

# **2023 Lower Cook Inlet Area Salmon Annual Management Report**

by

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Divisions of Sport Fish and Commercial Fisheries



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Weights and measures (metric)		General		Mathematics, statistics	
centimeter	cm	Alaska Administrative Code		all standard mathematical signs, symbols and abbreviations	
deciliter	dL		AAC		
gram	g	all commonly accepted abbreviations	e.g., Mr., Mrs., AM, PM, etc.	alternate hypothesis	H <sub>A</sub>
hectare	ha			base of natural logarithm	e
kilogram	kg			catch per unit effort	CPUE
kilometer	km	all commonly accepted professional titles	e.g., Dr., Ph.D., R.N., etc.	coefficient of variation	CV
liter	L			common test statistics	(F, t, $\chi^2$ , etc.)
meter	m	at	@	confidence interval	CI
milliliter	mL	compass directions:		correlation coefficient (multiple)	R
millimeter	mm	east	E	correlation coefficient (simple)	r
<b>Weights and measures (English)</b>		north	N	covariance	cov
cubic feet per second	ft <sup>3</sup> /s	south	S	degree (angular)	°
foot	ft	west	W	degrees of freedom	df
gallon	gal	copyright	©	expected value	E
inch	in	corporate suffixes:		greater than	>
mile	mi	Company	Co.	greater than or equal to	≥
nautical mile	nmi	Corporation	Corp.	harvest per unit effort	HPUE
ounce	oz	Incorporated	Inc.	less than	<
pound	lb	Limited	Ltd.	less than or equal to	≤
quart	qt	District of Columbia	D.C.	logarithm (natural)	ln
yard	yd	et alii (and others)	et al.	logarithm (base 10)	log
<b>Time and temperature</b>		et cetera (and so forth)	etc.	logarithm (specify base)	log <sub>2</sub> , etc.
day	d	exempli gratia (for example)	e.g.	minute (angular)	'
degrees Celsius	°C	Federal Information Code	FIC	not significant	NS
degrees Fahrenheit	°F	id est (that is)	i.e.	null hypothesis	H <sub>0</sub>
degrees kelvin	K	latitude or longitude	lat or long	percent	%
hour	h	monetary symbols (U.S.)	\$, ¢	probability	P
minute	min	months (tables and figures): first three letters	Jan.,...,Dec	probability of a type I error (rejection of the null hypothesis when true)	α
second	s	registered trademark	®	probability of a type II error (acceptance of the null hypothesis when false)	β
<b>Physics and chemistry</b>		trademark	™	second (angular)	"
all atomic symbols		United States (adjective)	U.S.	standard deviation	SD
alternating current	AC	United States of America (noun)	USA	standard error	SE
ampere	A	U.S.C.	United States Code	variance	
calorie	cal			population sample	Var var
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				

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**2023 LOWER COOK INLET AREA SALMON ANNUAL MANAGEMENT  
REPORT**

by

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# ABSTRACT

The Lower Cook Inlet Management Area (LCI) consists of all coastal waters and inland drainages entering waters north of Cape Douglas, west of Cape Fairfield, and south of Anchor Point. In 2023, commercial harvest was approximately 3.1 million salmon and was composed of 2.7 million pink *Oncorhynchus gorbuscha*, 350,427 sockeye *O. nerka*, 39,441 chum *O. keta*, 661 coho *O. kisutch*, and 328 Chinook salmon *O. tshawytscha*. Approximately 32.0% of the harvest (978,618 salmon) was sold as commercial harvest, and 2.1 million salmon were sold for hatchery cost recovery, including carcass sales. Homepack and donated fish (4,114 salmon) accounted for less than 1% of the harvest. Based on fish ticket reporting, the preliminary value of the commercial salmon harvest was \$4.1 million, including hatchery sales. During the 2023 season, 15 set gillnet and 11 purse seine permit holders reported commercial deliveries. Set gillnet harvest value was an estimated \$191,253 with average permit earnings of \$12,750. Purse seine fishery exvessel harvest value was an estimated \$1.5 million, with average permit earnings of \$132,109. Revenue generated by cost recovery for hatchery operations was approximately \$2.4 million. A total of 1,179 salmon were harvested in the Kachemak Bay personal use set gillnet fishery.

Keywords: Sockeye salmon, *Oncorhynchus nerka*, pink salmon, *O. gorbuscha*, chum salmon, *O. keta*, Chinook salmon, *O. tshawytscha*, coho salmon, *O. kisutch*, Annual Management Report, Lower Cook Inlet

## INTRODUCTION

### LOWER COOK INLET MANAGEMENT AREA COMMERCIAL SALMON FISHERIES

The Lower Cook Inlet Management Area (LCI) consists of waters of the Cook Inlet Management Area (Area H) south of the latitude of Anchor Point, including the western shore of Cook Inlet south to Cape Douglas, and the eastern shore of Cook Inlet along the Kenai Peninsula to Cape Fairfield (Figures 1 and 2).

LCI is divided into 5 districts that correspond to local geography and distribution of the 5 species of Pacific salmon (*Oncorhynchus* spp.) harvested by commercial fisheries (Figure 1). These districts are further divided into subdistricts and sections for management and harvest reporting purposes (Figure 2). The primary management objective for all districts is to achieve spawning escapement goals for major salmon stocks and allow orderly fisheries to harvest fish surplus to spawning requirements.

Four hatcheries currently contribute to the LCI salmon fisheries. These facilities and their annual production are presented in detail in Alaska Salmon Fisheries Enhancement Annual Report, 2023 (Wilson 2024).

Gear utilized in commercial salmon fisheries is limited to purse seine and set gillnet. Purse seine gear is permitted to fish in the Southern, Outer, Eastern, and Kamishak Bay Districts (Figure 1). Set gillnet gear is permitted to fish in designated portions of the Southern District. The Barren Islands District is closed by regulation to salmon harvest.

### OVERVIEW OF AREAWIDE SALMON FISHERIES

In 2023, the LCI commercial harvest of 3.1 million salmon included 328 Chinook *O. tshawytscha*, 350,427 sockeye *O. nerka*, 857 coho *O. kisutch*, 2.7 million pink *O. gorbuscha*, and 39,441 chum salmon *O. keta* (Table 1). Approximately 32% of the harvest (978,618 fish) was attributed to the commercial fishery, and 68% (2.1 million) came from hatchery cost recovery (Table 1). Homepack harvest (575 fish) accounted for less than 1% of the harvest from LCI. The 2023 preliminary exvessel value estimates by gear group from the commercial fishery were \$1.5 million (88.4%) for purse seine and \$191,253 (11.6%) for set gillnet (Table 2). The average price per pound paid to

commercial fishers was generally below the 10-year average for all salmon species (Table 3). Hatchery harvest in 2023 was estimated at \$2.4 million (Table 2), which was greater than the recent 10-year average for hatchery sales (Table 4). Approximately \$1.3 million (53%) of the 2023 hatchery harvest was from sockeye salmon sales, and most of the remainder was from pink salmon sales.

## **SALMON SEASON SUMMARY BY DISTRICT**

### **SOUTHERN DISTRICT**

The Southern District includes the waters of eastern Cook Inlet south of Anchor Point and north of a line from Cape Elizabeth to Cape Douglas, excluding waters east of a line from Point Adam to the tip of Cape Elizabeth (Figure 1). Commercial fishing in this district is restricted by regulation to waters primarily along the south shore of Kachemak Bay from Chugachik Island near the terminus of Kachemak Bay to Point Bede approximately 4 miles south of the village of Nanwalek (English Bay; Figures 1 and 2). Purse seine gear is permitted in all open waters of this district during periods established by emergency order (EO). Commercial set gillnet harvest is restricted to approximately 15 miles of shoreline in 5 subdistricts within the Southern District (Figure 1). An Area H Commercial Fisheries Entry Commission permit is required in all areas of Cook Inlet for commercial set gillnet fishing, but the area fished must be registered at the onset of fishing each year. Although any Area H commercial set gillnet permit holder may register to fish in the Southern District as part of the “Greater Cook Inlet” registration area, registering a permit there precludes that permit holder from fishing in the Northern District of Upper Cook Inlet Management Area (UCI), or in the Upper Subdistrict of the Central District of UCI, for the remainder of that calendar year, as defined in 5 AAC 21.345. Other areas in the Greater Cook Inlet Area may be fished by set gillnet permit holders registered to fish in the Southern District. The primary salmon species harvested in the Southern District for both purse seine and set gillnet permit holders are sockeye and pink salmon, although modest numbers of chum and coho salmon are also harvested. The major producer of wild sockeye salmon in this district is the English Bay Lakes system. Pink salmon historically have returned in large numbers to Humpy Creek and Seldovia River, as well as numerous smaller streams in the Southern District.

### **Preseason Outlook and Harvest Strategy**

The 2023 commercial wild stock salmon harvest forecast for the Southern District was 78,200 sockeye and 75,000 pink salmon (Appendix F1). The enhanced sockeye salmon run to hatchery release sites in the Southern District was forecast to be 75,400 fish. A total of 1.6 million hatchery-produced pink salmon were forecast to return to the LCI in 2023 (Appendix F1).

As specified in regulation (5 AAC 21.310(b)(4)(B)), the set gillnet fishing season in the Southern District opens on or after June 1 with two 48-hour periods per week unless modified by EO. The seine fishing season and fishing periods are opened and closed by EO, depending on the availability of the harvestable surplus of salmon.

### **Season Summary**

The Southern District set gillnet commercial salmon fishing season was opened by EO at 6:00 AM on Thursday, June 1 (Table 5). This, and all following commercial set gillnet fishing periods were 48 hours in duration (Monday–Wednesday, Thursday–Saturday) as specified in regulation. The



commercial set gillnet salmon season in the Southern District was closed by regulation on October 1.

The Southern District commercial purse seine season was opened by EO on Monday, June 12, with a fishing schedule of 3 weekly 16-hour periods (6:00 AM–10:00 PM) on Mondays, Wednesdays, and Fridays in portions of the district east of McDonald Spit (Table 5). The seine fishery in the early portion of the season, prior to mid-July, targets enhanced sockeye salmon runs to hatchery release sites in the Southern District (e.g., Leisure and Hazel Lakes).

The 2023 Southern District total sockeye salmon commercial harvest, excluding homepack, was 94,915 fish, including 19,470 (20.1%) harvested by the set gillnet fleet and 75,445 harvested by seine permit holders (Table 1, Appendices A1–A3). Total commercial pink salmon harvest was 548,445 fish, including 5,838 fish (1.1%) harvested by the set gillnet permit holders and 542,607 harvested by the purse seine fleet. A total of 247 Chinook salmon were harvested in the commercial fishery in the Southern District, including 193 harvested by set gillnet permit holders and the remaining by seine permit holders. A total of 2,873 chum salmon were harvested, with 2,489 (86.6%) by set gillnet and 380 by seine permit holders. In addition, 621 coho salmon were harvested, including 451 by set gillnet and 203 by seine permit holders (Appendices A1 and A2, Table 1). The total 2023 Southern District commercial harvest of 96,250 sockeye salmon was above the 10-year average harvest of 80,305 (Appendix A3), and above the forecasted harvest of 75,400 (Appendix F1). The pink salmon commercial harvest of 591,275 was above the forecasted wild production harvest of 75,000 (Appendix F1), and the 10-year average harvest of 151,242 (Appendix A3).

The English Bay River has the only sockeye salmon sustainable escapement goal (SEG) in the Southern District. The SEG for this system is 6,000–13,500 fish (Table 6), which was assessed this year by a picket weir operated by the village of Nanwalek. The final spawning escapement for the English Bay River was 23,936 sockeye salmon, which was above the SEG range of 6,000–13,500 fish (Table 6). The 10-year average spawning escapement was 14,400 sockeye salmon for this system (Appendix A4). Of the 6 pink salmon index streams in the Southern District, 4 had final escapement indices above their respective SEG ranges (Tutka Creek, Barabara Creek, Seldovia Creek, and Port Graham River). Two index streams were below SEG ranges (Humpty Creek and China Poot Creek). None were within the SEG range (Table 6). The only chum salmon SEG in the Southern District is for the Port Graham River. The final chum salmon escapement in this system was 1,212 fish, which was within the SEG range of 1,200–2,700 fish (Table 6), and was below the previous 10-year average escapement of 2,500 chum salmon (Appendix A4).

## **OUTER DISTRICT**

The Outer District includes the waters of LCI along the Kenai Peninsula south and east of a line from Point Adam to Cape Elizabeth, and east of the longitude of Cape Elizabeth to the longitude of Aliquo Point, which is 35 miles southwest of Seward (Figures 1 and 2). Purse seine gear is permitted in all open waters of this district during periods established by EO. Historically, the primary target species have been sockeye, chum, and pink salmon. The major producers of wild sockeye salmon in this district are Delight, Desire, and Delusion Lakes in East Nuka Bay (Figure 2). Pink salmon return in large numbers to Rocky, Port Dick, and Windy Bays, as well as several smaller streams (Figure 2). In addition, chum salmon are regularly harvested from Dogfish Lagoon and Island and Port Dick Creeks in Port Dick Bay (Figure 2).

## **Preseason Outlook and Harvest Strategy**

The 2023 commercial wild stock harvest forecast for the Outer District was 9,000 sockeye and 1.7 million pink salmon (Appendix F1). As specified in regulation, the seine fishing season and periods are opened and closed by EO depending on the available harvestable surplus of wild stock salmon returning to spawning systems in the Outer District.

Historically, management of commercial sockeye, pink, and chum salmon fisheries in the Outer District have relied heavily on aerial and ground surveys of major spawning systems for those species. From 1997 to 2014, daily monitoring of sockeye salmon returning to Delight Lake was conducted using a picket weir staffed by Alaska Department of Fish and Game (ADF&G) field personnel. Funding for the weir was discontinued in 2015, and escapement monitoring through 2017 was conducted using aerial surveys. From 2018 to 2022, escapement monitoring was conducted using a picket weir staffed by Cook Inlet Aquaculture Association (CIAA) employees. This ended in 2023 with the resumption of aerial surveys as the primary monitoring tool for estimating escapement into this system. Typically, sockeye salmon runs to this lake, as well as to nearby Desire and Delusion Lakes, peak in late July. Escapement pulses into these lakes are frequently driven by rain events, with weeks of limited passage followed by a spike in escapement as the result of increased water volume in the lake outflow. By early August, chum and pink salmon run timing to this district may result in harvestable levels of fish.

## **Season Summary**

In 2023, portions of the East Nuka Subdistrict opened on Saturday, July 15, to a schedule of daily 16-hour fishing periods beginning at 6:00 AM. The following Monday, the western portions of the Outer District opened on this schedule (Table 5). Total harvest from the Outer District was 73 Chinook, 47,580 sockeye, 7 coho, 158,341 pink, and 33,207 chum salmon (Table 1, Appendices B1 and B2). The total 2023 Outer District commercial harvest of 158,341 pink salmon was below the previous 10-year average harvest of 1.3 million fish (Appendix B2), and below the forecast harvest of 1.7 million fish (Appendix F1). The chum salmon commercial harvest of 33,207 was above the forecasted wild-only harvest of 23,500 (Appendix F1), although below the 10-year average harvest of 55,370 (Appendix B2).

Of the 9 pink salmon index streams in the Outer District monitored for escapement, 3 were within SEG ranges (Rocky River, South Nuka, and Desire Creeks), and all 6 of the remaining systems exceeded their goals (Dogfish Lagoon, Port Chatham, Windy Creek Right, Windy Creek Left, Port Dick Creek, and Island Creek). There are 4 chum salmon index streams with SEGs in the Outer District. Three streams were above their SEG ranges (Rocky River, Island and Port Dick Creeks), and 1 was below its SEG range (Dogfish Lagoon; Appendix B3, Table 6). Delight Lake was within its sockeye salmon SEG, whereas Desire Lake was below its sockeye salmon SEG (Table 6, Appendices B3).

## **EASTERN DISTRICT**

The Eastern District includes all state waters of the Gulf of Alaska between the longitudes of Alio Point and Cape Fairfield (Figures 1 and 2). Purse seine gear is permitted in all open waters of this district during periods established by EO. Historically, the primary target species have been sockeye and pink salmon with commercial harvests of the pink salmon occurring irregularly. Harvests of chum salmon were larger in this district during the 1980s (Hollowell et al. 2019). The

largest producers of wild sockeye salmon in this district have historically been Bear and Aialik Lakes.

Since 1956, the Seward Chamber of Commerce has conducted a fishing derby that focuses on enhanced and wild coho salmon returning to local spawning systems at the head of Resurrection Bay. Beginning in 1990, coho salmon harvested by participants in the derby have been sold commercially by the Chamber of Commerce to a local processor as a fundraiser for that organization (Hollowell et al. 2019).

### **Preseason Outlook and Harvest Strategy**

The 2023 enhanced sockeye salmon run to Resurrection Bay was forecast to be 89,900 fish (Appendix F1). As specified in regulation, the seine fishing season and fishing periods are opened and closed by EO, depending on the available harvestable surplus of salmon returning to the Eastern District. Early season management of the Eastern District is based on hatchery cost-recovery progress toward a stated goal, as well as passage at the Bear Creek weir, which is located 8 km (5 miles) from salt water at the outlet of Bear Lake (Figure 1). Beginning in July, management is also based on aerial surveys of sockeye salmon runs to Aialik Lake. Historically, runs of pink and chum salmon to this district have been below the level required to support consistent and sustainable commercial harvests.

### **Season Summary**

On June 26, waters of Resurrection Bay north of Caines Head opened to 16-hour fishing commercial fishing periods, Monday through Friday, beginning at 6:00 AM on those days. This schedule ended on Friday, July 14, at 10:00 PM (Table 5).

The total 2023 Eastern District sockeye salmon commercial harvest is confidential due to fewer than 3 permit holders reporting deliveries (Appendix C1). The most recent 10-year average sockeye salmon harvest is 5,471 fish (Appendix C2).

Final spawning escapement into Bear Lake was 7,975 sockeye salmon (Appendix C3), and within the sockeye salmon SEG range (700–8,300) for this system (Table 6).

In 2023, the peak count for sockeye salmon aerial surveys of Aialik Lake was 6,480 sockeye salmon (Appendix C3), and above the current SEG range of 3,200–5,400 for this system (Table 6).

A total of 1,041 coho salmon were donated to the Seward Chamber of Commerce by sport fishery participants in the annual silver salmon derby; these fish were sold to local processors to benefit the Chamber (Appendix C2).

## **KAMISHAK BAY DISTRICT**

The Kamishak Bay District includes all state waters on the west side of Cook Inlet south of the latitude of Anchor Point and north of a line from Cape Douglas to Elizabeth Island (Figures 1 and 2). Purse seine gear is permitted in all open waters of this district during periods established by EO. Historically, the primary target species have been wild chum, sockeye, and pink salmon.

The major producers of wild pink salmon in this district have been the Bruin River, Sunday Creek, and Brown's Peak Creek. Major chum salmon producers have been the Big Kamishak and Little Kamishak Rivers, as well as Cottonwood Creek and the McNeil River (Appendix D6). In addition, numerous other rivers and streams have periodically produced respectable pink and chum salmon runs. The major wild producer of sockeye salmon in this district is Chenik Lake.

## Preseason Outlook and Harvest Strategy

The 2023 commercial wild stock harvest forecast for the Kamishak Bay District was 59,200 sockeye, 8,900 chum, 63,600 pink, and 600 coho salmon (Appendix F1). The enhanced CIAA sockeye salmon run to Kirschner Lake was forecast to be 32,000 fish (Appendix F1). In most years, the fishing season in the Kamishak Bay District opens from June 1 until closed by EO. Historically, the Kamishak Bay District has been opened for extended 7-day periods, with specific areas closed as needed by EO to address anticipated escapement shortfalls (e.g., McNeil River chum salmon). Aerial surveys are flown, weather permitting, to monitor sockeye and chum salmon escapement to index streams and to recover recording media from video monitoring sites for inseason review in the Homer Area office. Beginning in July, management is also based on aerial surveys of pink and chum salmon runs to spawning systems in this district. Aerial surveys continued into late August to monitor late-run chum salmon and early progress of coho salmon runs to select streams in this district.

## Season Summary

The total 2023 Kamishak Bay District commercial harvest is confidential due to fewer than 3 permit holders reporting deliveries from this area (Table 1, Appendices D1 and D2). Waters of the Kamishak Bay District opened to commercial harvest on Thursday, June 1, with waters of the McNeil and Paint River Subdistricts remaining closed to prevent interception of chum and sockeye salmon returning to McNeil River and Mikfik Lake (Table 5). McNeil River chum salmon were designated as a *stock of management concern* at the 2016 BOF meeting (Otis et al. 2016a), and Mikfik Lake sockeye salmon were similarly designated at the 2023 BOF meeting (Hollowell and Otis 2024). In addition, the Kirschner Lake special harvest area (SHA) and Chenik Subdistrict remained closed. Fishing was permitted 24 hours per day and remained open every day in the remaining subdistricts of Kamishak Bay District. Portions of the Chenik Subdistrict opened for commercial harvest beginning on July 7. Given the difficulty of fishing in the remote Kamishak Bay District, combined with the relatively good pink salmon runs to some Outer District streams, there was modest effort in this area in 2023; deliveries occurred weekly from early July through early August (Table 1, Appendix D1).

Salmon escapement to index streams in the Kamishak Bay District was very good with all pink and chum salmon index streams achieving the minimum SEG (Table 6). A total of 9,751 sockeye salmon entered Chenik Lake during daylight hours which was within the SEG range (2,900–13,700) for this system (Appendix D3). A total of 2,917 sockeye salmon were counted from video at Mikfik Lake through late August (Appendix D4); however, this represents an incomplete count because the video was down from July 3–August 3. This is below the SEG range (3,400–11,000 fish) and the previous 10-year average escapement for this system (Appendices D4 and D5). The peak sockeye salmon count in Amakdedori Creek was 1,300 fish (Table 6, Appendix D6), within the 1,200–2,600 SEG range, and below the previous 10-year average escapement of 2,960 fish (Table 6, Appendix D6).

CIAA harvested 31,348 sockeye salmon for cost-recovery purposes from the Kirschner Lake SHA (Table 1); this was above the anticipated harvest of 28,800 fish (Appendix F1).

## LOWER COOK INLET PERSONAL USE FISHERIES AND COMMERCIAL FISHERIES HOMEPACK

There were 124 personal use set gillnet permits issued in 2023. Of those, 109 permits had been returned, and 112 permits reported harvest information by the writing of this report. This year was the fourth year where permits for this fishery were available online and online reporting was an option. A total of 1,217 salmon, of which 893 were coho salmon, were reported as harvested (Appendix E1). This personal use set gillnet season was noteworthy in that for a third consecutive year it was open for the full regulatory season until the last Wednesday or Saturday before September 16. In 2023, the actual closure date was Wednesday, September 13, with the 48-hour period that began on Monday, September 11, concluding at 6:00 AM on Wednesday for a total of eight 48-hour fishing periods. Additional information regarding personal use salmon fisheries in LCI may be found in the most recent Alaska Subsistence and Personal Use Salmon Fisheries Annual Report (Fall et al. *In prep*).

Homepack from commercial fishery deliveries were similar to recent years with 3 seine permit holders reporting 274 salmon retained, and 7 set gillnet permit holders reporting 301 salmon retained (Appendix E2).

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Tom Sigurdsson	Fish & Wildlife Tech. III	Lead Stream Survey Technician
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## **FIGURES AND TABLES**

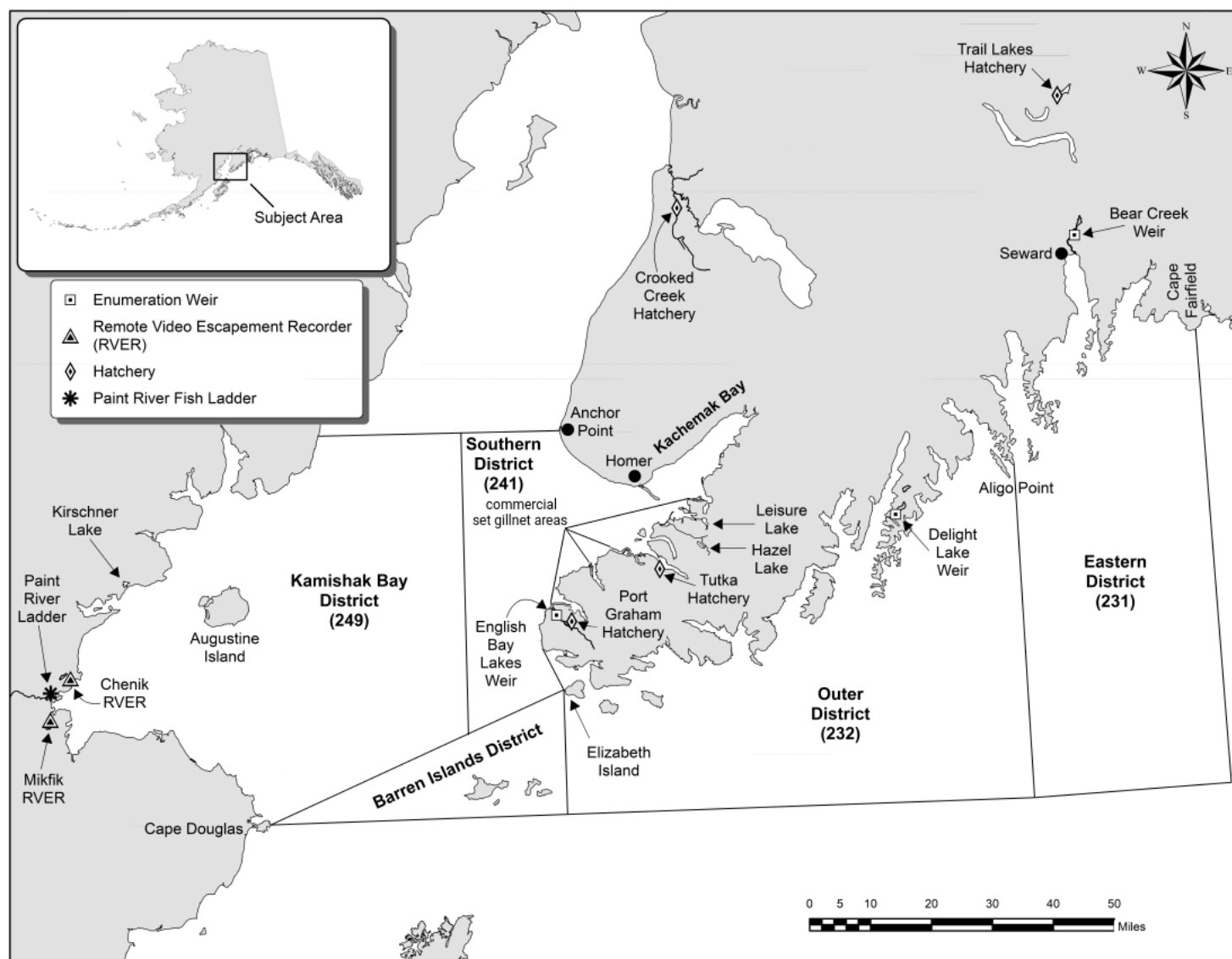


Figure 1.—Lower Cook Inlet Management Area commercial fishing districts, commercial set gillnet areas, salmon hatcheries, weir and fish ladder locations, and remote video salmon monitoring sites.



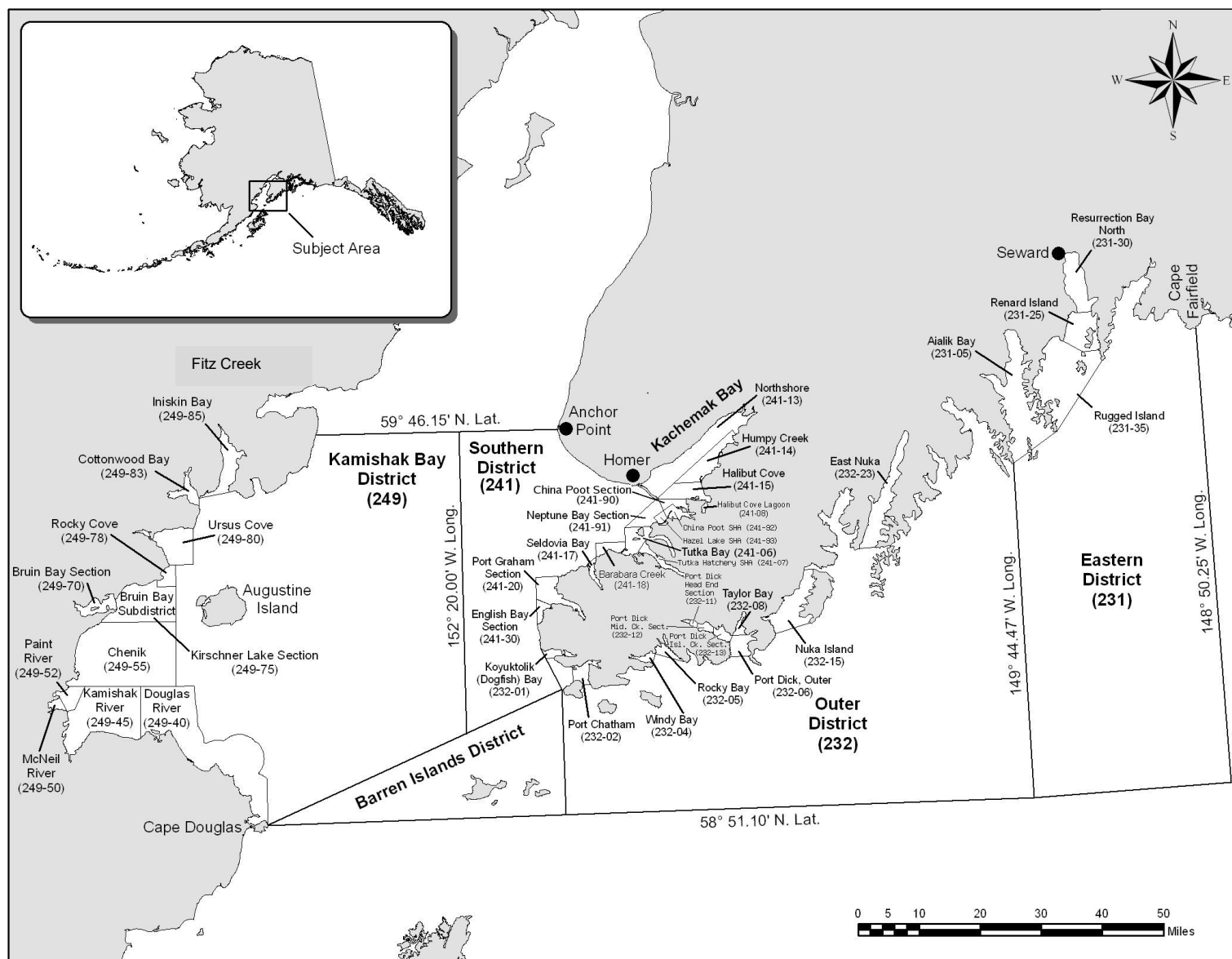


Figure 2.—Lower Cook Inlet Management Area commercial fishing districts and reporting subdistricts.

Table 1.—Lower Cook Inlet Management Area commercial salmon harvest by gear and district, 2023.

District	Permit holders <sup>a</sup>	Chinook <sup>a</sup>	Sockeye <sup>a</sup>	Coho <sup>a,b</sup>	Pink <sup>a</sup>	Chum <sup>a</sup>	Total
Southern District	10	54	75,445	203	542,607	380	618,689
Outer District	5	73	47,580	7	158,341	33,207	239,208
Eastern and Kamishak Bay Districts <sup>c</sup>	-----confidential-----						
Purse seine total	11	127	160,843	210	752,233	36,764	950,177
Set gillnet total	15 <sup>d</sup>	193	19,470	451	5,838	2,489	28,441
Commercial total		320	180,313	661	758,071	39,253	978,618
China Poot special harvest area (SHA)			27,697		15		27,712
Tutka Lagoon SHA		0	20,196	15	1,905,381	57	1,925,649
Resurrection Bay SHA		0	87,039	0	0	123	87,162
Kirschner Lake SHA		0	31,348	0	898	6	32,252
Hatchery cost recovery total <sup>e</sup>		0	166,280	15	1,906,294	186	2,072,775
Commercially sold total		320	346,593	676	2,664,365	39,439	3,051,393
Homepack		8	295	181	89	2	575
Hatchery donated fish <sup>e</sup>		0	3,539	0	0	0	3,539
Miscellaneous total		8	3,834	181	89	2	4,114
Lower Cook Inlet total		328	350,427	857	2,664,454	39,441	3,055,507

<sup>a</sup> Numbers of fish and numbers of permit holders delivering are from ADF&G statewide electronic fish ticket database [Internet]. 1985–current. Juneau, AK. [URL not available because some information is confidential].

<sup>b</sup> There were 750 coho salmon harvested in the Seward Salmon Derby and sold by the sponsor to commercial processors. These fish were caught by sport permit holders using rod and reel (troll gear). This harvest is not included in the commercial harvest total catch.

<sup>c</sup> Harvest confidential (fewer than 3 permit holders delivered).

<sup>d</sup> Of the 15 permit holders that delivered, 6 were dual permits.

<sup>e</sup> Hatchery sales for hatchery operating costs, may include incidentally harvested wild salmon.

Table 2.—Average price and estimated exvessel value of the total hatchery and commercial salmon harvest (excluding homepack) by gear type, Lower Cook Inlet Management Area, 2023.

COMMERCIAL PURSE SEINE			Average		
Species	Number <sup>a</sup>	Pounds <sup>a</sup>	weight	Price <sup>a</sup>	Value
Chinook	132	1,366	10.51	\$2.86	\$3,907
Sockeye	161,053	769,532	4.81	\$1.15	\$884,962
Coho	232	1,267	5.46	\$0.35	\$443
Pink	752,268	2,455,446	3.26	\$0.20	\$491,089
Chum	36,766	227,509	6.19	\$0.32	\$72,803
	950,451	3,455,120			\$1,453,204
COMMERCIAL SET GILLNET			Average		
Species	Number <sup>a</sup>	Pounds <sup>a</sup>	weight	Price <sup>a</sup>	Value
Chinook	196	1,911	9.90	\$3.83	\$7,319
Sockeye	19,555	106,786	5.48	\$1.59	\$169,790
Coho	610	2,378	5.27	\$0.74	\$1,760
Pink	5,892	21,077	3.61	\$0.12	\$2,529
Chum	2,489	15,895	6.39	\$0.62	\$9,855
	28,742	148,047			\$191,253
HATCHERY SALES			Average		
Species	Number <sup>a</sup>	Pounds <sup>a</sup>	weight	Price <sup>a</sup>	Value
Chinook	0	0	0.00	\$0.00	\$0
Sockeye	169,819	791,670	4.68	\$1.62	\$1,282,505
Coho	15	78	4.25	\$0.60	\$47
Pink	1,905,381	5,423,510	2.89	\$0.21	\$1,138,937
Chum	186	1,200	6.63	\$0.34	\$408
	2,075,401	6,216,458			\$2,421,897
TOTAL HARVEST			Average		
Species	Number <sup>a</sup>	Pounds <sup>a</sup>	weight	Price <sup>a</sup>	Value
Chinook	328	3,277	10.15	\$3.43	11,226
Sockeye	350,427	1,667,988	4.79	\$1.40	2,337,257
Coho	857	3,723	5.33	\$0.60	2,250
Pink	2,663,541	7,900,033	3.02	\$0.21	1,632,556
Chum	39,441	244,604	6.20	\$0.34	83,066
	3,054,594	9,819,625			\$4,066,354
Commercial gear type	Value of catch		No. of permit holders <sup>b</sup>	Average earnings	
Purse seine	\$1,453,204		11	\$132,109	
Set gillnet	\$191,253		15	\$12,750	
Subtotal value of catch	\$1,644,457				
Hatchery	\$2,421,897				
GRAND TOTAL	\$4,066,354				

<sup>a</sup> Mean prices are based on weighted average prices from the ADF&G statewide electronic fish ticket database [Internet]. 1985–current Juneau, AK. [URL not available because some information is confidential]. Pounds and numbers of fish are based on fish ticket reporting. Number of fish includes homepack harvest.

<sup>b</sup> In 2023, six set gillnet permit holders fished dual permits. Permit stacking has been permitted by the Alaska Board of Fisheries since 2014.

Table 3.—Average price per pound paid to permit holders for salmon, Lower Cook Inlet Management Area, 2013–2023.

Year	Chinook salmon			Sockeye salmon			Coho salmon			Pink salmon			Chum salmon		
	Seine	Set gillnet	Combined	Seine	Set gillnet	Combined	Seine	Set gillnet	Combined	Seine	Set gillnet	Combined	Seine	Set gillnet	Combined
2013	\$1.02	\$5.14	\$4.53	\$2.00	\$2.21	\$2.11	\$0.83	\$1.01	\$0.95	\$0.38	\$0.33	\$0.38	\$0.53	\$0.35	\$0.52
2014	\$2.67	\$3.92	\$3.89	\$1.94	\$2.23	\$2.15	\$0.75	\$1.24	\$1.11	\$0.28	\$0.26	\$0.28	\$0.59	\$0.47	\$0.57
2015	\$1.70	\$3.16	\$3.11	\$1.45	\$1.86	\$1.62	\$0.42	\$0.73	\$0.64	\$0.20	\$0.18	\$0.20	\$0.45	\$0.34	\$0.43
2016	\$1.43	\$3.14	\$2.92	\$1.45	\$1.78	\$1.60	\$0.63	\$1.01	\$0.97	\$0.21	\$0.15	\$0.19	\$0.50	\$0.36	\$0.45
2017	\$4.34	\$3.79	\$3.86	\$1.41	\$2.16	\$1.97	\$0.95	\$0.77	\$0.80	\$0.30	\$0.15	\$0.24	\$0.75	\$0.50	\$0.63
2018	\$2.95	\$4.79	\$4.17	\$2.14	\$2.56	\$2.20	\$1.23	\$1.41	\$1.27	\$0.39	\$0.19	\$0.37	\$0.78	\$0.71	\$0.78
2019	\$3.60	\$4.79	\$4.07	\$2.32	\$2.19	\$2.29	\$0.97	\$0.90	\$0.95	\$0.30	\$0.25	\$0.30	\$0.50	\$0.39	\$0.49
2020	\$2.52	\$3.75	\$3.52	\$1.79	\$2.07	\$1.83	\$0.80	\$0.62	\$0.66	\$0.29	\$0.21	\$0.29	\$0.50	\$0.43	\$0.49
2021	\$2.88	\$3.75	\$3.52	\$2.14	\$2.50	\$2.17	\$0.88	\$1.06	\$0.94	\$0.32	\$0.25	\$0.32	\$0.66	\$0.63	\$0.66
2022	\$2.80	\$4.28	\$3.86	\$2.08	\$2.09	\$2.09	\$0.70	\$0.92	\$0.87	\$0.39	\$0.22	\$0.38	\$0.91	\$0.75	\$0.90
10-year Average	\$2.59	\$4.05	\$3.74	\$1.87	\$2.16	\$2.00	\$0.82	\$0.97	\$0.92	\$0.31	\$0.22	\$0.30	\$0.62	\$0.49	\$0.59
2023	\$2.86	\$3.83	\$3.43	\$1.15	\$1.59	\$1.21	\$0.35	\$0.74	\$0.61	\$0.20	\$0.12	\$0.20	\$0.32	\$0.62	\$0.34

*Note:* Prices are based on weighted average prices from the ADF&G statewide electronic fish ticket database [Internet]. 1985–current. Juneau, AK. [URL not available because some information is confidential] and does not reflect postseason adjustments and bonuses. Caution should be used when estimating value from these prices.

Table 4.—Estimated exvessel value (in US \$) of commercial salmon harvest by gear type with 10-year average, Lower Cook Inlet Management Area, 2013–2023.

Purse seine											Previous 10-year average	2023
Species	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		
Chinook	689	411	624	1,966	10,485	3,115	19,229	3,725	2,923	2,268	4,544	3,907
Sockeye	644,508	618,967	424,498	478,989	1,062,723	1,066,657	1,232,374	801,127	1,280,169	1,262,102	887,211	884,962
Coho	9,366	1,314	2,892	3,140	23,363	117,622	71,361	3,129	9,526	718	26,857	443
Pink	2,403,739	264,127	2,788,824	49,958	1,955,477	775,003	1,680,547	1,829,796	1,772,972	463,863	1,502,271	491,089
Chum	205,517	294,110	287,699	243,999	1,117,301	293,259	187,464	61,474	115,119	337,596	311,771	72,803
Total value	\$3,263,819	\$1,178,929	\$3,504,537	\$778,052	\$4,169,350	\$2,255,656	\$3,190,974	\$2,699,249	\$3,180,710	\$2,066,548	2,691,253	\$1,453,204
Set gillnet												
Species												
Chinook	15,135	11,533	24,510	23,757	29,001	9,992	16,828	17,479	10,789	8,526	16,755	7,319
Sockeye	502,583	433,220	359,009	190,984	455,125	203,034	357,204	131,267	164,195	299,591	309,621	169,790
Coho	20,959	3,220	13,635	4,735	44,430	28,897	14,960	9,888	5,718	3,407	16,271	1,760
Pink	2,217	3,351	18,010	13,896	25,531	40,586	5,687	30,350	3,391	7,167	15,891	2,529
Chum	6,842	18,062	25,534	4,905	28,931	22,787	10,418	6,218	9,402	15,125	14,789	9,855
Total value	\$547,736	\$469,385	\$440,698	\$238,277	\$583,018	\$305,295	\$405,098	\$195,202	\$193,494	\$333,816	375,356	\$191,253
Hatchery sales												
Species												
Chinook	0	245	0	0	0	68	0	0	0	0	31	0
Sockeye	910,285	1,799,731	821,739	1,642,913	862,685	3,070,644	1,475,610	1,130,740	1,244,672	1,203,623	1,416,264	1,282,505
Coho	0	0	554	0	2,909	2,598	1,695	4,571	80	3	1,379	47
Pink	57,622	130	1,383,195	24,290	94,108	1,570,933	223,393	1,242,991	412,791	139,359	556,606	1,138,937
Chum	83	628	4,444	422	1,055	398	515	584	127	59	917	408
Total value	\$967,990	\$1,800,733	\$2,209,932	\$1,667,624	\$960,758	\$4,644,642	\$1,701,212	\$2,378,886	\$1,657,670	\$1,343,044	1,998,827	\$2,421,897
Average earnings												
Purse seine	\$296,711	\$58,946	\$184,449	\$40,950	\$231,631	\$112,783	\$145,044	\$168,703	\$212,047	\$187,868	163,913	\$132,109
Set gillnet	\$28,828	\$24,704	\$18,362	\$11,347	\$29,151	\$16,068	\$20,255	\$11,482	\$12,093	\$22,254	19,455	\$12,750
Number of permit holders fishing												
Purse seine	11	20	19	19	18	20	22	16	15	11	17	11
Set gillnet	19	19	24	21	20	19	20	17	16	15	19	15

Table 5.—Emergency orders (EO) issued for the commercial, personal use, and subsistence salmon fisheries in Lower Cook Inlet Management Area, 2023.

EO number issue date	Description
2-F-LCI-001-23/ Friday, May 26	<b>Southern, Outer, Eastern, and Kamishak Districts, purse seine and set gillnet.</b> Opens waters of the Southern District to commercial salmon harvest and establishes two weekly 48-hour set gillnet fishing periods in the Southern District beginning at 6:00 AM on Mondays and Thursdays effective Thursday, June 1. Opens the commercial purse seine salmon fishing season on June 1 in the Southern, Outer, Kamishak, and Eastern Districts with a September 30 season closing. Establishes 7-day per week purse seine fishing periods in the Kamishak District excluding the Kirschner SHA, as well as the Chenik, McNeil and Paint River Subdistricts beginning June 1. Opens portions of Chenik Lagoon on June 13. Suspends regulatory closed waters in China Poot Bay, and Neptune Bay.
2-F-LCI-002-23/ Friday, June 9	<b>Southern, Outer, Eastern, Kamishak Districts, purse seine.</b> Establishes a Monday, Wednesday, and Friday fishing schedule in portions of the Southern District for purse seine gear. Establishes specific regulatory closed waters in portions of the Lower Cook Inlet Area.
2-F-LCI-003-23/ Thursday, June 22	<b>Eastern District, purse seine.</b> Opens Resurrection Bay North Subdistrict to commercial harvest on June 26 and closes this area to commercial salmon harvest on July 14. Established a schedule of Monday–Friday 6:00 AM–10:00 PM fishing periods with this area closed on July 3 and 4.
2-F-LCI-004-23/ Friday, June 23	<b>Southern District, purse seine.</b> Closes China Poot special harvest area (SHA) to commercial harvest at 10:00 PM on Friday, June 23.
2-F-LCI-005-23/ Thursday, July 6	<b>Southern and Kamishak Districts, purse seine.</b> Opens China Poot SHA to commercial harvest beginning Friday, July 7. Opens the Chenik Subdistrict and a portion of Chenik Lagoon for a single six-hour fishing period beginning at 4:00 PM on July 7.
2-F-LCI-006-23/ Sunday, July 9	<b>Kamishak District, purse seine.</b> Opens a portion of Chenik Lagoon for a 6-hour fishing period on July 10 and then again on July 11.
2-F-LCI-007-23/ Tuesday, July 11	<b>Kamishak District, purse seine.</b> Opens a portion of Chenik Lagoon for a 6-hour fishing period on July 12 and then again on July 13.
2-F-LCI-008-23/ Thursday, July 13	<b>Outer and Kamishak Districts, purse seine.</b> Opens a portion of Chenik Lagoon for an 8-hour fishing period on July 14 and then again on July 15. Opens the East Nuka Subdistrict on July 15 on a schedule of daily 16-hour fishing periods beginning at 6:00 AM. Opens other areas of the Outer District (Dogfish Bay, Windy Bay, and Port Chatham) effective the following day on this schedule as well.
2-F-LCI-009-23/ Saturday, July 15	<b>Southern and Kamishak Districts, purse seine.</b> Opens a portion of the Chenik Subdistrict to commercial purse seine harvest on a schedule of daily 16-hour fishing periods beginning at 6:00 AM. Closes the China Poot SHA to commercial seine harvest.
2-F-LCI-010-23/ Friday, July 21	<b>Outer, and Kamishak Districts, purse seine.</b> Opens portions of the Chenik Subdistrict on a schedule of daily 24-hour fishing periods. Opens a portion of the Nuka Island Subdistrict in the Petrof area to commercial salmon harvest concurrent with other areas in this district.

-continued-

Table 5.–Page 2 of 2.

EO number/ issue date	Description
2-F-LCI-011-23/ Wednesday, July 26	<b>Outer District, purse seine.</b> Opens the Rocky Bay Subdistrict on July 27 to commercial salmon harvest concurrent with periods in 2-F-LCI-008-23 for this district.
2-F-LCI-012-23/ Wednesday, July 26	<b>Kamishak and Southern districts, purse seine.</b> Opens the Kirschner Lake SHA to commercial harvest on July 29. Closes the China Poot and Halibut Cove subdistricts to commercial salmon harvest. Establishes a Monday–Friday schedule of 6:00 AM–10:00 PM fishing periods in open waters of the Southern District. Opens a portion of the Tutka Bay Lagoon salmon hatchery SHA on July 31 to commercial salmon harvest on this schedule.
2-F-LCI-013-23/ Tuesday, August 1	<b>Kamishak District, purse seine.</b> Effective August 2, suspends closed waters in Rocky Cove and in Brown’s Peak Creek area.
2-F-LCI-014-23/ Wednesday, August 2	<b>Southern District, purse seine.</b> Effective August 3, reduces the size of the Tutka Bay Lagoon salmon hatchery SHA.
2-F-LCI-015-23/ Tuesday, August 8	<b>Kamishak District, purse seine.</b> Effective August 9, opens a portion of regulatory closed waters in Iniskin Bay to commercial salmon harvest.
2-F-LCI-016-23/ Wednesday, August 16	<b>Outer District, purse seine.</b> Effective August 18, opens the Taylor Bay and Head End sections of the Port Dick Subdistrict to commercial purse seine salmon harvest.
2-F-LCI-017-23/ Friday, August 18	<b>Southern District, purse seine.</b> Effective on August 21, reduces the size of the Tutka Bay Lagoon salmon hatchery SHA.
2-F-LCI-018-23/ Saturday, August 19	<b>Outer District, purse seine.</b> Opens Middle Creek and Island Creek sections of Port Dick. Suspends regulatory closed waters in Island Creek for 1 day.
2-F-LCI-019-23/ Tuesday, August 22	<b>Outer District, purse seine. Effective August 21,</b> suspends regulatory closed waters in Island Creek for 2 days.
2-F-LCI-020-23/ Friday, September 1	<b>Southern, Outer, Eastern, and Kamishak districts, purse seine.</b> Ends the 2023 commercial purse seine fishing season effective on September 8.

Table 6.—Escapements relative to escapement goals and methods used to monitor escapements in 2023 for chum, pink, and sockeye salmon stocks in Lower Cook Inlet Management Area, Alaska.

Stock	2023	Escapement goal range			Monitoring method				Comments
	Escapement	Lower	Midpoint	Upper	Aerial	Ground	Video	Weir	
CHUM SALMON (12 with goals)									
Port Graham River	1,212	1,200	1,950	2,700		X			
Dogfish Lagoon	2,732	3,500	6,050	8,600	X	X			used ground index
Rocky River	7,912	1,500	2,950	4,400	X				
Port Dick Creek	7,126	1,900	3,100	4,300	X	X			used ground index
Island Creek	21,469	5,100	8,500	11,900	X	X			used ground index
Big Kamishak River	11,481	6,800	11,200	15,600	X				
Little Kamishak River	52,274	8,000	12,400	16,800	X				
McNeil River	25,142	24,000	36,000	48,000	X				
Bruin River	14,629	5,200	7,600	10,000	X				
Ursus Cove	16,190	5,900	8,000	10,100	X				
Cottonwood Creek	8,702	5,200	8,700	12,200	X				
Iniskin Bay	18,615	5,900	9,750	13,600	X				
PINK SALMON (18 with goals)									
Humpy Creek	15,478	17,500	34,450	51,400		X			
China Poot Creek	1,071	2,500	4,400	6,300		X			
Tutka Creek	103,043	6,500	11,750	17,000		X			
Barabara Creek	14,750	2,000	3,800	5,600		X			
Seldovia Creek	45,755	21,800	29,600	37,400		X			
Port Graham River	20,080	7,700	13,700	19,700		X			
Dogfish Lagoon Creeks	55,978	800	3,950	7,100	X	X			used ground index
Port Chatham	20,230	7,800	12,950	18,100	X	X			used ground index
Windy Creek Right	12,919	3,400	7,300	11,200	X				
Windy Creek Left	50,577	5,400	16,250	27,100	X				
Rocky River	41,111	11,700	33,250	54,800	X				

-continued-



Table 6.—Page 2 of 2.

Stock	2023	Escapement goal range			Monitoring method				Comments
	Escapement	Lower	Midpoint	Upper	Aerial	Ground	Video	Weir	
PINK SALMON (Continued)									
Port Dick Creek	67,708	17,900	33,850	49,800	X	X			used ground index
Island Creek	50,195	9,600	21,050	32,500	X	X			used ground index
South Nuka Island Creek	7,161	2,800	7,000	11,200	X				
Desire Lake	5,907	1,500	9,750	18,000	X				
Bruin River	29,617	17,800	60,400	103,000	X				
Sunday Creek	104,084	4,400	14,650	24,900	X				
Brown's Peak Creek	51,114	2,600	10,050	17,500	X				
SOCKEYE SALMON (8 with goals)									
English Bay	23,936	6,000	9,750	13,500				X	
Delight Lake	6,901	7,550	12,575	17,650	X				
Desire Lake	14,700	4,800	8,350	11,900	X				
Bear Lake	7,975	700	4,500	8,300				X	
Aialik Lake	6,480	3,200	4,300	5,400	X				
Mikfik Lake	2,917	3,400	7,200	11,000			X		
Chenik Lake	9,751	2,900	8,300	13,700			X		Day count only
Amakdedori Creek	1,300	1,200	1,900	2,600	X				

Note: blank cells mean not applicable or not recorded.



## **APPENDIX A: SOUTHERN DISTRICT**

Appendix A1.—Southern District commercial set gillnet salmon harvest (excluding homepack) by fishing period, 2023.

Period	Statistical week	Date	Hours	Permit holders fishing	Chinook		Sockeye		Coho		Pink		Chum	
					Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1	23	06/01–06/03	48	4	11	94	640	3,104	0	0	0	0	13	88
2	23	06/05–06/07	48	6	16	131	619	3,215	0	0	0	0	16	109
3	24	06/08–06/10	48	9	20	158	940	5,685	0	0	0	0	22	171
4	24	06/12–06/14	48	7	8	61	917	5,022	0	0	0	0	34	232
5	25	06/15–06/17	48	7	22	237	933	5,380	0	0	0	0	21	147
6	25	06/19–06/21	48	10	10	123	1,268	7,077	0	0	0	0	69	489
7	26	06/22–06/24	48	9	30	314	917	5,090	1	8	0	0	68	467
8	26	06/26–06/28	48	8	23	292	995	5,365	0	0	3	12	107	689
9	27	06/29–07/01	48	8	5	48	1,143	6,217	1	4	22	95	160	1,131
10	27	07/03–07/05	48	11	9	106	1,197	6,412	1	7	153	582	175	1,140
11	28	07/06–07/08	48	6	13	91	623	3,356	2	6	260	1,006	171	980
12	28	07/10–07/12	48	9	2	16	621	3,245	3	13	479	1,749	188	1,188
13	29	07/13–07/15	48	10	5	42	1,252	6,926	77	375	712	2,602	257	1,526
14	29	07/17–07/19	48	14	5	62	2,024	11,353	52	269	1,234	4,409	260	1,656
15	30	07/20–07/22	48	8	3	32	2,336	12,524	70	359	659	2,305	258	1,640
16	30	07/24–07/26	48	9	7	82	1,652	9,252	82	435	992	3,667	465	2,978
17	31	07/27–07/29	48	7	0	0	602	3,177	27	150	778	3,014	144	940
18 <sup>a</sup>	31	07/31–08/02	48	<3	a	a	a	a	a	a	a	a	a	a
19 <sup>a</sup>	32	08/03–08/05	48	<3	a	a	a	a	a	a	a	a	a	a
20 <sup>a</sup>	32	08/07–08/09	48	<3	a	a	a	a	a	a	a	a	a	a
21 <sup>a</sup>	33	08/10–08/12	48	<3	a	a	a	a	a	a	a	a	a	a
22 <sup>a</sup>	33	08/14–08/16	48	<3	a	a	a	a	a	a	a	a	a	a
23 <sup>a</sup>	34	08/17–08/19	48	<3	a	a	a	a	a	a	a	a	a	a
35 <sup>a</sup>	40	09/28–09/30	48	<3	a	a	a	a	a	a	a	a	a	a
Total				15	193	1,911	19,470	106,769	451	2,392	5,838	21,077	2,489	15,895
Average weight						9.90		5.48		5.27		3.61		6.39

Note: Fewer than 3 permits reporting deliveries during Periods 35–39, from August 22 through September 28.

<sup>a</sup> Confidential data. Fewer than 3 permits reporting.

<sup>b</sup> Fifteen permit holders fished in 2022, of those, 6 individuals were dual permit holders.

Appendix A2.—Southern District commercial purse seine salmon harvest (excluding homepack) by period, 2023.

Period	Statistical		Hours	Permits fished	Chinook		Sockeye		Coho		Pink		Chum	
	week	Date			Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1 <sup>a</sup>	26	6/12	16	0	—	—	—	—	—	—	—	—	—	—
2 <sup>a</sup>	26	6/14	16	0	—	—	—	—	—	—	—	—	—	—
3 <sup>a,b</sup>	26	6/16	16	<3	b	b	b	b	b	b	b	b	b	b
4 <sup>a,b</sup>	27	6/19	16	<3	b	b	b	b	b	b	b	b	b	b
5 <sup>a</sup>	27	6/21	16	3	1	13	5,146	29,648	0	0	0	0	3	32
6 <sup>a</sup>	27	6/23	16	4	18	159	2,816	14,051	0	0	1	3	6	62
7 <sup>a,c</sup>	28	6/26	16	6	4	58	2,976	15,621	0	0	11	41	12	109
8 <sup>a,c</sup>	28	6/28	16	6	2	13	1,265	6,347	0	0	10	35	4	35
9 <sup>a,c</sup>	28	6/30	16	6	3	30	2,298	13,254	0	0	8	21	4	31
10 <sup>a,c</sup>	29	7/3	16	7	4	46	3,265	14,952	0	0	49	169	10	89
11 <sup>a,c</sup>	29	7/5	16	7	2	33	2,599	12,084	0	0	136	457	6	55
12 <sup>a</sup>	29	7/7	16	8	5	106	17,093	81,959	0	0	62	222	10	78
13 <sup>a</sup>	30	7/10	16	10	3	55	15,509	71,683	2	14	590	1,789	15	150
14 <sup>a</sup>	30	7/12	16	9	0	0	4,538	20,891	0	0	265	809	6	52
15 <sup>a</sup>	30	7/14	16	7	3	51	4,651	21,096	0	0	5,096	18,443	56	440
16 <sup>a,c</sup>	31	7/17	16	5	0	0	3,918	20,961	9	58	1,987	7,310	1	6
17 <sup>a</sup>	31	7/19	16	7	2	42	2,994	16,550	16	76	1,742	6,097	31	225
18 <sup>a,c</sup>	31	7/21	16	7	1	24	2,506	13,532	52	266	23,647	76,342	24	191
19 <sup>a,c</sup>	32	7/24	16	8	3	32	862	3,691	8	44	27,039	84,619	20	132
20 <sup>a,c</sup>	32	7/26	16	5	0	0	430	2,368	18	91	13,055	43,086	9	65
21 <sup>a,c</sup>	32	7/28	16	4	0	0	95	539	2	10	13,974	46,542	8	68
22 <sup>d</sup>	33	7/31	16	5	1	14	84	470	12	57	31,262	112,536	9	69
23 <sup>d</sup>	33	8/1	16	5	0	0	113	444	2	14	45,074	135,216	9	54
24 <sup>d</sup>	33	8/2	16	8	0	0	248	1,423	17	103	52,410	166,781	27	186
25 <sup>e</sup>	34	8/3	16	8	0	0	250	1,331	9	43	45,933	179,124	4	32
26 <sup>e</sup>	34	8/4	16	8	0	0	469	2,245	2	13	41,469	124,407	11	71
27 <sup>e</sup>	34	8/7	16	7	0	0	63	352	2	14	35,854	111,154	2	15
28 <sup>e</sup>	34	8/8	16	5	0	0	108	586	8	54	25,403	88,924	18	113
29 <sup>e</sup>	34	8/9	16	5	0	0	84	419	0	0	21,346	74,924	3	11
30 <sup>e</sup>	34	8/10	16	5	0	0	51	247	0	0	18,148	62,981	7	43
31 <sup>e</sup>	35	8/11	16	4	0	0	27	138	3	14	29,163	68,531	2	10

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Period	Statistical		Hours	Permits fished	Chinook		Sockeye		Coho		Pink		Chum	
	week	Date			Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
32 <sup>e</sup>	35	8/14	16	9	0	0	98	508	7	43	44,235	133,107	22	141
33 <sup>e</sup>	36	8/15	16	7	0	0	104	473	14	80	27,037	96,530	12	84
34 <sup>e</sup>	36	8/16	16	5	0	0	68	326	3	19	18,729	61,812	10	71
35 <sup>e</sup>	36	8/17	16	4	0	0	64	305	1	6	11,390	37,581	11	58
36 <sup>e</sup>	37	8/18	16	3	0	0	47	270	16	100	7,482	28,656	8	52
Total				10	54	693	75,445	371,758	203	1,119	542,607	1,768,248	380	2,830
Average weight						12.8		4.9		5.5		3.3		7.5

Note: En dashes mean no data.

<sup>a</sup> Waters of the Tutka Bay, China Poot, and Halibut Cove Subdistricts, excluding waters of the special harvest area (SHA) in the Tutka Subdistrict is open to commercial salmon seine harvest for regular 16-hour periods on Mondays, Wednesdays, and Fridays. Waters of the Neptune Bay Section up to the freshwater of the Wosnesenski River are open for these periods. Waters of the south arm of China Poot Bay west of 151° 15.53' W long, and waters of the north arm of China Poot Bay west of 151° 14.65' W long are also open for these periods.

<sup>b</sup> Confidential data. Fewer than 3 permits reporting.

<sup>c</sup> All waters of the China Poot SHA are closed.

<sup>d</sup> Waters of the Tutka Bay Subdistrict open on a schedule of Monday–Friday 6:00 AM to 10:00 PM fishing periods. Portions of the SHA seaward of Aleutika Island are open to commercial harvest.

<sup>e</sup> Waters of the Tutka Bay Subdistrict open on a schedule of Monday–Friday 6:00 AM to 10:00 PM fishing periods. Portions of the SHA seaward of the Homer Electric Association powerlines are open to commercial harvest.

Appendix A3.—Total commercial salmon harvest (excluding homepack) in the Southern District, 2013–2023.

Set gillnet (number of fish)						
Year	Permits	Chinook	Sockeye	Coho	Pink	Chum
2013	18	234	38,238	3,466	1,804	2,685
2014	19	320	32,910	393	3,231	5,355
2015	24	752	36,061	3,102	27,726	11,539
2016	23	731	19,427	687	21,872	2,124
2017	24	435	36,689	9,353	43,904	7,852
2018	24	185	15,157	3,067	56,638	4,232
2019	22	350	29,274	2,817	6,411	3,908
2020	17	405	12,463	2,680	35,133	1,918
2021	16	231	13,004	981	3,461	2,231
2022	15	182	26,677	643	8,661	2,974
Previous 10-year avg.	20	383	25,990	2,719	20,884	4,482
2023	15	193	19,470	451	5,838	2,489

Purse seine (number of fish)						
Year	Permits	Chinook	Sockeye	Coho	Pink	Chum
2013	11	140	28,032	1,902	33,288	265
2014	16	18	23,188	269	58,890	3,360
2015	19	52	54,783	997	141,604	1,450
2016	19	112	47,235	169	44,637	165
2017	17	166	62,715	3,493	361,751	3,892
2018	20	131	55,246	1,747	472,204	1,166
2019	21	140	47,006	3,065	22,934	298
2020	15	109	68,698	526	120,861	1,074
2021	14	32	74,535	1,725	41,650	374
2022	9	64	81,710	167	5,764	308
Previous 10-year avg.	16	96	54,315	1,406	130,358	1,235
2023	10	54	75,445	203	542,607	380

Purse seine and set gillnet combined (number of fish)						
Year	Permits	Chinook	Sockeye	Coho	Pink	Chum
2013	—	374	66,270	5,368	35,092	2,950
2014	—	338	56,098	662	62,121	8,715
2015	—	804	90,844	4,099	169,330	12,989
2016	—	843	66,662	856	66,509	2,289
2017	—	601	99,404	12,846	405,655	11,744
2018	—	316	70,403	4,814	528,842	5,398
2019	—	490	76,280	5,882	29,345	4,206
2020	—	514	81,161	3,206	155,994	2,992
2021	—	263	87,539	2,706	45,111	2,605
2022	—	246	108,387	810	14,425	3,282
Previous 10-year avg.	—	479	80,305	4,125	151,242	5,717
2023	—	247	94,915	654	548,445	2,869

Source: ADF&G statewide electronic fish ticket database [Internet]. 2011–current. Juneau, AK. [URL not available as some information is confidential].

Appendix A4.—Estimated sockeye, pink, and chum salmon escapements for the major spawning systems in the Southern District of the Lower Cook Inlet Management Area, 2013–2023.

Year	Pink salmon						Total pink salmon escapement	Chum salmon	Sockeye salmon
	Humpy Creek	China Poot Creek	Tutka Lagoon Creek	Barabara Creek	Seldovia River	Port Graham River		Port Graham River	English Bay River
2013	6,749	7,119	9,541	17,377	36,824	11,893	89,503	1,944	10,904
2014	44,369	1,409	10,152	3,558	35,895	32,295	127,678	3,735	6,955
2015	38,025	7,366	81,584	25,203	108,793	82,356	343,327	4,030	6,290
2016	89,673	698	33,242	2,813	15,694	14,629	156,749	2,391	7,550
2017	71,073	2,379	61,369	25,002	27,025	20,642	207,490	5,765	20,281
2018	54,816	2,280	60,691	7,236	50,827	33,419	209,269	3,725	18,804
2019	25,667	1,575	53,732	9,462	18,337	29,588	138,361	1,074	24,044
2020	232	235	114,986	6,633	39,297	34,784	196,167	660	31,486
2021	3,125	79	50,911	5,451	21,849	12,824	94,239	1,029	6,328
2022	2,055	145	22,908	3,492	16,999	9,193	54,792	606	11,452
Previous 10-year avg.	33,578	2,329	49,912	10,623	37,154	28,162	161,758	2,496	14,409
2023	15,478	1,071	103,043	14,750	45,755	20,080	200,177	1,212	23,661

*Note:* Area-under-the-curve escapement indices for pink and chum salmon are derived from periodic ground surveys with a 17.5-day stream-life factor applied. Peak counts are used for sockeye salmon.



## **APPENDIX B: OUTER DISTRICT**

Appendix B1.—Outer District commercial purse seine salmon harvest (excluding homepack) by period, 2023.

Period	Statistical week	Date	Hours	Permits fished	Chinook		Sockeye		Coho		Pink		Chum	
					Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1 <sup>a</sup>	28	7/15	16	3	3	60	9,508	47,775	—	—	862	2,614	25	199
2 <sup>a,b</sup>	29	7/16	16	<3	b	b	b	b	b	b	b	b	b	b
3 <sup>a,b</sup>	29	7/18	16	<3	b	b	b	b	b	b	b	b	b	b
4 <sup>a,b,c</sup>	29	7/19	16	3	—	—	1,853	9,898	5	22	488	1,710	21	135
5 <sup>a,b,c</sup>	29	7/20	16	<3	b	b	b	b	b	b	b	b	b	b
6 <sup>a,c,d</sup>	29	7/21	16	<3	b	b	b	b	b	b	b	b	b	b
7 <sup>a,b,c,d</sup>	30	7/23	16	<3	b	b	b	b	b	b	b	b	b	b
8 <sup>a,b,c,d</sup>	30	7/24	16	<3	b	b	b	b	b	b	b	b	b	b
9 <sup>a,b,c,d,e</sup>	30	7/25	16	<3	b	b	b	b	b	b	b	b	b	b
10 <sup>a,b,c,d,e</sup>	30	7/26	16	3	—	—	1,618	8,580	—	—	2,147	7,339	465	3,479
11 <sup>a,c,d,e,f,g</sup>	30	7/27	16	<3	b	b	b	b	b	b	b	b	b	b
12 <sup>a,c,d,e,f,g</sup>	30	7/28	16	3	—	—	3,859	18,170	—	—	1,485	5,255	85	498
13 <sup>a,c,d,e,f,g</sup>	30	7/29	16	<3	b	b	b	b	b	b	b	b	b	b
14 <sup>a,c,d,e,f,g</sup>	31	7/30	16	<3	b	b	b	b	b	b	b	b	b	b
15 <sup>a,c,d,e,f,g</sup>	31	7/31	16	<3	b	b	b	b	b	b	b	b	b	b
16 <sup>a,b,c,d,e,f,g</sup>	31	8/1	16	<3	b	b	b	b	b	b	b	b	b	b
17 <sup>a,c,d,e,f,g</sup>	31	8/2	16	<3	b	b	b	b	b	b	b	b	b	b
18 <sup>a,c,d,e,f,g,h,i</sup>	31	8/3	16	<3	b	b	b	b	b	b	b	b	b	b
19 <sup>a,c,d,e,f,g,h,i</sup>	31	8/4	16	<3	b	b	b	b	b	b	b	b	b	b
20 <sup>a,c,d,e,f,g,h,i</sup>	31	8/5	16	<3	b	b	b	b	b	b	b	b	b	b
21 <sup>a,c,d,e,f,g,h,i</sup>	32	8/7	16	<3	b	b	b	b	b	b	b	b	b	b
22 <sup>a,c,e,f,g,h,i</sup>	32	8/8	16	<3	b	b	b	b	b	b	b	b	b	b
23 <sup>a,c,e,g,i</sup>	32	8/9	16	<3	b	b	b	b	b	b	b	b	b	b
24 <sup>a,c,e,g,i</sup>	32	8/10	16	<3	b	b	b	b	b	b	b	b	b	b
25 <sup>a,c,e,g,i</sup>	32	8/11	16	<3	b	b	b	b	b	b	b	b	b	b
26 <sup>a,c,e,g,i</sup>	33	8/18	16	<3	b	b	b	b	b	b	b	b	b	b
27 <sup>a,c,e,g,i</sup>	34	8/21	16	<3	b	b	b	b	b	b	b	b	b	b

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Period	Statistical		Hours	Permits fished	Chinook		Sockeye		Coho		Pink		Chum	
	week	Date			Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
28 <sup>a,c,e,g,i</sup>	34	8/24	16	3	—	—	—	—	—	—	28,289	84,868	2,779	22,232
29 <sup>a,c,e,g,i,j</sup>	34	8/25	16	<3	b	b	b	b	b	b	b	b	b	b
Total				5	73	637	47,580	242,550	7	33	158,341	487,790	33,207	195,484
Average weight						8.73		5.10		4.71		3.08		5.87

*Note:* No deliveries after August 25. En dash = no data.

<sup>a</sup> Waters of East Nuka Subdistrict open on daily schedule of 16-hour fishing periods. Regulatory closed waters associated with Delight Lake are suspended.

<sup>b</sup> Confidential data. Fewer than 3 permits reporting.

<sup>c</sup> Waters of the Dogfish Bay, Port Chatham, and Windy Bay subdistricts open on a daily schedule of 16-hour fishing periods.

<sup>d</sup> The Delight Lake freshwater lagoon and channel open to commercial salmon harvest.

<sup>e</sup> Regulatory closed waters associated with Desire Lake are rescinded.

<sup>f</sup> Waters of the Middle Creek in the Port Dick Subdistrict open to commercial salmon harvest.

<sup>g</sup> Waters of Head End Creek in the Port Dick Subdistrict open to commercial salmon harvest.

<sup>h</sup> Waters of the Rocky Bay Subdistrict are open.

<sup>i</sup> Waters in the Petrof area north and west of a point at 59° 20.00' N lat, 150° 48.00' W long are open.

<sup>j</sup> The Taylor Bay Section open.

Appendix B2.—Total commercial salmon harvest (excluding homepack) in Outer District, 2013–2023.

Year	Permits fished	Chinook	Sockeye	Coho	Pink	Chum
2013	11	1	119	53	2,015,105	49,062
2014	15	0	24,264	0	163,938	59,702
2015	19	0	613	41	4,096,578	97,974
2016	13	1	7	2	5,369	60,800
2017	17	1	260	389	1,244,172	151,356
2018	11	2	1,409	5	32,326	34,857
2019	21	184	15,482	2,889	1,710,012	19,460
2020	14	3	219	108	1,563,893	11,181
2021	13	22	225	313	1,559,174	20,334
2022	9	12	16,442	40	324,836	48,970
Previous 10-year avg.	14	23	5,904	384	1,271,540	55,370
2023	5	73	47,580	7	158,341	33,207

Source: ADF&G statewide electronic fish ticket database [Internet]. 2011–current. Juneau, AK. [URL not available as some information is confidential].

Appendix B3.—Estimated pink, chum, and sockeye salmon escapements for the major spawning systems in the Outer District of the Lower Cook Inlet Management Area, 2013–2023.

Year	Pink salmon										Chum salmon					Sockeye salmon		
	Dogfish Lagoon	Port Chatham	Windy Right Creek	Windy Left Creek	Rocky River	Port Dick Creek	Island Creek	South Nuka Creek	Desire Lake Creek	Total index count	Dogfish Lagoon	Rocky River	Port Dick Creek	Island Creek	Total index count	Delight Lake	Desire Lake	Total index count
2013	26,448	57,447	11,704	47,849	75,791	55,828	26,004	8,442	56,921	366,434	9,300	8,148	4,133	8,772	30,353	5,961 <sup>a</sup>	8,400	14,361
2014	8,848	10,290	5,710	10,147	17,114	48,732	50,402	11,000	443	162,686	11,205	6,863	1,829	2,699	22,596	22,289 <sup>a</sup>	11,480	33,769
2015	50,058	42,613	17,009	33,640	107,931	98,002	50,387	8,900	46,290	454,830	13,312	3,138	13,230	18,479	48,159	3,220 <sup>b</sup>	2,830	6,050
2016	2,307	1,140	1,400	500	4,300	4,819	1,735	10	169	16,380	11,260	4,620	9,323	8,477	33,680	5,110 <sup>b</sup>	6,740	11,850
2017	13,331	44,291	5,053	17,381	31,189	62,098	22,579	540	4,364	200,826	13,191	6,922	2,633	5,522	28,268	5,380 <sup>b</sup>	9,450	14,830
2018	8,034	18,122	8,925	14,043	2,088	94,585	5,558	545	2,547	154,447	7,615	5,620	724	1,368	15,327	13,428 <sup>a</sup>	9,840	23,268
2019	22,043	39,585	13,744	25,580	75,412	93,157	63,691	2,453	2,547	338,212	3,640	6,569	2,000	5,482	17,691	16,695 <sup>a</sup>	9,040	25,735
2020	18,387	17,291	16,720	74,944	8,310	108,219	9,888	3,943	1,357	259,059	1,246	5,010	1,040	1,399	8,695	12,299 <sup>a</sup>	4,710	17,009
2021	29,205	20,673	12,400	16,133	41,446	115,740	99,199	6,567	13,705	355,068	4,030	6,542	3,261	3,112	16,945	7,496 <sup>b</sup>	3,744	11,240
2022	11,596	7,126	17,380	39,094	12,542	30,411	8,550	2,300	3,820	132,819	3,319	5,580	2,817	2,822	14,538	22,777 <sup>b</sup>	20,460	43,237
Previous 10-year avg.	19,026	25,858	11,005	27,931	37,612	71,159	33,799	4,470	13,216	244,076	7,812	5,901	4,099	5,813	23,625	11,466	8,669	20,135
2023	55,978	20,230	12,919	50,577	41,111	67,708	50,195	7,161	5,907	311,786	2,732	7,912	7,126	21,469	39,238	6,901 <sup>b</sup>	14,700	21,601

<sup>a</sup> Escapement derived from weir counts.

<sup>b</sup> Escapement derived from a combination of weir, video counts, and/or aerial counts.



## **APPENDIX C: EASTERN DISTRICT**

Appendix C1.—Eastern District commercial purse seine salmon harvest (excluding homepack) by period, 2023.

Period <sup>a</sup>	Statistical		Hours	Permits fished	Chinook		Sockeye		Coho		Pink		Chum	
	week	Date			Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1	26	6/26	16	<3	a	a	a	a	a	a	a	a	a	a
2	26	6/27	16	<3	a	a	a	a	a	a	a	a	a	a
3	26	6/28	16	<3	a	a	a	a	a	a	a	a	a	a
4	26	6/29	16	<3	a	a	a	a	a	a	a	a	a	a
5	27	6/30	16	<3	a	a	a	a	a	a	a	a	a	a
6	27	7/5	16	<3	a	a	a	a	a	a	a	a	a	a
7	27	7/6	16	<3	a	a	a	a	a	a	a	a	a	a
8	27	7/7	16	<3	a	a	a	a	a	a	a	a	a	a
9	27	7/10	16	<3	a	a	a	a	a	a	a	a	a	a
10	28	7/11	16	<3	a	a	a	a	a	a	a	a	a	a
11	28	7/12	16	<3	a	a	a	a	a	a	a	a	a	a
12	28	7/13	16	<3	a	a	a	a	a	a	a	a	a	a
13	28	7/14	16	<3	a	a	a	a	a	a	a	a	a	a
Total				<3	a	a	a	a	a	a	a	a	a	a
Average weight								4.3						

<sup>a</sup> Confidential data. Fewer than 3 permits reporting.



Appendix C2.—Historical commercial and derby commercial sales harvest (excluding homepack) by species in the Eastern District, 2013–2023.

Year	Permits	Commercial harvest					Derby sales
		Chinook	Sockeye	Coho	Pink	Chum	Coho
2013	<3	a	a	a	a	a	1,380
2014	<3	a	a	a	a	a	606
2015	3		4,633		155	115	1,408
2016	<3	a	a	a	a	a	200
2017	<3	a	a	a	a	a	1,577
2018	5		22,310			66	1,956
2019	4		4,307	2	112	19	1,561
2020	<3	a	a	a	a	a	748
2021	<3	a	a	a	a	a	1,878
2022	<3	a	a	a	a	a	750
Previous 10-year avg.	2		5,471	2	257	117	1,206
2023	<3	a	a	a	a	a	1,041

Source: ADF&G statewide electronic fish ticket database [Internet]. 2011–current. Juneau, AK. [URL not available as some information is confidential].

<sup>a</sup> Confidential data. Fewer than 3 permits reporting.

Appendix C3.—Estimated sockeye and pink salmon escapements for the major spawning systems in the Eastern District of the Lower Cook Inlet Management Area, 2013–2023.

Year	Pink salmon							Sockeye salmon		
	Aialik Lagoon	Bear Creek	Salmon Creek	Tonsina Creek	Thumb Cove	Humpty Cove	Total	Aialik Lake	Bear Lake <sup>a,b</sup>	Total
2013	0	8,125	—	5,255	637	1,783	15,800	3,530	9,004	12,534
2014	—	—	—	—	—	—	—	450	9,245	9,695
2015	800	—	—	—	—	—	800	3,182	9,560	12,742
2016	—	—	—	—	—	—	—	400	9,158	9,558
2017	1,821	—	—	—	—	—	1,821	4,900	9,000	13,900
2018	10	—	—	—	—	—	10	2,620	10,568	13,188
2019	3,752	—	—	—	—	—	3,752	5,000	9,185	14,185
2020	40	—	—	—	—	—	40	4,020	8,222	12,242
2021	3,200	—	—	—	—	—	3,200	2,352	11,318	13,670
2022	—	—	—	—	—	—	—	2,863	9,962	12,825
Previous 10-year average	1,375	8,125	—	5,255	637	1,783	2,542	2,932	9,522	12,454
2023	—	—	—	—	—	—	—	6,480	7,975	14,455

Note: En dash (—) = no data collected.

<sup>a</sup> Weir counts.

<sup>b</sup> Beginning in 1994, Bear Lake escapement figures are derived from total weir count minus number of fish collected for hatchery broodstock.

## **APPENDIX D: KAMISHAK BAY DISTRICT**

Appendix D1.–Kamishak Bay District commercial salmon harvest (excluding homepack) by period, 2023.

Period	Statistical		Hours	Permits fished	Chinook		Sockeye		Coho		Pink		Chum	
	week	Date			Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1 <sup>a,b</sup>	22	06/01–06/03	72	<3	b	b	b	b	b	b	b	b	b	b
2 <sup>a,b</sup>	23	06/04–06/10	160	<3	b	b	b	b	b	b	b	b	b	b
3 <sup>a,b,c</sup>	24	06/11–06/17	160	<3	b	b	b	b	b	b	b	b	b	b
4 <sup>a,b,c</sup>	25	06/18–06/24	160	<3	b	b	b	b	b	b	b	b	b	b
5 <sup>a,b,c</sup>	26	06/25–07/01	160	<3	b	b	b	b	b	b	b	b	b	b
6 <sup>a,b,c,d</sup>	27	07/02–07/08	160	<3	b	b	b	b	b	b	b	b	b	b
7 <sup>a,b,c,d,e</sup>	28	07/09–07/15	160	<3	b	b	b	b	b	b	b	b	b	b
8 <sup>a,b,c,d,e</sup>	29	07/16–07/22	160	<3	b	b	b	b	b	b	b	b	b	b
9 <sup>a,b,c,d,e</sup>	30	07/23–07/29	160	<3	b	b	b	b	b	b	b	b	b	b
10 <sup>a,b,c,d,e</sup>	31	07/30–08/05	160	<3	b	b	b	b	b	b	b	b	b	b
11 <sup>a,b,c,d,e,f</sup>	32	08/06–08/12	160	<3	b	b	b	b	b	b	b	b	b	b
12 <sup>a,b,c,d,e,f</sup>	33	08/13–08/19	160	<3	b	b	b	b	b	b	b	b	b	b
13 <sup>a,b,c,d,e,f</sup>	34	08/20–08/26	160	<3	b	b	b	b	b	b	b	b	b	b
14 <sup>a,b,c,d,e,f</sup>	35	08/27–09/02	160	<3	b	b	b	b	b	b	b	b	b	b
15 <sup>a,b,c,d,e,f</sup>	36	09/03–09/09	160	<3	b	b	b	b	b	b	b	b	b	b
Total				<3	b	b	b	b	b	b	b	b	b	b
Average weight							4.1		6.3		3.9		9.3	

<sup>a</sup> Kamishak District open 24/7, fishing periods are Sunday - Saturday. Exceptions are McNeil and Paint River subdistricts which remain closed.

<sup>b</sup> Confidential data. Fewer than 3 permits reporting.

<sup>c</sup> Effective June 15, Kirschner Lake special harvest area is closed.

<sup>d</sup> Chenik Subdistrict closed.

<sup>e</sup> Effective at 6:00AM, July 15, waters of Chenik Lagoon are open.

<sup>f</sup> Effective at 6:00AM, August 8, waters of Kirschner Lake special harvest area are open.

Appendix D2.—Total commercial harvest (excluding homepack) by species in the Kamishak Bay District, 2013–2023.

Year	Permits	Chinook	Sockeye	Coho	Pink	Chum
2013	5	0	33,154	0	314	2,357
2014	8	0	12,137	0	44,227	4,449
2015	<3	<sup>a</sup>	<sup>a</sup>	<sup>a</sup>	<sup>a</sup>	<sup>a</sup>
2016	5	0	18,218	578	350	10,984
2017	5	0	102,810	185	254,440	34,275
2018	7	0	33,699	9,077	5,226	8,298
2019	7	0	59,069	3,349	59,008	31,629
2020	<3	<sup>a</sup>	<sup>a</sup>	<sup>a</sup>	<sup>a</sup>	<sup>a</sup>
2021	5	0	71,883	24	62,598	4,443
2022	<3	<sup>a</sup>	<sup>a</sup>	<sup>a</sup>	<sup>a</sup>	<sup>a</sup>
Previous 10-year avg.	5	0	41,219	1,321	46,879	10,080
2023	<3	<sup>a</sup>	<sup>a</sup>	<sup>a</sup>	<sup>a</sup>	<sup>a</sup>

*Source:* ADF&G statewide electronic fish ticket database [Internet]. 2010–current. Juneau, AK. [URL not available as some information is confidential].

<sup>a</sup> Confidential data. Fewer than 3 permits reporting.

Appendix D3.—Daily and cumulative sockeye salmon escapement objectives compared to actual escapement (daytime counts only) past the video monitoring site at Chenik Lake, 2023.

Date	Actual		Anticipated percent (%)	Apportioned sustainable escapement goals				Comments
				Projected minimum		Projected maximum		
	Daily	Cumulative		Daily	Cumulative	Daily	Cumulative	
6/1	—	0	0.0	0	0	0	0	Video monitoring started
6/2	—	0	0.0	0	0	0	0	
6/3	—	0	0.0	0	0	0	0	
6/4	—	0	0.0	0	0	0	0	
6/5	—	0	0.0	0	0	0	0	
6/6	—	0	0.0	0	0	0	0	
6/7	—	0	0.0	0	0	0	0	
6/8	—	0	0.0	0	0	0	0	
6/9	—	0	0.0	0	0	0	0	
6/10	—	0	0.0	0	0	0	0	
6/11	—	0	0.0	0	0	0	0	
6/12	—	0	0.0	0	0	0	0	
6/13	—	0	0.0	0	0	1	1	
6/14	—	0	0.0	0	0	0	1	
6/15	—	0	0.1	1	1	6	7	
6/16	—	0	0.1	1	2	1	8	
6/17	—	0	0.1	0	2	1	9	
6/18	0	0	0.1	0	2	1	10	
6/19	1	1	0.2	3	5	16	26	
6/20	0	1	0.2	1	6	2	28	
6/21	0	1	0.2	0	6	1	29	
6/22	0	1	0.3	2	8	8	37	
6/23	0	1	0.5	7	15	34	71	
6/24	0	1	0.5	0	15	0	71	
6/25	0	1	0.8	7	22	33	104	
6/26	1	2	2.0	36	58	171	275	
6/27	0	2	3.5	42	100	198	473	
6/28	0	2	3.6	3	103	14	487	
6/29	5	7	4.3	21	124	97	584	
6/30	12	19	5.5	36	160	172	756	
7/1	33	52	8.6	88	248	416	1,172	
7/2	76	128	9.8	36	284	168	1,340	
7/3	14	142	11.9	60	344	286	1,626	
7/4	8	150	13.3	42	386	196	1,822	
7/5	15	165	14.8	44	430	209	2,031	
7/6	20	185	14.9	3	433	14	2,045	
7/7	38	223	16.3	39	472	187	2,232	
7/8	33	256	16.3	2	474	7	2,239	
7/9	116	372	16.7	12	486	55	2,294	
7/10	10	382	18.2	43	529	204	2,498	
7/11	7	389	21.7	101	630	479	2,977	
7/12	1	390	22.3	17	647	77	3,054	
7/13	4	394	22.5	5	652	28	3,082	
7/14	240	634	27.5	145	797	683	3,765	
7/15	646	1,280	33.9	185	982	873	4,638	

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Date	Actual		Anticipated percent (%)	Apportioned sustainable escapement goals				Comments
				Projected minimum		Projected maximum		
	Daily	Cumulative		Daily	Cumulative	Daily	Cumulative	
7/16	400	1,680	36.0	61	1,043	292	4,930	
7/17	260	1,940	38.4	69	1,112	325	5,255	
7/18	34	1,974	50.6	354	1,466	1,671	6,926	
7/19	2,915	4,889	54.5	113	1,579	534	7,460	
7/20	473	5,362	56.6	61	1,640	290	7,750	
7/21	4	5,366	59.2	77	1,717	359	8,109	
7/22	21	5,387	64.6	156	1,873	741	8,850	
7/23	15	5,402	66.8	65	1,938	304	9,154	
7/24	1	5,403	68.6	51	1,989	241	9,395	
7/25	9	5,412	71.0	70	2,059	333	9,728	
7/26	2	5,414	76.3	153	2,212	722	10,450	
7/27	54	5,468	78.0	51	2,263	239	10,689	
7/28	81	5,549	80.3	67	2,330	319	11,008	
7/29	1,401	6,950	80.8	13	2,343	62	11,070	
7/30	39	6,989	81.4	17	2,360	79	11,149	
7/31	65	7,054	82.2	24	2,384	114	11,263	
8/1	122	7,176	83.6	42	2,426	196	11,459	
8/2	162	7,338	84.4	21	2,447	103	11,562	
8/3	237	7,575	87.7	97	2,544	454	12,016	
8/4	25	7,600	90.6	84	2,628	399	12,415	
8/5	455	8,055	94.0	99	2,727	470	12,885	
8/6	352	8,407	96.0	57	2,784	268	13,153	
8/7	42	8,449	97.9	54	2,838	256	13,409	
8/8	19	8,468	98.5	18	2,856	82	13,491	
8/9	287	8,755	98.9	13	2,869	63	13,554	
8/10	26	8,781	99.1	5	2,874	25	13,579	
8/11	142	8,923	99.3	7	2,881	30	13,609	
8/12	89	9,012	99.5	4	2,885	22	13,631	
8/13	124	9,136	99.6	2	2,887	8	13,639	
8/14	170	9,306	99.6	2	2,889	11	13,650	
8/15	138	9,444	99.8	4	2,893	18	13,668	
8/16	114	9,558	99.9	3	2,896	12	13,680	
8/17	29	9,587	99.9	0	2,896	3	13,683	
8/18	14	9,601	99.9	2	2,898	5	13,688	
8/19	27	9,628	99.9	0	2,898	1	13,689	
8/20	59	9,687	99.9	0	2,898	1	13,690	
8/21	15	9,702	99.9	0	2,898	1	13,691	
8/22	8	9,710	99.9	1	2,899	2	13,693	
8/23	10	9,720	100.0	0	2,899	2	13,695	
8/24	3	9,723	100.0	0	2,899	1	13,696	
8/25	11	9,734	100.0	1	2,900	4	13,700	
8/26	6	9,740	100.0	0	2,900	0	13,700	
8/27	8	9,748	100.0	0	2,900	0	13,700	
8/28	1	9,749	100.0	0	2,900	0	13,700	
8/29	2	9,751	100.0	0	2,900	0	13,700	
8/30	0	9,751	100.0	0	2,900	0	13,700	
8/31	0	9,751	100.0	0	2,900	0	13,700	Counting ended

Note: Escapement objectives derived from historical run timing and Chenik Lake sockeye salmon SEG (2,900–13,700 fish).

Appendix D4.–Daily and cumulative sockeye salmon escapement objectives compared to actual escapement (daytime counts only) past the video monitoring site at Mikfik Lake, 2023.

			Apportioned sustainable escapement goal					
	Actual		Anticipated percent (%)	Projected minimum		Projected maximum		
Date	Daily	Cumulative		Daily	Cumulative	Daily	Cumulative	Comments
6/1	–	0	0.4	10	13	35	43	
6/2	–	0	1.0	20	33	62	105	
6/3	–	0	2.1	37	70	121	226	
6/4	–	0	2.5	13	83	44	270	
6/5	–	0	4.1	57	140	182	452	
6/6	–	0	7.0	98	238	317	769	
6/7	–	0	8.6	55	293	178	947	
6/8	–	0	9.6	33	326	107	1,054	
6/9	–	0	11.9	79	405	257	1,311	
6/10	–	0	15.7	130	535	421	1,732	
6/11	–	0	19.8	140	675	451	2,183	
6/12	–	0	23.0	105	780	342	2,525	
6/13	0	0	29.9	237	1,017	765	3,290	Video monitoring started 6/13
6/14	0	0	34.4	151	1,168	490	3,780	
6/15	0	0	38.0	125	1,293	403	4,183	
6/16	0	0	42.2	141	1,434	456	4,639	
6/17	0	0	46.1	134	1,568	433	5,072	
6/18	0	0	50.7	155	1,723	502	5,574	
6/19	560	560	56.4	194	1,917	627	6,201	
6/20	194	754	60.3	135	2,052	436	6,637	
6/21	0	754	64.2	131	2,183	426	7,063	
6/22	0	754	69.0	163	2,346	528	7,591	
6/23	1,563	2,317	71.4	83	2,429	267	7,858	
6/24	525	2,842	74.5	103	2,532	333	8,191	
6/25	7	2,849	76.4	65	2,597	211	8,402	
6/26	2	2,851	78.9	84	2,681	273	8,675	
6/27	1	2,852	81.8	100	2,781	321	8,996	
6/28	7	2,859	83.5	59	2,840	192	9,188	
6/29	6	2,865	84.3	27	2,867	87	9,275	
6/30	16	2,881	87.1	95	2,962	309	9,584	
7/1	0	2,881	88.7	53	3,015	170	9,754	
7/2	3	2,884	89.6	30	3,045	98	9,852	
7/3	0	2,884	90.4	27	3,072	88	9,940	Lost video mid-day on 7/3
7/4	–	2,884	90.6	9	3,081	28	9,968	
7/5	–	2,884	91.0	12	3,093	40	10,008	
7/6	–	2,884	92.6	55	3,148	176	10,184	
7/7	–	2,884	93.8	41	3,189	133	10,317	
7/8	–	2,884	94.6	29	3,218	94	10,411	
7/9	–	2,884	94.7	3	3,221	10	10,421	
7/10	–	2,884	94.9	6	3,227	18	10,439	
7/11	–	2,884	95.0	2	3,229	9	10,448	
7/12	–	2,884	95.1	3	3,232	10	10,458	
7/13	–	2,884	95.3	9	3,241	29	10,487	
7/14	–	2,884	95.5	5	3,246	16	10,503	
7/15	–	2,884	95.7	6	3,252	19	10,522	

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Apportioned sustainable escapement goal								
Date	Actual		Anticipated percent (%)	Projected minimum		Projected maximum		Comments
	Daily	Cumulative		Daily	Cumulative	Daily	Cumulative	
7/16	—	2,884	95.7	1	3,253	3	10,525	
7/17	—	2,884	96.5	29	3,282	93	10,618	
7/18	—	2,884	97.2	24	3,306	77	10,695	
7/19	—	2,884	97.4	4	3,310	15	10,710	
7/20	—	2,884	97.6	7	3,317	21	10,731	
7/21	—	2,884	97.6	3	3,320	10	10,741	
7/22	—	2,884	97.8	6	3,326	19	10,760	
7/23	—	2,884	98.0	6	3,332	21	10,781	
7/24	—	2,884	98.2	7	3,339	21	10,802	
7/25	—	2,884	98.3	3	3,342	11	10,813	
7/26	—	2,884	98.5	7	3,349	23	10,836	
7/27	—	2,884	98.9	14	3,363	44	10,880	
7/28	—	2,884	99.1	7	3,370	21	10,901	
7/29	—	2,884	99.2	3	3,373	11	10,912	
7/30	—	2,884	99.3	4	3,377	14	10,926	
7/31	—	2,884	99.4	2	3,379	6	10,932	
8/1	—	2,884	99.4	1	3,380	3	10,935	
8/2	—	2,884	99.5	3	3,383	10	10,945	
8/3	0	2,884	99.5	0	3,383	0	10,945	Regained video mid-day on 8/3
8/4	2	2,886	99.5	1	3,384	3	10,948	
8/5	0	2,886	99.7	5	3,389	15	10,963	
8/6	0	2,886	99.7	0	3,389	1	10,964	
8/7	2	2,888	99.7	1	3,390	2	10,966	
8/8	4	2,892	99.7	0	3,390	0	10,966	
8/9	0	2,892	99.7	0	3,390	0	10,966	
8/10	2	2,894	99.7	0	3,390	1	10,967	
8/11	4	2,898	99.7	1	3,391	3	10,970	
8/12	13	2,911	99.7	0	3,391	0	10,970	
8/13	6	2,917	99.7	0	3,391	0	10,970	Video ended for the season
8/14	—	2,917	99.8	2	3,393	8	10,978	
8/15	—	2,917	99.8	0	3,393	0	10,978	
8/16	—	2,917	99.8	1	3,394	2	10,980	
8/17	—	2,917	99.8	0	3,394	0	10,980	
8/18	—	2,917	99.8	1	3,395	3	10,983	
8/19	—	2,917	99.8	0	3,395	0	10,983	
8/20	—	2,917	99.8	0	3,395	0	10,983	
8/21	—	2,917	99.8	0	3,395	0	10,983	
8/22	—	2,917	99.8	0	3,395	0	10,983	
8/23	—	2,917	99.8	0	3,395	0	10,983	
8/24	—	2,917	99.8	0	3,395	0	10,983	
8/25	—	2,917	99.8	0	3,395	0	10,983	
8/26	—	2,917	99.8	0	3,395	0	10,983	
8/27	—	2,917	100.0	5	3,400	17	11,000	
8/28	—	2,917	100.0	0	3,400	0	11,000	
8/29	—	2,917	100.0	0	3,400	0	11,000	
8/30	—	2,917	100.0	0	3,400	0	11,000	
8/31	—	2,917	100.0	0	3,400	0	11,000	-

Note: Anticipated escapement derived from run timing and Mikfik Lake sockeye salmon sustainable escapement goal of 3,400–11,000 fish.

Appendix D5.—Sockeye salmon escapement into Chenik Lake and Mikfik Lake (daylight counts only), 2013–2023.

Year	Chenik	Mikfik
2013	11,333 <sup>a</sup>	4,042 <sup>a</sup>
2014	17,774 <sup>a</sup>	17,802 <sup>a,b</sup>
2015	19,073 <sup>a</sup>	3,502 <sup>a</sup>
2016	19,510 <sup>a</sup>	10,180 <sup>a</sup>
2017	21,468 <sup>a</sup>	7,495 <sup>a</sup>
2018	6,651 <sup>a</sup>	4,966 <sup>a</sup>
2019	12,079 <sup>a</sup>	2,901 <sup>a</sup>
2020	11,686 <sup>a</sup>	314 <sup>a</sup>
2021	17,134 <sup>a</sup>	2,346 <sup>a</sup>
2022	16,461 <sup>a</sup>	3,165 <sup>a</sup>
Previous 10-year average	15,317	5,671
2023	9,751 <sup>a</sup>	2,917 <sup>a</sup>

<sup>a</sup> Escapement derived from video counts.

<sup>b</sup> Escapement derived from aerial surveys.

Appendix D6.—Estimated pink, chum, and sockeye salmon escapements for the major spawning systems in the Kamishak District of the Lower Cook Inlet Management Area (day counts only), 2013–2023.

Year	Pink salmon						Chum salmon								Sockeye salmon			
	Big Kamishak River	Little Kamishak River	Bruin Bay River	Sunday Creek	Brown's Peak Creek	Total of index streams	Big Kamishak River	Little Kamishak River	McNeil River	Bruin Bay	Ursus Cove <sup>a</sup>	Cottonwood Creek	Iniskin Bay	Total of index streams	Mikfik Lake <sup>b</sup>	Chenik Lake <sup>b</sup>	Amakdedori Creek	Total of index streams
2013	–	543	15,020	6,132	4,061	25,213	3,280	6,744	9,498	8,942	10,339	5,206	5,928	49,937	4,042	11,333	1,540	16,915
2014	–	4,826	121,569	7,665	4,048	133,282	5,676	15,069	17,475	3,583	5,308	7,079	13,020	67,210	17,802	17,797	4,280	39,879
2015	690	1,464	40,801	60,385	29,141	130,327	6,990	14,370	20,494	11,006	14,783	16,962	7,513	92,118	3,502	19,073	2,910	25,485
2016	690	30	86,632	2,185	1,378	118,927	9,585	11,991	26,262	26,598	7,032	1,648	1,089	84,205	10,180	19,510	2,240	31,930
2017	3,800	1,400	71,100	22,211	39,197	132,508	32,290	19,275	38,679	38,536	22,025	6,150	15,591	172,546	7,495	21,468	1,680	30,643
2018	0	23	94,715	3,400	1,341	99,456	7,694	14,417	37,331	28,497	3,718	1,326	9,149	102,132	4,966	6,651	1,916	13,533
2019	0	1,000	43,800	21,801	43,420	109,021	51,030	22,611	9,205	25,283	13,400	3,908	15,294	140,731	2,901	12,079	1,620	16,600
2020	0	0	57,320	4,715	21,034	83,069	19,391	38,591	8,850	22,206	4,367	679	8,804	102,888	305	11,686	6,992	18,983
2021	0	0	78,374	38,976	74,976	192,326	15,987	35,046	15,219	29,655	7,500	5,690	15,024	124,121	2,346	17,134	4,370	23,850
2022	0	0	330	3,208	541	4,079	13,013	22,330	17,739	3,948	6,977	6,588	12,740	83,335	2,346	16,461	2,050	20,857
10-year average	648	929	60,966	17,068	21,914	99,948	16,494	20,044	20,075	19,825	9,545	5,524	10,415	101,922	5,589	15,319	2,960	23,868
2023	0	0	29,617	104,084	51,114	184,815	11,481	52,274	25,142	14,629	16,190	8,702	18,615	147,032	2,917	9,751	1,300	17,264

Note: En dash (–) = no data were collected.

<sup>a</sup> “Ursus Cove” is the sum of Ursus Lagoon RH Creek and Ursus Lagoon Creek.

<sup>b</sup> Escapement derived from video counts.



## **APPENDIX E: PERSONAL USE AND HOMEPACK HARVEST**

Appendix E1.—Personal use set gillnet salmon harvest in numbers of fish by species and effort, Southern District Lower Cook Inlet Management Area, 2013–2023.

Year	Permits				Reported harvest						
	Issued	Reporting	Fished	Not fished	Chinook	Sockeye	Coho	Pink	Chum	Other	Total
2013	123	118	89	29	9	122	1,732	135	3	0	2,001
2014	160	154	115	39	13	310	2,273	20	178	0	2,794
2015	136	131	91	40	10	509	1,373	152	22	6	2,072
2016	170	169	118	50	18	166	2,033	8	335	0	2,560
2017	148	145	108	37	6	298	2,388	11	212	0	2,915
2018	192	187	132	55	6	259	1,947	161	11	0	2,384
2019	156	151	109	43	9	147	1,287	162	27	0	1,632
2020	194	153	118	35	7	112	1,050	250	11	8	1,438
2021	130	90	73	17	4	131	1,085	29	3	7	1,259
2022	154	132	89	42	1	107	1,352	66	5	2	1,533
Previous 10-year avg.	156	143	104	39	8	216	1,652	99	81	2	2,059
2023	124	112	72	39	4	148	893	168	4	4	1,217

Appendix E2.—Salmon retained from the commercial harvest for homepack by species and gear type from Lower Cook Inlet Management Area districts, 2013–2023.

Year	Permits		Chinook salmon		Sockeye salmon		Coho salmon		Pink salmon		Chum salmon	
	Set	Purse	Set	Purse	Set	Purse	Set	Purse	Set	Purse	Set	Purse
	gillnet	seine	gillnet	seine	gillnet	seine	gillnet	seine	gillnet	seine	gillnet	seine
2013	7	0	16	0	155	0	150	0	157	0	13	0
2014	8	1	10	0	180	3	128	0	318	0	17	0
2015	16	4	60	7	158	120	417	62	99	302	28	0
2016	12	11	35	40	115	269	171	25	205	79	41	5
2017	13	6	36	23	513	140	189	12	121	71	110	0
2018	10	12	11	50	102	671	108	27	71	1	26	2
2019	7	10	12	53	107	204	143	23	12	50	22	10
2020	8	7	15	49	44	153	133	11	27	25	0	1
2021	8	8	2	12	119	276	301	28	39	154	32	2
2022	12	6	7	10	178	414	131	18	132	6	12	0
Previous 10-year average	10	7	20	24	167	225	187	21	118	69	30	2
2023	7	3	3	5	85	210	159	22	54	35	0	2

## **APPENDIX F: 2023 OUTLOOK**

## Appendix F1.–Lower Cook Inlet Management Area salmon fishery outlook, 2023.

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**Alaska Department of Fish and Game**  
**Doug Vincent-Lang, Commissioner**

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### **Advisory Announcement**

***For Immediate Release: February 10, 2023***

***Time: 2:00 PM***

**CONTACT: Glenn Hollowell**

**Area Management Biologist  
(907) 235-8191**

### **2023 Lower Cook Inlet Commercial Salmon Fishery Outlook**

This outlook is provided to assist the commercial salmon industry in planning for the 2023 season in the Lower Cook Inlet (LCI) Management Area. Information regarding the forecasts used to create this document will soon be available on the Alaska Department of Fish and Game (ADF&G) web site:

<http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyarealci.salmon#forecasts>

Cook Inlet Aquaculture Association (CIAA) manages the Trail Lakes Hatchery (TLH), Port Graham Hatchery (PGH), and Tutka Bay Lagoon Hatchery (TBLH). Hatchery forecasts can be found by contacting CIAA directly.

Inseason modifications to harvest projections, season opening dates, and strategies for weekly fishing periods may occur as fisheries develop. Fishery announcements from the Homer office will routinely occur on Fridays at 2:00 p.m., and at other times as required. Interested individuals may sign up to receive email announcements here: <http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main>. Recorded commercial fisheries announcements will be available at 907-235-7307. Harvest information and fisheries announcements are located on the ADF&G web site: <http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyarealci.salmon>. The next advisory announcement is expected to be released at 2:00 p.m., Friday, April 28.

The commercial harvest from LCI is forecast to be 2.2 million salmon, of which 176,700 fish (8%) are anticipated to be of hatchery-origin harvested from special harvest areas (SHAs) (Table 1). Additional hatchery-origin fish are harvested incidentally with wild fish outside of SHAs. CIAA forecasts a total of 197,300 hatchery-produced sockeye and 1.6 million pink salmon to return to LCI release sites in 2023. Of those, CIAA projects to harvest 167,700 sockeye (85%) and 1.5 million pink salmon (91%) for cost recovery and broodstock.

#### **Set Gillnet Fishery**

The Southern District is expected to open for the 2023 season on Thursday, June 1 at 6:00 a.m. for a 48-hour period. Subsequent commercial fishing periods will likely be 48 hours in duration beginning at 6:00 a.m. on Mondays and Thursdays, as specified in regulation. Harvest projections for this district and gear are 200 Chinook, 500 coho, 2,900 chum, 25,600 sockeye, and 12,900 pink salmon. The Port Graham Subdistrict is anticipated to open to commercial set gillnet harvest on June 1 and remain on a schedule concurrent with other areas in the Southern District for this gear. Fishing time in the Port Graham Subdistrict will be closely linked to escapement levels in English Bay and Port Graham rivers.

#### **Purse Seine Fishery**

Portions of the Southern District will open to purse seine harvest in mid-June, coinciding with hatchery-produced returns to Leisure and Hazel lakes. Historically, this return peaks in mid-July. CIAA forecasts a return of 38,300 sockeye salmon to Leisure and Hazel lakes combined, as well as 37,100 sockeye salmon to Tutka Bay. Of those, 30,600 (80%) of the fish returning to Leisure and Hazel lakes, and 33,900 (91%) of the sockeye salmon returning

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to Tutka Lagoon will be used for cost recovery and broodstock purposes. A total of 1.6 million hatchery-produced pink salmon are forecast to return to release sites in the Southern District. Of those, 1.5 million pink salmon (91%) will be required for cost recovery and broodstock purposes. Commercial fishing time after mid-July will be based on wild pink salmon escapement levels in this district.

Hatchery sockeye salmon returns to the Eastern District are forecasted by CIAA to be 89,900 fish of which CIAA has identified 74,400 (83%) for cost recovery and broodstock purposes. Wild stock harvest opportunity in the Eastern District will be linked to aerial survey observations of wild sockeye and pink salmon escapements in this district.

Portions of the Outer District may open to commercial harvest in mid-July focusing on sockeye salmon returns to McCarty Fjord lakes. In recent years, escapement to McCarty Fjord systems (Delight, Desire, and Delusion lakes) have been monitored by aerial survey and weir. The weir at Delight Lake will not be operated in 2023, consequently escapement monitoring for this system will be done via aerial surveys.

Waters in the western portion of the Outer District may be open by late-July, focusing on pink and chum salmon runs to Port Dick, as well as Windy and Rocky bays. There are numerous other smaller systems in the Nuka Passage area that are also monitored for chum and pink salmon. Dogfish Bay, Chugach Bay, and Port Chatham in the western portion of the district will be evaluated for chum and pink salmon harvest potential from August to early September. The harvest projections for the Outer District include 9,000 sockeye, 23,500 chum, and 1.7 million pink salmon.

Portions of the Kamishak Bay District typically open to commercial harvest on June 1. Commercial harvest projections for wild stocks in this district are 59,200 sockeye, 8,900 chum, and 63,600 pink salmon. The majority of sockeye salmon harvest is expected to come from Chenik Lake, while the chum salmon harvest has historically been spread throughout the district. Hatchery-released sockeye salmon returns to Kirschner Lake are forecast to be 32,000 fish, of which 28,800 (90%) are expected to be required for hatchery cost recovery. The department tracks salmon escapement in this district using remote video monitoring sites at Chenik and Mikfik lakes, as well as regular aerial surveys of pink and chum salmon index streams. The department intends to monitor the Chenik run using streaming video from the lake and will consider opening Chenik Lagoon once escapement into the lake is adequate.

Table 1.–Projected salmon harvests for Lower Cook Inlet, 2023. Hatchery cost recovery goals are preliminary.

<b>SOCKEYE SALMON</b>				Total anticipated harvest =	<b>176,000</b>
<b>Wild stocks, (area-wide commercial harvest)<sup>a</sup></b>					<b>146,400</b>
Southern District, (purse seine, excluding hatchery SHAs)					52,600
Southern District, (set gillnet)					25,600
Eastern District, (Aialik Bay)					0
Outer District					9,000
Kamishak Bay District, (excluding Kirschner Lake Subdistrict)					59,200
				<b>Hatchery run</b>	<b>Broodstock harvest</b>
<b>Sockeye salmon hatchery programs<sup>b</sup></b>				<b>Cost recovery harvest</b>	<b>Commercial harvest</b>
Resurrection Bay				89,900	12,200
China Poot and Hazel lakes				38,300	0
Tutka Bay Lagoon				37,100	5,200
Kirschner Lake				32,000	0
Port Graham Bay				0	0
English Bay Lakes				0	0
<b>Hatchery stocks (area-wide totals)</b>				<b>197,300</b>	<b>17,400</b>
					<b>150,300</b>
					<b>29,600</b>
<b>PINK SALMON</b>				Total anticipated harvest =	<b>1,948,100</b>
<b>Wild stocks, (area-wide commercial harvest)<sup>a</sup></b>					<b>1,801,000</b>
Southern District (purse seine, excluding hatchery SHAs)					62,100
Southern District (set gillnet)					12,900
Eastern District					0
Outer District					1,662,400
Kamishak Bay District					63,600
				<b>Hatchery run</b>	<b>Broodstock harvest</b>
<b>Pink salmon hatchery programs<sup>b</sup></b>				<b>Cost recovery harvest</b>	<b>Commercial harvest</b>
Tutka Bay Lagoon				1,542,600	96,000
Port Graham Bay				63,100	38,500
<b>Hatchery stocks (area-wide totals)</b>				<b>1,605,700</b>	<b>134,500</b>
					<b>1,324,100</b>
					<b>147,100</b>
<b>CHUM SALMON - Wild production<sup>a</sup></b>				Total anticipated harvest =	<b>36,500</b>
Southern District (purse seine)					1,200
Southern District (set gillnet)					2,900
Eastern District					0
Outer District					23,500
Kamishak Bay District					8,900
<b>COHO SALMON – Wild production<sup>a</sup></b>				Total anticipated harvest =	<b>1,700</b>
Southern District (purse seine)					500
Southern District (set gillnet)					500
Eastern District					0
Outer District					100
Kamishak Bay District					600
<b>CHINOOK SALMON – Wild production<sup>a</sup></b>				Total anticipated harvest =	<b>290</b>
Southern District (purse seine)					90
Southern District (set gillnet)					200
Eastern District					0
Outer District					0
Kamishak Bay District					0
<b>Total LCI anticipated commercial harvest- all salmon species =</b>					<b>2,162,590</b>

Note: Rows and columns may not total exactly due to rounding to the nearest hundred fish.

<sup>a</sup> Area-wide harvest forecasts for wild production were produced by ADF&G using trend forecast models based on historical harvests (<http://www.adfg.alaska.gov/index.cfm?adfg=commercialbvarealci.salmon#forecasts>).

<sup>b</sup> Provided by Cook Inlet Aquaculture Association, based on parent year releases and recent ocean survival.