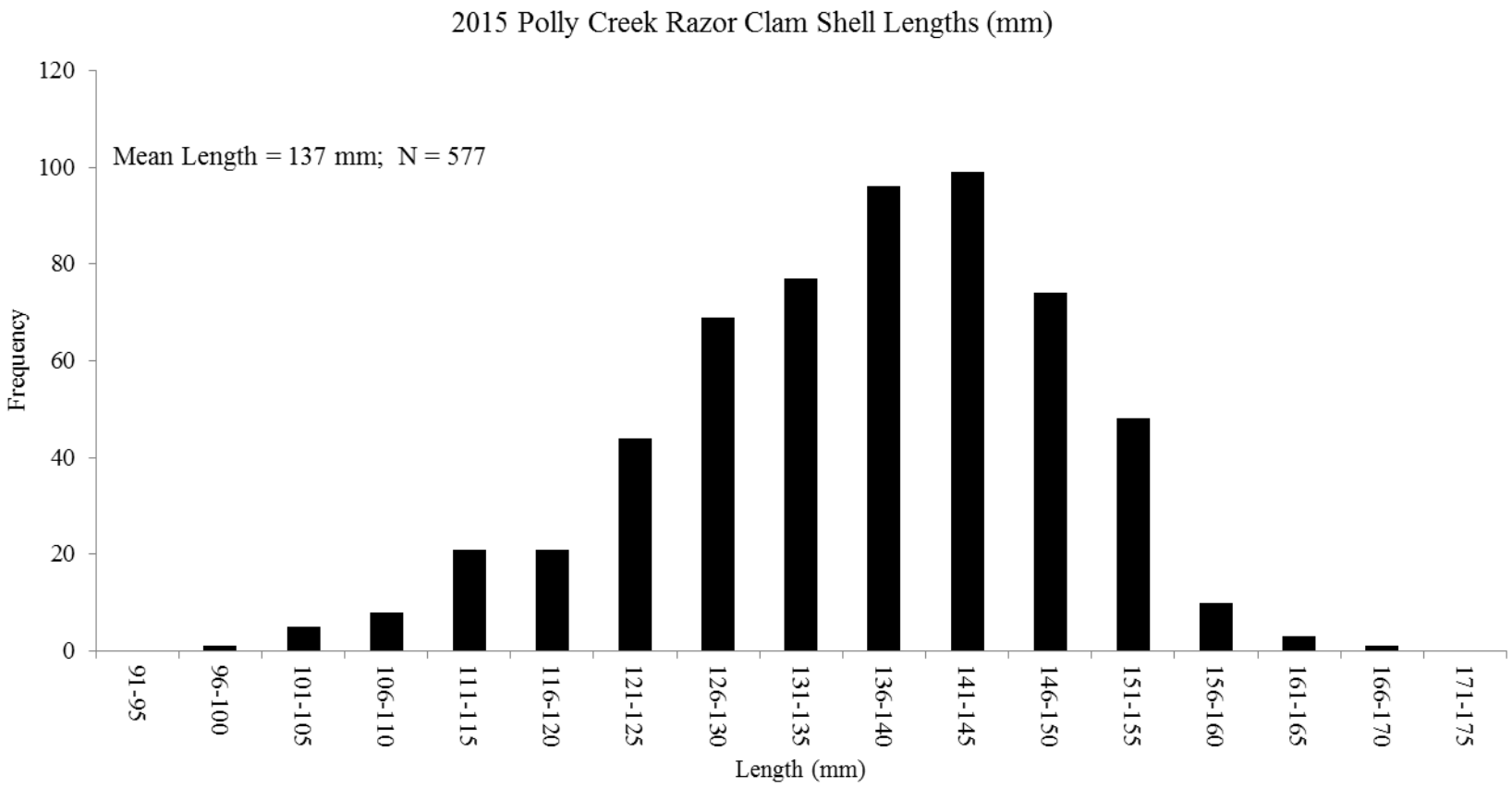


Figure 12.–Length frequency of razor clam shells sampled from the 2015 Polly Creek commercial razor clam fishery.

APPENDIX A: 2015 SEASON DATA

Appendix A1.–Offshore test fish sockeye salmon catch results and environmental data, 2015.

Date	No. of Stations	Fishing Time (min)	Catch[a] Daily	Catch[a] Cum	Index[a] Daily	Index[a] Cum	Mean Length (mm)	Water Temp (c)	Air Temp (c)	Salinity (ppm)	Beginning Wind Vel	Beginning Wind Dir	Ending Wind Vel	Ending Wind Dir
Jul 1	1[b]	53.5	1	1	1	1	509	0.0	11.2	–	4	SW	0	SW
Jul 2	6	237.0	7	8	5	6	542	0.0	18.8	30.4	0	NE	2	N
Jul 3	6	223.5	12	20	9	15	536	0.0	13.6	30.6	8	NW	7	SE
Jul 4	6	241.5	21	41	15	30	545	0.0	12.0	30.6	8	SE	23	NE
Jul 5	6	239.5	3	44	2	33	546	0.0	12.3	30.8	5	N	10	N
Jul 6	6	225.0	20	64	15	48	536	0.0	14.1	30.2	3	N	10	N
Jul 7	6	231.5	13	77	10	58	538	0.0	12.9	30.7	5	SW	4	S
Jul 8	6	232.0	12	89	8	66	529	0.0	13.1	30.1	7	S	6	SW
Jul 9	6	232.5	18	107	13	80	518	0.0	12.3	30.3	6	S	6	S
Jul 10	6	281.0	30	137	16	95	546	11.7	16.4	29.5	1	S	4	SW
Jul 11	6	249.5	34	171	24	119	536	11.1	13.8	29.9	6	S	0	S
Jul 12	6	238.0	23	194	17	136	537	11.2	12.5	29.8	0	S	10	W
Jul 13	6	251.0	25	219	18	154	547	11.1	12.2	29.7	5	W	0	W
Jul 14	6	246.0	52	271	42	196	541	11.0	14.7	30.4	1	N	8	W
Jul 15	6	236.5	24	295	18	214	545	11.0	13.4	30.0	3	W	3	N
Jul 16	0[a]	0.0	31	326	23	237	–	–	–	–	–	–	–	–
Jul 17	0[a]	0.0	36	362	28	265	–	–	–	–	–	–	–	–
Jul 18	0[a]	0.0	42	404	32	297	–	–	–	–	–	–	–	–
Jul 19	6	220.0	47	451	38	335	550	11.5	21.3	30.3	11	S	0	S
Jul 20	6	253.0	304	755	204	538	550	11.2	18.0	30.4	2	N	0	N
Jul 21	6	223.0	74	829	56	594	549	11.5	17.5	29.9	1	SE	5	S
Jul 22	6	289.0	602	1,431	342	936	557	11.4	14.9	29.5	6	SW	4	S
Jul 23	6	232.5	119	1,550	87	1,023	554	12.4	19.2	29.7	10	NW	5	SW
Jul 24	6	223.0	35	1,585	25	1,049	559	11.6	16.7	29.7	2	S	2	SE
Jul 25	6	252.0	245	1,830	161	1,210	557	12.6	20.0	28.2	12	S	9	S
Jul 26	6	244.0	212	2,042	147	1,356	554	12.5	16.8	28.2	9	S	16	S
Jul 27	6	220.5	35	2,077	27	1,383	536	14.4	18.9	26.8	0	S	0	S
Jul 28	6	216.3	31	2,108	25	1,408	554	12.5	15.4	28.7	2	SE	6	SE
Jul 29	6	238.5	226	2,334	167	1,576	552	12.6	16.4	28.6	0	S	3	S
Jul 30	6	225.0	44	2,378	33	1,609	552	12.1	15.3	28.5	8	SW	5	SW

[a] Sockeye salmon catch and indices were linearly interpolated for days with missing statements.

[b] Not all stations fished due to weather or mechanical issues.

Appendix A2.–Upper Cook Inlet sockeye salmon enumeration by watershed and date, 2015.

	Kenai River		Kasilof River		Fish Creek		Chelatna Lake		Judd Lake		Larson Lake	
Date	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
15 Jun			9,078	9,078								
16 Jun			6,930	16,008								
17 Jun			6906	22,914								
18 Jun			7,080	29,994								
19 Jun			11,325	41,319								
20 Jun			15,366	56,685								
21 Jun			15,954	72,639								
22 Jun			12,665	85,304								
23 Jun			6,792	92,096								
24 Jun			17,016	109,112								
25 Jun			3,342	112,454								
26 Jun			5,040	117,494								
27 Jun			5,788	123,281								
28 Jun			4,266	127,547								
29 Jun			11,808	139,355								
30 Jun			4,068	143,423								
1 Jul	4,880	4,880	5,220	148,643								
2 Jul	5,850	10,730	8,664	157,307								
3 Jul	7,658	18,387	4,122	161,429								
4 Jul	7,398	25,785	8,586	170,015								
5 Jul	8,592	34,377	5,214	175,229								
6 Jul	11,294	45,671	16,182	191,411								
7 Jul	13,287	58,959	8,778	200,189								
8 Jul	12,840	71,799	5,148	205,337								
9 Jul	22,770	94,569	8,730	214,067								
10 Jul	15,587	110,156	7,932	221,999	0	0						

-continued-

Appendix A2.–Page 2 of 4.

	Kenai River		Kasilof River		Fish Creek		Chelatna Lake		Judd Lake		Larson Lake	
Date	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
11 Jul	12,135	122,291	6,486	228,485	0	0						
12 Jul	12,373	134,664	6,261	234,746	42	42						
13 Jul	20,172	154,836	9,330	244,076	296	338					9	9
14 Jul	24,744	179,580	11,940	256,016	652	990					0	9
15 Jul	15,148	194,728	12,810	268,826	619	1,609					0	9
16 Jul	18,114	212,842	10,800	279,626	511	2,120	2	2			3	12
17 Jul	17,529	230,371	4,926	284,552	2,768	4,888	43	45			9	21
18 Jul	20,009	250,380	7,002	291,554	6,469	11,357	46	91			2	23
19 Jul	49,158	299,538	12,726	304,280	3,669	15,026	56	147			12	35
20 Jul	53,600	353,137	10,896	315,176	3,368	18,394	567	714			45	80
21 Jul	32,547	385,684	12,246	327,422	3,076	21,470	872	1,586			68	148
22 Jul	27,262	412,946	7,836	335,258	5,311	26,781	1,045	2,631			48	196
23 Jul	75,150	488,096	12,163	347,420	2,739	29,520	1,173	3,804	2	2	331	527
24 Jul	57,280	545,376	8,322	355,742	138	29,658	1,577	5,381	1	3	249	776
25 Jul	72,100	617,476	11,118	366,860	22	29,680	2,958	8,339	49	52	2	778
26 Jul	66,442	683,918	10,463	377,323	1,505	31,185	3,061	11,400	28	80	378	1,156
27 Jul	49,749	733,667	11,489	388,811	10,578	41,763	2,209	13,609	711	791	400	1,556
28 Jul	58,985	792,652	6,605	395,417	1,551	43,314	2,932	16,541	1,114	1,905	660	2,216
29 Jul	41,620	834,272	5,796	401,213	2,259	45,573	3,446	19,987	1,503	3,408	367	2,583
30 Jul	34,791	869,063	4,554	405,767	1,756	47,329	3,456	23,443	1,865	5,273	259	2,842
31 Jul	21,565	890,628	4,602	410,369	3,709	51,038	3,262	26,705	1,736	7,009	310	3,152
1 Aug	42,730	933,358	3,168	413,537	2,454	53,492	3,828	30,533	1,037	8,046	808	3,960
2 Aug	35,975	969,333	2,730	416,267	2,927	56,419	4,910	35,443	2,076	10,122	1,031	4,991

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	Kenai River		Kasilof River		Fish Creek		Chelatna Lake		Judd Lake		Larson Lake	
Date	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
3 Aug	24,064	993,397	4,680	420,947	5225	61,644	4,748	40,191	1,573	11,695	1,118	6,109
4 Aug	21,743	1,015,139	4,734	425,681	3571	65,215	4117	44,308	2835	14,530	959	7,068
5 Aug	48,318	1,063,457	7,578	433,259	5,059	70,274	3453	47,761	2099	16,629	1,179	8,247
6 Aug	43,038	1,106,495	5,940	439,199	3155	73,429	2,667	50,428	2647	19,276	1,155	9,402
7 Aug	43,429	1,149,925	4,020	443,219	4130	77,559	2199	52,627	2,139	21,415	1,056	10,458
8 Aug	46,631	1,196,556	4,056	447,275	2545	80,104	1750	54,377	2,216	23,631	1,256	11,714
9 Aug	28,866	1,225,422	3,764	451,039	483	80,587	959	55,336	1,421	25,052	1,005	12,719
10 Aug	23,899	1,249,321	3,450	454,489	6348	86,935	1348	56,684	2,139	27,191	721	13,440
11 Aug	36,822	1,286,143	6,132	460,621	4871	91,806	1394	58,078	1719	28,910	436	13,876
12 Aug	32,700	1,318,843	3,888	464,509	3485	95,291	1465	59,543	1733	30,643	731	14,607
13 Aug	30,411	1,349,254	2,862	467,371	1701	96,992	1636	61,179	1656	32,299	1,183	15,790
14 Aug	35,817	1,385,070	3,306	470,677	1005	97,997	1,622	62,801	1537	33,836	1,016	16,806
15 Aug	34,401	1,419,472			521	98,518	1,215	64,016	1480	35,316	987	17,793
16 Aug	36,221	1,455,693			198	98,716	1299	65,315	1241	36,557	675	18,468
17 Aug	28,851	1,484,544			825	99,541	924	66,239	1863	38,420	835	19,303
18 Aug	20,370	1,504,913			337	99,878	920	67,159	1963	40,383	718	20,021
19 Aug	32,591	1,537,504			614	100,492	722	67,881	1352	41,735	446	20,467
20 Aug	42,023	1,579,527			130	100,622	675	68,556	912	42,647	289	20,756
21 Aug	22,582	1,602,109			4	100,626	684	69,240	924	43,571	361	21,117
22 Aug	19,153	1,621,262			9	100,635	542	69,782	967	44,538	381	21,498
23 Aug	24,346	1,645,608			76	100,711	115	69,897	909	45,447	427	21,925
24 Aug	26,910	1,672,518			722	101,433			846	46,293	321	22,246
25 Aug	23,109	1,695,626			283	101,716			513	46,806	332	22,578
26 Aug	13,424	1,709,050			143	101,859			571	47,377	194	22,772
27 Aug					118	101,977			242	47,619	240	23,012
28 Aug					19	101,996			65	47,684	169	23,181

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	Kenai River		Kasilof River		Fish Creek		Chelatna Lake		Judd Lake		Larson Lake	
Date	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
29 Aug					8	102,004			245	47,929	4	23,185
30 Aug					2	102,006			5	47,934		
31 Aug					6	102,012						
1 Sep					0	102,012						
2 Sep					4	102,016						
3 Sep					1	102,017						
4 Sep					49	102,066						
5 Sep					26	102,092						
6 Sep					14	102,106						
7 Sep					40	102,146						
8 Sep					5	102,151						
9 Sep					44	102,195						
10 Sep					6	102,201						
11 Sep					2	102,203						
12 Sep					9	102,212						
13 Sep					4	102,216						
14 Sep					6	102,222						
15 Sep					61	102,283						
16 Sep					13	102,296						
17 Sep					3	102,299						
18 Sep					4	102,303						
19 Sep					1	102,304						
20 Sep					1	102,305						
21 Sep					0	102,305						
22 Sep					0	102,305						
23 Sep					1	102,306						

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, 2015.

Upper Subdistrict Set Gillnet																
	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	
Date	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
22 Jun	22	22	13	13			8	8							43	43
24 Jun	15	37	11	24			5	13							31	74
25 Jun	20	57	48	72			4	17							72	146
27 Jun	30	87	19	91			12	29							61	207
29 Jun	17	104	28	119			23	52							68	275
30 Jun	23	127	16	135			15	67							54	329
2 Jul	31	158	45	180			32	99							108	437
4 Jul	58	216	67	247			68	167							193	630
6 Jul	60	276	74	321			49	216							183	813
7 Jul					22	22									22	835
8 Jul					97	119									97	932
9 Jul	55	331	80	401			99	315	104	104	402	402	28	28	768	1,700
10 Jul					22	141									22	1,722
11 Jul	68	399	43	444	13	154	83	398	88	192	418	820	9	37	722	2,444
12 Jul					5	159									5	2,449
13 Jul					43	202									43	2,492
14 Jul	32	431	64	508			74	472	72	264	286	1,106	5	42	533	3,025
15 Jul	10	441	6	514			19	491							35	3,060
16 Jul	57	498	80	594			57	548	53	317	168	1,274	7	49	422	3,482
17 Jul					25	227									25	3,507
18 Jul	32	530	63	657	11	238	51	599							157	3,664
19 Jul	20	550	7	664			23	622							50	3,714
20 Jul	45	595	67	731			47	669	122	439	370	1,644	11	60	662	4,376

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Upper Subdistrict Set Gillnet

	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	
Date	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
21 Jul	9	604	22	753	7	245	18	687							56	4,432
22 Jul	10	614	17	770	27	272	16	703							70	4,502
23 Jul	29	643	39	809	8	280	46	749	48	487	282	1926	13	73	465	4,967
24 Jul					48	328									48	5,015
25 Jul	34	677	32	841	1	329	53	802	39	526	134	2,060	5	78	298	5,313
26 Jul	24	701	28	869		329	33	835	37	563	139	2,199	5	83	266	5,579
27 Jul	12	713	16	885	1	330	36	871	23	586	159	2,358	2	85	249	5,828
28 Jul	7	720	8	893	21	351	8	879							44	5,872
29 Jul	10	730	22	915	5	356	32	911	39	625	220	2,578	6	91	334	6,206
30 Jul	16	746	22	937			27	938	43	668	142	2,720	6	97	256	6,462
31 Jul	2	748	2	939	16	372	5	943							25	6,487
1 Aug	15	763	22	961	3	375	30	973	35	703	108	2,828	10	107	223	6,710
2 Aug					51	426			45	748	108	2,936	11	118	215	6,925
3 Aug	23	786	15	976			40	1,013	38	786	133	3,069	11	129	260	7,185
5 Aug	15	801	18	994			31	1,044	30	816	83	3,152	7	136	184	7,369
6 Aug	29	830	9	1,003			22	1,066	22	838	51	3,203	9	145	142	7,511
8 Aug	19	849	11	1,014			5	1,071	21	859	53	3,256	3	148	112	7,623
9 Aug	4	853	4	1,018			9	1,080	3	862	44	3,300	1	149	65	7,688
10 Aug	8	861	4	1,022			2	1,082	7	869	21	3,321	2	151	44	7,732
12 Aug									7	876	42	3,363		151	49	7,781

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Central District - West Side Set Gillnet

	245-10 Chinitna Bay		245-20 Silv. Salmon		245-30 Tuxedni Bay		245-40 Polly Cr.		245-50 L. J. Slough		245-55 Big River		245-60 W. Forelands		246-10 Kalgin - West		246-20 Kalgin - East		Total	
Date	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
1 Jun											11	11			19	19			30	30
3 Jun											5	16			61	80			66	96
5 Jun											4	20			48	128			52	148
8 Jun											3	23			19	147			22	170
10 Jun											31	54			31	178			62	232
12 Jun											13	67			29	207			42	274
15 Jun											12	79			21	228			33	307
17 Jun															14	242			14	321
18 Jun					9	9													9	330
19 Jun																242			0	330
22 Jun					21	30									3	245			24	354
24 Jun															4	249			4	358
25 Jun					34	64									2	251	1	1	37	395
29 Jun					15	79									1	252			16	411
2 Jul					28	107	2	2							8	260	2	3	40	451
6 Jul					16	123	2	4							6	266	1	4	25	476
9 Jul					13	136									3	269	1	5	17	493

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Central District - West Side Set Gillnet																				
	245-10 Chinitna Bay		245-20 Silv. Salmon		245-30 Tuxedni Bay		245-40 Polly Cr.		245-50 L. J. Slough		245-55 Big River		245-60 W. Forelands		246-10 Kalgin - West		246-20 Kalgin - East		Total	
Date	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
13 Jul					17	153		4							5	274	2	7	24	517
16 Jul					6	159													6	523
18 Jul																			0	523
20 Jul					6	165	1	5							1	275			8	531
23 Jul					2	167													2	533
25 Jul					2	169													2	535
27 Jul					1	170													1	536
30 Jul																			0	536
1 Aug															1	276			1	537
3 Aug															1	277			1	538
6 Aug																			0	538
8 Aug																			0	538
10 Aug																			0	538
13 Aug																			0	538
15 Aug																			0	538
17 Aug																			0	538
20 Aug																			0	538

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Northern District Set Gillnet																				
	247-10 Trading Bay		247-20 Tyonek		247-30 Beluga		247-41 Su. Flats		247-42 Pt. McKenzie		247-43 Fire Island		247-70 Pt. Possession		247-80 Birch Hill		247-90 #3 Bay		Total	
Date	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
1 Jun	83	83	38	38			52	52	38	38	93	93	39	39	25	25	9	9	377	377
8 Jun	92	175	76	114			48	100	27	65	85	178	72	111	41	66	22	31	463	840
15 Jun	93	268	80	194			58	158	80	145	75	253	38	149	5	71	7	38	436	1,276
22 Jun	86	354	29	223			34	192	33	178	51	304	37	186	10	81	4	42	284	1,560
25 Jun	2	356	125	348			9	201					19	205	12	93	6	48	173	1,733
29 Jun	12	368	34	382			1	202					4	209	10	103			61	1,794
2 Jul	3	371	12	394									5	214			1	49	21	1,815
6 Jul	3	374	52	446					5	183			2	216	1	104	1	50	64	1,879
9 Jul			7	453			3	205	2	185			7	223			1	51	20	1,899
13 Jul	3	377	5	458			2	207			1	305	1	224	1	105			13	1,912
16 Jul			1	459	1	1	1	208							1	106			4	1,916
20 Jul													1	225					1	1,917
23 Jul							1	209			1	306			2	108			4	1,921
27 Jul																			0	1,921
30 Jul																			0	1,921
3 Aug																			0	1,921

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Northern District Set Gillnet																				
	247-10 Trading Bay		247-20 Tyonek		247-30 Beluga		247-41 Su. Flats		247-42 Pt. McKenzie		247-43 Fire Island		247-70 Pt. Possession		247-80 Birch Hill		247-90 #3 Bay		Total	
Date	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
6 Aug					1	2							1	226					2	1,923
10 Aug																			0	1,923
13 Aug																			0	1,923
17 Aug																			0	1,923
20 Aug																			0	1,923
24 Aug																			0	1,923
27 Aug																			0	1,923
31 Aug																			0	1,923
3 Sep																			0	1,923
7 Sep																			0	1,923
10 Sep																			0	1,923
14 Sep																			0	1,923
21 Sep																			0	1,923
24 Sep																			0	1,923
28 Sep																			0	1,923

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Central District Drift Gillnet

		244-26 KRSHA		244-56 Exp. Ken/Kas		244-57 Exp. Ken/Kas & A.P.		244-60 District Wide		244-61 Kas. Section		245-10 Chinitna Bay		Total	
Date	Deliveries	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
22 Jun	94							26	26					26	26
25 Jun	117							9	35					9	35
27 Jun	30													0	35
29 Jun	200							19	54					19	54
30 Jun	22									1	1			1	55
2 Jul	301							17	71					17	72
4 Jul	31									2	3			2	74
6 Jul	365							34	105					34	108
7 Jul	16	2	2											2	110
8 Jul	41	32	34											32	142
9 Jul	395							68	173					68	210
10 Jul	19													0	210
11 Jul	245			55	55									55	265
12 Jul	<4													0	265
13 Jul	434	6	40					30	203					36	301
14 Jul	312			24	79									24	325
16 Jul	381					26	26							26	351
17 Jul	41	6	46											6	357
18 Jul	15	3	49											3	360
20 Jul	444							10	213					10	370
21 Jul	18	7	56											7	377
22 Jul	65	18	74											18	395
23 Jul	422					23	49							23	418
24 Jul	55	14	88											14	432

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Central District Drift Gillnet

		244-26 KRSHA		244-56 Exp. Ken/Kas		244-57 Exp. Ken/Kas & A.P.		244-60 District Wide		244-61 Kas Section		245-10 Chinitna Bay		Total	
Date	Deliveries	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
25 Jul	405					17	66							17	449
26 Jul	235					9	75							9	458
27 Jul	404							7	220					7	465
28 Jul	235	1	89			10	85							11	476
29 Jul	283					12	97							12	488
30 Jul	296					13	110							13	501
31 Jul	200					4	114							4	505
1 Aug	352							6	226					6	511
2 Aug	107					9	123							9	520
3 Aug	328							8	234					8	528
5 Aug	217					6	129							6	534
6 Aug	281							6	240					6	540
7 Aug	110					1	130							1	541
8 Aug	161							8	248					8	549
9 Aug	20													0	549
10 Aug	77							1	249					1	550
12 Aug	38					1	131							1	551
13 Aug	101							3	252					3	554
17 Aug	24							1	253					1	555
18 Aug	4													0	555
20 Aug	26							1	254					1	556
21 Aug	8													0	556
24 Aug	15													0	556
25 Aug	6													0	556

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Central District Drift Gillnet

		244-26 KRSHA		244-56 Exp. Ken/Kas		244-57 Exp. Ken/Kas & A.P.		244-60 District Wide		244-61 Kas Section		245-10 Chinitna Bay		Total	
Date	Deliveries	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
28 Aug	<4													0	556
31 Aug	<4													0	556
1 Sep	<4													0	556
3 Sep	5													0	556
4 Sep	6													0	556
7 Sep	5													0	556
8 Sep	4													0	556
11 Sep	<4													0	556
15 Sep	<4													0	556
17 Sep	<4													0	556

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

Appendix A4.–Commercial sockeye salmon harvest by area and date, Upper Cook Inlet, 2015.

Upper Subdistrict Set Gillnet																
	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	
Date	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
22 Jun	6,235	6,235	3,159	3,159			8,721	8,721							18,115	18,115
24 Jun	4,838	11,073	3,904	7,063			4,227	12,948							12,969	31,084
25 Jun	10,058	21,131	2,495	9,558			2,372	15,320							14,925	46,009
27 Jun	19,986	41,117	4,670	14,228			7,450	22,770							32,106	78,115
29 Jun	13,646	54,763	6,629	20,857			8,760	31,530							29,035	107,150
30 Jun	17,001	71,764	4,400	25,257			4,300	35,830							25,701	132,851
2 Jul	14,247	86,011	5,695	30,952			11,013	46,843							30,955	163,806
4 Jul	9,748	95,759	8,004	38,956			9,305	56,148							27,057	190,863
6 Jul	10,757	106,516	7,002	45,958			6,374	62,522							24,133	214,996
7 Jul					6,448	6,448									6,448	221,444
8 Jul					16,396	22,844									16,396	237,840
9 Jul	18,267	124,783	8,515	54,473			4,671	67,193	4,322	4,322	6,578	6,578	2,542	2,542	44,895	282,735
10 Jul					2,988	25,832									2,988	285,723
11 Jul	12,696	137,479	7,797	62,270	2,649	28,481	4,792	71,985	6,295	10,617	6,957	13,535	2,513	5,055	43,699	329,422
12 Jul					1,181	29,662									1,181	330,603
13 Jul					17,725	47,387									17,725	348,328
14 Jul	10,659	148,138	9,289	71,559			8,001	79,986	5,458	16,075	9,104	22,639	2,341	7,396	44,852	393,180
15 Jul	7,571	155,709	4,908	76,467			7,117	87,103							19,596	412,776
16 Jul	13,508	169,217	10,384	86,851			7,373	94,476	4,187	20,262	6,746	29,385	2,242	9,638	44,440	457,216
17 Jul					12,050	59,437									12,050	469,266
18 Jul	20,909	190,126	21,740	108,591	8,470	67,907	16,902	111,378							68,021	537,287
19 Jul	13,636	203,762	6,228	114,819			7,907	119,285							27,771	565,058
20 Jul	15,904	219,666	13,785	128,604			4,716	124,001	8,600	28,862	17,357	46,742	2,537	12,175	62,899	627,957

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Upper Subdistrict Set Gillnet																
	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	
Date	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
21 Jul	9,079	228,745	4,346	132,950	3,061	70,968	8,134	132,135							24,620	652,577
22 Jul	8,901	237,646	3,520	136,470	6,244	77,212	8,291	140,426							26,956	679,533
23 Jul	12,472	250,118	15,665	152,135	849	78,061	10,203	150,629	11,338	40,200	24,953	71,695	9,064	21,239	84,544	764,077
24 Jul					11,890	89,951									11,890	775,967
25 Jul	15,770	265,888	6,226	158,361	114	90,065	8,463	159,092	10,345	50,545	28,515	100,210	7,677	28,916	77,110	853,077
26 Jul	23,608	289,496	19,987	178,348	127	90,192	10,681	169,773	13,820	64,365	22,356	122,566	5,374	34,290	95,953	949,030
27 Jul	11,122	300,618	6,124	184,472	13	90,205	7,692	177,465	13,966	78,331	30,753	153,319	7,733	42,023	77,403	1,026,433
28 Jul	7,091	307,709	2,875	187,347	2,429	92,634	2,833	180,298							15,228	1,041,661
29 Jul	9,245	316,954	5,345	192,692	611	93,245	5,035	185,333	8,451	86,782	21,422	174,741	7,609	49,632	57,718	1,099,379
30 Jul	6,867	323,821	2,819	195,511			2,498	187,831	4,852	91,634	21,486	196,227	8,256	57,888	46,778	1,146,157
31 Jul	2,822	326,643	1,989	197,500	3,579	96,824	2,138	189,969							10,528	1,156,685
1 Aug	4,811	331,454	6,080	203,580	1,323	98,147	3,082	193,051	4,436	96,070	20,869	217,096	6,156	64,044	46,757	1,203,442
2 Aug					3,513	101,660			5,259	101,329	11,053	228,149	4,439	68,483	24,264	1,227,706
3 Aug	4,681	336,135	4,369	207,949			2,254	195,305	3,976	105,305	15,594	243,743	4,687	73,170	35,561	1,263,267
5 Aug	5,463	341,598	6,743	214,692			2,546	197,851	4,891	110,196	29,852	273,595	10,272	83,442	59,767	1,323,034
6 Aug	9,063	350,661	5,661	220,353			2,166	200,017	4,069	114,265	24,321	297,916	7,555	90,997	52,835	1,375,869
8 Aug	5,416	356,077	4,200	224,553			1,127	201,144	5,610	119,875	15,257	313,173	5,327	96,324	36,937	1,412,806
9 Aug	4,272	360,349	1,680	226,233			1,134	202,278	2,911	122,786	9,173	322,346	3,181	99,505	22,351	1,435,157
10 Aug	3,332	363,681	1,495	227,728			1,264	203,542	2,500	125,286	12,092	334,438	4,698	104,203	25,381	1,460,538
12 Aug									4,154	129,440	13,076	347,514	3,568	107,771	20,798	1,481,336

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Central District - West Side Set Gillnet

	245-10 Chinitna Bay		245-20 Silv. Salmon		245-30 Tuxedni Bay		245-40 Polly Cr.		245-50 L. J. Slough		245-55 Big River		245-60 W. Forelands		246-10 Kalgin - West		246-20 Kalgin - East		Total	
Date	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
1 Jun											226	226			193	193			419	419
3 Jun											292	518			599	792			891	1,310
5 Jun											302	820			657	1,449			959	2,269
8 Jun											103	923			356	1,805			459	2,728
10 Jun											379	1,302			521	2,326			900	3,628
12 Jun											133	1,435			425	2,751			558	4,186
15 Jun											251	1,686			1,102	3,853			1,353	5,539
17 Jun															635	4,488			635	6,174
18 Jun					261	261			49	49									310	6,484
19 Jun															114	4,602			114	6,598
22 Jun					419	680									435	5,037			854	7,452
24 Jun															536	5,573			536	7,988
25 Jun					577	1,257			86	135					421	5,994	139	139	1,223	9,211
29 Jun					999	2,256			28	163					579	6,573	187	326	1,793	11,004
2 Jul					1,433	3,689	14	14	52	215					2,426	8,999	350	676	4,275	15,279
6 Jul					1,881	5,570	89	103	128	343					3,518	12,517	550	1,226	6,166	21,445
9 Jul					1,769	7,339			90	433					533	13,050	326	1,552	2,718	24,163

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Appendix A4.–Page 4 of 9.

Central District - West Side Set Gillnet																				
	245-10 Chinitna Bay		245-20 Silv. Salmon		245-30 Tuxedni Bay		245-40 Polly Cr.		245-50 L. J. Slough		245-55 Big River		245-60 W. Forelands		246-10 Kalgin - West		246-20 Kalgin - East		Total	
Date	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
13 Jul					4,259	11,598	80	183	114	547					1,183	14,233	240	1,792	5,876	30,039
16 Jul					2,015	13,613									1,211	15,444	321	2,113	3,547	33,586
18 Jul					1,527	15,140													1,527	35,113
20 Jul					3,350	18,490	111	294	384	931			113	113	1,330	16,774	541	2,654	5,829	40,942
23 Jul					5,938	24,428			182	1,113			402	515	3,869	20,643	1,151	3,805	11,542	52,484
25 Jul					3,126	27,554													3,126	55,610
27 Jul					2,055	29,609			218	1,331			247	762	2,041	22,684	1,563	5,368	6,124	61,734
30 Jul					1,713	31,322			165	1,496			82	844	3,210	25,894	1,882	7,250	7,052	68,786
1 Aug					1,103	32,425									2,269	28,163	644	7,894	4,016	72,802
3 Aug					1,258	33,683			132	1,628					3,595	31,758	539	8,433	5,524	78,326
6 Aug					989	34,672			134	1,762					3,977	35,735	400	8,833	5,500	83,826
8 Aug					229	34,901									1,219	36,954	219	9,052	1,667	85,493
10 Aug									73	1,835					1,152	38,106	287	9,339	1,512	87,005
13 Aug	1	1			118	35,019			35	1,870					1,838	39,944	913	10,252	2,905	89,910
15 Aug															3,323	43,267	1,162	11,414	4,485	94,395
17 Aug					115	35,134			26	1,896					4,086	47,353	991	12,405	5,218	99,613
20 Aug					142	35,276			16	1,912									158	99,771

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Northern District Set Gillnet																				
	247-10 Trading Bay		247-20 Tyonek		247-30 Beluga		247-41 Su. Flats		247-42 Pt. McKenzie		247-43 Fire Island		247-70 Pt. Possession		247-80 Birch Hill		247-90 #3 Bay		Total	
Date	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
1 Jun	5	5					4	4	2	2	4	4	118	118	71	71	44	44	248	248
8 Jun	43	48					3	7	3	5	3	7	330	448	146	217	166	210	694	942
15 Jun	21	69	7	7			8	15	3	8	8	15	140	588	80	297	99	309	366	1,308
22 Jun	72	141	34	41			11	26	2	10	4	19	135	723	124	421	201	510	583	1,891
25 Jun	77	218	150	191			2	28					163	886	80	501	112	622	584	2,475
29 Jun	91	309	103	294									101	987	113	614	219	841	627	3,102
2 Jul	108	417	618	912									392	1,379	304	918	605	1,446	2,027	5,129
6 Jul	310	727	1,942	2,854					100	110			312	1,691	509	1,427	643	2,089	3,816	8,945
9 Jul	212	939	1,396	4,250	162	162	150	178	94	204	284	303	1,210	2,901	485	1,912	366	2,455	4,359	13,304
13 Jul	437	1,376	1,650	5,900	345	507	391	569	163	367	218	521	824	3,725	544	2,456	1,240	3,695	5,812	19,116
16 Jul	62	1,438	369	6,269	284	791	175	744	396	763	61	582	511	4,236	380	2,836	52	3,747	2,290	21,406
20 Jul	33	1,471	1,630	7,899	726	1,517	355	1,099	455	1,218	642	1,224	1,325	5,561	725	3,561	612	4,359	6,503	27,909
23 Jul	14	1,485	2,264	10,163	972	2,489	390	1,489	336	1,554	92	1,316	709	6,270	453	4,014	492	4,851	5,722	33,631
27 Jul	226	1,711	1,208	11,371	824	3,313	671	2,160	209	1,763	187	1,503	696	6,966	391	4,405	327	5,178	4,739	38,370
30 Jul	56	1,767	896	12,267	296	3,609	299	2,459	277	2,040	84	1,587	479	7,445	356	4,761	437	5,615	3,180	41,550
3 Aug	195	1,962	576	12,843	86	3,695	98	2,557	377	2,417	134	1,721	329	7,774	48	4,809	370	5,985	2,213	43,763

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Northern District Set Gillnet

	247-10 Trading Bay		247-20 Tyonek		247-30 Beluga		247-41 Su. Flats		247-42 Pt. McKenzie		247-43 Fire Island		247-70 Pt. Possession		247-80 Birch Hill		247-90 #3 Bay		Total	
Date	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
6 Aug	255	2,217	1,292	14,135	203	3,898	73	2,630	166	2,583	39	1,760	454	8,228	579	5,388	866	6,851	3,927	47,690
10 Aug	8	2,225	402	14,537	49	3,947	40	2,670	89	2,672	91	1,851	321	8,549	329	5,717	497	7,348	1,826	49,516
13 Aug	111	2,336	115	14,652			130	2,800	96	2,768	96	1,947	329	8,878	210	5,927	757	8,105	1,844	51,360
17 Aug	295	2,631	159	14,811	42	3,989			63	2,831	35	1,982	457	9,335	31	5,958	147	8,252	1,229	52,589
20 Aug	5	2,636	51	14,862	31	4,020			65	2,896	16	1,998	442	9,777	439	6,397	510	8,762	1,559	54,148
24 Aug	118	2,754	22	14,884			25	2,825	30	2,926			179	9,956	116	6,513	238	9,000	728	54,876
27 Aug	6	2,760	12	14,896									49	10,005	50	6,563	97	9,097	214	55,090
31 Aug																			0	55,090
3 Sep													36	10,041	437	7,000	49	9,146	522	55,612
7 Sep	3	2,763											100	10,141	25	7,025	96	9,242	224	55,836
10 Sep													15	10,156			19	9,261	34	55,870
14 Sep													2	10,158			3	9,264	5	55,875
21 Sep													1	10,159					1	55,876
24 Sep																			0	55,876
28 Sep																			0	55,876

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Central District Drift Gillnet

		244-26 KRSHA		244-56 Exp. Ken/Kas		244-57 Exp. Ken/Kas & A.P.		244-60 District Wide		244-61 Kas. Section		245-10 Chinitna Bay		Total	
Date	Deliveries	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
22 Jun	94							2,469	2,469					2,469	2,469
25 Jun	117							3,111	5,580					3,111	5,580
27 Jun	30									1,091	1,091			1,091	6,671
29 Jun	200							8,116	13,696					8,116	14,787
30 Jun	22									251	1,342			251	15,038
2 Jul	301							17,254	30,950					17,254	32,292
4 Jul	31									426	1,768			426	32,718
6 Jul	365							20,523	51,473					20,523	53,241
7 Jul	16	579	579											579	53,820
8 Jul	41	4,070	4,649											4,070	57,890
9 Jul	395							17,540	69,013					17,540	75,430
10 Jul	19	308	4,957											308	75,738
11 Jul	245			14,511	14,511									14,511	90,249
12 Jul	<4	109	5,066											109	90,358
13 Jul	434	1,064	6,130					75,021	144,034					76,085	166,443
14 Jul	312			15,518	30,029									15,518	181,961
16 Jul	381					26,444	26,444							26,444	208,405
17 Jul	41	6,763	12,893											6,763	215,168
18 Jul	15	2,089	14,982											2,089	217,257
20 Jul	444							123,454	267,488					123,454	340,711
21 Jul	18	476	15,458											476	341,187
22 Jul	65	5,577	21,035											5,577	346,764
23 Jul	422					104,428	130,872							104,428	451,192
24 Jul	55	6,531	27,566											6,531	457,723

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Central District Drift Gillnet

		244-26 KRSHA		244-56 Exp. Ken/Kas		244-57 Exp. Ken/Kas & A.P.		244-60 District Wide		244-61 Kas Section		245-10 Chinitna Bay		Total	
Date	Deliveries	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
25 Jul	405					70,832	201,704							70,832	528,555
26 Jul	235					58,716	260,420							58,716	587,271
27 Jul	404							46,969	314,457					46,969	634,240
28 Jul	235	93	27,659			20,126	280,546							20,219	654,459
29 Jul	283	225	27,884			31,815	312,361							32,040	686,499
30 Jul	296	208	28,092			34,756	347,117							34,964	721,463
31 Jul	200					26,205	373,322							26,205	747,668
1 Aug	352							59,770	374,227					59,770	807,438
2 Aug	107	295	28,387			10,753	384,075							11,048	818,486
3 Aug	328							72,773	447,000					72,773	891,259
5 Aug	217					38,196	422,271							38,196	929,455
6 Aug	281							43,995	490,995					43,995	973,450
7 Aug	110					3,508	425,779							3,508	976,958
8 Aug	161							17,987	508,982					17,987	994,945
9 Aug	20					833	426,612							833	995,778
10 Aug	77							6,229	515,211					6,229	1,002,007
12 Aug	38					2,131	428,743							2,131	1,004,138
13 Aug	101							4,951	520,162					4,951	1,009,089
17 Aug	24							1,365	521,527					1,365	1,010,454
18 Aug	4											198	198	198	1,010,652
20 Aug	26							831	522,358					831	1,011,483
21 Aug	8											120	318	120	1,011,603
24 Aug	15							404	522,762					404	1,012,007
25 Aug	6											119	437	119	1,012,126

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Central District Drift Gillnet

		244-26 KRSHA		244-56 Exp. Ken/Kas		244-57 Exp. Ken/Kas & A.P.		244-60 District Wide		244-61 Kas Section		245-10 Chinitna Bay		Total	
Date	Deliveries	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
28 Aug	<4											4	441	4	1,012,130
31 Aug	<4							34	522,796					34	1,012,164
1 Sep	<4											31	472	31	1,012,195
3 Sep	5							282	523,078					282	1,012,477
4 Sep	6											131	603	131	1,012,608
7 Sep	5							50	523,128					50	1,012,658
8 Sep	4											16	619	16	1,012,674
11 Sep	<4											8	627	8	1,012,682
15 Sep	<4											1	628	1	1,012,683
17 Sep	<4							1	523,129					1	1,012,684

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

Appendix A5.–Commercial coho salmon harvest by area and date, Upper Cook Inlet, 2015.

Upper Subdistrict Set Gillnet																
	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	
Date	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
22 Jun															0	0
24 Jun	1	1													1	1
25 Jun		1													0	1
27 Jun		1													0	1
29 Jun	1	2													1	2
30 Jun		2													0	2
2 Jul	5	7	4	4			2	2							11	13
4 Jul	1	8		4			2	4							3	16
6 Jul	13	21	9	13			1	5							23	39
7 Jul					1	1									1	40
8 Jul					3	4									3	43
9 Jul	12	33	16	29			2	7	5	5	66	66	61	61	162	205
10 Jul						4									0	205
11 Jul	14	47	6	35	1	5	8	15	2	7	27	93	47	108	105	310
12 Jul						5									0	310
13 Jul					12	17									12	322
14 Jul	39	86	33	68			7	22	4	11	77	170	162	270	322	644
15 Jul	19	105	15	83			1	23							35	679
16 Jul	39	144	40	123			14	37	21	32	179	349	391	661	684	1,363
17 Jul					12	29									12	1,375
18 Jul	66	210	80	203	3	32	75	112							224	1,599
19 Jul	56	266	31	234			13	125							100	1,699
20 Jul	44	310	26	260			8	133	35	67	108	457	138	799	359	2,058

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Upper Subdistrict Set Gillnet

	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	
Date	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
21 Jul	26	336	12	272	1	33	2	135							41	2,099
22 Jul	38	374	53	325	7	40	4	139							102	2,201
23 Jul	176	550	201	526		40	17	156	13	80	384	841	692	1,491	1,483	3,684
24 Jul					12	52									12	3,696
25 Jul	110	660	93	619	2	54	22	178	18	98	226	1,067	192	1,683	663	4,359
26 Jul	273	933	152	771		54	33	211	16	114	466	1,533	145	1,828	1,085	5,444
27 Jul	109	1,042	80	851		54	18	229	21	135	124	1,657	241	2,069	593	6,037
28 Jul	68	1,110	32	883	3	57	4	233							107	6,144
29 Jul	116	1,226	90	973		57	11	244	16	151	122	1,779	232	2,301	587	6,731
30 Jul	46	1,272	34	1,007			17	261	17	168	109	1,888	206	2,507	429	7,160
31 Jul	72	1,344	21	1,028	15	72	8	269							116	7,276
1 Aug	79	1,423	83	1,111	8	80	27	296	16	184	184	2,072	197	2,704	594	7,870
2 Aug					46	126			55	239	261	2,333	229	2,933	591	8,461
3 Aug	279	1,702	131	1,242			68	364	117	356	303	2,636	260	3,193	1,158	9,619
5 Aug	304	2,006	239	1,481			100	464	130	486	403	3,039	261	3,454	1,437	11,056
6 Aug	315	2,321	119	1,600			105	569	143	629	247	3,286	190	3,644	1,119	12,175
8 Aug	362	2,683	268	1,868			43	612	183	812	546	3,832	332	3,976	1,734	13,909
9 Aug	456	3,139	171	2,039			56	668	111	923	370	4,202	305	4,281	1,469	15,378
10 Aug	412	3,551	160	2,199			43	711	184	1,107	385	4,587	380	4,661	1,564	16,942
12 Aug									207	1,314	468	5,055	331	4,992	1,006	17,948

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Central District - West Side Set Gillnet

Date	245-10 Chinitna Bay		245-20 Silv. Salmon		245-30 Tuxedni Bay		245-40 Polly Cr.		245-50 L. J. Slough		245-55 Big River		245-60 W. Forelands		246-10 Kalgin - West		246-20 Kalgin - East		Total	
	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
1 Jun																			0	0
3 Jun																			0	0
5 Jun																			0	0
8 Jun																			0	0
10 Jun																			0	0
12 Jun																			0	0
15 Jun																			0	0
17 Jun																			0	0
18 Jun																			0	0
19 Jun																			0	0
22 Jun																			0	0
24 Jun																			0	0
25 Jun																	1	1	1	1
29 Jun					4	4									19	19		1	23	24
2 Jul					7	11									60	79	7	8	74	98
6 Jul					24	35	1	1	1	1					203	282	32	40	261	359
9 Jul					64	99			2	3					568	850	65	105	699	1,058

-continued-

Central District - West Side Set Gillnet

	245-10 Chinitna Bay		245-20 Silv. Salmon		245-30 Tuxedni Bay		245-40 Polly Cr.		245-50 L. J. Slough		245-55 Big River		245-60 W. Forelands		246-10 Kalgin - West		246-20 Kalgin - East		Total	
Date	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
13 Jul					269	368		1	1	4					876	1,726	59	164	1,205	2,263
16 Jul					150	518									497	2,223	56	220	703	2,966
18 Jul					149	667													149	3,115
20 Jul					268	935	2	3	36	40			121	121	960	3,183	211	431	1,598	4,713
23 Jul					432	1,367			13	53			245	366	1,341	4,524	243	674	2,274	6,987
25 Jul					387	1,754													387	7,374
27 Jul					326	2,080			64	117			306	672	904	5,428	345	1,019	1,945	9,319
30 Jul					269	2,349			109	226			166	838	1,182	6,610	402	1,421	2,128	11,447
1 Aug					308	2,657									1,579	8,189	267	1,688	2,154	13,601
3 Aug					297	2,954			122	348					1,311	9,500	158	1,846	1,888	15,489
6 Aug					216	3,170			126	474					1,009	10,509	33	1,879	1,384	16,873
8 Aug					16	3,186									894	11,403	49	1,928	959	17,832
10 Aug									189	663					364	11,767	70	1,998	623	18,455
13 Aug	12	12				3,186			88	751					484	12,251	82	2,080	666	19,121
15 Aug															425	12,676	59	2,139	484	19,605
17 Aug	10	22			23	3,209			145	896					773	13,449	83	2,222	1,034	20,639
20 Aug					32	3,241			77	973									109	20,748

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Northern District Set Gillnet

	247-10 Trading Bay		247-20 Tyonek		247-30 Beluga		247-41 Su. Flats		247-42 Pt. McKenzie		247-43 Fire Island		247-70 Pt. Possession		247-80 Birch Hill		247-90 #3 Bay		Total	
Date	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
1 Jun																			0	0
8 Jun																			0	0
15 Jun																			0	0
22 Jun																			0	0
25 Jun													1	1					1	1
29 Jun	1	1	1	1										1					2	3
2 Jul	6	7	11	12									7	8	1	1			25	28
6 Jul	19	26	48	60					2	2			11	19	5	6	19	19	104	132
9 Jul	191	217	498	558	137	137	139	139	22	24	100	100	111	130	51	57	7	26	1,256	1,388
13 Jul	328	545	433	991	273	410	134	273	32	56	89	189	128	258	93	150	131	157	1,641	3,029
16 Jul	71	616	241	1,232	96	506	183	456	69	125	17	206	143	401	110	260	12	169	942	3,971
20 Jul	101	717	870	2,102	323	829	368	824	554	679	541	747	515	916	184	444	102	271	3,558	7,529
23 Jul	71	788	1,474	3,576	594	1,423	383	1,207	269	948	235	982	283	1,199	409	853	286	557	4,004	11,533
27 Jul	155	943	998	4,574	1,233	2,656	1,218	2,425	416	1,364	768	1,750	566	1,765	278	1,131	33	590	5,665	17,198
30 Jul	181	1,124	971	5,545	761	3,417	519	2,944	388	1,752	188	1,938	264	2,029	128	1,259	11	601	3,411	20,609
3 Aug	316	1,440	1,714	7,259	647	4,064	210	3,154	476	2,228	172	2,110	239	2,268	20	1,279	23	624	3,817	24,426

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Northern District Set Gillnet

	247-10 Trading Bay		247-20 Tyonek		247-30 Beluga		247-41 Su. Flats		247-42 Pt. McKenzie		247-43 Fire Island		247-70 Pt. Possession		247-80 Birch Hill		247-90 #3 Bay		Total	
Date	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
6 Aug	269	1,709	1,932	9,191	297	4,361	373	3,527	344	2,572	119	2,229	274	2,542	188	1,467	55	679	3,851	28,277
10 Aug	101	1,810	1,197	10,388	28	4,389	173	3,700	190	2,762	424	2,653	466	3,008	242	1,709	133	812	2,954	31,231
13 Aug	207	2,017	440	10,828			392	4,092	312	3,074	190	2,843	428	3,436	262	1,971	228	1,040	2,459	33,690
17 Aug	146	2,163	566	11,394	54	4,443			76	3,150	80	2,923	392	3,828	300	2,271	139	1,179	1,753	35,443
20 Aug	103	2,266	689	12,083	26	4,469			127	3,277	36	2,959	523	4,351	669	2,940	858	2,037	3,031	38,474
24 Aug	155	2,421	803	12,886			112	4,204	108	3,385			368	4,719	762	3,702	649	2,686	2,957	41,431
27 Aug	109	2,530	299	13,185									150	4,869	833	4,535	317	3,003	1,708	43,139
31 Aug	31	2,561	102	13,287															133	43,272
3 Sep	46	2,607	36	13,323									152	5,021	400	4,935	127	3,130	761	44,033
7 Sep	83	2,690	238	13,561									212	5,233	485	5,420	163	3,293	1,181	45,214
10 Sep	47	2,737	51	13,612									502	5,735			254	3,547	854	46,068
14 Sep	15	2,752	36	13,648									47	5,782			65	3,612	163	46,231
21 Sep			104	13,752									187	5,969					291	46,522
24 Sep															84	5504			84	46,606
28 Sep			10	13762															10	46,616

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Central District Drift Gillnet

		244-26 KRSHA		244-56 Exp. Ken/Kas		244-57 Exp. Ken/Kas & A.P.		244-60 District Wide		244-61 Kas. Section		245-10 Chinitna Bay		Total	
Date	Deliveries	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
22 Jun	94							51	51					51	51
25 Jun	117							71	122					71	122
27 Jun	30													0	122
29 Jun	200							351	473					351	473
30 Jun	22									11	11			11	484
2 Jul	301							643	1,116					643	1,127
4 Jul	31									2	13			2	1,129
6 Jul	365							1,777	2,893					1,777	2,906
7 Jul	16	1	1											1	2,907
8 Jul	41	9	10											9	2,916
9 Jul	395							3,217	6,110					3,217	6,133
10 Jul	19	1	11											1	6,134
11 Jul	245			327	327									327	6,461
12 Jul	<4	4	15											4	6,465
13 Jul	434	58	73					14,226	20,336					14,284	20,749
14 Jul	312			792	1,119									792	21,541
16 Jul	381					1,512	1,512							1,512	23,053
17 Jul	41	102	175											102	23,155
18 Jul	15	15	190											15	23,170
20 Jul	444							13,718	34,054					13,718	36,888
21 Jul	18	6	196											6	36,894
22 Jul	65	30	226											30	36,924
23 Jul	422					6,826	8,338							6,826	43,750
24 Jul	55	51	277											51	43,801

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Central District Drift Gillnet

		244-26 KRSHA		244-56 Exp. Ken/Kas		244-57 Exp. Ken/Kas & A.P.		244-60 District Wide		244-61 Kas Section		245-10 Chinitna Bay		Total	
Date	Deliveries	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
25 Jul	405					5,523	13,861							5,523	49,324
26 Jul	235					2,405	16,266							2,405	51,729
27 Jul	404							5,697	39,751					5,697	57,426
28 Jul	235		277			1,504	17,770							1,504	58,930
29 Jul	283		277			1,856	19,626							1,856	60,786
30 Jul	296	10	287			1,319	20,945							1,329	62,115
31 Jul	200					1,911	22,856							1,911	64,026
1 Aug	352							17,578	57,329					17,578	81,604
2 Aug	107	24	311			1,379	24,235							1,403	83,007
3 Aug	328							15,145	72,474					15,145	98,152
5 Aug	217					2,051	26,286							2,051	100,203
6 Aug	281							7,294	79,768					7,294	107,497
7 Aug	110					392	26,678							392	107,889
8 Aug	161							4,764	84,532					4,764	112,653
9 Aug	20					52	26,730							52	112,705
10 Aug	77							2,926	87,458					2,926	115,631
12 Aug	38					170	26,900							170	115,801
13 Aug	101							3,013	90,471					3,013	118,814
17 Aug	24							2,617	93,088					2,617	121,431
18 Aug	4											426	426	426	121,857
20 Aug	26							2,316	95,404					2,316	124,173
21 Aug	8											449	875	449	124,622
24 Aug	15							1,399	96,803					1,399	126,021
25 Aug	6											358	1,233	358	126,379

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Central District Drift Gillnet

		244-26 KRSHA		244-56 Exp. Ken/Kas		244-57 Exp. Ken/Kas & A.P.		244-60 District Wide		244-61 Kas Section		245-10 Chinitna Bay		Total	
Date	Deliveries	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
28 Aug	<4											332	1,565	332	126,711
31 Aug	<4							24	96,790					24	126,735
1 Sep	<4											380	1,945	380	127,115
3 Sep	5							1,051	97,841					1,051	128,166
4 Sep	6											928	2,873	928	129,094
7 Sep	5							730	98,571					730	129,824
8 Sep	4											374	3,247	374	130,198
11 Sep	<4											113	3,360	113	130,311
15 Sep	<4											107	3,467	107	130,418
17 Sep	<4							302	98,873					302	130,720

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

Appendix A6.–Commercial pink salmon harvest by area and date, Upper Cook Inlet, 2015.

Upper Subdistrict Set Gillnet																
	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	
Date	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
22 Jun	3	3	3	3											6	6
24 Jun	6	9	2	5			5	5							13	19
25 Jun	8	17	2	7				5							10	29
27 Jun	10	27	6	13				5							16	45
29 Jun	24	51	10	23			2	7							36	81
30 Jun	125	176	39	62			6	13							170	251
2 Jul	159	335	64	126			18	31							241	492
4 Jul	152	487	63	189			20	51							235	727
6 Jul	306	793	224	413			23	74							553	1,280
7 Jul					15	15									15	1,295
8 Jul					45	60									45	1,340
9 Jul	380	1,173	199	612			30	104	34	34	92	92	144	144	879	2,219
10 Jul					139	199									139	2,358
11 Jul	905	2,078	618	1,230	52	251	126	230	47	81	192	284	223	367	2,163	4,521
12 Jul					67	318									67	4,588
13 Jul					596	914									596	5,184
14 Jul	1,869	3,947	1,488	2,718			273	503	53	134	236	520	350	717	4,269	9,453
15 Jul	664	4,611	361	3,079			45	548							1,070	10,523
16 Jul	1,082	5,693	1,231	4,310			225	773	32	166	64	584	106	823	2,740	13,263
17 Jul					130	1,044									130	13,393
18 Jul	340	6,033	312	4,622	10	1,054	102	875							764	14,157
19 Jul	545	6,578	178	4,800			63	938							786	14,943
20 Jul	699	7,277	476	5,276			120	1,058	51	217	84	668	159	982	1,589	16,532

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Upper Subdistrict Set Gillnet

	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	
Date	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
21 Jul	343	7,620	129	5,405	12	1,066	15	1,073							499	17,031
22 Jul	187	7,807	92	5,497	41	1,107	16	1,089							336	17,367
23 Jul	213	8,020	317	5,814	2	1,109	28	1,117	5	222	53	721	233	1,215	851	18,218
24 Jul					33	1,142									33	18,251
25 Jul	173	8,193	188	6,002	5	1,147	26	1,143	12	234	48	769	135	1,350	587	18,838
26 Jul	176	8,369	314	6,316	1	1,148	36	1,179	10	244	35	804	55	1,405	627	19,465
27 Jul	304	8,673	199	6,515		1,148	24	1,203	4	248	36	840	117	1,522	684	20,149
28 Jul	83	8,756	81	6,596	92	1,240	22	1,225							278	20,427
29 Jul	212	8,968	203	6,799	4	1,244	28	1,253	8	256	45	885	110	1,632	610	21,037
30 Jul	117	9,085	124	6,923			22	1,275	11	267	41	926	70	1,702	385	21,422
31 Jul	80	9,165	56	6,979	61	1,305	5	1,280							202	21,624
1 Aug	88	9,253	107	7,086	17	1,322	18	1,298	6	273	17	943	24	1,726	277	21,901
2 Aug					24	1,346			10	283	22	965	29	1,755	85	21,986
3 Aug	55	9,308	41	7,127			13	1,311	3	286	18	983	30	1,785	160	22,146
5 Aug	45	9,353	39	7,166			15	1,326	18	304	47	1,030	42	1,827	206	22,352
6 Aug	58	9,411	30	7,196			27	1,353	10	314	20	1,050	31	1,858	176	22,528
8 Aug	23	9,434	27	7,223			4	1,357	3	317	24	1,074	24	1,882	105	22,633
9 Aug	55	9,489	39	7,262			9	1,366	8	325	18	1,092	29	1,911	158	22,791
10 Aug	44	9,533	12	7,274			16	1,382	6	331	14	1,106	15	1,926	107	22,898
12 Aug									11	342	23	1,129	51	1,977	85	22,983

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Central District - West Side Set Gillnet																				
	245-10 Chinitna Bay		245-20 Silv. Salmon		245-30 Tuxedni Bay		245-40 Polly Cr.		245-50 L. J. Slough		245-55 Big River		245-60 W. Forelands		246-10 Kalgin - West		246-20 Kalgin - East		Total	
Date	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
1 Jun																			0	0
3 Jun																			0	0
5 Jun																			0	0
8 Jun																			0	0
10 Jun																			0	0
12 Jun																			0	0
15 Jun																			0	0
17 Jun																			0	0
18 Jun																			0	0
19 Jun																			0	0
22 Jun					2	2													2	2
24 Jun															3	3			3	5
25 Jun					3	5			2	2						3			5	10
29 Jun					3	8				2					4	7			7	17
2 Jul					20	28			4	6					27	34			51	68
6 Jul					16	44	8	8	1	7					88	122	7	7	120	188
9 Jul					36	80			14	21					39	161	2	9	91	279

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Central District - West Side Set Gillnet

	245-10 Chinitna Bay		245-20 Silv. Salmon		245-30 Tuxedni Bay		245-40 Polly Cr.		245-50 L. J. Slough		245-55 Big River		245-60 W. Forelands		246-10 Kalgin - West		246-20 Kalgin - East		Total	
Date	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
13 Jul					106	186	3	11	21	42					163	324		9	293	572
16 Jul					12	198									44	368		9	56	628
18 Jul					11	209													11	639
20 Jul					62	271	1	12	7	49			2	2	68	436	12	21	152	791
23 Jul					16	287			4	53			10	12	65	501	12	33	107	898
25 Jul					22	309													22	920
27 Jul					17	326			18	71			9	21	27	528			71	991
30 Jul					9	335			8	79			3	24	2	530	2	35	24	1,015
1 Aug					6	341									11	541		35	17	1,032
3 Aug					3	344			8	87					18	559		35	29	1,061
6 Aug					6	350			14	101					9	568		35	29	1,090
8 Aug					4	354									11	579		35	15	1,105
10 Aug									3	104					5	584		35	8	1,113
13 Aug	2	2							13	117					8	592		35	23	1,136
15 Aug															10	602		35	10	1,146
17 Aug	5	7							7	124					13	615		35	25	1,171
20 Aug									4	128									4	1,175

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Northern District Set Gillnet

	247-10 Trading Bay		247-20 Tyonek		247-30 Beluga		247-41 Su. Flats		247-42 Pt. McKenzie		247-43 Fire Island		247-70 Pt. Possession		247-80 Birch Hill		247-90 #3 Bay		Total	
Date	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
1 Jun																			0	0
8 Jun																			0	0
15 Jun																			0	0
22 Jun													1	1			1	1	2	2
25 Jun													3	4			1	2	4	6
29 Jun													2	6			2	4	4	10
2 Jul													16	22			9	13	25	35
6 Jul	1	1							1	1			23	45	3	3	17	30	45	80
9 Jul	2	3					13	13	4	5			87	132	50	53	31	61	187	267
13 Jul	14	17					5	18	7	12	1	1	114	246	31	84	174	235	346	613
16 Jul					21	21	2	20	12	24			27	273	30	114	2	237	94	707
20 Jul					9	30	15	35	44	68			242	515	87	201	79	316	476	1,183
23 Jul			7	7			10	45	19	87			112	627	133	334	51	367	332	1,515
27 Jul	6	23	1	8			19	64	26	113			95	722	96	430	12	379	255	1,770
30 Jul	2	25	1	9			19	83	22	135			32	754	19	449	4	383	99	1,869
3 Aug							4	87	22	157			6	760					32	1,901

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Northern District Set Gillnet																				
	247-10 Trading Bay		247-20 Tyonek		247-30 Beluga		247-41 Su. Flats		247-42 Pt. McKenzie		247-43 Fire Island		247-70 Pt. Possession		247-80 Birch Hill		247-90 #3 Bay		Total	
Date	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
6 Aug			1	10			10	97	3	160			2	762	7	456	15	398	38	1,939
10 Aug							1	98	4	164			2	764	6	462	8	406	21	1,960
13 Aug							3	101					5	769	1	463	8	414	17	1,977
17 Aug			2	12					5	169					1	464	4	418	12	1,989
20 Aug									6	175			1	770	2	466	1	419	10	1,999
24 Aug	2	27					3	104							1	467	3	422	9	2,008
27 Aug																			0	2,008
31 Aug																			0	2,008
3 Sep																	184	606	184	2,192
7 Sep																	1	607	1	2,193
10 Sep																			0	2,193
14 Sep																			0	2,193
21 Sep																			0	2,193
24 Sep																			0	2,193
28 Sep																			0	2,193

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Central District Drift Gillnet

		244-26 KRSHA		244-56 Exp. Ken/Kas		244-57 Exp. Ken/Kas & A.P.		244-60 District Wide		244-61 Kas. Section		245-10 Chinitna Bay		Total	
Date	Deliveries	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
22 Jun	94							10	10					10	10
25 Jun	117							9	19					9	19
27 Jun	30									2	2			2	21
29 Jun	200							460	479					460	481
30 Jun	22									11	13			11	492
2 Jul	301							596	1,075					596	1,088
4 Jul	31									14	27			14	1,102
6 Jul	365							1,730	2,805					1,730	2,832
7 Jul	16	3	3											3	2,835
8 Jul	41	24	27											24	2,859
9 Jul	395							1,519	4,324					1,519	4,378
10 Jul	19	11	38											11	4,389
11 Jul	245			606	606									606	4,995
12 Jul	<4	5	43											5	5,000
13 Jul	434	42	85					5,395	9,719					5,437	10,437
14 Jul	312			1,078	1,684									1,078	11,515
16 Jul	381					1,299	1,299							1,299	12,814
17 Jul	41	117	202											117	12,931
18 Jul	15	33	235											33	12,964
20 Jul	444							2,134	11,853					2,134	15,098
21 Jul	18	8	243											8	15,106
22 Jul	65	68	311											68	15,174
23 Jul	422					975	2,274							975	16,149
24 Jul	55	39	350											39	16,188

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Central District Drift Gillnet

		244-26 KRSHA		244-56 Exp. Ken/Kas		244-57 Exp. Ken/Kas & A.P.		244-60 District Wide		244-61 Kas Section		245-10 Chinitna Bay		Total	
Date	Deliveries	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
25 Jul	405					998	3,272							998	17,186
26 Jul	235					425	3,697							425	17,611
27 Jul	404							666	12,512					666	18,277
28 Jul	235	2	352			222	3,919							224	18,501
29 Jul	283					284	4,203							284	18,785
30 Jul	296					292	4,495							292	19,077
31 Jul	200					212	4,707							212	19,289
1 Aug	352							305	12,817					305	19,594
2 Aug	107					33	4,740							33	19,627
3 Aug	328							492	13,309					492	20,119
5 Aug	217					207	4,947							207	20,326
6 Aug	281							493	13,802					493	20,819
7 Aug	110					24	4,971							24	20,843
8 Aug	161							136	13,938					136	20,979
9 Aug	20					19	4,990							19	20,998
10 Aug	77							99	14,037					99	21,097
12 Aug	38					16	5,006							16	21,113
13 Aug	101							102	14,139					102	21,215
17 Aug	24							113	14,252					113	21,328
18 Aug	4											10	10	10	21,338
20 Aug	26							74	14,326					74	21,412
21 Aug	8											19	29	19	21,431
24 Aug	15							78	14,404					78	21,509
25 Aug	6											76	105	76	21,585

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Central District Drift Gillnet

		244-26 KRSHA		244-56 Exp. Ken/Kas		244-57 Exp. Ken/Kas & A.P.		244-60 District Wide		244-61 Kas Section		245-10 Chinitna Bay		Total	
Date	Deliveries	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
28 Aug	<4											4	109	4	21,589
31 Aug	<4							2	14,406					2	21,591
1 Sep	<4											3	112	3	21,594
3 Sep	5							23	14,429					23	21,617
4 Sep	6											6	118	6	21,623
7 Sep	5							28	14,457					28	21,651
8 Sep	4											2	120	2	21,653
11 Sep	<4													0	21,653
15 Sep	<4													0	21,653
17 Sep	<4													0	21,653

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

Appendix A7.–Commercial chum salmon harvest by area and date, Upper Cook Inlet, 2015.

Upper Subdistrict Set Gillnet																
	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	
Date	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
22 Jun															0	0
24 Jun															0	0
25 Jun															0	0
27 Jun	1	1	1	1											2	2
29 Jun	1	2		1											1	3
30 Jun	4	6	2	3											6	9
2 Jul	1	7		3			1	1							2	11
4 Jul	4	11		3				1							4	15
6 Jul	4	15	9	12				1							13	28
7 Jul															0	28
8 Jul															0	28
9 Jul	2	17	11	23				1			24	24	13	13	50	78
10 Jul															0	78
11 Jul	3	20	3	26			2	3			15	39	2	15	25	103
12 Jul															0	103
13 Jul					1	1									1	104
14 Jul	12	32	4	30			2	5			14	53	10	25	42	146
15 Jul	11	43	3	33			6	11							20	166
16 Jul	20	63		33			8	19	2	2	91	144	57	82	178	344
17 Jul					1	2									1	345
18 Jul	17	80	5	38		2	1	20							23	368
19 Jul	5	85	9	47				20							14	382
20 Jul	16	101	10	57				20	4	6	24	168	20	102	74	456

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Upper Subdistrict Set Gillnet

	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	
Date	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
21 Jul	10	111	2	59		2		20							12	468
22 Jul	5	116	6	65		2	3	23							14	482
23 Jul	12	128	16	81		2	2	25		6	63	231	40	142	133	615
24 Jul					2	4									2	617
25 Jul	45	173	14	95	1	5	35	60	1	7	32	263	8	150	136	753
26 Jul	209	382	55	150		5	9	69	2	9	43	306	17	167	335	1,088
27 Jul	94	476	29	179		5	6	75		9	27	333	43	210	199	1,287
28 Jul	24	500	16	195		5		75							40	1,327
29 Jul	77	577	29	224		5	4	79	2	11	20	353	20	230	152	1,479
30 Jul	18	595	12	236				79		11	9	362	23	253	62	1,541
31 Jul	7	602	2	238	4	9		79							13	1,554
1 Aug	19	621	15	253		9	1	80	1	12	13	375	16	269	65	1,619
2 Aug						9				12	26	401	30	299	56	1,675
3 Aug	15	636	9	262				80	1	13	8	409	32	331	65	1,740
5 Aug	14	650	10	272				80	3	16	16	425	17	348	60	1,800
6 Aug	16	666	5	277			2	82	1	17	7	432	10	358	41	1,841
8 Aug	23	689	9	286				82	5	22	26	458	13	371	76	1,917
9 Aug	139	828	77	363			1	83	2	24	12	470	14	385	245	2,162
10 Aug	37	865	6	369				83		24	12	482	13	398	68	2,230
12 Aug									1	25	4	486	13	411	18	2,248

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Central District - West Side Set Gillnet																				
	245-10 Chinitna Bay		245-20 Silv. Salmon		245-30 Tuxedni Bay		245-40 Polly Cr.		245-50 L. J. Slough		245-55 Big River		245-60 W. Forelands		246-10 Kalgin - West		246-20 Kalgin - East		Total	
Date	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
1 Jun																			0	0
3 Jun																			0	0
5 Jun																			0	0
8 Jun																			0	0
10 Jun																			0	0
12 Jun																			0	0
15 Jun																			0	0
17 Jun																			0	0
18 Jun																			0	0
19 Jun																			0	0
22 Jun																			0	0
24 Jun															3	3			3	3
25 Jun					4	4									3	6	1	1	8	11
29 Jun					11	15									86	92	1	2	98	109
2 Jul					14	29									21	113	1	3	36	145
6 Jul					33	62	1	1							51	164	14	17	99	244
9 Jul					192	254			1	1					126	290	6	23	325	569

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Central District - West Side Set Gillnet

	245-10 Chinitna Bay		245-20 Silv. Salmon		245-30 Tuxedni Bay		245-40 Polly Cr.		245-50 L. J. Slough		245-55 Big River		245-60 W. Forelands		246-10 Kalgin - West		246-20 Kalgin - East		Total	
Date	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
13 Jul					442	696	1	2	6	7					235	525		23	684	1,253
16 Jul					204	900									104	629	10	33	318	1,571
18 Jul					301	1,201													301	1,872
20 Jul					721	1,922	33	35	37	44			1	1	277	906	37	70	1,106	2,978
23 Jul					1,349	3,271			21	65			8	9	939	1,845	82	152	2,399	5,377
25 Jul					1,486	4,757													1,486	6,863
27 Jul					1,527	6,284			45	110			6	15	160	2,005	306	458	2,044	8,907
30 Jul					823	7,107			38	148			7	22	151	2,156	58	516	1,077	9,984
1 Aug					411	7,518									233	2,389	26	542	670	10,654
3 Aug					570	8,088			49	197					618	3,007		542	1,237	11,891
6 Aug					626	8,714			33	230					816	3,823		542	1,475	13,366
8 Aug					312	9,026									595	4,418		542	907	14,273
10 Aug									14	244					54	4,472		542	68	14,341
13 Aug	10	10			167	9,193			14	258					128	4,600	67	609	386	14,727
15 Aug															103	4,703	8	617	111	14,838
17 Aug	28	38			124	9,317			8	266					161	4,864		617	321	15,159
20 Aug					140	9,457			13	279									153	15,312

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Northern District Set Gillnet

	247-10 Trading Bay		247-20 Tyonek		247-30 Beluga		247-41 Su. Flats		247-42 Pt. McKenzie		247-43 Fire Island		247-70 Pt. Possession		247-80 Birch Hill		247-90 #3 Bay		Total	
Date	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
1 Jun																			0	0
8 Jun																			0	0
15 Jun																			0	0
22 Jun							2	2					1	1					3	3
25 Jun													3	4	1	1			4	7
29 Jun													2	6					2	9
2 Jul	1	1											5	11					6	15
6 Jul	1	2							58	58			4	15			1	1	64	79
9 Jul	70	72	27	27			136	138	3	61	177	177	18	33	3	4	1	2	435	514
13 Jul	50	122	181	208			87	225	69	130	128	305	46	79	3	7	6	8	570	1,084
16 Jul					46	46	172	397	146	276	5	310	3	82	1	8	1	9	374	1,458
20 Jul			212	420	171	217	133	530	234	510	148	458	24	106			3	12	925	2,383
23 Jul			38	458	38	255	347	877	260	770	9	467	23	129	10	18	2	14	727	3,110
27 Jul	3	125	52	510	72	327	277	1,154	141	911	150	617	144	273	1	19			840	3,950
30 Jul	1	126	64	574	45	372	122	1,276	127	1,038	1	618	21	294	9	28			390	4,340
3 Aug	12	138	198	772	9	381	134	1,410	192	1,230	63	681	7	301			1	15	616	4,956

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Northern District Set Gillnet																				
	247-10 Trading Bay		247-20 Tyonek		247-30 Beluga		247-41 Su. Flats		247-42 Pt. McKenzie		247-43 Fire Island		247-70 Pt. Possession		247-80 Birch Hill		247-90 #3 Bay		Total	
Date	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
6 Aug	27	165	161	933	33	414	199	1,609	72	1,302			2	303	5	33	1	16	500	5,456
10 Aug			59	992	10	424	50	1,659	51	1,353	18	699	7	310	2	35	3	19	200	5,656
13 Aug	17	182					51	1,710	34	1,387	3	702	5	315	3	38	5	24	118	5,774
17 Aug	17	199			10	434			29	1,416			35	350			17	41	108	5,882
20 Aug					24	458			30	1,446			18	368	1	39	2	43	75	5,957
24 Aug	29	228					27	1,737	14	1,460			10	378	4	43	6	49	90	6,047
27 Aug													1	379			3	52	4	6,051
31 Aug																			0	6,051
3 Sep													3	382					3	6,054
7 Sep													4	386			4	56	8	6,062
10 Sep													6	392			1	57	7	6,069
14 Sep																			0	6,069
21 Sep																			0	6,069
24 Sep																			0	6,069
28 Sep																			0	6,069

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Central District Drift Gillnet

		244-26 KRSHA		244-56 Exp. Ken/Kas		244-57 Exp. Ken/Kas & A.P.		244-60 District Wide		244-61 Kas. Section		245-10 Chinitna Bay		Total	
Date	Deliveries	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
22 Jun	94							119	119					119	119
25 Jun	117							230	349					230	349
27 Jun	30									4	4			4	353
29 Jun	200							2,443	2,792					2,443	2,796
30 Jun	22									26	30			26	2,822
2 Jul	301							4,005	6,797					4,005	6,827
4 Jul	31									2	32			2	6,829
6 Jul	365							10,918	17,715					10,918	17,747
7 Jul	16													0	17,747
8 Jul	41	1	1											1	17,748
9 Jul	395							16,787	34,502					16,787	34,535
10 Jul	19		1											0	34,535
11 Jul	245			2,601	2,601									2,601	37,136
12 Jul	<4	12	13											12	37,148
13 Jul	434	120	133					36,787	71,289					36,907	74,055
14 Jul	312			3,321	5,922									3,321	77,376
16 Jul	381					10,312	10,312							10,312	87,688
17 Jul	41	41	174											41	87,729
18 Jul	15		174											0	87,729
20 Jul	444							31,521	102,810					31,521	119,250
21 Jul	18		174											0	119,250
22 Jul	65	3	177											3	119,253
23 Jul	422					7,661	17,973							7,661	126,914
24 Jul	55	24	201											24	126,938

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Central District Drift Gillnet

		244-26 KRSHA		244-56 Exp. Ken/Kas		244-57 Exp. Ken/Kas & A.P.		244-60 District Wide		244-61 Kas Section		245-10 Chinitna Bay		Total	
Date	Deliveries	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
25 Jul	405					9,821	27,794							9,821	136,759
26 Jul	235					7,670	35,464							7,670	144,429
27 Jul	404							14,837	117,647					14,837	159,266
28 Jul	235		201			3,902	39,366							3,902	163,168
29 Jul	283		201			5,647	45,013							5,647	168,815
30 Jul	296	24	225			3,002	48,015							3,026	171,841
31 Jul	200					4,686	52,701							4,686	176,527
1 Aug	352							24,894	142,541					24,894	201,421
2 Aug	107	57	282			2,895	55,596							2,952	204,373
3 Aug	328							22,722	165,263					22,722	227,095
5 Aug	217					4,503	60,099							4,503	231,598
6 Aug	281							9,445	174,708					9,445	241,043
7 Aug	110					643	60,742							643	241,686
8 Aug	161							3,870	178,578					3,870	245,556
9 Aug	20					149	60,891							149	245,705
10 Aug	77							2,359	180,937					2,359	248,064
12 Aug	38					349	61,240							349	248,413
13 Aug	101							1,341	182,278					1,341	249,754
17 Aug	24							414	182,692					414	250,168
18 Aug	4											308	308	308	250,476
20 Aug	26							477	183,169					477	250,953
21 Aug	8											286	594	286	251,239
24 Aug	15							249	183,418					249	251,488
25 Aug	6											275	869	275	251,763

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Central District Drift Gillnet

		244-26 KRSHA		244-56 Exp. Ken/Kas		244-57 Exp. Ken/Kas & A.P.		244-60 District Wide		244-61 Kas Section		245-10 Chinitna Bay		Total	
Date	Deliveries	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum	Day	Cum
28 Aug	<4											147	1,016	147	251,910
31 Aug	<4							3	183,354					3	251,913
1 Sep	<4											29	1,045	29	251,942
3 Sep	5							143	183,497					143	252,085
4 Sep	6											106	1,151	106	252,191
7 Sep	5							85	183,582					85	252,276
8 Sep	4											27	1,178	27	252,303
11 Sep	<4											19	1,197	19	252,322
15 Sep	<4											6	1,203	6	252,328
17 Sep	<4							3	183,585					3	252,331

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, 2015.

Gear	District	Subdistrict	Stat Area	Permits[a]	Chinook	Sockeye	Coho	Pink	Chum	Total
Drift	Central	All	All	492	556	1,012,684	130,720	21,653	252,331	1,417,944
Setnet	Central	Upper	24421	98	861	363,681	3,551	9,533	865	378,491
			24422	72	1,022	227,728	2,199	7,274	369	238,592
			24425	103	426	101,660	126	1,346	9	103,567
			24431	68	1,082	203,542	711	1,382	83	206,800
			24432	60	876	129,440	1,314	342	25	131,997
			24441	57	3,363	347,514	5,055	1,129	486	357,547
			24442	27	151	107,771	4,992	1,977	411	115,302
			All	373	7,781	1,481,336	17,948	22,983	2,248	1,532,296
		Kalgin Is.	24610	24	277	47,353	13,449	615	4,864	66,558
			24620	4	7	12,405	2,222	35	617	15,286
			All	28	284	59,758	15,671	650	5,481	81,844
		Chinitna	24510	<4	0	1	22	7	38	68
		Western	24520	0	0	0	0	0	0	0
			24530	15	170	35,276	3,241	354	9,457	48,498
			24540	<4	5	294	3	12	35	349
			24550	<4	0	1,912	973	128	279	3,292
			All	21	175	37,482	4,217	494	9,771	52,139
		Kustatan	24555	8	79	1,686				1,765
			24560	<4		844	838	24	22	1,728
			All	9	79	2,530	838	24	22	3,493
		All	All	429	8,319	1,581,107	38,696	24,158	17,560	1,669,840
	Northern	General	24710	12	377	2763	2752	27	228	6,147
			24720	15	459	14896	13,762	12	992	30,121
			24730	9	2	4,020	4,469	30	458	8,979
			24741	13	209	2,825	4,204	104	1737	9,079
			24742	8	185	2,926	3,385	175	1460	8,131
			24743	5	306	1,998	2,959	1	702	5,966
			All	50	1,538	29,428	31,531	349	5,577	68,423
		Eastern	24770	14	226	10,159	5,969	770	392	17,516
			24780	10	108	7025	5,504	467	43	13,147
			24790	8	51	9,264	3,612	607	57	13,591
			All	31	385	26,448	15,085	1,844	492	44,254
		All	All	80	1,923	55,876	46,616	2,193	6,069	112,677
	All	All	All	507	10,242	1,636,983	85,312	26,351	23,629	1,782,517
Seine	All	All	All	0	0	0	0	0	0	0
All	All	All	All	999	10,798	2,649,667	216,032	48,004	275,960	3,200,461

[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, 2015.

Gear	District	Subdistrict	Stat Area	Permits[a]	Chinook	Sockeye	Coho	Pink	Chum	Total
Drift	Central	All	All	492	1	2,058	266	44	513	2,882
Set	Central	Upper	24421	98	9	3,711	36	97	9	3,862
			24422	72	14	3,163	31	101	5	3,314
			24425	103	4	987	1	13	0	1,006
			24431	68	16	2,993	10	20	1	3,041
			24432	60	15	2,157	22	6	0	2,200
			24441	57	59	6,097	89	20	9	6,273
			24442	27	6	3,992	185	73	15	4,270
			All	373	21	3,971	48	62	6	4,108
		Kalgin Is.	24610	24	12	1,973	560	26	203	2,773
			24620	4	2	3,101	556	9	154	3,822
			All	28	10	2,134	560	23	196	2,923
		Chinit–	24510	<4	–	–	–	–	–	–
		Western	24520	0	0	0	0	0	0	0
			24530	15	11	2,352	216	24	630	3,233
			24540	<4	–	–	–	–	–	–
			24550	<4	–	–	–	–	–	–
			All	21	8	1,785	201	24	465	2,483
		Kustatan	24555	8	10	211	0	0	0	221
			24560	<4	–	–	–	–	–	–
			All	9	9	281	93	3	2	388
		All	All	429	19	3,686	90	56	41	3,892
	Northern	General	24710	12	31	230	229	2	19	512
			24720	15	31	993	917	1	66	2,008
			24730	9	0	447	497	3	51	998
			24741	13	16	217	323	8	134	698
			24742	8	23	366	423	22	183	1,016
			24743	5	61	400	592	0	140	1,193
			All	50	31	589	631	7	112	1,368
		Eastern	24770	14	16	726	426	55	28	1,251
			24780	10	11	703	550	47	4	1,315
			24790	8	6	1,158	452	76	7	1,699
			All	31	12	853	487	59	16	1,428
		All	All	80	24	698	583	27	76	1,408
	All	All	All	507	20	3,229	168	52	47	3,516
Seine	All	All	All	-	-	-	-	-	-	-
All	All	All	All	999	11	2,652	216	48	276	3,204

[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 2015 Upper Cook Inlet fishing season.

Emergency Order No.	Effective Date	Action	Reason
2G-01-15	23 May	Closed the Cook Inlet commercial smelt fishery for the 2015 season at 2:30 PM on Wednesday, May 23, 2015.	To comply with the Cook Inlet Smelt FMP; the fishery is to close when harvest meets the 100 ton limit.
2S-01-15	25 May	Closed commercial salmon fishing in the Northern District of Upper Cook Inlet on Monday, May 25, 2015. Reduced the open fishing time from twelve to six hours per day for the four remaining commercial Chinook salmon fishing periods scheduled in the Northern District of Upper Cook Inlet for the 2015 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 Chinook salmon fishing for the 2015 directed Chinook salmon fishery. The fishing periods affected by this announcement were June 1, June 8, June 15, and June 22, 2015.	Chuitna River king salmon are 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 2015 season.
2S-02-15	15 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 Chinook salmon commercial set gillnet fishery in the Northern District of Upper Cook Inlet. The fishing periods affected by this announcement occurred on Monday, June 15, 2015 and Monday, June 22, 2015.	To allow opportunity in the fishery based on the likelihood of achieving the Deshka River Chinook salmon SEG

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Emergency Order No.	Effective Date	Action	Reason
2S-03-15	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 11:00 AM to 3:00 PM daily, from Monday, June 15, 2015 through Wednesday, June 24, 2015.	To reduce the harvest of Kasilof River Chinook salmon.
2S-04-15	22 Jun	Opened commercial salmon fishing with set gillnets in the Kasilof Section of the Upper Subdistrict from 10:00 AM until 10:00 PM on Monday, June 22, 2015. Opened drift gillnetting in the Kasilof Section of the Upper Subdistrict from 7:00 PM until 10:00 PM on Monday, June 22, 2015.	To reduce the escapement rate of Kasilof River sockeye salmon.
2S-05-15	24 Jun	Opened commercial salmon fishing with set and drift gillnets in the Kasilof Section of the Upper Subdistrict from 4:00 PM until 12:00 PM midnight on Wednesday, June 24, 2015.	To reduce the escapement rate of Kasilof River sockeye salmon.
2S-06-15	25 Jun	Opened commercial salmon fishing with set and drift gillnets in the Kasilof Section of the Upper Subdistrict from 5:00 AM until 7:00 AM on Thursday, June 25, 2015.	To reduce the escapement rate of Kasilof River sockeye salmon.
2S-07-15	27 Jun	Opened commercial salmon fishing with set and drift gillnets in the Kasilof Section of the Upper Subdistrict from 7:00 AM until 9:00 PM on Saturday, June 27, 2015.	To reduce the escapement rate of Kasilof River sockeye salmon.
2S-08-15	30 Jun	Opened commercial salmon fishing with set and drift gillnets in the Kasilof Section of the Upper Subdistrict from 9:00 AM until 6:00 PM on Tuesday, June 30, 2015.	To reduce the escapement rate of Kasilof River sockeye salmon.
2S-09-15	1 Jul	Modified 5AAC 21.320(a)(2) *Weekly Fishing Periods* by eliminating regularly scheduled Monday and Thursday fishing periods in the Upper Subdistrict set gillnet fishery beginning 12:01 AM on July 1, 2015.	To comply with the Kenai River Late-Run King Salmon Management Plan.
2S-10-15	2 Jul	Opened commercial salmon fishing with set gillnets in the Kasilof Section of the Upper Subdistrict from 4:00 AM until 8:00 PM on Thursday, July 2, 2015. Opened drift gillnetting in the Kasilof Section of the Upper Subdistrict from 4:00 AM until 7:00 AM and from 7:00 PM until 8:00 PM on Thursday, July 2, 2015.	To reduce the escapement rate of Kasilof River sockeye salmon.

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Emergency Order No.	Effective Date	Action	Reason
2S-11-15	4 Jul	Opened commercial salmon fishing with set and drift gillnets in the Kasilof Section of the Upper Subdistrict from 8:00 AM until 10:00 PM on Saturday, July 4, 2015.	To reduce the escapement rate of Kasilof River sockeye salmon.
2S-12-15	6 Jul	Opened commercial salmon fishing with set gillnets in the Kasilof Section of the Upper Subdistrict from 2:00 PM until 11:00 PM on Monday, July 6, 2015. Opened drift gillnetting in the Kasilof Section of the Upper Subdistrict from 7:00 PM until 11:00 PM on Monday, July 6, 2015.	To reduce the escapement rate of Kasilof River sockeye salmon.
2S-13-15	8 Jun	Opened commercial salmon fishing with set gillnets in the Kasilof River Special Harvest Area (KRSHA) from 6:00 PM on Tuesday, July 7, 2015 until 11:00 PM on Wednesday, July 8, 2015. Opened drift gillnetting in the KRSHA from 6:00 PM until 11:59 pm on Tuesday, July 7, 2015 and from 5:00 AM until 11:00 PM on Wednesday, July 8, 2015.	To reduce the escapement rate of Kasilof River sockeye salmon and to conserve Kenai River Chinook salmon.
2S-14-15	9 Jul	Opened commercial salmon fishing with set gillnets in the Kenai, Kasilof, and East Foreland sections of the Upper Subdistrict on Thursday, from 7:00 AM until 7:00 PM on July 9, 2015.	To reduce the escapement rate of Kenai River and Kasilof River sockeye salmon.
2S-15-14	10 Jul	Opened commercial salmon fishing with set gillnets in the Kasilof River Special Harvest Area (KRSHA) from 9:00 PM on Friday, July 10 until 5:00 AM on Saturday, July 11, 2015. Opened drift gillnetting in the KRSHA from 9:00 PM until 11:59 pm on Friday, July 10, 2015.	To reduce the escapement rate of Kasilof River sockeye salmon and to conserve Kenai River Chinook salmon.
2S-16-15	11 Jul	Opened commercial salmon fishing with set gillnets in the Kenai, Kasilof, and East Foreland sections of the Upper Subdistrict from 7:00 AM until 10:00 PM on Saturday, July 11, 2015. Opened drift gillnetting in the Expanded Kenai and Expanded Kasilof sections of the Upper Subdistrict from 7:00 AM until 10:00 PM on Saturday, July 11, 2015.	To reduce the escapement rate of Kenai River and Kasilof River sockeye salmon.
2S-17-15	13 Jul	Opened commercial salmon 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; from 6:00 AM until 10:00 PM on Thursdays; and from 6:00 AM until 10:00 PM on Saturdays each week until further notice, effective beginning at 6:00 AM on Monday, July 13, 2015.	To reduce the escapement rate of Crescent River sockeye salmon.

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Emergency Order No.	Effective Date	Action	Reason
2S-18-15	12 Jul	Opened commercial salmon fishing with set gillnets in the Kasilof River Special Harvest Area (KRSHA) from 11:00 PM on Sunday, July 12 until 7:00 PM on Monday, July 13, 2015. Opened drift gillnetting in the KRSHA from 11:00 PM until 11:59 PM on Sunday, July 12, 2015 and from 5:00 AM until 7:00 pm on Monday, July 13, 2015.	To reduce the escapement rate of Kasilof River sockeye salmon and to conserve Kenai River Chinook salmon.
2S-19-15	14 Jul	Opened commercial salmon fishing with set gillnets in the Kenai, Kasilof, and East Foreland sections of the Upper Subdistrict from 9:00 AM until 7:00 PM on Tuesday, July 14, 2015. Opened drift gillnetting in the Expanded Kenai and Expanded Kasilof sections of the Upper Subdistrict from 9:00 AM until 7:00 PM on Tuesday, July 14, 2015.	To reduce the escapement rate of Kenai River and Kasilof River sockeye salmon.
2S-20-15	15 Jul	Opened commercial salmon fishing with set gillnets in that portion of the Kasilof Section of the Upper Subdistrict within 600 feet of the mean high tide mark on the Kenai Peninsula shoreline from 11:00 AM until 11:00 PM on Wednesday, July 15, 2015.	To reduce the escapement rate of Kasilof River sockeye salmon.
2S-21-15	16 Jul	Opened commercial salmon 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 Thursday, July 16, 2015. 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 from 7:00 AM until 7:00 PM on Thursday, July 16, 2015.	To reduce the escapement rate of Kenai River and Kasilof River sockeye salmon.
2S-22-15	17 Jul	Open commercial salmon fishing with set gillnets in the Kasilof River Special Harvest Area (KRSHA) from 5:00 AM on Friday, July 17 until 7:00 AM on Saturday, July 18, 2015. Opened drift gillnetting in the KRSHA from 5:00 AM until 11:59 PM on Friday, July 17, 2015 and from 5:00 AM until 7:00 AM on Saturday, July 18, 2015.	To reduce the escapement rate of Kasilof River sockeye salmon and to conserve Kenai River Chinook salmon.
2S-23-15	18 Jul	Opened commercial salmon fishing with set gillnets 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 8:00 AM until 10:00 PM on Saturday, July 18, 2015	To reduce the escapement rate of Kasilof River sockeye salmon.

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Emergency Order No.	Effective Date	Action	Reason
2S-24-15	20 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 20, 2015, from 7:00 AM until 7:00 PM on Thursday, July 23, 2015, from 7:00 AM until 7:00 PM on Monday, July 27, 2015, and from 7:00 AM until 7:00 PM on Thursday, July 30, 2015.	To comply with the Northern District Salmon Management Plan and the Susitna River Sockeye Action Plan
2S-25-15	19 Jul	Opened commercial salmon fishing with set gillnets in that portion of the Kasilof Section of the Upper Subdistrict within 600 feet of the mean high tide mark on the Kenai Peninsula shoreline from 5:00 AM until 10:00 PM on Sunday, July 19, 2015.	To reduce the escapement rate of Kasilof River sockeye salmon.
2S-26-15	20 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 Monday, July 20, 2015. Drift gillnetting was opened in Drift Gillnet Area 1 and the Expanded Kenai and Expanded Kasilof sections of the Upper Subdistrict, and in the Anchor Point Sections of the Lower Subdistrict from 7:00 AM until 7:00 PM on Monday, July 20, 2015.	To reduce the escapement rate of Kenai and Kasilof river sockeye salmon.
2S-27-15	21 Jul	Opened commercial fishing with set gillnets in that portion of the Kasilof Section of the Upper Subdistrict within 600 feet of the mean high tide mark on the Kenai Peninsula shoreline from 5:00 AM until 11:00 PM on Tuesday, July 21, 2015.	To reduce the escapement rate of Kasilof River sockeye salmon.
2S-28-15	21 Jul	Opened commercial salmon fishing with set gillnets in the Kasilof River Special Harvest Area (KRSHA) from 6:00 PM on Tuesday, July 21 until 11:00 PM on Wednesday, July 22, 2015. Opened drift gillnetting in the KRSHA from 6:00 PM until 11:00 PM on Tuesday, July 21, 2015 and from 5:00 AM until 11:00 PM on Wednesday, July 22, 2015. Opened set gillnetting in the Kasilof Section of the Upper Subdistrict within 600 feet of the mean high tide mark of the Kenai Peninsula shoreline from 5:00 AM until 11:00 PM on Wednesday, July 22, 2015.	To reduce the escapement rate of Kasilof River sockeye salmon and to conserve Kenai River Chinook salmon.

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Emergency Order No.	Effective Date	Action	Reason
2S-29-15	23 Jul	Opened commercial fishing with set gillnets in the Kenai, Kasilof, and East Foreland sections of the Upper Subdistrict from 5:00 AM until 7:00 PM on Thursday, July 23, 2015. Drift gillnetting was opened in the Expanded Kenai and Expanded Kasilof sections of the Upper Subdistrict, and in the Anchor Point section of the Lower Subdistrict from 5:00 AM until 7:00 PM on Thursday, July 23, 2015.	To reduce the escapement rate of Kenai and Kasilof river sockeye salmon.
2S-30-15	23 Jul	Opened commercial fishing with set gillnets in the Kasilof River Special Harvest Area (KRSHA) from 7PM on Thursday, July 23, 2015 until 11:00 PM on Friday, July 24, 2015. Opened drift gillnetting in the KRSHA from 7:00 PM until 11:00 PM on Thursday, July 23, 2015, and from 5:00 AM until 11:00 PM on Friday, July 24, 2015.	To reduce the escapement rate of Kasilof River sockeye salmon.
2S-31-15	25 Jul	Rescinded Emergency Order No. 2S-09-15 and returned management of the Upper Subdistrict set gillnet fishery to the provisions of 5 AAC 21.360 Kenai River Late-Run Sockeye Salmon Management Plan effective Saturday, July 25, 2015.	To comply with the Kenai River Late-Run King Salmon Management Plan
2S-32-15	25 Jul	Opened commercial salmon fishing with set gillnets in the Kenai, Kasilof, and East Foreland sections of the Upper Subdistrict from 7:00 AM until 9:00 PM on Saturday, July 25, 2015. 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 from 7:00 AM until 9:00 PM on Saturday, July 25, 2015.	To reduce the escapement rate of Kenai and Kasilof river sockeye salmon.
2S-33-15	25 Jul	Opened commercial salmon fishing with set gillnets in the Kasilof River Special Harvest Area (KRSHA) from 9:00 PM on Saturday, July 25, 2015 until 6:00 AM on Sunday, July 26, 2015. Opened drift gillnetting in the KRSHA from 9:00 PM until 11:00 PM on Saturday, July 25, 2015, and from 5:00 AM until 6:00 AM on Sunday, July 26, 2015. Opened set gillnetting in the Kenai, Kasilof, and East Foreland sections of the Upper Subdistrict from 7:00 AM until 10:00 PM on Sunday, July 26, 2015. 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 from 7:00 AM until 10:00 PM on Sunday, July 26, 2015	To reduce the escapement rate of Kenai and Kasilof river sockeye salmon.

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Emergency Order No.	Effective Date	Action	Reason
2S-34-15	27 Jul	Opened commercial salmon fishing with drift gillnets in Drift Gillnet Area 1 and in the Expanded Kenai and Expanded Kasilof sections of the Upper Subdistrict from 7:00 AM until 7:00 PM on Monday, July 27, 2015.	To comply with the Central District Drift Gillnet Fishery Management Plan
2S-35-15	27 Jul	Extended commercial salmon fishing with set gillnets in the Kenai, Kasilof, and East Foreland sections of the Upper Subdistrict from 7:00 PM until 10:00 PM on Monday, July 27, 2015. 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 PM until 10:00 PM on Monday, July 27, 2015.	To reduce the escapement rate of Kenai and Kasilof river sockeye salmon.
2S-36-15	27 Jul	Opened commercial salmon fishing with set gillnets in the Kasilof River Special Harvest Area (KRSHA) from 10:00 PM on Monday, July 27 until 6:00 AM on Wednesday, July 29, 2015. Opened drift gillnetting in the KRSHA from 10:00 PM until 11:00 PM on Monday, July 27, 2015, from 5:00 AM until 11:00 PM on Tuesday, July 28, 2015, and from 5:00 AM until 6:00 AM on Wednesday, July 29, 2015. Opened set gillnetting in the Kasilof Section of the Upper Subdistrict within 600 feet of the mean high tide mark of the Kenai Peninsula shoreline from 10:00 AM until 6:00 PM on Tuesday, July 28, 2015. 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 28, 2015.	To reduce the escapement rate of Kenai and Kasilof river sockeye salmon.
2S-37-15	29 Jul	Opened commercial fishing with set gillnets in the Kenai, Kasilof, and East Foreland sections of the Upper Subdistrict from 8:00 AM until 11:00 PM on Wednesday, July 29, 2015. 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 11:00 PM on Wednesday, July 29, 2015.	To reduce the escapement rate of Kenai and Kasilof river sockeye salmon.

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Emergency Order No.	Effective Date	Action	Reason
2S-38-15	30 Jul	Opened commercial salmon fishing with set gillnets in the Kenai, Kasilof, and East Foreland sections of the Upper Subdistrict from 5:00 AM until 7:00 AM and from 7:00 PM until 8:00 PM on Thursday, July 30, 2015. 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 5:00 AM until 8:00 PM on Thursday, July 30, 2015.	To reduce the escapement rate of Kenai and Kasilof river sockeye salmon.
2S-39-15	30 Jul	Opened commercial salmon fishing with set gillnets in the Kasilof River Special Harvest Area (KRSHA) from 8:00 PM on Thursday, July 30, 205, until 6:00 AM on Saturday, August 1, 2015. Opened drift gillnetting in the KRSHA from 8:00 PM until 11:00 PM on Thursday, July 30, 2015, from 5:00 AM until 11:00 PM on Friday, July 31, 2015, and from 5:00 AM until 6:00 AM on Saturday, August 1, 2015. Opened set gillnetting in the Kasilof Section of the Upper Subdistrict within 600 feet of the mean high tide mark of the Kenai Peninsula shoreline from 5:00 AM until 8:00 PM on Friday, July 31, 2015. 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 from 7:00 AM until 7:00 PM on Friday, July 31, 2015.	To reduce the escapement rate of Kenai and Kasilof river sockeye salmon.
2S-40-15	1 Aug	Opened commercial fishing with set gillnets in Kenai, Kasilof, and East Foreland sections of the Upper Subdistrict from 8:00 AM until 11:00 PM on Saturday, August 1, 2015. Opened drift gillnetting in all waters of the Central District of Upper Cook Inlet normally open to drift gillnetting (see 5AAC 21.200(b) and 5AAC 21.350(b)) from 7:00 AM until 7:00 PM on Saturday, August 1, 2015. Opened set gillnetting in the Kalgin Island Subdistrict of Upper Cook Inlet from 9:00 AM until 9:00 PM on Saturday, August 1, 2015.	To reduce the escapement rate of Kenai and Kasilof river sockeye salmon and Packers Creek sockeye salmon.

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Emergency Order No.	Effective Date	Action	Reason
2S-41-15	2 Aug	Opened commercial salmon fishing with set and drift gillnets in the Kasilof River Special Harvest Area from 5:00 AM until 10:00 PM on Sunday, August 2, 2015. Opened set gillnetting in Kenai and East Foreland sections of the Upper Subdistrict from 8:00 AM until 11:00 PM on Sunday, August 2, 2015. 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 from 8:00 AM until 11:00 PM on Sunday, August 2, 2015.	To reduce the escapement rate of Kenai and Kasilof river sockeye salmon.
2S-42-15	3 Aug	Modified Emergency Order No. 2S-24-15, issued on July 18, 2015, which had 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 20, 2015. Legal gear for that portion of the General Subdistrict of the Northern District along the western shore of Upper Cook Inlet and south of the Susitna River, was now 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 Monday, August 3, 2015 and from 7:00 AM until 7:00 PM on Thursday, August 6, 2015. Legal gear in the remainder of the Northern District will be limited to no more than one set gillnet per permit, measuring no more than 35 fathoms in length, from 7:00 AM until 7:00 PM on Monday, August 3, 2015 and from 7:00 AM until 7:00 PM on Thursday, August 6, 2015.	To comply with the Northern District Salmon Management Plan and the Susitna River Sockeye Salmon Action Plan.
2S-43-15	3 Aug	Extended commercial salmon fishing with set gillnets in Kenai, Kasilof, and East Foreland sections of the Upper Subdistrict from 7:00 PM until 11:00 PM on Monday, August 3, 2015. Drift gillnetting was opened in the Expanded Kenai and Expanded Kasilof sections of the Upper Subdistrict and the Anchor Point Section of the Lower Subdistrict from 7:00 PM until 11:00 PM on Monday, August 3, 2015.	To reduce the escapement rate of Kenai and Kasilof river sockeye salmon.

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Emergency Order No.	Effective Date	Action	Reason
2S-44-15	5 Aug	Opened commercial salmon fishing with set gillnets in the Kenai, Kasilof, and East Foreland sections of the Upper Subdistrict from 8:00 AM until 11:00 PM on Wednesday, August 5, 2015. 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 11:00 PM on Wednesday, August 5, 2015.	To reduce the escapement rate of Kenai and Kasilof river sockeye salmon.
2S-45-15	6 Aug	Opened commercial salmon 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, August 6, 2015.	To reduce the escapement rate of Kenai and Kasilof river sockeye salmon.
2S-46-15	6 Aug	Opened commercial salmon fishing with drift gillnets in the Expanded Kenai and Expanded Kasilof sections of the Upper Subdistrict and the Anchor Point Section of the Lower Subdistrict from 7:00 PM until 11:00 PM on Thursday, August 6, 2015, and from 8:00 AM until 8:00 PM on Friday, August 7, 2015.	To reduce the escapement rate of Kenai and Kasilof river sockeye salmon.
2S-47-15	8 Aug	Opened commercial salmon fishing with set gillnets in Kenai, Kasilof, and East Foreland sections of the Upper Subdistrict from 8:00 AM until 8:00 PM on Saturday, August 8, 2015. Opened drift gillnetting in all waters of the Central District of Upper Cook Inlet normally open to drift gillnetting (see 5AAC 21.200(b) and 5AAC 21.350(b)) from 8:00 AM until 8:00 PM on Saturday, August 8, 2015. Opened set gillnetting in the Kalgin Island Subdistrict of Upper Cook Inlet from 9:00 AM until 9:00 PM on Saturday, August 8, 2015.	To reduce the escapement rate of Kenai and Kasilof river sockeye salmon and Packers Creek sockeye salmon.
2S-48-15	9 Aug	Opened commercial salmon 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 Sunday, August 9, 2015. 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 9:00 AM until 9:00 PM on Sunday, August 9, 2015.	To reduce the escapement rate of Kenai and Kasilof river sockeye salmon.

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Emergency Order No.	Effective Date	Action	Reason
2S-49-15	10 Aug	Opened commercial salmon fishing with set gillnets in the Kenai, Kasilof, and East Foreland sections of the Upper Subdistrict from 10:00 AM until 10:00 PM on Monday, August 10, 2015.	To reduce the escapement rate of Kenai and Kasilof river sockeye salmon.
2S-50-15	12 Aug	Opened commercial salmon fishing with set gillnets in the Kenai and East Foreland sections of the Upper Subdistrict o from 7:00 AM until 7:00 PM on Wednesday, August 12, 2015. 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 from 7:00 AM until 7:00 PM on Wednesday, August 12, 2015.	To reduce the escapement rate of Kenai and Kasilof river sockeye salmon.
2S-51-15	13 Aug	Rescinded Emergency Order No. 2S-17-15 and closed set gillnetting in that portion of the Western Subdistrict south of the latitude of Redoubt Point, effective immediately. 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 13, 2015, at 7:00 AM	To reduce the harvest of Crescent Lake sockeye salmon.
2S-52-15	15 Aug	Opened commercial salmon fishing with set gillnets in the Kalgin Island Subdistrict of Upper Cook Inlet from 9:00 AM until 9:00 PM on Saturday, August 15, 2015.	To reduce the escapement rate of Packers Lake sockeye salmon.
2S-53-15	18 Aug	Opened commercial salmon fishing with set and drift gillnets in the Chinitna Bay Subdistrict of the Central District from 7:00 AM until 7:00 PM on Tuesdays and Fridays, beginning on Tuesday, August 18, 2015, for the remainder of the 2015 season.	To provide fishing opportunity in the Chinitna Bay Subdistrict.

Appendix A11.–Commercial salmon fishing periods, Upper Cook Inlet, 2015.

Date	Day	Time	Set Gillnet	Drift Gillnet
1 Jun	Mon	0700–1900	Kustatan - Big River - Kalgin Island	
		0700–1300	Northern District	
3 Jun	Wed	0700–1900	Kustatan - Big River - Kalgin Island	
5 Jun	Fri	0700–1900	Kustatan - Big River - Kalgin Island	
8 Jun	Mon	0700–1900	Kustatan - Big River - Kalgin Island	
		0700–1300	Northern District	
10 Jun	Wed	0700–1900	Kustatan - Big River - Kalgin Island	
12 Jun	Fri	0700–1900	Kustatan - Big River - Kalgin Island	
15 Jun	Mon	0700–1900	Kustatan - Big River - Kalgin Island - N. Dist.	
17 Jun	Wed	0700–1900	Kustatan - Big River - Kalgin Island	
18 Jun	Thu	0700–1900	Western Subdistrict	
19 Jun	Fri	0700–1900	Kustatan - Big River - Kalgin Island	
22 Jun	Mon	0700–1900	Kustatan - Big River - Kalgin Island - N. Dist.	All
		1000–2200	Kasilof Section	
		1900–2200		Kasilof Section
24 Jun	Wed	0700–1900	Kustatan - Big River - Kalgin Island	
		1600–2400	Kasilof Section	Kasilof Section
25 Jun	Thu	0500–0700	Kasilof Section	Kasilof Section
		0700–1900	All except Kenai & E. Forelands Sections	All
27 Jun	Sat	0700–2100	Kasilof Section	Kasilof Section
29 Jun	Mon	0700–1900	All except Kenai & E. Forelands Sections	All
30 Jun	Tue	0900–1800	Kasilof Section	Kasilof Section
2 Jul	Thu	0400–0700		Kasilof Section
		0400–2000	Kasilof Section	
		0700–1900	All except Upper Subdistrict	All
		1900–2000		Kasilof Section
4 Jul	Sat	0800–2000	Kasilof Section	Kasilof Section
6 Jul	Mon	0700–1900	All except Upper Subdistrict	All
		1400–2300	Kasilof Section	
		1900–2300		Kasilof Section
7 Jul	Tue	1800–2400	KRSHA	KRSHA
8 Jul	Wed	0000–2300	KRSHA	
		0500–2300		KRSHA
9 Jul	Thu	0700–1900	All	Drift Area 1 & Expanded Corridor
10 Jul	Fri	2200–2400	KRSHA	KRSHA
11 Jul	Sat	0000–0500	KRSHA	
		0700–2200	Upper Subdistrict	Expanded Kenai/Kasilof sections
12 Jul	Sun	2300–2400	KRSHA	KRSHA
13 Jul	Mon	0000–1900	KRSHA	
		0500–0700		KRSHA
		0600–2200	Western Subdistrict south of Redoubt Pt.	
		0700–1900	All, except W. Sub. s of Redoubt Pt. & U. Sub.	Drift Area 1 & Exp. Corridor

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Date	Day	Time	Set Gillnet	Drift Gillnet
14 Jul	Tue	0900–1900	Upper Subdistrict	Exp Kenai/Kasilof sections
15 Jul	Wed	1100–2300	Kasilof Section within 600 feet	
16 Jul	Thu	0600–2200	Western Subdistrict south of Redoubt Pt.	
		0700–1900	All, except W. Sub. south of Redoubt Pt. & U. Sub.	Exp. Ken/Kas, and Anchor Pt.
		0800–2000	Upper Subdistrict	
17 Jul	Fri	0500–2400	KRSHA	KRSHA
18 Jul	Sat	0000–0700	KRSHA	
		0500–0700		KRSHA
		0600–2200	Western Subdistrict south of Redoubt Pt.	
		0800–2200	Kasilof Section within 600 feet	
19 Jul	Sun	0500–2200	Kasilof Section within 600 feet	
20 Jul	Mon	0600–2200	Western Subdistrict south of Redoubt Pt.	
		0700–1900	All, except W. Sub. S. of Redoubt Pt. & U. Sub.	Area 1, Ex. Ken/Kas & AP sec
		1100–2300	Upper Subdistrict	
21 Jul	Tue	0500–2300	Kasilof Section within 600 feet	
		1800–2300		KRSHA
		1800–2400	KRSHA	
22 Jul	Wed	0000–2300	KRSHA	
		0500–2300	Kasilof Section within 600 feet	KRSHA
23 Jul	Thu	0500–1900	Upper Subdistrict	Exp. Ken/Kas, and Anchor Pt.
		0600–2200	Western Subdistrict south of Redoubt Pt.	
		0700–1900	All, except W. Sub. south of Redoubt Pt. & U. Sub.	
25 Jul	Sat	0600–2200	Western Subdistrict south of Redoubt Pt.	
		0700–2100	Upper Subdistrict	Exp. Ken/Kas, and Anchor Pt.
		2100–2200		KRSHA
		2100–2400	KRSHA	
26 Jul	Sun	0000–0600	KRSHA	
		0500–0600		KRSHA
		0700–2200	Upper Subdistrict	Exp. Ken/Kas, and Anchor Pt.
27 Jul	Mon	0600–2200	Western Subdistrict south of Redoubt Pt.	
		0700–1900	All, except W. Sub. south of Redoubt Pt.	Area 1, Ex. Ken/Kas & AP sec
		1900–2200	Upper Subdistrict	Exp. Ken/Kas, and Anchor Pt.
		2200–2300		KRSHA
		2200–2400	KRSHA	
28 Jul	Tue	0000–2400	KRSHA	
		0500–2300		KRSHA
		0700–1900		Exp. Ken/Kas, and Anchor Pt.
		1000–1800	Kasilof Section within 600 feet	
29 Jul	Wed	0000–0600	KRSHA	
		0500–0600		KRSHA
		0800–2300	Upper Subdistrict	Exp. Ken/Kas, and Anchor Pt.

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Date	Day	Time	Set Gillnet	Drift Gillnet
30 Jul	Thu	0500–0700	Upper Subdistrict	
		0500–2000		Exp. Ken/Kas, and Anchor Pt.
		0600–2200	Western Subdistrict south of Redoubt Pt.	
		0700–1900	All, except W. Sub. south of Redoubt Pt.	
		1900–2000	Upper Subdistrict	
		2000–2300		KRSHA
		2000–2400	KRSHA	
31 Jul	Fri	0000–2400	KRSHA	
		0500–2300		KRSHA
		0500–2000	Kasilof Section within 600 feet	
		0700–1900		Exp. Ken/Kas, and Anchor Pt.
1 Aug	Sat	0000–0600	KRSHA	
		0500–0600		KRSHA
		0700–1900		All
		0800–2300	Upper Subdistrict	
		0900–2100	Kalgin Island Subdistrict	
2 Aug	Sun	0500–2200	KRSHA	KRSHA
		0800–2300	Kenai & East Foreland sections	Exp. Ken/Kas, and Anchor Pt.
3 Aug	Mon	0600–2200	Western Subdistrict south of Redoubt Pt.	
		0700–1900	All, except W. Sub. south of Redoubt Pt.	All
		1900–2300	Upper Subdistrict	Exp. Ken/Kas, and Anchor Pt.
5 Aug	Wed	0800–2300	Upper Subdistrict	Exp. Ken/Kas, and Anchor Pt.
6 Aug	Thu	0600–2200	Western Subdistrict south of Redoubt Pt.	
		0700–1900	All, except W. Sub. s of Redoubt Pt. & U. Sub.	All
		1100–2300	Upper Subdistrict	
		1900–2300		Exp. Ken/Kas, and Anchor Pt.
7 Aug	Fri	0800–2000		Exp. Ken/Kas, and Anchor Pt.
8 Aug	Sat	0600–2200	Western Subdistrict south of Redoubt Pt.	
		0800–2000	Upper Subdistrict	All
		0900–2100	Kalgin Island Subdistrict	
9 Aug	Sun	0900–2100	Upper Subdistrict	Exp. Ken/Kas, and Anchor Pt.
10 Aug	Mon	0700–1900	All, except W. Sub. of Redoubt Pt. & U. Sub.	All
		1000–2200	Upper Subdistrict	
12 Aug	Wed	0700–1900	Kenai & East Foreland sections	Exp. Ken/Kas, and Anchor Pt.
13 Aug	Thu	0700–1900	All, except Kasilof Section	All
15 Aug	Sat	0900–2100	Kalgin Island Subdistrict	
17 Aug	Mon	0700–1900	All, except Upper Subdistrict	Drift Areas 3 & 4
18 Aug	Tue	0700–1900	Chinitna Bay Subdistrict	Chinitna Bay Subdistrict
20 Aug	Thu	0700–1900	All, except Upper Subdistrict	Drift Areas 3 & 4
21 Aug	Fri	0700–1900	Chinitna Bay Subdistrict	Chinitna Bay Subdistrict
24 Aug	Mon	0700–1900	All, except Upper Subdistrict	Drift Areas 3 & 4
25 Aug	Tue	0700–1900	Chinitna Bay Subdistrict	Chinitna Bay Subdistrict

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Date	Day	Time	Set Gillnet	Drift Gillnet
27 Aug	Thu	0700–1900	All, except Upper Subdistrict	Drift Areas 3 & 4
28 Aug	Fri	0700–1900	Chinitna Bay Subdistrict	Chinitna Bay Subdistrict
31 Aug	Mon	0700–1900	All, except Upper Subdistrict	Drift Areas 3 & 4
1 Sep	Tue	0700–1900	Chinitna Bay Subdistrict	Chinitna Bay Subdistrict
3 Sep	Thu	0700–1900	All, except Upper Subdistrict	Drift Areas 3 & 4
4 Sep	Fri	0700–1900	Chinitna Bay Subdistrict	Chinitna Bay Subdistrict
7 Sep	Mon	0700–1900	All, except Upper Subdistrict	Drift Areas 3 & 4
8 Sep	Tue	0700–1900	Chinitna Bay Subdistrict	Chinitna Bay Subdistrict
10 Sep	Thu	0700–1900	All, except Upper Subdistrict	Drift Areas 3 & 4
11 Sep	Fri	0700–1900	Chinitna Bay Subdistrict	Chinitna Bay Subdistrict
14 Sep	Mon	0700–1900	All, except Upper Subdistrict	Drift Areas 3 & 4
15 Sep	Tue	0700–1900	Chinitna Bay Subdistrict	Chinitna Bay Subdistrict
17 Sep	Thu	0700–1900	All, except Upper Subdistrict	Drift Areas 3 & 4
18 Sep	Fri	0700–1900	Chinitna Bay Subdistrict	Chinitna Bay Subdistrict
21 Sep	Mon	0700–1900	All, except Upper Subdistrict	Drift Areas 3 & 4
22 Sep	Tue	0700–1900	Chinitna Bay Subdistrict	Chinitna Bay Subdistrict
24 Sep	Thu	0700–1900	All, except Upper Subdistrict	Drift Areas 3 & 4
25 Sep	Fri	0700–1900	Chinitna Bay Subdistrict	Chinitna Bay Subdistrict
28 Sep	Mon	0700–1900	All, except Upper Subdistrict	Drift Areas 3 & 4

Appendix A12.–Susitna River sockeye salmon studies, 2006–2015.

Yentna River Passage	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015[a]
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	ND

Weir Data	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Chelatna	18,433	41,290	74,469	17,721	37,784	70,353	36,736	70,555	26,212	69,897
Judd	40,633	57,392	53,681	44,616	18,446	39,984	18,715	14,088	22,416	47,934
Larson	57,411	47,924	34,595	40,929	20,324	12,190	16,566	21,821	12,040	23,185
Weir Totals	116,477	146,606	162,745	103,266	76,554	122,527	72,017	106,464	60,668	141,016

Susitna Pop. Est.	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015[b]
Mark Recapture	418,197	327,732	304,449	219,041	190,460	314,447	141,804	228,536	167,374	NA
MR : Weirs ratio	3.6	2.2	1.9	2.1	2.5	2.6	2.0	2.1	2.8	NA
MR : Bendix ratio	4.5	4.1	3.4	9.7	ND	ND	ND	ND	ND	ND

[a] DIDSON was not operational in 2015.

[b] Mark–recapture estimates from 2015 were not available when this report was published.

Appendix A13.–Age composition (in percent) of sockeye salmon escapements, Upper Cook Inlet, 2015.

	Age Group													
Stream	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	Total[a]
Kenai River				18.6	0.7	47.5	6.7	0.5	26.4			0.2		100.6
Kasilof River	0.5		1.8	20.9	2.8	34.7	35.1		7.1					102.9
Yentna River	0.6	5.5	0.4	18.9	0.3	62.3	2.9	0.4	9.5			0.2		101.0
Fish Creek	0.6		2.1	80.8	0.6	11.8	3.8		0.9					100.6
Hidden Creek				86.6		10.0	4.2							100.8

[a] Values may not sum to 100 due to rounding.

Appendix A14.–Upper Cook Inlet salmon average weights (in pounds) by area, 2015.

Fishery	Chinook	Sockeye	Coho	Pink	Chum
Upper Cook Inlet Total	16.7	5.3	5.8	3.3	6.6
A. Northern District Total	11.4	4.8	5.4	3.4	6.0
1. Northern District West	11.7	4.8	5.3	3.5	6.0
a. Trading Bay 247-10	15.4	5.2	5.6	3.5	5.9
b. Tyonek 247-20	10.8	4.9	5.1	3.5	5.7
c. Beluga 247-30	6.0	5.2	5.5	4.0	5.8
d. Susitna Flat 247-41	8.9	4.6	5.2	2.2	6.5
e. Pt. Mackenzie 247-42	11.0	3.9	5.7	4.1	6.7
f. Fire Island 247-43	10.9	4.1	5.4	4.0	3.7
2. Northern District East	10.1	4.8	5.4	3.4	5.6
a. Pt. Possession 247-70	10.7	4.8	5.4	3.0	5.6
b. Birch Hill 247-80	8.9	4.8	5.6	3.5	6.0
c. Number 3 Bay 247-90	9.8	4.8	5.4	3.9	5.5
B. Central District Total	17.8	5.3	5.9	3.3	6.6
1. East Side Set Total	18.3	5.1	5.8	3.0	5.6
a. Salamatof/EastForeland	19.1	5.7	5.7	3.1	5.8
1. Salamatof 244-41	19.1	5.9	5.8	3.0	5.9
2. East Foreland 244-42	17.2	5.2	5.5	3.1	5.7
b. Kalifonsky Beach	18.1	4.8	6.3	2.9	4.9
1. South K. Beach 244-31	17.0	4.3	6.0	2.9	4.6
2. North K. Beach 244-32	19.4	5.5	6.4	3.0	5.9
c. Kasilof Terminal 244-25	17.8	4.3	5.6	2.9	5.7
d. Cohoe/Ninilchik	17.3	5.0	5.9	3.1	5.4
1. Cohoe 244-22	15.6	4.9	5.8	3.1	5.4
2. Ninilchik 244-21	19.3	5.0	6.0	3.1	5.5

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Fishery	Chinook	Sockeye	Coho	Pink	Chum
2. West Side Set Total	20.2	5.0	5.7	3.4	6.0
a. Little Jack Slough 245-50		5.0	5.4	2.8	6.2
b. Polly Creek 245-40	20.8	5.2	6.3	2.8	6.7
c. Tuxedni Bay 245-30	20.2	5.0	5.7	3.6	6.0
3. Kustatan Total	18.9	4.8	5.6	3.7	6.4
a. Big River 245-55	18.9	4.5			
b. West Foreland 245-60		5.4	5.6	3.7	6.4
4. Kalgin Island Total	15.5	5.1	5.6	3.3	5.8
a. West Side 246-10	15.8	5.1	5.6	3.3	5.8
b. East Side 246-20	5.3	5.1	5.8	3.3	6.0
5. Chinitna Bay Total		5.2	5.9	2.4	6.3
a. Set 245-10		5.0	5.6	3.0	6.5
6. Central District Set Total	18.3	5.1	5.7	3.1	5.9
7. Central District Drift Total	11.2	5.5	6.0	3.5	6.6
a. Area 1/District Wide 244-60	9.2	5.6	6.1	3.6	6.7
b. Kasilof section, narrow 244-61	6.3	5.2	6.6	3.3	6.4
c. Full ex corridor 244-56 & 244-57	12.1	5.6	5.9	3.3	6.6
d. Area 3/4 244-60	5.0	5.5	5.9	3.1	6.5
e. Kasilof Terminal 244-26	14.9	4.7	6.6	3.2	6.3
f. Chinitna Bay drift 245-10		5.2	5.9	2.4	6.3

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, 1990–2015.

Year	Sample Size	Percent Composition by Age Class (%)														
		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	Total
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
2015	610		13.3		36.0			24.6		25.8		0.3				100
Mean		0.05	8.0	0.0	27.5	0.1	0.0	27.0	0.2	34.8	0.3	1.8	0.3	0.0	0.0	100

Appendix A16.–Major buyers and processors of Upper Cook Inlet fishery products, 2015.

Buyer/Processor	Code	Plant Site	Contact	Address
Alaska Salmon Purchasers Inc.	F4665	Kenai	Mark Powell	46655 Kenai Spur Hwy. Kenai, AK 99611
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
Clucas Fisheries	F8055	Clam Gulch	John Clucas	PO Box 61 Clam Gulch, AK 99568
Copper River Seafoods	F6426	Anchorage	Nicole Holiday	1118 E. 5th Ave. Anchorage, AK 99501
Copper River Seafoods	F10056	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
North Pacific Seafoods Inc	F10419	Kenai	Leauri Moore	PO Box 114 Kenai, AK 99611
North Pacific Seafoods Inc	F10420	Kasilof	Leauri Moore	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
Tanner's Fresh Fish Processing	F9070	Ninilchik	Rory Tanner	PO Box 39752 Ninilchik, AK 99639
The Auction Block Co.	F8162	Homer	Heather Brinster	4501 Ice 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, 2015.

	Harvest					
Fishery	Chinook	Sockeye	Coho	Pink	Chum	Total
Kasilof Gillnet	61	27,567	191	20	2	27,841
Kasilof Dip Net	0	89,000	2,723	1,607	597	93,927
Kenai Dip Net	66	377,532	4,150	4,147	957	386,852
Fish Creek Dip Net	0	19,260	3,321	1,329	329	24,239
Beluga Dip Net	0	65	17	0	0	82
No Site Reported	0	8,626	263	153	41	9,083
Total	127	522,050	10,665	7,256	1,926	542,024

Note: Preliminary estimates.

Appendix A18.–Personal use sockeye salmon harvest by day, 2015.

	Kasilof Gillnet		Kasilof Dip Net		Kenai Dip Net		Fish Creek Dip Net	
Date	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
15 Jun	4,743	4,743						
16 Jun	3,409	8,152						
17 Jun	2,304	10,456						
18 Jun	2,916	13,372						
19 Jun	1,929	15,301						
20 Jun	3,387	18,688						
21 Jun	2,190	20,878						
22 Jun	624	21,502						
23 Jun	986	22,488						
24 Jun	666	23,154						
25 Jun			807	807				
26 Jun			2,592	3,399				
27 Jun			1,505	4,904				
28 Jun			1,197	6,101				
29 Jun			742	6,843				
30 Jun			590	7,433				
1 Jul			1,721	9,154				
2 Jul			808	9,962				
3 Jul			1,931	11,893				
4 Jul			2,161	14,054				
5 Jul			2,178	16,232				
6 Jul			1,655	17,887				
7 Jul			976	18,863				
8 Jul			670	19,533				
9 Jul			1,265	20,798				

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	Kasilof Gillnet		Kasilof Dip Net		Kenai Dip Net		Fish Creek Dip Net	
Date	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
10 Jul			2,962	23,760	2,543	2,543		
11 Jul			1,902	25,662	2,504	5,047		
12 Jul			3,575	29,237	3,536	8,583		
13 Jul			1,684	30,921	6,903	15,486		
14 Jul			3,033	33,954	7,529	23,015		
15 Jul			5,318	39,272	14,556	37,571		
16 Jul			2,409	41,681	9,445	47,016		
17 Jul			1,878	43,559	14,411	61,427		
18 Jul			5,039	48,598	37,133	98,560		
19 Jul			3,029	51,627	21,504	120,064		
20 Jul			2,402	54,029	17,502	137,566		
21 Jul			2,487	56,516	17,927	155,493		
22 Jul			1,086	57,602	21,593	177,086		
23 Jul			1,915	59,517	14,083	191,169		
24 Jul			1,104	60,621	33,503	224,672	672	672
25 Jul			2,723	63,344	17,418	242,090	1,679	2,351
26 Jul			1,443	64,787	8,905	250,995	2,005	4,356
27 Jul			769	65,556	12,943	263,938	1,829	6,185
28 Jul			439	65,995	10,818	274,756	2,130	8,315
29 Jul			502	66,497	11,356	286,112	2,464	10,779
30 Jul			486	66,983	8,712	294,824	2,326	13,105
31 Jul			304	67,287	15,028	309,852	1,608	14,713
1 Aug			512	67,799				
2 Aug			328	68,127				
3 Aug			187	68,314				
4 Aug			597	68,911				
5 Aug			392	69,303				
6 Aug			576	69,879				
7 Aug			619	70,498				

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, 2015.

Sample date = April 20–24, 2015

		No. of Fish						Percent	Weight			Length		
Sample Area	Age	Male	Imm. Female	Ripe Female	Spawned Female	Unknown	Total	of Total	Mean (g)	SD	Number Weighed	Mean (mm)	SD	Number Measured
ESSN	4	1	–	–	–	–	1	2	87	–	1	189	–	1
	5	2	–	3	–	–	5	10	138	37.3	5	216	7.2	5
	6	8	–	7	–	–	15	31	130	26.2	15	215	9.0	15
	7	7	–	13	–	–	20	41	145	24.3	20	225	9.4	20
	8	5	–	1	–	–	6	12	160	25.3	6	230	10.0	6
	9	–	–	1	–	–	1	2	175	–	1	233	–	1
	10	1	–	–	–	–	1	2	157	–	1	229	–	1
Sample Total		24	0	25	0	0	49	100	141	28.3	49	221	11.2	49
Sex Composition		49%	0%	51%	0%	0%								

Sample date = April 27 to May 1, 2015

		No. of Fish						Percent	Weight			Length		
Sample Area	Age	Male	Imm. Female	Ripe Female	Spawned Female	Unknown	Total	of Total	Mean (g)	SD	Number Weighed	Mean (mm)	SD	Number Measured
ESSN	3	–	–	1	–	–	1	2	146	–	1	225	–	1
	4	1	–	1	–	–	2	4	139	5.6	2	211	2.8	2
	5	3	–	3	–	–	6	11	138	20.4	6	216	7.5	6
	6	7	–	16	–	–	23	42	163	23.5	23	228	10.1	23
	7	8	–	7	1	–	16	29	167	29.3	16	232	12.5	16
	8	2	–	1	–	–	3	5	186	21.5	3	238	5.5	3
	9	–	–	2	–	–	2	4	181	6.9	2	236	4.9	2
	10	1	–	1	–	–	2	4	202	44.0	2	239	19.8	2
Sample Total		22	0	32	1	0	55	100	163	27.5	55	229	12.0	55
Sex Composition		40%	0%	58%	2%	0%								

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Sample date = May 4–8, 2015

Sample Area	Age	No. of Fish: Male	Imm. Female	Ripe Female	Spawned Female	Unknown	Total	Percent of Total	Weight: Mean (g)	SD	Number Weighed	Length: Mean (mm)	SD	Number Measured
ESSN	4	–	–	2	1	–	3	5	115	25.0	3	200	11.2	3
	5	6	–	3	–	–	9	15	133	23.8	9	210	11.6	9
	6	11	–	10	1	–	22	37	152	21.2	22	223	8.5	22
	7	5	–	11	1	–	17	29	176	22.5	17	232	8.2	17
	8	3	–	3	–	–	6	10	178	30.3	6	233	6.4	6
	9	2	–	–	–	–	2	3	215	18.3	2	245	6.4	2
Sample Total		27	0	29	3	0	59	100	159	30.9	59	224	13.1	59
Sex Composition		46%	0%	49%	5%	0%								

Sample date = May 11–15, 2015

Sample Area	Age	No. of Fish: Male	Imm. Female	Ripe Female	Spawned Female	Unknown	Total	Percent of Total	Weight: Mean (g)	SD	Number Weighed	Length: Mean (mm)	SD	Number Measured
ESSN	4	2	–	3	–	–	5	10	103	9.6	5	194	6.8	5
	5	3	–	6	1	–	10	19	125	14.8	10	210	7.6	10
	6	3	–	6	3	–	12	23	122	29.4	12	211	9.2	12
	7	8	–	–	8	–	16	31	133	16.1	16	226	10.0	16
	8	3	–	2	1	–	6	12	164	37.1	6	232	8.1	6
	9	3	–	–	–	–	3	6	153	17.5	3	228	6.0	3
Sample Total		22	0	17	13	0	52	100	131	26.7	52	217	14.1	52
Sex Composition		42%	0%	33%	25%	0%								

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Sample date = May 18–22, 2015

Sample Area	Age	No. of Fish: Male	Imm. Female	Ripe Female	Spawned Female	Unknown	Total	Percent of Total	Weight: Mean (g)	SD	Number Weighed	Length: Mean (mm)	SD	Number Measured
ESSN	4	–	–	–	–	–	0	0	–	–	0	–	–	0
	5	2	–	3	1	–	6	11	118	18.0	6	208	11.4	6
	6	4	–	3	2	–	9	17	138	26.7	9	221	11.4	9
	7	15	–	3	4	–	22	41	146	26.0	22	228	10.4	22
	8	9	–	–	4	–	13	24	147	16.0	13	231	6.9	13
	9	2	–	–	1	–	3	6	143	8.8	3	230	36.0	3
	10	1	–	–	–	–	1	2	131	–	1	232	–	1
Sample Total		33	0	9	12	0	54	100	141	23.5	54	225	11.8	54
Sex Composition		61%	0%	17%	22%	0%								

Sample date = All 2015

Sample Area	Age	No. of Fish: Male	Imm. Female	Ripe Female	Spawned Female	Unknown	Total	Percent of Total	Weight: Mean (g)	SD	Number Weighed	Length: Mean (mm)	SD	Number Measured
ESSN	3	–	–	1	–	–	1	0	146	–	1	225	–	1
	4	4	–	6	1	–	11	4	112	20.2	11	199	9.7	11
	5	16	–	18	2	–	36	13	130	22.5	36	211	9.4	36
	6	33	–	42	6	–	81	30	145	28.5	81	221	11.1	81
	7	43	–	34	14	–	91	34	153	28.2	91	228	10.4	91
	8	22		7	5	–	34	13	162	27.6	34	232	7.4	34
	9	7	–	3	1	–	11	4	169	29.4	11	234	7.6	11
	10	3	–	1	–	–	4	1	173	43.2	4	235	12.5	4
Sample Total		128	0	112	29	0	269	100	148	30.0	269	223	13.0	269
Sex Composition		48%	0%	42%	11%	0%								

Appendix A20.–Age, sex, and size distribution of eulachon (smelt) from Upper Cook Inlet commercial dip net fishery, 2006–2015.

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					2011				
Age	Sex	Length (mm)	No. Sampled	%	Age	Sex	Length (mm)	No. Sampled	%
3	Male	189.4	14	7%	3	Male	192	25	13%
	Female	193.6	10	5%		Female	185	47	24%
4	Male	197.2	61	31%	4	Male	205	48	24%
	Female	204.1	105	53%		Female	203	41	21%
5	Male	204.0	3	2%	5	Male	210	28	14%
	Female	203.2	6	3%		Female	208	11	6%
Avg	Male	196	78	39%	Avg	Male	203	101	51%
	Female	203	121	61%		Female	195	99	50%
Avg - All		200	199		Avg - All		199	200	

2012					2013				
Age	Sex	Length (mm)	No. Sampled	%	Age	Sex	Length (mm)	No. Sampled	%
3	Male	191	20	11%	3	Male	212	7	4%
	Female	198	19	10%		Female	216	7	4%
4	Male	204	50	27%	4	Male	219	78	50%
	Female	207	88	47%		Female	212	37	24%
5	Male	208	2	1%	5	Male	224	22	14%
	Female	215	7	4%		Female	217	5	3%
Avg	Male	201	72	39%	Avg	Male	220	107	69%
	Female	206	114	61%		Female	213	49	31%
Avg - All		204	186		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	

2015				
Age	Sex	Length (mm)	No. Sampled	%
3	F	179	7	3%
	M	184	73	30%
4	F	192	8	3%
	M	198	152	63%
5	F	0	0	0%
	M	214	3	1%
All	M	193	228	94%
	F	185	15	6%
Avg - All		194	243	

All Years (2006–2015)				
Age	Sex	Length (mm)	No. Sampled	%
3	Male	191	115	7%
	Female	191	211	13%
4	Male	201	518	32%
	Female	199	599	38%
5	Male	188	108	7%
	Female	208	45	3%
Avg	Male	198	741	46%
	Female	198	855	54%
Avg - All		198	1,596	

Appendix A21.–Seldovia District tide tables, May through August, 2015.

May											
		High Tides						Low Tides			
		Morning		Evening				Morning		Evening.	
Date	Day	Time	Feet	Time	Feet	Date	Day	Time	Feet	Time	Feet
1	Fri	0136	16.8	1406	16.1	1	Fri	0754	0.9	1957	2.1
2	Sat	0207	17.7	1443	17.0	2	Sat	0827	**-0.4**	2031	1.6
3	Sun	0237	18.5	1519	17.6	3	Sun	0900	**-1.5**	2105	1.3
4	Mon	0309	19.1	1556	17.9	4	Mon	0933	**-2.2**	2140	1.4
5	Tue	0341	19.3	1633	17.9	5	Tue	1007	**-2.6**	2216	1.7
6	Wed	0415	19.3	1712	17.6	6	Wed	1043	**-2.5**	2253	2.2
7	Thu	0451	18.8	1754	16.9	7	Thu	1122	**-2.1**	2335	3.0
8	Fri	0531	18.1	1840	16.2	8	Fri			1204	**-1.3**
9	Sat	0617	17.0	1935	15.5	9	Sat	1222	3.9	1253	**-0.2**
10	Sun	0713	15.8	2038	15.1	10	Sun	0119	4.6	1351	0.8
11	Mon	0825	14.8	2146	15.3	11	Mon	0228	4.9	1459	1.6
12	Tue	0948	14.5	2252	16.2	12	Tue	0346	4.5	1611	1.9
13	Wed	1110	14.9	2350	17.4	13	Wed	0502	3.1	1720	1.7
14	Thu			1220	16.0	14	Thu	0607	1.1	1820	1.2
15	Fri	1241	18.7	1320	17.2	15	Fri	0703	**-1.0**	1913	0.7
16	Sat	0128	19.9	1413	18.3	16	Sat	0752	**-2.8**	2002	0.3
17	Sun	0213	20.7	1502	19.1	17	Sun	0838	**-4.1**	2047	0.1
18	Mon	0256	21.2	1548	19.4	18	Mon	0921	**-4.8**	2131	0.3
19	Tue	0338	21.0	1633	19.2	19	Tue	1004	**-4.7**	2214	0.8
20	Wed	0419	20.4	1717	18.6	20	Wed	1046	**-4.0**	2258	1.7
21	Thu	0501	19.3	1802	17.6	21	Thu	1128	**-2.8**	2342	2.8
22	Fri	0543	17.8	1848	16.5	22	Fri			1211	**-1.2**
23	Sat	0628	16.2	1937	15.4	23	Sat	1230	4.0	1257	0.4
24	Sun	0719	14.6	2032	14.6	24	Sun	0124	5.0	1348	2.1
25	Mon	0820	13.2	2132	14.2	25	Mon	0227	5.7	1445	3.4
26	Tue	0934	12.4	2231	14.2	26	Tue	0340	5.7	1548	4.2
27	Wed	1051	12.4	2323	14.7	27	Wed	0454	5.1	1651	4.6
28	Thu	1157	12.9			28	Thu	0555	3.9	1747	4.5
29	Fri	1207	15.4	1251	13.8	29	Fri	0642	2.5	1835	4.1
30	Sat	1247	16.3	1337	14.9	30	Sat	0722	1.1	1918	3.6
31	Sun	0124	17.3	1420	15.9	31	Sun	0759	**-0.3**	1958	3.0

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June											
		High Tides						Low Tides			
		Morning		Evening				Morning		Evening.	
Date	Day	Time	Feet	Time	Feet	Date	Day	Time	Feet	Time	Feet
1	Mo	0201	18.2	1500	16.9	1	Mo	0835	**-1.6**	2038	2.5
2	Tu	0238	19.0	1539	17.5	2	Tu	0911	**-2.6**	2117	2.1
3	We	0316	19.5	1619	18.0	3	We	0949	**-3.3**	2157	1.9
4	Th	0356	19.6	1700	18.1	4	Th	1027	**-3.5**	2239	2.0
5	Fr	0437	19.4	1743	17.9	5	Fr	1108	**-3.3**	2324	2.3
6	Sa	0521	18.8	1828	17.5	6	Sa	1151	**-2.6**		
7	Su	0610	17.7	1917	17.1	7	Su	0013	2.8	1239	**-1.5**
8	Mo	0706	16.5	2012	16.8	8	Mo	0108	3.2	1332	**-0.2**
9	Tu	0812	15.2	2112	16.7	9	Tu	0212	3.4	1431	1.0
10	We	0929	14.4	2214	17.0	10	We	0324	3.1	1537	2.1
11	Th	1050	14.4	2315	17.6	11	Th	0438	2.1	1645	2.7
12	Fr			1205	15.0	12	Fr	0547	0.7	1751	2.8
13	Sa	0011	18.3	1309	16.0	13	Sa	0646	**-0.8**	1850	2.6
14	Su	0103	19.1	1404	16.9	14	Su	0738	**-2.2**	1942	2.2
15	Mo	0151	19.7	1453	17.8	15	Mo	0825	**-3.3**	2030	1.9
16	Tu	0237	20.0	1538	18.3	16	Tu	0908	**-3.9**	2115	1.7
17	We	0320	20.0	1621	18.5	17	We	0949	**-3.9**	2158	1.7
18	Th	0402	19.6	1701	18.3	18	Th	1028	**-3.5**	2240	2.0
19	Fr	0442	18.9	1741	17.8	19	Fr	1107	**-2.7**	2322	2.6
20	Sa	0522	17.8	1820	17.1	20	Sa	1146	**-1.5**		
21	Su	0603	16.5	1900	16.3	21	Su	0005	3.3	1225	-0.1
22	Mo	0647	15.1	1942	15.5	22	Mo	0051	4.1	1306	1.4
23	Tu	0738	13.7	2028	14.9	23	Tu	0143	4.7	1351	2.9
24	We	0838	12.6	2118	14.6	24	We	0242	5.1	1442	4.1
25	Th	0950	12.0	2212	14.7	25	Th	0348	5.0	1541	5.0
26	Fr	1106	12.1	2306	15.1	26	Fr	0457	4.3	1644	5.5
27	Sa	1213	12.9	2357	15.9	27	Sa	0557	3.1	1745	5.4
28	Su			1309	14.0	28	Su	0647	1.7	1840	4.9
29	Mo	0044	16.9	1357	15.2	29	Mo	0731	0.1	1929	4.1
30	Tu	0130	17.9	1440	16.5	30	Tu	0812	**-1.4**	2014	3.1

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July											
		High Tides						Low Tides			
		Morning		Evening				Morning		Evening	
Date	Day	Time	Feet	Time	Feet	Date	Day	Time	Feet	Time	Feet
1	We	0214	19.0	1522	17.6	1	We	0851	**-2.8**	2058	2.2
2	Th	0258	19.8	1602	18.4	2	Th	0931	**-3.8**	2141	1.5
3	Fr	0341	20.3	1643	19.0	3	Fr	1011	**-4.3**	2225	1.0
4	Sa	0426	20.3	1724	19.2	4	Sa	1052	**-4.2**	2310	0.8
5	Su	0512	19.8	1807	19.1	5	Su	1135	**-3.6**	2359	1.0
6	Mo	0601	18.7	1853	18.7	6	Mo			1220	**-2.3**
7	Tu	0655	17.3	1942	18.2	7	Tu	0052	1.3	1309	**-0.7**
8	We	0757	15.8	2037	17.7	8	We	0151	1.8	1404	1.1
9	Th	0910	14.5	2138	17.3	9	Th	0258	2.0	1506	2.7
10	Fr	1032	13.9	2243	17.2	10	Fr	0413	1.8	1615	3.9
11	Sa			2347	17.5	11	Sa	0527	1.1	1727	4.3
12	Su	1153	14.2	1833		12	Su	0633	0.0	1833	4.2
13	Mo	0046	18.0	1358	16.1	13	Mo	0728	**-1.1**	1930	3.6
14	Tu	0138	18.6	1445	17.0	14	Tu	0814	**-2.0**	2019	2.9
15	We	0225	19.0	1526	17.7	15	We	0855	**-2.6**	2102	2.3
16	Th	0307	19.3	1604	18.2	16	Th	0933	**-2.9**	2142	1.9
17	Fr	0346	19.2	1639	18.3	17	Fr	1009	**-2.8**	2221	1.7
18	Sa	0424	18.9	1712	18.1	18	Sa	1043	**-2.3**	2258	1.9
19	Su	0501	18.2	1745	17.7	19	Su	1117	**-1.4**	2337	2.3
20	Mo	0538	17.2	1818	17.1	20	Mo	1151	**-0.2**		
21	Tu	0617	15.9	1852	16.4	21	Tu	0016	2.9	1227	1.1
22	We	0659	14.6	1929	15.7	22	We	0058	3.6	1304	2.6
23	Th	0750	13.3	2012	15.1	23	Th	0147	4.2	1347	4.1
24	Fr	0855	12.3	2105	14.7	24	Fr	0245	4.6	1440	5.4
25	Sa	1015	11.9	2207	14.8	25	Sa	0354	4.6	1547	6.2
26	Su	1135	12.4	2311	15.4	26	Su	0508	3.8	1700	6.4
27	Mo			1241	13.5	27	Mo	0612	2.4	1807	5.8
28	Tu	0012	16.4	1333	15.0	28	Tu	0704	0.7	1904	4.6
29	We	0106	17.7	1418	16.6	29	We	0749	**-1.0**	1953	3.1
30	Th	0155	19.2	1459	18.1	30	Th	0830	**-2.7**	2039	1.6
31	Fr	0242	20.4	1539	19.4	31	Fr	0911	**-3.9**	2124	0.2

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August											
		High Tides						Low Tides			
		Morning		Evening				Morning		Evening	
Date	Day	Time	Feet	Time	Feet	Date	Day	Time	Feet	Time	Feet
1	Sa	0328	21.2	1619	20.3	1	Sa	0952	**-4.6**	2208	**-0.7**
2	Su	0414	21.4	1659	20.7	2	Su	1033	**-4.6**	2253	**-1.2**
3	Mo	0500	20.9	1740	20.7	3	Mo	1115	**-3.8**	2340	**-1.1**
4	Tu	0549	19.7	1823	20.1	4	Tu	0030	**-0.5**		
5	We	0641	18.1	1910	19.2	5	We	0126	0.4	1245	**-0.4**
6	Th	0740	16.2	2002	18.1	6	Th	0231	1.4	1337	1.8
7	Fr	0851	14.6	2104	17.0	7	Fr	0347	2.0	1438	3.8
8	Sa	1016	13.8	2217	16.4	8	Sa	0509	1.9	1552	5.2
9	Su	1143	14.0	2331	16.4	9	Su	0622	1.1	1713	5.6
10	Mo			1254	14.8	10	Mo	0718	0.2	1826	5.1
11	Tu	0037	16.9	1348	15.9	11	Tu	0802	**-0.7**	1923	4.2
12	We	0130	17.6	1430	16.9	12	We	0840	**-1.3**	2009	3.1
13	Th	0215	18.3	1507	17.7	13	Th	0914	**-1.7**	2048	2.2
14	Fr	0254	18.8	1539	18.2	14	Fr	0945	**-1.8**	2124	1.4
15	Sa	0330	19.1	1609	18.6	15	Sa	1016	**-1.5**	2158	1.0
16	Su	0405	19.0	1638	18.6	16	Su	1047	**-0.9**	2232	0.8
17	Mo	0439	18.6	1706	18.4	17	Mo	1118	0.1	2306	1.0
18	Tu	0513	17.8	1735	17.9	18	Tu	1150	1.4	2341	1.6
19	We	0548	16.7	1805	17.3	19	We	0018	2.3		
20	Th	0627	15.5	1838	16.5	20	Th	0059	3.2	1225	2.9
21	Fr	0712	14.1	1916	15.7	21	Fr	0149	4.0	1303	4.4
22	Sa	0811	12.9	2006	14.9	22	Sa	0256	4.5	1353	5.8
23	Su	0930	12.2	2114	14.6	23	Su	0417	4.2	1501	6.9
24	Mo	1100	12.5	2233	14.9	24	Mo	0534	3.1	1624	7.0
25	Tu	1212	13.7	2345	16.0	25	Tu	0634	1.3	1741	6.1
26	We			1306	15.4	26	We	0723	**-0.5**	1843	4.5
27	Th	0046	17.6	1351	17.2	27	Th	0807	**-2.2**	1934	2.5
28	Fr	0139	19.3	1431	19.0	28	Fr	0848	**-3.5**	2021	0.4
29	Sa	0228	20.8	1511	20.5	29	Sa	0929	**-4.1**	2105	**-1.4**
30	Su	0314	21.7	1550	21.6	30	Su	1010	**-4.0**	2149	**-2.6**
31	Mo	0400	22.0	1629	22.1	31	Mo	1158	**-2.3**	2233	**-3.1**

Appendix A22.–Total sockeye salmon harvest from all sources in Upper Cook Inlet, 1996–2015.

	Commercial				Sport[a,b,c]			Personal Use					Subsistence/Educational		
Year	Drift	Set	Test Fishery	All	Kenai River	All Other UCI	All	Kas. Gillnet	Kas. Dip net	Ken. Dip net	Other[d]	All	Subsist.	Educ.	Total
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	7,190	2,842,461
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	8,048	6,355,998
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	4,418	4,271,066
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	6,185	3,638,035
2014	1,501,678	842,356	5,648	2,349,682	380,055	24,751	404,806	22,567	88,513	379,823	15,144	506,047	587	7,724	3,268,846
2015	1,012,684	1,636,983	2,378	2,652,045	476,791	24,238	501,029	27,567	89,000	377,532	27,951	522,050	800	9,170	3,685,094

[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 2015 is unknown until harvest surveys are finalized; these figures are estimates based on the size of the 2015 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 2014–2015, and Beluga dip net (2008–2015).

Appendix A23.–Daily commercial harvest of razor clams, Upper Cook Inlet, 2015.

Date	Pounds	No. Diggers	Date	Pounds	No. Diggers
5/14/2015	1,950	12	6/30/2015	5,655	19
5/15/2015	1,929	18	7/1/2015	7,358	20
5/16/2015	2,972	19	7/2/2015	6,588	19
5/17/2015	2,935	16	7/3/2015	8,071	20
5/18/2015	4,988	20	7/4/2015	5,676	19
5/19/2015	4,858	20	7/5/2015	5,687	18
5/20/2015	3,914	18	7/6/2015	4,664	17
5/21/2015	3,952	19	7/7/2015	3,737	17
5/22/2015	4,993	20	7/8/2015	3,448	19
5/23/2015	2,979	20	7/11/2015	2,899	18
5/24/2015	2,809	20	7/12/2015	4,554	17
5/30/2015	8,492	19	7/13/2015	4,761	19
5/31/2015	5,957	19	7/14/2015	5,621	19
6/1/2015	5,029	19	7/15/2015	7,517	19
6/2/2015	6,733	20	7/16/2015	3,799	18
6/3/2015	6,722	20	7/17/2015	3,825	19
6/5/2015	6,675	20	7/18/2015	4,705	18
6/6/2015	7,059	19	7/19/2015	5,464	19
6/7/2015	5,981	20	7/20/2015	4,530	19
6/8/2015	3,465	20	7/21/2015	2,742	19
6/12/2015	4,952	17	7/27/2015	2,877	16
6/13/2015	5,498	20	7/28/2015	4,785	19
6/14/2015	5,758	20	7/29/2015	5,771	19
6/15/2015	5,811	20	7/30/2015	7,484	19
6/16/2015	5,966	19	7/31/2015	7,782	18
6/17/2015	5,298	20	8/1/2015	8,160	19
6/18/2015	5,900	18	8/2/2015	5,705	15
6/19/2015	4,830	20	8/3/2015	5,569	19
6/20/2015	5,068	20	8/4/2015	5,462	18
6/21/2015	4,649	20	8/5/2015	4,170	18
6/22/2015	3,338	19			
6/28/2015	3,043	18			
6/29/2015	4,969	19			

Total for Year = 318,538 lb

APPENDIX B: HISTORICAL DATA

Appendix B1.–Upper Cook Inlet commercial Chinook salmon harvest by gear type and area, 1966–2015.

	Central District						Northern District		
	Drift Gillnet		Upper Subdistrict Set		Kalgin/West Side Set		Set Gillnet		
Year	Number	%	Number	%	Number	%	Number	%	Total
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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	Central District						Northern District		
	Drift Gillnet		Upper Subdistrict Set		Kalgin/West Side Set		Set Gillnet		
Year	Number	%	Number	%	Number	%	Number	%	Total
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
2015	556	5.1	7,781	72.1	538	5.0	1,923	17.8	10,798
1966-14 Avg [a]	969	6.5	9,452	65.2	1,246	9.4	3,078	19.0	14,746
2005-14 Avg	939	7.5	7,776	62.7	703	8.0	2,496	21.7	11,914

Note: Harvest data prior to 2015 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, 1966–2015.

	Central District						Northern District		
	Drift Gillnet		Upper Subdistrict Set		Kalgin/West Side Set		Set Gillnet		
Year	Number	%	Number	%	Number	%	Number	%	Total
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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	Central District						Northern District		
	Drift Gillnet		Upper Subdistrict Set		Kalgin/West Side Set		Set Gillnet		
Year	Number	%	Number	%	Number	%	Number	%	Total
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	1,501,678	64.1	724,398	30.9	80,271	3.4	37,687	1.6	2,344,034
2015	1,012,684	38.2	1,481,336	55.9	99,771	3.8	55,876	2.1	2,649,667
1966-14 Avg [a]	1,654,618	55.8	1,050,444	34.8	103,133	4.9	85,237	4.5	2,893,432
2005-14 Avg	1,795,703	55.1	1,210,445	41.3	109,735	3.5	28,274	0.9	3,144,157

Note: Harvest data prior to 2015 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, 1966–2015.

	Central District						Northern District		
	Drift Gillnet		Upper Subdistrict Set		Kalgin/West Side Set		Set Gillnet		
Year	Number	%	Number	%	Number	%	Number	%	Total
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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	Central District						Northern District		
	Drift Gillnet		Upper Subdistrict Set		Kalgin/West Side Set		Set Gillnet		
Year	Number	%	Number	%	Number	%	Number	%	Total
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	76,932	56.0	5,908	4.3	19,379	14.1	35,200	25.6	137,419
2015	130,720	60.5	17,948	8.3	20,748	9.6	46,616	21.6	216,032
1966-14 Avg [a]	146,243	47.9	35,144	13.0	49,030	17.2	62,875	22.0	293,291
2005-14 Avg	101,097	58.8	16,153	10.3	23,662	13.8	30,361	17.1	171,273

Note: Harvest data prior to 2015 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, 1966–2015.

	Central District						Northern District		
	Drift Gillnet		Upper Subdistrict Set		Kalgin/West Side Set		Set Gillnet		
Year	Number	%	Number	%	Number	%	Number	%	Total
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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	Central District						Northern District		
	Drift Gillnet		Upper Subdistrict Set		Kalgin/West Side Set		Set Gillnet		
Year	Number	%	Number	%	Number	%	Number	%	Total
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	417,344	64.9	213,616	33.2	4,331	0.7	7,695	1.2	642,986
2015	21,653	45.1	22,983	47.9	1,175	2.4	2,193	4.6	48,004
1966-14 Avg [a]	212,757	44.7	172,904	37.2	12,622	4.3	68,455	13.8	466,737
2005-14 Avg	148,548	58.4	90,863	36.4	4,246	3.0	3,436	1.9	247,093

Note: Harvest data prior to 2015 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, 1966–2015.

	Central District						Northern District		
	Drift Gillnet		Upper Subdistrict Set		Kalgin/West Side Set		Set Gillnet		
Year	Number	%	Number	%	Number	%	Number	%	Total
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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	Central District						Northern District		
	Drift Gillnet		Upper Subdistrict Set		Kalgin/West Side Set		Set Gillnet		
Year	Number	%	Number	%	Number	%	Number	%	Total
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	108,345	93.3	548	0.5	4,828	4.2	2,406	2.1	116,127
2015	252,331	91.4	2,248	0.8	15,312	5.5	6,069	2.2	275,960
1966-14 Avg [a]	381,845	88.6	2,445	0.7	21,283	5.0	23,536	5.6	429,109
2005-14 Avg	117,608	93.7	881	0.8	4,017	3.6	2,385	2.0	124,891

Note: Harvest data prior to 2015 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, 1966–2015.

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	82,808	2,504,883
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	2,343,529	137,376	642,879	116,093	3,244,537
2015	10,798	2,649,667	216,032	48,004	275,960	3,200,461
1966-2014 Avg	14,746	2,893,431	293,375	466,783	430,184	4,098,520
2005-2014 Avg	11,914	3,144,107	171,268	247,082	122,760	3,697,130

Note: Harvest statistics prior to 2015 reflect minor adjustments to catch database.

Appendix B7.–Approximate exvessel value of Upper Cook Inlet commercial salmon harvest by species, 1960–2015.

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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Appendix B7.–Page 2 of 2.

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	$ 343,545	1.6	$ 20,029,356	95.5	$ 331,342	1.6	$ 6,011	0.0	$ 265,460	1.3	$ 20,975,713
2000	$ 183,400	2.3	$ 7,104,456	87.2	$ 626,032	7.7	$ 47,075	0.6	$ 186,344	2.3	$ 8,147,307
2001	$ 169,593	2.2	$ 7,134,560	92.3	$ 297,387	3.8	$ 20,313	0.3	$ 111,028	1.4	$ 7,732,881
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	$ 19,416,259	93.8	$ 416,071	2.0	$ 65,884	0.3	$ 129,791	0.6	$ 20,701,093
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	$ 115,965	0.8	$ 14,573,849
2010	$ 359,184	1.1	$ 30,556,535	92.1	$ 1,090,191	3.3	$ 311,199	0.9	$ 851,004	2.6	$ 33,168,113
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	0.3	$ 32,008,304	91.6	$ 480,119	1.4	$ 622,809	1.8	$ 1,723,098	4.9	$ 34,955,955
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	$ 32,812,019	93.6	$ 778,428	2.2	$ 588,311	1.7	$ 687,013	2.0	$ 35,071,891
2015	$ 359,903	1.5	$ 22,285,338	92.2	$ 753,078	3.1	$ 39,197	0.2	$ 726,696	3.0	$ 24,164,211

Appendix B8.–Commercial herring harvest by fishery, Upper Cook Inlet, 1973–2015.

	Harvest (Tons)				
Year	Upper Subdistrict	Chinitna Bay	Tuxedni Bay	Kalgin Isl	Total
1973	13.8	–	–	–	13.8
1974	36.7	–	–	–	36.7
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
2015	24.6	1.6	0.0	0.0	26.2

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

Appendix B9.–Commercial harvest of razor clams in Upper Cook Inlet, 1919–2015.

Year	Pounds	Year	Pounds
1919	76,963	1968	0
1920	11,952	1969	0
1921	72,000	1970	0
1922	510,432	1971	14,755
1923	470,280	1972	31,360
1924	156,768	1973	34,415
1925	0	1974	0
1926	0	1975	10,020
1927	25,248	1976	0
1928	0	1977	1,762
1929	0	1978	45,931
1930	0	1979	144,358
1931	No Record	1980	140,420
1932	93,840	1981	441,949
1933	No Record	1982	460,639
1934	No Record	1983	269,618
1935	No Record	1984	261,742
1936	No Record	1985	319,034
1937	8,328	1986	258,632
1938	No Record	1987	312,349
1939	No Record	1988	399,376
1940	No Record	1989	222,747
1941	0	1990	323,602
1942	0	1991	201,320
1943	0	1992	296,727
1944	0	1993	310,481
1945	15,000	1994	355,165
1946	11,424	1995	248,358
1947	11,976	1996	355,448
1948	2,160	1997	366,532
1949	9,672	1998	371,877
1950	304,073	1999	352,910
1951	112,320	2000	369,397
1952	0	2001	348,917
1953	0	2002	338,938
1954	0	2003	411,403
1955	0	2004	419,697
1956	0	2005	371,395
1957	0	2006	368,953
1958	0	2007	283,085
1959	0	2008	390,999
1960	372,872	2009	361,388
1961	277,830	2010	379,547
1962	195,650	2011	189,172
1963	0	2012	307,409
1964	0	2013	380,912
1965	0	2014	348,294
1966	0	2015	318,538
1967	0		

Appendix B10.–Enumeration goals and counts of sockeye salmon in selected streams of Upper Cook Inlet, 1978–2015.

	Kenai River		Kasilof River		Fish Creek	
Year	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[d]	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
2015	1,000,000–1,200,000	1,709,051	160,000–340,000	470,677	20,000–70,000	102,296

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Appendix B10.–Page 2 of 2.

Year	Yentna River		Crescent River		Packers Creek	
	Enumeration Goal[f]	Enumeration Estimate[h]	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[i]
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	–[h]	–[h]	30,000–70,000	–	15,000–30,000	16,473[i]
2010	–[h]	–[h]	30,000–70,000	86,333	15,000–30,000	–
2011	–[h]	–[h]	30,000–70,000	81,952	15,000–30,000	–
2012	–[h]	–[h]	30,000–70,000	58,838	15,000–30,000	–
2013	–[h]	–[h]	30,000–70,000	ND	15,000–30,000	–
2014	–[h]	–[h]	30,000–70,000	ND	15,000–30,000	19,242[i]
2015	–[h]	–[h]	30,000–70,000	ND	15,000–30,000	28,072[i]

[a] From 1978 to 2010 enumeration and goals were Bendix sonar; from 2011 to 2014 goals are DIDSON based.

[b] Inriver goal

[c] Enumeration estimates prior to 2015 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.

Appendix B11.–Average price for commercially-harvested salmon, Upper Cook Inlet, 1975–2015.

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
2015	2.00	1.60	0.60	0.25	0.40

Note: Price is expressed as dollars per pound. Data source: 1969–1983: Commercial Fisheries Entry Commission; 1984–2015: random fish ticket averages, which do not include bonuses or postseason adjustments.

Appendix B12.–Average weight (pounds) of commercially-harvested salmon, Upper Cook Inlet, 1970–2015.

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
2014	15.8	6.2	6.3	3.7	7.4
2005-2014	19.3	6.1	6.3	3.6	7.3
1970-2014	24.9	6.3	6.5	3.6	7.4
2015	16.7	5.3	5.8	3.3	6.6

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, 1975–2015.

	Drift Gillnet			Set Gillnet			
Year	Resident	Non-Resident	Subtotal	Resident	Non-Resident	Subtotal	Total
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
2015	410	156	566	622	112	734	1,300

Source: 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, 1985–2015.

	Sockeye			Coho			Pink			Chum			Chinook		
Year	Forecast[a]	Actual[b,d]	Error	Projected	Actual[c,d]	Error	Projected	Actual[c,d]	Error	Projected	Actual[c,d]	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%
2015	3,700,000	3,685,160	0%	161,000	216,032	34%	98,000	48,004	-51%	176,000	275,960	57%	6,700	10,798	61%
Avg.	3,435,484	4,316,741	25%	279,000	297,135	10%	267,177	276,844	18%	307,484	250,950	-3%	17,171	16,809	4%

[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 2015 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, 1980–2015.

Tyonek Subsistence Fishery								
	No. of Permits							
Year	Issued	Returned	Chinook	Sockeye	Coho	Pink	Chum	Total
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
2015	103	46	744	237	331	41	5	1,358

-continued-

Yentna Subsistence Fishery								
	No. of Permits							
Year	Issued	Returned	Chinook	Sockeye	Coho	Pink	Chum	Total
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
2015	30	28	0	563	147	44	56	810

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

Appendix B16.–Upper Cook Inlet educational fisheries salmon harvest, 2015.

Year	Fishery	Chinook	Sockeye	Coho	Pink	Chum	Total
2015	Kenaitze	20	8,109	63	4	0	8,196
	NTC	106	369	313	51	0	839
	NND	36	37	45	0	0	118
	NES	34	58	44	8	1	145
	Sons of American Legion	0	45	3	2	0	50
	APVFW	0	50	32	26	9	117
	Kasilof H.A.	1	32	43	0	0	76
	SCF	0	13	16	0	21	50
	Knik	0	43	15	1	21	80
	Big Lake	0	25	8	0	1	34
	Eklutna	0	237	41	9	48	335
	Territorial Homestead Lodge	2	152	29	53	1	237
	Chickaloon Native Village	–	–	–	–	–	0
	Total	199	9,170	652	154	102	10,277

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, 1996–2015.

Kasilof River Gillnet

	Days	Days Fished		Sockeye		Chinook		Coho		Pink		Chum		Total	
Year	Open	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
2015	10	1,741	22	27,567	339	61	3	191	41	20	5	2	1	27,841	341
Min.	5	582		9,506		46		0		2		0		9,561	
Mean	9	1,362		19,840		184		92		26		7		20,149	
Max.	13	1,864		28,867		514		420		105		23		29,591	

Kasilof River Dip Net

	Days	Days Fished		Sockeye		Chinook		Coho		Pink		Chum		Total	
Year	Open	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
2015	44	10,346	52	89,000	566	0	0	2,723	95	1,607	74	597	31	93,927	579
Min.	27	1,091		9,737		0		90		19		17		9,900	
Mean	39	5,284		51,519		55		1,031		818		149		53,572	

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Kenai River Dip Net

	Days	Days Fished		Sockeye		Chinook		Coho		Pink		Chum		Total	
Year	Open	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
2015	22	31,487	75	377,532	1,088	66	2	4,150	130	4,147	99	957	45	386,853	1,101
Min.	18	10,503		98,262		0		559		619		58		101,771	
Mean	22	21,046		261,682		659		2,437		4,358		439		269,576	
Max.	27	36,380		537,765		1,509		4,745		19,140		1,194		548,583	

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Unknown Fishery															
	Days	Days Fished		Sockeye		Chinook		Coho		Pink		Chum		Total	
Year	Open	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
2015	–	820	14	8,626	183	0	0	263	19	153	12	41	3	9,084	184
Min.		270		3,310		0		39		28		4		3,429	
Mean		832		8,632		53		166		207		38		9,095	
Max.		1,339		15,675		238		366		916		90		16,360	

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Fish Creek Dip Net

Year	Days Open	Days Fished Est.	Days Fished SE	Sockeye Est.	Sockeye SE	Chinook Est.	Chinook SE	Coho Est.	Coho SE	Pink Est.	Pink SE	Chum Est.	Chum SE	Total Est.	Total 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
2015	8	2,303	22	19,260	280	0	0	3,321	87	1,329	48	329	27	24,239	298
Min.	3	131		436		0		17		2		0		457	
Mean	11	1,568		8,813		6		1,261		732		106		10,918	
Max.	22	3,749		23,705		37		3,576		4,218		329		29,303	

Note: fishery not open 2002-2008, and 2012-2013.

Beluga River Dip Net

Year	Days Open	Days Fished Est.	Days Fished SE	Sockeye Est.	Sockeye SE	Chinook Est.	Chinook SE	Coho Est.	Coho SE	Pink Est.	Pink SE	Chum Est.	Chum SE	Total Est.	Total 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		1		88	
2014	43			32		0		12		1		1		46	
2015	43			65		0		17		0		0		82	
Min.	43			9		0		1		0		0		16	
Mean	43			61		0		28		1		2		92	
Max.	43			140		0		78		7		5		225	

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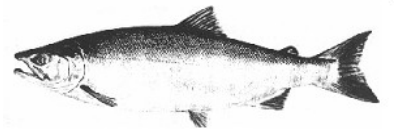
Upper Cook Inlet Personal Use Fisheries Total

	Days Fished		Sockeye		Chinook		Coho		Pink		Chum		Total	
Year	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	630,242	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	506,047	1,164	50	2	9,370	199	26,795	217	1,859	56	544,121	1,202
2015	46,697	91	522,051	1,256	61	3	10,648	191	7,257	137	1,927	62	541,943	1,279
Min.	14,923		145,545		50		777		844		88		151,113	
Mean	29,388		346,559		950		4,426		5,811		691		358,445	
Max.	50,819		630,242		1,924		10,648		26,795		1,927		644,635	

Note: Does not include Beluga River dip net fishery.

APPENDIX C: SALMON OUTLOOK AND FORECAST

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



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Fax: (907) 262-4709 Date Issued: March 5, 2015

UPPER COOK INLET
2015 OUTLOOK FOR COMMERCIAL SALMON FISHING

SOCKEYE SALMON

A run of approximately 5.8 million sockeye salmon is forecasted to return to Upper Cook Inlet (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 Kenai River sockeye salmon forecast is approximately 3.6 million fish, which is 0.2 million fish less than the 20-year average run for this system of 3.8 million. Age-1.3 salmon typically comprise about 57% of the run; in 2015 the predominant age classes are projected to be age 1.3 (52%), age 1.2 (11%), and age 2.3 (29%). The 10-year mean absolute percent error (MAPE) for the set of models used for the 2015 Kenai River sockeye salmon forecast is 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 2015 Kasilof River predominate age classes are projected to 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 River sockeye salmon forecast is 19%.

The Susitna River sockeye salmon run forecast is 276,000 fish, 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 error estimates (MAPE) are not available. The 9-year average run (2006–2014) was calculated using mark–recapture estimates of inriver run and genetic estimates of commercial harvests.

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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 run; the predominant age classes in the 2015 run are projected to be age 1.2 (76%) and age 1.3 (11%).

Forecast runs to individual freshwater systems are as follows:

System	Run	Goals[a]
Fish Creek	61,000	20,000–70,000
Kasilof River [b,c]	1,092,000	160,000–340,000
Kenai River [b,d]	3,550,000	1,000,000–1,200,000
Susitna River	276,000	
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]	851,000	N/A
Total	5,830,000	

[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 160,000–390,000 sockeye salmon.

[d] Kenai River optimal escapement goal is 700,000–1,400,000.

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

2015 FISHING STRATEGY

Northern District Set Gillnet

Since 2011, management actions in the Northern District directed Chinook salmon set gillnet fishery have included area closures, time restrictions, and regularly scheduled fishing period closures in order to reduce the harvest of northern Cook Inlet Chinook salmon. While escapements have moderately improved over the past couple of years, 7 Chinook salmon stocks remain as stocks of concern. Therefore, the 2015 management strategy will mimic actions taken in 2014. In the 2015 directed Chinook salmon commercial set gillnet fishery, the first period of season, which occurs on Monday, May 25, 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 Chinook salmon fishing. Finally, the remaining four commercial Chinook salmon fishing periods will be reduced in duration from 12 hours to 6 hours per fishing period. These periods occur on June 1, 8, 15, and 22. Additional restrictions (or relaxation of restrictions) will be based upon inseason assessment of Chinook salmon escapement at the Deshka River. All of the Northern District is expected to return to a regular fishing schedule beginning on Thursday, June 25.

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 at the 2014 Alaska Board of Fisheries (board) meeting. *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

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through August 6 to conserve Susitna River sockeye salmon. 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 2015, six different fishing periods could be affected by a reduction of gear. All areas in the Northern District will return to a full complement of gear beginning on Monday, August 10.

Central District Fisheries

Upper Subdistrict Set Gillnet Fishery – Overview

The 2015 Kenai River late-run Chinook salmon forecast projects a total run of approximately 22,000 fish. Therefore, 2015 management strategies in the Upper Subdistrict set gillnet fishery will be similar to 2014; that is, fishing time will be based on inseason assessments of sockeye salmon abundance, while ensuring adequate Chinook salmon escapement relative to the SEG of 15,000-30,000 Kenai River late-run Chinook 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 emergency order (EO); however, the fishery may not open earlier than June 20. Opening the fishery prior to June 25 will also be dependent on the inseason assessment of Kenai River early-run Chinook salmon abundance.

Through June 30, the fishery will be open for regular 12 hour periods (Mondays and Thursdays) and must close for 36 consecutive hours per week, which will begin between 7:00 p.m. Thursday and 7:00 a.m. Friday. Additionally, the department may allow up to 48 hours of additional fishing time per week (Sunday through Saturday).

Kasilof Section After July 1

If the projected inriver run of late-run Kenai River Chinook 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 Chinook salmon run is projected to be less than 22,500 fish, management of the Kasilof Section set gillnet fishery beginning July 1 may be tied to actions taken in the Kenai River Chinook 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 Kenai, Kasilof, and East Foreland sections (Upper Subdistrict) set gillnet fishery will be based on the abundance of Kenai River late-run Chinook salmon, as well as the run size of Kenai River sockeye salmon and escapement levels of sockeye salmon in both the Kenai and Kasilof rivers. In July, if the inriver run of Kenai River late-run Chinook 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 2015 season, the Kenai River run projection is 3.6 million sockeye salmon. Therefore, the season

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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.

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 in the Upper Subdistrict set gillnet fishery and will close the fishery for a 36 hour period per week, which will begin between 7:00 p.m. Thursday and 7:00 a.m. Friday. In addition, there will be a second 24 hour closed period per week that will begin between 7:00 p.m. on Monday and 7:00 a.m. 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 Chinook 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 Chinook 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 *Kenai River Late-Run King Salmon Management Plan* on pages 7-8 of this document.

If the escapement of Kenai River late-run Chinook 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 Northern Cook Inlet 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 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 2) 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.

-continued-

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 (Figure 3), 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 (Figure 4). 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 Regulatory Changes section of this document).

From August 16 until closed by EO:

Drift Areas 3 and 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

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.

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.

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 Kasilof River 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 Chinook salmon escapement goals, this area may be further restricted to fishing within 600 feet of the high tide mark in the Kasilof Section.

SEASON OPENING DATES

Season opening dates in 2015 for the various fisheries around the inlet are as follows:

Northern District Chinook Salmon Fishery: May 25. As explained earlier in this document, there are 5 regular Monday fishing periods that occur beginning Monday, May 25, and include June 1, 8, 15, and 22. However, like 2014, the fishing period on May 25 will be closed. The area from a point at the wood chip dock to the Susitna River remains closed for the directed Chinook salmon fishery in 2015.

Big River Fishery: June 1 and continuing through June 24, unless the 1,000 Chinook salmon harvest limit is reached prior to that date. Weekly fishing periods are Mondays, Wednesdays, and Friday from 7:00 a.m. to 7:00 p.m.

Western Subdistrict Set Gillnet Fishery: June 18.

Drift Gillnet Fishery: June 22.

All remaining set gillnet fisheries, except the Upper Subdistrict: June 25.

Upper Subdistrict Set Gillnet Fishery: June 25 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 25 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.

REGULATORY CHANGES

There were several regulatory changes made by the board during the January–February 2014 meeting that were first implemented in 2014 and will again direct management of the 2015 fishing season. The following summary is for informational purposes only and is not intended to be a comprehensive review. Please consult regulations prior to fishing. Regulation books are available at department offices.

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

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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 (size A-0) 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 Drift Areas 3 and 4 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 p.m. on Mondays and 7:00 a.m. 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 allowed within the first 1,200 feet from mean high tide, instead of the first 600 feet. Drift gillnetting is now allowed 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 Chinook 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 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 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:

no additional restrictions on amount of gear and depth of nets;

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;

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;

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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 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 1–15. 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 nets that are required to be 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

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to any or all of the following areas: Expanded Kenai Section, Expanded Kasilof Section, Anchor Point Section, 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.

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.

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 2015 season.

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 catch, 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

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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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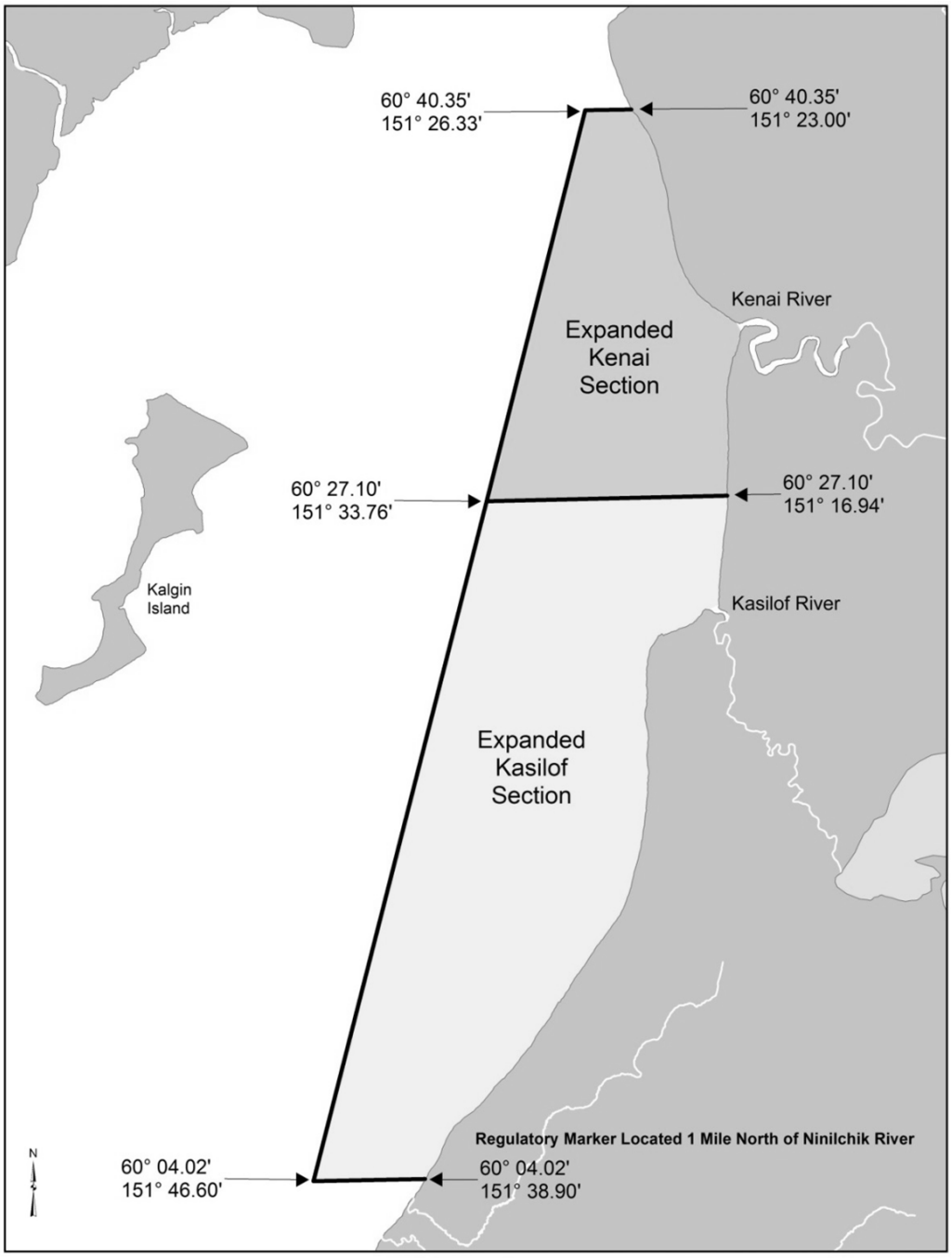

Latitude and Longitude are based on the North American Datum of 1983 (NAD 83), equivalent to the World Geodetic System 1984 (WGS 84).

Figure 1.–Map of the Expanded Kenai and Expanded Kasilof Sections with waypoint descriptions.

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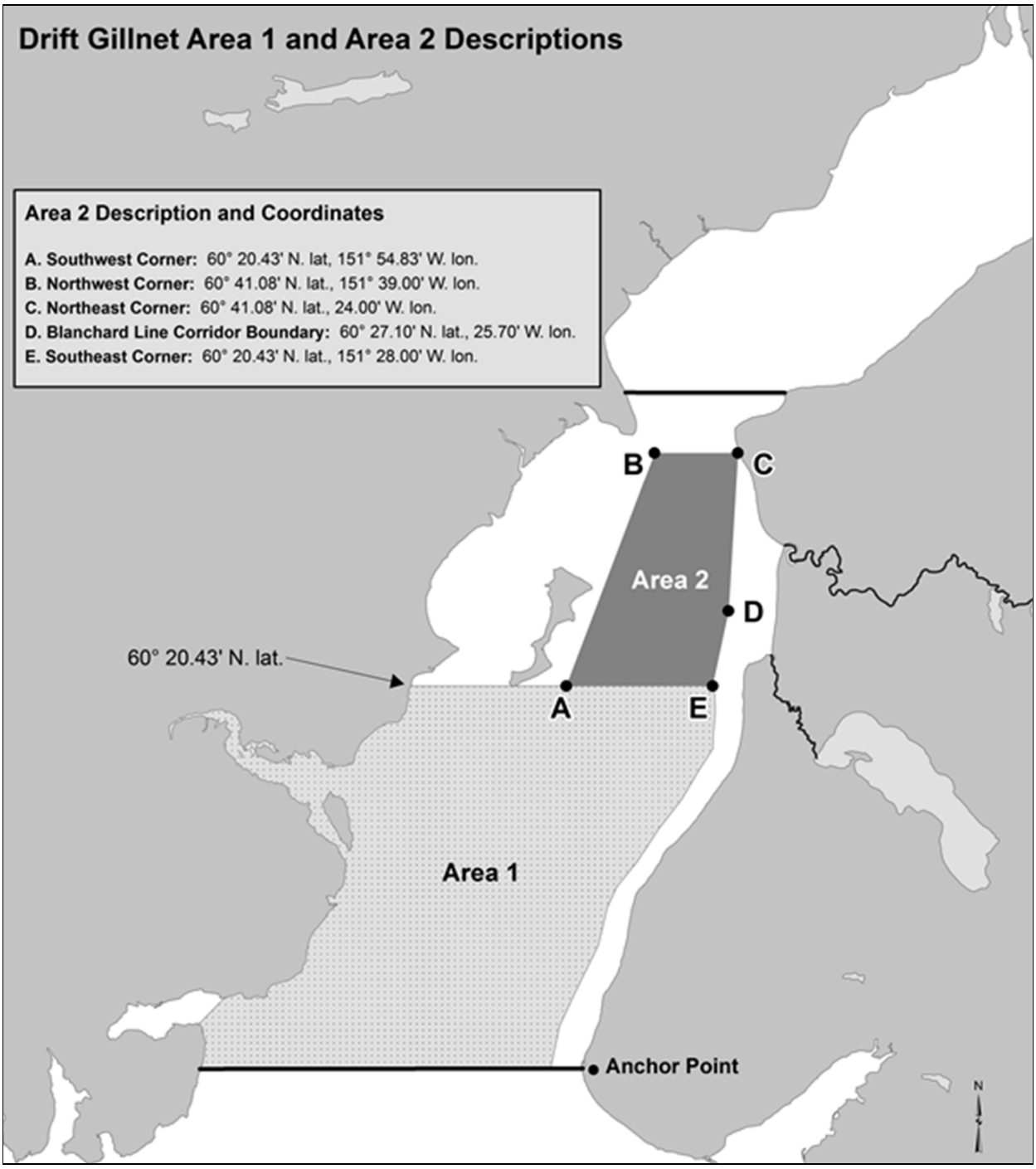

Latitude and Longitude are based on the North American Datum of 1983 (NAD 83), equivalent to the World Geodetic System 1984 (WGS 84).

Figure 2.–Map of drift gillnet fishing areas one and two.

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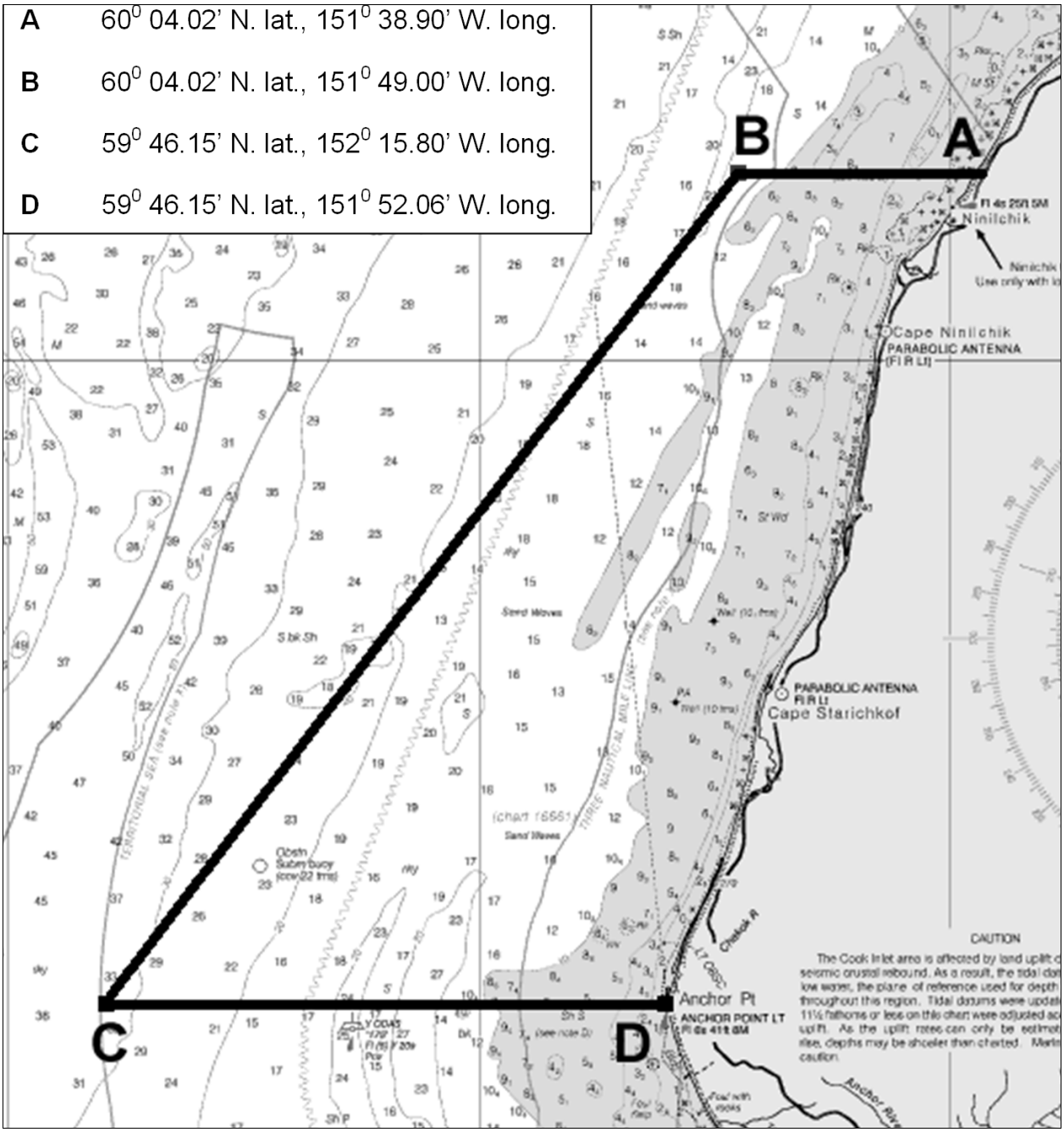

Latitude and Longitude are based on the North American Datum of 1983 (NAD 83), equivalent to the World Geodetic System 1984 (WGS 84).

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

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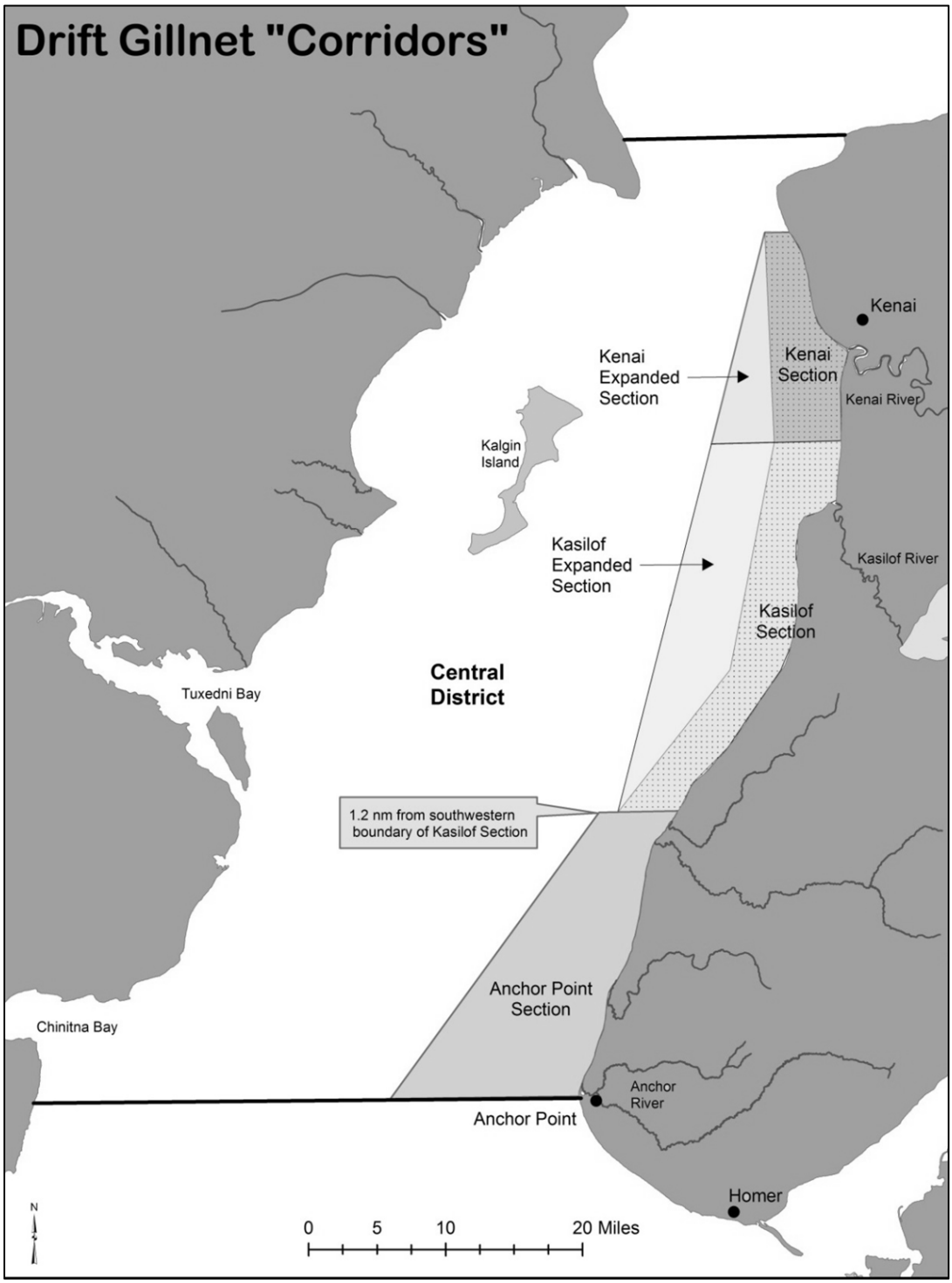

Figure 4.–Map of all drift gillnet "corridors" in Upper Cook Inlet.

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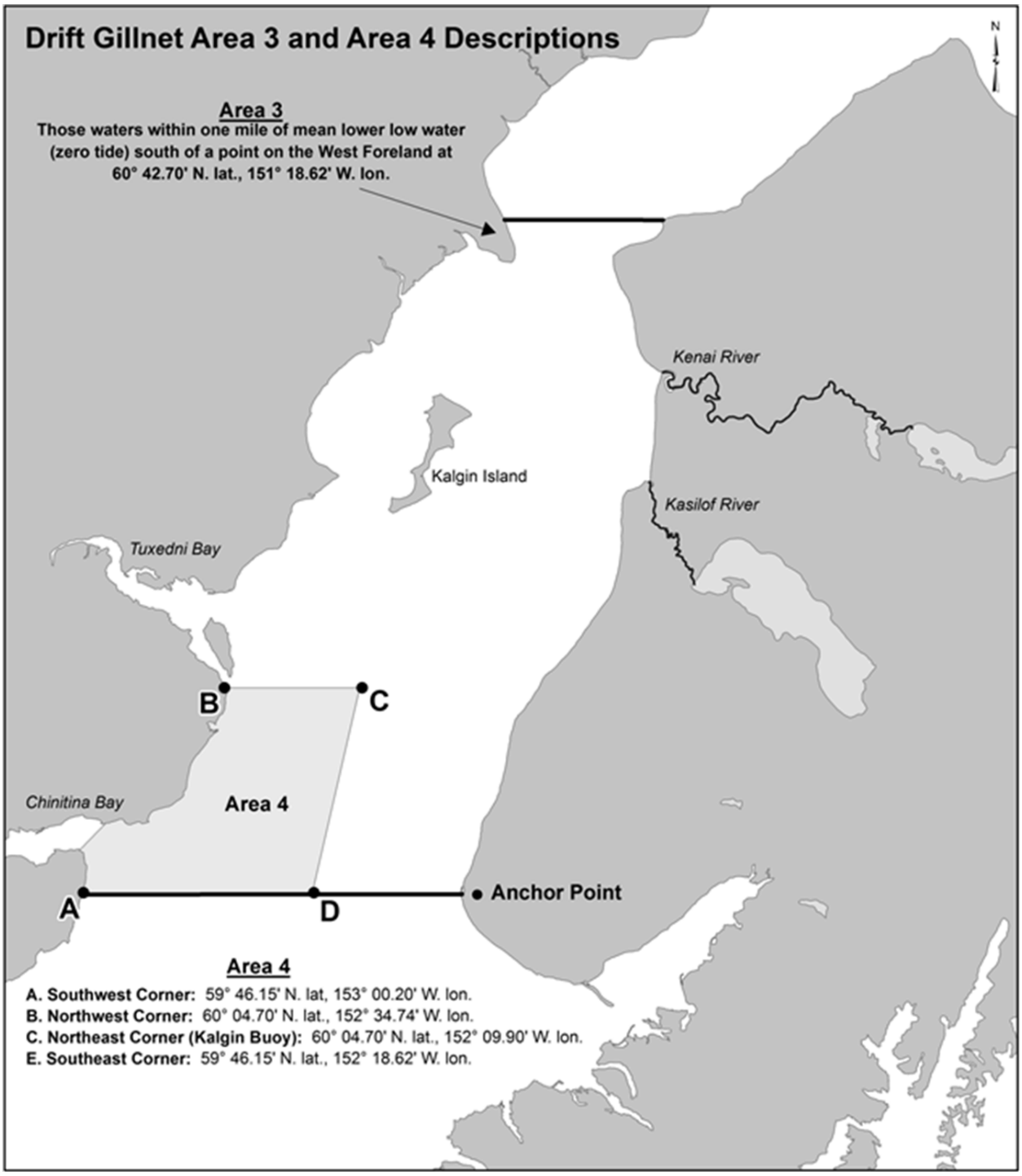


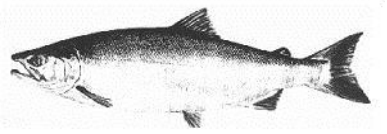
Latitude and Longitude are based on the North American Datum of 1983 (NAD 83), equivalent to the World Geodetic System 1984 (WGS 84).

Figure 5.–Map of the drift gillnet areas open beginning August 16.

ALASKA DEPARTMENT OF FISH AND GAME
DIVISION OF COMMERCIAL FISHERIES

NEWS RELEASE

Sam Cotten, Commissioner
Scott Kelly, Director



Contact:
Mark Willette, Research Project Leader
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Soldotna ADF&G
43961 Kalifornsky Beach Rd.
Suite B
Soldotna, AK 99669
Date Issued: Nov. 16, 2015

2016 UPPER COOK INLET SOCKEYE SALMON FORECAST

The forecast of the 2016 Upper Cook Inlet sockeye salmon run is as follows:

	Forecast Estimate (millions)	Forecast Range (millions)
TOTAL PRODUCTION:		
Total Run	7.1	5.6–8.6
Escapement	1.8	
Commercial Harvest	4.1	
Other Harvests	1.2	

Forecast Methods

The major sockeye salmon systems in Upper Cook Inlet (UCI) are the Kenai, Kasilof, Susitna, and Crescent rivers, and Fish Creek. Available escapement (spawner abundance), return, sibling, fry, and smolt data, if available, were examined for each system. Four models were evaluated to forecast the total run of sockeye salmon to UCI in 2016: (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 typically selected. Forecast model predictions were compared to evaluate uncertainty.

The return of age-1.3 Kenai River sockeye salmon in 2016 was forecasted using a sibling model. The sibling-model prediction of the return of age-1.3 salmon is based on the abundance of age-

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1.2 salmon that returned in 2015. A spawner-recruit model predicts the age-1.2 salmon return based upon the spawning escapement in 2012. 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 age-1.2, -1.3 and -2.2 Kasilof River sockeye salmon in 2016 were forecasted using sibling models based upon returns of age-1.1, -1.2 and -2.1 salmon in 2015. A smolt model based upon age-2 smolt abundances in 2013 was used to forecast the return of age-2.3 Kasilof River sockeye salmon in 2016.

The total run of Susitna River sockeye salmon was forecasted using mean return per spawner by age class for brood years 2006–2011. 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. Unmonitored stocks include Crescent River, Big River, McArthur River, Chilligan River, Coal Creek, Cottonwood Creek, Wasilla Creek, Eagle River, and many other smaller systems in the area. The fraction of the total run destined for unmonitored systems was estimated using genetic estimates of the stock composition of offshore test fishery harvests.

The total harvest by all user groups was estimated by subtracting the aggregate escapement from the total run forecast for all stocks. Aggregate escapement was estimated from the sum of the midpoints of the escapement goal ranges for each of the monitored sockeye salmon-producing systems and the escapement into unmonitored systems, which was estimated as 17% of the escapement into monitored systems. The commercial harvest was estimated from the fraction of total harvest taken in the commercial fishery in relation to run sizes in 2010–2014. The harvest by all other user groups (sport, personal use, and subsistence) was estimated by subtracting commercial harvest from total harvest.

The total run forecast range was calculated by multiplying the forecast by the MAPE of the actual runs from published forecast runs from 2006 through 2015.

Forecast Discussion

In 2015, the harvest of sockeye salmon by all user groups in UCI (3.6 million) was 0.1 million less than the preseason forecast of 3.7 million. In 2015, the total run was 3.9 million to the Kenai River; 1,168,000 to the Kasilof River; 435,000 to the Susitna River; and 120,000 to Fish Creek. The 2015 run forecast was 3.6 million to the Kenai River; 1,092,000 to the Kasilof River; 276,000 to the Susitna River; and 61,000 to Fish Creek.

A run of approximately 7.1 million sockeye salmon is forecasted to return to UCI in 2016, with a commercial harvest of 4.1 million. The forecasted commercial harvest in 2016 is 1.1 million greater than the 20-year average harvest.

The run forecast for the Kenai River is approximately 4.7 million, which is 1.0 million greater than the 20-year average run of 3.7 million. A sibling model based upon the return of age-1.2 salmon in 2015 (534,000; 404,000 20-year average) predicted a return of 3.1 million age-1.3

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salmon. A fry model based upon the abundance of age-0 fry rearing in Skilak and Kenai lakes in the fall of 2012 (23.6 million; 17.3 million 20-year average) predicted a return of 2.6 million age-1.3 salmon. The sibling model was used for this forecast, because the 10-year MAPE was lower for the sibling (27%) than the fry model (55%). A sibling model based upon the return of age-2.2 salmon in 2015 predicted a return of 413,000 age-2.3 salmon in 2016. A smolt model based upon the abundance of age-2 smolt emigrating from the Kenai River in spring 2013 (5.6 million) predicted a return of 1.0 million age-2.3 salmon. The smolt model was used for this forecast, because the 10-year MAPE was lower for the smolt (38%) than the sibling model (46%). The predominant age classes in the 2016 run forecast are age 1.3 (65%), age 1.2 (8%), and age 2.3 (21%). The 10-year MAPE for the set of models used for the 2016 Kenai sockeye salmon run forecast is 20%.

Sockeye salmon run forecasts, 20-year average runs and escapement goals (in thousands of fish) to individual freshwater systems are as follows:

		Major Age Classes				Total	Escapement
System		1.2	1.3	2.2	2.3	Run	Goals[a]
Kenai River	Forecast	370	3,061	225	992	4,731	1,100 – 1,350b
	20-yr	404	2,217	255	701	3,652	
Kasilof River	Forecast	262	215	256	113	861	160 – 340
	20-yr	307	339	239	84	987	
							No Goal[c]
Susitna River	Forecast	42	249	28	23	372	
	20-yr	97	215	27	23	421	
Fish Creek	Forecast	63	32	9	2	110	20 – 70
	20-yr	48	21	8	3	84	
Unmonitored	Forecast	126	608	88	193	1,039	No Goal
	20-yr	146	477	91	139	880	
Total Run	Forecast	863	4,166	606	1,323	7,113	
	20-yr	1,003	3,269	619	950	6,023	

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 river mile 19 on the Kenai River.

[c] Susitna sockeye salmon are managed to achieve escapement goals (in thousands of fish) at Larson (15–50), Chelatna (20-65), and Judd (25–55) lakes.

The Kasilof River sockeye salmon run forecast is 861,000, which is 13% less than the 20-year average of 987,000. A sibling model based upon the abundance of age-1.2 salmon in 2015 was used to forecast a return of 215,000 age-1.3 salmon in 2016. The smolt model predicted a return

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of 288,000 age-1.3 salmon. The sibling model was used for this forecast, because the 10-year MAPE was lower for the sibling (33%) than the smolt model (55%). A sibling model based upon the abundance of age 1.1 salmon in 2015 was used to forecast a return of 262,000 age-1.2 salmon in 2016. A spawner-recruit model based upon the abundance of spawners in 2012 forecasted a return of 248,000 age-1.2 salmon. The sibling model was used for this forecast, because the 10-year MAPE was lower for the sibling (56%) than the spawner-recruit model (59%). A sibling model based upon the abundance of age-2.1 salmon in 2015 was used to forecast a return of 256,000 age-2.2 salmon in 2016. A spawner-recruit model forecast for age-2.2 salmon was 214,000. The sibling model was used for this forecast, because the 5-year MAPE was lower for the sibling (12%) than the spawner-recruit model (22%). The predominant age classes in the 2016 run forecast are age 1.2 (31%), age 1.3 (25%), and age 2.2 (30%). The 10-year MAPE for the set of models used for the 2016 Kasilof sockeye salmon run forecast is 17%.

The Susitna River sockeye salmon run forecast is 372,000, which is 12% less than the 10-year average of 421,000. This forecast was derived using mean return per spawner by age class for brood years 2006–2011 and mark–recapture estimates of spawner abundance in 2010-2012. Sonar estimates of spawner abundance 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. The 3-year MAPE for this forecast method is 21%. The predominant age classes in the 2016 Susitna sockeye salmon run forecast are age 1.2 (11%) and age 1.3 (67%).

The Fish Creek sockeye salmon run forecast is 110,000, which is 31% greater than the 20-year average of 84,000. Sibling models were used to forecast the returns age-1.2, -1.3, -2.2 and -2.3 salmon in 2016. The predominant age classes in the 2016 Fish Creek run forecast are age 1.2 (57%) and age 1.3 (29%). The 10-year MAPE for the Fish Creek sockeye salmon run forecast is 62%.

OTHER SALMON SPECIES

The forecast of the 2016 commercial harvest of other salmon species is as follows:

Commercial Harvest Forecasts	
Pink Salmon	393,000
Chum Salmon	184,000
Coho Salmon	160,000
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 2016. The forecast for pink salmon is based upon the average harvest during the past 5 even-numbered years.

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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

Sam Cotten, Commissioner
Jeff Regnart, Director

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Date Issued: April 2, 2015 Time: 9:00 AM

2015 UPPER COOK INLET COMMERCIAL SMELT (HOOLIGAN) AND HERRING FISHING SEASONS

5AAC 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 through June 30; however, the total harvest may not exceed 100 tons of smelt and the season will close immediately if this level of harvest is reached. Legal gear for the fishery is a hand-operated dip net, as defined in 5 AAC 39.105. 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 a.m. on Monday until 6:00 p.m. on Friday; however, a fishing period may extend beyond May 31 if the fishing period began before May 31. In 2015, commercial fishing for herring will open at 6:00 a.m. on Monday, April 20 and close no later than 6:00 p.m. on Friday, May 29, unless closed earlier by emergency order in any area where the guideline harvest level is met. 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.