Kodiak Management Area Commercial Salmon Fishery Annual Management Report, 2018

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FISHERY MANAGEMENT REPORT NO. 19-17

KODIAK MANAGEMENT AREA COMMERCIAL SALMON FISHERY ANNUAL MANAGEMENT REPORT, 2018

by
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TABLE OF CONTENTS

	rage
LIST OF TABLES	ii
LIST OF FIGURES	iii
LIST OF APPENDICES	iii
ABSTRACT	1
INTRODUCTION	1
SALMON RESOURCES	1
Salmon Producing Streams	1
Supplemental Production	
ESCAPEMENT GOALS AND MONITORING	3
Escapement Goals	3
Escapement Monitoring	
Stock Status	4
Chinook Salmon	
Sockeye Salmon	
Pink Salmon.	
Chum Salmon	
COMMERCIAL SALMON FISHING	5
Background	5
Gear Types	6
Board of Fisheries-Approved Regulatory Management Plans	6
Salmon Forecasts	6
2018 Harvest Strategy	7
Seasonal Abundance and Management Consideration	
2018 COMMERCIAL SALMON FISHERY SUMMARY	
Permit Holder Participation	
Harvest	
Chinook Salmon	
Sockeye Salmon	
Coho Salmon	
Pink Salmon	
Chum Salmon	10
Exvessel Value	11
Test Fishery and Cost Recovery	11
NONCOMMERCIAL SALMON HARVESTS	11
Subsistence Salmon Fishery	11
Retention of Salmon Taken in Commercial Fisheries	
REFERENCES CITED	13

TABLE OF CONTENTS (Continued)

	P	age
TABLE	S AND FIGURES	15
APPEN	DIX A. MAPS OF FISHING DISTRICTS	41
APPEN	DIX B. INSEASON MANAGEMENT ACTIONS	51
APPEN	DIX C. CAPE IGVAK FISHERY SUMMARY	81
	DIX D. ALITAK DISTRICT FISHERY SUMMARY	
	DIX E. WESTSIDE FISHERY SUMMARY	
	DIX F. NORTH SHELIKOF FISHERY SUMMARY	_
APPEN.	DIX G. EASTSIDE AFOGNAK FISHERY SUMMARY	.139
APPEN	DIX H. SPIRIDON BAY SPECIAL HARVEST AREA FISHERY SUMMARY	.151
APPEN	DIX I. EASTSIDE KODIAK FISHERY SUMMARY	.157
APPEN	DIX J. NORTH AFOGNAK/SHUYAK FISHERY SUMMARY	.165
	DIX K. MAINLAND DISTRICT FISHERY SUMMARY	
	DIX L. AREAWIDE HARVEST TABLES	
APPEN.	DIX M. ESCAPEMENT DATA	. 193
Table		age
1.	Estimated number of streams with documented salmon production by district, and species, in the	1.0
2.	Kodiak Management Area Estimated commercial harvest of salmon from Kodiak Regional Aquaculture Association projects in	16
2.	the Kodiak Management Area, 1994–2018.	17
3.	Comparison of 2018 salmon peak escapements and escapement goals of index streams or districts, by	
4	species, in the Kodiak Management Area. Fish weir installation and removal dates and cumulative salmon weir counts for systems with weirs in	18
4.	the Kodiak Management Area, 2018.	19
5.	Indexed salmon escapements by species in the Kodiak Management Area, 1979–2018	20
6.	Commercial salmon harvest by species in the Kodiak Management Area, 1882–2018	22
7.	Summary of limited entry permit activity in the commercial salmon fishery by gear type in the Kodiak	26
8.	Management Area, 1980–2018	26
0.	2018	28
9.	Projected versus actual 2018 commercial salmon harvest, by species and fishery, for the Kodiak	
10	Management Area	29
10.	geographic area and type, 2018.	32
11.	Commercial salmon harvest and value, by gear and species, in the Kodiak Management Area, 2018	
12.	Commercial salmon harvest, in numbers of fish, exvessel value of the harvest in dollars, and value of	
	average permit holder harvest by gear type, in the Kodiak Management Area, 2006–2018	34
13.	Subsistence salmon fishery harvest from ADF&G permit reports, by species, for the Kodiak	25
14.	Management Area, 1990–2018	33
1 T.	Management Area, 1997–2018.	36

LIST OF FIGURES

Figure		Page
1.	Map of the Kodiak Management Area and neighboring management areas, 2018	37
2.	Map of the Kodiak Archipelago showing communities, fish processing facilities, sockeye salmon	
	enhancement projects, and weir and hatchery locations in the Kodiak Management Area, 2018	38
3.	Commercial salmon fishery chronology and daily harvest by date and species of management focus,	
	Kodiak Management Area, 2018.	39
	LIGE OF A DRENDIGEG	
	LIST OF APPENDICES	
Appen	ndix	Page
A1.	Map of the Kodiak Management Area commercial salmon fishing districts.	_
A2.	Map of the Alitak District commercial salmon fishing sections and statistical areas	
A3.	Map of the Northwest Kodiak District commercial salmon fishing sections and statistical areas	
A4.	Map of the Southwest Kodiak District commercial salmon fishing sections and statistical areas	
A5.	Map of the Mainland District commercial salmon fishing sections and statistical areas.	
A6.	Map of the Afognak District commercial salmon fishing sections and statistical areas	
A7.	Map of the Eastside Kodiak District commercial salmon fishing sections and statistical areas	48
A8.	Map of the Northeast Kodiak District commercial salmon fishing sections and statistical areas	49
B1.	Commercial salmon fishing time, by district and section, in the Kodiak Management Area, 2018	52
B2.	Summary of emergency orders issued in the in the Kodiak Management Area, 2018	52
C1.	Narrative account of the Cape Igvak sockeye salmon fishery in the Kodiak Management Area, 2018	82
	Map of the Cape Igvak Section of the Kodiak Management Area	84
C3.	Harvest of sockeye salmon considered to be Chignik bound in the Chignik, Cape Igvak, and	
	Southeastern District Mainland commercial salmon fisheries, from 1978 to 2018	
C4.	Impact of the Cape Igvak Salmon Management Plan.	
D1.	Narrative account of the Alitak District salmon fishery in the Kodiak Management Area, 2018	
D2.	Map of the Alitak District showing sections, statistical areas, and closed waters, 2018	
D3.	Set gillnet daily salmon harvest, by species and section, for the Alitak District, 2018	
D4.	Purse seine daily salmon harvest, by species and section, for the Alitak District, 2018	
D5.	Salmon harvest by gear type and species for the Alitak District, 2018.	
D6.	Commercial salmon harvest, by species with percent harvest by gear type, in the Alitak District, 1993-2018	
E1.	Narrative account of the Westside Kodiak salmon fisheries in the Kodiak Management Area, 2018	
E2.	Map of the west side of Kodiak Island, including Southwest Kodiak and Northwest Kodiak districts	110
	and the Southwest Afognak Section of the Afognak District.	118
E3.	Commercial salmon harvest, by species, for Westside management units in the Kodiak Management	
	Area, 1990–2018.	119
E4.	Commercial salmon harvest, by gear type and species, for Westside management units, 2018	
E5.	Seine daily salmon harvest, by species, for the Westside Management Plan units, 2018.	
E6.	Set gillnet salmon harvest, by species, for Westside Management Plan units, 2018	
F1.	Narrative account of the North Shelikof Strait sockeye salmon fishery in the Kodiak Management	
	Area, 2018	132
F2.	Map showing the North Shelikof management area	134
F3.	Summary of fishing time, zone closures, effort, and harvest by species, for the North Shelikof	
	management unit of the Kodiak Management Area, 1995–2018.	135
F4.	Summary of fishing time, zone closures, effort, and harvest by species, for the Southwest Afognak	
	management unit of the Kodiak Management Area, 1995–2018.	
F5.	Daily salmon harvest by species for the North Shelikof management units of the North Shelikof Strait	
	Sockeye Salmon Management Plan, 2018.	137
F6.	Daily salmon harvest by species in the Southwest Afognak management units of the North Shelikof	
	Strait Sockeye Salmon Management Plan, 2018.	138

LIST OF APPENDICES (Continued)

Appe	ndix	Page
G1.	Narrative account of the Eastside Afognak salmon fishery in the Kodiak Management Area, 2018	140
G2.	Map of the Afognak District of the Kodiak Management Area.	142
G3.	Daily salmon harvest by species for the management units of the East Afognak Management Plan,	
	2018	143
H1.	Narrative account of the Spiridon Bay Special Harvest Area sockeye salmon fishery in the Kodiak	
	Management Area, 2018.	152
H2.	Map of the Spiridon Bay Special Harvest Area in the Northwest Kodiak District.	153
H3.	Daily salmon harvest by species in the Spiridon Bay Special Harvest Area, 2018	154
H4.	Estimated contribution to the commercial harvest from the Spiridon Lake sockeye salmon	
	enhancement project by locality in the Kodiak Management Area, 2018	
I1.	Narrative account of the Eastside Kodiak salmon fishery in the Kodiak Management Area, 2018	
I2.	Map of the Northeast Kodiak District commercial salmon fishing sections and statistical areas	
I3.	Map of the Eastside Kodiak District commercial salmon fishing sections and statistical areas	
I4.	Daily commercial salmon harvest by species for the Eastside Kodiak Management Plan units, 2018.	162
J1.	Narrative account of the North Afognak/Shuyak salmon fishery in the Kodiak Management Area,	
	2018	
J2.	Map of the Afognak District within the Kodiak Management Area.	168
J3.	Daily salmon harvest by species for the North Afognak/Shuyak Island management units, 2018	
K1.	Narrative account of the Mainland District salmon fishery in the Kodiak Management Area, 2018	
K2.	Map of the Mainland District commercial salmon fishing sections and statistical areas.	
K3.	Daily commercial salmon harvest, by species, for Mainland District Management Plan units, 2018	177
L1.	Commercial salmon harvest, by management unit and statistical week, all gear combined, in the	
	Kodiak Management Area, 2018	
M1.	Peak salmon escapements in the Kodiak Management Area, by district and species, 2018	194

ABSTRACT

This report provides an overview of the 2018 Kodiak Management Area (KMA) salmon resources, stock status, as well as commercial, personal use, and subsistence salmon fisheries.

Sockeye salmon *Oncorhynchus nerka* escapements met or exceeded the established goals for Frazer, Saltery, earlyrun Karluk, late-run Karluk, early-run Ayakulik, late-run Ayakulik, early-run Upper Station, and late-run Upper Station, but were below established goals for the Afognak, Malina, Buskin, and Pasagshak systems. The Mainland District and Kodiak Archipelago pink salmon *O. gorbuscha* and the Kodiak Archipelago chum salmon *O. keta* escapement goals were met in 2018. The Chinook salmon *O. tshawytscha* escapement goals were not achieved in both the Karluk and Ayakulik rivers, whereas coho salmon *O. kisutch* escapement goals were achieved in the American, Olds, and Pasagshak rivers but not in the Buskin River.

The 2018 KMA commercial salmon fishery began on June 9, with the last reported landing on September 28. A total of 293 permits were fished, consisting of 151 purse seine permits, 140 set gillnet permits, and 2 beach seine permits. The total commercial salmon harvest in the KMA, including cost-recovery harvest but excluding test fishery harvest and commercially caught salmon retained for personal use, was 3,895 Chinook, 1,820,350 sockeye, 438,065 coho, 5,946,894 pink, and 463,834 chum salmon. The exvessel value for salmon harvested by all gear types totaled approximately \$27.3 million, which was below average for the KMA.

Key words: Chinook, sockeye, coho, pink, chum, salmon, *Oncorhynchus*, Alaska Department of Fish and Game, AMR, exvessel value, Kodiak Management Area, KMA, BOF, commercial fisheries, subsistence, management plan, annual management report, purse seine, set gillnet, harvest, personal use

INTRODUCTION

This report describes the Kodiak Management Area's (KMA) commercial salmon *Oncorhynchus* fisheries and harvest strategies in effect during the 2018 commercial salmon fishing season. A summary is also provided of the 2018 commercial salmon fishing season and historical commercial harvest, effort levels, escapement, subsistence, and commercial harvest retained for personal use. In addition, this report provides a comparison of salmon escapements as they pertain to the condition of salmon stocks within the KMA.

The KMA includes the waters of the western Gulf of Alaska surrounding the Kodiak Archipelago and that portion of the Alaska Peninsula bordering the Shelikof Strait between Cape Douglas and Kilokak Rocks (Figure 1). The archipelago is approximately 150 miles long, extending from northeast to southwest.

General information concerning escapements, harvest, and economic value is contained in the body of this report. More detail is provided in a series of appendices describing the KMA commercial fishing districts (Appendix A), fishing opportunity and management actions taken during the 2018 season (Appendix B), detailed information on specific fisheries (Appendices C–K), commercial salmon harvest by statistical week and management unit (Appendix L), and indexed peak salmon escapements by species and district (Appendix M). More detailed escapement data by stream are published in a separate escapement report (Fuerst 2019).

SALMON RESOURCES

SALMON PRODUCING STREAMS

Salmon migration or spawning has been documented in approximately 1,200 streams within the KMA (Johnson and Blossom 2018), but only 493 streams have been documented by Alaska Department of Fish and Game (ADF&G) to support yearly spawning populations of salmon (Table 1). There are Chinook salmon *O. tshawytscha* in 6 streams, sockeye salmon *O. nerka* in 60

streams, coho salmon *O. kisutch* in 254 streams, pink salmon *O. gorbuscha* in approximately 441 streams, and chum *O. keta* in 215 streams. The majority of pink salmon streams in the KMA are located in the Kodiak Archipelago (Afognak, Northwest Kodiak, Southwest Kodiak, Alitak, Eastside Kodiak, and Northeast Kodiak districts; Appendix A1), with 101 pink salmon streams located in the Mainland District (on the Alaska Peninsula). In years with very large returns, additional small streams are used by pink salmon.

SUPPLEMENTAL PRODUCTION

There are 2 hatcheries located in the KMA that currently produce salmon to supplement natural salmon production. The Kodiak Regional Aquaculture Association (KRAA) operates both hatcheries: the Kitoi Bay Hatchery on the southeast side of Afognak Island, and Pillar Creek Hatchery (Figure 2). The Kitoi Bay Hatchery primarily produces pink salmon but also cultures sockeye, chum, and coho salmon. KRAA outstocks (placing juvenile salmon in sites other than the hatchery) juvenile coho and sockeye salmon fry from the Kitoi Bay Hatchery, but the majority of hatchery returns are to be harvested in either the common property or cost-recovery fisheries, or to be used as broodstock. Pillar Creek Hatchery is located north of the City of Kodiak at Pillar Creek, which drains into Monashka Bay, and is used primarily as an incubation facility for sockeye salmon outstocking projects. Chinook and coho salmon are also reared at the Pillar Creek Hatchery for outstocking.

The Kodiak Regional Planning Team (KRPT), a group consisting of representatives from ADF&G, KRAA, and the public, is mandated by law (AS 16.10.375–470) to develop and periodically update comprehensive plans for salmon production in the KMA. KRPT identified sockeye salmon as the priority species for supplemental production (KRPT 1992). The priority status given to sockeye salmon production resulted in remote egg takes, hatchery incubation, and juvenile outstocking by KRAA to enhance harvests, develop broodstocks, and restore depleted runs (Honnold and Schrof 2001). Current enhancement efforts include "put-and-take" projects that involve placement of juvenile salmon at nursery sites where they will return as harvestable adults to systems with no spawning habitat or impassable stream access to spawning habitat.

KRPT summarized its production goals in an update to the Kodiak Regional Comprehensive Management Plan (KRPT 2011). The long-term goal of the plan is to increase the annual harvest of salmon (over and above KMA wild salmon harvest) by an additional 6,000 Chinook, 2,500,000 sockeye, 600,000 coho, 15,000,000 pink, and 1,500,000 chum salmon. The recent ten-year (2008–2017) average supplemental production has included an undetermined number of Chinook salmon and an estimated 344,591 sockeye, 89,343 coho, 4,527,318 pink, and 135,690 chum salmon (Table 2).

In 2018, sockeye salmon were outstocked in saltwater at Telrod Cove and Ouzinkie Harbor and in the freshwater systems of Big Waterfall, Little Waterfall, Spiridon, Crescent, Hidden, Ruth, and Jennifer lakes to produce harvest opportunities in terminal fisheries near the outlets of these systems. Sockeye salmon were also outstocked in 2018 in Little Kitoi Lake and Bay for broodstock development. Coho salmon were outstocked into Crescent Lake (near the community of Port

¹ 2018 Annual Management Plan Kitoi Bay Hatchery. Unpublished. Available from Kodiak Regional Aquaculture Association, Kodiak, Alaska.

² 2018 Annual Management Plan Pillar Creek Hatchery. Unpublished. Available from Kodiak Regional Aquaculture Association, Kodiak, Alaska.

Lions) and Katmai Lake (on Spruce Island near the community of Ouzinkie) to provide subsistence and commercial harvest opportunities.

ESCAPEMENT GOALS AND MONITORING

ESCAPEMENT GOALS

In 2016, ADF&G staff reviewed previously established escapement goals within the KMA for each system and salmon species and recommended no change to 18 goals, modified 4 goals, and eliminated 2 goals (Schaberg et al. 2016). The directors of the Division of Commercial Fisheries and the Division of Sport Fish accepted these recommended changes to the escapement goals. In 2018, the KMA commercial salmon fisheries were managed to achieve escapement levels that were within the established ranges or, in some cases, which exceeded lower-bound escapement goals. Established goals in the KMA include 2 for Chinook salmon, 12 for sockeye salmon, 4 for coho salmon, 2 for pink salmon and 1 chum salmon (Table 3).

ESCAPEMENT MONITORING

In 2018, weirs were operated on the major systems of the KMA (Table 4; Figure 2; Fuerst 2019). The 4 largest systems with weirs are the Karluk River, Ayakulik River, South Olga Lakes (Upper Station), and Dog Salmon Creek. There are 5 smaller systems with weirs: Afognak River (Litnik), Saltery Lake, Pasagshak River, Buskin River. On Dog Salmon Creek, a fish pass is operated upstream near the outlet of Frazer Lake. To avoid duplicates when summing escapement totals, the Dog Salmon weir counts are considered the total escapement for all species in this system except sockeye salmon. In some years, an appreciable number of sockeye salmon that pass the Dog Salmon weir do not ascend the fish pass to Frazer Lake. Sockeye salmon that do not ascend the fish pass to Frazer Lake are not likely to successfully spawn; therefore, the cumulative sockeye salmon count through the fish pass is considered the spawning escapement for the drainage.

The majority of sockeye salmon and Chinook salmon ascending rivers in the KMA were counted through weirs (Tables 3–5; Fuerst 2019). The timely nature of these data allowed for inseason stock-specific management. The remaining KMA sockeye salmon systems were monitored by aerial observation using small fixed-wing aircraft.

Most pink, chum, and coho salmon escapement estimates were collected from fixed-wing aircraft surveys of bays and streams. Coho salmon escapement estimates were incomplete due to poor weather conditions for conducting surveys and limited budgets. Foot surveys were also conducted on a few streams, primarily along the Kodiak road system. Aerial and foot survey counts are considered an index of the actual escapement and are utilized inseason to aid fishery management.

Peak indexed escapements were calculated postseason for all systems surveyed and, together with weir escapement data, were used to estimate an areawide escapement (Table 5). Peak indexed escapement for sockeye, chum, and coho salmon were defined as the highest daily aerial or foot survey count for each system for each year. For pink salmon, peak indexed escapement of each stream surveyed was estimated as the larger of either the highest daily survey count or the sum of 2 counts that were 30 or more days apart. This was done to compensate for the shorter stream life and more varied spawning dates of pink salmon. For Chinook salmon, peak indexed escapements were defined as the cumulative weir counts minus an estimate of upriver sport fishery harvest. Indexed peak salmon escapement estimates by species and district are listed in Appendix M1. Peak

escapement estimates by species for individual streams are published in a separate escapement report (Fuerst 2019).

STOCK STATUS

Chinook Salmon

In recent years there has been concern regarding the low returns of Chinook salmon escapement in the Karluk and Ayakulik rivers. In an attempt to increase escapement, regulation 5 AAC 18.395 provides ADF&G emergency order authority to prohibit retention of Chinook salmon 28 inches or greater in length by seine gear during fisheries in the Inner Karluk, Outer Karluk, Inner Ayakulik, and Outer Ayakulik sections and that portion of the Central Section south of the latitude of Cape Kuliuk when weir counts indicate inadequate escapement. Additionally, the Board of Fisheries (BOF) has mandated nonretention of Chinook salmon 28 inches or greater in length for the entire KMA from June 1 to July 5.

The 2018 Karluk River Chinook salmon season total weir count of 3,155 fish (Table 4; Fuerst 2019) was within the biological escapement goal (BEG) range of 3,000–6,000 fish (Table 3; Schaberg et al. 2016). The inriver Chinook salmon sport fishery was closed on the Karluk River for the entire 2018 season; therefore, the estimated total escapement is the same as the weir count.

In 2018, a total of 2,149 Chinook salmon were counted through the Ayakulik River weir (Table 4; Fuerst 2019). An inriver sport fishery targeting Chinook salmon was open to catch and release only through the entirety of the season. No harvest occurred during the 2018 Chinook salmon sport fishery upstream of the weir, this resulted in an estimated escapement of 2,149 fish, which was below the escapement goal range of 4,800–8,400 fish (Table 3; Schaberg et al. 2016).

Dog Salmon Creek has a run of Chinook salmon originally introduced in 1970. A total of 66 were counted through the Dog Salmon weir in 2018 (Table 4; Fuerst 2019). There is no escapement goal established for this system, but the average total season cumulative weir count during the previous decade (2008–2017) was 119 fish (Fuerst 2019). No sport fishery is allowed for Chinook salmon on Dog Salmon Creek, so the escapement is considered the total season cumulative weir count.

Sockeye Salmon

Sockeye salmon counted through weirs accounted for about 96% (1,441,460 fish) of all documented sockeye salmon escapements in 2018 (Table 4). Additional escapements of 59,925 sockeye salmon were estimated by aerial and foot surveys in other systems such as Malina Creek, Ocean Beach, Kaflia Lake, Uganik Lake, Little River Lake, Thorsheim Lake, Pauls Lake, and Swikshak Lagoon (Fuerst 2019). With the exception of Afognak Lake, Malina Creek, Buskin and Pasagshak river systems, sockeye salmon escapements met or exceeded the escapement goals in river systems with established escapement goals within the KMA during the 2018 season (Table 3).

Coho Salmon

Estimating coho salmon escapements to the KMA streams is difficult because of survey conditions and cost. Coho salmon often do not migrate into streams until late fall. Typically during this time, heavy rains will cause reduced water clarity, which creates difficult survey conditions. Coho salmon escapement goals were reevaluated in 2016 (Schaberg et al. 2016). Information adequate to establish escapement goals was only available for the American, Pasagshak, Buskin, and Olds rivers (Table 3). Escapements were estimated using a weir on the Buskin River and foot surveys

on the American, Olds, and Pasagshak rivers. In 2018, coho salmon escapement goals were achieved in the American, Olds, and Pasagshak rivers but not in the Buskin River (Table 3).

All salmon weirs were removed before the peak of the coho salmon run due to high water conditions and budget constraints.

Pink Salmon

The majority of pink salmon streams were monitored by aerial surveys, although in 2018 approximately 57% (2,958,630 fish) of all KMA pink salmon escapement was counted through salmon weirs (Tables 4 and 5). The 2018 indexed pink salmon escapement of 4,874,342 fish in the Kodiak Island Archipelago was within the escapement goal range of 2,000,000–5,000,000 fish (Table 3; Schaberg et al. 2016). The Mainland District indexed pink salmon escapement of 280,400 fish was also within the escapement goal range of 250,000–1,000,000 fish (Table 3; Schaberg et al. 2016). Districtwide peak escapements are shown in Appendix M1.

Chum Salmon

In 2010, department staff changed the aggregated chum salmon escapement goals that were developed in 2007 to separate lower-bound sustainable escapement goals (SEGs) for the Kodiak Archipelago and the Mainland District. In 2016, the Mainland aggregated chum salmon escapement goal was removed due to inconsistencies in the data and the Kodiak Archipelago goal was changed to an aggregate of 17 index steams.

The majority of the 2018 chum salmon escapement was estimated from aerial surveys, with less than 2% (3,064fish) counted through weirs (Tables 4 and 5). Estimating chum salmon escapements using aerial observations is more difficult than estimating escapements of other species of salmon. Chum salmon migrate into small sloughs and side creeks as well as into major river systems, and also may occupy more turbid systems, making observations difficult. Due to the remoteness of these systems, limited aerial surveys were conducted on several major KMA chum salmon systems along Kodiak Island's west side and in the Mainland District. Pink salmon, usually in greater numbers, are often present in chum salmon systems and make counting the less numerous chum salmon difficult. Estimates based on aerial surveys are considered minimum estimates of actual escapement.

The chum salmon escapement for the Kodiak Archipelago of 187,545 met the escapement goal of 101,000 fish (Table 3; Schaberg et al. 2016). In 2018, aerial surveys were conducted through the peak of chum salmon escapement in the majority of the KMA.

COMMERCIAL SALMON FISHING

BACKGROUND

Commercial salmon harvest records for the KMA date back to 1882 (Table 6; Roppel 1986). In 1974, a limited entry system was adopted by the State of Alaska that restricted the number of individuals allowed to participate in the commercial salmon fisheries (Rickey et al. 1975). In 2018, there were 593 commercial salmon fishing permits available in the KMA, of which 293 were fished (Table 7; CFEC 2018). This was below the recent 10-year average (2008–2017) of 315 permits fished annually.

Inseason management of the KMA commercial salmon fishery is structured around 7 districts that are subdivided into 56 sections (Appendices A1–A8). These sections are occasionally subdivided

further during the season to adjust fishing effort in response to unexpected salmon surpluses or deficits. Each section defines a traditional geographic harvest area managed for specific stocks or traditional fishing patterns. Divisions of sections, groups of sections, or districts that are opened or closed together are referred to as management units. The BOF has also designated 5 special harvest areas (SHAs; 5 AAC 40.085) and 1 terminal harvest area (THA; 5 AAC 18.378) within the KMA to provide harvest opportunity of enhanced salmon runs (Fuerst and Jackson 2018).

GEAR TYPES

In the KMA, there are restrictions on the types of gear that can be used in specific areas based on historical gear use patterns (5 AAC 18.330). The majority of the KMA is open to seine gear only. Both purse and beach seine gear are allowed to operate in the entire management area. Prior to statehood, the Alitak Bay, Moser Bay, and Olga Bay sections of the Alitak District were designated as set gillnet only areas. In 1970, this regulation was amended such that the Alitak Bay, Moser Bay, and Olga Bay sections remained set gillnet fisheries only through September 4, after which seine gear is legal in the entire Alitak District (5 AAC 18.330(d)(2)). At the January 2017 BOF meeting a proposal was adopted which now allows set gillnet gear to be fished in the Humpy-Deadman and Cape Alitak sections north of a line from Cape Trinity to Cape Alitak, after September 4. This proposal is scheduled to sunset after the 2019 fishing season.

Set gillnet and seine gear are allowed in the Central Section of the Northwest Kodiak District, making this the only section where all gear types may operate simultaneously for the entire season (5 AAC 18.330(b)).

BOARD OF FISHERIES-APPROVED REGULATORY MANAGEMENT PLANS

To regulate Kodiak commercial salmon fisheries, ADF&G staff are guided by 10 KMA salmon management plans that describe biological and allocative constraints and were adopted into regulation by the BOF (5 AAC 18.360–369; Table 8). These plans reflect traditional fishing opportunities and the subsequent harvest allocations that have resulted between and within gear types participating in specific fisheries, and they were all in effect during the 2018 season. These plans are the *Alitak District Salmon Management Plan* (Appendix D), *Westside Kodiak Salmon Management Plan* (Appendix E), *Eastside Afognak Management Plan* (Appendix G), *Eastside Kodiak Salmon Management Plan* (Appendix I), *Mainland District Salmon Management Plan* (Appendix J). The Cape Igvak Salmon Management Plan (Appendix C) and North Shelikof Strait Sockeye Salmon Management Plan (Appendix F) affect Kodiak purse seine permit holders' opportunity to target salmon migrating through the KMA to spawning systems in the Chignik and Cook Inlet management Plan (Appendix H) provide for full utilization of enhanced stocks while protecting local wild stocks.

SALMON FORECASTS

ADF&G forecasts salmon runs to inform industry and management staff of the likely magnitude of salmon returns. In addition, the length of the initial fishing periods for pink salmon are determined preseason based on the magnitude of the pink salmon forecast (Fuerst and Jackson 2018). Chinook, coho, pink, and chum salmon harvests are projected by broad geographic area, whereas forecasts are made for major individual sockeye salmon stocks. Projected harvests are summarized by fishery and geographic area (Table 9; Brenner et al. 2018).

The 2018 commercial Chinook salmon projected harvest was 8,000 fish (Table 9). The sockeye salmon harvest was forecasted to be 2,609,500 fish (Table 9). This projection included formal forecasts for the major sockeye salmon systems of Karluk, Ayakulik, Upper Station, and Dog Salmon, plus projected harvests from minor sockeye salmon systems, supplemental production (from enhancement projects), and the Cape Igvak Section. The 2018 projected KMA harvest also included 400,200 coho, 8,700,000 pink, and 1,017,000 chum salmon (Table 9). These projections included expected supplemental production of salmon from Kitoi Bay hatchery and the Spiridon Bay enhancement projects.

2018 HARVEST STRATEGY

Seasonal Abundance and Management Consideration

Fluctuations in the abundance of each species of salmon within the KMA follow a general chronology (Figure 3). Generally, early-run sockeye salmon are present throughout June to mid-July, and late-run sockeye salmon are present from mid-July through September. Pink and chum salmon are present in July and August. Coho salmon are generally present from August through October. Commercial salmon fisheries are structured around the seasonal abundance of specific salmon species.

The 2018 Kodiak Area Commercial Salmon Fishery Harvest Strategy, published in March 2018, outlined the approaching fishing season (Fuerst and Jackson 2018). This document contains a synopsis of the expected chronology of the 2018 commercial salmon fisheries by species, expected escapements and harvests, an overview of pertinent regulations, and a summary of the management plans that guide management throughout the season.

Sockeye salmon are the primary target species on which fishing periods are scheduled from June through early July. However, some early-run chum salmon stocks may influence management in localized areas. Pink salmon are the primary species managed from early July through mid-August, with some areas managed specifically for local sockeye salmon or chum salmon stocks. Late-run sockeye, coho, and late-run chum salmon are the primary targeted species from mid-August through early September. Coho salmon are the primary species managed after early September.

Anticipated Commercial Fishery Openings

The 2018 harvest strategy listed June 9 as the initial opening date of the early-run sockeye salmon fishery, although the fishery may open as early as June 1 if Karluk River escapement is strong (Figure 3; Fuerst and Jackson 2018). The areas expected to be opened included the Central and North Cape sections of the Northwest Kodiak District. Results of the initial opening would be used to evaluate the actual run strength of the Karluk and Ayakulik early-run sockeye salmon stocks. The Foul Bay and Waterfall Bay SHAs and the Inner Kitoi Bay, Outer Kitoi Bay, Duck Bay, and Izhut Bay sections were scheduled to open to continuous fishing on June 9. A commercial salmon fishing period was not likely to be announced for June 9 in the Alitak District due to the expected weak early-run sockeye salmon forecast for Dog Salmon and Upper Station. The first fishing period could occur as early as June 1 in the Cape Igvak Section if the Chignik River sockeye salmon early run is stronger than expected and run timing was normal.

An initial 33-hour opening was scheduled to start June 9 in the Anton Larsen Bay, Sharatin Bay, Kizhuyak Bay, Terror Bay, Inner Uganik Bay, Spiridon Bay, Zachar Bay, and Uyak Bay sections of the Northwest Kodiak District to test run strength of the local chum and sockeye salmon returns. A second fishing period was scheduled for June 14, but it was to be concurrent with open fishing

periods in the Central and North Cape sections. Additionally, more areas could be opened during the second period if sockeye salmon escapements to local minor systems were of sufficient strength. From June 16 to July 5, additional fishing time in Westside Kodiak fisheries was based solely on the strength of the sockeye and early chum salmon runs, as determined by escapements.

Initial fishing periods in the Inner and Outer Ayakulik sections of the Southwest Kodiak District were solely dependent on sockeye salmon escapement into Ayakulik River. The preseason forecast (Brenner et al. 2018) projected a harvestable surplus which could be utilized during openings throughout the sockeye salmon run. Initial periods in the Southeast Afognak Section of the Afognak District were solely dependent on the sockeye salmon escapement into Afognak River.

Additional 33-hour fishing periods were scheduled for June 14 and 21 for select systems with minor sockeye salmon returns. These included the Eastside Kodiak District, the Northwest Afognak, Pauls Bay, and Perenosa Bay sections of the Afognak District, and the Big River and Outer Kukak Bay sections of the Mainland District. These periods were intended to target sockeye salmon runs to Saltery, Ocean Beach, Thorsheim, Long Lagoon, Pauls, Portage, Swikshak, and Kaflia Lake systems.

The initial fishing period targeting pink salmon was scheduled to begin July 6, and subsequent weekly fishing periods were projected for July and August (Fuerst and Jackson 2018). Based on the forecasted pink salmon run strength, the initial pink salmon opening was set at 57 hours in length, with the 3 subsequent fishing periods following in July and August also set at 57 hours per week. Adjustments in fishing time in late July and August in most areas is to be determined by the run strength of local pink and chum salmon runs and on the strength of coho salmon runs in September.

2018 COMMERCIAL SALMON FISHERY SUMMARY

The 2018 Kodiak commercial salmon fishery began on June 9 with a 57-hour fishing period in the majority of the Northwest Kodiak District and an indefinite period in terminal fisheries at Foul and Waterfall bays and in the Duck Bay, Izhut Bay, Inner Kitoi Bay, and Outer Kitoi Bay sections (Appendix B1 and B2). Two fishing periods of 81 hours were allowed in the Outer Karluk Section beginning on June 16 and June 25. There was only one 57-hour fishing period allowed in the Outer Ayakulik Section in June targeting early-run sockeye salmon. The two 33-hour openings scheduled for June 14 and 21 in the Eastside Kodiak District, the Northwest Afognak, Pauls Bay, and Perenosa Bay sections of the Afognak District and the Outer Kukak Bay and Big River sections of the Mainland District occurred as scheduled (Appendix B1 and B2). The majority of the Alitak District opened for 57 hours beginning on June 25. There was no commercial fishing allowed in the Cape Igvak Section in June because the Chignik early sockeye salmon run was well below the forecast. In total, the Central and North Cape sections were open for 13 days in June.

The pink salmon fishery started as scheduled with a 57-hour weekly fishing period on July 6. The subsequent fishing period in July took place as scheduled but the third weekly period was delayed by 3 days as it became apparent the pink salmon run may be well below forecast. The magnitude of the Chignik sockeye salmon run was not sufficient to warrant fishing periods within the Cape Igvak Section from July 11 to July 25.

Beyond the anticipated fishery openings in the harvest strategy, additional fishing opportunities were provided by emergency order to facilitate the harvest of salmon determined to be in excess

of escapement needs based on inseason analysis of abundance. A narrative of the management actions is detailed separately for each plan in Appendices C through K.

In 2018, the KMA commercial salmon harvest occurred over a 112-day period, with the last reported landing occurring on September 28 (Figure 3). A total of 15 buyer/locations purchased salmon within the KMA in 2018 (Table 10).

PERMIT HOLDER PARTICIPATION

A total of 293 KMA commercial salmon fishing permit holders reported harvests in the common property fishery in 2018. This was 16 fewer permits than during the 2017 season and below the recent 10-year average (2008–2017) of 315 permits (Table 7). Purse seine participation during the 2018 season (151 permits) was 12 permits less than the 2017 season and below the previous 10-year average (2008–2017) of 162 permits. Two beach seine permit holders were active during the 2018 season, which was similar to the 10-year average (2008–2017). Set gillnet participation in the 2018 KMA commercial salmon fishing season was made up of 140 permits, 3 less than the 2017 season and below the recent 10-year average (2008–2017) of 150 permits (Table 7).

Set gillnet permit participation statistics from 2008 to 2010 are not comparable to other years because from 2008 to 2010, individual set gillnet permit holders were allowed to own 2 permits and operate 2 sets of gear. During the years in which this regulation (5 AAC 18.331(j)) was in effect, ADF&G could not collect accurate effort statistics from the fish ticket data in the KMA set gillnet fishery because fish tickets did not document the number of dual permit holders fishing both sets of gear.

HARVEST

A total of 8,673,038 salmon were harvested in the 2018 KMA commercial fisheries (common property and cost recovery combined), which was well below the recent 10-year (2008–2017) average of 21,563,091 salmon (Table 6).

Not including cost recovery, purse seine permit holders caught 88% (7,616,575 fish) of the total number of salmon harvested, which included 3,567 Chinook, 1,309,676 sockeye, 392,993 coho, 5,499,705 pink, and 410,634 chum salmon in the common property fishery (Table 11). Set gillnet permit holders caught 12% (996,277 fish) of the salmon harvested, which included 328 Chinook, 454,184 sockeye, 45,072 coho, 443,800 pink, and 52,893 chum salmon in the common property fishery (Table 11). Beach seine permit holders harvest was confidential in 2018 due to only 2 permits fished (Table 11).

CHINOOK SALMON

The Chinook salmon harvest of 3,895 fish was well below the 10-year average (2008–2017) of 13,726 fish (Table 6) and below the projected harvest of 8,000 fish (Table 9). The average weight of Chinook salmon sold in the common property fishery was 6.75 lb (Table 11). The majority of the Chinook salmon was harvested in Eastside and Northwest Kodiak districts in June and July. Chinook salmon harvests ranged from a low of 2 fish harvested in Northeast Kodiak District to a high of 1,195 fish harvested in the Northwest Kodiak District.

SOCKEYE SALMON

The sockeye salmon harvest of 1,820,350 fish (Table 6) was below both the forecast of 2,609,500 fish (Table 9) and 10-year average (2008–2017) catch of 2,295,350 fish (Table 6). The average

weight of sockeye salmon sold in the common property fishery was 5.09 lb (Table 11). Approximately 63% of the sockeye salmon harvest (1,156,313 fish) came from the Westside Kodiak fisheries³ (Table 9). Approximately 15% of the sockeye salmon harvest (254,318 fish) came from the Alitak District (Table 9). Approximately 8% of the sockeye salmon harvest (342,888 fish) came from the Spiridon Bay sockeye salmon project fishery (Table 9). Approximately 6% of the sockeye salmon harvest (118,095 fish) came from the Ayakulik fishery (Table 9). There was no sockeye salmon harvest from the Cape Igvak fishery in 2018 (Table 9). The area near the Kitoi Bay Hatchery accounted for a sockeye salmon harvest of 25,381 fish, although an unknown portion of these fish were likely not of hatchery origin.

COHO SALMON

The coho salmon harvest of 438,065 fish (Table 6) was similar to the forecast of 400,200 fish (Table 9) and above the 10-year average (2008–2017) of 296,287 fish (Table 6). The average weight of coho salmon sold in the common property fishery was 8.17 lb (Table 11). Westside Kodiak fisheries (excluding the Southwest Afognak Section) harvested approximately 158,115 coho salmon, above the forecast of 142,900 fish (Table 9). The Eastside/Northend Kodiak coho salmon harvest⁴ of 75,620 fish was above the forecast of 62,000 fish (Table 9). The Afognak nonhatchery harvest of 52,291 coho salmon was above the forecast of 29,400 fish (Table 9). The coho salmon harvest attributed to the Kitoi Bay Hatchery was 129,140 fish, which was similar to the hatchery forecast of 134,000 fish (Table 9).

PINK SALMON

The pink salmon harvest of 5,946,894 fish (Table 6) was below the harvest forecast of 8,700,000 fish (Table 9) and below the recent 5 even-year average (2008–2016) of 9,696,480 fish (Table 6). The average pink salmon weight of 3.85 lb (Table 11) was above the 2017 average weight of 3.7 lb. The Afognak nonhatchery (wild stock) pink salmon harvest of 90,817 fish was well below the harvest projection of 1,449,000 fish. The Westside Kodiak fisheries harvest of 1,658,943 fish accounted for approximately 60% of the total wild KMA pink salmon harvest and was below the Westside Kodiak forecast of 3,534,100 fish (Table 9). The fishery associated with the Kitoi Bay Hatchery accounted for 3,184,120 pink salmon, which was above the forecast of 2,100,000 fish (Table 9). The KRAA did not prosecute a Kitoi Bay cost recovery fishery in 2018 therefore all pink salmon in excess of broodstock needs were harvested in the common property fishery. Additional hatchery-bound pink salmon were probably harvested along the west side and east side of Kodiak and Afognak islands. However, ADF&G does not have a stock separation program for pink salmon and is unable to differentiate stocks.

CHUM SALMON

The chum salmon harvest of 463,834 fish (Table 6) was well below the forecast of 1,017,000 fish (Table 9) and well below the 10-year average (2008–2017) of 848,458 fish (Table 6). The average weight of the chum salmon harvested in the common property fishery was 8.04 lb (Table 11). Westside Kodiak fisheries harvested 106,096 chum salmon, which was well below the forecast of

³ From the Southwest Afognak Section (251-10 and -20) and the Northwest Kodiak District (except the Spiridon and Settler Cove Special Harvest Areas), Inner and Outer Karluk sections, plus 50% of the Halibut Bay Section from June 21 to July 15 and 100% after July 31, minus the estimated contribution bound for the Spiridon SHA.

⁴ From the Eastside Kodiak District (all 258s and 259-40 to 259-42), Northeast Kodiak District (259-21 to 259-25), and the North Cape, Anton Larsen Bay, Sharatin Bay, and Kizhuyak sections, plus part of the Central Section (259-35–259-39).

330,200 fish (Table 9). The Eastside/Northend Kodiak fishery total harvest of 85,459 chum salmon was well below the forecast of 230,400 fish. The Mainland District total harvest of 17,816 chum salmon was also well below the forecast of 97,700 fish (Table 9). The chum salmon harvest attributed to the Kitoi Bay Hatchery of 166,041 fish below the forecast of 263,000 fish (Table 9).

EXVESSEL VALUE

The estimated total exvessel value of the 2018 KMA commercial salmon fishery (not including cost recovery) was \$27,263,475 (Table 11), which was well below the 10-year (2008–2017) average exvessel value of \$37,884,989 (Table 12). This exvessel value was based on inseason price estimates and does not reflect additional payments made to fishermen for dock deliveries, refrigerated or iced fish, or postseason adjustments. The average price per pound, by gear and species, can be found in Table 11.

Seine permit holders' gross earnings averaged \$147,748 in 2018 (2008–2017 average \$188,865; Table 12). Gillnet permit holders' gross earnings averaged \$35,118 (2008–2017 average \$43,615; Table 12), whereas the beach seine permit holders' earnings were confidential in 2018 (Table 12).

TEST FISHERY AND COST RECOVERY

The ADF&G test fishery program harvested salmon in 2018 to help cover the cost of managing the commercial salmon fishery. A total of zero Chinook, 7 sockeye, 682 coho, 15,844 pink, and 370 chum salmon were harvested under the ADF&G test fishery program with a total exvessel value of \$23,665.

The KRAA has conducted a cost-recovery program to pay for operational costs at the Kitoi Bay Hatchery from 1987 to 1989 and 2003 to 2017. In 2018, KRAA did not conduct a cost-recovery program in the vicinity of the Kitoi Bay Hatchery but did conduct the Spiridon Bay SHA cost recovery fishery.⁵ The cost-recovery program in Spiridon Bay SHA (in Telrod Cove) was conducted to cover the cost of running the enhancement program for Spiridon Lake. From July 6 to July 29, 51,790 sockeye, 2,652 pink, and 299 chum salmon were harvested in this program.

NONCOMMERCIAL SALMON HARVESTS

SUBSISTENCE SALMON FISHERY

Subsistence salmon permits are available to Alaska residents and are issued annually to obtain harvest data. Since 1989, Kodiak staff has mailed out permits, regulations, and a map showing closed-water areas to all permit holders who returned their harvest report from the previous year. Subsistence fishermen are required to return their permits to ADF&G after the salmon season, listing areas fished by date and salmon harvest by species. With few restrictions, the entire KMA was open to subsistence salmon fishing in recent years. Only the freshwater systems of Afognak Island (which are relatively small, easily accessible, and at risk of overexploitation) and some areas near heavily exploited salmon systems were closed to subsistence salmon fishing by regulation (5 AAC 01.525).

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⁵ 2018 Annual Management Plan Kitoi Bay Hatchery. Unpublished. Available from Kodiak Regional Aquaculture Association, Kodiak, Alaska.

²⁰¹⁸ Annual Management Plan Pillar Creek Hatchery. Unpublished. Available from Kodiak Regional Aquaculture Association, Kodiak, Alaska.

Historically, the most utilized subsistence fishery areas are on the north end of Kodiak Island, the saltwater areas in proximity to the Buskin and Pasagshak rivers, and the southeast side of Afognak Island in Afognak Bay targeting Litnik fish, although all three systems required restrictions to subsistence fishing in 2018 due to low returns of sockeye salmon. The 2018 subsistence harvest data were not summarized at the time this report was written. In 2017, 1,478 permit holders returned subsistence permits and reported a harvest of 25,158 salmon, including 80 Chinook, 22,436 sockeye, 1,918 coho, 446 pink, and 278 chum salmon (Table 13). Reported subsistence salmon harvests averaged 28,807 fish annually for the 10-year period 2007–2016 (Table 13). Sockeye salmon have accounted for 83% of the recent 10-year average harvest (23,824 fish), followed by coho salmon at 12% (3,462 fish), pink salmon at 4% (1,154 fish), and both Chinook salmon (149 fish) and chum salmon (219 fish) at about 1% (Table 13).

RETENTION OF SALMON TAKEN IN COMMERCIAL FISHERIES

In the KMA, commercial fishermen are required to report the number of salmon taken but not sold on an ADF&G fish ticket at the time of landing (5 AAC 18.355(b)). Additionally, under *General Provisions* (5 AAC 39.010), "A person engaged in commercial fishing may retain finfish from lawfully taken commercial catch for that person's own use, including for the use as bait in a commercial fishery. Finfish retained under this section may not be sold or bartered."

In 2018, 75 permit holders reported retaining 6,774 salmon from their commercial harvest for "home pack" or personal use. This included 92 Chinook, 3,802 sockeye, 2,630 coho, 214 pink, and 36 chum salmon (Table 14).

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TABLES AND FIGURES

Table 1.–Estimated number of streams with documented salmon production by district, and species, in the Kodiak Management Area.

Management	Number of		Number of streams with each species ^b						
District	streams ^a	Chinook	Sockeye	Coho	Pink	Chum			
Afognak	125	0	25	96	104	16			
Northwest Kodiak	70	0	5	33	69	29			
Southwest Kodiak	11	2	4	6	11	6			
Alitak	34	1	8	16	31	22			
Eastside Kodiak	107	1	9	48	93	58			
Northeast Kodiak	43	2	5	34	33	15			
Mainland	103	0	7	21	101	70			
TOTAL	493	6	60	254	441	215			

^a The State of Alaska's Division of Sport Fish identifies over 1,200 streams in the Kodiak Management Area that have documented use by anadromous fish (Johnson and Blossom 2018). Many of these streams are very small and may only be used by pink salmon in years with very large returns.

^b These estimates are based on current knowledge and are expected to change as more system-specific data are collected.

Table 2.–Estimated commercial harvest of salmon from Kodiak Regional Aquaculture Association projects in the Kodiak Management Area, 1994–2018.

		Nun	nber of Salmon		
Year	Sockeye	Coho	Pink	Chum	Total
1994	277,884	46,984	2,051,375	10,799	2,387,042
1995	186,371	42,235	4,519,885	215,351	4,963,842
1996	487,900	57,200	979,143	14,189	1,538,432
1997	248,336	110,334	1,213,615	11,029	1,583,314
1998	315,109	148,333	6,272,029	38,118	6,773,589
1999	582,218	116,513	4,057,093	140,896	4,896,720
2000	287,387	133,238	3,659,698	303,783	4,384,106
2001	244,761	151,732	13,126,761	216,266	13,739,520
2002	565,422	209,259	6,696,774	88,724	7,560,179
2003	796,359	144,389	5,533,522	466,205	6,940,475
2004	266,150	128,291	3,962,421	239,610	4,596,472
2005	206,860	151,729	13,603,742	91,814	14,054,145
2006	113,869	168,205	4,158,109	177,548	4,617,731
2007	207,309	125,781	7,884,867	210,699	8,428,656
2008	316,197	120,366	2,118,392	93,025	2,647,980
2009	248,339	154,473	9,080,346	94,905	9,578,063
2010	311,323	116,647	3,292,029	191,998	3,911,997
2011	491,670	70,335	2,174,975	320,578	3,057,558
2012	324,108	49,791	2,971,123	218,794	3,563,816
2013	457,039	53,533	11,772,629	96,909	12,380,110
2014	377,800	231,987	5,779,624	45,621	6,435,032
2015	308,948	49,556	4,957,615	55,266	5,371,385
2016	231,588	12,282	1,122,800	72,890	1,439,560
2017	378,897	34,456	2,003,651	166,915	2,583,919
2018	180,339	131,068	3,199,981	166,324	3,677,712
Average					
2008–2017	344,591	89,343	4,527,318	135,690	5,096,942

Source: ADF&G fish ticket summaries.

Note: Includes harvest from the Kitoi Bay Hatchery (Izhut Bay, Duck Bay, and Kitoi Bay sections [statistical areas 252-30 to 252-32 and 252-35]). SHA harvests are from the returns to the Spiridon Lake project (in the Spiridon SHA, 254-50, and adjacent sections), the Foul Bay SHA (251-41), the Waterfall Bay SHA (251-84), and the Settler Cove SHA (259-35). Includes fish not sold and set aside for personal use by commercial fishermen and cost-recovery harvests.

Table 3.-Comparison of 2018 salmon peak escapements and escapement goals of index streams or districts, by species, in the Kodiak Management Area.

Species		Stream	Esca	Escapement	
	System (or group of systems)	Number	Lower	Upper	Estimate ^a
Chinook				**	
	Karluk ^b	255-101	3,000	6,000	3,155
	Ayakulik ^b	256-201	4,800	8,400	2,149
Sockeye					
	Malina	251-105	1,000	10,000	500
	Afognak	252-342	20,000	50,000	17,601
	Karluk	255-101			
	Early run		150,000	250,000	198,877
	Late run		200,000	450,000	434,402
	Ayakulik	256-201			
	Early run		140,000	280,000	189,008
	Late run		60,000	120,000	77,325
	Upper Station	257-304			
	Early run		43,000	93,000	61,732
	Late run		120,000	265,000	235,669
	Frazer	257-403	75,000	170,000	201,161
	Buskin	259-211	5,000	8,000	4,284
	Pasagshak ^c	259-411	3,000		1,100
	Saltery	259-415	15,000	35,000	19,299
Coho					
	Buskin	259-211	4,700	9,600	4,523
	American	259-231	400		800
	Olds (Sid Olds)	259-242	1,000		1,100
	Pasagshak	259-411	1,200		5,600
Pink					
	Mainland District		250,000	1,000,000	280,400
	Kodiak Archipelago		3,000,000	7,000,000	4,874,342
Chum					
	Kodiak Archipelago		151,000		187,545

^a Escapement estimates in this table are based on the best available information. Some estimates are weir counts. If weir counts are not available, either peak aerial or foot survey counts are depicted. In some cases (such as Malina, for example) the escapement estimate available is a minimal count based on limited information.

^b Escapement of Chinook salmon includes weir counts minus an estimate of sport fish harvest, if any, above the weir.

^c Escapement estimate from aerial survey. The 2018 Pasagshak River sockeye salmon weir count was 2,019 fish.

19

Table 4.–Fish weir installation and removal dates and cumulative salmon weir counts for systems with weirs in the Kodiak Management Area, 2018.

	20	18 Dates		Salmon Species Enumerated				
Weir Location	Installed	Removed	Chinook	Sockeye	Coho	Pink	Chum	
Karluk River ^a	18-May	3-Sep	3,155	633,279	14,533	2,275,207	464	
Ayakulik River	25-May	25-Aug	2,149	266,333	3,333	378,084	11	
Dog Salmon Creek ^b	24-May	8-Aug	66	232,526	58	250,509	2,440	
Frazer Lake Fish Pass ^b	21-May	22-Aug	39	201,161	0	9	0	
Upper Station (Olga Creek) ^c	21-May	18-Sep	0	297,401	17,187	2,120	0	
Litnik (Afognak River)	15-May	12-Aug	0	17,601	2,494	11,400	6	
Buskin River	16-May	8-Sep	0	4,284	4,523	40,366	64	
Lake Louise ^d	1-Jun	17-Sep	0	83	0	3	0	
Saltery River ^e	13-Jun	16-Aug	2	19,299	20	905	9	
Pasagshak River	6-Jun	15-Aug	4	2,019	54	36	70	
Totals	·	·	5,376	1,441,460	42,202	2,958,630	3,064	

^a Count includes post-weir estimate of 158,000 sockeye, 47,000 pink, and 11,000 coho salmon.

b Some sockeye salmon that pass Dog Salmon weir are not counted at Frazer Lake fish pass due to mortality or failure to migrate up the fish pass and are not likely to spawn; the Frazer Lake fish pass count is considered the best escapement estimate of sockeye salmon, and the Dog Salmon sockeye salmon count is omitted from the totals.

^c Upper Station total includes a post-weir estimate of 19,000 sockeye salmon.

d All species of salmon, with the exception of sockeye salmon, were already counted at the lower Buskin River weir and are not included in totals.

^e Saltery system sockeye salmon total reflects 3,546 fish removed for KRAA hatchery broodstock.

Table 5.-Indexed salmon escapements by species in the Kodiak Management Area, 1979–2018.

	Number of salmon								
Year	Chinook	Sockeye	Coho	Pink	Chum	Total			
1979	14,445	1,417,055	94,155	3,063,724	613,325	5,202,704			
1980	5,853	1,816,487	27,300	6,401,258	829,070	9,079,968			
1981	15,657	1,391,588	61,150	3,190,677	741,978	5,401,050			
1982	10,929	1,604,026	86,497	5,370,249	1,023,923	8,095,624			
1983	27,447	1,296,118	100,913	2,095,104	825,564	4,345,146			
1984	14,411	1,470,230	119,811	4,519,966	604,441	6,728,859			
1985	13,891	2,557,363	193,224	3,209,450	723,402	6,697,330			
1986	11,025	2,020,773	160,505	3,926,175	688,705	6,807,183			
1987	23,669	1,544,688	169,554	3,018,455	514,763	5,271,129			
1988	35,015	1,666,319	92,652	3,773,072	614,332	6,181,390			
1989a	26,131	3,021,252	165,387	14,645,387	1,432,609	19,290,766			
1990	25,996	1,978,885	163,717	6,074,372	474,618	8,717,588			
1991	27,306	2,416,005	259,850	4,317,610	887,736	7,908,507			
1992	19,013	1,947,247	287,746	3,512,074	530,128	6,296,208			
1993	22,122	1,679,319	159,998	4,291,581	234,381	6,387,401			
1994	21,591	1,985,432	201,033	3,637,615	521,691	6,367,362			
1995	30,843	1,814,290	231,205	10,498,232	469,856	13,044,426			
1996	21,089	1,803,929	193,074	3,349,738	394,784	5,762,614			
1997	28,534	1,725,309	235,039	3,260,029	459,293	5,708,204			
1998	24,652	1,769,131	234,734	7,088,985	374,381	9,491,883			
1999	26,872	2,112,665	133,398	4,081,686	882,257	7,236,878			
2000	31,362	1,742,208	136,423	4,508,174	888,592	7,306,759			
2001	18,753	1,417,344	250,552	3,390,773	557,925	5,635,347			
2002	20,115	1,604,130	171,471	8,399,602	530,591	10,725,909			
2003	25,548	2,159,040	122,824	5,096,762	380,523	7,784,697			
2004	32,939	1,730,489	71,456	8,786,518	533,091	11,154,493			
2005	13,488	1,515,916	106,363	4,039,674	244,255	5,919,696			
2006	7,467	984,658	64,954	5,842,942	787,549	7,687,570			
2007	8,441	1,260,920	49,848	2,550,653	294,342	4,164,204			
2008	3,916	931,517	66,200	3,174,124	223,907	4,399,664			
2009	4,053	1,118,444	109,190	5,138,889	293,145	6,663,721			
2010	8,569	1,095,458	108,081	3,644,133	300,285	5,156,526			

Table 5.-Page 2 of 2.

			Number of S	Salmon		
Year	Chinook	Sockeye	Coho	Pink	Chum	Total
2011	7,820	1,014,840	83,812	2,780,214	422,130	4,308,816
2012	8,110	1,302,793	119,672	5,524,374	341,334	7,296,283
2013	4,291	1,326,677	77,310	5,071,191	397,499	6,876,968
2014	2,139	1,641,574	85,000	2,987,932	245,920	4,962,565
2015	5,250	1,515,837	38,356	6,369,131	441,576	8,370,150
2016	8,126	1,285,363	65,837	1,764,586	202,485	3,326,397
2017	6,387	1,522,210	83,708	6,089,116	764,323	8,465,744
2018	5,378	1,501,385	186,696	5,154,742	345,745	7,193,946
Average-Previo	us 10 Years:					
2008-2017	5,866	1,275,471	83,717	4,254,369	363,260	5,982,683
Odd Years				5,089,708		
Even Years				3,419,030		
Average-Previo	ous Decades:					
2000-2009	16,608	1,446,467	114,928	5,092,811	473,392	7,144,206
1990-1999	24,802	1,923,221	209,979	5,011,192	522,913	7,692,107
1980-1989	18,403	1,838,884	117,699	5,014,979	799,879	7,789,845
Average-Overa	<u>11:</u>					
1979–2017	17,007	1,646,347	132,872	4,832,929	556,172	7,185,326

Note: Data include peak counts from aerial and foot surveys, plus end-of-season totals from weired systems, except upriver sport harvest of Chinook salmon, which is deducted from weir counts.

^a Commercial fisheries were severely restricted in 1989 due to the M/V Exxon Valdez oil spill. Despite this, 1989 data are included in applicable averages.

Table 6.-Commercial salmon harvest by species in the Kodiak Management Area, 1882-2018.

	Number of salmon ^a								
Year	Chinook	Sockeye	Coho	Pink	Chum	Total			
1882	-	58,800	-	_	-	58,800			
1883	-	188,706	-	-	-	188,706			
1884	-	282,184	-	-	-	282,184			
1885	=	468,580	-	-	-	468,580			
1886	=	646,100	-	-	-	646,100			
1887	=	1,004,500	-	-	-	1,004,500			
1888	=	2,781,100	-	-	-	2,781,100			
1889	=	3,754,735	-	-	-	3,754,735			
1890	=	3,592,707	-	-	-	3,592,707			
1891	-	3,846,388	-	-	-	3,846,388			
1892	-	3,126,459	-	-	-	3,126,459			
1893	-	3,244,609	-	-	-	3,244,609			
1894	-	3,830,336	-	-	-	3,830,336			
1895	-	2,246,966	8,321	-	-	2,255,287			
1896	-	3,328,846	_	_	-	3,328,846			
1897	-	2,785,515	1,500	_	-	2,787,015			
1898	_	2,033,094	19,175	_	-	2,052,269			
1899	1,104	1,934,771	32,475	_	-	1,968,350			
1900	4,838	3,450,480	32,239	_	-	3,487,557			
1901	3,838	4,826,159	· -	2,015	-	4,832,012			
1902	2,932	3,868,101	34,972	, -	-	3,906,005			
1903	1,187	1,826,163	119,541	10,000	-	1,956,891			
1904	3,190	2,875,118	103,136	5,180	-	2,986,624			
1905	2,496	2,142,367	86,913	, -	-	2,231,776			
1906	3,640	3,980,462	23,738	_	-	4,007,840			
1907	4,015	4,232,454	38,059	-	-	4,274,528			
1908	3,028	2,487,848	73,789	286,374	-	2,851,039			
1909	3,907	1,915,230	51,500	153,595	-	2,124,232			
1910	1,598	1,954,717	44,291	215,382	-	2,215,988			
1911	689	2,685,949	21,870	229,551	6,492	2,944,551			
1912	686	2,246,467	17,491	547,171	24,588	2,836,403			
1913	1,082	1,663,163	27,634	590,039	3,822	2,285,740			
1914	1,329	1,255,444	32,063	1,726,411	13,094	3,028,341			
1915	939	1,664,426	51,819	252,073	20,331	1,989,588			
1916	1,038	3,373,055	49,683	3,181,890	28,962	6,634,628			
1917	1,457	3,645,914	30,485	225,335	15,961	3,919,152			
1918	2,021	1,894,466	78,169	2,467,325	81,699	4,523,680			
1919	1,831	1,619,101	104,233	282,715	60,102	2,067,982			
1920	1,637	1,957,636	88,970	1,977,421	55,175	4,080,839			
1921	660	2,857,922	45,764	67,688	24,779	2,996,813			
1922	703	1,097,359	119,724	2,766,257	223,970	4,208,013			
1923	1,915	1,090,117	77,554	928,510	38,653	2,136,749			
1924	1,002	1,407,525	120,686	5,435,091	117,883	7,082,187			
1925	1,911	1,693,057	92,960	2,673,675	212,492	4,674,095			

Table 6.–Page 2 of 4.

Chinook 596 4,358 2,546 3,200 4,991 1,541 1,873 1,140 1,300 1,393 2,548 1,257 1,232 2,272	Sockeye 3,015,366 1,155,202 1,592,003 712,126 466,409 1,183,074 1,058,446 1,428,373 1,828,953 1,613,519 2,657,195	Coho 174,475 151,548 290,645 144,226 228,800 170,075 52,192 91,428 89,588 76,849	Pink 4,606,694 5,297,305 1,535,313 6,108,402 1,651,398 6,839,906 4,719,939 6,573,660 7,641,891	Chum 324,706 417,956 726,480 1,057,662 419,011 183,737 237,023 536,935	Total 8,121,837 7,026,369 4,146,987 8,025,616 2,770,609 8,378,333 6,069,473
4,358 2,546 3,200 4,991 1,541 1,873 1,140 1,300 1,393 2,548 1,257 1,232	1,155,202 1,592,003 712,126 466,409 1,183,074 1,058,446 1,428,373 1,828,953 1,613,519 2,657,195	151,548 290,645 144,226 228,800 170,075 52,192 91,428 89,588	5,297,305 1,535,313 6,108,402 1,651,398 6,839,906 4,719,939 6,573,660	417,956 726,480 1,057,662 419,011 183,737 237,023	7,026,369 4,146,987 8,025,616 2,770,609 8,378,333
2,546 3,200 4,991 1,541 1,873 1,140 1,300 1,393 2,548 1,257 1,232	1,592,003 712,126 466,409 1,183,074 1,058,446 1,428,373 1,828,953 1,613,519 2,657,195	290,645 144,226 228,800 170,075 52,192 91,428 89,588	1,535,313 6,108,402 1,651,398 6,839,906 4,719,939 6,573,660	726,480 1,057,662 419,011 183,737 237,023	4,146,987 8,025,616 2,770,609 8,378,333
3,200 4,991 1,541 1,873 1,140 1,300 1,393 2,548 1,257 1,232	712,126 466,409 1,183,074 1,058,446 1,428,373 1,828,953 1,613,519 2,657,195	144,226 228,800 170,075 52,192 91,428 89,588	6,108,402 1,651,398 6,839,906 4,719,939 6,573,660	1,057,662 419,011 183,737 237,023	8,025,616 2,770,609 8,378,333
4,991 1,541 1,873 1,140 1,300 1,393 2,548 1,257 1,232	466,409 1,183,074 1,058,446 1,428,373 1,828,953 1,613,519 2,657,195	228,800 170,075 52,192 91,428 89,588	1,651,398 6,839,906 4,719,939 6,573,660	419,011 183,737 237,023	2,770,609 8,378,333
1,541 1,873 1,140 1,300 1,393 2,548 1,257 1,232	1,183,074 1,058,446 1,428,373 1,828,953 1,613,519 2,657,195	170,075 52,192 91,428 89,588	6,839,906 4,719,939 6,573,660	183,737 237,023	8,378,333
1,873 1,140 1,300 1,393 2,548 1,257 1,232	1,058,446 1,428,373 1,828,953 1,613,519 2,657,195	52,192 91,428 89,588	4,719,939 6,573,660	237,023	
1,140 1,300 1,393 2,548 1,257 1,232	1,428,373 1,828,953 1,613,519 2,657,195	91,428 89,588	6,573,660		6,069,473
1,300 1,393 2,548 1,257 1,232	1,828,953 1,613,519 2,657,195	89,588		536,935	
1,393 2,548 1,257 1,232	1,613,519 2,657,195		7 641 891	. ,	8,631,536
2,548 1,257 1,232	2,657,195	76,849	7,011,071	661,341	10,223,073
1,257 1,232			10,780,612	381,753	12,854,126
1,257 1,232		183,903	5,647,726	328,218	8,819,590
1,232	1,881,304	164,902	16,787,150	346,238	19,180,851
	1,965,943	154,959	8,397,981	640,119	11,160,234
	1,786,445	112,171	11,741,218	641,693	14,283,799
1,233	1,318,233	148,016	9,997,899	673,265	12,138,646
2,571	1,730,201	199,515	7,601,531	444,521	9,978,339
1,329	1,281,529	106,865	6,092,526	564,924	8,047,173
1,133	1,990,557	59,661	12,479,608	454,205	14,985,164
668	1,817,875	51,675	4,955,354	506,703	7,332,275
2,021	2,041,090	60,122	9,044,544	559,332	11,707,109
129	838,863	56,425	9,545,871	298,486	10,739,774
					10,220,907
					7,593,512
					6,574,251
					6,953,475
					3,102,503
					6,476,278
					6,084,041
					10,082,593
					11,478,081
					4,349,104
					6,195,232
,					5,280,147
					3,047,278
					8,456,274
					4,882,380
					15,748,920
					6,249,556
					13,713,833
					3,691,866
					12,218,293
		10,334 56,629	8,768,122		735,357
1 026		111 17 / 9		750,428	10,337,508
	99 1,401 851 2,127 2,402 1,081 2,991 942 2,428 1,123 1,030 1,942 1,837 1,238 864 1,095 286 1,306 786 599 1,753 1,936	99 993,394 1,401 1,260,465 851 892,336 2,127 920,885 2,402 467,875 1,081 603,677 2,991 317,150 942 325,157 2,428 164,482 1,123 271,249 1,030 234,253 1,942 288,014 1,837 330,087 1,238 362,525 864 407,979 1,095 784,664 286 407,040 1,306 498,488 786 346,237 599 631,646	99 993,394 76,230 1,401 1,260,465 32,364 851 892,336 53,737 2,127 920,885 40,653 2,402 467,875 48,792 1,081 603,677 51,567 2,991 317,150 41,681 942 325,157 66,430 2,428 164,482 34,582 1,123 271,249 52,844 1,030 234,253 34,995 1,942 288,014 20,555 1,837 330,087 14,512 1,238 362,525 54,308 864 407,979 28,579 1,095 784,664 54,583 286 407,040 57,011 1,306 498,488 35,535 786 346,237 26,672 599 631,646 67,700 1,753 308,756 10,354	99 993,394 76,230 8,856,666 1,401 1,260,465 32,364 5,968,487 851 892,336 53,737 4,927,779 2,127 920,885 40,653 5,304,701 2,402 467,875 48,792 2,100,377 1,081 603,677 51,567 4,576,726 2,991 317,150 41,681 5,174,645 942 325,157 66,430 8,439,231 2,428 164,482 34,582 10,794,164 1,123 271,249 52,844 3,318,841 1,030 234,253 34,995 4,716,482 1,942 288,014 20,555 4,038,938 1,837 330,087 14,512 1,967,058 1,238 362,525 54,308 6,737,817 864 407,979 28,579 3,926,023 1,095 784,664 54,583 14,113,851 286 407,040 57,011 5,480,158 1,306 4	99 993,394 76,230 8,856,666 294,518 1,401 1,260,465 32,364 5,968,487 330,795 851 892,336 53,737 4,927,779 699,548 2,127 920,885 40,653 5,304,701 685,109 2,402 467,875 48,792 2,100,377 483,057 1,081 603,677 51,567 4,576,726 1,243,227 2,991 317,150 41,681 5,174,645 547,574 942 325,157 66,430 8,439,231 1,250,833 2,428 164,482 34,582 10,794,164 482,425 1,123 271,249 52,844 3,318,841 705,047 1,030 234,253 34,995 4,716,482 1,208,472 1,942 288,014 20,555 4,038,938 930,698 1,837 330,087 14,512 1,967,058 733,784 1,238 362,525 54,308 6,737,817 1,300,386 864

Table 6.–Page 3 of 4.

	Number of salmon ^a							
Year	Chinook	Sockeye	Coho	Pink	Chum	Total		
1970	1,089	917,045	66,421	12,035,549	919,102	13,939,206		
1971	920	478,479	22,844	4,334,492	1,541,444	6,378,179		
1972	1,300	222,408	16,587	2,478,064	1,163,426	3,881,785		
1973	800	167,341	3,573	511,708	317,921	1,001,343		
1974	545	418,761	13,631	2,647,196	249,294	3,329,427		
1975	101	136,418	23,659	2942801	84,431	3,187,410		
1976	766	641,484	23,714	11,077,992	740,495	12,484,451		
1977	585	623,468	27,920	6,252,405	1,072,313	7,976,691		
1978	3,228	1,071,782	48,795	15,004,065	814,345	16,942,215		
1979	1,907	630,756	140,629	11,285,809	358,336	12,417,437		
1980	529	651,394	139,154	17,290,615	1,075,557	19,157,249		
1981	1,418	1,288,949	121,544	10,336,747	1,345,313	13,093,971		
1982	1,214	1,203,787	344,823	8,089,780	1,262,587	10,902,191		
1983	3,839	1,231,989	157,612	4,603,371	1,085,165	7,081,976		
1984	4,657	1,950,439	229,524	10,844,293	649,092	13,678,005		
1985	4,970	1,842,731	284,166	7,334,825	430,757	9,897,449		
1986	4,381	3,188,046	168,690	11,807,727	1,134,372	16,303,216		
1987	4,613	1,794,224	192,433	4,920,365	680,994	7,592,629		
1988	22,374	2,698,349	303,267	14,262,355	1,426,400	18,712,745		
1989	106	1,289,511	2,599	6,825,124	19,972	8,137,312		
1990	18,808	5,247,569	293,819	5,983,812	577,748	12,121,756		
1991	22,234	5,702,754	324,860	16,642,836	1,029,057	23,721,741		
1992	24,299	4,166,762	280,085	3,310,639	679,540	8,461,325		
1993	41,029	4,377,523	313,467	34,019,390	588,328	39,339,737		
1994	22,576	2,876,878	296,311	8,162,564	738,851	12,097,180		
1995	18,704	4,487,568	307,795	42,849,294	1,522,786	49,186,147		
1996	13,071	4,968,954	201,836	3,486,930	543,729	9,214,520		
1997	18,728	2,503,423	381,005	11,035,023	520,264	14,458,443		
1998	17,341	3,623,031	425,143	22,062,465	316,107	26,444,087		
1999	18,299	4,650,738	296,979	11,898,307	913,817	17,778,140		
2000	12,293	2,905,403	332,998	9,927,374	1,194,414	14,372,482		
2001	23,827	2,657,601	407,977	19,567,052	1,053,691	23,710,148		
2002	19,263	1,824,848	496,073	18,327,818	650,144	21,318,146		
2003	18,531	4,041,886	339,457	14,065,615	1,151,757	19,617,246		
2004	28,899	4,165,880	489,871	21,440,641	1,121,855	27,247,146		
2005	14,411	3,047,142	396,030	30,139,434	477,416	34,074,433		
2006	20,283	1,583,876	553,524	31,693,347	1,081,989	34,933,019		
2007	17,222	2,012,564	356,063	24,809,213	728,912	27,923,974		
2008	17,176	1,819,143	300,793	8,788,655	908,035	11,833,802		
2009	7,219	1,726,971	288,744	27,648,943	955,808	30,627,685		
2010	14,550	1,436,606	266,431	8,864,796	734,806	11,317,189		
2011	18,454	2,266,651	188,474	16,642,402	823,202	19,939,183		
2012	14,785	2,232,441	208,514	16,873,244	866,381	20,195,365		

Table 6.-Page 4 of 4.

-	Number of salmon ^a									
Year	Chinook	Sockeye	Coho	Pink	Chum	Total				
2013	34,028	2,573,757	268,799	28,192,164	794,054	31,862,802				
2014	8,382	3,259,037	472,035	10,674,898	336,572	14,750,924				
2015	8,087	3,097,344	396,145	33,024,992	770,539	37,297,107				
2016	7,478	2,063,566	206,542	3,280,808	403,881	5,962,275				
2017	7,101	2,476,502	366,395	27,103,276	1,891,299	31,844,573				
2018	3,895	1,820,350	438,065	5,946,894	463,834	8,673,038				
Averages b										
2008-2017	13,726	2,295,202	296,287	18,109,418	848,458	21,563,091				
Even Years, 2	008-2016			9,696,480						
Odd Years, 20	009-2017			26,063,543						
1882-2017	5,872	1,865,514	146,684	8,912,784	635,973	11,047,716				
1949-2017	8,785	1,748,068	186,553	11,784,359	815,522	14,543,288				
Even Years, 1	950-2016			10,485,699						
Odd Years, 19	949–2017			13,083,018						

Source: 1882–1947 data are from processors' case pack information. 1948–2018 data are from ADF&G fish ticket summaries and are considered more accurate than previous data.

^a Harvest numbers include cost-recovery harvest but do not include subsistence or test fishery catches or commercially caught fish retained for personal use.

 $^{^{\}rm b}$ Averages do not include 1989. Commercial fisheries were severely limited due to the M/V Exxon Valdez oil spill.

Table 7.—Summary of limited entry permit activity in the commercial salmon fishery by gear type in the Kodiak Management Area, 1980–2018.

	Purse se	eine	Beach se	eine	Set gillr	net		Total	
Year	Available	Fished	Available	Fished	Available	Fished	Available	Fished	Percent
1980	387	370	35	33	187	168	609	571	94
1981	387	325	35	30	187	169	609	524	86
1982	386	345	35	30	187	170	608	545	90
1983	383	342	35	27	188	174	606	543	90
1984	384	296	35	25	188	168	607	489	81
1985	384	270	35	21	188	169	607	460	76
1986	385	287	35	14	187	174	607	475	78
1987	386	298	35	18	188	173	609	489	80
1988	387	323	35	21	188	180	610	524	86
1989 ^a	387	5	35	1	189	87	611	93	15
1990	388	354	35	21	189	184	612	559	91
1991	388	348	35	17	189	185	612	550	90
1992	387	335	35	12	189	178	611	525	86
1993	387	324	36	9	190	176	613	509	83
1994	387	285	36	5	190	169	613	459	75
1995	386	312	36	8	189	173	611	493	81
1996	384	261	36	6	189	172	609	439	72
1997	384	261	36	5	188	174	608	440	72
1998	384	217	36	2	188	171	608	390	64
1999	384	220	36	4	188	173	608	397	65
2000	383	223	34	2	188	173	605	398	66
2001	384	182	34	0	188	172	606	354	58
2002	382	149	34	0	188	93	604	242	40
2003	377	143	33	0	188	161	598	304	51
2004	375	140	32	0	188	164	595	304	51
2005	374	135	31	0	188	165	593	300	51
2006	375	130	31	1	188	153	594	284	48
2007	377	140	31	3	188	157	596	300	50
2008 ^b	374	128	31	0	188	148	593	276	47
2009 ^b	374	157	31	1	188	132	593	290	49
2010 ^b	374	155	31	2	188	158	593	315	53
2011	376	175	31	7	188	157	595	339	57
2012	376	168	31	4	188	164	595	336	56
2013	376	170	31	3	188	152	595	325	55
2014	373	184	31	3	188	146	592	333	56

Table 7.–Page 2 of 2.

	Purse	Seine	Beach	Seine	Set Gi	llnet		Tota	1
Year	Available	Fished	Available	Fished	Available	Fished	Available	Fished	Percent
2015	372	180	31	1	188	154	591	335	57
2016	374	165	30	3	188	137	592	305	52
2017	375	163	30	3	188	143	593	309	52
2018	375	151	30	2	188	140	593	293	49
Recent 10-ye	ear Average:								
2008-2017	375	162	31	3	188	150	593	315	53
Average-Pre	vious Decade	<u>s:</u>							
2000-2009	378	153	32	1	188	152	598	305	51
1990-1999	386	292	36	9	189	176	611	476	78
1980–1988 ^a	385	317	35	24	188	172	608	513	84
Average ^a -Ov	verall:								
1980-2017	381	234	34	9	188	163	603	406	67

Source: Commercial Fisheries Entry Commission Summary Information and Reports (CFEC 2018) and ADF&G fish ticket summaries.

^a Commercial fisheries were severely restricted in 1989 due to the M/V Exxon Valdez oil spill. 1989 data are not included in averages.

^b From 2008 to 2010, a provision allowing set gillnet permit holders to fish two permits has resulted in the second permit not being recorded in the harvest data. This provision was discontinued before the 2011 season.

Table 8.–Alaska Board of Fisheries–approved salmon management plans for the Kodiak Management Area, 2018.

	Year	Management	Dates in
Management plan	initiated	units affected	effect
Cape Igvak Salmon	1978	Cape Igvak Section Wide Bay Section	6/5-7/25
Alitak District Salmon	1987	Alitak District	6/1-10/31
Westside Kodiak Salmon	1990	NW Kodiak District SW Kodiak District SW Afognak Section	6/1–10/31
Crescent Lake Coho Salmon	1990	Special Harvest Area in the Central Section near Port Lions	7/15–10/31
North Shelikof Strait Sockeye Salmon	1991	SW Afognak Section NW Afognak Section Shuyak Island Section Big River Section Hallo Bay Section Inner and Outer Kukak Bay Section	7/6–7/25 ections
Spiridon Bay Sockeye Salmon	1993	Special Harvest Area in Spiridon Bay Section	6/9–10/31
Eastside Afognak Salmon	1993	Southeast Afognak Section Kitoi Bay Section Izhut Bay Section Duck Bay Section Raspberry Strait Section	6/1–10/31
Eastside Kodiak Salmon	1995	Eastside Kodiak District NE Kodiak District	6/14–10/31
Afognak Shuyak Salmon	1995	Perenosa Bay Section Shuyak Island Section NW Afognak Section	6/1–10/31
Mainland District Salmon	1999	Mainland District	6/14–10/31

Table 9.—Projected versus actual 2018 commercial salmon harvest, by species and fishery, for the Kodiak Management Area.

			Number of Sa	lmon		
	Chinook	Sockeye	Coho	Pink	Chum	Total
Projected Harvest 2018 ^a	8,000	2,609,500	400,200	8,700,000	1,017,000	12,734,700
Actual Harvest 2018	3,895	1,820,350	438,065	5,946,894	463,834	8,673,038
		_		3 Harvest		
Fishery			Projection b		Actual c	
Early Sockeye Salmon Fisher		except Cape Ig		/26)		
Kitoi Bay Hatcher	y ^d		24,500		10,282	
Cape Igvak ^e			67,500		0	
Karluk ^f			192,000		139,292	
Ayakulik ^g			115,500		98,796	
Alitak District h			75,000		81,002	
Minor enhanceme	nt ⁱ		29,000		6,168	
Spiridon ^j			137,000		57,792	
Other ^k			358,000	<u>-</u>	31,946	
Subtotal			998,500		425,278	
Late Sockeye Salmon Fisheri	es (7/16–10/3	1 except Cape 1	gvak which is 7/8–	-7/25)		
Kitoi Bay Hatcher	y ^d		24,500		15,099	
Cape Igvak ^e			52,000		0	
Karluk ^f			622,500		1,017,021	
Ayakulik ^g			78,000		19,299	
Alitak District h			148,000		196,526	
Spiridon ^j			137,000		90,831	
Other k			549,000	_	56,296	
Subtotal			1,611,000		1,395,072	
Total Sockeye			2,609,500		1,820,350	
Coho Salmon Fisheries						
Kitoi Bay Hatcher	y ^d		134,000		129,140	
Afognak (non-hate	chery) 1		29,400		52,291	
Westside Kodiak n	n		142,900		158,115	
Alitak District			10,600		21,403	
Eastside/Northend	Kodiak n		62,000		75,620	
Mainland District		_	21,300	_	1,496	
Subtotal			400,200		438,065	

Table 9.—Page 2 of 3.

	2018 Harvest		
Fishery	Projection ^b	Actual c	
Pink Salmon Fisheries			
Kitoi Bay Hatchery d	2,100,000	3,184,120	
Afognak (non-hatchery) ¹	1,449,000	90,817	
Westside Kodiak ^m	3,534,100	1,658,943	
Alitak District ⁿ	760,800	780,486	
Eastside/Northend Kodiak ⁿ Mainland	747,900	205,202	
District	108,200	27,326	
Subtotal/Wild stock pinks	6,600,000	2,762,774	
Subtotal/all pinks	8,700,000	5,946,894	
Chum Salmon Fisheries			
Kitoi Bay Hatchery d	263,000	166,041	
Afognak (non-hatchery) ¹	61,400	5,119	
Westside Kodiak ^m	333,200	160,096	
Alitak District	31,300	29,303	
Eastside/Northend Kodiak ⁿ Mainland	230,400	85,459	
District	97,700	17,816	
Subtotal	1,017,000	463,834	
Grand Total °	12,734,700	8,673,038	

^a Includes commercial harvest, test fisheries, and cost-recovery harvests, but does not include subsistence, sport, or personal use fisheries.

^b Projected harvests for enhanced and major sockeye salmon systems are based on formal forecasts for those individual stocks (total run minus escapement); the projected harvest from minor sockeye salmon systems and other salmon species are based on less formal escapement-to-return relationships, environmental factors, and interspecies competition (Brenner et al. 2018).

^c Actual harvest is the number of fish taken in a particular geographic area, not the catch assigned to an individual salmon stock.

^d From the Duck Bay, Izhut Bay, and Inner and Outer Kitoi Bay sections only.

^e From the Cape Igvak Section. Early run is from the beginning of the season through June 26. Late run is from July 8 to July 25.

From the Southwest Afognak Section, Northwest Kodiak District (except for Spiridon and Settler Cove Special Harvest Areas), Inner and Outer Karluk sections, plus 50% of Halibut Bay Section from June 21 to July 15 and 100% after July 31 minus the estimated contribution from the Spiridon SHA. Includes the majority of Karluk sockeye salmon harvest.

From the Outer and Inner Ayakulik sections, plus 50% of Halibut Bay Section from June 21 to July 15 and 100% from July 16–31.

^h From the Alitak District.

ⁱ From the Foul Bay, Waterfall Bay, and Settler Cove Special Harvest Areas.

^j From the Spiridon Bay Special Harvest Area (Telrod Cove), plus an estimate of the Spiridon-bound sockeye salmon contributing to the Westside Kodiak fishery.

Table 9.-Page 3 of 3.

- k Includes sockeye salmon harvested from minor systems at Inner and Outer Ugak Bay (Saltery), Buskin River, Perenosa Bay (Portage), Northwest Afognak (Thorsheim and Long Lagoon), Big River (Swikshak), and Outer Kukak Bay (Kaflia and Kuliuk) sections and migrating fish of undetermined origin.
- ¹ From the Afognak District except the Duck Bay, Izhut Bay, and Inner and Outer Kitoi Bay sections.
- ^m From the Southwest Kodiak District (all 255s and 256s) and the Northwest Kodiak District (all 253s and 254s), except for the North Cape, Anton Larsen Bay, Sharatin Bay, and Kizhuyak Bay sections and part of the Central Section (259-30 to 259-39).
- From the Eastside Kodiak District (all 258s, and 259-40 to 259-42), Northeast Kodiak District (259-21 to 259-27, 259-10), and the North Cape, Anton Larsen Bay, Sharatin Bay and Kizhuyak Bay sections, plus part of the Central Section (259-30 to 259-39)
- ^o Includes the projected 2018 harvest of 8,000 Chinook salmon and the actual harvest of 3,895 Chinook salmon.

Table 10.–Commercial salmon buyers and processing plants active in the Kodiak Management Area, by geographic area and type, 2018.

	Shor	e-based Proces	sors
	Kodiak	Kodiak	Other
Buyers/Processors	City	Borough	Areas
Icicle Seafoods		X	
Alaska Pacific Seafoods	X		
International Seafoods of Alaska	X		
Ocean Beauty Seafoods Kodiak	X		
Ocean Beauty Seafoods Alitak		X	
Adelaide Sage Fisheries		X	
Pacific Seafoods Kodiak	X		
Trident Star of Kodiak	X		
Old Harbor Finest		X	
Half Moon Bay Fisheries		X	
Kodiak Wildsource	X		
Richard Blanc Akhiok Skiff		X	
Peterson Plus		X	
Adelia Myrick		X	
Broken Point Setnet Site		X	
Totals	6	9	0

Table 11.—Commercial salmon harvest and value, by gear and species, in the Kodiak Management Area, 2018.

			Nun	nber of Salmon			
	Chinook	Sockeye	Coho	Pink	Chum	Total	%
Purse							
Total # a	3,567	1,309,676	392,993	5,499,705	410,634	7,616,575	88.4
Avg. wt.	<u>6.49</u>	<u>4.99</u>	<u>8.19</u>	<u>3.84</u>	<u>7.99</u>		
Total lbs. a	23,154	6,535,833	3,218,594	21,096,075	3,279,105	34,152,761	87.1
Avg. \$/lb. b	\$0.73	<u>\$1.52</u>	<u>\$0.76</u>	<u>\$0.39</u>	<u>\$0.51</u>		
Exvessel Value (\$)	\$16,861.74	\$9,958,877.50	\$2,433,932.97	\$8,240,337.86	\$1,659,886.23	\$22,309,896.29	81.8
# of Permits = 151							
Average Value (\$)	\$111.67	\$65,952.83	\$16,118.76	\$54,571.77	\$10,992.62	\$147,747.66	
Percent (%)	0.1	44.6	10.9	36.9	7.4	100.0	
Beach Seine ^c							,
Total #							
Avg. wt.							
Total lbs.							
Avg. \$/lb.							
Exvessel Value (\$)							
# of Permits = 2							
Average Value (\$)							
Percent (%)							
Set Gillnet							
Total # a	328	454,184	45,072	443,800	52,893	996,277	11.6
Avg. wt.	9.60	<u>5.37</u>	<u>7.95</u>	4.01	8.44		
Total lbs. a	3,149	2,440,025	358,453	1,777,894	446,506	5,026,027	12.8
Avg. \$/lb. b	<u>\$0.64</u>	<u>\$1.62</u>	<u>\$0.61</u>	<u>\$0.28</u>	<u>\$0.55</u>		
Exvessel Value (\$)	\$2,028.48	\$3,940,769.70	\$220,032.07	\$506,086.42	\$247,578.20	\$4,916,494.87	18.0
# of Permits = 140							
Average Value (\$)	\$14.49	\$28,148.35	\$1,571.66	\$3,614.90	\$1,768.42	\$35,117.82	
Percent (%)	0.0	80.2	4.5	10.3	5.0	100.0	
Total All Gear							
Total # a	3,895	1,768,560	438,065	5,944,242	463,535	8,618,297	100.0
Avg. wt.	6.75	<u>5.09</u>	<u>8.17</u>	3.85	<u>8.04</u>		
Total Lbs. a	26,303	8,999,546	3,577,047	22,876,644	3,725,680	39,205,220	100.0
Avg. \$/lb. b	\$0.72	<u>\$1.55</u>	<u>\$0.74</u>	<u>\$0.38</u>	<u>\$0.51</u>		
Exvessel Value (\$)	\$18,890.22	\$13,935,652.95	\$2,653,965.04	\$8,747,467.52	\$1,907,499.62	\$27,263,475.36	100.0

Numbers and pounds of fish are derived from ADF&G fish ticket summaries. There were 7,059 fish tickets generated in 2018; each ticket represents a landing. Each gear type had the following landings: Purse Seine – 3,447; Beach Seine – 18; Set Gillnet – 3,594. Numbers do not include commercially harvested salmon retained for personal use or subsistence, sport fishery, or cost-recovery harvests.

9.7

32.1

7.0

51.1

% of Total Value

0.1

^b Figures for average price per pound are based on fish ticket information. Some fish tickets may not show price per pound figures. These average prices may not reflect payments made to fishermen for refrigerated or iced fish, dock deliveries, or postseason settlements.

^c Confidential.

Table 12.—Commercial salmon harvest, in numbers of fish, exvessel value of the harvest in dollars, and value of average permit holder harvest by gear type, in the Kodiak Management Area, 2006–2018.

	Total	Total	Avera	verage Exvessel Value ^c			
Year	Catcha	Value ^b	Purse Seine	Gillnet	Beach Seine		
2006	32,595,862	\$24,820,388	\$150,038	\$33,926	d		
2007	26,239,484	\$28,174,695	\$148,504	\$41,404	\$3,484		
2008	10,127,638	\$25,806,691	\$143,819	\$43,202	\$0		
2009	28,338,446	\$33,698,297	\$174,566	\$44,918	d		
2010	10,291,590	\$24,269,085	\$130,009	\$25,728	d		
2011	18,228,922	\$44,247,720	\$225,633	\$31,155	\$13,750		
2012	19,032,409	\$44,988,487	\$219,164	\$52,084	\$16,367		
2013	30,145,552	\$59,391,598	\$304,526	\$55,673	\$24,487		
2014	13,995,803	\$42,806,102	\$183,451	\$61,504	\$23,796		
2015	34,353,663	\$34,381,769	\$163,566	\$29,953	d		
2016	5,031,781	\$14,509,665	\$66,243	\$25,972	\$7,111		
2017	29,978,602	\$54,750,472	\$277,675	\$65,957	\$19,216		
2018	8,618,297	\$27,263,475	\$147,748	\$35,118	d		
Recent 10-year	Averagee						
2008–2017	19,952,441	\$37,884,989	\$188,865	\$43,615	\$14,961		

^a Number of fish. Does not include fish retained for personal use, ADF&G test fishery, or cost-recovery harvests.

^b Exvessel value is based on inseason price estimates and do not include postseason adjustments or are adjusted for inflation.

^c Exvessel values are based on fish ticket information. These average values may not reflect payments made to harvesters for iced fish or dock deliveries and do not include any postseason adjustments or adjustments due to inflation.

^d Confidential data.

^e Beach Seine recent 10-year average exvessel value does not include years in which no permit made a delivery.

Table 13.–Subsistence salmon fishery harvest from ADF&G permit reports, by species, for the Kodiak Management Area, 1990–2018.

	Permits	Permits	Percent		Number of Salmon							
Year	Issued	Returned	Returned	Chinook	Sockeye	Coho	Pink	Chum	Total			
1991	_a	2,660	-	177	21,835	8,208	1,743	714	32,677			
1992	_a	2,614	-	318	20,684	8,643	1,646	643	31,934			
1993	_a	1,774	-	243	19,471	7,176	2,696	838	30,424			
1994 ^c	2,550	1,518	60	205	17,962	7,491	1,758	440	27,856			
1995 °	1,950	1,218	62	175	19,416	5,603	1,548	293	27,035			
1996 °	1,567	1,413	90	253	28,287	5,117	1,125	381	35,163			
1997 °	2,098	1,596	76	383	33,293	6,369	1,458	234	41,737			
1998 ^c	1,845	1,048	57	350	20,459	5,348	1,412	214	27,783			
1999 °	1,422	1,239	87	397	26,534	4,974	1,229	388	33,522			
2000 ^c	1,710	1,442	84	351	31,667	6,383	977	375	39,753			
2001 °	2,376	1,975	83	273	33,878	5,920	1,158	427	41,656			
2002 °	2,276	2,051	90	588	33,844	6,175	1,665	350	42,622			
2003 °	2,268	2,042	90	510	32,193	6,098	1,509	388	40,698			
2004 °	2,239	2,050	92	379	30,503	5,857	1,403	261	38,403			
2005 °	2,290	1,949	85	434	27,664	7,703	2,350	592	38,743			
2006 ^c	2,096	1,911	91	280	22,985	6,640	1,827	441	32,173			
2007 °	2,096	1,927	92	207	25,656	4,715	1,585	266	32,429			
2008 °	2,037	1,738	85	159	21,852	4,570	1,180	186	27,947			
2009 °	1,926	1,777	92	176	23,018	4,125	1,919	342	29,580			
2010 °	2,022	1,890	93	158	22,037	4,188	1,263	273	27,919			
2011 °	2,211	1,999	90	112	33,958	2,344	1,154	166	37,734			
2012 °	2,121	1,870	88	54	24,074	2,920	1,154	166	28,368			
2013 °	2,080	1,698	82	119	27,881	2,528	826	175	31,529			
2014 ^c	1,996	1,674	84	184	22,815	3,916	572	185	27,672			
2015 °	1,798	1,516	84	186	16,043	3,045	1,168	271	20,713			
2016 °	1,782	1,523	85	135	20,902	2,267	715	160	24,179			
2017 °	1,729	1,478	85	80	22,436	1,918	446	278	25,158			
Recent 10-ye	ar Average	2										
2007-2016	2,007	1,761	88	149	23,824	3,462	1,154	219	28,807			
species comp	osition by	percent		1%	83%	12%	4%	1%	100%			
Averages b -	Previous D	<u>Decades</u>										
1990-1999	1,905	1,742	91	263	22,590	6,756	1,622	480	31,448			
1980-1988	1,259	1,076	85	119	14,481	6,038	2,450	707	23,677			
1970–1979	973	618	64	81	8,808	3,770	3,024	453	16,053			
Average b – C	<u>Overall</u>											
1978–2016	1,781	1,562	80	215	21,706	5,496	1,756	450	29,623			

Source: 1981 and 1986 to 2018 data is from the ADF&G subsistence permit database. Data from all other years is from Area Management Reports (AMRs). In some cases, AMRs may show slightly higher harvests than the permit database, likely due to late permits that may not have been entered into the system. The harvest information is only from those permits that were returned, so it may not represent the total KMA subsistence salmon harvest.

^a Permits were mailed to all previous applicants, totaling approximately 2,800. Many were returned as undeliverable. Those names were removed from subsequent mailing lists. Accurate counts of the number of permits issued were not kept.

b In 1989 harvest patterns were unusual due to the M/V *Exxon Valdez* oil spill. 1989 data is not included in averages. There was also an Exxon-sponsored subsistence fishery in Karluk Lagoon, and those harvests are not included. Harvest totaled an additional 1 Chinook, 13,329 sockeye, 523 coho, 47 pink, and 19 chum salmon.

^c In 1994, the salmon and shellfish subsistence permitting programs were merged. Since then, the total number of permits includes permits mailed to all previous permit holders and permits issued by ADF&G staff in the City of Kodiak and Kodiak Island villages.

Table 14.—Retention of salmon taken in commercial salmon fisheries but not sold, by species, for the Kodiak Management Area, 1997–2018.

			Number of Salmon ^a							
Year	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total		
1997	10	10	7	678	91	6	2	784		
1998	4	5	8	26	9	0	0	43		
1999 ^b										
2000 b										
2001	9	14	16	465	1,215	0	33	1,729		
2002	33	56	57	5,447	7,542	566	0	13,612		
2003 °	36	87	72	11,025	12,310	1,492	86	24,985		
2004	13	39	8	3,052	290	253	10	3,613		
2005	16	37	54	4,432	811	4,385	11	9,693		
2006	31	52	100	1,442	2,786	1,140	128	5,596		
2007	13	25	26	1,577	520	2,246	8	4,377		
2008	19	40	76	2,513	681	0	0	3,270		
2009	23	38	49	1,393	936	1,002	6	3,386		
2010	42	75	160	2,330	2,976	6,267	15	11,748		
2011	57	117	161	1,314	2,009	6,390	67	9,941		
2012	57	137	195	4,116	1,971	1,413	31	7,726		
2013	64	152	592	3,032	1,164	5,721	1,067	11,576		
2014	77	159	189	3,371	2,230	3,035	18	8,843		
2015	70	155	293	3,231	1,551	4,008	740	9,823		
2016	63	133	239	3,270	1,175	571	172	5,427		
2017	71	180	313	3,928	4,125	4,902	100	13,368		
2018	75	165	92	3,802	2,630	214	36	6,774		
10-year Avei	rage									
2008-2017	54	119	227	2,850	1,882	3,331	222	8,511		

Source: ADF&G fish ticket database.

^a This is the number of salmon taken by CFEC permit holders with commercial gear during commercial fishing periods that was not sold but instead was kept for the crew's own use. Prior to 1997 this data was not recorded on ADF&G fish tickets.

^b Confidential data.

^c In 2003, there was concern that salmon taken as home pack were being custom-processed for later sale for consumptive use. In response, the Alaska Board of Fisheries adopted a regulation clearly stating that these fish were not to be sold or bartered (5 AAC 39.010).

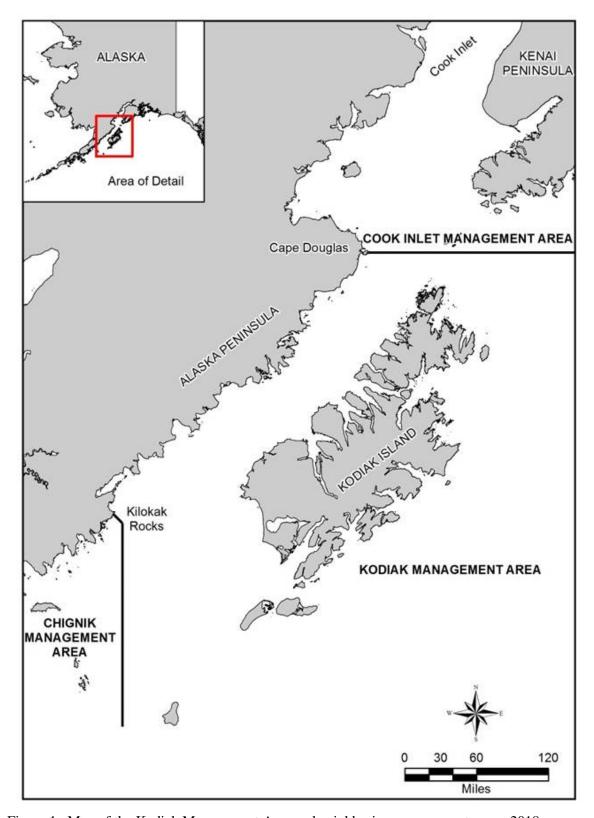


Figure 1.-Map of the Kodiak Management Area and neighboring management areas, 2018.

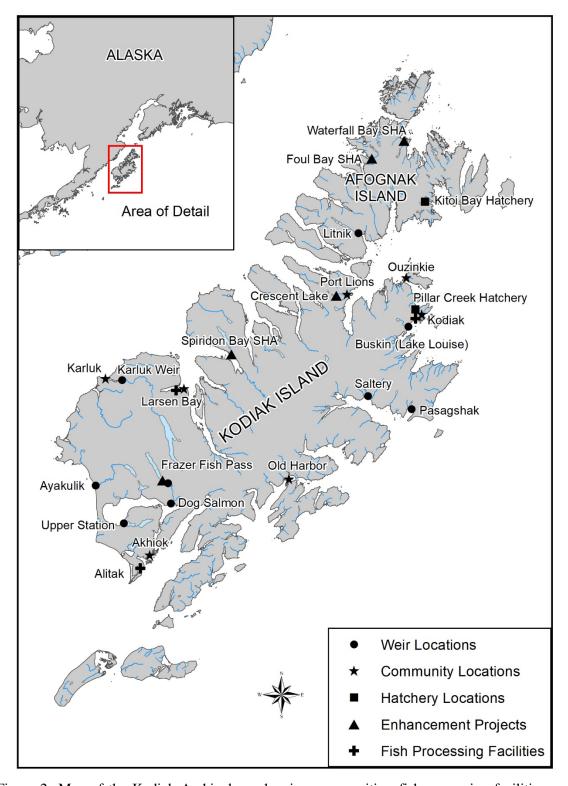
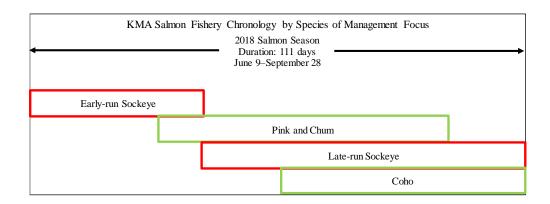


Figure 2.–Map of the Kodiak Archipelago showing communities, fish-processing facilities, sockeye salmon enhancement projects, and weir and hatchery locations in the Kodiak Management Area, 2018.



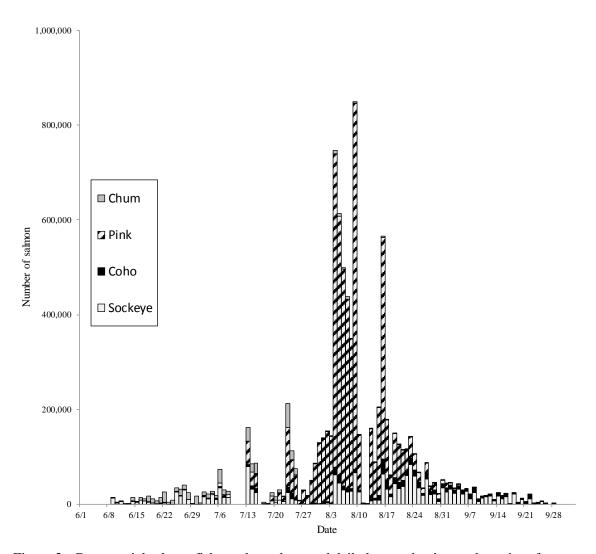
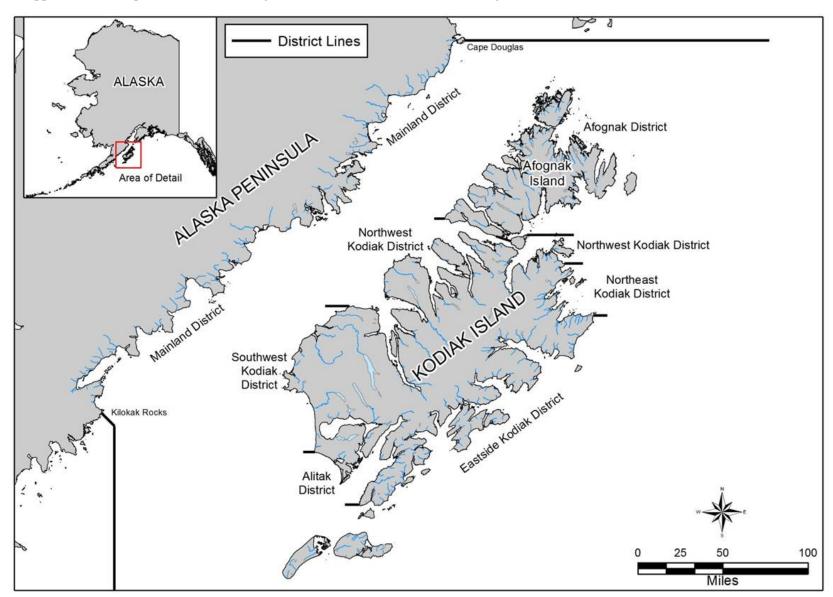


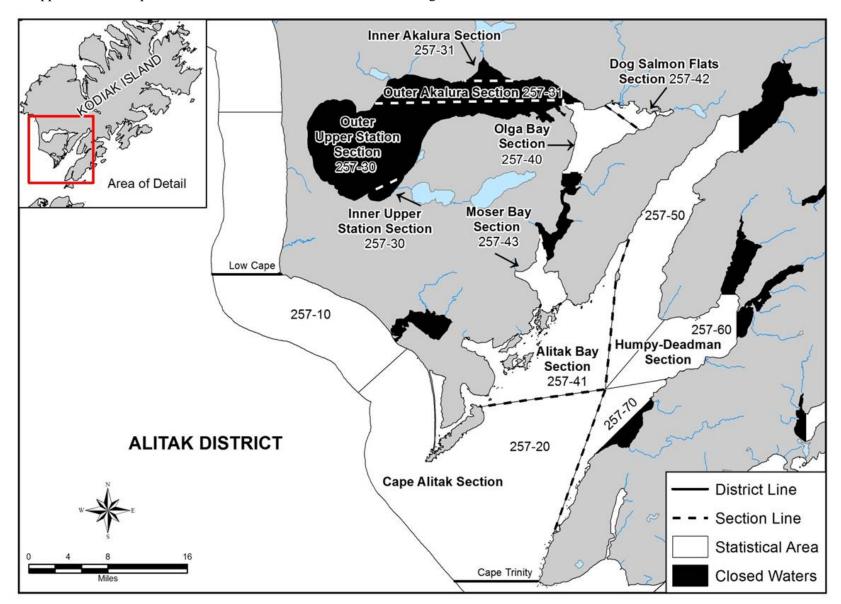
Figure 3.—Commercial salmon fishery chronology and daily harvest by date and species of management focus, Kodiak Management Area, 2018.

APPENDIX A. MAPS OF FISHING DISTRICTS

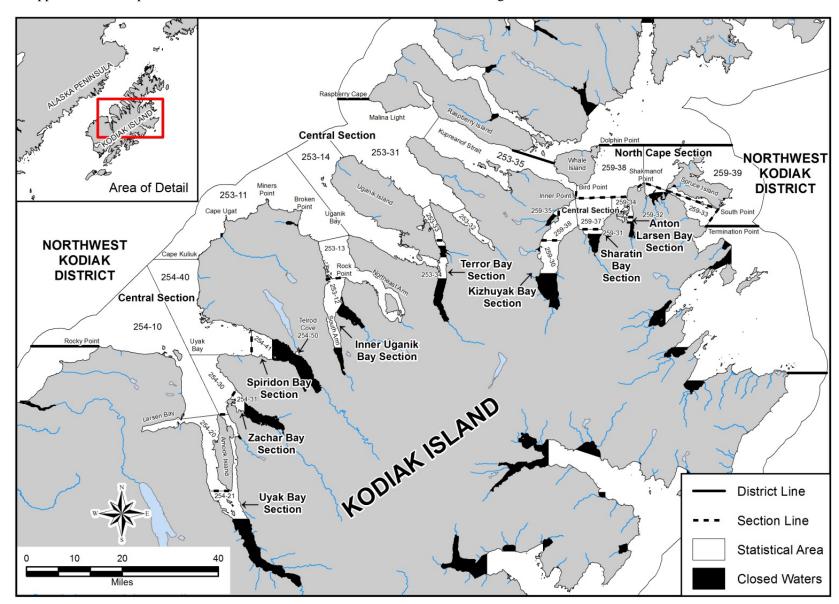
Appendix A1.–Map of the Kodiak Management Area commercial salmon fishing districts.



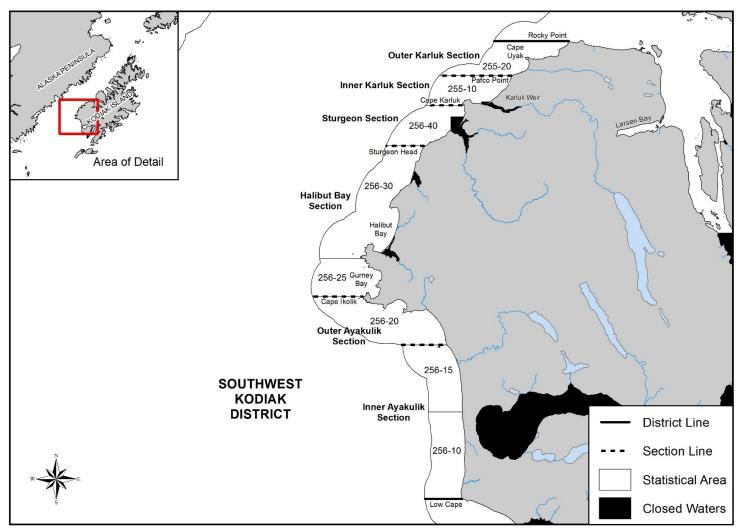
Appendix A2.—Map of the Alitak District commercial salmon fishing sections and statistical areas.



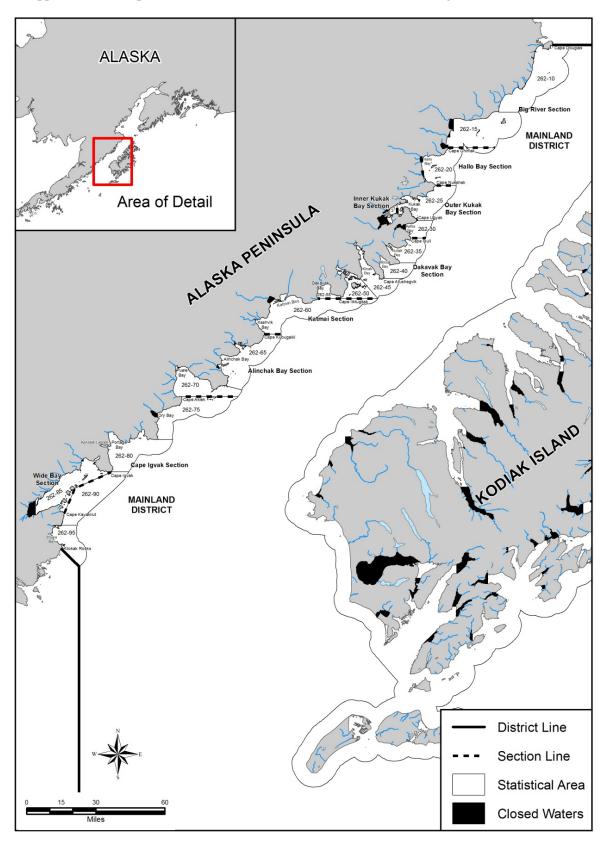
Appendix A3.—Map of the Northwest Kodiak District commercial salmon fishing sections and statistical areas.

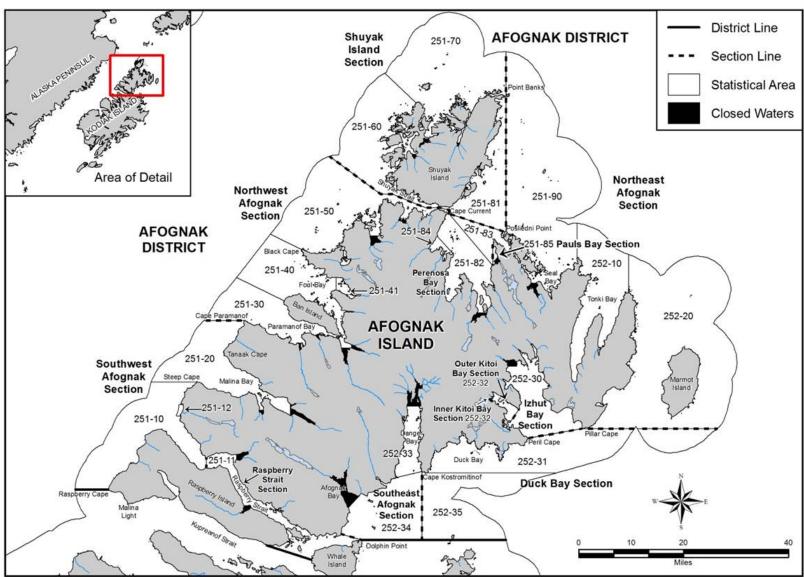


Appendix A4.—Map of the Southwest Kodiak District commercial salmon fishing sections and statistical areas.

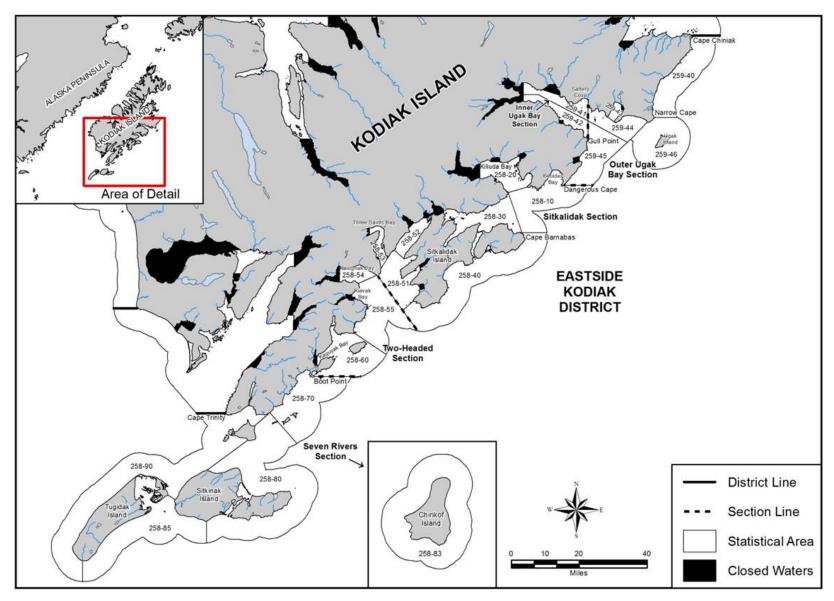


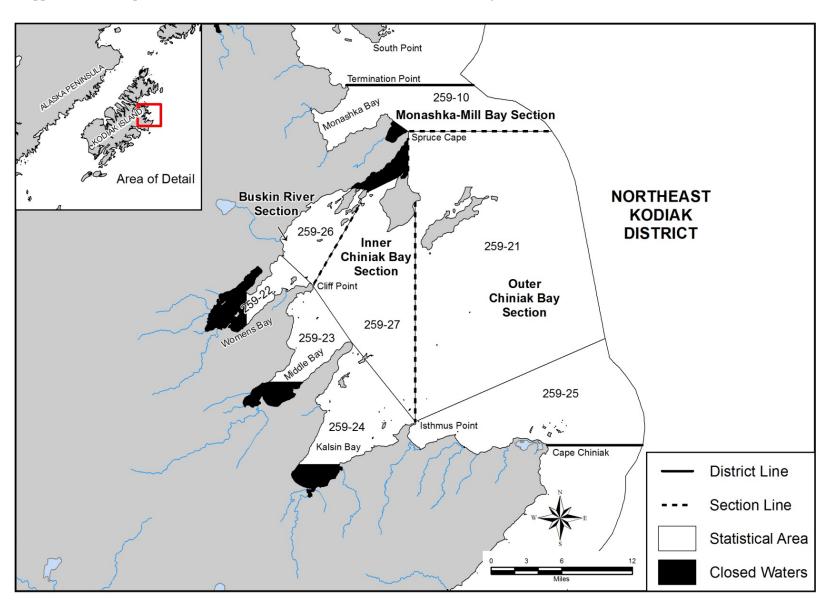
Appendix A5.—Map of the Mainland District commercial salmon fishing sections and statistical areas.





Appendix A7.–Map of the Eastside Kodiak District commercial salmon fishing sections and statistical areas.



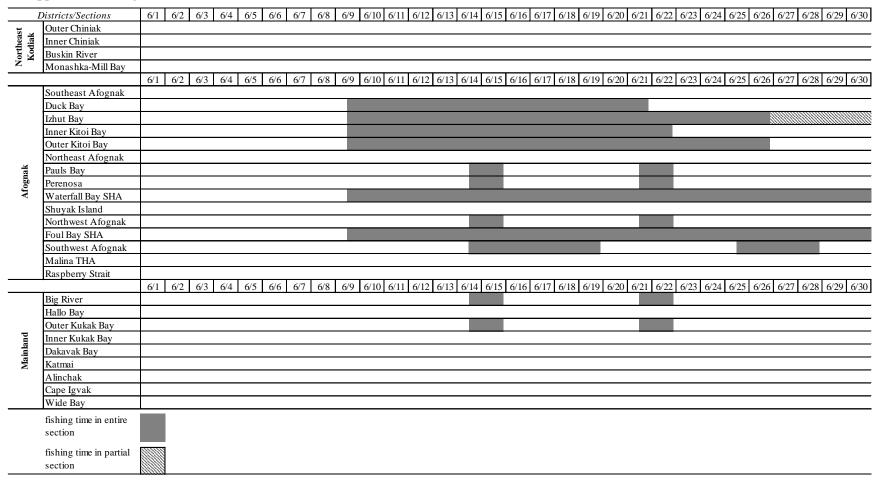


APPENDIX B.	INSEASON N	MANAGEMENT	ACTIONS

Appendix B1.—Commercial salmon fishing time, by district and section, in the Kodiak Management Area, 2018.

	Districts/Sections	6/1 6/2 6/3 6/4 6/5 6/6 6/7 6/8 6/9 6/10 6/11 6/12 6/13 6/14 6/15 6/16 6/17 6/18 6/19 6/20 6/21 6/22 6/23 6/24 6/25 6/26 6/27 6/28 6/29 6/30
	Central	01 02 03 04 03 06 07 06 07 00 01 011 012 013 014 015 016 017 016 017 025 025 025 025 025 025 025
	North Cape	
	Anton Larson	
Northwest Kodiak	Sharatin	
Sod	Kizhuyak	
st I	Terror Bay	
1W6	Inner Uganik Bay	
ort]	Spiridon SHA	
Z	Spiridon Bay	
	Zachar Bay	
	Uyak Bay	
	, , , , , , , , , , , , , , , , , , , ,	6/1 6/2 6/3 6/4 6/5 6/6 6/7 6/8 6/9 6/10 6/11 6/12 6/13 6/14 6/15 6/16 6/17 6/18 6/19 6/20 6/21 6/22 6/23 6/24 6/25 6/26 6/27 6/28 6/29 6/30
	Outer Karluk	
g	Inner Karluk	
t K	Sturgeon	
Southwest Kodiak	Halibut Bay	
ţ.	Outer Ayakulik	
Sor	Inner Ayakulik	
	•	6/1 6/2 6/3 6/4 6/5 6/6 6/7 6/8 6/9 6/10 6/11 6/12 6/13 6/14 6/15 6/16 6/17 6/18 6/19 6/20 6/21 6/22 6/23 6/24 6/25 6/26 6/27 6/28 6/29 6/30
	Olga Bay	
	Moser	
	Alitak Bay	
	Cape Alitak	
Alitak	Humpy - Deadman	
Ā	Dog Salmon Flats	
	Outer Akalura	
	Inner Akalura	
	Outer Upper Station	
	Inner Upper Station	
	1	6/1 6/2 6/3 6/4 6/5 6/6 6/7 6/8 6/9 6/10 6/11 6/12 6/13 6/14 6/15 6/16 6/17 6/18 6/19 6/19 6/20 6/21 6/22 6/23 6/24 6/25 6/26 6/27 6/28 6/29 6/30
	Seven Rivers	
Eastside Kodiak	Two Headed	
asts	Sitkalidak	
⊠ ≖	Outer Ugak Bay	
	Inner Ugak Bay	
	fishing time in entire	
	section	
	fishing time in partial	
	section	

Appendix B1.-Page 2 of 8.



Appendix B1.–Page 3 of 8.

D	Districts/Sections	7/1 7/2 7/3 7/4 7/5 7/6 7/7 7/8 7/9 7/10 7/11 7/12 7/13 7/14 7/15 7/16 7/17 7/18 7/19 7/20 7/21 7/22 7/23 7/24 7/25 7/26 7/27 7/28 7/29 7/30 7/31
	Central	
u	North Cape	
Northwestern Kodiak	Anton Larson	
<u>K</u>	Sharatin	
E	Kizhuyak	
ste	Terror Bay	
)MC	Inner Uganik Bay	
ort]	Spiridon SHA	
Z	Spiridon Bay	
	Zachar Bay	
	Uyak Bay	
	_	7/1 7/2 7/3 7/4 7/5 7/6 7/7 7/8 7/9 7/10 7/11 7/12 7/13 7/14 7/15 7/16 7/17 7/18 7/19 7/20 7/21 7/22 7/23 7/24 7/25 7/26 7/27 7/28 7/29 7/30 7/31
iak	Outer Karluk	
Şoq	Inner Karluk	
st I	Sturgeon	
JW 6	Halibut Bay	
Southwest Kodiak	Outer Ayakulik	
<u>×</u>	Inner Ayakulik	
	,	7/1 7/2 7/3 7/4 7/5 7/6 7/7 7/8 7/9 7/10 7/11 7/12 7/13 7/14 7/15 7/16 7/17 7/18 7/19 7/20 7/21 7/22 7/23 7/24 7/25 7/26 7/27 7/28 7/29 7/30 7/31
	Olga Bay	
	Moser	
	Alitak Bay	
u	Cape Alitak	
Alitak	Humpy - Deadman	
A	Dog Salmon Flats	
	Outer Akalura	
	Inner Akalura	
	Outer Upper Station	
	Inner Upper Station	
	1	7/1 7/2 7/3 7/4 7/5 7/6 7/7 7/8 7/9 7/10 7/11 7/12 7/13 7/14 7/15 7/16 7/17 7/18 7/19 7/20 7/21 7/22 7/23 7/24 7/25 7/26 7/27 7/28 7/29 7/30 7/31
	Seven Rivers	
side iak	Two Headed	
Eastside Kodiak	Sitkalidak	
日五	Outer Ugak Bay	
	Inner Ugak Bay	
	fishing time in entire section	
	fishing time in partial section	

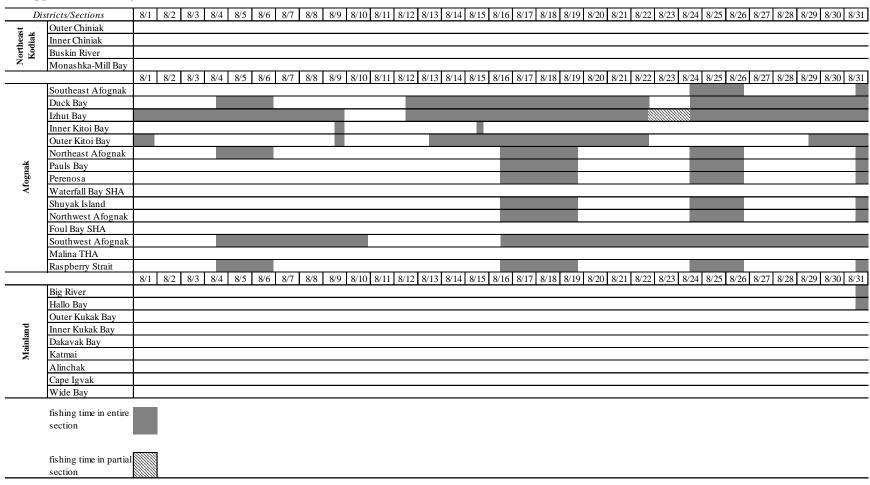
Appendix B1.–Page 4 of 8.

	histricts/Sections	7/1 7/2	2 7/3 7/	4 7/5	7/6 7/7 7	/8 7/9	7/10 7/11 7/12	7/13 7/14 7/15	7/16 7/17 7/	18 7/19 7/20 3	7/21 7/22 7/2	23 7/24 7/25	7/26 7/27 7/28	3 7/29 7/30 7/31
	Outer Chiniak		.,5 1	. 1115		, , , , , , ,	,, 10 ,, 11 ,, 12	,,,10 ,,,11 ,,,12	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	10 11 11 11 11 11 11			2021 1120	
Northeast Kodiak	Inner Chiniak													
f So	Buskin River													
ž	Monashka-Mill Bay													
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	Big River													
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Appendix B1.–Page 5 of 8.

Dis	stricts/Sections	8/1 8/2 8/3 8/4 8/5 8/6 8/7 8/8 8/9 8/10 8/11 8/12 8/13 8/14 8/15 8/16 8/17 8/18 8/19 8/20 8/21 8/22 8/23 8/24 8/25 8/26 8/27 8/28 8/29 8/30 8/31
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u	Anton Larsen	
Northwest Kodiak	Sharatin	
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est	Terror Bay	
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iak	Outer Karluk	
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st K	Sturgeon	
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Southwest Kodiak	Outer Ayakulik	
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	Olga Bay	
	Moser	
	Alitak Bay	
	Cape Alitak	
Alitak	Humpy - Deadman	
4	Dog Salmon Flats	
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-	Inner Ugak Bay	
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Appendix B1.–Page 6 of 8.



Appendix B1.–Page 7 of 8.

	istricts/Sections	9/1 9/2	9/3 9/4 9/	/5 9/6 9/7	9/8 9/9	9/10 9/11	9/12 9/13 9/	14 9/15 9/16	5 9/17 9/18	9/19 9/20 9	/21 9/22 9/23	3 9/24 9/25	9/26 9/27	9/28 9/29 9/30
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	Kizhuyak													
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ak	Outer Karluk					'	<u> </u>			<u> </u>			<u> </u>	
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Sol	Inner Ayakulik													
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Eastside Kodiak	Seven Rivers	ļ												
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	Southeast Afognak	
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	Izhut Bay	
	Inner Kitoi Bay	
	Outer Kitoi Bay	
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	Big River	
	Hallo Bay	
	Outer Kukak Bay	
Б	Inner Kukak Bay	
Mainland	Dakavak Bay	
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_	Alinchak	
	Cape Igvak	
	Wide Bay	
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	fishing time in partial section	

Appendix B2.-Summary of emergency orders issued in the Kodiak Management Area, 2018.

E.O. #	Issued	Effective	Action in Effect
1	10:00 AM 6/6/18	Noon 6/9/18	Opening for 57 hours, until 9:00 PM 6/11: Northwest Kodiak District
			 Opening until further notice: Inner Kitoi Bay, Outer Kitoi Bay, Duck Bay and Izhut Bay sections Foul Bay Special Harvest Area (FBSHA) Waterfall Bay Special Harvest Area (WBSHA)
			Closed water adjustments:Reduced until further notice in Foul Bay, Waterfall Bay, and Kitoi Bay
			$\underline{\text{Non-retention}}$ of Chinook salmon 28 inches or greater in length until further notice
2	10:30 AM 6/12/18	Noon 6/14/18	Opening for 57 hours, until 9:00 PM 6/16: Central and North Cape sections Southwest Afognak Section
			 Opening for 33 hours, until 9:00 PM 6/15: Eastside Kodiak District Northwest Afognak, Pauls Bay, and Perenosa Bay sections Uyak Bay, Zachar Bay, Spiridon Bay, Inner Uganik Bay, Terror Bay, Kizhuyak Bay, Sharatin Bay, and Anton Larsen Bay sections Big River and Outer Kukak Bay sections
			 Open until further notice: Inner Kitoi Bay, Outer Kitoi Bay, Duck Bay and Izhut Bay sections Foul Bay Special Harvest Area (FBSHA) Waterfall Bay Special Harvest Area (WBSHA)
			 Closed water adjustments: Reduced until further notice in Foul Bay, Waterfall Bay, and Kitoi Bay Reduced until 9:00 PM 6/15 at Kaflia Creek and Saltery Creek
			Non-retention of Chinook salmon 28 inches or greater in length until further notice
3	10:00 AM 6/15/18	9:00 PM 6/16/18	Extension for 72 hours, until 9:00 PM 6/19: Central and North Cape sections Southwest Afognak Section
		Noon 6/16/18	Opening for 81 hours, until 9:00 PM 6/19: Outer Karluk Section
			Open until further notice: Inner Kitoi Bay, Outer Kitoi Bay, Duck Bay and Izhut Bay sections Foul Bay Special Harvest Area (FBSHA) Waterfall Bay Special Harvest Area (WBSHA)

E.O. #	Issued	Effective	Action in Effect
3 (Cont.)			 Closed water adjustments: Reduced until further notice in Foul Bay, Waterfall Bay, and Kitoi Bay Reduced until 9:00 PM 6/15 at Kaflia Creek and Saltery Creek
			Non-retention of Chinook salmon 28 inches or greater in length until further notice
4	10:00 AM 6/19/18	Noon 6/21/18	Opening for 33 hours, until 9:00 PM 6/22: Eastside Kodiak District Northwest Afognak, Pauls Bay, and Perenosa Bay sections Big River and Outer Kukak sections
			 Open until further notice: Inner Kitoi Bay, Outer Kitoi Bay, Duck Bay and Izhut Bay sections Foul Bay Special Harvest Area (FBSHA) Waterfall Bay Special Harvest Area (WBSHA)
			 <u>Closed water adjustments:</u> Reduced until further notice in Foul Bay, Waterfall Bay, and Kitoi Bay Reduced until 9:00 PM 6/21 at Kaflia Creek and Saltery Creek
			Non-retention of Chinook salmon 28 inches or greater in length until further notice
5	10:00 AM 6/20/18	9:00 PM 6/21/18	Closure in the following area: Duck Bay Section
			 Open until further notice: Inner Kitoi Bay, Outer Kitoi Bay, and Izhut Bay sections Foul Bay Special Harvest Area (FBSHA) Waterfall Bay Special Harvest Area (WBSHA)
			 Closed water adjustments: Reduced until further notice in Foul Bay, Waterfall Bay, and Kitoi Bay Reduced until 9:00 PM 6/21 at Kaflia Creek and Saltery Creek
			Non-retention of Chinook salmon 28 inches or greater in length until further notice
6	10:00 AM 6/21/18	9:00 PM 6/21/18	Closure in the following area: Inner Kitoi Bay Section
			 Open until further notice: Outer Kitoi Bay and Izhut Bay sections Foul Bay Special Harvest Area (FBSHA) Waterfall Bay Special Harvest Area (WBSHA)
			 Closed water adjustments: Reduced until further notice in Foul Bay, Waterfall Bay, and Kitoi Bay Reduced until 9:00 PM 6/21 at Kaflia Creek and Saltery Creek
			Non-retention of Chinook salmon 28 inches or greater in length until further notice

Appendix B2.-Page 3 of 20.

E.O. #	Issued	Effective	Action in Effect
7	10:00 AM 6/24/18	Noon 6/25/18	 Opening for 57 hours, until 9:00 PM 6/27: Outer Ayakulik, Halibut Bay, and Outer Karluk sections Central and North Cape sections Southwest_Afognak Section Cape Alitak, Humpy-Deadman, Alitak Bay, Moser Bay, and Olga Bay sections
			 Open until further notice: Outer Kitoi Bay and Izhut Bay sections Foul Bay Special Harvest Area (FBSHA) Waterfall Bay Special Harvest Area (WBSHA)
			Closed water adjustments: Reduced until further notice in Foul Bay and Waterfall Bay
			Non-retention of Chinook salmon 28 inches or greater in length until further notice
8	10:00 AM 6/25/18	9:00 PM 6/26/18	Closure in the following areas:Outer Kitoi SectionIzhut Bay Section southern portion
			 Open until further notice: Izhut Bay Section northern portion Foul Bay Special Harvest Area (FBSHA) Waterfall Bay Special Harvest Area (WBSHA)
			Closed water adjustments: Reduced until further notice in Foul Bay and Waterfall Bay
			Non-retention of Chinook salmon 28 inches or greater in length until further notice
9	10:00 AM 6/27/18	9:00 PM 6/27/18	 Extension for 24 hours, until 9:00 PM 6/28: Outer Ayakulik, Halibut Bay, and Outer Karluk sections Central and North Cape sections Southwest Afognak Section Cape Alitak, Humpy-Deadman, Alitak Bay, Moser Bay, and Olga Bay sections
			 Open until further notice: Izhut Bay Section northern portion Foul Bay Special Harvest Area (FBSHA) Waterfall Bay Special Harvest Area (WBSHA)
			Closed water adjustments: Reduced until further notice in Foul Bay and Waterfall Bay
			Non-retention of Chinook salmon 28 inches or greater in length until further notice

Appendix B2.–Page 4 of 20.

E.O. #	Issued	Effective	Action in Effect
10	10:00 AM 6/28/18	12:01 AM 6/29/18	Opening of Cost Recovery Fishery: • Telrod Cove Special Harvest Area
			 Open until further notice: Izhut Bay Section northern portion Foul Bay Special Harvest Area (FBSHA) Waterfall Bay Special Harvest Area (WBSHA)
			Closed water adjustments:Reduced until further notice in Foul Bay and Waterfall Bay
			Non-retention of Chinook salmon 28 inches or greater in length until further notice
11	10:00 AM 6/30/18	9:00 PM 7/1/18	Closure in the following area: Izhut Bay Section northern portion
		Noon 7/2/18	Opening for 81 hours, until 9:00 PM 7/5: Outer Karluk Section Central and North Cape sections Southwest Afognak Section
			 Open until further notice: Izhut Bay Section northern portion Foul Bay Special Harvest Area (FBSHA) Waterfall Bay Special Harvest Area (WBSHA)
			Closed water adjustments:Reduced until further notice in Foul Bay and Waterfall Bay
			Non-retention of Chinook salmon 28 inches or greater in length until further notice
12	10:00 AM 7/3/18	Noon 7/4/18	 Opening for 57 hours, until 9:00 PM 7/6: Cape Alitak, Humpy-Deadman, Alitak Bay, Moser Bay, and Olga Bay sections Outer Ayakulik and Halibut Bay sections
		9:00 PM 7/5/18	 Extension for 72 hours, until 9:00 PM 7/8: Outer Karluk Section Central and North Cape sections Southwest Afognak Section
		Noon 7/6/18	 Opening for 57 hours, until 9:00 PM 7/8: Uyak Bay, Zachar Bay, Spiridon Bay, Inner Uganik Bay, Terror Bay, Kizhuyak Bay, Sharatin Bay, and Anton Larsen Bay sections Northwest Afognak, Raspberry Strait, Shuyak Island, Pauls Bay, Perenosa Bay, Northwest Afognak, and Duck Bay sections Mainland District (except Wide Bay and Cape Igvak sections remain closed) Eastside Kodiak District (except Pasagshak Bay remains closed) Northeast Kodiak District (except Buskin Bay Section remains closed)

Appendix B2.–Page 5 of 20.

E.O. #	Issued	Effective	Action in Effect
12 (cont.)		9:00 PM 7/8/18	Closure in the following areas:Foul Bay Special Harvest AreaWaterfall Bay Special Harvest Area
			Closed water adjustments:Reduced until 9:00 PM 7/8 in Foul Bay and Waterfall Bay
			Non-retention of Chinook salmon 28 inches or greater in length until further notice:
			That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
13	2:00 PM 7/5/18	9:00 PM 7/6/18	 Extension for 48 hours, until 9:00 PM 7/8: Cape Alitak, Humpy-Deadman, Alitak Bay, Moser Bay, and Olga Bay sections Outer Ayakulik and Halibut Bay sections
			Closed water adjustments:Reduced until 9:00 PM 7/8 in Foul Bay and Waterfall Bay
			 Non-retention of Chinook salmon 28 inches or greater in length until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
14	4:30 PM 7/11/18	Noon 7/13/18	 Opening for 57 hours, until 9:00 PM 7/15: Cape Alitak, Humpy-Deadman, Alitak Bay, Moser Bay, and Olga Bay sections Outer Ayakulik, Halibut Bay, and Outer Karluk sections Central, North Cape, Uyak Bay, Spiridon Bay, Terror Bay, Sharatin Bay, and Anton Larsen Bay sections Southwest Afognak, Northwest Afognak, Raspberry Strait, Shuyak Island, Pauls Bay, Perenosa Bay, Northeast Afognak, and Duck Bay sections Mainland District (except Wide Bay and Cape Igvak sections remain closed) Eastside Kodiak District (except Pasagshak Bay remains closed) Northeast Kodiak District (except Buskin River Section remains closed) Non-retention of Chinook salmon 28 inches or greater in length until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
15	10:00 AM 7/16/18	Noon 7/17/18	Opening until further notice: • Izhut Bay Section Non-retarting of China all column 28 in the second to in boath antil further
			Non-retention of Chinook salmon 28 inches or greater in length until further notice

Appendix B2.-Page 6 of 20.

E.O. #	Issued	Effective	Action in Effect
16	10:00 AM 7/17/18	Noon 7/18/18	Opening until further notice: Outer Kitoi Bay Section
			Open until further notice: • Izhut Bay Section
			 Non-retention of Chinook salmon 28 inches or greater in length until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
17	10:00 AM 7/18/18	Noon 7/19/18	Opening for 57 hours, until 9:00 PM 7/21: • Cape Alitak, Alitak Bay, Moser Bay, and Olga Bay sections
		Noon 7/23/18	 Opening for 57 hours, until 9:00 PM 7/25: Humpy-Deadman Section Central, North Cape, Uyak Bay, Spiridon Bay, Terror Bay, Sharatin Bay, and Anton Larsen Bay sections (except the Kizhuyak Bay, Inner Uganik Bay, and Zachar Bay sections remain closed) Southwest Afognak, Northwest Afognak, Raspberry Strait, Shuyak Island, Pauls Bay, Perenosa Bay, Northeast Afognak, and Duck Bay sections Mainland District (except the Wide Bay and Cape Igvak sections remain closed) Eastside Kodiak District (except Inner Ugak Bay Section and Pasagshak Bay remain closed) Northeast Kodiak District (except the Buskin River section remains closed)
			 Open until further notice: Izhut Bay Section Outer Kitoi Bay Section (opening at noon 7/18/18)
			 Non-retention of Chinook salmon 28 inches or greater in length until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
18	10:00 AM 7/19/18	Noon 7/20/18	Opening until further notice: • Inner Kitoi Bay Section
			Closed water adjustments: • Increased until further notice at Little Kitoi Creek and Big Kitoi Creek
			Open until further notice: Izhut Bay Section Outer Kitoi Bay Section
			 Non-retention of Chinook salmon 28 inches or greater in length until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk

Appendix B2.-Page 7 of 20.

E.O. #	Issued	Effective	Action in Effect
19	10:00 AM 7/21/18	9:00 PM 7/21/18	 Extension for 48 hours, until 9:00 PM 7/23: Cape Alitak, Alitak Bay, Moser Bay, and Olga Bay sections
			Open until further notice: Izhut Bay Section Outer Kitoi Bay Section Inner Kitoi Bay Section
			Closed water adjustments: Reduced until further notice at Little Kitoi Creek and Big Kitoi Creek
			 Non-retention of Chinook salmon 28 inches or greater in length until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
20	5:00 PM 7/25/18	8:00 PM 7/25/18	 Closure in the following areas: The Seaward Zones of the Dakavak Bay, Outer Kukak Bay, Hallo Bay, and Big River sections The Seaward Zones of the Northwest Afognak and Shuyak Island sections
			Open until further notice: Izhut Bay Section Outer Kitoi Bay Section Inner Kitoi Bay Section
			Closed water adjustments: Reduced until further notice at Little Kitoi Creek and Big Kitoi Creek
			 Non-retention of Chinook salmon 28 inches or greater in length until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
21	10:00 AM 7/26/18	9:00 PM 7/26/18	Closure in the following area: Inner Kitoi Bay Section
			Open until further notice: Izhut Bay Section Outer Kitoi Bay Section
			 Non-retention of Chinook salmon 28 inches or greater in length until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk

Appendix B2.-Page 8 of 20.

E.O. #	Issued	Effective	Action in Effect
22	10:00 AM 7/31/18	Noon 8/1/18	Opening until further notice: • Spiridon Bay Special Harvest Area
		9:00 PM 8/1/18	Closure in the following area: Outer Kitoi Bay Section
			Open until further notice: Izhut Bay Section
			 Non-retention of Chinook salmon 28 inches or greater in length until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
23	10:00 AM 8/2/18	Noon 8/4/18	 Opening for 57 hours, until 9:00 PM 8/6: Cape Alitak, Humpy-Deadman, Alitak Bay, Moser Bay, and Olga Bay sections Outer Karluk Section Central, North Cape, Uyak Bay, Spiridon Bay, Inner Uganik Bay, and Anton Larsen Bay sections (the Sharatin Bay, Kizhuyak Bay, Terror Bay, and Zachar Bay sections remain closed) Southwest Afognak, Raspberry Strait, Northwest Afognak, and Duck Bay Sections (the Northwest Afognak, Shuyak Island, Pauls Bay, Perenosa Bay, and Southeast Afognak sections remain closed)
			 Open until further notice: Izhut Bay Section Spiridon Bay Special Harvest Area
			Non-retention of Chinook salmon 28 inches or greater in length until further notice:That portion of the Northwest Kodiak and Southwest Kodiak districts
			south of the latitude of Cape Kuliuk
24	10:00 AM 8/5/18	9:00 PM 8/6/18	Closure in the following area: • Izhut Bay Section south of a line from Haystack Rock to Pillar Cape
			 Open until further notice: Izhut Bay Section north of a line from Haystack Rock to Pillar Cape Spiridon Bay Special Harvest Area
			Non-retention of Chinook salmon 28 inches or greater in length until further notice:
			That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
25	10:00 AM 8/6/18	9:00 PM 8/6/18	Extension for 48 hours until 9:00PM 8/8: • Cape Alitak, Alitak Bay, Moser Bay, and Olga Bay Sections

Appendix B2.–Page 9 of 20.

E.O. #	Issued	Effective	Action in Effect
25 (cont.)		9:00 PM 8/6/18	 Extension for 24 hours until 9:00 PM 8/7: Humpy-Deadman Section Outer Karluk Section Central, North Cape, Uyak Bay, Spiridon Bay, Inner Uganik Bay, and Anton Larsen Bay sections (the Sharatin Bay, Kizhuyak Bay, Terror Bay, and Zachar Bay sections remain closed) Southwest Afognak Section
		Noon 8/7/18	Opening for 33 hours until 9:00 PM 8/8: • Dog Salmon Flats Section
			 Closed Water Adjustments: Reduced until 9:00 PM 8/8 at Dog Salmon Creek and Horse Marine Lagoon
			 Open until further notice: Izhut Bay Section north of a line from Haystack Rock to Pillar Cape Spiridon Bay Special Harvest Area
			 Non-retention of Chinook salmon 28 inches or greater in length until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
26	5:00 PM 8/6/18	9:00 PM 8/6/18	Extension until further notice: • Izhut Bay Section south of a line from Haystack Rock to Pillar Cape
			 Closed Water Adjustments: Reduced until 9:00 PM 8/8 at Dog Salmon Creek and Horse Marine Lagoon
			 Open until further notice: Izhut Bay Section north of a line from Haystack Rock to Pillar Cape Spiridon Bay Special Harvest Area
			 Non-retention of Chinook salmon 28 inches or greater in length until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
27	10:00 AM 8/7/18	9:00 PM 8/7/18	 Extension for 48 hours until 9:00 PM 8/9: Outer Karluk Section Central, North Cape, Uyak Bay, Spiridon Bay, Inner Uganik Bay, and Anton Larsen Bay sections (the Sharatin Bay, Kizhuyak Bay, Terror Bay, and Zachar Bay sections remain closed) Southwest Afognak Section
		Noon 8/8/18	Opening for 33 hours until 9:00 PM 8/9: • Halibut Bay and Sturgeon sections
			 Closed Water Adjustments: Reduced until 9:00 PM 8/8 at Dog Salmon Creek and Horse Marine Lagoon

E.O. #	Issued	Effective	Action in Effect
27 (cont.)			 Open until further notice: Izhut Bay Section north of a line from Haystack Rock to Pillar Cape Spiridon Bay Special Harvest Area
			 Non-retention of Chinook salmon 28 inches or greater in length until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
28	10:00 AM 8/8/18	9:00 PM 8/8/18	 Extension for 48 hours until 9:00 PM 8/10: Cape Alitak, Alitak Bay, Moser Bay, Olga Bay, and Dog Salmon Flats sections
		Noon 8/9/18	Opening for 9 hours when hatchery staff launch a flare until 9:00 PM 8/9: • Inner Kitoi Bay and Outer Kitoi Bay sections
			Opening for 9 hours until 9:00 PM 8/9: • Inner Karluk Section
		9:00 PM 8/9/18	 Extension for 24 hours until 9:00 PM 8/10: Halibut Bay, Sturgeon, and Outer Karluk sections Central, North Cape, Uyak Bay, Spiridon Bay, Inner Uganik Bay, and Anton Larsen sections (the Sharatin Bay, Kizhuyak Bay, Terror Bay, and Zachar Bay sections remain closed) Southwest Afognak Section
			 Closed Water Adjustments: Increased to markers at Little Kitoi Creek and Big Kitoi Creek Reduced from noon 8/9 until 9:00 PM 8/9 at Karluk Lagoon terminus Reduced until 9:00 PM 8/10 at Dog Salmon Creek and Horse Marine Lagoon
			 Open until further notice: Izhut Bay Section north of a line from Haystack Rock to Pillar Cape Spiridon Bay Special Harvest Area
			 Non-retention of Chinook salmon 28 inches in length or greater until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
29	10:30 AM 8/9/18	9:00 PM 8/9/18	Closure in the following area: Izhut Bay Section
		9:00 PM 8/10/18	<u>Closure</u> in the following area:Spiridon Bay Special Harvest Area
			Extension until further notice: • Dog Salmon Flats Section -continued-

Appendix B2.–Page 11 of 20.

E.O. #	Issued	Effective	Action in Effect
29 (cont.)			 Closed Water Adjustments: Reduced until further notice at Dog Salmon Creek and Horse Marine Lagoon Increased to markers at Little Kitoi Creek and Big Kitoi Creek Reduced from noon 8/9 until 9:00PM 8/9 at Karluk Lagoon terminus
			 Non-retention of Chinook salmon 28 inches in length or greater until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
30	10:00 AM 8/12/18	Noon 8/13/18	Opening for 57 hours, until 9:00 PM 8/15: • Cape Alitak, Humpy-Deadman, Alitak Bay, Moser Bay, and Olga Bay sections
			Opening until further notice: • Duck Bay and Izhut Bay sections
			Open until further notice: • Dog Salmon Flats Section
			 Closed Water Adjustments: Reduced until further notice at Dog Salmon Creek and Horse Marine Lagoon
			 Non-retention of Chinook salmon 28 inches in length or greater until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
31	10:00 AM 8/13/18	Noon 8/14/18	Opening until further notice: Outer Kitoi Bay Section
			Opening until further notice (at noon 8/13):Duck Bay and Izhut Bay sections
			Open until further notice: • Dog Salmon Flats Section
			 Closed Water Adjustments: Reduced until further notice at Dog Salmon Creek and Horse Marine Lagoon
			 Non-retention of Chinook salmon 28 inches in length or greater until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk

Appendix B2.–Page 12 of 20.

E.O. #	Issued	Effective	Action in Effect
32	10:00 AM 8/14/18	Noon 8/15/18	Opening for 6 hours when hatchery staff launch a flare until 6:00 PM 8/15: • Inner Kitoi Bay Section
		9:00 PM 8/15/18	 Extension for 45 hours until 6:00 PM 8/17: Cape Alitak, Alitak Bay, Moser Bay, and Olga Bay sections
		Noon 8/16/18	 Opening for 54 hours until 6:00 PM 8/18: Halibut Bay, Sturgeon, and Outer Karluk sections Central and North Cape sections Southwest Afognak, Northwest Afognak, Raspberry Strait, Shuyak Island, Pauls Bay, Perenosa Bay, and Northeast Afognak sections
			Opening for 30 hours until 6:00 PM 8/17: • Spiridon Bay Special Harvest Area
			 Open until further notice: Outer Kitoi Bay, Duck Bay, and Izhut Bay sections Dog Salmon Flats Section
			 Closed Water Adjustments: Increased to markers at Little Kitoi Creek and Big Kitoi Creek until 6:00 PM 8/15 Reduced until further notice at Dog Salmon Creek and Horse Marine Lagoon
			 Non-retention of Chinook salmon 28 inches in length or greater until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
33	2:00 PM 8/15/18	9:00 PM 8/15/18	Extension for 45 hours, until 6:00 PM 8/17: • Humpy-Deadman Section
			 Open until further notice: Outer Kitoi Bay, Duck Bay, and Izhut Bay sections Dog Salmon Flats Section
			 Closed Water Adjustments: Reduced At Humpy-Deadman until 6:00 PM 8/17 Reduced at Little Kitoi Creek and increased at Big Kitoi Creek until 6:00 PM 8/15 Reduced until further notice at Dog Salmon Creek and Horse Marine Lagoon
			 Non-retention of Chinook salmon 28 inches in length or greater until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk

Appendix B2.–Page 13 of 20.

E.O. #	Issued	Effective	Action in Effect
34	10:00 AM 8/17/18	6:00 PM 8/17/18	 Extension for 48 hours, until 6:00 PM 8/19: Cape Alitak, Humpy-Deadman, Alitak Bay, Moser Bay, and Olga Bay sections
		6:00 PM 8/18/18	 Extension for 24 hours, until 6:00 PM 8/19: Halibut Bay, Sturgeon, and Outer Karluk sections Central and North Cape Sections Southwest Afognak, Northwest Afognak, Raspberry Strait, Shuyak Island, Pauls Bay, Perenosa Bay, and Northwest Afognak sections
			 Open until further notice: Outer Kitoi Bay, Duck Bay, and Izhut Bay sections Dog Salmon Flats Section
			 Closed Water Adjustments: Reduced from 6:00 PM 8/17 until 6:00 PM 8/19 at Humpy Creek Reduced until further notice at Dog Salmon Creek and Horse Marine Lagoon
			 Non-retention of Chinook salmon 28 inches in length or greater until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
35	10:00 AM 8/19/18	6:00 PM 8/19/18	 Extension for 24 hours, until 6:00 PM 8/20: Outer Karluk Section Central and North Cape sections Southwest Afognak Section
			 Open until further notice: Outer Kitoi Bay, Duck Bay, and Izhut Bay sections Dog Salmon Flats Section
			 Closed Water Adjustments: Reduced from 6:00 PM 8/17 until 6:00 PM 8/19 at Humpy Creek Reduced until further notice at Dog Salmon Creek and Horse Marine Lagoon
			 Non-retention of Chinook salmon 28 inches in length or greater until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
36	10:00 AM 8/20/18	6:00 PM 8/20/18	Extension for 24 hours, until 6:00 PM 8/21: Outer Karluk Section Central and North Cape sections Southwest Afognak Section
			Open until further notice: Outer Kitoi Bay, Duck Bay, and Izhut Bay sections Dog Salmon Flats Section -continued-

Appendix B2.-Page 14 of 20.

E.O. #	Issued	Effective	Action in Effect
36 (cont.)			 Closed Water Adjustments: Reduced until further notice at Dog Salmon Creek and Horse Marine Lagoon
			 Non-retention of Chinook salmon 28 inches in length or greater until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
37	10:00 AM 8/21/18	6:00 PM 8/21/18	Extension for 72 hours, until 6:00 PM 8/24: Outer Karluk Section Central and North Cape sections Southwest Afognak Section
		Noon 8/22/18	 Opening for 54 hours, until 6:00 PM 8/24: Cape Alitak, Humpy-Deadman, Alitak Bay, Moser Bay, and Olga Bay sections Outer Ayakulik, Sturgeon, and Halibut Bay section
		6:00 PM 8/22/18	 Closure in the following areas: Outer Kitoi Bay and Duck Bay sections Izhut Bay Section south of a line from Haystack Rock to Pillar Cape
			 Open until further notice: Izhut Bay Section north of a line from Haystack Rock to Pillar Cape Dog Salmon Flats Section
			 Closed Water Adjustments: Reduced until further notice at Dog Salmon Creek and Horse Marine Lagoon
			 Non-retention of Chinook salmon 28 inches in length or greater until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
38	10:00 AM 8/22/18	Noon 8/23/18	Opening for 6 hours, until 6:00 PM 8/23: • Inner Ayakulik Section
		Noon 8/24/18	 Opening until further notice: Duck Bay Section Izhut Bay Section south of a line from Haystack Rock to Pillar Cape
			 Open until further notice: Izhut Bay Section north of a line from Haystack Rock to Pillar Cape Dog Salmon Flats Section
			 Closed Water Adjustments: Reduced until further notice at Dog Salmon Creek and Horse Marine Lagoon

Appendix B2.–Page 15 of 20.

E.O. #	Issued	Effective	Action in Effect
38 (cont.)			 Non-retention of Chinook salmon 28 inches in length or greater until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
39	10:00 AM 8/23/18	Noon 8/24/18	 Opening for 54 hours, until 6:00 PM 8/26: Uyak Bay, Spiridon Bay, Inner Uganik Bay, Sharatin Bay, and Anton Larsen Bay sections Southeast Afognak, Northwest Afognak, Raspberry Strait, Shuyak Island, Pauls Bay, Perenosa Bay, and Northwest Afognak sections
		6:00 PM 8/24/18	 Extension for 48 hours, until 6:00 PM 8/26: Outer Karluk Section Central and North Cape sections Southwest Afognak Section Cape Alitak, Humpy-Deadman, Alitak Bay, Moser Bay, and Olga Bay sections
			 Open until further notice: Duck Bay and Izhut Bay sections Dog Salmon Flats Section
			 Closed Water Adjustments: Reduced until further notice at Dog Salmon Creek and Horse Marine Lagoon
			 Non-retention of Chinook salmon 28 inches in length or greater until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
40	10:00 AM 8/26/18	6:00 PM 8/26/18	 Extension for 48 hours, until 6:00 PM 8/28: Outer Karluk Section Central and North Cape sections Southwest Afognak Section Cape Alitak, Humpy-Deadman, Alitak Bay, Moser Bay, and Olga Bay sections
			 Closure in the following areas: Dog Salmon Flats Section Uyak Bay, Spiridon Bay, Inner Uganik Bay, Sharatin Bay, and Anton Larsen Bay sections Southeast Afognak, Northwest Afognak, Raspberry Strait, Shuyak Island, Pauls Bay, Perenosa Bay, and Northeast Afognak sections
			 Closed water adjustments: Reduced until 6:00 PM 8/26 at Dog Salmon Creek and Horse Marine Lagoon
			Open until further notice: • Duck Bay and Izhut Bay sections

Appendix B2.–Page 16 of 20.

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E.O. #	Issued	Effective	Action in Effect
40 (cont.)			Non-retention of Chinook salmon 28 inches in length or greater until further notice:
			 That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
41	10:00 AM 8/28/18	6:00 PM 8/28/18	Extension for 48 hours, until 6:00 PM 8/30: Outer Karluk Section Central and North Cape sections Southwest Afognak Section
		Noon 8/29/18	Opening until further notice: Outer Kitoi Bay Section
			Open until further notice:Duck Bay and Izhut Bay sections
			Non-retention of Chinook salmon 28 inches in length or greater until further notice:
			 That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
42	10:00 AM 8/30/18	6:00 PM 8/30/18	 Extension until further notice: Outer Karluk Section Central and North Cape sections Southwest Afognak Section
		Noon 8/31/18	Opening until further notice: • Halibut Bay and Sturgeon sections
			 Opening for 54 hours, until 6:00 PM 9/2: Cape Alitak, Humpy-Deadman, Alitak Bay, Moser Bay, and Olga Bay sections Outer Ayakulik Section Uyak Bay, Zachar Bay, Spiridon Bay, Inner Uganik Bay, Terror Bay, Sharatin Bay, and Anton Larsen Bay sections Southeast Afognak, Northwest Afognak, Raspberry Strait, Shuyak Island, Pauls Bay, Perenosa Bay, and Northeast Afognak sections Big River Hallo Bay sections
			Open until further notice:Duck Bay, Izhut Bay, Outer Kitoi Bay sections
			Non-retention of Chinook salmon 28 inches in length or greater until further notice: • That portion of the Northwest Kodiak and Southwest Kodiak districts
43	10:00 PM 9/1/18	Noon 9/2/18	south of the latitude of Cape Kuliuk Opening for 78 hours, until 6:00 PM 9/5: Inner Karluk Section
		6:00 PM 9/2/18	 Extension until further notice: Cape Alitak, Alitak Bay, Moser Bay, and Olga Bay sections

Appendix B2.–Page 17 of 20.

E.O. #	Issued	Effective	Action in Effect
43 (cont.)			 Open until further notice: Outer Karluk, Halibut Bay, Sturgeon Bay sections Central and North Cape sections Duck Bay, Izhut Bay, Outer Kitoi Bay, and Southwest Afognak sections
			 Non-retention of Chinook salmon 28 inches in length or greater until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
44	10:00 AM 9/5/18	6:00 PM 9/5/18	Extension for 96 hours until 6:00 PM 9/9: • Inner Karluk Section
		Noon 9/7/18	 Opening for 54 hours, until 6:00 PM 9/9 Humpy-Deadman Section Outer Ayakulik Section Uyak Bay, Zachar Bay, Spiridon Bay, Inner Uganik Bay, Terror Bay, Kizhuyak Bay, Sharatin Bay, and Anton Larsen Bay sections Southeast Afognak, Northwest Afognak, Raspberry Strait, Shuyak Island, Pauls Bay, Perenosa Bay, and Northeast Afognak sections Big River and Hallo Bay sections Eastside Kodiak District
			 Open until further notice: Outer Karluk, Halibut Bay, Sturgeon Bay sections Central and North Cape sections Duck Bay, Izhut Bay, Outer Kitoi Bay, and Southwest Afognak sections Cape Alitak, Alitak Bay, Moser Bay, and Olga Bay sections
			 Non-retention of Chinook salmon 28 inches in length or greater until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
45	10:00 AM 9/11/18	Noon 9/12/18	Opening for 102 hours, until 6:00 PM 9/16: • Inner Karluk Section
		Noon 9/14/18	 Opening for 54 hours, until 6:00 PM 9/16: Humpy-Deadman Section Outer Ayakulik Section Uyak Bay, Zachar Bay, Spiridon Bay, Inner Uganik Bay, Terror Bay, Kizhuyak Bay, Sharatin Bay, and Anton Larsen Bay sections Southeast Afognak, Northwest Afognak, Raspberry Strait, Shuyak Island, Pauls Bay, Perenosa Bay, and Northeast Afognak sections Big River and Hallo Bay sections Eastside Kodiak District

Appendix B2.-Page 18 of 20.

E.O. #	Issued	Effective	Action in Effect
45 (cont.)			 Open until further notice: Outer Karluk, Halibut Bay, Sturgeon Bay sections Central and North Cape sections Duck Bay, Izhut Bay, Outer Kitoi Bay, and Southwest Afognak sections Cape Alitak, Alitak Bay, Moser Bay, and Olga Bay sections
			 Non-retention of Chinook salmon 28 inches in length or greater until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
46	3:30 PM 9/12/18	6:00 PM 9/13/18	Closure in the following areas: Izhut Bay and Outer Kitoi Bay sections
			 Open until further notice: Outer Karluk, Halibut Bay, Sturgeon Bay sections Central and North Cape sections Duck Bay and Southwest Afognak sections Cape Alitak, Alitak Bay, Moser Bay, and Olga Bay sections
			 Non-retention of Chinook salmon 28 inches in length or greater until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
47	10:00 AM 9/16/18	6:00 PM 9/16/18	Extension for 72 hours, until 6:00 PM 9/19: • Inner Karluk Section
			 Open until further notice: Outer Karluk, Halibut Bay, Sturgeon Bay sections Central and North Cape sections Duck Bay and Southwest Afognak sections Cape Alitak, Alitak Bay, Moser Bay, and Olga Bay sections
			 Non-retention of Chinook salmon 28 inches in length or greater until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
48	10:00 AM 9/19/18	6:00 PM 9/19/18	Extension until further notice: • Inner Karluk Section
		Noon 9/21/18	 Opening for 54 hours, until 6:00 PM 9/23: Humpy-Deadman Section Outer Ayakulik Section Uyak Bay, Zachar Bay, Spiridon Bay, Inner Uganik Bay, Terror Bay, Kizhuyak Bay, Sharatin Bay, and Anton Larsen Bay sections Southeast Afognak, Northwest Afognak, Raspberry Strait, Shuyak Island, Pauls Bay, Perenosa Bay, and Northeast Afognak sections Big River and Hallo Bay sections Eastside Kodiak District

E.O. #	Issued	Effective	Action in Effect
48 (cont.)			 Open until further notice: Outer Karluk, Halibut Bay, Sturgeon Bay sections Central and North Cape sections Duck Bay and Southwest Afognak sections Cape Alitak, Alitak Bay, Moser Bay, and Olga Bay sections
			 Non-retention of Chinook salmon 28 inches in length or greater until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
49	10:00 AM 9/26/18	Noon 9/28/18	 Opening for 54 hours, until 6:00 PM 9/30: Humpy-Deadman Section Outer Ayakulik Section Uyak Bay, Zachar Bay, Spiridon Bay, Inner Uganik Bay, Terror Bay, Kizhuyak Bay, Sharatin Bay, and Anton Larsen Bay sections Southeast Afognak, Northwest Afognak, Raspberry Strait, Shuyak Island, Pauls Bay, Perenosa Bay, and Northeast Afognak sections Big River and Hallo Bay sections Eastside Kodiak District (except in the Inner Ugak Bay section northeast of a line from Shark Point to a point west of Portage Bay)
			 Open until further notice: Inner Karluk, Outer Karluk, Halibut Bay, Sturgeon Bay sections Central and North Cape sections Duck Bay and Southwest Afognak sections Cape Alitak, Alitak Bay, Moser Bay, and Olga Bay sections
			 Non-retention of Chinook salmon 28 inches in length or greater until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk
50	10:00 AM 10/3/18	Noon 10/4/18	 Opening for 78 hours, until 6:00 PM 10/7: Humpy-Deadman Section Outer Ayakulik Section Uyak Bay, Zachar Bay, Spiridon Bay, Inner Uganik Bay, Terror Bay, Kizhuyak Bay, Sharatin Bay, and Anton Larsen Bay sections Southeast Afognak, Northwest Afognak, Raspberry Strait, Shuyak Island, Pauls Bay, Perenosa Bay, and Northeast Afognak sections Big River and Hallo Bay sections
			 Eastside Kodiak District (except in the Inner Ugak Bay section northeast of a line from Shark Point to a point west of Portage Bay) Monashka-Mill Bay Section Open until further notice: Inner Karluk, Outer Karluk, Halibut Bay, Sturgeon Bay sections Central and North Cape sections
			 Duck Bay and Southwest Afognak sections Cape Alitak, Alitak Bay, Moser Bay, and Olga Bay sections

Appendix B2.–Page 20 of 20.

E.O. #	Issued	Effective	Action in Effect
48 (cont.)	10:00 AM 10/3/18	Noon 10/4/18	 Non-retention of Chinook salmon 28 inches in length or greater until further notice: That portion of the Northwest Kodiak and Southwest Kodiak districts south of the latitude of Cape Kuliuk

APPENDIX C. (CAPE IGVAK FISI	HERY SUMMARY
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INTRODUCTION

Beginning in 1964, a purse seine fishery developed along the capes in the Cape Igvak Section of the Mainland District (Appendix C2). Between 1968 and 1969, ADF&G conducted a tagging study at Cape Igvak (ADF&G 1970). In 1968, ADF&G tagged 325 sockeye salmon on June 22. Only 5 recoveries were documented (4 in Chignik and 1 in Cook Inlet). In 1969 ADF&G tagged 791 sockeye salmon in the Cape Igvak area between June 14 and July 6. Tag recoveries (*n* = 161) were primarily made in the Chignik Management Area (83.9%), KMA (9.3%), Cook Inlet (4.3%), and West of Chignik (2.5%). The issue of interception of Chignik-bound sockeye salmon in the Cape Igvak Section came before the Board of Fisheries (BOF) several times over the next 10 years, and management of this section was modified many times. From 1974 to 1977, this area was managed for "day for day" equal fishing time with the Chignik Bay District of the Chignik Management Area (CMA).

In 1978, a specific management plan for the Cape Igvak Section was adopted by the BOF. The *Cape Igvak Salmon Management Plan* (CISMP; 5 AAC 18.360) covered the time period from the start of the season through July 25 for fishing activity in the Cape Igvak Section of the Mainland District. This management plan stipulated that 80% of the sockeye salmon harvest from the Cape Igvak Section during this period would be considered Chignik bound. In 2002, the BOF modified the CISMP such that 90% of the Cape Igvak Section sockeye salmon catch was now considered to be Chignik bound. The CISMP allows the Kodiak Management Area fleet to harvest up to 15% of the Chignik-bound sockeye salmon harvest. The CISMP also stipulated strict allocative and biological requirements. Through July 25 in Chignik, a minimum harvest of 600,000 sockeye salmon must be expected (300,000 each for both the early and late run), and sockeye salmon escapement must be at desired levels for a harvest to be allowed. Commercial fisheries must begin in CMA before fisheries are allowed in the Cape Igvak Section (Fuerst and Jackson 2018).

Since this plan was adopted in 1978, the catch of Chignik-bound sockeye salmon from the Cape Igvak Section has ranged from 0% to 19.2% of the total Chignik sockeye salmon harvest (Appendix C3). In years that an allocation fishery has been prosecuted in the Cape Igvak Section, the sockeye salmon harvest has averaged 12.0% of the total CMA sockeye salmon harvest (Appendix C4). The Cape Igvak harvest has met or exceeded its 15% allocation level in 10 of the 40 years the plan has been in place (Appendices C3 and C4).

2018 Cape Igvak Fishery

Early Run

The 2018 preseason forecast for the Chignik system predicted a return of approximately 848,000 early-run (Black Lake) sockeye salmon. The early-run escapement goal is 350,000 to 450,000 sockeye salmon though late July (Schaberg et al. 2015). This left a forecasted harvestable surplus of 447,000 early-run sockeye salmon (Brenner et al. 2018).

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Chignik-bound sockeye salmon are also harvested in the Southeastern Mainland District of the Alaska Peninsula Management Area, in accordance with the regulatory Southeastern District Mainland Salmon Management Plan, 5 AAC 09.360.

The early Chignik sockeye salmon return was well below average and the allocative requirements were not met, therefore the allocation fishery with Cape Igvak was not open to commercial fishing during the early run in 2018. The CISMP provides for an "overlap period" between the first and second runs (June 26 to July 9) during which fishing in the Cape Igvak Section is closed or severely limited until the strength of the late run (Chignik Lake) can be assessed. In accordance with the CISMP, the Cape Igvak fishery remained closed from June 26 to July 9.

Late Run

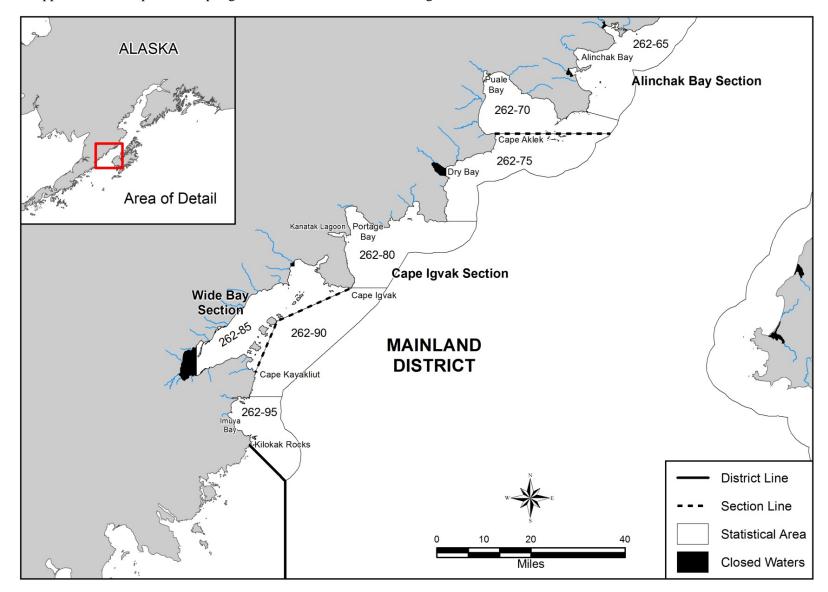
The preseason forecast for late-run (Chignik Lake) sockeye salmon was approximately 901,000 fish in 2018. The late-run escapement objective was 250,000 to 400,000 sockeye salmon (Schaberg et al. 2015) resulting in a harvestable surplus forecast of 563,000 sockeye salmon (Brenner et al. 2018).

The actual late run was weaker than forecast during the allocation period and did not meet the biological and allocative criteria to allow for the Cape Igvak fishery to open during the late run.

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- Brenner, R. E., A. R. Munro, and J. C. Shriver, editors. 2018. Run forecasts and harvest projections for 2018 Alaska salmon fisheries and review of the 2017 season. Alaska Department of Fish and Game, Special Publication No. 18-09, Anchorage.
- Fuerst, B. A., and J. Jackson. 2018. Kodiak management area harvest strategy for the 2018 commercial salmon fishery. Alaska Department of Fish and Game, Regional Information Report No. 4K18-02, Kodiak.
- Schaberg, K. L., D. A. Tracy, M. B. Foster, and M. Loewen. 2015. Review of salmon escapement goals in the Chignik Management Area, 2015. Alaska Department of Fish and Game, Fishery Manuscript Series No. 15-02, Anchorage.

Appendix C2.—Map of the Cape Igvak Section of the Kodiak Management Area.



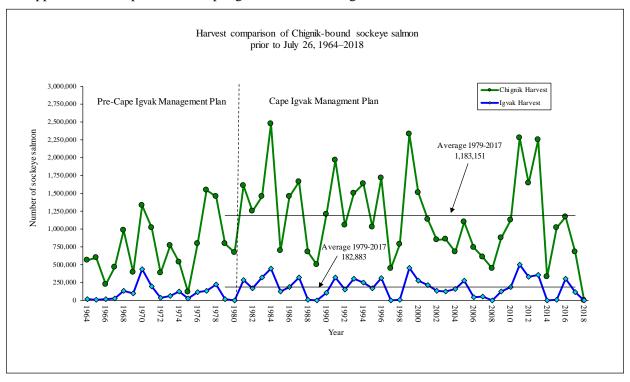
Appendix C3.—Harvest of sockeye salmon considered to be Chignik bound in the Chignik, Cape Igvak, and Southeastern District Mainland commercial salmon fisheries, from 1978 to 2018.

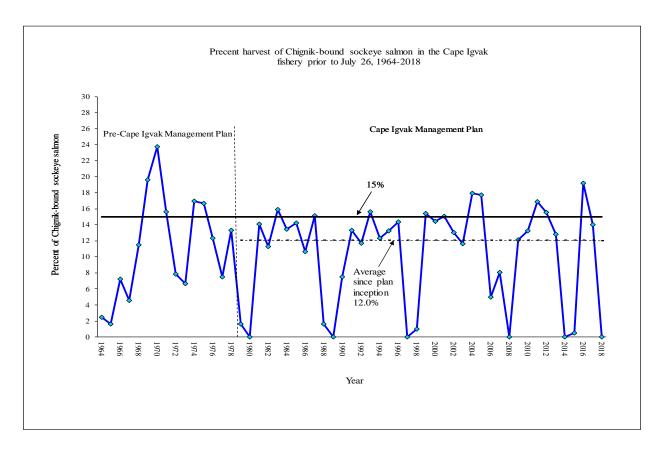
	Ch	ignik	Cape	e Igvak ^a	Southeaster Mainla		
Year	Catch ^b	Percent	Catchb	Percent	Catchb	Percent	Total
1978 °	1,454,389	86.60	225,078	13.40	N/A	N/A	1,679,467
1979 ^d	794,504	98.27	13,950	1.73	N/A	N/A	808,454
1980	670,001	91.31	32	0.00	63,724	8.68	733,757
1981	1,606,300	79.87	282,727	14.06	122,198	6.08	2,011,225
1982	1,250,768	84.49	166,756	11.26	62,789	4.24	1,480,313
1983	1,450,832	72.68	318,048	15.93	227,392	11.39	1,996,272
1984	2,474,405	73.93	449,372	13.43	423,292	12.65	3,347,069
1985 ^e	690,698	79.78	123,627	14.28	51,421	5.94	865,746
1986	1,456,729	82.64	188,017	10.67	118,006	6.69	1,762,752
1987	1,659,236	77.99	321,506	15.11	146,886	6.90	2,127,628
1988	675,487	95.77	10,520	1.49	19,320	2.74	705,327
1989	496,044	99.10	f	0.00	4,485	0.90	500,529
1990	1,205,575	84.29	107,706	7.53	117,065	8.18	1,430,346
1991 ^g	1,962,583	80.45	324,195	13.29	152,714	6.26	2,439,492
1992 ^h	1,054,309	81.19	150,434	11.58	93,845	7.23	1,298,588
1993	1,495,098	77.72	300,055	15.60	128,536	6.68	1,923,689
1994 ⁱ	1,632,435	80.61	250,230	12.36	142,350	7.03	2,025,015
1995	1,024,785	79.85	169,530	13.21	89,086	6.94	1,283,401
1996 ^j	1,710,249	79.70	308,327	14.37	127,201	5.93	2,145,777
1997	443,892	100.00	f	0.00	f	0.00	443,892
1998 ^k	786,466	91.22	8,813	1.02	66,893	7.76	862,172
1999	2,326,811	78.70	456,039	15.43	173,621	5.87	2,956,471
2000	1,509,652	80.11	271,344	14.40	103,419	5.49	1,884,415
2001 1	1,134,991	79.41	215,214	15.06	79,037	5.53	1,429,242
$2002 ^{\mathrm{m}}$	849,980	80.99	136,488	13.01	63,026	6.01	1,049,494
2003	854,673	81.67	121,887	11.65	69,935	6.68	1,046,495
2004	681,139	75.94	160,665	17.91	55,123	6.15	896,927
2005	1,098,718	70.84	274,328	17.69	177,906	11.47	1,550,952
2006	741,887	87.72	41,834	4.95	62,010	7.33	845,731
2007 n	601,213	91.97	52,527	8.03	f	0.00	653,740
2008	455,199	100.00	f	0.00	f	0.00	455,199
2009	871,890	83.26	126,968	12.12	48,322	5.54	1,047,180
2010	1,125,135	80.62	185,193	13.27	85,267	7.58	1,395,595
2011	2,277,681	77.77	494,538	16.89	156,637	6.88	2,928,856
2012	1,640,517	78.44	324,895	15.53	126,083	7.69	2,091,495
2013	2,253,424	81.16	354,179	12.76	169,029	7.50	2,776,632

				Southeastern District						
_	Chi	ignik	Саре	e Igvak ^a	Mainl	and ^a				
Year	Catch ^b	Percent	Catch ^b	Percent	Catch ^b	Percent	Total			
2014	330,302	100.00	0	0.00	0	0.00	330,302			
2015	1,014,550	90.67	5,936	0.53	98,473	9.71	1,118,959			
2016	1,167,326	74.92	298,470	19.16	94,790	8.12	1,558,034			
2017	679,410	80.76	118,101	14.04	43,730	6.44	841,241			
2018	128	100.00	0	0.00	0	0.00	128			

- ^a Through 2001, the Cape Igvak and Southeastern District Mainland figures represent 80% of the total sockeye salmon catch for those areas, based on the premise that 80% of the sockeye salmon caught in those areas are destined for Chignik (excluding sockeye salmon caught in the Northwest Stepovak Section from 1964 to 1991 and during July from 1996 to 2009, and Orzinski Bay from 1992 to 1995). In 2002, for the Cape Igvak fishery, the BOF increased the percentage of the sockeye salmon harvest considered to be Chignik bound from 80% to 90%.
- ^b Beginning in 1978, the Cape Igvak Salmon Management Plan allocated up to 15% of the total catch of Chignik-bound sockeye salmon to Kodiak Management Area fishermen.
- ^c In 1978, seining prior to July 11 was disallowed in the Southeastern District Mainland. Set gillnet fisheries were allowed for 3 days per week through July 10, after which the fishery was based on local stock abundance.
- ^d From 1979 to 1984, fishing in the Southeastern District Mainland was allowed for 5 days per week prior to July 11, with an estimated ceiling of 60,000 Chignik-bound sockeye. If the Chignik Management Area catch was 1,000,000 or more before July 11 then the ceiling was removed.
- ^e Beginning in 1985, the Southeastern District Mainland (excluding the Northwest Stepovak Section and Orzinski Bay) was allowed an allocation of 6.2% of the total harvest of Chignik-bound sockeye salmon through July 25. After July 25 the Southeast District Mainland was managed based on local stock abundance. The allocation level changed to 6.0% beginning in 1988, with seining still not allowed prior to July 11.
- f No fishery.
- g Includes overescapement of 208,305 sockeye salmon counted through the Chignik weir during a Chignik Area seiners strike (June 23 to July 4).
- ^h Beginning in 1992, after a BOF review of historical records, the allocation of Chignik-bound sockeye salmon to the Southeastern District Mainland fishery (excluding Orzinzki Bay) was increased to 7.0%, through July 25.
- ⁱ Includes overescapement of 208,921 sockeye salmon counted through the Chignik weir during a Chignik Area seiners strike (June 2 to June 25).
- J In January 1996, the BOF increased the area managed for local Orzinski Lake sockeye salmon from only Orzinski Bay to the entire Northwest Stepovak Section. Prior to July 1, the entire Northwest Stepovak Section will be managed by allocation based on Chignik sockeye salmon run strength. Beginning July 1, the Northwest Stepovak Section is managed entirely on local stocks. The BOF also decreased the percentage of Chignik-bound sockeye salmon allocated to the Southeastern District Mainland fishery from 7.0% to 6.0%.
- k Includes 7,714 sockeye salmon caught on June 18 by the Chignik Seiners Association, and an overescapement of 52,131 sockeye salmon counted through the weir during the Chignik Seiners Association boycott (June 16 to June 29).
- ¹ Includes 176,605 sockeye salmon caught June 16–29 by the Chignik Seiners Association, and foregone harvest due to overescapement of 398,887 in the CMA and 27,896 in the Southeastern District Mainland during the fishermen's strike (June 14 to July 2).
- ^m In 2002, the BOF changed the regulations such that 90% (up from 80%) of sockeye salmon harvested in the Cape Igvak Section through July 25 are to be considered Chignik bound.
- ⁿ In 2007, the BOF changed the Southeastern District Mainland allocation from 6.0% of the total Chignik-bound harvest to 7.6% of the total Chignik Area harvest.

Appendix C4.–Impact of the Cape Igvak Salmon Management Plan.





APPENDIX D.	ALITAK	DISTRICT	FISHERY	SUMMARY
				1 7 1 / I V I I V I / T I T I T

Appendix D1.-Narrative account of the Alitak District salmon fishery in the Kodiak Management Area, 2018.

INTRODUCTION

Within the Alitak District fishery set gillnet and seine are legal gear types for commercial salmon fishing. Set gillnets are allowed only in the inside waters of the Alitak Bay, Moser Bay, and Olga Bay sections, whereas seine gear is limited to the outer waters of the Cape Alitak and Humpy-Deadman sections until September 5 (5 AAC 18.330(d)(2); Appendix D2). Prior to the mid-1980s, various strategies were applied in the Alitak District to conserve and build sockeye salmon stocks returning to the Frazer, Akalura, and Upper Station systems, while offering some protection to local pink, chum, and coho salmon stocks. In the fall of 1987, the existing harvest strategy was formalized into a regulatory management plan and was adopted by the Board of Fisheries (BOF; 5AAC 18.361). This plan details the key species and targeted stocks managed in each section of the district throughout the fishing season (Fuerst and Jackson 2018). This management plan has been in effect since 1988 and was most recently revised by the BOF in 2017.

Recent Board of Fisheries Actions:

Most of the changes to the Alitak District Salmon Management Plan are directed at early run sockeye salmon management between June 1 and July 15. The changes are aimed at achieving the Frazer sockeye salmon BEG of 75,000 to 170,000 fish while meeting the smaller Upper Station early-run sockeye salmon BEG of 43,000 to 93,000 fish. These two salmon runs have overlapping run timing and Upper Station is located further into Olga Bay than the Frazer system (Appendix D2).

Previous BOF actions directed the department to focus management on the larger Frazer sockeye salmon run by establishing an Upper Station early-run sockeye salmon OEG of 25,000 fish (Prokopowich 1999). Since the Upper Station early-run OEG was lower than the Upper Station early-run SEG, management was focused on the larger Frazer sockeye salmon run. As a result, Upper Station early-run often achieved the OEG but failed to meet the SEG.

Beginning in 2014, the BOF eliminated the staggered opening and closing times for the Cape Alitak, Alitak Bay, Moser Bay, and Olga Bay sections. Deleting this allocative language better enabled the department to pulse fish into Olga Bay. The BOF also liberalized the criteria for opening the terminal Dog Salmon Flats Section. Beginning in 2014, the Dog Salmon Flats Section could open prior to exceeding the Frazer sockeye salmon escapement goal.

In 2017, the BOF mandated the department to manage the Upper Station sockeye salmon early-run for the BEG instead of the OEG (5 AAC 18.361(c); Fuerst 2019). The BOF also deleted language directing the department to manage the commercial fishery to the extent possible in the traditional fisheries located in the Cape Alitak, Humpy-Deadman, Alitak Bay, Moser Bay, and Olga Bay sections. Removing this language enables the department to restrict the commercial fishery to the nontraditional terminal Dog Salmon Flats Section. The BOF further removed language directing the department to manage the Frazer sockeye salmon run for maximum sustained yield. All of these changes allow the department more flexibility to manage for the Frazer BEG and the Upper Station BEG.

2018 Alitak Fishery

The total run forecast for the Upper Station early run was 79,000 sockeye salmon, with an estimated harvestable surplus of approximately 14,000 fish. The 2018 total run forecast for the Frazer Lake system was 239,000 sockeye salmon (Brenner et al. 2018), with an estimated harvestable surplus of approximately 102,000 sockeye salmon. The total run forecast for Upper Station late run was 293,000 sockeye salmon, with an estimated harvestable surplus of approximately 107,000 sockeye salmon (Brenner et al. 2018).

The early-run Upper Station sockeye salmon run has a biological escapement goal (BEG) of 43,000 to 93,000 fish. The 2018 target sockeye salmon escapement for Upper Station early run was based on a maximum sustained yield calculation of 66,000 fish (Schaberg et al. 2016). The Frazer Lake sockeye salmon BEG range is 75,000 to 170,000 fish. The 2018 targeted sockeye salmon escapement for Frazer Lake was based on a maximum sustained yield calculation of 117,000 fish (Schaberg et al. 2016). Frazer sockeye salmon escapement are first enumerated through a lower weir near the outlet of the Dog Salmon River (Dog Salmon weir) and then enumerated through the fish pass (Frazer Lake fish pass) below the outlet of the lake. Some sockeye salmon that have been enumerated at the Dog Salmon weir do not ascend the Frazer fish pass and remain in Dog Salmon Creek. For the past 5 years the number of sockeye salmon remaining in the river has averaged approximately 13,553 fish. The 2018 targeted Dog Salmon weir sockeye salmon escapement was determined to be 137,000 fish. However, if appropriate, the Dog Salmon weir target escapement goal will also be further increased to account for jack sockeye salmon (jacks). The department defines jack sockeye salmon as sexually mature males that return after only 1 year in the ocean. The Upper Station late run has a BEG of 120,000 to 265,000 fish. The 2018 target sockeye salmon escapement for the Upper Station late run was based on a maximum sustained yield calculation of 186,000 fish (Schaberg et al. 2016).

Frazer Jack Salmon and Alitak Salmon Management

In some years, the Frazer Lake sockeye salmon run has included a large number of jacks. In order to increase the absolute number of large adult spawners, the Frazer Lake target sockeye salmon escapement is further increased to account for excess jacks. When the total number of jacks counted through Dog Salmon weir exceeds 10% of the overall cumulative sockeye salmon counted through the weir, then jacks in excess of 10% are not considered toward the inseason management objectives.

Olga Bay, Moser Bay, Alitak Bay, and Cape Alitak Salmon Management

By regulation, the Alitak District is managed from June 1 through June 30 based on sockeye returning to the Frazer system and the Upper Station system. The Upper Station weir was fish tight on May 21, and Dog Salmon Creek weir (Frazer system) was fish tight on May 24 (Fuerst 2019). Early-run escapement through the Upper Station weir was not sufficient to allow for the traditional 33-hour test fishery beginning on June 9.

Through, June 24, with no commercial salmon fishing in the Alitak District, both early-run sockeye salmon escapement through the Upper Station weir and Dog Salmon creek was on target to meet their respective midpoints of 66,000 and 140,000 fish (Fuerst 2019). The department announced a 57-hour commercial salmon fishing period in the traditional fishing areas of the Alitak District (both seine and gillnet) beginning on June 25. Sockeye salmon harvest was below average but both Dog Salmon creek and Upper Station early-run sockeye escapement was adequate to justify a 24-hour extension to the commercial salmon fishery. Due to an increasing number of jack sockeye salmon passing Dog Salmon creek weir, and diminishing Upper Station early-run escapement, the Alitak District closed on June 28 (Fuerst 2019).

By regulation, the Alitak District is managed from July 1 through July 15 based on sockeye returning to either the Frazer system or the Upper Station system. By July 2, escapement of both Dog Salmon creek large adult sockeye salmon and Upper early-run escapement began to increase and the department opened the traditional fishing areas of the Alitak District (both seine and gillnet) for 57 hours beginning Wednesday, July 4 (Fuerst 2019). Sockeye salmon harvest was below average but both Dog Salmon and Upper Station weir sockeye salmon escapements were adequate resulting in a 48-hour extension to the commercial fishing period (Fuerst 2019). Due to an increasing number of jack sockeye salmon passing Dog Salmon creek weir, the Alitak District closed on July 8.

Shortly after the closure, Dog Salmon creek weir sockeye salmon escapement began to increase; however, the percentage of jack sockeye salmon increased substantially as well. The department determined that the fishery should remain closed until the next general pink salmon opening.

The department opened the traditional sockeye salmon fishing areas of the Alitak District for 57 hours beginning July 13. Sockeye salmon harvest was below average, but Dog Salmon creek sockeye salmon escapement was adequate. The jack sockeye salmon percentage again began to increase and the Alitak District closed on July 15 (Fuerst 2019). The final 2018 early-run sockeye salmon escapement at Upper Station weir (through July 15) was 61,732 sockeye salmon; within the established BEG of 43,000 to 93,000 fish.

By regulation, the traditional sockeye salmon fishing areas of the Alitak District are managed from July 16 through August 9 based on sockeye returning to either the Frazer system or to the Upper Station system. By, July 17, escapement of Dog Salmon creek large adult sockeye salmon escapement began to increase and the department opened the traditional sockeye salmon fishing areas (excluding the Humpy–Deadman Section, which at this time is managed based on local pink salmon) for 57 hours beginning July 19. Sockeye salmon harvest was well below average but Dog Salmon Creek sockeye salmon escapement continued to climb and the fishery was extended for a further 48 hours. Sockeye salmon harvest numbers continued to be below average while the Dog Salmon Creek jack sockeye salmon percentage increase again. The Alitak District closed on July 23.

Between July 24 and August 3, the number of jack sockeye salmon escaping through Dog Salmon Creek weir was very high. After an extended closure for more Dog Salmon creek large adult sockeye salmon, the department opened the Alitak District for 57 hours beginning August 4. Both pink salmon and sockeye salmon harvest numbers were above average and the traditional sockeye salmon fishing areas (excluding the Humpy-Deadman Section) were extended for 48 hours.

Dog Salmon Creek pink salmon also increased and the non-traditional (gillnet only) Dog Salmon Flats Section was opened on August 7. Both pink salmon and sockeye salmon harvest remained above average and the traditional sockeye salmon fishing areas were extended for another 48 hours. Pink salmon escapement through Dog Salmon Creek weir increased substantially and the non-traditional (gillnet only) Dog Salmon Flats section was extended until further notice.

The final 2018 sockeye salmon escapement at Dog Salmon weir was 232,526 sockeye salmon (Fuerst 2019). The final 2018 Frazer fish pass escapement was 201,161 sockeye salmon. A total of 31,365 sockeye salmon were enumerated at the Dog Salmon weir but did not ascend the Frazer fish pass. The Frazer fish pass was closed after counts were completed on August 22. A total of 62,052 jacks (26.69% of the Dog Salmon escapement) passed Dog Salmon weir. A total of 60,037 jacks passed the Frazer fish pass, bringing the nonjack adult total sockeye salmon escaped into Frazer Lake to 141,124 fish within the established BEG of 75,000 to 170,000 fish (Schaberg et al. 2016; Fuerst 2019). Finally, a total of 250,509 pink salmon also escaped into Dog Salmon Creek (Table 4).

By regulation, the traditional sockeye salmon fishing areas of the Alitak District are managed from August 10 through August 25 based on sockeye returning to the Upper Station system. By August 11, Upper Station late-run sockeye salmon escapement was well above average and the Alitak District opened for 57 hours on August 13 (Fuerst 2019). Sockeye salmon harvest numbers continued to be strong and the fishery was extended until August 19.

Due to above average Upper Station late-run sockeye salmon escapement the traditional sockeye salmon fishing areas largely remained open for the remainder of the season. By August 24, the Upper Station late-run sockeye salmon escapement target was assured. Despite lengthy fishing openers fishing set gillnet effort remained low.

The final 2018 Upper Station late-run sockeye salmon escapement of 235,669 was within the BEG of 120,000 to 265,000 fish and the largest in over 20 years (Schaberg et al. 2016; Fuerst 2019). The 2018 Upper Station coho salmon escapement was the largest on record with a total of 17,187 escaped (Table 4).

Humpy-Deadman Section Salmon Management

The Humpy-Deadman Section (HDS) is managed from June 1 to July 15 with equal fishing time in the Cape Alitak Section. After July 15, HDS is managed based on the strength of the local salmon returns.

On July 15, HDS was extended for an additional 48 hours until July 17. Pink salmon harvests and early aerial surveys indicated below average abundance of pink salmon in the Alitak District. Due to early indications catch and escapement numbers, several closures were necessary to meet escapement needs. After August 15 pink salmon escapement (particularly to Humpy Creek stream #257-701) was adequate and the HDS remained open for the remainder of the season. In total, total, 562,073 pink salmon were harvested in the HDS and the Alitak District escapement was 690,029 pink salmon in 2018, below the 10-year average (Fuerst 2019).

Season Totals

In 2018, set gillnet harvest in the Olga Bay Section (statistical area 257-40) by 16 permit holders included 41,183 sockeye, 2,471 coho, 25,641 pink, and 794 chum salmon (Appendix D3). Set gillnet harvest in the Moser Bay Section (statistical area 257-43) by 23 permit holders included 82,945 sockeye, 4,462 coho, 39,731 pink, and 1,190 chum salmon (Appendix D3). Set gillnet harvest in the Alitak Bay Section (statistical area 257-41) by 19 permit holders included 1 Chinook, 46,087 sockeye, 1,564 coho, 31,317 pink, and 2,528 chum salmon (Appendix D3). Set gillnet harvest in the Dog Salmon Flats Section (statistical area 257-42) by 7 permit holders included 1,335 sockeye, 183 coho, 5,173 pink, and 63 chum salmon (Appendix D3).

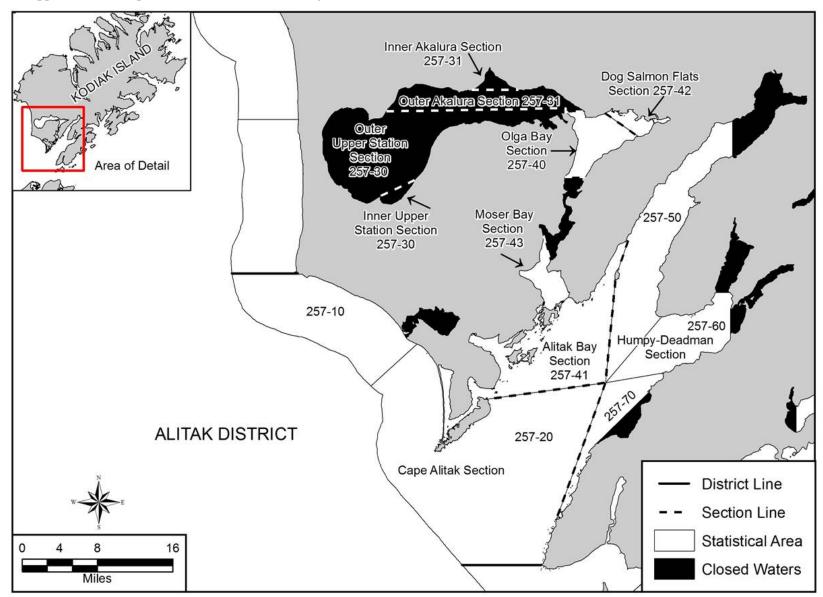
In 2018, seine harvest in the Cape Alitak Section (statistical areas 257-10 and -20) by 48 permit holders included 219 Chinook, 97,763 sockeye, 11,076 coho, 116,551 pink, and 15,084 chum salmon (Appendix D4). Seine harvest in the HDS (statistical areas 257-50, -60, and -70) by 26 permit holders included 6 Chinook, 8,208 sockeye, 1,616 coho, 562,073 pink and 9,643 chum salmon (Appendix D4).

A total of 50 purse seine permit holders fished in the Alitak District in 2018 with a total harvest of 225 Chinook (>99% of the total Alitak District Chinook harvest), 105,971 sockeye (38%), 12,692 coho (59%), 678,624 pink (87%), and 24,727 chum salmon (84%; Appendices D4, D5, and D6). A total of 43 gillnet permit holders fished in Alitak District and harvested 1 Chinook (<1%), 171,557 sockeye (62%), 8,711 coho (41%), 101,862 pink (13%), and 4,576 chum salmon (16%; Appendices D3, D5, and D6).

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Appendix D2.-Map of the Alitak District showing sections, statistical areas, and closed waters, 2018.



Appendix D3.-Set gillnet daily salmon harvest, by species and section, for the Alitak District, 2018.

Statistical			_	Chine	ook	Socke	eye	Coh	.0	Pinl	ζ	Chu	m
Area	Date	Permits	Landings	Number	Pounds								
Olga Bay	25-Jun	7	7	0	0	2,593	11,407	0	0	1	3	9	67
Section	26-Jun	9	10	0	0	1,508	6,589	0	0	0	0	40	360
257-40	27-Jun	5	5	0	0	343	1,487	0	0	0	0	10	125
	28-Jun	6	6	0	0	540	2,275	0	0	0	0	12	121
	4-Jul	7	8	0	0	763	3,638	0	0	1	3	12	97
	5-Jul	6	6	0	0	360	1,549	0	0	0	0	9	75
	6-Jul	5	5	0	0	321	1,457	0	0	0	0	3	37
	7-Jul	4	5	0	0	68	326	0	0	0	0	0	0
	8-Jul	3	3	0	0	52	277	0	0	0	0	1	8
	13-Jul	9	9	0	0	1,312	6,334	1	7	23	104	17	144
	14-Jul	6	7	0	0	268	1,172	0	0	8	39	21	169
	15-Jul	4	4	0	0	293	1,347	0	0	6	30	10	77
	19-Jul	6	7	0	0	635	3,277	1	6	52	225	19	164
	20-Jul	7	7	0	0	273	1,210	0	0	22	96	8	79
	21-Jul	4	4	0	0	151	658	1	7	13	61	2	18
	22-Jul	4	4	0	0	50	177	0	0	2	13	1	14
	23-Jul	3	3	0	0	84	373	0	0	3	13	0	0
	4-Aug	6	11	0	0	1,525	7,949	6	47	2,303	10,954	22	206
	5-Aug	8	19	0	0	2,099	11,444	35	259	3,260	16,156	26	237
	6-Aug	7	13	0	0	922	5,079	29	229	3,265	16,045	31	279
	7-Aug	6	9	0	0	528	2,881	29	219	1,569	7,768	21	189
	8-Aug	5	7	0	0	640	3,490	13	121	962	4,697	9	92
	9-Aug	4	7	0	0	943	5,417	29	217	1,238	6,112	5	43
	10-Aug	5	8	0	0	804	4,287	36	254	1,104	5,333	13	108
	13-Aug	4	12	0	0	2,859	15,882	90	727	1,990	9,352	52	452
	14-Aug	4	7	0	0	1,153	6,290	138	1,162	1,746	8,373	30	251
	15-Aug	4	8	0	0	1,347	7,569	69	631	1,516	7,258	14	104
	16-Aug	4	6	0	0	880	4,957	69	582	925	4,457	3	25
	17-Aug	3	8	0	0	1,199	6,584	109	863	1,523	7,265	20	181

Appendix D3.–Page 2 of 7.

Statistical				Chin	ook	Sock	eye	Coho)	Pin	k	Chu	ım
Area	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
	18-Aug	3	7	0	0	888	4796	58	491	730	3500	21	186
Olga Bay	19-Aug	3	6	0	0	620	3,613	104	834	358	1,706	6	52
Section 257-40	22-Aug	3	5	0	0	562	3,108	84	686	272	1,228	27	193
(cont.)	23-Aug	3	5	0	0	741	3,999	114	926	614	2,666	15	104
(*****)	24-Aug	3	7	0	0	1,015	5,536	129	1,069	382	1,656	18	133
	25-Aug	3	9	0	0	954	5,195	80	746	414	1,791	31	216
	26-Aug	3	8	0	0	1,032	5,565	155	1,421	158	719	16	126
	27-Aug	3	7	0	0	860	4,665	127	1,119	308	1,405	31	219
	28-Aug	3	7	0	0	868	4,666	171	1,452	282	1,319	41	266
	31-Aug	3	9	0	0	2,804	14,208	144	1,276	121	558	42	338
	1-Sep	4	10	0	0	2,111	10,804	149	1,359	132	624	36	275
	2-Sep	3	6	0	0	1,174	6,313	64	604	124	574	15	128
	3-Sep	4	7	0	0	497	2,664	130	1,237	108	484	7	50
	4-Sep	3	5	0	0	303	1,557	70	695	39	172	9	81
	5-Sep	5	5	0	0	315	1,722	35	337	26	131	6	44
	6-Sep	4	6	0	0	432	2,287	51	423	13	72	13	89
	7-Sep	3	4	0	0	371	1,962	36	333	6	33	10	74
	8-Sep	3	3	0	0	143	767	40	397	11	52	12	79
	9-Sep ^a												
	10-Sep	3	3	0	0	261	1,443	27	247	3	11	7	49
	11-Sep ^a												
Total		16	339	0	0	41,183	214,122	2,471	21,422	25,641	123,097	794	6,492
Average we	ight				0.0		5.2		8.7		4.8		8.2
Moser Bay	25-Jun	5	6	0	0	1,296	6,237	0	0	0	0	13	141
Section	26-Jun	8	11	0	0	1,423	6,704	1	5	0	0	13	107
(257-43)	27-Jun	6	7	0	0	1,516	6,911	0	0	1	3	9	81
	28-Jun	6	13	0	0	1,599	7,355	1	5	0	0	8	69
	4-Jul	7	8	0	0	871	4,190	0	0	8	27	22	152
	5-Jul	8	12	0	0	1,206	5,684	0	0	8	31	33	244

Appendix D3.–Page 3 of 7.

Statistical				Chino	ook	Socke	eye	Coh	10	Pinl	ζ	Chu	m
Area	Date	Permits	Landings	Number	Pounds								
Moser Bay	6-Jul	8	11	0	0	1,585	7,174	0	0	3	9	18	137
Section (257-43)	7-Jul	7	10	0	0	862	4,296	0	0	7	23	14	101
(237-43) (cont.)	8-Jul	6	11	0	0	758	3,575	4	31	11	41	35	307
(cont.)	13-Jul	6	8	0	0	922	4,583	1	5	46	181	24	164
	14-Jul	8	13	0	0	1,076	5,007	2	14	39	149	14	110
	15-Jul	8	10	0	0	1,269	5,865	0	0	58	278	22	176
	19-Jul	6	9	0	0	773	3,871	1	4	92	320	18	89
	20-Jul	8	15	0	0	854	4,312	4	39	147	600	14	110
	21-Jul	6	8	0	0	541	2,734	4	26	183	736	23	172
	22-Jul	10	12	0	0	859	4,305	3	17	265	1,106	13	92
	23-Jul	6	9	0	0	1,008	5,089	2	17	267	1,147	8	60
	4-Aug	6	11	0	0	2,336	12,777	32	258	3,315	14,371	24	205
	5-Aug	7	10	0	0	3,268	17,960	52	439	5,583	25,350	21	184
	6-Aug	9	16	0	0	1,778	9,756	54	405	4,020	19,251	41	312
	7-Aug	6	12	0	0	1,547	8,412	58	459	2,761	12,414	31	266
	8-Aug	6	10	0	0	2,626	14,430	87	672	3,070	13,990	39	331
	9-Aug	5	10	0	0	2,881	16,378	93	705	3,066	14,322	35	292
	10-Aug	8	11	0	0	2,503	13,789	113	929	2,624	11,945	32	272
	13-Aug	8	13	0	0	2,516	13,850	201	1,699	1,880	8,463	67	580
	14-Aug	7	14	0	0	4,589	25,179	336	2,691	3,116	14,314	73	671
	15-Aug	8	12	0	0	3,806	20,850	199	1,595	1,755	7,934	49	382
	16-Aug	8	14	0	0	3,101	17,277	163	1,344	1,172	5,495	30	239
	17-Aug	8	10	0	0	2,920	16,079	91	728	1,005	4,518	14	118
	18-Aug	8	13	0	0	2,669	14,678	339	2,714	1,188	5,348	46	411
	19-Aug	8	11	0	0	2,881	15,830	256	2,072	932	4,207	22	179
	22-Aug	7	10	0	0	2,096	11,534	120	957	468	2,098	27	223
	23-Aug	7	12	0	0	2,140	11,801	150	1,199	465	2,095	15	131
	24-Aug	7	11	0	0	2,198	12,013	189	1,590	485	2,172	34	250
	25-Aug	6	12	0	0	985	5,417	66	548	221	991	19	153

Appendix D3.–Page 4 of 7.

Statistical				Chin	ook	Sock	eye	Col	10	Pin	k	Chui	m
Area	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Moser Bay	26-Aug	7	9	0	0	1,583	8,698	118	950	217	984	8	56
Section	27-Aug	6	14	0	0	2,444	13,416	307	2,480	359	1,663	37	295
(257-43) (cont.)	28-Aug	8	10	0	0	2,275	12,485	244	2,020	271	1,226	19	147
(cont.)	31-Aug	6	9	0	0	1,868	10,270	146	1,187	107	387	31	256
	1-Sep	8	17	0	0	2,663	14,749	259	2,080	203	697	32	240
	2-Sep	8	10	0	0	1,775	9,568	246	1,976	171	616	26	203
	3-Sep	6	12	0	0	632	3,476	118	923	51	194	20	151
	4-Sep	5	6	0	0	752	4,138	123	992	36	128	16	121
	5-Sep	4	7	0	0	499	2,733	74	591	18	61	21	166
	6-Sep	3	6	0	0	781	4,218	49	434	13	43	14	87
	7-Sep	4	10	0	0	427	2,351	53	453	12	45	12	88
	8-Sep	3	4	0	0	389	2,124	20	161	11	50	11	70
	9-Sep ^a												
	10-Sep ^a												
	11-Sep ^a												
Total		23	512	0	0	82,945	442,758	4,462	36,099	39,731	180,029	1,190	9,553
Average wei	ght				0.0		5.3		8.1		4.5		8.0
Alitak Bay	25-Jun	5	5	0	0	1,549	7,008	1	5	5	12	35	322
Section	26-Jun	8	9	0	0	904	4,377	0	0	10	28	60	506
(257-41)	27-Jun	7	7	1	20	1,633	7,936	0	0	19	54	70	585
	28-Jun	7	11	0	0	1,531	7,080	1	4	4	12	53	378
	4-Jul	6	6	0	0	783	3,990	0	0	13	42	58	386
	5-Jul	9	11	0	0	944	4,552	0	0	27	83	48	374
	6-Jul	8	11	0	0	915	4,630	0	0	25	91	47	387
	7-Jul	8	10	0	0	647	3,229	3	15	59	181	50	389
	8-Jul	7	7	0	0	659	3,505	6	36	89	310	83	644
	13-Jul	6	6	0	0	347	1,873	16	98	157	672	48	343
	14-Jul	9	12	0	0	1,157	6,052	4	19	244	883	117	872
	15-Jul	8	9	0	0	654	3,009	2	18	131	554	98	794

Appendix D3.–Page 5 of 7.

Statistical				Chino	ook	Socke	eye	Coh	10	Pinl	ζ	Chu	m
Area	Date	Permits	Landings	Number	Pounds								
	25-Jun	5	5	0	0	1,549	7,008	1	5	5	12	35	322
	26-Jun	8	9	0	0	904	4,377	0	0	10	28	60	506
Alitak Bay Section	27-Jun	7	7	1	20	1,633	7,936	0	0	19	54	70	585
(257-41)	28-Jun	7	11	0	0	1,531	7,080	1	4	4	12	53	378
(cont.)	4-Jul	6	6	0	0	783	3,990	0	0	13	42	58	386
	5-Jul	9	11	0	0	944	4,552	0	0	27	83	48	374
	6-Jul	8	11	0	0	915	4,630	0	0	25	91	47	387
	7-Jul	8	10	0	0	647	3,229	3	15	59	181	50	389
	8-Jul	7	7	0	0	659	3,505	6	36	89	310	83	644
	13-Jul	6	6	0	0	347	1,873	16	98	157	672	48	343
	14-Jul	9	12	0	0	1,157	6,052	4	19	244	883	117	872
	15-Jul	8	9	0	0	654	3,009	2	18	131	554	98	794
	19-Jul	6	7	0	0	864	4,354	8	67	318	1,414	68	604
	20-Jul	12	15	0	0	1,462	7,325	24	176	853	3,329	89	702
	21-Jul	7	12	0	0	1,161	5,799	37	295	951	4,257	61	480
	22-Jul	9	12	0	0	776	3,902	68	514	1,306	4,819	100	780
	23-Jul	11	11	0	0	964	4,946	43	304	1,385	5,766	114	834
	4-Aug	8	10	0	0	1,252	6,913	18	168	2,846	12,422	52	463
	5-Aug	10	16	0	0	1,701	9,497	48	408	4,920	21,680	71	593
	6-Aug	8	10	0	0	485	2,652	24	185	1,710	7,815	60	527
	7-Aug	5	6	0	0	632	3,522	27	232	1,210	5,454	34	311
	8-Aug	9	12	0	0	1,578	8,491	43	360	3,049	13,495	80	651
	9-Aug	8	11	0	0	682	3,670	28	199	1,567	7,086	41	348
	10-Aug	10	13	0	0	1,693	9,248	67	533	3,710	15,910	126	1,098
	13-Aug	7	7	0	0	1,129	6,174	98	828	1,314	5,777	93	794
	14-Aug	7	10	0	0	1,404	7,571	79	677	1,309	5,476	114	958
	15-Aug	6	10	0	0	2,206	11,905	81	659	1,305	5,501	103	895
	16-Aug	7	10	0	0	1,608	7,980	52	446	693	2,770	56	484
	17-Aug	5	5	0	0	770	3,694	43	362	281	1,337	44	381

Appendix D3.–Page 6 of 7.

Statistical			_	Chine	ook	Sock	eye	Col	10	Pin	k	Chu	m
Area	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
	18-Aug ^a												
Alitak Bay Section	19-Aug	5	6	0	0	689	3,333	49	400	219	920	34	265
(257-41)	22-Aug	5	7	0	0	999	5,252	45	387	206	919	42	342
(cont.)	23-Aug	4	5	0	0	1,055	5,779	73	592	294	1,290	49	425
	24-Aug	4	5	0	0	1,030	5,232	81	703	139	628	44	363
	25-Aug	3	6	0	0	1,088	5,962	49	400	214	962	39	325
	26-Aug	3	3	0	0	840	4,554	38	314	119	537	32	263
	27-Aug	3	6	0	0	2,249	12,214	84	685	262	1,177	53	460
	28-Aug	4	6	0	0	1,283	5,994	39	303	48	175	28	202
	31-Aug	3	3	0	0	555	3,048	55	436	39	138	21	172
	1-Sep	5	7	0	0	1,329	7,184	66	535	77	269	31	258
	2-Sep	5	5	0	0	397	2,114	17	154	63	219	15	124
	3-Sep	5	8	0	0	942	4,840	37	347	5	18	24	185
	4-Sep	4	4	0	0	143	787	27	163	1	3	6	44
	5-Sep	5	6	0	0	307	1,692	39	312	9	32	19	150
	6-Sep ^a												
	7-Sep	4	5	0	0	250	1,577	23	218	3	11	5	40
	8-Sep	4	4	0	0	237	1,307	4	37	2	8	5	42
	9-Sep	5	7	0	0	321	2,028	4	35	1	6	0	0
	10-Sep ^a												
	11-Sep ^a												
Total		19	380	1	20	46,087	239,347	1,564	12,730	31,317	134,931	2,528	20,601
Average weigh	ıt				20.0		5.2		8.1		4.3		8.1
Dog Salmon	7-Aug	3	5	0	0	353	1,288	2	12	670	3,353	4	35
Flats Section	8-Aug	3	5	0	0	276	1,206	34	226	1,048	5,215	1	6
(257-42)	9-Aug ^a												
	10-Aug	3	4	0	0	290	1,012	21	139	1,182	5,781	4	44
	11-Aug	4	6	0	0	184	717	31	275	982	4,858	14	149
	12-Aug ^a												

Appendix D3.–Page 7 of 7.

Statistical			_	Chine	ook	Sock	eye	Coh	10	Pin	k	Chu	m
Area	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Dog Salmon	20-Aug a												
Flats Section	21-Aug a												
(257-42)	22-Aug ^a												
(cont.)													
Total		7	30	0	0	1,335	5,225	183	1,519	5,173	25,553	63	564
Average weigh	nt				0.0		4		8		5		9
Humpy-	8-Sep ^a												
Deadman													
(257-50,60,70))												
Total ^a													
Average weigh	nt												
Grand Total		43	1,262	1	20	171,557	901,491	8,711	72,019	101,862	463,610	4,576	37,218
Average weigh	nt				20.0		5.3		8.3		4.6		8.1

^a Confidential.

Appendix D4.-Purse seine daily salmon harvest, by species and section, for the Alitak District, 2018.

Statistical			<u>-</u>	Chine	ook	Sock	eye	Coh	0	Pin	k	Chu	ım
Area	Date	Permits	Landings	Number	Pounds								
Cape Alitak	25-Jun	12	12	4	24	6,552	27,171	0	0	86	273	364	3,460
Section	26-Jun	9	10	2	13	8,273	32,176	0	0	117	397	572	5,299
(257-10 & 20)	27-Jun	6	6	4	32	2,875	11,880	3	16	76	246	210	1,754
	28-Jun	3	3	0	0	959	4,626	2	11	8	30	69	514
	4-Jul	9	9	17	136	3,818	23,048	7	74	142	497	953	7,120
	6-Jul	7	7	1	12	2,900	15,088	9	54	191	664	551	4,094
	7-Jul ^a												
	8-Jul ^a												
	13-Jul	4	4	22	372	8,497	36,013	36	230	3,502	13,208	1,029	7,532
	14-Jul a												
	19-Jul	26	26	25	324	4,431	23,069	91	694	5,898	23,520	5,592	44,158
	20-Jul	7	7	5	84	1,411	6,937	15	105	1,620	5,638	1,536	14,062
	21-Jul	20	20	9	115	5,408	25,603	48	396	7,240	28,079	413	3,043
	22-Jul	4	4	7	127	3,376	15,153	33	304	6,079	22,942	146	1,314
	23-Jul	6	6	1	6	949	6,041	22	128	7,107	27,634	198	1,449
	4-Aug a												
	5-Aug a												
	7-Aug a												
	8-Aug a												
	9-Aug a												
	10-Aug	6	6	9	104	830	4,152	380	3,684	5,852	24,496	135	1,014
	13-Aug a												
	14-Aug a												
	16-Aug ^a												
	17-Aug	7	7	0	0	2,693	16,194	649	6,398	11,199	40,027	81	648
	19-Aug	8	8	0	0	2,190	11,872	440	3,753	5,340	19,504	96	835
	22-Aug	3	3	0	0	3,410	16,774	1,420	9,384	4,517	19,240	195	1,395
	23-Aug	4	4	0	0	2,361	11,812	582	5,241	2,125	7,861	93	697
	24-Aug	5	5	0	0	1,331	6,541	796	7,286	3,813	14,061	155	1,165

Appendix D4.–Page 2 of 3.

Statistical				Chine	ook	Sock	eye	Coh	10	Pi	nk	Chu	ım
Area	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Cape Alitak	25-Aug	5	5	1	13	4,219	20,200	1,628	12,336	3,666	14,015	191	1,406
Section	26-Aug a												
(257-10 & 20)	28-Aug a												
,	31-Aug a												
	1-Sep	3	3	9	113	2,653	13,708	1,269	8,754	460	1,725	108	774
	2-Sep a												
	5-Sep a												
	15-Sep a												
	18-Sep a												
	21-Sep ^a												
Total		48	180	219	2,962	97,763	457,286	11,076	91,989	116,551	450,910	15,084	120,774
Average weight					13.52		4.68		8.31		3.87		8.01
Humpy-Deadman	6-Jul ^a												
Section	7-Jul a												
(257-50,60 & 70)	15-Jul	3	3	0	0	242	920	0	0	245	1,158	138	1,090
	23-Jul	6	6	0	0	259	1,485	32	157	23,454	85,579	2,568	17,104
	24-Jul	5	5	0	0	44	306	1	9	13,594	47,578	1,326	8,625
	25-Jul	3	3	0	0	32	212	4	18	7,894	29,529	138	1,062
	4-Aug	8	8	0	0	179	889	10	93	48,362	183,740	242	2,001
	5-Aug	8	8	1	6	175	800	38	313	49,590	195,177	181	1,464
	6-Aug	8	8	3	29	2,321	11,480	320	3,041	46,679	178,854	380	2,992
	7-Aug	9	10	1	18	977	4,500	54	405	38,237	138,105	2,170	15,237
	13-Aug	7	7	0	0	585	2,750	63	575	17,041	58,279	440	3,269
	14-Aug	4	4	0	0	651	2,833	292	2,777	5,673	18,865	333	2,353
	15-Aug	3	3	0	0	711	2,820	84	568	11,546	37,299	127	850
	16-Aug	13	18	0	0	1,020	5,383	397	3,289	286,629	1,022,302	133	1,006
	17-Aug a												
	19-Aug	3	3	0	0	81	409	16	140	4,829	18,221	7	61
	23-Aug a												

Appendix D4.–Page 3 of 3.

Statistical			_	Chine	ook	Sock	eye	Col	10	Pi	nk	Chu	m
Area	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Humpy-Deadman	25-Aug ^a												
Section													
(257-50,60 & 70)													
(cont.)													
Total		26	93	6	57	8,208	39,323	1,616	14,007	562,073	2,048,184	9,643	67,048
Average weight					9.50		4.79		8.67		3.64		6.95
Grand Total		50	268	225	3,019	105,971	496,609	12,692	105,996	678,624	2,499,093	24,727	187,821
Average weight					13.42		4.69		8.35		3.68		7.60

^a Confidential.

Appendix D5.-Salmon harvest by gear type and species for the Alitak District, 2018.

		_	Chino	ook	Soc	keye	Col	ho	Р	ink	Chu	ım	Tot	tal
	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Seine														
Total	50	268	225	3,019	105,971	496,609	12,692	105,996	678,624	2,499,093	24,727	187,821	822,239	3,292,537
Average weight				13.42		4.69		8.35		3.68		7.60		
Set Gillnet														
Total	43	1,225	1	20	171,557	901,491	8,711	72,019	101,862	463,610	4,576	37,218	286,707	1,474,358
Average weight				20.00		5.25		8.27		4.55		8.13		
Year Total	93	1,534	226	3,039	277,528	1,398,100	21,403	178,015	780,486	2,962,703	29,303	225,039	1,108,946	4,766,895
Average weight				13.44		5.04		8.32		3.80		7.68		

Appendix D6.—Commercial salmon harvest, by species with percent harvest by gear type, in the Alitak District, 1993–2018.

	(Chinoc	ok ^a	S	ockeye	a a		Coho ^a		F	ink ^a			Chum	ı ^a		Total ^a	
Year	Number	GN%	PS%	Number	GN%	PS%	Number	GN%	PS%	Number	GN%	PS%	Number	GN%	PS%	Number	GN%	PS%
1993	1,828	10%	90%	998,751	53%	47%	19,271	40%	60%	3,465,473	6%	94%	53,636	27%	73%	4,538,959	17%	83%
1994	1,946	8%	92%	931,328	54%	46%	32,312	44%	56%	1,120,832	9%	91%	112,191	18%	82%	2,198,609	29%	71%
1995	848	15%	85%	1,674,169	47%	53%	19,000	47%	53%	7,065,939	6%	94%	105,224	17%	83%	8,865,180	14%	86%
1996	569	18%	82%	1,458,215	54%	46%	35,529	47%	53%	553,424	39%	61%	65,250	29%	71%	2,112,987	49%	51%
1997	291	31%	69%	685,635	59%	41%	33,549	41%	59%	955,253	15%	85%	85,710	34%	66%	1,760,438	33%	67%
1998	1,487	6%	94%	1,003,245	57%	43%	32,185	47%	53%	1,704,581	26%	74%	40,554	40%	60%	2,782,052	37%	63%
1999	271	12%	88%	633,579	70%	30%	13,126	74%	26%	1,353,933	12%	88%	79,000	16%	84%	2,079,909	30%	70%
2000	433	10%	90%	558,674	57%	43%	10,131	51%	49%	243,161	30%	70%	67,189	17%	83%	879,588	47%	53%
2001	651	11%	89%	461,785	64%	36%	2,471	24%	76%	1,439,930	7%	93%	52,521	21%	79%	1,957,358	26%	74%
2002	13	0%	100%	14,575	0%	100%	1,060	0%	100%	1,078,120	0%	100%	10,164	0%	100%	1,103,932	0%	100%
2003	298	3%	97%	341,402	67%	33%	10,592	45%	55%	497,822	18%	82%	31,866	22%	78%	881,980	38%	62%
2004	1,316	4%	96%	1,156,539	61%	39%	15,897	54%	46%	1,420,188	24%	76%	38,348	40%	60%	2,632,288	41%	59%
2005	602	8%	92%	777,905	60%	40%	6,977	56%	44%	4,193,022	4%	96%	22,839	40%	60%	5,001,027	87%	13%
2006	55	7%	93%	86,286	76%	24%	4,449	63%	37%	2,872,970	5%	95%	46,904	5%	95%	3,010,664	7%	93%
2007	23	26%	74%	85,469	80%	20%	2,456	62%	38%	474,016	15%	85%	47,931	9%	91%	609,895	24%	76%
2008	265	3%	97%	743,052	63%	37%	15,390	17%	83%	712,242	22%	88%	78,694	7%	93%	1,549,643	41%	59%
2009	204	4%	96%	631,312	64%	36%	7,883	40%	60%	3,996,164	3%	97%	72,497	10%	90%	4,708,060	11%	89%
2010	158	3%	97%	116,065	79%	21%	14,585	25%	75%	146,363	44%	56%	18,843	20%	80%	296,014	55%	45%
2011	2,633	1%	99%	318,208	56%	44%	6,094	21%	79%	4,896,501	1%	99%	44,699	17%	83%	5,268,135	5%	95%
2012	224	3%	97%	361,287	54%	46%	3,044	35%	65%	1,563,557	10%	90%	26,896	12%	88%	1,955,008	18%	82%
2013	646	1%	99%	223,126	60%	40%	4,056	41%	59%	2,664,435	1%	99%	34,324	8%	92%	2,926,587	6%	94%
2014	194	5%	95%	254,517	52%	48%	4,260	28%	72%	661,789	9%	91%	13,601	34%	66%	934,361	22%	78%
2015	1,554	1%	99%	364,946	37%	63%	19,847	17%	83%	5,812,572	1%	99%	52,682	17%	83%	6,251,601	4%	96%
2016	377	8%	92%	183,295	47%	53%	7,686	23%	77%	182,615	20%	80%	12,197	45%	55%	386,170	29%	71%
2017	223	0%	100%	214,898	54%	46%	17,284	33%	67%	3,415,116	8%	92%	117,849	12%	88%	3,765,370	21%	79%
2018	226	0%	100%	277,528	62%	38%	21,403	41%	59%	780,486	13%	87%	29,303	16%	84%	1,108,946	26%	74%
Averages b																		
1993-2017	418	18%	80%	489,372	63%	37%	12,823	45%	55%	1,556,638	19%	81%	57,326	24%	76%	2,116,571	30%	70%
2008-2017	648	3%	97%	341,071	57%	43%	10,013	28%	72%	2,405,135	12%	89%	47,228	18%	82%	2,804,095	21%	79%

Note: GN = gillnet; PS = purse seine

^a ADF&G test fish harvest is not included.

b The harvest during 1989 is not included in averages because of fishery restrictions and unusual fishing patterns due to the M/V Exxon Valdez oil spill.

APPENDIX E. WESTSIDE FISHERY SUMMARY

INTRODUCTION

Westside Kodiak Harvest Strategy

The Westside Kodiak Salmon Management Plan is the result of long-term management strategies that were initially implemented in 1971 and placed into regulation in 1990. Placing the management plan in regulation clarified the management strategy and helped maintain the biological integrity of local salmon stocks while alleviating allocative concerns of local fishermen (Prokopowich et al. 1991).

The intent of this management plan is to harvest salmon bound to local systems in traditional fisheries. Due to the mixing of various local salmon stocks during inshore migration, the plan is complex, but it provides a predictable framework for the harvest of sockeye, pink, chum, and coho salmon stocks from the west side of Kodiak. The plan is in effect for the entire salmon season and covers the Southwest and Northwest Kodiak districts, as well as the Southwest Afognak Section (Appendix E2). The management plan guides the prosecution of early- and late-run sockeye salmon fisheries, including those targeting the major systems of Karluk and Ayakulik and other minor sockeye salmon systems, as well as local pink, chum, and coho salmon fisheries.

The Northwest Kodiak District and Southwest Afognak Section

The Northwest Kodiak District and the Southwest Afognak Section can be broken up into 2 distinct areas: the outer cape areas and the inner bays. The Central, North Cape, and Southwest Afognak sections consist of the outer capes between Rocky Point in the west, Cape Paramanof in the north, and Monashka Bay in the east. The inner bays consist of 8 bays in the Northwest Kodiak District: Anton Larsen, Sharatin, Kizhuyak, Terror, Inner Uganik, Spiridon, Zachar, and Inner Uyak bays (Appendix E2).

The Central, North Cape, and Southwest Afognak Sections

The Central Section is open to seine and set gillnet gear types. The Southwest Afognak and North Cape sections are only open to seine gear. In June these areas are opened and closed based on Karluk Lake early-run sockeye salmon escapement. From June 1 to June 15, ADF&G is directed to open 2 mandatory 33-hour fishing periods. The Southwest Afognak Section can only open for one 33-hour fishing period from June 1 to June 15. From June 15 to July 5, openings are based on the early-run sockeye salmon returning to Karluk Lake.

The pink salmon fishery opens on July 6, and the length of the initial weekly fishing periods is based on the current year's (wild stock) pink salmon forecast. During the peak pink salmon harvest period, from late July to mid-August, fishing periods are adjusted to match the actual strength of pink salmon returning to systems within the Northwest Kodiak District. However, the Southwest Afognak Section is also tied to the allocative considerations of the *North Shelikof Strait Sockeye Salmon Management Plan* between July 6 and July 25 and has a harvest cap of 50,000 sockeye salmon.

From approximately August 16 to August 24, the Central, North Cape, and Southwest Afognak sections are opened and closed based on both Karluk Lake late-run sockeye and pink salmon returning to the major systems of the Northwest Kodiak District and Southwest Afognak Section. From August 25 to September 5, these areas are managed based on late-run sockeye salmon returning to Karluk. After September 5, the fishery is managed both on late-run sockeye salmon returning to Karluk and coho salmon returning to the major systems of the Northwest Kodiak District and Southwest Afognak Section. This blended management has allowed for the protection of both Northwest Kodiak District and Southwest Afognak Section pink salmon, as well as Karluk Lake sockeye salmon.

Northwest Kodiak District Inner Bays

The inner bays of the Northwest Kodiak District are open to seine gear only. From June 1 to June 15, ADF&G is directed to open 2 mandatory 33-hour fishing periods at the same time as those in the Central and North Cape sections. From June 16 to July 5, openings are based on local sockeye and early-run chum salmon returning to each individual section.

From July 6 to July 31, the inner bays are opened to commercial salmon fishing based on local sockeye, pink, and early-run chum salmon returning to each section. The lengths of the initial weekly fishing periods are based on the current year's (wild stock) pink salmon forecast. However, the inner bays may be closed due to weak early-run chum or sockeye salmon escapement. Openings from August 1 to August 24 are based on pink and late-run chum salmon returning to each individual section. From August 25 to September 5 fishery openings are based on local pink, late-run chum, and coho salmon returning to each individual section. After September 5, openings are based only on coho salmon.

The Southwest Kodiak District

The Southwest Kodiak District is a seine gear only area and extends from Low Cape in the south to Rocky Point in the north. The Southwest Kodiak District can be broken down into 3 different areas: Inner and Outer Karluk sections in the north, Inner and Outer Ayakulik sections in the south, and the Halibut Bay and Sturgeon sections between the two. Management decisions within the Inner and Outer Karluk sections are primarily determined by salmon returning to the Karluk system. The Inner and Outer Ayakulik sections are managed on salmon returning to the Ayakulik system. The Halibut Bay and Sturgeon sections are managed based on a mixture of Ayakulik, Karluk, and local salmon stocks. Both the Karluk and Ayakulik systems have very defined even-year-dominant pink salmon runs (Donnelly 1983; Eggers et al. 1991). Differences in system dynamics between even and odd years in July has resulted in different management practices depending on the relative pink salmon run strength within a year.

Inner and Outer Karluk Sections

From June 1 to July 15, the Inner and Outer Karluk sections are opened based on early-run sockeye salmon returning to Karluk Lake. However, the Inner Karluk Section cannot be opened during this timeframe unless ADF&G determines that the midpoint of the early-run Karluk sockeye salmon escapement goal is met.

In odd years, from July 16 to August 24, Inner and Outer Karluk sections' commercial salmon fishing periods are based on late-run sockeye salmon. In even years, openings are based on both late-run sockeye salmon and pink salmon returns. Openings from August 25 to September 5 are based on late-run Karluk Lake sockeye salmon. After September 5, openings are based on both late-run sockeye and coho salmon returning to the Karluk system.

Inner and Outer Ayakulik sections

From June 1 to July 15, commercial salmon fishing periods within the Inner and Outer Ayakulik sections are based on early-run sockeye salmon returning to Red Lake (Ayakulik River). In odd years, from July 16 to August 24, fishing periods are based on late-run sockeye salmon run strength. In even years during this timeframe, Inner and Outer Ayakulik sections fishing periods are based on late-run sockeye salmon and pink salmon run strengths. After approximately August 24, fishing periods are based on coho salmon returning to the Ayakulik system.

Sturgeon and Halibut Bay Sections

The Sturgeon and Halibut Bay sections are closed from June 1 to June 22 because of mixed Karluk, Ayakulik, and Olga Bay sockeye salmon stocks present at this time. From June 23 to July 15, openings are based on early-run sockeye salmon returning to Ayakulik and Karluk lakes. However, the Sturgeon River has one of the largest documented chum salmon runs in the Kodiak Management Area, and this early-run chum salmon system must also be taken into consideration when opening the Sturgeon Section during this time frame. From July 16 to August 24 in either even or odd years, fishing periods are determined based on Ayakulik or Karluk late-run sockeye salmon or pink salmon. After August 25, fishing periods are based on Karluk and Ayakulik late-run sockeye salmon run strength, as well as local coho salmon stocks.

2018 Westside Kodiak Fisheries

ADF&G's preseason salmon forecasts predicted a surplus (in excess of escapement needs) of early-run sockeye salmon returning to Karluk Lake (192,000 fish), Frazer Lake (102,000 fish), Ayakulik River (193,000,000 fish), and early-run Upper Station (14,000 fish; Brenner et al. 2018).

The Karluk early-run sockeye salmon biological escapement goal (BEG) is 150,000 to 250,000 fish. The 2018 targeted sockeye salmon escapement for Karluk Lake early-run was 200,000 fish. The Ayakulik early-run sockeye salmon sustainable escapement goal (SEG) is 140,000 to 280,000 fish. The 2018 targeted sockeye salmon escapement for the Ayakulik early run was 210,000 fish.

The Karluk late-run sockeye salmon BEG is 200,000 to 450,000 fish. The 2018 targeted sockeye salmon escapement of 325,000 fish for Karluk Lake late run was based on a maximum sustained yield calculation (Schaberg et al. 2016). The Ayakulik late-run sockeye salmon SEG is 60,000 to 120,000 fish. The 2018 targeted sockeye salmon escapement of 90,000 fish for the Ayakulik late run was based on a maximum sustained yield calculation (Schaberg et al. 2016).

Karluk Early Run

The Karluk River weir was fish tight on May 18 (Fuerst 2019). Due to weak early escapement, the first commercial test fishing period in the Northwest Kodiak District was delayed until June 9 for a total of 57 hours. The resulting harvest indicated a below average amount of sockeye salmon traveling along the Westside fishery and the fishery closed for several days. Through June 13, 124,518 sockeye salmon had passed the Karluk River weir, which was average (Fuerst 2019). The Central and North Cape sections of the Northwest Kodiak District and the Southwest Afognak Section of the Afognak District opened on June 14 for the second commercial salmon test fishing period for 57 hours.

Although sockeye salmon harvest on the Westside fishery was below average due to sufficient Karluk early-run sockeye salmon escapement (Fuerst 2019) the Central and North Cape sections of the Northwest Kodiak District as well as the Southwest Afognak Section of the Afognak District were extended for 72 hours. By regulation, from June 16 through July 15 fishing periods in the Outer Karluk Section shall occur at the same time as fishing periods in the Central Section. The Outer Karluk Section of the Southwest Kodiak District opened for 81 hours on June 16. Westside Kodiak sockeye salmon sockeye salmon harvest remained below average and the fishery shut down on June 19.

After a 5-day closure the Karluk-early run sockeye salmon escapement continued to have sufficient escapement (Fuerst 2019) and the department opened the Outer Karluk Section of the Southwest Kodiak District, the Central and North Cape sections of the Northwest Kodiak District as well as the Southwest Afognak Section of the Afognak District for 81 hours on June 25. Westside Kodiak sockeye salmon sockeye salmon harvest remained below average and the fishery closed on June 28.

After a 3-day closure the Karluk-early run sockeye salmon escapement continued to have sufficient escapement (Fuerst 2019) and the department opened the Outer Karluk Section of the Southwest Kodiak District, the Central and North Cape sections of the Northwest Kodiak District as well as the Southwest Afognak Section of the Afognak District for 81 hours on July 2. Although sockeye salmon harvest numbers continued to be below average the fishery was extended until the end of the first general pink salmon opening on July 8.

The 2018 Karluk Lake early-run sockeye salmon escapement of 198,877 fish (Fuerst 2019) was within the escapement goal range of 150,000 to 250,000 fish (Schaberg et al. 2016). From June 1 to July 15, approximately 139,292 sockeye salmon were harvested in the Westside fishery opened based on Karluk early-run sockeye (Table 9). Of this harvest, approximately 42,474 fish were estimated to be of Karluk Lake origin (Wattum 2019).

Pink Salmon Run

On July 6, the Northwest Kodiak District and the Southwest Afognak Section of the Afognak District opened to commercial salmon fishing for 57 hours based on the weak preseason wild stock pink salmon harvest estimate of only 3.5 million fish. The Outer Karluk Section also reopened due to sufficient Karluk early-run sockeye salmon escapement (Fuerst 2019). The Sturgeon Section of the Southwest Kodiak District remained closed due to weak early chum salmon escapement. Pink salmon harvests for the first pink salmon fishing period were well below average.

After a four-and-a-half-day closure, the majority of the Westside reopened for 57 hours on July 13. The Northwest Kodiak District inner bays of Kizhuyak Bay and Zachar Bay were kept closed due to below-average chum salmon escapement. The Inner Uganik Bay Section remained closed due weak sockeye salmon escapement. Pink salmon harvests from the second pink salmon fishing period were well below average and recent aerial surveys also indicated very weak early pink salmon escapement and no pink salmon in several of the inner bays on the Westside of Kodiak.

Due to the record low abundance of pink salmon (similar to the extremely weak 2016 run), the majority of the KMA including the Westside of Kodiak remained closed for the next scheduled commercial pink salmon opening as a recent aerial survey indicated below-average pink salmon escapement to the Northwest Kodiak District.

After a seven-day closure for most of the KMA, the majority of the Northwest Kodiak District and the Southwest Afognak Section of the Afognak District opened for 57 hours on July 23. The Kizhuyak Bay and Zachar Bay sections remained closed due to weak chum salmon escapement. The Inner Uganik Bay Section remained closed due to weak sockeye salmon escapement. The Inner and Outer Karluk sections remained closed due to weak late-run sockeye escapement. The Sturgeon Bay Section remained closed due to weak pink salmon escapement. Pink salmon harvest on the Westside of Kodiak was below average and aerial surveys again indicated very weak early pink salmon escapement to all the major systems and the Westside fishery.

The department flew the Westside of Kodiak several times between July 25 and August 4. Very few of the major systems of the Northwest Kodiak District had improved. Many still indicated record low pink salmon abundance. After a 9-day closure the Central, North Cape, Uyak Bay, Spiridon Bay, Inner Uganik Bay, and Anton Larsen Bay sections of the Northwest Kodiak District and the Southwest Afognak Section of the Afognak District opened for 57 hours on August 4. Sharatin Bay, Kizhuyak Bay, Terror Bay, and Zachar Bay sections all remained closed due to weak pink salmon escapement. An aerial survey on August 1 indicated a very large buildup of pink salmon in Karluk Lagoon in excess of half a million fish. The Outer Karluk Section of the Southwest also opened for 57 hours on August 4.

By August 5, pink salmon harvest on the Westside was still below average; however, a substantial buildup of pink salmon was observed in Karluk Lagoon. The Outer Karluk Section of the Southwest Kodiak District, the Central, North Cape, Uyak Bay, Spiridon Bay, Inner Uganik Bay and Anton Larsen Bay sections of the Northwest Kodiak, and the Southwest Afognak Section of the Afognak District were extended until August 10.

Through August 7, 881,836 pink salmon had escaped past Karluk River weir. An aerial survey around the same time also indicated a large amount of pink salmon still in Karluk Lagoon. The department opened the Inner Karluk Section of the Southwest Kodiak District for 9 hours on August 8. The Sturgeon and Halibut Bay sections of the Southwest Kodiak District also opened on August 8 and were extended through August 10. With the exception of Karluk River, the remainder of the Westside of Kodiak still had very poor pink salmon escapement and the fishery closed on August 10.

The 2018 Kodiak Area pink salmon run was very weak. A total of 473,600 pink salmon escaped in the Northwest Kodiak District, within the even year objective of 315,000 to 945,000 fish (Fuerst 2019). A total of 2,903,291 pink salmon escaped in the Southwest Kodiak District above the escapement objective of 1,250,000 to 2,550,000 fish (Fuerst 2019). However, it should be noted that 2,275,207 of that escapement was at Karluk, and both the major systems of Sturgeon River and Ayakulik River did not meet their respective escapement objectives.

Karluk Late Run

In the previous pink salmon opening (August 4-10) the Westside sockeye salmon harvest was well above average. Through August 15, 68,984 late-run sockeye salmon had passed Karluk River weir (Fuerst 2019) and a large buildup of both sockeye salmon and pink salmon were still in Karluk Lagoon. During this timeframe the Halibut Bay, Sturgeon, and Inner and Outer Karluk sections of the Southwest Kodiak District are all managed based on late-run sockeye returning to the Karluk system. During this timeframe the Central and North Cape Sections of the Northwest Kodiak District and the Southwest Afognak Section of the Afognak District are managed based on late-run sockeye returning to the Karluk system, and pink salmon returning to the major systems of the Northwest Kodiak District. The Halibut Bay, Sturgeon, Outer Karluk, Central and North Cape, and the Southwest Afognak Section of the Afognak District opened to commercial salmon fishing for 54 hours on August 16.

Both Karluk late-run sockeye salmon escapement and Westside sockeye salmon harvest continued to be above average and the majority of the Westside was extended through the end of the salmon season.

The Karluk late-run sockeye salmon escapement of 434,402 fish was within the desired escapement goal range of 200,000 to 450,000 fish (Schaberg et al. 2016), and the Westside post-July 15 sockeye salmon harvest was approximately 1,017,021 sockeye salmon, which included an estimated 658,372 Karluk late-run sockeye salmon (Wattum *In prep*).

Ayakulik

The Ayakulik River weir was fish tight on May 25 (Fuerst 2019). The 2018 Ayakulik early-run sockeye salmon run was again weak, and prior to July 15 only 2 short fishing periods were allowed in the Outer Ayakulik Section of the Southwest Kodiak District. Through July 15, the cumulative Ayakulik early-run sockeye salmon escapement of 189,008 fish (Fuerst 2019) was within the escapement goal range of 140,000 to 280,000 fish (Schaberg et al. 2016).

The 2018 Ayakulik late-run sockeye salmon run was not sufficient to allow commercial salmon fishing openers in the Inner or Outer Ayakulik sections of the Southwest Kodiak District from July 15 through August 22. Through weir removal on August 25, the cumulative late-run Ayakulik sockeye salmon escapement of 77,325 fish was within the escapement goal range of 60,000 to 120,000 fish (Schaberg et al. 2016).

The total sockeye salmon escapement through the Ayakulik weir was 266,333 fish (Fuerst 2019), and was within the combined early- and late-run escapement goals (200,000 to 400,000 fish; Schaberg et al. 2016). For the season, only 118,095 sockeye salmon were harvested based on Ayakulik sockeye salmon (Table 9).

In 2018, there were a total of 4,056 landings made in Westside Kodiak management units (Southwest Afognak to Ayakulik¹) consisting of a total commercial harvest of 3,643,523 salmon, including 1,911 Chinook, 1,398,751 sockeye, 191,060 coho, 1,868,851 pink, and 182,950 chum salmon (Appendix E3). There were 138 seine permit holders that made 1,687 landings with a harvest of 1,584 Chinook, 1,116,124 sockeye, 154,699 coho, 1,526,913 pink, and 134,633 chum salmon (Appendix E4). There were 97 set gillnet permit holders that made 2,369 landings for 327 Chinook, 282,627sockeye, 36,361 coho, 341,938 pink, and 48,317 chum salmon. Commercial salmon harvests, by gear type, for individual Westside Kodiak management units can be found in Appendices E5 and E6.

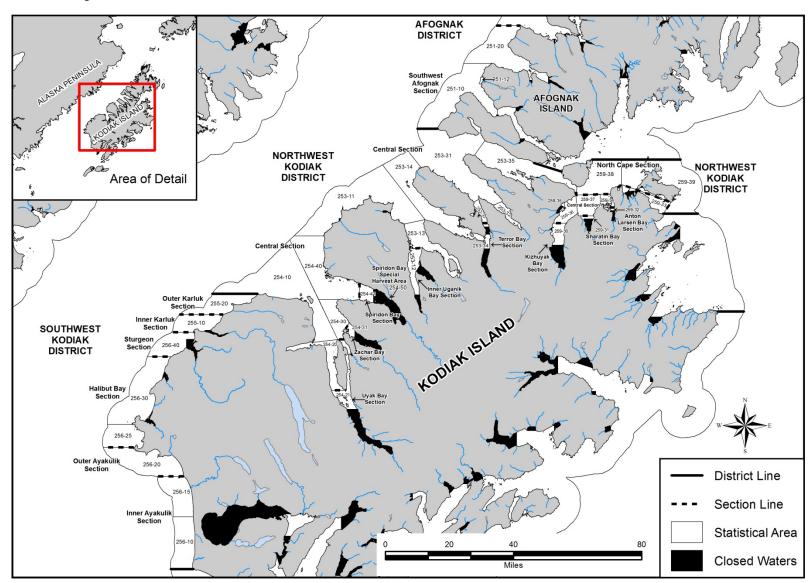
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Westside Kodiak salmon harvest totals in Appendix E do not include salmon taken in the Spiridon Bay Special Harvest Area (SBSHA). Sockeye salmon from an enhancement project return to this area. SBSHA is managed under a separate plan; see Appendix H for a description of the SBSHA fishery. These tables do include sockeye salmon destined for Spiridon Bay that were caught outside the SBSHA in the Westside fishery. These totals also do not include salmon taken in Settler Cove (259-35). Commercial fisheries in Settler Cove are managed under a separate plan.

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Appendix E2.—Map of the west side of Kodiak Island, including Southwest Kodiak and Northwest Kodiak districts and the Southwest Afognak Section of the Afognak District.



Appendix E3.-Commercial salmon harvest, by species, for Westside management units in the Kodiak Management Area, 1990-2018.

					Numbe	r of Salmon		
Year	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
1990	455	12,604	12,090	3,383,351	176,475	3,674,278	218,883	7,465,077
1991	434	11,957	11,780	2,842,802	179,852	5,588,982	346,193	8,969,609
1992	429	11,121	17,238	2,306,791	128,737	1,538,305	302,779	4,293,850
1993	406	12,106	21,019	2,426,540	124,497	10,344,080	300,571	13,216,707
1994	350	8,024	16,930	1,236,314	135,365	3,873,574	329,281	5,591,464
1995	369	13,104	13,819	2,071,281	147,204	21,025,711	722,649	23,980,664
1996	328	7,808	10,437	2,536,733	71,984	1,780,755	365,034	4,764,943
1997	334	7,752	11,152	1,412,061	108,459	6,520,085	214,730	8,266,487
1998	290	9,623	13,886	2,220,631	163,102	12,335,360	176,636	14,909,615
1999	317	8,494	12,794	2,733,598	104,806	4,114,397	267,329	7,232,924
2000	306	7,554	9,382	1,600,248	111,908	5,343,028	379,439	7,444,005
2001	265	6,799	18,301	1,613,978	143,681	3,687,193	381,083	5,844,236
2002	228	5,365	14,911	1,178,677	166,321	9,442,576	250,137	11,052,622
2003	227	7,508	13,765	2,973,555	156,308	5,406,272	329,512	8,879,412
2004	225	8,919	23,744	2,413,242	259,500	14,756,880	604,428	18,057,794
2005	204	6,671	11,034	1,457,611	183,158	6,178,927	243,153	8,073,883
2006	211	8,252	16,139	1,200,137	249,668	20,198,535	402,146	22,066,625
2007	219	6,865	13,373	1,511,395	167,153	8,718,322	219,554	10,629,797
2008	199	3,387	13,124	634,056	92,170	3,732,346	223,658	4,695,354
2009	197	3,505	1,621	577,893	57,363	4,936,956	353,915	5,927,748
2010	235	2,982	6,061	640,336	75,327	3,837,741	227,171	4,786,636
2011	222	2,438	4,676	507,603	58,970	955,492	134,701	1,661,442
2012	250	5,780	5,858	1,021,551	127,529	9,555,127	334,333	11,044,398
2013	241	5,080	12,702	1,483,699	106,994	5,103,909	241,555	6,948,859
2014	271	5,701	4,940	2,348,820	182,890	2,603,984	160,406	5,301,040
2015	257	6,953	4,534	2,094,753	247,564	12,488,343	484,559	15,319,753
2016	237	4,326	3,253	1,109,165	133,375	1,421,142	204,317	2,871,252
2017	244	7,910	4,612	1,760,513	232,102	16,482,110	519,676	18,999,013
2018	235	4,056	1,911	1,398,751	191,060	1,868,851	182,950	3,643,523
Average								
2008-2017	235	4,806	6,138	1,217,839	131,428	6,111,715	288,429	7,755,550
1990-2017	315	7,358	9,114	1,455,340	126,911	6,885,085	312,472	8,788,922

Note: Westside Kodiak Management Plan units include the Southwest Afognak Section, the Northwest Kodiak District (except the Spiridon Bay Special Harvest Area and Settler Cove), and the Southwest Kodiak District. Harvest numbers do not include test fish harvests or commercial harvest retained for personal use.

Appendix E4.—Commercial salmon harvest, by gear type and species, for Westside management units, 2018.

			Chin	ook	Soc	keye	Co	oho	Pin	ık	Ch	um	Tota	al
Gear	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Seine	138	1,687	1,584	10,765	1,116,124	5,618,048	154,699	1,283,006	1,526,913	5,818,621	134,633	1,153,601	2,933,953 1	3,884,041
Average w	veight			6.80		5.03		8.29		3.81		8.57		
Set Gillnet	t 97	2,369	327	3,129	282,627	1,538,534	36,361	286,434	341,938	1,314,284	48,317	409,288	709,570	3,551,669
Average w	veight			9.57		5.44		7.88		3.84		8.47		
Grand total	235	4,056	1,911	13,894	1,398,751	7,156,582	191,060	1,569,440	1,868,851	7,132,905	182,950	1,562,889	3,643,523 1	7,435,710
Average w	veight			7.27		5.12		8.21		3.82		8.54		

Note: Westside Kodiak Management Plan units include the Southwest Afognak Section, the Northwest Kodiak District (except for the Spiridon Bay Special Harvest Area and Settler Cove Special Harvest Area), and the Southwest Kodiak District. Harvest numbers do not include test fish harvests or commercial harvest retained for personal use.

Appendix E5.-Seine daily salmon harvest, by species, for the Westside Management Plan units, 2018.

Management				Chine	ook	Sockey	/e	Coh	10	Pink	ζ.	Chu	ım
Unit	Date	Permits	Landings	Number	Pounds								
Southwest	14-Jun ^a												
Afognak	15-Jun ^a												
Section	19-Jun ^a												
	25-Jun	3	3	6	48	198	532	0	0	14	57	150	1,444
	2-Jul	10	10	2	13	879	4,104	14	104	308	1,079	596	4,707
	3-Jul	4	4	0	0	379	1,758	3	18	149	514	132	1,081
	4-Jul	5	5	0	0	124	544	0	0	52	184	57	496
	13-Jul ^a												
	14-Jul ^a												
	15-Jul ^a												
	23-Jul ^a												
	4-Aug	6	6	24	157	3,497	16,997	1,503	10,369	16,494	66,525	553	4,131
	5-Aug ^a												
	6-Aug ^a												
	7-Aug ^a												
	8-Aug ^a												
	9-Aug	3	3	23	122	277	1,497	312	2,432	7,489	26,219	54	393
	10-Aug	3	3	0	0	659	2,944	677	4,321	5,745	23,300	84	525
	16-Aug ^a												
	17-Aug ^a												
	20-Aug	4	4	8	63	937	4,620	1,513	14,051	12,331	38,893	125	1,149
	21-Aug	4	4	4	52	500	2,633	438	4,162	4,866	15,529	70	569
	22-Aug	4	4	0	0	307	1,486	972	7,664	737	3,196	39	252
	23-Aug	3	3	0	0	388	1,893	963	8,073	508	2,168	27	179
	24-Aug ^a												
	25-Aug	4	4	1	11	523	2,348	1,095	8,505	686	2,741	28	204
	27-Aug ^a												
	28-Aug ^a												
	3-Sep ^a												
	5-Sep ^a												
	10-Sep ^a												

Appendix E5.–Page 2 of 7.

Management				Chine	ook	Socke	ye	Coh	10	Pin	k	Chu	ım
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Southwest	12-Sep ^a												
Afognak	19-Sep a												
Section (cont.)													
Total		33	82	104	801	13,787	65,952	14,877	117,780	69,340	255,492	3,093	23,519
Average weight					7.7		4.8		7.9		3.7		7.6
Northwest	9-Jun	14	14	1	3	4,422	19,309	1	4	13	37	478	3,351
Kodiak	10-Jun	4	4	4	20	941	4,390	0	0	3	10	78	652
District ^b	11-Jun	8	8	2	10	1,527	5,791	0	0	1	3	76	696
	14-Jun	11	11	8	36	1,495	7,086	0	0	60	186	485	4,686
	15-Jun	10	10	1	7	1,608	7,677	12	120	120	371	638	6,324
	16-Jun	8	8	0	0	1,918	9,391	0	0	172	655	1,962	10,400
	17-Jun	7	7	1	3	1,503	6,998	2	8	101	386	612	4,988
	18-Jun	5	5	0	0	905	4,737	0	0	68	268	865	7,352
	19-Jun ^a												
	25-Jun	9	9	4	36	348	1,404	0	0	38	142	728	6,200
	26-Jun	6	6	10	63	279	1,284	0	0	39	121	649	6,696
	27-Jun	9	9	0	0	703	2,958	15	87	90	287	912	7,645
	28-Jun	7	7	0	0	449	2,051	8	44	60	211	461	3,482
	2-Jul	32	32	94	470	8,951	44,179	40	279	1,356	4,343	6,921	61,938
	3-Jul	11	11	37	236	1,860	9,747	28	188	1,266	4,018	5,153	43,985
	4-Jul	9	9	2	6	2,486	12,166	8	54	497	1,684	1,311	9,936
	5-Jul	6	6	26	52	2,013	9,409	8	45	1,574	5,152	2,849	24,716
	6-Jul	24	24	22	159	7,308	31,389	39	331	1,109	4,405	2,819	24,795
	7-Jul	9	9	70	301	1,406	7,412	14	95	761	2,473	1,565	15,209
	8-Jul	14	14	4	30	1,654	8,231	119	854	694	2,417	1,748	15,307
	13-Jul	40	40	61	382	18,891	89,067	1,448	9,540	18,718	65,546	12,586	109,451
	14-Jul	11	11	42	325	5,929	29,628	652	4,512	8,978	31,879	5,749	61,892
	15-Jul	31	32	19	173	6,776	33,024	1,063	7,429	9,963	34,443	10,231	89,388
	23-Jul	38	39	12	100	6,485	26,920	1,896	13,464	25,950	100,816	30,055	253,613
	24-Jul	20	21	6	47	1,336	5,579	164	1,325	6,938	26,497	6,679	64,136

Appendix E5.–Page 3 of 7.

Management				Chino	ok	Socke	eye	Co	ho	Pin	k	Chu	m
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Northwest	25-Jul	19	19	3	23	1,046	4,978	119	867	3,847	14,811	1,796	15,493
Kodiak	4-Aug	37	41	155	1,105	19,513	101,373	4,754	34,576	185,087	714,249	3,103	25,508
District ^b	5-Aug	24	26	40	360	14,576	72,863	3,566	30,070	128,549	506,460	2,592	20,033
(cont.)	6-Aug	20	20	11	90	8,707	40,077	1339	9260.25	106,492	433,908	1,393	11,091
	7-Aug	21	24	33	222	8,044	39,856	1626	12749	144,409	545,594	1,075	8,719
	8-Aug	13	15	9	136	6,587	31,565	1300	10058	87,108	334,691	793	6,824
	9-Aug	17	17	39	344	2,236	11,030	1584	10458.8	49,367	196,660	505	3,451
	10-Aug	27	27	60	230	5,869	33,265	1,463	11,561	22,550	87,938	322	2,400
	16-Aug	12	12	5	44	5,226	27,488	2,634	19,020	16,022	60,465	908	8,319
	17-Aug	6	6	7	96	3,357	14,351	1,674	11,567	8,834	29,000	285	1,948
	18-Aug	4	4	0	0	371	1,605	370	3,062	2,145	8,899	98	596
	19-Aug	12	12	1	10	10,379	56,059	1,685	13,497	9,616	34,943	173	1,291
	20-Aug	13	13	6	42	10,035	50,062	2,128	18,042	12,474	47,558	272	2,099
	21-Aug	18	18	21	145	19,203	92,542	2,128	17,601	10,581	34,760	381	2,758
	22-Aug	14	14	0	0	15,677	81,059	2,589	22,627	11,100	45,413	299	2,464
	23-Aug	15	15	3	5	17,215	88,443	2,624	19,970	13,229	49,739	312	2,236
	24-Aug	23	23	5	26	17,249	89,000	3,899	29,420	9,451	34,648	392	3,039
	25-Aug	20	20	3	13	4,217	20,450	2,509	20,363	3,703	14,499	566	4,172
	26-Aug	16	16	4	25	9,596	51,864	1,934	15,175	2,472	9,276	114	771
	27-Aug	28	29	20	132	18,400	92,848	4,874	39,831	4,987	16,887	265	1,980
	28-Aug	13	13	0	0	5,801	27,513	1,403	12,275	988	3,324	50	364
	29-Aug	23	23	1	5	8,149	41,898	2,275	17,122	1,788	5,893	79	522
	30-Aug	5	5	0	0	868	3,788	720	5,782	1,409	5,362	10	65
	31-Aug	20	21	1	20	10,043	54,442	1,624	13,937	818	2,757	61	399
	1-Sep	11	11	0	0	2,649	13,015	1,212	9,529	578	1,978	67	439
	2-Sep	20	20	7	37	13,013	68,247	3,388	30,885	967	3,502	116	800
	3-Sep	11	11	0	0	6,437	31,358	1,782	14,279	335	1,163	71	535
	4-Sep	11	11	0	0	3,435	19,122	1,145	10,050	177	605	19	135
	5-Sep	6	6	1	7	2,055	10,163	775	6,063	65	252	9	57
	6-Sep	8	8	2	16	4,768	23,371	1,093	10,601	116	402	19	137
	7-Sep	3	3	0	0	404	1,903	421	3,433	10	31	3	19

Appendix E5.–Page 4 of 7.

Management				Chino	ok	Soc	keye	Col	ho	Pi	ink	Chu	ım
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Northwest	8-Sep	6	6	0	0	1,600	7,379	1,568	13,212	87	278	59	431
Kodiak	9-Sep ^a												
District ^b	10-Sep	6	6	0	0	703	3,518	694	6,635	4	15	2	15
(cont.)	11-Sep ^a												
	12-Sep	6	6	0	0	1,065	5,964	810	6,776	0	0	2	9
	13-Sep ^a												
	14-Sep	4	4	0	0	1,947	10,987	592	6,355	1	3	1	5
	15-Sep ^a												
	16-Sep ^a												
	18-Sep	9	9	0	0	7,527	38,403	274	2,667	1	4	10	72
	19-Sep a												
	20-Sep	4	4	0	0	2,596	13,136	43	492	0	0	0	0
	21-Sep ^a												
	22-Sep ^a												
	23-Sep ^a												
	24-Sep ^a												
	25-Sep ^a												
Total		126	902	868	5,619	362,126	1,808,602	71,139	568,363	917,953	3,532,372	111,848	966,146
Average weight					6.5		5.0		8.0		3.8		8.6
Inner and Outer	16-Jun	13	13	11	89	1,980	8,551	0	0	9	31	323	2,860
Karluk Section	17-Jun	7	9	30	246	3,145	13,311	0	0	1	2	183	1,448
	18-Jun	5	5	3	14	1,064	5,251	0	0	5	17	153	1,170
	25-Jun ^a												
	2-Jul	6	6	13	82	1,436	6,302	0	0	55	169	181	1,379
	7-Jul ^a												
	8-Jul ^a												
	13-Jul	5	5	22	137	3,140	15,696	64	428	3,464	12,486	500	3,614
	15-Jul	6	6	3	24	1,000	4,916	273	1,909	1,920	8,069	371	3,192
	4-Aug	16	19	85	419	19,857	101,482	1,273	10,073	73,062	296,985	903	6,869
	5-Aug	9	9	31	287	10,049	49,778	529	4,448	48,105	163,670	369	3,034
	6-Aug	5	6	12	79	7,407	37,859	274	2,480	32,399	114,729	118	1,009

Appendix E5.–Page 5 of 7.

Management				Chino	ok	Socke	eye	Coh	10	Pinl	ζ.	Chu	m
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Inner and Outer	8-Aug	6	6	4	38	6,279	30,732	331	3,069	16,564	64,084	77	468
Karluk Section	9-Aug	17	21	1	6	44,894	223,382	475	3,933	119,315	465,701	116	979
	10-Aug	5	5	2	10	3,331	17,543	464	3,538	6,124	21,348	35	279
	16-Aug	13	13	0	0	17,596	83,611	1,724	16,785	14,741	58,921	111	842
	17-Aug	7	7	0	0	7,707	35,418	1,524	12,615	6,403	26,051	87	633
	19-Aug	10	10	0	0	14,071	66,616	495	4,176	5,118	20,406	31	245
	20-Aug	7	7	10	85	12,297	73,531	1,330	12,706	5,284	22,216	109	934
	21-Aug	6	6	0	0	5,587	30,087	498	4,483	2,398	9,395	49	396
	22-Aug	8	9	7	23	12,598	66,351	744	6,254	2,918	11,641	35	201
	23-Aug	13	13	1	8	28,227	145,579	1,500	14,089	5,936	22,865	40	294
	24-Aug	20	21	0	0	26,594	138,904	2,497	22,923	5,138	20,119	71	493
	25-Aug	15	15	0	0	21,248	113,661	2,241	19,352	3,834	13,542	65	503
	26-Aug ^a												
	27-Aug	17	17	2	36	24,277	131,107	1,424	11,360	2,913	9,873	30	212
	28-Aug	7	7	2	7	4,045	20,194	885	7,523	508	1,982	31	188
	29-Aug	20	20	10	112	9,991	57,164	1,971	16,041	1,626	5,831	30	188
	30-Aug ^a												
	31-Aug	13	13	0	0	8,476	42,618	1,499	14,433	702	2,625	67	440
	1-Sep	11	11	0	0	4,380	22,039	1,096	9,350	370	1,205	36	283
	2-Sep	18	20	1	7	10,585	56,621	2,062	19,410	443	1,662	44	347
	3-Sep	9	9	0	0	3,311	18,134	1,143	9,283	157	553	10	66
	4-Sep	23	23	0	0	20,378	98,858	3,324	30,366	285	1,143	41	261
	5-Sep	9	9	0	0	13,886	70,397	2,192	17,343	192	640	27	187
	6-Sep	13	13	0	0	11,298	61,500	1,553	13,798	128	482	30	187
	7-Sep	7	7	0	0	7,342	34,039	879	6,702	46	168	9	73
	8-Sep	15	15	0	0	19,987	98,365	1,970	18,198	162	581	22	162
	9-Sep	6	7	0	0	4,614	23,185	488	4,253	18	64	8	58
	10-Sep	7	7	0	0	5,555	29,850	541	5,710	20	73	3	22
	11-Sep	19	19	0	0	12,038	63,937	1,489	12,928	47	148	8	53
	12-Sep	19	20	0	0	14,006	69,525	1,327	12,497	38	135	43	316
	13-Sep	6	6	0	0	5,513	31,511	257	2,398	10	37	10	54

Appendix E5.–Page 6 of 7.

Management				Chino	ok	Soc	keye	Col	10	Pi	nk	Chu	ım
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Inner and Outer Karluk Section	14-Sep	15	15	0	0	13,330	66,881	793	6,790	25	95	22	166
(cont.)	15-Sep	7	7	1	12	7,434	46,702	400	4,025	18	65	2	17
	16-Sep	17	17	0	0	13,940	71,729	1,133	10,345	14	49	30	204
	17-Sep ^a												
	18-Sep	13	13	0	0	12,018	61,792	461	4,212	8	28	16	122
	19-Sep a												
	20-Sep	12	12	0	0	8,056	42,126	329	3,137	0	0	3	25
	21-Sep ^a												
	22-Sep	9	9	0	0	7,496	38,331	527	4,824	0	0	5	37
	23-Sep ^a												
	25-Sep	3	3	3	18	3,227	16,485	266	1,913	0	0	11	70
	26-Sep ^a												
Total		85	523	258	1,762	503,351	2,582,777	44,761	394,382	361,464	1,383,036	5,216	41,536
Average weight					6.8		5.1		8.8		3.8		8.0
Remainder of	25-Jun	15	15	29	252	9,665	44,676	1	5	136	468	845	6,622
Southwest Kodiak	26-Jun	4	4	0	0	1,804	7,741	0	0	14	47	141	1,130
District	27-Jun	15	15	15	97	21,768	97,429	0	0	619	2,308	4,746	35,690
(256-10, 15, 20	28-Jun	6	6	0	0	3,128	15,762	4	14	160	490	874	8,937
25, 30, 40)	4-Jul	12	12	43	321	7,654	34,440	8	52	511	1,739	568	5,027
	6-Jul	9	9	45	299	7,273	34,925	64	443	2,257	7,041	1,915	18,020
	7-Jul	4	4	4	27	3,203	13,424	8	50	972	4,147	263	2,479
	8-Jul	4	4	18	63	3,559	16,171	48	318	1,524	4,751	332	2,873
	13-Jul	20	20	68	377	36,372	176,981	228	1,616	13,633	47,554	2,851	27,664
	14-Jul	4	4	7	43	3,545	19,849	0	0	4,560	15,823	379	2,543
	15-Jul	9	9	19	108	5,576	28,520	64	464	5,956	19,165	481	3,829
	9-Aug	3	3	21	203	5,786	28,564	333	2,959	21,464	91,632	113	750
	10-Aug	6	6	0	0	6,355	32,506	424	3,494	54,280	179,345	231	1,614
	16-Aug	14	15	19	171	23,813	115,091	4,203	35,516	35,927	136,684	136	1,028
	17-Aug a												
	18-Aug	7	7	0	0	6,404	32,898	1,136	8,583	8,310	33,487	56	386

Appendix E5.—Page 7 of 7.

Management				Chinoc	ok	Sock	teye	C	oho	Piı	nk	Ch	num
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Remainder of	19-Aug	5	5	0	0	6,452	32,018	290	2,391	3,694	13,645	19	155
Southwest Kodiak	22-Aug	7	7	0	0	6,219	31,690	1,485	13,113	3,623	14,472	39	313
District cont.	23-Aug	25	25	0	0	22,852	124,474	5,483	49,385	12,789	47,254	100	616
(256-10, 15, 20	24-Aug	4	4	2	12	3,267	15,976	733	6,560	947	3,653	32	194
25, 30, 40)	31-Aug	4	4	17	123	3,942	20,041	724	6,344	419	1,640	39	281
	1-Sep	4	4	0	0	5,542	24,217	876	7,173	424	1,476	31	188
	2-Sep	3	3	0	0	3,087	17,002	731	4,839	291	902	4	28
	3-Sep	6	6	1	12	7,681	35,184	1,485	10,333	293	1,042	53	330
	4-Sep	5	5	0	0	4,151	21,589	1,017	8,697	141	560	63	463
	5-Sep a												
	6-Sep	7	7	28	320	8,705	42,501	1,351	12,034	214	777	53	458
	7-Sep a												
	8-Sep	4	4	0	0	2,320	11,476	384	3,458	30	106	10	75
	10-Sep	5	5	0	0	4,924	23,445	836	7,134	71	212	34	214
	11-Sep a												
	12-Sep a												
	13-Sep a												
	14-Sep a												
	22-Sep a												
	25-Sep a												
	28-Sep a												
Total		61	228	354	2,584	236,860	1,160,717	23,922	202,481	178,156	647,720	14,476	122,400
Average weight					7.3		4.9		8.5		3.6		8.5
Grand Total		138	1,735	1,584	10,765	1,116,124	5,618,048	154,699	1,283,006	1,526,913	5,818,621	134,633	1,153,601

Note: Harvest numbers do not include test fish harvests or commercial harvest retained for personal use.

^a Confidential.

^b Does not include Spiridon Special Harvest Area (254-50) or Settler Cove Special Harvest Area (259-35).

Appendix E6.-Set gillnet salmon harvest, by species, for Westside Management Plan units, 2018.

Management			_	Chine	ook	Socke	ye	Coh	0	Pink		Chu	m
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Northwest	9-Jun	36	43	28	238	4,852	24,421	0	0	1	4	139	1,066
Kodiak District b	10-Jun	35	40	4	48	2,533	13,249	0	0	1	5	159	1,159
	11-Jun	36	38	4	47	3,622	19,106	0	0	11	38	224	1,798
	14-Jun	18	19	3	21	1,289	6,299	0	0	2	8	90	693
	15-Jun	31	31	3	37	1,336	6,720	1	6	6	23	80	674
	16-Jun	33	40	0	0	1,311	6,716	0	0	24	93	137	1,088
	17-Jun	36	36	1	7	1,401	7,073	0	0	19	69	79	669
	18-Jun	19	23	2	12	1,087	5,525	0	0	20	63	67	626
	19-Jun	37	39	3	38	1,373	6,816	0	0	31	101	121	955
	25-Jun	27	27	4	54	2,906	14,606	2	11	42	163	695	5,550
	26-Jun	46	53	4	41	3,504	18,303	3	19	105	406	1,248	9,919
	27-Jun	27	27	6	86	1,688	8,073	0	0	100	326	433	3,851
	28-Jun	46	48	2	13	2,046	10,652	0	0	110	383	812	6,689
	2-Jul	30	31	1	7	4,698	24,097	20	134	122	452	603	5,382
	3-Jul	55	65	1	13	8,757	47,065	98	653	593	2,188	3,209	28,667
	4-Jul	33	34	4	29	4,325	23,191	60	422	265	1,004	1,578	13,469
	5-Jul	51	57	9	120	6,219	32,563	147	998	1,013	4,012	2,315	19,166
	6-Jul	51	52	3	34	6,290	33,950	216	1,463	1,665	6,554	2,172	18,448
	7-Jul	53	57	5	48	3,415	18,077	115	754	1,437	5,580	1,221	9,857
	8-Jul	34	38	2	24	1,911	9,788	195	1,121	463	1,881	573	4,755
	13-Jul	31	32	4	73	4,448	22,883	185	1,321	2,884	11,148	1,384	12,405
	14-Jul	56	61	4	47	7,523	41,640	891	5,977	7,822	29,803	3,787	34,187
	15-Jul	49	62	1	19	5,347	29,269	730	5,016	6,546	25,549	3,174	27,075
	23-Jul	36	37	5	56	3,767	20,994	319	2,460	10,050	38,583	1,510	13,440
	24-Jul	54	62	15	173	5,873	32,311	1,071	7,989	19,125	72,602	3,786	33,327
	25-Jul	46	52	5	52	3,974	21,270	1,081	7,049	13,694	50,975	2,745	22,894
	4-Aug	44	59	8	59	10,487	56,476	848	6,177	34,499	135,229	1,517	13,326
	5-Aug	53	68	7	109	10,902	59,073	1,780	12,483	38,889	149,481	1,938	17,451
	6-Aug	46	49	10	86	6,320	34,728	1,150	8,140	24,409	96,309	1,412	12,664
	7-Aug	50	61	9	72	8,469	45,328	1,207	8,947	30,697	121,107	1,495	12,335
	8-Aug	49	56	8	55	8,319	45,045	1,602	10,691	30,848	112,950	1,237	9,359

Appendix E6.–Page 2 of 3.

Management			_	Chine	ook	Socke	eye	Coh	0	Pink		Chu	m
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Northwest	9-Aug	51	55	5	44	5,923	32,422	1,067	7,897	21,610	82,639	798	6,253
Kodiak District b	10-Aug	41	49	6	74	3,120	17,476	916	6,363	12,293	50,115	617	4,633
(cont.)	16-Aug	38	40	4	38	6,755	37,110	1,731	14,537	10,525	39,088	696	5,431
,	17-Aug	44	54	9	66	9,455	51,019	2,227	17,048	13,195	50,408	1,012	8,681
	18-Aug	28	29	3	53	5,352	29,048	1,061	7,948	5,124	18,918	415	3,217
	19-Aug	41	47	0	0	5,591	31,313	1,651	13,160	8,611	32,573	667	5,599
	20-Aug	40	42	0	0	8,866	50,230	1,279	10,764	7,057	27,351	567	4,591
	21-Aug	45	47	7	75	11,956	67,107	1,790	15,199	6,699	25,681	577	4,761
	22-Aug	43	47	8	84	18,341	104,076	1,818	15,659	12,399	47,918	717	5,476
	23-Aug	42	48	7	57	8,768	49,280	1,063	9,251	6,244	23,739	430	3,345
	24-Aug	41	46	10	73	5,923	32,281	1,091	8,881	4,470	16,736	389	3,152
	25-Aug	29	30	4	34	1,727	9,625	699	5,800	1,943	7,446	162	1,136
	26-Aug	26	26	8	50	2,000	10,977	932	8,350	1,166	4,290	134	1,206
	27-Aug	37	46	13	111	5,529	30,234	1,485	12,673	1,878	7,423	320	2,401
	28-Aug	31	37	7	72	4,865	27,153	767	6,814	949	3,705	164	1,244
	29-Aug	20	21	4	25	3,471	19,974	272	2,311	304	1,381	76	539
	30-Aug	20	20	9	70	5,199	28,749	711	6,592	474	1,774	130	998
	31-Aug	31	33	3	26	6,638	37,832	807	6,811	506	2,181	130	960
	1-Sep	33	40	9	64	5,084	27,804	496	4,345	310	1,138	87	656
	2-Sep	17	17	8	75	2,158	11,591	259	2,222	109	403	25	171
	3-Sep	21	22	7	60	3,196	17,532	299	2,855	113	413	30	255
	4-Sep	23	24	5	43	2,887	15,939	413	3,428	199	817	39	291
	5-Sep	29	29	4	31	2,246	12,409	402	3,280	111	437	45	296
	6-Sep	14	14	1	7	1,412	7,918	107	995	37	130	21	144
	7-Sep	23	23	13	99	1,696	9,328	623	5,432	54	215	73	499
	8-Sep	15	15	5	48	584	3,206	135	1,195	14	48	11	88
	9-Sep	15	15	3	32	792	4,254	154	1,416	12	45	15	105
	10-Sep	15	15	0	0	736	4,164	137	1,184	24	112	10	74
	11-Sep	16	16	0	0	752	4,112	80	728	5	17	3	18
	12-Sep	10	13	0	0	815	4,635	129	1,086	7	43	11	76
	13-Sep	8	8	0	0	678	3,777	35	342	2	7	3	23

Appendix E6.–Page 3 of 3.

Management				Chine	ook	Soci	keye	Coh	10	Pir	ık	Chu	m
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Northwest	14-Sep ^a												
Kodiak District b	15-Sep	3	3	0	0	107	582	2	17	0	0	2	18
(cont.) Total		93	2,369	327	3,129	282,627	1,538,534	36,361	286,434	341,938	1,314,284	48,317	409,288
Average weight		73	2,307	321	9.6	202,027	5.4	30,301	7.9	541,730	3.8	40,317	8.5

Note: Harvest numbers do not include test fish harvests or commercial harvest retained for personal use.

^a Confidential.

b Does not include Spiridon Special Harvest Area (254-50) or Settler Cove (259-35).

APPENDIX F.	NORTH SHE	LIKOF FISH	IERY SUMM	IARY

Appendix F1.-Narrative account of the North Shelikof Strait sockeye salmon fishery in the Kodiak Management Area, 2018.

INTRODUCTION

In 1988, there was a significant harvest of large (greater than 6 lb) sockeye salmon in management units bordering the northern portion of Shelikof Strait (Appendix F2). Analysis of average weights, age composition of the harvest, review of past tagging studies, and estimates of migratory timing led to the determination that the majority of these sockeye salmon were bound for Cook Inlet (Barrett 1989). Subsequently the Board of Fisheries determined that an expanded, nontraditional harvest pattern had developed in the Kodiak Management Area. In 1990, the *North Shelikof Strait Sockeye Salmon Management Plan* (NSSSSMP; 5 AAC 18.363) was adopted into regulation.

The NSSSSMP limits purse seine fishing opportunities in those sections of the KMA bordering the north Shelikof Strait (those waters of Shelikof Strait from Dakavak Bay to Cape Douglas in the Mainland District and from Raspberry Cape to Shuyak Island in the Afognak District; Appendix F2). The plan covers the time period from July 6 to July 25 and establishes 2 specific sockeye salmon harvest "triggers" for defined management units within the affected zone. These triggers were established to reduce the harvest of Cook Inlet-bound sockeye salmon that migrate through the Shelikof Strait. The Southwest Afognak management unit (composed of the Southwest Afognak Section) and the North Shelikof management unit (made up of the Dakavak Bay, Outer Kukak Bay, Hallo Bay, and Big River sections of the Mainland District, and the Shuyak Island and Northwest Afognak sections of the Afognak District) have separate sockeye salmon harvest triggers (Appendix F2). If the sockeye salmon harvest within either of these units reaches an established cap, then commercial fishing opportunities within that unit are restricted.

By regulation, "seaward zones" are established in each management unit. These zones are made up of all waters seaward of a line that is drawn from cape to cape. The seaward zone of the Southwest Afognak management unit closes to fishing if 50,000 sockeye salmon are harvested between July 6 and July 25. The seaward zone of the North Shelikof management unit closes to fishing if 15,000 sockeye salmon are harvested between July 6 and July 25. If a seaward zone closure occurs, only the inshore "shoreward zone" (all waters inside the line) will remain open to commercial fishing during normal fishing periods (Appendix F2; Fuerst and Jackson 2018).

In the 20 years the NSSSSMP has been in effect, the North Shelikof management unit has had seaward zone closures every year except 1991, 2000, and 2008 (Appendix F3). The seaward zone of the Southwest Afognak management unit has been closed only 3 times (in 1992, 1993, and 2003; Appendix F4).

¹ In 1993, the seaward zone boundary of the Southwest Afognak unit was modified by the Alaska Board of Fisheries. The seaward zone boundary was moved ½ mile offshore of the line running cape to cape in order to allow for traditional harvest opportunities of pink salmon. In 2008, the seaward zone boundary of that portion of the North Shelikof unit in the Northwest Afognak Section was moved ½ mile offshore of the line running cape to cape in order to allow for traditional harvest opportunities for pink salmon.

First Fishing Period (July 6 to 8)

The first fishing period was characterized by below average fishing effort and low harvest rates. A total of 4 permit holders harvested 164 Chinook, 4,023 sockeye, 31 coho, 443 pink, and 1,138 chum salmon during the first fishing period in the North Shelikof management unit (Appendix F5). Fishing effort was well below average in the Southwest Afognak management unit with no reported harvest of salmon (Appendix F6).

Second Fishing Period (July 13 to 15)

During the second fishing period, the number of the vessels fishing in the North Shelikof management unit increased although harvests rates remained low. During the second fishing period, 8 permit holders harvested of 39 Chinook, 3,127 sockeye, 190 coho, 2,835 pink, and 1,621 chum salmon (Appendix F5).

There was an increase in fishing effort within the Southwest Afognak management unit during the second fishing period with 4 permit holders harvesting 9 Chinook, 898 sockeye, 358 coho, 2,284 pink, and 664 chum salmon (Appendix F6).

Third Fishing Period (July 23 to 25)

Effort increased during the third period within the North Shelikof management unit. By the early evening of July 25 ADF&G determined that the 15,000 fish harvest cap for the North Shelikof management units may be reached before the closer at 9:00 P.M. At 5:00 P.M it was announced that the seaward zones would close at 8:00 p.m.

During the third period 11 permit holders harvested 104 Chinook, 8,916 sockeye, 876 coho, 17,201 pink, and 3,314 chum salmon (Appendix F5).

Fishing effort in the Southwest Afognak Section remained low throughout the third fishing period, therefore a seaward zone closure was not necessary in 2018. From July 23 to July 25, salmon harvests were confidential due to less than 3 permits fishing (Appendix F6).

Season Totals

The 2018 North Shelikof management unit harvest for the time period from July 6 to July 25 totaled 307 Chinook, 16,066 sockeye, 1,097 coho, 20,479 pink, and 6,073 chum salmon, taken by 16 permit holders (Appendix F3 and F5). The average weight of the sockeye salmon harvested in the North Shelikof Unit was 5.25 lb (Appendix F5).

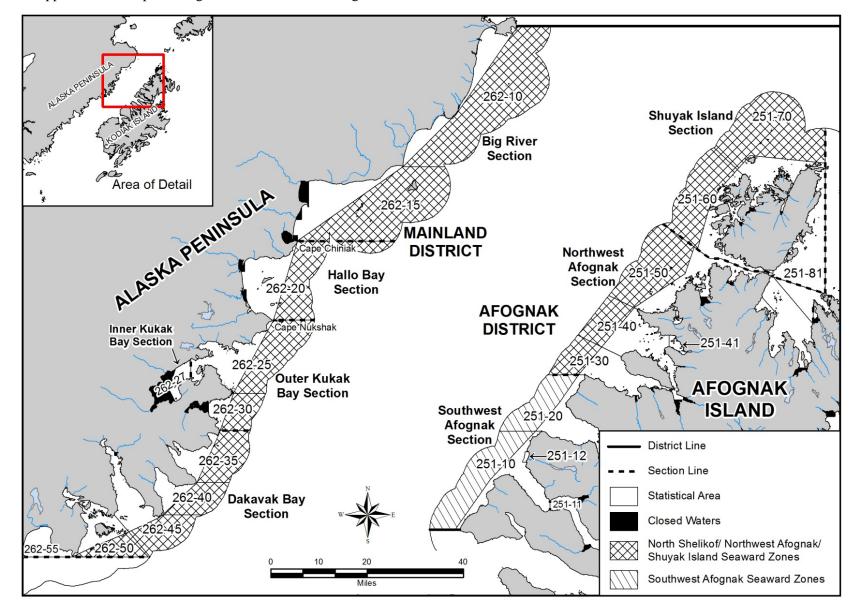
The 2018 Southwest Afognak Unit harvest for the time period from July 6 to July 25 totaled 10 Chinook, 936 sockeye, 406 coho, 2,672 pink, and 747 chum salmon, taken by 5 permit holders (Appendices F4 and F6). The average weight of the sockeye salmon harvested in the Southwest Afognak management unit was 5.15 lb (Appendix F6).

REFERENCES CITED

Fuerst, B. A., and J. Jackson. 2018. Kodiak management area harvest strategy for the 2018 commercial salmon fishery. Alaska Department of Fish and Game, Regional Information Report No. 4K18-02, Kodiak.

Barrett, B. M. 1989. North Shelikof Strait 1988 sockeye catch distribution, timing, and stock composition. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K88-6, Kodiak.

Appendix F2.–Map showing the North Shelikof management area.



Appendix F3.—Summary of fishing time, zone closures, effort, and harvest by species, for the North Shelikof management unit of the Kodiak Management Area, 1995–2018.

	Mai	nland	N. A.f.	a a male			Estimated							
		nland # - 6 1	N. Afo				sockeye							Upper Cook
	# of	# of days	# of	# of days Seaward			harvest at time of	Number						Inlet
	days	Seaward	days	Zone	Zono	Closure			Total Calma	n Houseat by	Consider	July 6 throug	sh Issler 25	sockeye
Year	open to fishing	Zone closed	open to fishing	closed	Date	Time	zone closure	of Vessels	Chinook	Sockeye	Coho	Pink	Chum	harvest (in millions)
1995	7.1	3.3	13.3	8.5	13-Jul	10:00 PM	15,770	77		37,400	1,260	178,800	16,590	2.9
1996	7.1	4.3	7.1	4.3	15-Jul	10:00 PM	11,675	77		73,720	1,820	30,050	14,585	3.9
1997	7.1	4.9	10.1	7.9	8-Jul	5:00 PM	19,850	80		59,140	1,840	38,190	4,550	4.1
1998	7.1	2.4	10.1	4.4	16-Jul	9:00 PM	17,830	39	,	40,630	5,380	59,535	6,370	1.2
1999	7.1	3.3	10.1	6.4	13-Jul	10:00 PM	13,021	45		30,830	230	31,920	7,795	2.7
2000	7.1	0.0	10.1	0.0	none	none	no closure	31		9,225	1,045	20,215	22,155	1.3
2001	7.1	2.7	10.1	4.7	16-Jul	1:00 PM	14,729	26		22,321	9,943	33,534	10,348	1.8
2002	7.1	2.4	10.1	4.7	15-Jul	5:00 PM	16,600	35		35,290	13,181	238,734	13,708	2.8
2003	7.1	5.1	13.1	11.1	8-Jul	12:00 PM	16,448	37		33,122	1,054	35,151	6,500	3.5
2004	7.1	3.5	13.1	7.5	13-Jul	5:00 PM	16,000	36		53,334	3,756	44,886	14,710	4.9
2005	7.1	3.8	13.1	8.3	13-Jul	12:01 AM	17,400	22	87	59,856	1,809	27,269	5,361	5.1
2006	8.6	4.3	17.3	9.9	14-Jul	NOON	15,000	31	482	82,538	8,312	146,445	33,075	2.4
2007	7.1	4.7	13.8	8.9	8-Jul	9:00 PM	12,688	28	266	17,407	566	14,340	5,083	3.3
2008	8.6	0.0	8.6	0.0	none	none	no closure	7	175	5,227	512	18,924	5,082	2.8
2009	7.1	2.4	13.1	6.4	15-Jul	9:00 PM	12,626	14	179	15,645	620	47,694	6,061	2.3
2010	7.1	5.1	10.1	8.1	8-Jul	1:00 PM	14,441	19	609	18,920	2,009	75,481	10,820	2.8
2011	7.1	0.3	13.1	2.3	22-Jul	1:00 PM	25,625	26	386	28,805	2,275	16,162	8,688	5.4
2012	7.1	0.3	13.1	2.3	22-Jul	1:00 PM	33,173	26	141	42,184	691	78,244	16,655	3.1
2013	7.1	2.4	9.1	4.3	15-Jul	9:00 PM	15,565	16	427	15,565	387	14,146	6,258	2.6
2014	7.1	2.4	13.1	10.8	8-Jul	5:00 PM	21,099	50	164	143,909	4,808	133,580	12,085	2.3
2015	7.1	2.8	13.1	7.8	15-Jul	3:00 PM	22,332	35	152	82,225	7,292	288,989	11,605	2.6
2016	7.1	4.7	11.1	9.0	8-Jul	9:00 PM	14,591	24	387	101,856	2,406	24,579	11,566	2.4
2017	7.1	3.4	13.1	5.4	14-Jul	1:00 PM	17,401	35	457	67,843	2,258	74,592	33,248	1.8
2018	7.1	0.0	7.1	0.0	25-Jul	8:00 PM	15,999	16	307	16,066	1,097	20,479	6,073	0.8

Note: In 1988, the Upper Cook Inlet sockeye salmon run was strong, with a commercial harvest of approximately 6,800,000 sockeye salmon. In the Kodiak Area, within the North Shelikof management unit from 7/6–7/25, 1988, with 6.9 days open to fishing, 392,000 sockeye salmon were harvested. This led to adoption of regulations to limit the sockeye salmon harvest in the North Shelikof (15,000 fish) and Southwest Afognak (50,000 fish) management units (5 AAC 18.363).

Appendix F4.—Summary of fishing time, zone closures, effort, and harvest by species, for the Southwest Afognak management unit of the Kodiak Management Area, 1995–2018.

	Mai	nland	N. Afo	ognak			Sockeye							Upper
	# of	# of days	# of	# of days			Harvest at						(Cook Inlet
	days	Seaward	days	Seaward			time of	Number						sockeye
	open to	Zone	open to	Zone		Closure	zone	of			-	July 6 throug		harvest (in
Year	fishing	closed	fishing	closed	Date	Time	closure	Vessels	Chinook	Sockeye	Coho	Pink	Chum	millions)
1995	7.1	3.3	13.3	8.5	13-Jul	10:00 PM	15,770	77	150	37,400	1,260	178,800	16,590	2.9
1996	7.1	4.3	7.1	4.3	15-Jul	10:00 PM	11,675	77	260	73,720	1,820	30,050	14,585	3.9
1997	7.1	4.9	10.1	7.9	8-Jul	5:00 PM	19,850	80	1,940	59,140	1,840	38,190	4,550	4.1
1998	7.1	2.4	10.1	4.4	16-Jul	9:00 PM	17,812	39	140	40,630	5,380	59,535	6,370	1.2
1999	7.1	3.3	10.1	6.4	13-Jul	10:00 PM	13,021	45	310	30,830	230	31,920	7,795	2.7
2000	7.1	0.0	10.1	0.0	none	none	no closure	31	68	9,225	1,045	20,215	22,155	1.3
2001	7.1	2.7	10.1	4.7	16-Jul	1:00 PM	14,729	26	245	22,321	9,943	33,534	10,348	1.8
2002	7.1	2.4	10.1	4.7	15-Jul	5:00 PM	16,600	35	295	35,290	13,181	238,734	13,708	2.8
2003	7.1	5.1	13.1	11.1	8-Jul	12:00 PM	16,448	37	120	33,122	1,054	35,151	6,500	3.5
2004	7.1	3.5	13.1	7.5	13-Jul	5:00 PM	16,000	36	533	53,334	3,756	44,886	14,710	4.9
2005	7.1	3.8	13.1	8.3	13-Jul	12:01 AM	17,400	22	87	59,856	1,809	27,269	5,361	5.1
2006	8.6	4.3	17.3	9.9	14-Jul	NOON	15,000	31	482	82,538	8,312	146,445	33,075	2.4
2007	7.1	4.7	13.8	8.9	8-Jul	9:00 PM	12,688	28	266	17,407	566	14,340	5,083	3.3
2008	8.6	0.0	8.6	0.0	none	none	no closure	7	175	5,227	512	18,924	5,082	2.8
2009	7.1	2.4	13.1	6.4	15-Jul	9:00 PM	12,626	14	179	15,645	620	47,694	6,061	2.3
2010	7.1	5.1	10.1	8.1	8-Jul	1:00 PM	14,441	19	609	18,920	2,009	75,481	10,820	2.8
2011	7.1	0.3	13.1	2.3	22-Jul	1:00 PM	25,625	26	386	28,805	2,275	16,162	8,688	5.4
2012	7.1	0.3	13.1	2.3	22-Jul	1:00 PM	33,173	26	141	42,184	691	78,244	16,655	3.1
2013	7.1	2.4	9.1	4.3	15-Jul	9:00 PM	15,565	16	427	15,565	387	14,146	6,258	2.6
2014	7.1	2.4	13.1	10.8	8-Jul	5:00 PM	21,099	50	164	143,909	4,808	133,580	12,085	2.3
2015	7.1	2.8	13.1	7.8	15-Jul	3:00 PM	22,332	35	152	82,225	7,292	288,989	11,605	2.6
2016	7.1	4.7	11.1	9.0	8-Jul	9:00 PM	14,591	24	387	101,856	2,406	24,579	11,566	2.4
2017	7.1	3.4	13.1	5.4	14-Jul	1:00 PM	17,401	35	457	67,843	2,258	74,592	33,248	1.8
2018	7.1	0.0	7.1	0.0	25-Jul	8:00 PM	15,999	16	307	16,066	1,097	20,479	6,073	0.8

Note: In 1988, the Upper Cook Inlet sockeye salmon run was very strong, with a commercial harvest was approximately 6,800,000 sockeye salmon. In the Kodiak Area, within the North Shelikof management unit from 7/6–7/25, 1988, with 6.9 days open to fishing, 392,000 sockeye salmon were harvested. This led to adoption of regulations to limit the sockeye salmon harvest in the North Shelikof (15,000 fish) and Southwest Afognak (50,000 fish) management units (5 AAC 18.363).

137

Appendix F5.—Daily salmon harvest by species for the North Shelikof management units of the North Shelikof Strait Sockeye Salmon Management Plan, 2018.

			Chin	ninook Sockeye		eye	Col	10	Pinl	ζ	Chu	m
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
First Period	(July 6–July	8)										
$07/06^{a}$												
$07/07^{a}$												
$07/08^{a}$												
Total	4	5	164	835	4,023	16,606	31	305	443	1,467	1,138	8,642
Average wei	ght			5.09		4.13		9.84		3.31		7.59
Second Perio	od (July 13–.	July 15)										
07/13	7	7	32	245	2,511	13,919	94	771	2,172	8,071	894	6,869
07/14	3	3	7	27	616	2,880	96	588	663	2,861	727	5,503
Total	8	10	39	272	3,127	16,799	190	1,359	2,835	10,932	1,621	12,372
Average wei	ght			6.96		5.37		7.15		3.86		7.63
Third Period	July 23–Ju	ly 25)										
07/23	9	9	45	533	5,714	32,113	487	4,459	11,724	40,224	2,182	17,434
07/24	3	3	59	441	1,791	10,292	238	2,023	4,141	14,014	832	6,594
07/25a												
Total	11	14	104	974	8,916	51,020	876	7,765	17,201	58,845	3,314	26,672
Average wei	ght			9.37		5.72		8.86		3.42		8.05
North Shelik	of Managen	nent Harvest J	uly 6–July 2	<u>5</u>								
Total	16	29	307	2,081	16,066	84,425	1,097	9,429	20,479	71,244	6,073	47,686
Average wei	ght			6.78		5.25		8.60		3.48		7.85
	•											

^a Confidential.

138

Appendix F6.—Daily salmon harvest by species in the Southwest Afognak management units of the North Shelikof Strait Sockeye Salmon Management Plan, 2018.

			Chino	ok	Sock	eye	Coh	10	Pinl	k	Chu	m
Date	Permits Landi	ngs N	umber F	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
First Period (July 6–July 8)												
Total		0	0	0	0	0	0	0	0	0	0	0
Avg. Wt.				0.0		0.0		0.0		0.0		0.0
Second Period (July 13–July 15)												
07/13 ^a												
07/14 ^a												
07/15 ^a												
Total	4	4	9	45	898	4,650	358	2,263	2,284	7,923	664	4,860
Avg. Wt.				5.0		5.2		6.3		3.5		7.3
Third Period (July 23–July 25)												
07/23 ^a												
Total ^a												
Avg. Wt.												
SW Afognak Management Harve	est July 6–July 2	5										
Total	5	5	10	70	936	4,825	406	2,554	2,672	9,478	747	5,278
Avg. Wt.				7.00		5.15		6.29		3.55		7.06

^a Confidential.

APPENDIX G	. EASTSIDE A	AFOGNAK FI	SHERY SUM	MARY

Appendix G1.–Narrative account of the Eastside Afognak salmon fishery in the Kodiak Management Area, 2018.

INTRODUCTION

In 1990, the Board of Fisheries adopted the *Eastside Afognak Management Plan* (5 AAC 18.365) into regulation to manage the fisheries in the vicinity of the Kitoi Bay Hatchery. The plan has been in effect with occasional modification since 1981 and was formulated jointly by Kodiak Management Area (KMA) commercial fishery managers and the Kitoi Bay Hatchery manager. This hatchery, on the east side of Afognak Island (Appendix G2), produces significant returns of pink, chum, and coho salmon. The goal of this plan is to achieve escapement and harvest objectives for salmon stocks of the Raspberry Straits, Southeast Afognak, Duck Bay, Izhut Bay, and Kitoi Bay sections, and ensure broodstock for the hatchery. This plan details the key species and targeted stocks that are managed in each of these sections throughout the fishing season.

2018 Eastside Afognak Fishery

Management of the Southeast Afognak Section is based on local salmon runs. Fisheries can be allowed from June 1 to July 5 based on the sockeye salmon returning to the Afognak Lake system, and after July 5 based on local pink, chum, and coho salmon. Due to very low Afognak Lake sockeye salmon escapement, the Southeast Afognak Section was remained closed during the initial opening for KMA sockeye salmon on June 9. Afognak Lake sockeye salmon escapement continued to be low and the Southeast Afognak Section remained closed until August 28 when the area began coho salmon management. A total of 4 permit holders harvested zero Chinook, 17 sockeye, 5,356 coho, 746 pink, and 108 chum salmon (Appendix G3). The 2018 sockeye salmon escapement into Afognak Lake was 17,601 fish (Fuerst 2019), which was below the escapement goal range of 20,000 to 50,000 fish (Schaberg et al. 2016).

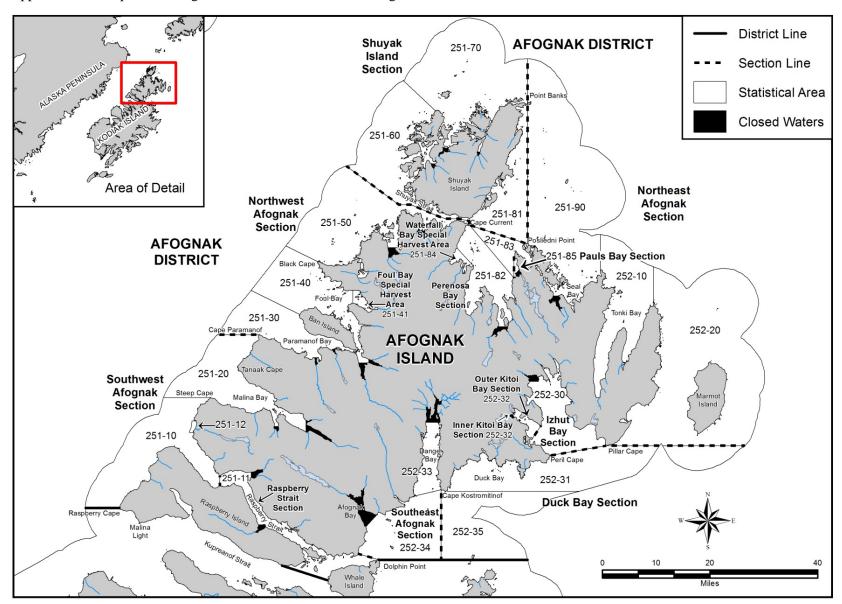
The salmon fishery targeting Kitoi Bay Hatchery fish began on June 9 with the last delivery occurring on September 11. In fisheries targeting the Kitoi Bay Hatchery return, which include the Duck Bay, Izhut Bay, Inner Kitoi Bay, and Outer Kitoi Bay sections, 123 permit holders harvested 210 Chinook, 25,525 sockeye, 166,298 coho, 3,199,964 pink, and 166,298 chum salmon (Appendix G3). The hatchery pink salmon harvest was above the preseason forecast, but early-run sockeye, late-run sockeye, coho, and chum salmon harvests were all below harvest forecasts (Brenner et al. 2018).

In 2018, there was no cost-recovery fishery conducted by Kodiak Regional Aquaculture Association in the vicinity of the Kitoi Bay Hatchery.

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Appendix G2.–Map of the Afognak District of the Kodiak Management Area.



Appendix G3.—Daily salmon harvest by species for the management units of the East Afognak Management Plan, 2018.

Management				Chin	ook	Socke	ye	Co	oho	Pink		Chu	ım
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Raspberry Strait	7-Sep ^a												
Section	9-Sep	3	3	0	0	1	3	1,710	10,777	0	0	0	0
251-11													
Total		4	4	0	0	1	3	1,872	12,272	0	0	0	0
Average weight					0.0		0.00		6.56		0.0		0.0
S.E.Afognak	24-Aug	4	4	0	0	0	0	2515	19,330.00	85	310.00	89	623
Section	25-Aug	4	4	0	0	8	44	1,410	11,699	230	921	4	22
252-33 & 34	31-Aug ^a												
	1-Sep ^a												
	7-Sep	3	3	0	0	4	20	447	3,644	32	105	3	14
	8-Sep ^a												
Total		11	15	0	0	17	87	5,356	43,046	746	2,650	108	761
Average weight					0.0		5.12		8.04		3.55		7.05
Izhut Bay Section	9-Jun	5	5	0	0	23	91	0	0	6	20	578	4,952
252-30	10-Jun ^a												
	11-Jun	4	4	5	42	37	144	0	0	15	31	410	3,201
	13-Jun	3	3	0	0	53	190	0	0	13	25	1,009	9,101
	16-Jun ^a												
	18-Jun	5	5	0	0	714	3,503	0	0	269	806	4,342	34,143
	19-Jun	4	4	2	12	224	959	0	0	80	241	1,802	16,266
	20-Jun	10	10	1	8	35	137	0	0	11	26	3,177	27,079
	21-Jun	6	6	0	0	30	102	0	0	5	18	1,786	13,999
	22-Jun	14	14	4	60	48	206	0	0	22	69	7,735	60,457
	23-Jun	6	6	0	0	0	0	34	241	0	0	2,650	22,923
	24-Jun	13	13	0	0	12	46	2	12	19	56	7,374	59,513
	25-Jun	5	5	1	5	20	74	0	0	7	30	3,143	25,822
	26-Jun	9	9	2	15	71	308	2	8	66	211	9,383	74,474
	27-Jun	7	7	1	5	7	28	1	6	17	57	2,855	23,017

Appendix G3.–Page 2 of 7.

Management				Chin	ook	Socke	eye	Col	10	Pink		Chu	ım
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Izhut Bay Section	28-Jun	20	20	1	8	154	461	2	9	55	175	11,540	86,481
252-30 (cont.)	29-Jun	4	4	0	0	2	7	0	0	3	8	899	7,399
	30-Jun	18	18	3	11	140	550	8	42	16	49	16,631	120,830
	1-Jul	7	7	4	18	23	92	4	25	1	3	2,426	19,394
	17-Jul	22	22	2	37	303	1,414	167	1,100	1,030	4,611	2,533	15,868
	18-Jul	8	8	0	0	31	164	16	98	107	349	406	2,749
	19-Jul	4	4	1	8	491	2,459	210	1,473	2,804	11,202	1,292	9,627
	20-Jul ^a												
	21-Jul	5	5	2	10	662	2,437	846	5,483	6,265	24,699	1,388	11,253
	22-Jul	4	4	0	0	170	757	227	1,579	2,262	6,763	348	2,190
	23-Jul	5	5	1	20	200	885	384	2,457	3,388	11,983	325	2,536
	24-Jul	3	3	1	5	126	572	47	256	1,149	4,892	216	1,365
	25-Jul	7	7	2	43	286	1,203	311	2,377	5,831	25,961	454	3,621
	26-Jul	4	4	1	25	110	480	385	2,072	6,171	21,050	351	2,095
	27-Jul	7	7	0	0	224	1,017	420	2,812	21,814	72,963	555	3,600
	28-Jul	3	3	0	0	10	49	2	14	9,595	24,475	643	5,865
	29-Jul	10	10	0	0	81	356	226	1,639	31,448	122,735	411	2,596
	30-Jul	13	15	5	28	290	1,199	1,271	8,903	56,302	213,403	406	2,462
	31-Jul	23	23	9	33	134	712	1,675	13,871	114,963	424,306	244	1,571
	1-Aug	28	29	7	114	181	803	1,767	12,748	118,836	463,500	188	1,186
	2-Aug	30	31	1	7	118	517	1,995	14,381	146,839	551,622	170	965
	3-Aug	21	21	0	0	112	487	1,503	10,488	138,867	512,591	151	838
	4-Aug	23	24	0	0	205	1,009	1,740	14,281	135,861	502,995	130	825
	5-Aug	13	13	1	4	113	573	1,255	10,024	75,141	281,375	85	544
	6-Aug	29	29	1	16	290	1,447	2,977	21,454	150,998	546,270	249	1,538
	7-Aug	37	38	0	0	326	1,626	2,344	17,203	171,698	693,049	127	790
	8-Aug	37	38	0	0	299	1,314	1,912	15,273	168,207	703,117	120	767
	9-Aug	34	35	1	2	468	2,029	1,758	13,040	156,951	589,810	96	659
	13-Aug	36	39	0	0	153	677	4,165	35,191	64,430	252,925	36	225
	14-Aug	19	19	0	0	73	289	2,464	19,012	33,642	128,576	28	154
	15-Aug	17	17	0	0	86	372	3,929	34,048	46,401	187,059	23	138

Appendix G3.–Page 3 of 7.

Management				Chin	ook	Socke	eye	Col	ho	Pin	k	Chi	um
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Izhut Bay Section	16-Aug	15	15	0	0	370	1,369	6,267	45,201	52,080	187,207	51	362
252-30 (cont.)	17-Aug	18	18	0	0	334	1,560	3,328	26,248	26,988	121,779	20	131
	18-Aug ^a												
	19-Aug	12	12	0	0	74	356	5,058	40,658	27,201	114,355	43	318
	20-Aug	18	18	0	0	234	1,337	4,028	33,533	24,880	92,082	25	182
	21-Aug	8	8	0	0	5	25	945	8,750	5,997	23,607	3	24
	22-Aug	4	4	0	0	49	243	539	4,533	1,738	7,428	5	37
	23-Aug	3	3	0	0	0	0	291	2,399	2,142	8,032	0	0
	24-Aug ^a												
	25-Aug ^a												
	26-Aug	3	3	0	0	84	358	424	3,423	1,626	5,912	20	143
	27-Aug	8	8	0	0	28	127	2,873	23,355	10,571	39,382	15	102
	28-Aug	3	3	0	0	3	11	1,155	8,651	3,364	14,229	2	7
	29-Aug	6	6	0	0	128	585	1,002	9,212	2,860	10,105	3	21
	30-Aug	6	6	0	0	16	77	2,702	23,674	6,886	25,597	4	33
	31-Aug a												
	1-Sep	5	5	0	0	9	45	1,621	12,445	2,337	8,909	3	25
	2-Sep ^a												
	3-Sep	3	3	0	0	25	118	1,001	8,965	1,044	4,498	5	32
	4-Sep	3	3	0	0	7	33	397	3,470	749	2,935	0	0
	5-Sep	3	3	0	0	1	7	103	883	201	665	0	0
Total		107	721	59	536	8,543	38,192	67,703	533,147	1,850,469	7,080,627	89,718	692,532
Average weight					9.1		4.5		7.9		3.8		7.7
Duck Bay	12-Jun ^a												
Section	14-Jun ^a												
252-31 & 35	15-Jun ^a												
(cont.)	16-Jun	4	4	2	8	3,045	14,484	0	0	304	937	2,358	17,992
	17-Jun ^a												
	18-Jun	4	4	11	34	993	4,492	0	0	163	498	1,933	14,860
	19-Jun ^a						•					•	•
	20-Jun	3	4	1	3	555	2,663	0	0	109	322	1,486	14,798

Appendix G3.–Page 4 of 7.

Management				Chin	ook	Socke	eye	Col	10	Pink	ζ	Chu	ım
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Duck Bay	21-Jun	3	3	0	0	18	49	1	6	6	13	294	2,491
Section	4-Jul ^a												
252-31 & 35	6-Jul	11	11	16	65	302	1,378	360	2,612	477	1,474	10,263	87,689
(cont.)	7-Jul	3	3	6		80	390	122	749	73	279	2,385	20,250
()	8-Jul ^a												
	13-Jul	12	12	9	38	1,077	5,314	783	5,328	2,513	7,977	6,430	50,264
	14-Jul	4	4	4		438	2,823	122	1,137	963	3,317	1,168	8,689
	15-Jul	10	10	1	2	381	1,857	163	1,132	984	3,769	1,253	9,308
	23-Jul	8	8	3	33	576	2,843	853	7,507	11,722	37,633	922	8,305
	24-Jul ^a												
	25-Jul	3	3	4	24	240	1,076	366	2,867	3,012	13,496	157	1,419
	28-Jul ^a												
	29-Jul ^a												
	4-Aug	17	21	0	0	840	4,011	4,259	30,697	140,133	573,309	396	2,732
	5-Aug	33	34	4	36	873	4,049	6,445	46,766	190,161	810,650	597	4,244
	6-Aug	17	18	13	127	170	867	2,258	16,723	84,386	340,121	248	1,570
	9-Aug ^a												
	13-Aug	13	13	1	8	241	1,179	2,190	18,734	40,935	147,592	69	469
	14-Aug	3	3	0	0	90	379	201	1,564	4,885	16,625	12	93
	15-Aug	15	15	0	0	152	694	2,009	16,111	28,923	104,480	23	162
	16-Aug	10	11	0	0	666	3,177	2,683	20,469	26,671	108,307	85	611
	17-Aug	11	12	0	0	345	1,621	2,245	18,012	29,897	115,247	44	332
	18-Aug	3	3	0	0	102	469	417	4,098	5,746	17,372	38	317
	19-Aug	5	5	0	0	61	302	1,895	16,469	19,916	82,396	31	180
	20-Aug	6	6	4	19	287	1,477	1,096	7,772	10,482	41,415	28	221
	21-Aug	10	10	0	0	34	154	2,296	17,956	18,669	63,843	13	85
	22-Aug ^a												
	24-Aug	3	3	0	0	2	9	1,371	13,458	7,240	31,940	0	0
	25-Aug ^a												
	26-Aug	4	4	0	0	33	160	365	3,347	3,336	13,426	3	14
	28-Aug ^a												

Appendix G3.–Page 5 of 7.

Management				Chino	ok	Socke	ye	Col	10	Pi	nk	Chu	ım
Unit	Date	Permits	Landings N	Number 1	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Duck Bay	29-Aug ^a												
Section	31-Aug ^a												
252-31 & 35	1-Sep ^a												
(cont.)	3-Sep ^a												
	4-Sep ^a												
	5-Sep ^a												
Total		73	251	94	655	13,715	65,884	37,045	292,971	666,316	2,674,107	33,738	277,193
Average weight					7.0		4.8		7.9		4.0		8.2
Inner & Outer	9-Jun ^a												
Kitoi Bay	11-Jun ^a												
Sections	13-Jun ^a												
252-32	14-Jun ^a												
	15-Jun ^a												
	16-Jun ^a												
	17-Jun ^a												
	18-Jun	4	4	0	0	114	570	0	0	29	115	4,168	32,860
	19-Jun	10	10	0	0	395	2,177	0	0	40	174	5,923	49,720
	20-Jun	5	5	0	0	3	12	0	0	9	30	1,451	12,680
	21-Jun	5	5	2	9	22	90	0	0	11	27	1,636	15,374
	22-Jun	4	4	1	3	3	9	0	0	0	0	1,268	11,239
	23-Jun	5	5	19	132	5	28	0	0	1	3	1,796	14,472
	24-Jun	3	3	0	0	0	0	0	0	0	0	622	5,456
	25-Jun	4	4	0	0	21	50	0	0	3	9	1,393	11,093
	26-Jun	3	3	0	0	0	0	0	0	0	0	1,052	8,839
	18-Jul	5	5	0	0	11	41	2	11	24	84	347	2,257
	19-Jul ^a												
	20-Jul	5	5	2	8	149	731	276	2,650	1,167	3,545	6,041	48,796
	21-Jul	4	4	0	0	67	261	1	7	705	2,181	3,738	24,248
	22-Jul ^a												

Appendix G3.–Page 6 of 7.

Management				Chin	ook	Socke	eye	Col	10	Pi	nk	Chu	ım
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Inner & Outer	23-Jul	6	6	0	0	125	556	206	1,541	4,139	13,321	3,639	29,779
Kitoi Bay	24-Jul ^a												
Sections	25-Jul	4	4	0	0	7	29	6	50	2,395	8,864	1,689	16,197
252-32	26-Jul ^a												
	27-Jul	4	4	0	0	71	287	132	901	6,760	23,645	364	2,648
	28-Jul ^a												
	29-Jul	5	7	0	0	36	142	82	555	17,795	58,387	270	1,839
	30-Jul	5	5	0	0	178	808	796	5,606	27,013	95,320	132	722
	31-Jul	5	5	0	0	5	20	48	320	11,657	43,170	46	323
	1-Aug	3	3	0	0	11	45	107	745	16,486	64,785	32	176
	9-Aug	56	69	28	155	1,488	7,399	1,029	7,880	386,296	1,538,027	106	750
	13-Aug	9	9	0	0	39	215	614	6,223	14,479	53,266	30	206
	14-Aug	12	12	4	26	50	224	936	7,886	23,249	87,336	8	57
	15-Aug	29	30	0	0	36	169	4,754	36,423	92,693	397,845	16	83
	16-Aug	7	7	0	0	59	268	503	3,478	9,041	37,212	0	0
	17-Aug	5	5	0	0	0	0	214	1,828	4,371	18,092	0	0
	18-Aug	3	3	0	0	28	138	660	4,952	14,716	51,504	7	44
	19-Aug a												
	20-Aug	3	3	0	0	6	22	1,881	15,754	6,710	25,845	1	10
	21-Aug	11	11	0	0	22	85	4,445	37,933	14,109	56,007	4	23
	22-Aug	7	7	0	0	50	322	920	7,759	2,850	11,128	3	22
	29-Aug	5	5	0	0	18	83	2,089	17,928	3,892	14,349	0	0
	30-Aug a												
	31-Aug	4	4	0	0	21	94	922	8,858	2,405	7,075	5	35
	1-Sep	5	5	0	0	1	3	1,324	11,410	2,125	6,760	0	0
	2-Sep	5	5	0	0	0	0	633	5,187	1,106	3,661	1	8
	3-Sep ^a												
	4-Sep ^a												

Appendix G3.–Page 7 of 7.

Management				Chine	ook	Sock	eye	Сс	oho	Pir	ık	Ch	um
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Inner & Outer	5-Sep ^a												
Kitoi Bay	11-Sep ^a												
Sections													
252-32													
Total		92	292	57	338	3,267	15,903	25,074	205,773	683,179	2,685,054	42,842	345,423
Average weight					5.93		4.87		8.21		3.93		8.06
Management Un	its Targeting	Kitoi Hatch	nery										
(Inner & Outer K	Kitoi, Izhut ar	nd Duck Ba	y Sections)										
Subtotal		123	1,264	210	1,529	25,525	119,978	129,822	1,031,891	3,199,964	12,439,787	166,298	1,315,148
Average weight					7.28		4.70		7.95		3.89		7.91
East Afognak Ma	anagement U	nits											
Grand Total		123	1,283	210	1,529	25,543	120,068	137,050	1,087,209	3,200,710	12,442,437	166,406	1,315,909
Average weight					7.28		4.70		7.93		3.89		7.91

APPENDIX H. SPIRIDON BAY SPECIAL HARVEST AREA FISHERY SUMMARY

Appendix H1.-Narrative account of the Spiridon Bay Special Harvest Area sockeye salmon fishery in the Kodiak Management Area, 2018.

INTRODUCTION

Adult sockeye salmon return each year to Telrod Cove in Spiridon Bay as a result of a juvenile stocking program of Spiridon Lake and net pen production in Telrod Cove conducted by Kodiak Regional Aquaculture Association (KRAA; Appendix H2). Some of these fish were harvested in Westside Kodiak commercial fisheries, and the remainder were harvested in a terminal fishery in the Spiridon Bay Special Harvest Area (SBSHA) in Telrod Cove. A total return of approximately 274,000 Spiridon Lake sockeye salmon (including Telrod Cove net pen production) were expected in 2018 (Brenner et a. 2018). Sockeye salmon stocked into Spiridon Lake were from Saltery Lake broodstock. Spiridon Lake sockeye salmon are expected to return in late June to early July, peak in mid- to late July, and end by mid-August. This run timing should follow the Saltery Lake sockeye salmon stock.

2018 Spiridon Bay Sockeye Salmon Fishery

KRAA conducted a cost-recovery harvest to help fund the stocking program. The cost-recovery harvest began on July 6, continued until July 29, and harvested 51,790 sockeye, 2,652 pink, and 299 chum salmon. With the conclusion of the cost-recovery harvest, the common property fishery was opened on August 1 and remained open until the sockeye salmon run began to subside (August 16). Nineteen seine permit holders harvested a total of zero Chinook, 11,705 sockeye, 13 coho, 2,448 pink, and 225 chum salmon in the common property fishery in SBSHA (Appendix H3). The total number of sockeye salmon harvested in Telrod Cove was 62,291 fish, 83% (51,790 fish) of which were harvested for cost recovery (Appendix H4).

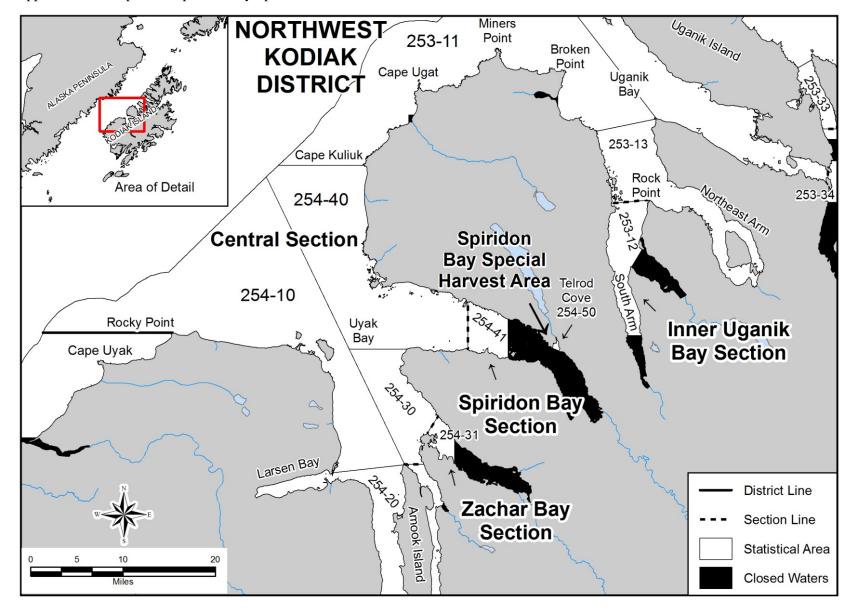
In 2018, limited fishing time along the west side of Kodiak Island for salmon in mid-July continued throughout the rest of the month and into early August as it became known that the pink salmon run was either late or not materializing. As a result of the decreased fishing time in July, the percentage of Spiridon-bound sockeye salmon harvested in areas outside of SBSHA was lower than in some previous years, when a large pink salmon return resulted in increased fishing time. The total number of sockeye salmon returning to the Spiridon enhancement project that were sold in 2018 was estimated at 148,623 fish, with approximately 51% (75,420 fish) harvested within SBSHA/Spiridon Bay Section and an estimated 49% (73,203 fish) harvested in the Southwest Afognak Section of the Afognak District and the Central, North Cape, and Spiridon Bay sections of the Northwest Kodiak District (Appendix H4). This estimate was based on the correlation between the number of days of commercial fishing in the Central Section of the Northwest Kodiak District (excluding the SBSHA) and the previously estimated portion of Spiridon Lake sockeye salmon harvested in the SBSHA determined from scale pattern analyses from commercial harvests from 2008 to 2012 (Moore 2013).

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Appendix H2.-Map of the Spiridon Bay Special Harvest Area in the Northwest Kodiak District.



Appendix H3.-Daily salmon harvest by species in the Spiridon Bay Special Harvest Area, 2018.

Management				Chin	ook	Socke	eye	Col	ho	Pin	k	Chu	ım
Unit	Date	Permits	Landings	Number	Pounds								
Spiridon Bay SHA	1-Aug	6	7	0	0	1,798	8,146	3	21	309	1,076	14	117
254-50	2-Aug	12	12	0	0	3,156	14,837	1	4	586	2,269	68	540
	3-Aug	7	7	0	0	1,867	9,255	2	16	451	1,526	95	692
	4-Aug	3	3	0	0	713	4,088	1	10	231	758	36	282
	5-Aug a												
	6-Aug a												
	7-Aug a												
	8-Aug a												
	9-Aug a												
	10-Aug a												
	16-Aug	3	3	0	0	900	5,566	6	60	261	1,173	7	55
Total		19	44	0	0	11,705	58,406	13	111	2,448	9,171	225	1,740
Average weight					0.0		4.99		8.55		3.75		7.73

Note: Harvest does not include fish set aside for personal use or fish harvested in cost-recovery fisheries.

^a Confidential

Appendix H4.—Estimated contribution to the commercial harvest from the Spiridon Lake sockeye salmon enhancement project by locality in the Kodiak Management Area, 2018.

	Actual	Estimated	
	Telrod Cove (254-50) and	Southwest Afognak Section	Westside
	Spiridon Bay (254-41)	and NW Kodiak District	Total
Cost recovery	51,790	0	51,790
Common property	23,630	73,203	96,833
Total harvest	75,420	73,203	148,623
Percent	51%	49%	100%

APPENDIX I	. EASTSIDE K	ODIAK FIS	HERY SUM	[MARY

Appendix I1.—Narrative account of the Eastside Kodiak salmon fishery in the Kodiak Management Area, 2018.

INTRODUCTION

The goal of the *Eastside Kodiak Salmon Management Plan* is to achieve escapement and harvest objectives for sockeye, pink, chum, and coho salmon returning to spawning streams in the Northeast Kodiak and Eastside Kodiak districts. This plan details the key species and targeted stocks that are managed in each of these sections throughout the fishing season (5 AAC 18.367).

For the Northeast Kodiak District (Appendix I2), all sections are to remain closed to commercial salmon fishing until July 6, when the pink salmon fishery begins for most of the Kodiak Management Area (Fuerst and Jackson 2018). Fishing opportunities through August 24 are based on the abundance of local and mixed pink and chum salmon, except that in the Buskin River Section from July 6 to July 15 fishing could be allowed based on local pink salmon and Buskin River sockeye salmon. From August 25 to September 5, fishing periods are based on the abundance of local pink and coho salmon, and after September 5, on local coho salmon.

For most of the Eastside Kodiak District in 2018 (Appendix I3), not more than two 33-hour fishing periods could occur between June 14 and July 5 to harvest local and migrating sockeye salmon. The Inner Ugak Bay Section could not open for more than two 33-hour fishing periods between June 14 and June 21. From June 22 to July 5, fishing opportunities are based on sockeye salmon bound to either the Pasagshak River in Outer Ugak Bay Section or the Saltery River in Inner Ugak Bay Section. From July 6 to August 24, fishing opportunities in all sections are based on the abundance of local and mixed pink and chum salmon, except that in Inner Ugak Bay Section, Saltery Lake sockeye salmon escapement must be considered through July 31. From August 25 to September 5, fishing periods are based on the abundance of local pink, chum, and coho salmon, and after September 5, on local coho salmon abundance (5 AAC 18.367).

Within the Buskin River Section of the Northeast Kodiak District, the Buskin Lake system produces a significant run of sockeye salmon that is targeted by a large number of subsistence fishermen. A weir is operated on the Buskin River to enumerate escapement. Within the Inner Ugak Bay Section of the Eastside Kodiak District, the Saltery Lake system produces a significant run of sockeye salmon. A weir is operated on this stream by Kodiak Regional Aquaculture Association and ADF&G to enumerate sockeye salmon. Additionally, ADF&G operates a weir on the Pasagshak River to enumerate sockeye salmon that are targeted by subsistence and sport fishermen. Other minor sockeye salmon systems are present in the Eastside Kodiak District, including Lake Miam and Ocean Beach.

2018 Eastside Kodiak Fisheries

The Saltery River sockeye salmon run was low to moderate with a cumulative escapement past Saltery weir of 22,845 fish (Fuerst 2019) which is within the desired escapement goal range of 15,000 to 35,000 fish (Fuerst and Jackson 2018). There were only two 33-hour fishing periods (June 14 and June 21) in the Inner Ugak Bay Section in June due to low escapements of Saltery sockeye salmon. Additionally, no commercial salmon fishing periods were allowed from early July until September due to low pink salmon escapements (Appendix B1).

The Buskin River sockeye salmon run was weak during the 2018 season resulting in expanded closed waters for the subsistence fishery and no commercial salmon fishing periods in the Buskin Section. A total of 4,523 sockeye salmon passed above the Buskin River weir (Fuerst 2019), which was below the escapement goal range of 5,000 to 8,000 fish (Schaberg et al. 2016).

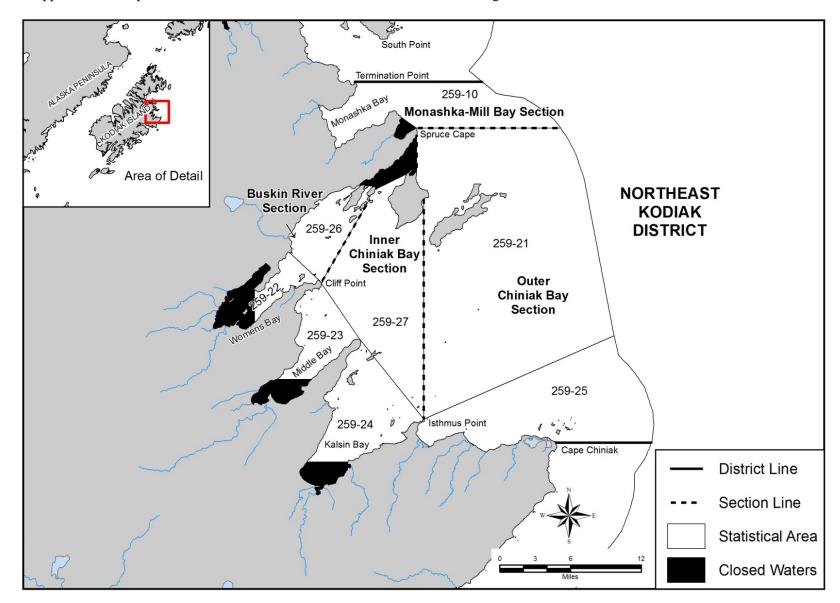
For the Pasagshak River, peak aerial surveys were used to establish the escapement goal. The 2018 peak aerial survey total of 1,100 sockeye salmon did not meet the lower-bound SEG of 3,000 fish (Schaberg et al. 2016). A total of 2,019 sockeye salmon were estimated to have passed the Pasagshak River weir in 2018 (Fuerst 2019) resulting in expanded closed waters within the subsistence fishery to protect escapement.

The total commercial harvest for the Eastside Kodiak management units by 56 permit holders included 1,117 Chinook, 25,248 sockeye, 57,494 coho, 59,518 pink, and 65,132 chum salmon (Appendix I4). The last day of commercial salmon harvest in the Eastside Kodiak District was September 24.

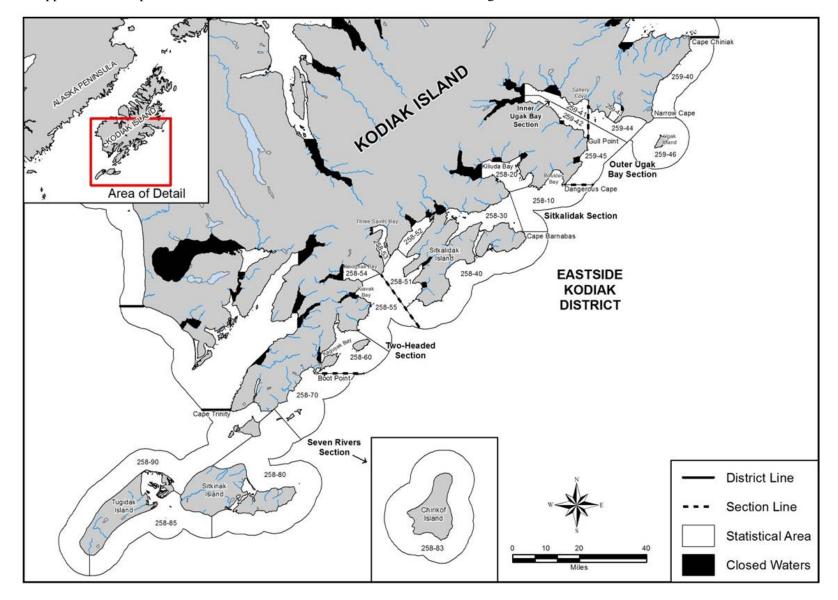
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Appendix I2.-Map of the Northeast Kodiak District commercial salmon fishing sections and statistical areas.



Appendix I3.-Map of the Eastside Kodiak District commercial salmon fishing sections and statistical areas.



Appendix I4.-Daily commercial salmon harvest by species for the Eastside Kodiak Management Plan units, 2018.

Management				Chino	ook	Sock	eye	Col	10	Pin	k	Chu	ım
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Eastside Kodiak	14-Jun	6	6	32	372	1,364	6,821	0	0	394	1,326	5,407	40,780
District	15-Jun	3	3	5	29	185	793	0	0	47	158	1,147	11,119
	21-Jun	12	12	54	256	1,267	5,438	2	9	501	1,577	8,276	56,788
	22-Jun	10	11	26	156	2,821	12,709	0	0	1,139	3,988	13,589	74,903
	6-Jul	17	17	192	809	3,571	16,699	2,233	14,280	1,467	5,364	8,438	62,581
	7-Jul	8	9	101	619	1,880	8,529	505	3,359	840	2,843	3,970	28,062
	8-Jul	12	13	66	435	1,507	7,919	325	2,276	1,389	5,224	2,693	22,280
	13-Jul	5	5	136	528	1,717	9,108	1,637	11,520	1,404	5,475	3,349	26,572
	14-Jul	7	8	3	36	2,595	10,726	4,056	19,696	2,189	7,142	3,855	28,556
	15-Jul	5	5	220	753	1,733	7,642	5,299	36,968	3,460	10,920	4,770	37,713
	23-Jul	12	12	127	454	3,317	15,996	5,944	40,578	22,612	87,201	5,225	35,786
	24-Jul	4	4	126	459	1,699	9,309	7,333	47,806	17,641	69,377	1,721	12,224
	25-Jul	10	10	25	102	846	4,347	1,126	7,079	6,375	24,650	1,730	13,787
	19-Aug ^a												
	7-Sep	3	3	0	0	3	15	495	4,450	6	23	106	756
	8-Sep	5	5	0	0	2	9	2,957	31,611	3	9	660	4,395
	9-Sep a												
	14-Sep	5	5	0	0	705	3,285	4,476	41,988	0	0	6	41
	15-Sep ^a												
	16-Sep	5	5	0	0	0	0	4,633	51,148	1	3	38	278
	21-Sep	4	4	0	0	9	48	2,381	21,052	0	0	37	266
	22-Sep	7	7	4	17	2	11	8,027	83,398	0	0	108	767
	23-Sep	4	4	0	0	0	0	1,738	17,087	0	0	7	51
	24-Sep ^a												
Total		56	153	1,117	5,025	25,248	119,519	57,494	475,418	59,518	225,485	65,132	457,705
Average weight					4.50		4.73		8.27		3.79		7.03

Appendix I4.—Page 2 of 2.

Management		Chinook		Sockeye		Coho		Pink		Chum			
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Northeast Kodiak	6-Jul ^a												
District													
Total ^a													
Average weight													
Eastside Management F	Plan												
Total		57	154	1,119	5,048	25,276	119,690	57,539	475,782	59,534	225,556	65,174	458,088
Average weight					4.51		4.74		8.27		3.79		7.03

^a Confidential.

APPENDIX J. NORTH AFOGNAK/SHUYAK FISHERY SUMMARY

Appendix J1.-Narrative account of the North Afognak/Shuyak salmon fishery in the Kodiak Management Area, 2018.

INTRODUCTION

In November of 1995, the Board of Fisheries adopted the *North Afognak/Shuyak Island Salmon Management Plan* into regulation (5 AAC 18.368). This plan governs all commercial salmon fisheries on the north end of the Kodiak Archipelago. Though no comprehensive regulatory management plan was in effect prior to that date, the commercial fisheries of the area had followed a framework developed by fishery managers in the early 1970s, with the harvest strategy remaining nearly unchanged after 1987. The goal of this plan is to achieve escapement and harvest objectives for sockeye, pink, and coho salmon returning to spawning systems located in the Northeast Afognak, Perenosa Bay, Pauls Bay, Shuyak Island, and Northwest Afognak sections of the Afognak District (Appendix J2). This plan details the key species and targeted stocks that are managed in each of these sections throughout the fishing season. This plan went into effect during the 1996 season and was most recently modified in 2005.

For the Northeast Afognak and Shuyak Island sections, commercial salmon fishing was to remain closed until July 6 when the general pink salmon fishery began for most of the Kodiak Management Area (KMA). Fishing opportunities in the Northeast Afognak Section were based on the abundance of local and migrating pink salmon through August 24, local pink and coho salmon from August 25 to September 5, and on local coho salmon after September 5. Fishing opportunities in the Shuyak Island Section were to be based on the abundance of local and mixed pink salmon through August 1, then on local coho salmon through the end of the season. From July 6 to July 25, the Shuyak Island Section was also managed in accordance with the *North Shelikof Strait Sockeye Salmon Management Plan* (5 AAC 18.363).

For the Perenosa Bay Section, from June 1 to July 5, fishing opportunities were based on sockeye salmon returning to the Pauls Bay and Portage Lake systems. Additional fishing time could be allowed to harvest enhanced sockeye salmon bound for the Little Waterfall system, but only inside the Waterfall Bay Special Harvest Area (WBSHA). From July 6 to July 20, management for the Perenosa Bay Section was based on local and migrating Kodiak pink salmon, and sockeye salmon migrating to Pauls and Portage lakes. From July 21 to August 20, management was based on the abundance of local and migrating pink salmon, from August 21 to September 5, on local pink and coho salmon, and after September 5, on the abundance of local coho salmon.

For the Northwest Afognak Section, from June 1 to July 5, fishing opportunities were based on sockeye salmon bound to the minor systems at Thorsheim Lake and Long Lagoon, although there could be no more than two 33-hour fishing periods. Additional fishing time could be allowed to harvest enhanced sockeye salmon bound for the Hidden Lake system, but only in the Foul Bay Special Harvest Area (FBSHA). From July 6 to August 24, management was based on the abundance of local and mixed pink salmon, and after August 24, fishing periods were based on the abundance of local coho salmon. Additional fishing time may be allowed to harvest enhanced coho salmon bound for the Hidden Lake System, but only in the FBSHA. From July 6 to July 25, the Northwest Afognak Section was also managed in accordance with the *North*

Shelikof Strait Sockeye Salmon Management Plan (5 AAC 18.363). For the Pauls Bay Section, from June 1 to July 5, fishing opportunities were based on sockeye salmon returning to Pauls Lake. From July 6 to August 1, management of the Pauls Bay Section was based on local and mixed pink and sockeye salmon bound for Pauls Lake. After August 1, management was based on the abundance of local coho salmon.

2018 North Afognak/Shuyak Island Fisheries

In 2018, the first commercial salmon fishing period for the North Afognak/Shuyak Island management units began June 9 and was limited initially to the FBSHA and WBSHA. Within the FBSHA, 12 permit holders harvested a total of 20,203 sockeye, zero coho or pink, and 2 chum salmon (Appendix J3). Three permit holders harvested 542 sockeye and 8 pink salmon within the WBSHA during the 2018 season (Appendix J3).

The Northwest Afognak, Pauls Bay, and Perenosa Bay sections opened on June 14 and June 21 for two 33-hour periods in order to test the strength of local Afognak sockeye salmon runs. Sockeyesalmon harvests were moderate during this time period (Appendix J3). The Pauls Bay weir at the outlet of Pauls Lake was not in operation during the 2018 season (Fuerst 2019).

In July, the Northwest Afognak, Shuyak Island, Pauls Bay, Perenosa Bay, and Northeast Afognak sections opened during all Kodiak Area general pink salmon fishing periods due to adequate sockeye and pink salmon escapement.

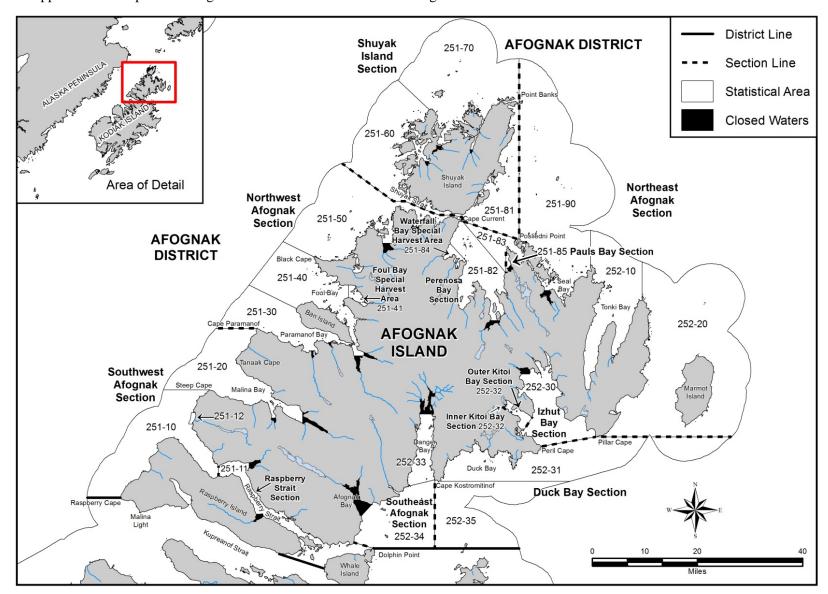
The last landing in the North Afognak/Shuyak Island management units occurred on September 15. In all the units of the North Afognak/Shuyak fishery combined, 36 permit holders made 86 landings and harvested 51 Chinook, 12,361 sockeye, 30,186 coho, 20,731 pink, and 1,918 chum salmon (Appendix J3).

Within the Pauls Bay Section a total of 13 permit holders harvested 877 sockeye, 7,777 coho, 3,237 pink, and 407 chum salmon (Appendix J3). The last day of commercial salmon harvest in the Pauls Bay Section was August 19.

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Fuerst, B. A. 2019. Kodiak Management Area weir descriptions and salmon escapement report, 2018. Alaska Department of Fish and Game, Fisheries Management Report No. 19-14, Anchorage.

Appendix J2.-Map of the Afognak District within the Kodiak Management Area.



Appendix J3.-Daily salmon harvest by species for the North Afognak/Shuyak Island management units, 2018.

Management				Chino	ok	Sock	eye	Co	ho	Pinl	k	Chu	ım
Unit	Date	Permits La	ndings N	umber I	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Northeast Afognak	15-Jul ^a												
Section	23-Jul	4	4	4	20	961	4,892	1,220	9,679	1,719	5,150	541	5,382
	24-Jul ^a												
	17-Aug ^a												
	18-Aug ^a												
Total		6	9	45	80	1,505	7,673	3,575	27,891	10,046	31,596	1,244	10,592
Average weight					1.78		5.10		7.80		3.15		8.51
Northwest Afognak	14-Jun	3	3	0	0	784	2,746	0	0	0	0	0	0
Section	15-Jun ^a												
(excluding Foul Bay SHA)	21-Jun a												
,	6-Jul a												
	7-Jul ^a												
	14-Jul ^a												
	17-Aug a												
	24-Aug a												
	25-Aug ^a												
	31-Aug a												
	2-Sep ^a												
	7-Sep	3	3	0	0	12	34	4,479	39,153	0	0	2	14
	8-Sep a												
	14-Sep ^a												
	15-Sep ^a												
Total		18	25	2	7	3,794	15,003	11,579	99,785	913	3,825	255	1,829
Average weight					3.50		3.95		8.62		4.19		7.17
Foul Bay Special	9-Jun	11	11	1	9		14,891	0		0	0	2	17
Harvest Area	11-Jun	4	4	0	0	406	1,548	0	0	0	0	0	0
	12-Jun ^a 16-Jun ^a												
					00	ontinued-							

Appendix J3.–Page 2 of 3.

Management				Chino	ok	Sock	eye	Col	ho	Pin	k	Chu	m
Unit	Date	Permits La	ndings N	ımber l	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Foul Bay Special	17-Jun ^a												
Harvest Area	27-Jun a												
(cont.)	2-Jul ^a												
Total		12	22	1	9	5,626	22,625	0	0	0	0	2	17
Average weight					9.00		4.02		0.00		0.00		8.50
Pauls Bay	14-Jun	3	3	1	4	602	2,589	0	0	1	1	35	315
Section	21-Jun ^a												
	7-Jul ^a												
	23-Jul ^a												
	24-Jul ^a												
	16-Aug	6	6	0	0	14	63	5,164	52,587	741	2,982	1	9
	17-Aug ^a												
	19-Aug a												
Total		13	16	2	9	877	3,739	7,777	72,589	3,237	13,207	407	2,681
Average weight					4.50		4.26		9.33		4.08		6.59
Perenosa Bay Section	16-Aug	4	4	0	0	17	84	3,785	28,679	6,134	24,345	6	34
(Excluding Waterfall Bay)	17-Aug ^a												
Total		4	5	0	0	17	84	4,460	35,342	6,452	25,439	6	34
Average weight					0.00		4.94		7.92		3.94		5.67
Waterfall Bay Special	9-Jun	3	3	1	5	313	1,184	0	0	0	0	0	0
Harvest Area	12-Jun a												
	14-Jun ^a												
	18-Jun ^a												
Total		4	7	1	5	542	2,160	0	0	8	24	0	0
Average weight					5.00		3.99		0.00		3.00		0.00

Appendix J3.–Page 3 of 3.

Management				Chinook		Sockeye	Coho	Pin	k	Chum	
Unit	Date	Permits Lar	ndings	Number	Pounds	Number Pounds	Number Pounds	Number	Pounds	Number	Pounds
Shuyak Island	17-Aug ^a										
Section	18-Aug ^a										
Total ^a											
Average weight											
Grand Total		36	86	51	110	12,361 51,285	30,186 258,069	20,731	74,422	1,918	15,181
Average weight					2.16	4.15	8.55		3.59		7.91

^a Confidential.

APPENDIX K. MAINLAND DISTRICT FISHERY SUMMARY

Appendix K1.–Narrative account of the Mainland District salmon fishery in the Kodiak Management Area, 2018.

INTRODUCTION

The Mainland District of the Kodiak Management Area (KMA; Appendix K2) is covered under 3 separate regulatory management plans, 2 of which are strictly allocative plans allowing the harvest of sockeye salmon considered to be nonlocal. The *Cape Igvak Salmon Management Plan* (CISMP; 5 AAC 18.360) covers the southernmost sections of the Mainland District from June 5 to July 25 and limits the harvest of sockeye salmon considered by regulation to be Chignik-bound. The *North Shelikof Strait Sockeye Salmon Management Plan* (NSSSSMP; 5 AAC 18.363) covers the northernmost sections of the Mainland District from July 6 to 25 and limits the harvest of sockeye salmon due to concern for interception of Cook Inlet-bound fish. The *Mainland District Salmon Management Plan* (MDSMP), while recognizing these other plans, sets forth the key species and targeted stocks that are managed for in each section throughout the entire fishing season (5 AAC 18.369).

MDSMP stipulates that commercial salmon fisheries in the majority of the Mainland District remain closed until July 6, when the general pink salmon fishery begins for most of the Kodiak Management Area. The exceptions are the Cape Igvak Section (managed based on the strength of the Chignik sockeye salmon run through July 25) and two 33-hour fisheries in June targeting local sockeye salmon runs (Swikshak River sockeye salmon in the Big River Section, and Kaflia Lake sockeye salmon in the Outer Kukak Bay Section; Appendix K2). From July 6 to July 25, weekly fishing periods could not exceed 57 hours and fishing opportunities are based on the abundance of local and mixed stocks of pink and chum salmon, except in the Wide Bay Section, which remains closed. From July 25 to the end of the season, fishing periods are based on the abundance of local pink, chum, and coho salmon.

2018 Mainland District Fisheries

On June 14 and June 21, there were two 33-hour fishing periods in the Big River and Outer Kukak Bay sections to allow harvest of Kaflia and Swikshak systems sockeye salmon. During the pink salmon season through July 25, the entire Mainland District (with the exception of the Wide Bay and Cape Igvak sections which remained closed) was opened for three 57-hour fishing periods between July 6 and July 23 (with some sections managed under the NSSSSMP).

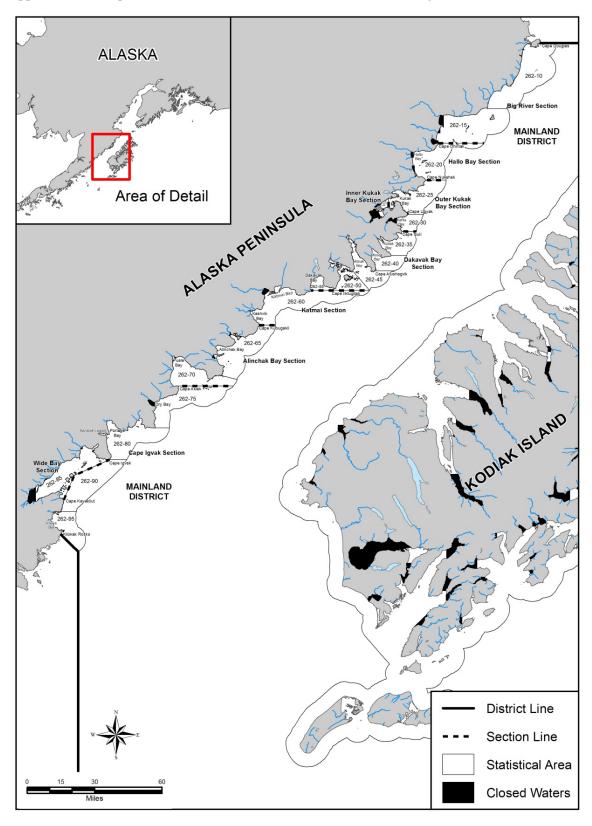
Pink and chum salmon runs were weak throughout the Mainland District in 2018. After the third 57-hour pink salmon opener, which began on July 23, the Mainland District remained closed until coho management in September. The estimated pink salmon escapement of 280,400 fish was slightly above the lower bound of the escapement goal range of 250,000 to 1,000,000 fish (Schaberg et al. 2016).

During 2018, the total commercial harvest by 17 permit holders in the Mainland District included 385 Chinook, 17,540 sockeye, 1,496 coho, 27,326 pink, and 17,816 chum salmon (Appendix K3). This includes all salmon harvested along the Mainland, including those harvested under the direction of CISMP and NSSSSMP.

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Appendix K2.—Map of the Mainland District commercial salmon fishing sections and statistical areas.



Appendix K3.-Daily commercial salmon harvest, by species, for the Mainland District Management Plan units, 2018.

Management				Chin	ook	Sock	eye	Coh	10	Pin	k	Chu	ım
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Big River													
Section													
Total		0	0	0	0	0	0	0	0	0	0	0	0
Average weight					0.00		0.00		0.00		0.00		0.00
Hallo Bay Section													
Total ^a		0	0	0	0	0	0	0	0	0	0	0	0
Average weight					0.00		0.00		0.00		0.00		0.00
Outer Kukak													
Bay Section													
Total		0	0	0	0	0	0	0	0	0	0	0	0
Average weight					0.00		0.00		0.00		0.00		0.00
Inner Kukak													
Bay Section													
Total		0	0	0	0	0	0	0	0	0	0	0	0
Average weight					0.00		0.00		0.00		0.00		0.00
Dakavak Bay	6-Jul ^a												
Section	8-Jul ^a												
	13-Jul	7	7	32	245	2,511	13,919	94	771	2,172	8,071	894	6,869
	14-Jul	3	3	7	27	241	1,004	20	137	251	1,213	528	4,114
	23-Jul	9	9	45	533	5,714	32,113	487	4,459	11,724	40,224	2,182	17,434
	24-Jul	3	3	59	441	1,791	10,292	238	2,023	4,141	14,014	832	6,594
	25-Jul ^a												
Total		16	27	307	2,081	14,294	77,935	1,021	8,978	20,023	69,427	5,842	
Average weight					6.78	aantinuad	5.45		8.79		3.47		7.88

Appendix K3.–Page 2 of 2.

Management				Chin	ook	Sock	eye	Col	10	Pin	k	Chu	ım
Unit	Date	Permits	Landings	Number	Pounds								
Katmai	6-Jul ^a												
Section	25-Jul	3	3	15	160	1,053	6,292	287	2,329	2,922	10,311	407	3,636
Total		3	5	78	641	1,710	10,230	302	2,480	3,163	11,036	931	7,562
Average weight					8.21		5.98		8.21		3.49		8.12
Alinchak	6-Jul ^a												
Bay Section	13-Jul ^a												
	23-Jul ^a												
	24-Jul ^a												
	25-Jul ^a												
Total ^a													
Average weight													
Cape Igvak													_
Section													
Total		0	0	0	0	0	0	0	0	0	0	0	0
Average weight					0.00		0.00		0.00		0.00		0.00
Wide Bay													
Section													
Total		0	0	0	0	0	0	0	0	0	0	0	0
Average weight					0.00		0.00		0.00		0.00		0.00
Mainland District													
Total		17	37	385	2,721	17,540	96,131	1,496	12,518	27,326	97,822	17,816	148,724
Average weight					7.07		5.48		8.37		3.58		8.35

^a Confidential.

APPENDIX L. AREAWIDE HARVEST TABLES

Appendix L1.-Commercial salmon harvest, by management unit and statistical week, all gear combined, in the Kodiak Management Area, 2018.

Section	Statistica	ıl Week_	(Chinook		So	ockeye			Coho			Pink			Chum	
(Stat Area)	Week	Ending	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.
S.W. Afognak	24	16-Jun	0	0	0.0	329	1,552	4.7	0	0	0.0	5	15	3.0	54	400	7.4
& Raspberry Straits	25	23-Jun	0	0	0.0	85	425	5.0	0	0	0.0	4	14	3.5	8	60	7.5
(combined)	26	30-Jun	6	48	7.9	198	532	2.7	0	0	0.0	14	57	4.1	150	1,444	9.6
(251-10, 11, 12, 20)	27	7-Jul	2	13	6.5	1,382	6,406	4.6	17	122	7.2	509	1,777	3.5	785	6,284	8.0
	28	14-Jul	0	0	0.0	379	1,902	5.0	323	1,959	6.1	901	3,585	4.0	363	2,593	7.1
	29	21-Jul	9	45	5.0	519	2,748	5.3	35	304	8.7	1,383	4,338	3.1	301	2,267	7.5
	30	28-Jul	1	25	25.0	38	175	4.6	48	291	6.1	388	1,555	4.0	83	418	5.0
	31	4-Aug	24	157	6.5	3,497	16,997	4.9	1,503	10,369	6.9	16,494	66,525	4.0	553	4,131	7.5
	32	11-Aug	43	350	8.1	3,119	15,368	4.9	1,858	12,514	6.7	21,621	83,058	3.8	363	2,551	7.0
	33	18-Aug	5	29	5.8	1,363	5,717	4.2	2,030	12,565	6.2	8,465	30,582	3.6	102	737	7.2
	34	25-Aug	13	126	9.7	2,661	13,006	4.9	4,994	42,574	8.5	19,148	62,609	3.3	289	2,352	8.1
	35	1-Sep	1	8	8.0	209	1,086	5.2	393	3,558	9.1	404	1,366	3.4	35	233	6.7
	36	8-Sep	0	0	0.0	0	0	0.0	2,522	24,865	9.9	4	12	3.0	7	50	7.1
	37	15-Sep	0	0	0.0	8	36	4.5	2,543	16,950	6.7	0	0	0.0	0	0	0.0
	38	22-Sep	0	0	0.0	1	5	5.0	483	3,983	8.2	0	0	0.0	0	0	0.0
	Total		104	801	7.7	13,788	65,955	4.8	16,749	130,052	7.8	69,340	255,492	3.7	3,093	23,519	7.6
N.W. Afognak	23	9-Jun	1	9	9.0	3,752	14,891	4.0	0	0	0.0	0	0	0.0	2	17	8.5
(251-30, 40, 41, 50)	24	16-Jun	0	0	0.0	1,652	6,241	3.8	0	0	0.0	0	0	0.0	7	74	10.6
	25	23-Jun	0	0	0.0	1,431	5,673	4.0	0	0	0.0	3	7	2.3	6	32	5.3
	26	30-Jun	0	0	0.0	364	1,967	5.4	0	0	0.0	0	0	0.0	0	0	0.0
	27	7-Jul	0	0	0.0	1,498	5,099	3.4	0	0	0.0	44	168	3.8	32	262	8.2
	28	14-Jul	0	0	0.0	375	1,876	5.0	76	451	5.9	412	1,648	4.0	199	1,389	7.0
	33	18-Aug	0	0	0.0	1	3	3.0	77	476	6.2	324	1,528	4.7	1	8	8.0
	34	25-Aug	0	0	0.0	10	43	4.3	1,494	14,542	9.7	91	315	3.5	1	8	8.0
	35	1-Sep	0	0	0.0	122	609	5.0	737	7,466	10.1	39	159	4.1	2	11	5.5
	36	8-Sep	0	0	0.0	13	38	2.9	6,680	57,216	8.6	0	0	0.0	2	14	7.0
	37	15-Sep	2	7	3.5	202	1,188	5.9	2,515	19,634	7.8	0	0	0.0	5	31	6.2
	Total		3	16	5.3	9,420	37,628	4.0	11,579	99,785	8.6	913	3,825	4.2	257	1,846	7.2

Appendix L1.—Page 2 of 12.

Section	Statistical	Week	C	hinool	k	S	ockeye			Coho			Pink			Chum	
(Stat Area)	Week	Ending	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.
Shuyak (251-60, 70, 81)	33	18-Aug	0	0	0.0	0	0	0.0	2,795	22,462	8.0	75	331	4.4	4	28	7.0
	Total		0	0	0.0	0	0	0.0	2,795	22,462	8.0	75	331	4.4	4	28	7.0
Perenosa Bay	23	9-Jun	1	5	5.0	313	1,184	3.8	0	0	0.0	0	0	0.0	0	0	0.0
(251-82, 83, 84, 85)	24	16-Jun	1	4	4.0	675	2,865	4.2	0	0	0.0	1	1	1.0	35	315	9.0
	25	23-Jun	0	0	0.0	299	1,343	4.5	0	0	0.0	8	24	3.0	0	0	0.0
	27	7-Jul	1	5	5.0	20	68	3.4	0	0	0.0	5	23	4.6	32	344	10.8
	30	28-Jul	0	0	0.0	95	359	3.8	1,046	5,584	5.3	1,814	7,985	4.4	338	2,005	5.9
	33	18-Aug	0	0	0.0	31	147	4.7	10,469	95,851	9.2	7,551	29,683	3.9	7	43	6.1
	34	25-Aug	0	0	0.0	3	17	5.7	722	6,496	9.0	318	954	3.0	1	8	8.0
	Total		3	14	4.7	1,436	5,983	4.2	12,237	107,931	8.8	9,697	38,670	4.0	413	2,715	6.6
N.E. Afognak	29	21-Jul	40	57	1.4	326	1,579	4.8	1,416	11,169	7.9	966	3,289	3.4	498	3,825	7.7
(251-90, 252-10 & 20)	30	28-Jul	5	23	4.6	1,001	5,096	5.1	1,892	14,048	7.4	2,439	8,177	3.4	721	6,569	9.1
(=== / =, === == /	33	18-Aug	0	0	0.0	178	998	5.6	267	2,674	10.0	6,641	20,130	3.0	25	198	7.9
	Total		45	80	1.8	1,505	7,673	5.1	3,575	27,891	7.8	10,046	31,596	3.1	1,244	10,592	8.5
Izhut (252-30)	23	9-Jun	0	0	0.0	23	91	4.0	0	0	0.0	6	20	3	578	4,952	8.6
	24	16-Jun	5	42	8.4	118	472	4.0	0	0	0.0	44	121	3	1,810	15,035	8.3
	25	23-Jun	7	80	11.4	1,051	4,907	4.7	34	241	7.1	387	1,159	3		174,867	8.1
	26	30-Jun	8	44	5.5	406	1,474	3.6	15	77	5.1	183	586	3	51,825	397,536	7.7
	27	7-Jul	4	18	4.5	23	92	4.0	4	25	6.3	1	3	3	2,426	19,394	8.0
	29	21-Jul	5	55	11.0	1,488	6,478	4.4	1,239	8,154	6.6	10,226	40,918	4	6,030	42,788	7.1
	30	28-Jul	5	93	18.6	1,126	4,963	4.4	1,776	11,567	6.5	50,210	168,087	3	2,892	21,272	7.4
	31	4-Aug	22	182	8.3	1,121	5,083	4.5	10,177	76,310	7.5	743,116	2,791,151	4	1,700	10,443	6.1
	32	11-Aug	3	22	7.3	1,496	6,989	4.7	10,246	76,994	7.5	722,995	2,813,620	4	677	4,298	6.3
	33	18-Aug	0	0	0.0	1,022	4,297	4.2	20,400	161,552	7.9	224,868	883,519	4	160	1,024	6.4
	34	25-Aug	0	0	0.0	363	1,965	5.4	11,461	94,857	8.3	66,537	262,083	4	76	561	7.4
	35	1-Sep	0	0	0.0	271	1,218	4.5	10,585	87,872	8.3	29,231	109,149	4	47	330	7.0
	36	8-Sep	0	0	0.0	35	164	4.7	1,766	15,498	8.8	2,665	10,211	4	5	32	6.4
	Total		59	536	9.1	8,543	38,192	4.5	67,703	533,147	7.9	1,850,469	7,080,627	3.8	89,718	692,532	7.7

Appendix L1.–Page 3 of 12.

Section	Statistica	ıl Week	(Chinook		So	ockeye			Coho			Pink			Chum	
(Stat Area)	Week	Ending	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.
Kitoi Bay (252-32)	23	9-Jun	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	240	2,263	9.4
	24	16-Jun	0	0	0.0	27	122	4.5	0	0	0.0	2	4	2.0	1,664	13,541	8.1
	25	23-Jun	23	149	6.5	671	3,460	5.2	0	0	0.0	132	459	3.5	19,418	161,765	8.3
	26	30-Jun	0	0	0.0	21	50	2.4	0	0	0.0	3	9	2.9	3,067	25,388	8.3
	29	21-Jul	2	8	4.0	232	1,060	4.6	280	2,677	9.6	1,930	5,944	3.1	10,676	79,153	7.4
	30	28-Jul	0	0	0.0	255	1,110	4.4	430	3,225	7.5	21,876	79,811	3.6	7,115	59,010	8.3
	31	4-Aug	0	0	0.0	230	1,015	4.4	1,033	7,226	7.0	72,951	261,662	3.6	480	3,060	6.4
	32	11-Aug	28	155	5.5	1,488	7,399	5.0	1,029	7,880	7.7	386,296	1,538,027	4.0	106	750	7.1
	33	18-Aug	4	26	6.5	212	1,015	4.8	7,681	60,790	7.9	158,549	645,256	4.1	61	389	6.4
	34	25-Aug	0	0	0.0	86	469	5.5	8,405	70,144	8.3	29,474	113,881	3.9	8	55	6.9
	35	1-Sep	0	0	0.0	42	190	4.5	4,935	43,173	8.7	9,508	31,929	3.4	5	35	7.0
	36	8-Sep	0	0	0.0	2	8	4.0	1,130	9,264	8.2	2,345	7,609	3.2	1	8	8.0
	37	15-Sep	0	0	0.0	1	5	5.0	151	1,395	9.2	113	465	4.1	1	7	7.0
	Total		57	338	5.9	3,267	15,903	4.9	25,074	205,773	8.2	683,179	2,685,054	3.9	42,842	345,423	8.1
Duck Bay (252-31 & 35)) 24	16-Jun	3	15	5.0	3,656	17,073	4.7	0	0	0.0	396	1,093	2.8	3,367	27,249	8.1
Duck Day (232-31 & 33)	25	23-Jun	12	37	3.1	1,831	8,633	4.7	1		6.0	332	1,010	3.0	4,616	40,718	8.8
	27	7-Jul	22	87	4.0	382	1,768	4.6	482	3,361		550	1,753	3.2	12,648	107,939	8.5
	28	14-Jul	13	94	7.2	1,692	8,835	5.2	980	6,983		3,585	11,709	3.3	8,454	64,551	7.6
	29	21-Jul	1	2	2.0	381	1,857	4.9	163	1,132		984	3,769	3.8	1,253	9,308	7.4
	30	28-Jul	14	193	13.8	1,660	8,138	4.9	2,174	18,980		20,464	68,328	3.3	1,555	14,502	9.3
	31	4-Aug	0	0	0.0	840	4,011	4.8	4,259	30,697		140,133	573,309	4.1	396	2,732	6.9
	32	11-Aug	17	163	9.6	1,043	4,916	4.7	8,703	63,489		274,547	1,150,771	4.2	845	5,814	
	33	18-Aug	1	8	8.0	1,596	7,519	4.7	9,745	78,988		137,057	509,622	3.7	271	1,983	7.3
	34	25-Aug	4	19	4.7	392	1,983	5.1	7,032	58,909		60,046	231,965	3.9	73	494	
	35	1-Sep	0	0	0.0	55	256	4.6	2,608	24,316		11,727	49,709	4.2	3	14	4.7
	36	8-Sep	0	0	0.0	43	180	4.2	216	2,014		651	2,695	4.1	0		
	Total	- ·- · F	87	618	7.1	13,571	65,169	4.8	36,363	288,873	7.9	650,472	2,605,734	4.0	33,481	275,303	8.2

Appendix L1.–Page 4 of 12.

Section	Statistica	l Week_	C	hinook		S	ockeye			Coho			Pink			Chum	
(Stat Area)	Week	Ending	No.	lbs.	avg.	No.	lbs. a	wg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.
S.E. Afognak (252-33 &	34	25-Aug	0	0	0.0	8	44	5.5	3,925	31,029	7.9	315	1,231	3.9	93	645	6.9
34)	35	1-Sep	0	0	0.0	3	14	4.7	571	4,930	8.6	394	1,299	3.3	0	0	0.0
	36	8-Sep	0	0	0.0	6	29	4.8	860	7,087	8.2	37	120	3.2	15	116	7.7
	Total		0	0	0.0	17	87	5.1	5,356	43,046	8.0	746	2,650	3.6	108	761	7.0
Central, Terror Bay,	23	9-Jun	29	241	8.3	9,269	43,704	4.7	1	4	4.0	14		2.9	617	4,417	7.2
Inner Uganik, Spiridon,	24	16-Jun	19	150	7.9	14,353	71,129	5.0	13	126	9.7	44	161	3.7	1,126	9,309	8.3
Zachar, & Uyak combined	1 25	23-Jun	12	88	7.3	4,395	21,758	5.0	0	0	0.0	22	85	3.9	237	2,003	8.5
(253-11, 12, 13, 14, 31	26	30-Jun	27	248	9.2	9,546	48,096	5.0	5	30	6.0	255	974	3.8	3,686	31,629	8.6
32, 33, 34, 35, 254-10, 20	, 27	7-Jul	252	1,267	5.0	67,067	342,174	5.1	420	2,963	7.1	11,390	40,845	3.6	30,282	262,326	8.7
21, 30, 31, 40, 41, 50)	28	14-Jul	107	777	7.3	45,922	223,809	4.9	1,947	13,183	6.8	32,746	117,451	3.6	21,859	208,127	9.5
	29	21-Jul	20	192	9.6	25,700	122,162	4.8	710	4,897	6.9	15,015	53,763	3.6	12,637	110,089	8.7
	30	28-Jul	33	343	10.4	33,723	160,542	4.8	2,194	16,655	7.6	58,148	224,039	3.9	43,856	381,448	8.7
	31	4-Aug	163	1,164	7.1	38,531	199,476	5.2	3,628	25,122	6.9	207,539	796,067	3.8	4,266	35,670	8.4
	32	11-Aug	226	1,723	7.6	90,043	466,665	5.2	11,658	91,329	7.8	608,756	2,389,878	3.9	11,830	97,764	8.3
	33	18-Aug	27	285	10.6	31,070	164,334	5.3	8,598	65,812	7.7	50,339	187,602	3.7	2,500	20,206	8.1
	34	25-Aug	72	548	7.6	154,891	820,000	5.3	25,739	210,333	8.2	114,540	432,383	3.8	5,236	40,503	7.7
	35	1-Sep	79	600	7.6	88,267	467,971	5.3	19,286	159,646	8.3	18,093	65,251	3.6	1,669	12,396	7.4
	36	8-Sep	53	423	8.0	45,890	239,458	5.2	11,939	103,193	8.6	2,357	8,546	3.6	537	3,843	7.2
	37	15-Sep	3	32	10.7	10,441	57,129	5.5	2,601	24,495	9.4	64	274	4.3	51	355	7.0
	38	22-Sep	0	0	0.0	15,423	79,344	5.1	488	4,927	10.1	1	4	4.0	10	72	7.2
	39	29-Sep	0	0	0.0	1,726	8,641	5.0	205	2,462	12.0	0	0	0.0	5	36	7.2
	Total		1,122	8,080	7.2	686,257	3,536,391	5.2	89,432	725,176	8.1	1,119,323	4,317,363	3.9	140,404	1,220,190	8.7

Appendix L1.–Page 5 of 12.

Section	Statistica	l Week	C	Chinook		So	ockeye			Coho]	Pink			Chum	
(Stat Area)	Week	Ending	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs. a	avg.	No.	lbs.	avg.	No.	lbs.	avg.
North Cape, Anton	23	9-Jun	0	0	0.0	5	26	5.2	0	0	0.0	0	0	0.0	0	0	0.0
Larsen, Sharatin,	24	16-Jun	10	76	7.6	3,227	15,296	4.7	0	0	0.0	356	1,231	3.5	2,803	18,861	6.7
& Kizhuyak combined	25	23-Jun	0	0	0.0	2,175	10,627	4.9	2	8	4.0	226	833	3.7	1,516	12,658	8.3
(259-30, 31, 32, 33, 34, 35	, 26	30-Jun	3	45	15.0	2,377	11,235	4.7	23	131	5.7	329	1,065	3.2	2,252	18,403	8.2
36, 37, 38, 39)	27	7-Jul	22	208	9.5	3,168	13,605	4.3	373	2,453	6.6	274	1,036	3.8	1,437	13,274	9.2
	28	14-Jul	10	104	10.4	3,141	16,610	5.3	1,543	10,142	6.6	6,857	25,406	3.7	4,026	30,556	7.6
	29	21-Jul	0	0	0.0	1,265	6,928	5.5	1,083	7,548	7.0	2,811	10,181	3.6	895	7,268	8.1
	30	28-Jul	13	108	8.3	2,652	13,403	5.1	2,456	16,499	6.7	22,485	83,917	3.7	2,771	21,919	7.9
	31	4-Aug	0	0	0.0	843	3,900	4.6	1,981	15,683	7.9	13,880	60,066	4.3	622	5,180	8.3
	32	11-Aug	11	99	9.0	2,300	12,576	5.5	6,942	47,348	6.8	89,075	330,343	3.7	2,352	17,503	7.4
	33	18-Aug	1	12	12.0	346	1,853	5.4	1,105	7,430	6.7	5,767	20,349	3.5	921	8,041	8.7
	34	25-Aug	3	17	5.6	256	1,526	6.0	1,214	9,900	8.2	3,037	10,621	3.5	668	5,615	8.4
	35	1-Sep	0	0	0.0	25	120	4.8	226	1,902	8.4	534	2,118	4.0	18	148	8.2
	36	8-Sep	0	0	0.0	1	7	7.0	471	4,737	10.1	37	149	4.0	3	15	5.0
	37	15-Sep	0	0	0.0	210	1,048	5.0	310	2,779	9.0	0	0	0.0	1	5	4.6
	39	29-Sep	0	0	0.0	0	0	0.0	352	3,173	9.0	0	0	0.0	0	0	0.0
	Total		73	669	9.2	21,991	108,759	4.9	18,081	129,732	7.2	145,668	547,316	3.8	20,285	159,445	7.9
Inner Karluk (255-10)	32	11-Aug	1	6	6.0	43 570	214,821	49	327	2,638	8 1	115,975	449,610	3.9	86	708	8.2
iiiiei Kariuk (233-10)	36	8-Sep	1	7	7.0	,	173,383		5,896	,	8.7	641	2,250	3.5	57		7.6
	37	15-Sep	0	0	0.0	12,561	62,565		1,201	,	9.6	26	89	3.4	31	206	
	38	22-Sep	0	0	0.0	14,147	73,736		935	9,194		15	49	3.3	25	173	6.9
	39	22-Sep 29-Sep	0	0	0.0	321	1,798		22	224		0	0	0.0	0		0.9
		27-3ep															
	Total		2	13	6.5	104,425	526,302		8,381	75,144	9.0	116,657	451,998	3.9	199	1,521	7.6

Appendix L1.–Page 6 of 12.

Section	Statistica	ıl Week	(Chinook			Sockeye			Coho		1	Pink			Chum	
(Stat Area)	Week	Ending	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.
Outer Karluk (255-20)) 24	16-Jun	11	89	8.1	1,980	8,551	4.3	0	0	0.0	9	31	3.4	323	2,860	8.9
	25	23-Jun	33	260	7.9	4,209	18,562	4.4	0	0	0.0	6	19	3.2	336	2,618	7.8
	26	30-Jun	0	0	0.0	1,350	6,080	4.5	0	0	0.0	34	116	3.4	374	3,303	8.8
	27	7-Jul	13	82	6.3	1,910	8,292	4.3	6	44	7.3	164	574	3.5	306	2,448	8.0
	28	14-Jul	26	161	6.2	3,429	17,428	5.1	64	428	6.7	3,858	13,746	3.6	733	6,069	8.3
	29	21-Jul	3	24	7.8	1,000	4,916	4.9	273	1,909	7.0	1,920	8,069	4.2	371	3,192	8.6
	31	4-Aug	85	419	4.9	19,857	101,482	5.1	1,273	10,073	7.9	73,062	296,985	4.1	903	6,869	7.6
	32	11-Aug	49	414	8.4	28,390	144,473	5.1	1,746	14,829	8.5	106,532	379,922	3.6	629	5,061	8.0
	33	18-Aug	0	0	0.0	25,303	119,029	4.7	3,248	29,400	9.1	21,144	84,972	4.0	198	1,475	7.4
	34	25-Aug	18	116	6.4	120,622	634,729	5.3	9,305	83,983	9.0	30,626	120,184	3.9	400	3,066	7.7
	35	1-Sep	14	155	11.1	54,290	287,697	5.3	7,217	61,565	8.5	6,523	22,887	3.5	211	1,429	6.8
	36	8-Sep	0	0	0.0	52,961	264,531	5.0	7,227	63,554	8.8	772	2,978	3.9	126	849	6.7
	37	15-Sep	1	12	12.0	49,929	269,026	5.4	4,094	37,058	9.1	150	528	3.5	65	480	7.4
	38	22-Sep	0	0	0.0	29,605	150,020	5.1	1,613	14,016	8.7	7	28	4.0	30	220	7.3
	39	29-Sep	3	18	6.0	4,091	21,659	5.3	314	2,381	7.6	0	0	0.0	12	76	6.3
	Total		256	1,749	6.8	398,926	2,056,475	5.2	36,380	319,238	8.8	244,807	931,038	3.8	5,017	40,015	8.0
Halibut Bay	26	30-Jun	23	211	9.2	2,670	11,271	4.2	0	0	0.0	109	388	3.6	428	3,280	7.7
(256-25 & 30)	27	7-Jul	3	23	7.7	4,189	23,661	5.6	67	454	6.8	673	2,312	3.4	507	5,235	10.3
	28	14-Jul	15	54	3.6	2,643	12,502	4.7	25	202	8.1	999	3,174	3.2	270	2,427	9.0
	32	11-Aug	21	203	9.7	6,336	31,445	5.0	525	4,227	8.1	31,607	125,637	4.0	155	1,059	6.8
	33	18-Aug	7	69	9.9	18,379	88,625	4.8	3,854	31,526	8.2	30,967	119,970	3.9	183	1,322	7.2
	34	25-Aug	2	12	6.0	13,966	72,612	5.2	2,443	21,659	8.9	5,296	20,463	3.9	71	507	7.1
	35	1-Sep	15	110	7.3	9,066	42,337	4.7	1,513	12,873	8.5	808	2,975	3.7	67	447	6.7
	36	8-Sep	32	356	11.1	22,036	108,222	4.9	4,313	34,037	7.9	868	2,984	3.4	168	1,239	7.4
	37	15-Sep	0	0	0.0	6,854	33,067	4.8	1,106	9,655	8.7	78	245	3.1	42	275	6.5
	38	22-Sep	15	132	8.8	608	3,040	5.0	92	735	8.0	0	0	0.0	8	64	8.0
	Total		133	1,170	8.8	86,747	426,781	4.9	13,938	115,367	8.3	71,405	278,149	3.9	1,899	15,854	8.3

Appendix L1.–Page 7 of 12.

Section	Statistica	ıl Week		Chinook		So	ockeye			Coho			Pink			Chum	
(Stat Area)	Week	Ending	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.
Inner & Outer	26	30-Jun	21	138	6.6	33,695	154,337	4.6	5	19	3.8	820	2,925	3.6	6,178	49,099	
Ayakulik (256-10, 15, 20)) 27	7-Jul	89	624	7.0	13,941	59,129	4.2	13	92	7.0	3,067	10,615	3.5	2,239	20,291	9.1
	28	14-Jul	78	429	5.5	40,833	200,499	4.9	251	1,732	6.9	18,718	64,954	3.5	3,292	30,653	9.3
	29	21-Jul	19	108	5.7	5,576	28,520	5.1	64	464	7.3	5,956	19,165	3.2	481	3,829	8.0
	34	25-Aug	0	0	0.0	19,240	104,407	5.4	5,281	47,553	9.0	12,563	46,398	3.7	97	600	6.2
	36	8-Sep	0	0	0.0	8	37	4.6	4	32	8.0	3	19	6.3	0	0	0.0
	37	15-Sep	0	0	0.0	51	254	5.0	10	84	8.4	0	0	0.0	0	0	0.0
	Total		207	1,299	6.3	113,344	547,183	4.8	5,628	49,975	8.9	41,127	144,076	3.5	12,287	104,473	8.5
Sturgeon (256-40)	32	11-Aug	0	0	0.0	5,805	29,625	5.1	232	2,226	9.6	44,137	145,340	3.3	189	1,305	6.9
	33	18-Aug	12	102	8.5	13,996	71,211		2,204	18,447	8.4	18,059	67,115	3.7	53	402	
	34	25-Aug	0	0	0.0	5,584		4.9	267	2,236	8.4	3,194	12,162	3.8	22	170	
	35	1-Sep	2	13	6.5	418	1,921	4.6	87	644	7.4	35	141	4.0	3	22	7.4
	36	8-Sep	0	0	0.0	7,000	36,723	5.2	1,157	10,180	8.8	175	662	3.8	22	164	7.5
	37	15-Sep	0	0	0.0	1,504	8,122	5.4	376	3,109	8.3	24	76	3.2	1	10	10.0
	39	29-Sep	0	0	0.0	2,462	12,012	4.9	33	296	9.0	0	0	0.0	0	0	0.0
	Total		14	115	8.2	36,769	186,753	5.1	4,356	37,138	8.5	65,624	225,496	3.4	290	2,073	7.1
Cape Alitak	26	30-Jun	10	69	6.9	18,659	75,853	4.1	5	27	5.4	287	946	3.3	1,215	11,027	9.1
(257-10 & 20)	27	7-Jul	18	148	8.2	9,142	47,384	5.2	16	128	8.0	516	1,820	3.5	1,697	12,771	7.5
	28	14-Jul	35	524	15.0	18,026	72,521	4.0	190	1,174	6.2	6,895	23,730	3.4	1,961	13,747	7.0
	29	21-Jul	39	523	13.4	11,250	55,609	4.9	154	1,195	7.8	14,758	57,237	3.9	7,541	61,263	8.1
	30	28-Jul	8	133	16.6	4,325	21,194	4.9	55	432	7.8	13,186	50,576	3.8	344	2,763	8.0
	31	4-Aug	67	1,005	15.0	2,291	11,464	5.0	409	3,280	8.0	19,246	76,967	4.0	134	1,068	8.0
	32	11-Aug	23	318	13.8	5,445	27,224	5.0	753	7,261	9.6	23,641	96,337	4.1	325	2,720	8.4
	33	18-Aug	1	15	15.0	3,894	22,401	5.8	1,361	13,137	9.7	17,009	62,877	3.7	232	1,932	8.3
	34	25-Aug	1	13	13.0	13,511	67,199	5.0	4,866	37,999	7.8	19,461	74,680	3.8	730	5,498	7.5
	35	1-Sep	9	113	12.6	5,373	27,279	5.1	1,964	15,045	7.7	1,475	5,492	3.7	209	1,512	7.2
	36	8-Sep	0	0	0.0	552	2,555	4.6	439	4,224	9.6	50	169	3.4	564	5,468	9.7
	37	15-Sep	0	0	0.0	1,895	9,464	5.0	330	3,184	9.6	17	51	3.0	40	326	8.2
	38	22-Sep	8	101	12.6	3,400	17,139	5.0	534	4,903	9.2	10	29	2.9	92	679	7.4
	Total		219	2,962	13.5	97,763	457,286	4.7	11,076	91,989	8.3	116,551	450,910	3.9	15,084	120,774	8.0

Appendix L1.–Page 8 of 12.

Section	Statistica	l Week	(Chinook		So	ockeye			Coho			Pink		(Chum	
(Stat Area)	Week	Ending	No.	lbs.	avg.	No.	lbs. a	vg.	No.	lbs.	avg.	No.	lbs. a	vg.	No.	lbs.	avg.
Moser/Olga Bay &	26	30-Jun	1	20	20.0	16,435	75,366	4.6	4	19	4.8	40	112	2.8	332	2,862	8.6
Dog Salmon Flats	27	7-Jul	0	0	0.0	9,325	44,715	4.8	3	15	5.0	151	490	3.2	314	2,379	7.6
(257-30, 31, 40, 41, 42, 43)	28	14-Jul	0	0	0.0	6,551	32,378	4.9	34	210	6.2	617	2,379	3.9	360	2,761	7.7
	29	21-Jul	0	0	0.0	8,930	43,761	4.9	82	638	7.8	2,826	11,900	4.2	432	3,465	8.0
	30	28-Jul	0	0	0.0	3,741	18,792	5.0	116	852	7.3	3,228	12,864	4.0	236	1,780	7.5
	31	4-Aug	0	0	0.0	5,113	27,639	5.4	56	473	8.4	8,464	37,747	4.5	98	874	8.9
	32	11-Aug	0	0	0.0	28,542	155,099	5.4	967	7,571	7.8	53,477	248,507	4.6	742	6,403	8.6
	33	18-Aug	0	0	0.0	35,150	191,900	5.5	2,238	18,381	8.2	23,590	107,711	4.6	838	7,195	8.6
	34	25-Aug	0	0	0.0	19,137	104,047	5.4	1,656	13,762	8.3	6,027	27,000	4.5	455	3,600	7.9
	35	1-Sep	0	0	0.0	24,764	132,520	5.4	2,102	17,617	8.4	2,703	11,878	4.4	458	3,573	7.8
	36	8-Sep	0	0	0.0	10,832	58,563	5.4	1,257	10,796	8.6	726	2,960	4.1	269	2,039	7.6
	37	15-Sep	0	0	0.0	3,030	16,672	5.5	165	1,436	8.7	13	62	4.8	41	279	6.8
	Total		1	20	20.0	171,550	901,452	5.3	8,680	71,770	8.3	101,862	463,610	4.6	4,575	37,210	8.1
Humpy/Deadman	27	7-Jul	1	4	4.0	406	1,998	4.9	93	589	6.3	142	573	4.0	1,392	9,499	6.8
(257-50, 60, 70)	29	21-Jul	0	0	0.0	242	920	3.8	0	0	0.0	245	1,158	4.7	138	1,090	7.9
(, , ,	30	28-Jul	0	0	0.0	335	2,003	6.0	37	184	5.0	44,942	162,686	3.6	4,032	26,791	6.6
	31	4-Aug	0	0	0.0	179	889	5.0	10	93	9.3	48,362	183,740	3.8	242	2,001	8.3
	32	11-Aug	5	53	10.6	3,473	16,780	4.8	412	3,759	9.1	134,506	512,136	3.8	2,731	19,693	7.2
	33	18-Aug	0	0	0.0	3,283	15,379	4.7	929	8,102	8.7	328,291	1,165,703	3.6	1,065	7,722	7.3
	34	25-Aug	0	0	0.0	290	1,354	4.7	135	1,282	9.5	5,585	22,189	4.0	43	252	5.9
	36	8-Sep	0	0	0.0	7	39	5.6	31	249	8.0	0	0	0.0	1	8	8.0
	Total		6	57	9.5	8,215	39,362	4.8	1,647	14,256	8.7	562,073	2,048,184	3.6	9,644	67,056	7.0

Appendix L1.–Page 9 of 12.

Section	Statistical	l Week_		Chinook		So	ockeye			Coho			Pink			Chum	
(Stat Area)	Week	Ending	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.
Seven Rivers	24	16-Jun	0	0	0.0	156	748	4.8	0	0	0.0	44	133	3.0	794	6,745	8.5
(258-70, 80, 85, 90)	25	23-Jun	27	164	6.1	3,359	15,098	4.5	0	0	0.0	1,550	5,238	3.4	6,177	50,022	8.1
	27	7-Jul	1	4	4.0	604	3,019	5.0	196	1,373	7.0	418	1,462	3.5	1,266	11,400	9.0
	28	14-Jul	1	7	7.0	890	5,289	5.9	217	1,651	7.6	1,216	4,533	3.7	1,635	14,460	8.8
	30	28-Jul	70	291	4.2	1,035	5,654	5.5	4,371	27,961	6.4	10,844	42,186	3.9	1,091	6,552	6.0
	Total		99	466	4.7	6,044	29,808	4.9	4,784	30,985	6.5	14,072	53,552	3.8	10,963	89,179	8.1
Two-Headed	24	16-Jun	0	0	0.0	10	57	5.7	0	0	0.0	0	0	0.0	74	594	8.0
(258-54, 55, 60)	27	7-Jul	25	147	5.9	667	2,715	4.1	20	145	7.3	253	842	3.3	620	4,479	7.2
(, , ,	28	14-Jul	6	44	7.3	1,375	5,902	4.3	123	844	6.9	1,007	3,501	3.5	1,051	9,061	8.6
	30	28-Jul	1	12	12.0	1,370	7,346	5.4	675	4,500	6.7	9,525	35,220	3.7	869	5,873	6.8
	Total		32	203	6.3	3,422	16,020	4.7	818	5,489	6.7	10,785	39,563	3.7	2,614	20,007	7.7
Sitkalidak	24	16-Jun	37	401	10.8	1,383	6,809	4.9	0	0	0.0	397	1,351	3.4	5,686	44,560	7.8
(258-10, 20, 30, 40, 51		23-Jun	25	107	4.3	689	2,879	4.2	2	9	4.5	87	320	3.7	15,638	81,185	5.2
52, 53)	27	7-Jul	219	1,187	5.4	3,972	18,453	4.6	2,411	15,510		1,566	5,672	3.6	9,909	70,466	7.1
,,	28	14-Jul	198	948	4.8	3,554	16,562	4.7	5,678	30,997	5.5	2,759	9,808	3.6	7,211	53,887	7.5
	29	21-Jul	220	753	3.4	1,733	7,642	4.4	5,299	36,968	7.0	3,460	10,920	3.2	4,770	37,713	7.9
	30	28-Jul	207	712	3.4	3,457	16,652	4.8	9,357	63,002	6.7	26,259	103,822	4.0	6,716	49,372	7.4
	34	25-Aug	0	0	0.0	25	115	4.6	19	280	14.7	50	205	4.1	0	0	0.0
	36	8-Sep	0	0	0.0	3	15	5.0	430	4,715	11.0	9	32	3.6	442	3,173	7.2
	37	15-Sep	0	0	0.0	705	3,285	4.7	91	804	8.8	0	0	0.0	0	0	0.0
	38	22-Sep	0	0	0.0	0	0	0.0	77	770	10.0	0	0	0.0	3	25	8.2
	Total		906	4,108	4.5	15,521	72,412	4.7	23,364	153,054	6.6	34,587	132,129	3.8	50,375	340,381	6.8

Appendix L1.–Page 10 of 12.

Section	Statistica	l Week_	(Chinook			Sockeye			Coho			Pink		(Chum	
(Stat Area)	Week	Ending	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs. a	ıvg.	No.	lbs.	avg.	No.	lbs.	avg.
Inner & Outer Ugak	25	23-Jun	28	141	5.0	40	170	4.3	0	0	0.0	3	7	2.3	50	484	9.7
(259-40, 41, 42, 43, 44	. 27	7-Jul	48	90	1.9	208	1,041	5.0	111	611	5.5	70	231	3.3	613	4,298	7.0
45, 46)	36	8-Sep	0	0	0.0	2	9	4.5	3,022	31,346 1	10.4	0	0	0.0	324	1,978	6.1
	37	15-Sep	0	0	0.0	0	0	0.0	7,493	70,440	9.4	0	0	0.0	6	41	6.8
	38	22-Sep	4	17	4.3	11	59	5.4	14,964	154,828 1		1	3	3.0	180	1,287	7.1
	39	29-Sep	0	0	0.0	0	0	0.0	2,938	28,664	9.8	0	0	0.0	7	51	7.3
	Total		80	248	3.1	261	1,279	4.9	28,528	285,889 1	0.0	74	241	3.3	1,180	8,139	6.9
Outer Chiniak (259-21, 25)	27	7-Jul	2	23	11.5	28	171	6.1	45	364	8.1	16	71	4.4	42	383	9.1
	Total		2	23	11.5	28	171	6.1	45	364	8.1	16	71	4.4	42	383	9.1
Inner Chiniak																	
	Total		0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Buskin River (259-22, 26)																	
	Total		0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Monaska/Mill Bay																	
	Total		0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Big River (262-10,15)																	
	Total		0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0

Appendix L1.–Page 11 of 12.

Section	Statistica	l Week_		Chinook		Sc	ockeye			Coho			Pink			Chum	
(Stat Area)	Week	Ending	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.
Hallo Bay (262-20)																	
	Total		0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Kukak Bay (262-25, 27, 30)																	
	Total		0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Dakavak	27	7-Jul	5	22	4.4	161	963	6.0	31	305	9.8	58	173	3.0	223	1,561	7.0
(262-35, 40, 45, 50, 55)	28	14-Jul	198	1,085	5.5	5,217	25,952	5.0	114	908	8.0	2,764	10,409	3.8	2,305	17,802	7.7
	30	28-Jul	104	974	9.4	8,916	51,020	5.7	876	7,765	8.9	17,201	58,845	3.4	3,314	26,672	8.0
	Total		307	2,081	6.8	14,294	77,935	5.5	1,021	8,978	8.8	20,023	69,427	3.5	5,842	46,035	7.9
Katmai (262-60)	27 30	7-Jul 28-Jul	63 15	481 160	7.6 10.7	657 1,053	3,938 6,292	6.0 6.0	15 287	151 2,329	10.0 8.1	241 2,922	725 10,311	3.0 3.5	524 407	3,926 3,636	7.5 8.9
	Total		78	641	8.2	1,710	10,230	6.0	302	2,480	8.2	3,163	11,036	3.5	931	7,562	8.1

Appendix L1.–Page 12 of 12.

Section	Statistical	Week_	Chinook		Sockeye			Coho			Pink			Chum			
(Stat Area)	Week	Ending	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.
Alinchak	27	7-Jul	0	0	0.0	1,301	6,762	5.2	148	934	6.3	243	780	3.2	440	5,006	11.4
(262-65, 70)	28	14-Jul	0	0	0.0	200	1,000	5.0	0	0	0.0	0	0	0.0	0	0	0.0
	30	28-Jul	0	0	0.0	35	205	5.9	25	126	5.0	3,897	16,579	4.3	10,603	90,121	8.5
	Total		0	0	0.0	1,536	7,967	5.2	173	1,060	6.1	4,140	17,359	4.2	11,043	95,127	8.6
Cape Igvak (262-75, 80, 90, 95)																	
	Total		0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Wide Bay (262-85)																	
	Total		0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
	Grand Tot	al	3,895	26,303	6.8	1,820,350	9,239,154	5.1	438,065	3,577,047	8.2	5,946,894	22,885,496	3.8	463,834	3,728,141	8.0

Note: Includes cost recovery, but not test fish or commercial catch set aside for personal use.

APPENDIX M. ESCAPEMENT DATA

Appendix M1.-Peak salmon escapements in the Kodiak Management Area, by district and species, 2018.

	Number of Fish											
District	Chinook	Sockeye	Coho	Pink	Chum							
Afognak	0	20,363	35,395	328,120	106							
Northwest Kodiak	0	15,500	28,135	473,600	58,500							
Northwest Rodiak	U	13,300	20,133	473,000	36,300							
Southwest Kodiak	5,304	899,612	17,866	2,903,291	10,565							
Alitak	66	531,827	35,745	690,029	32,540							
Eastside Kodiak	8	26,849	37,100	313,136	82,070							
		-,-	- · · ,	,	,							
Northeast Kodiak	0	4,284	12,205	166,166	3,764							
Mainland	0	2,950	20,250	280,400	159 200							
-	-	· ·	·	·	158,200							
Area Total	5,378	1,501,385	186,696	5,154,742	345,745							