

Kodiak Management Area Commercial Salmon Fishery Annual Management Report, 2010

by

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December 2010

Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



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

FISHERY MANAGEMENT REPORT NO. 10-47

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ANNUAL MANAGEMENT REPORT, 2010**

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

December, 2010

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This document should be cited as:

Jackson, J., J. Dinnocenzo, and G. Spalinger. 2010. Kodiak Management Area commercial salmon fishery annual management report, 2010. Alaska Department of Fish and Game, Fishery Management Report No. 10-47, Anchorage.

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ABSTRACT

This report provides an overview of the 2010 Kodiak Management Area (KMA) salmon resources, stock status, and commercial, personal use, and subsistence salmon fisheries.

Sockeye salmon *Oncorhynchus nerka* escapements met or exceeded the established goals of Malina, Afognak, Uganik, Frazer, Saltery, late-run Karluk, Ayakulik, Buskin, Little River, Pasagshak and South Olga lakes runs, but were not met for the Karluk early-run. The Kodiak Archipelago and Mainland District pink salmon *O. gorbuscha* escapement goals were met. The Kodiak Archipelago and Mainland District chum salmon *O. keta* lower bound escapement goals were exceeded. The Chinook salmon *O. tshawytscha* escapement goal was not achieved in the Karluk River, but was achieved in the Ayakulik River. The coho salmon *O. kisutch* escapement goals were achieved in the Buskin and Pasagshak rivers, but not in the American and Olds rivers.

The 2010 KMA commercial salmon fishery began on June 9 with the last reported landing on September 20. A total of 315 permits were fished, consisting of 155 purse seine permits, 2 beach seine permits, and 158 set gillnet permits. The total commercial salmon harvest in the KMA, including cost recovery harvest, but excluding test fishery harvest and commercially-caught salmon retained, but not sold, was 14,550 Chinook; 1,436,606 sockeye; 266,431 coho; 8,864,796 pink; and 734,806 chum salmon. Commercial harvests were less than projected based on the forecast for all species of salmon. The exvessel value for salmon harvested by all gear types totaled approximately 24.3 million dollars.

Commercially-harvested salmon that were reported as retained for personal use, but not sold, totaled 11,748 salmon in the KMA, consisting of 160 Chinook; 2,330 sockeye; 2,976 coho; 6,267 pink; and 15 chum salmon.

Harvest data from subsistence permits issued in 2010 have not yet been summarized.

Key words: Chinook salmon, sockeye salmon, coho salmon, pink salmon, 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 (KMA), its salmon *Oncorhynchus* spp. resources, and the commercial salmon fisheries and harvest strategies that were in effect during the 2010 commercial salmon fishing season. Recent and historical commercial harvest and effort levels have been reviewed and a comparison of stock status to salmon escapement and current management goals are provided, as well as information on subsistence and commercial harvest retained for personal use.

The KMA comprises 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 KMA commercial fishing districts (Appendix A), fishing opportunity and management actions taken during the 2010 season (Appendix B), detailed information on specific fisheries (Appendices C through 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 (Tiernan *in prep*).

Due to the effects of the *M/V Exxon Valdez* oil spill, most of the KMA remained closed to commercial salmon fishing during the 1989 season. Most tables and graphs in this report include 1989 data, but exclude it in the historical averages.

SALMON RESOURCES

SALMON PRODUCING STREAMS

Salmon migration or spawning has been documented in approximately 750 streams within the KMA (Johnson and Blanche 2010). Of these, 411 streams have been documented to support yearly spawning populations of salmon (Table 1) while the remaining 349 are small streams used by pink salmon *Oncorhynchus gorbuscha* in years with very large returns. Chinook salmon *O. tshawytscha* occur in 6 streams, 49 streams support sockeye salmon *O. nerka* stocks of varying size, 204 streams have coho salmon *O. kisutch* stocks, approximately 404 streams support pink salmon stocks, and 174 streams have chum salmon *O. keta* stocks (Table 1). Of the pink salmon streams, 97 are located in the Mainland District (on the Alaska Peninsula), and the remainder are located in the Kodiak Archipelago (in the Afognak, Northwest Kodiak, Southwest Kodiak, Alitak, Eastside Kodiak, and Northeast Kodiak districts; Appendix A1).

SUPPLEMENTAL PRODUCTION

Two hatcheries located in the KMA 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 near the city of Kodiak (Figure 2). The Kitoi Bay Hatchery primarily produces pink salmon, but also cultures sockeye, chum, and coho salmon (Schrof and Aro 2010). KRAA outstocks (placing juvenile salmon in sites other than the hatchery) some juvenile coho and sockeye salmon fry from the Kitoi Bay Hatchery, but the majority of the enhanced salmon return to the hatchery 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, near Pillar Creek, which drains into Monashka Bay and is used primarily as an incubation facility for sockeye salmon outstocking projects. Chinook salmon are also reared at the Pillar Creek Hatchery for outstocking (Finkle and Byrne 2010).

The Kodiak Regional Planning Team (KRPT), a group consisting of representatives from the department, 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. The 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 broodstock, and restore depleted runs (Honold and Schrof 2001). Enhancement efforts include “put-and-take” projects that produce salmon intended for harvest and involves placement of juvenile salmon at sites where they will return as adults to systems with no spawning habitat.

In 2010, sockeye salmon were stocked at Spiridon, Hidden, Crescent, Ruth, and Big Waterfall lakes to produce harvest opportunities in terminal fisheries near the outlets of these systems. Sockeye salmon were also stocked in 2010 in Little Kitoi Lake for broodstock development. Coho salmon were outstocked into Crescent Lake near the community of Port Lions, Katmai

Lake on Spruce Island near the community of Ouzinkie, and Jennifer and Ruth lakes on Afognak Island to provide subsistence and commercial harvest opportunities (Finkle and Byrne, 2010; Schrof and Aro, 2010).

The KRPT summarized its production goals in the Kodiak Regional Comprehensive Management Plan (KRPT 1992). The long-term goal of the plan is to increase the annual harvest of salmon (over and above the KMA wild salmon harvest) by an additional 3,000 Chinook; 1,700,000 sockeye; 383,000 coho; 11,500,000 pink; and 1,100,000 chum salmon. The recent ten-year (2000–2009) average supplemental production has included an undetermined number of Chinook salmon and an estimated 325,265 sockeye; 148,746 coho; 6,982,463 pink; and 198,258 chum salmon (Table 2). The KRPT is in the process of drafting a new plan which should be published sometime in the near future.

ESCAPEMENT GOALS AND MONITORING

ESCAPEMENT GOALS

In 2007, department management and research staff reviewed previously established escapement goals for the KMA for each salmon species and recommended that several be modified or eliminated (Honnold et al. 2007). The directors of the Division of Commercial Fisheries (CF) and the Division of Sport Fish (SF) accepted these recommended changes to the escapement goals. In 2010, the KMA commercial salmon fisheries were managed to achieve escapement levels that were within the established ranges or, in the case of chum salmon, that exceeded lower bound escapement goals. Established goals in the KMA include 2 for Chinook salmon, 15 for sockeye salmon, 4 for coho salmon, and 2 each for pink and chum salmon (Table 3). A comparison of 2010 salmon peak escapements and escapement goals of index streams are outlined in Table 3.

In 2008, the department (in cooperation with KRAA) resumed the operation of Saltery Lake weir for the first time since it was discontinued after the 2003 season (Caldentey 2009). The escapement goal varies depending on whether escapement is estimated using a weir or aerial surveys. The escapement goal utilized in 2007 of 20,000–50,000 sockeye salmon was established using aerial survey data. In 2008, an escapement goal of 15,000–30,000 sockeye salmon was used due to the availability of weir data. The ability to use an alternate escapement goal when weir data are available allows more accurate and timely measurement of escapement to this system, but does not significantly change the harvest strategy for this stock.

ESCAPEMENT MONITORING

In 2010, weirs were operated on the major systems of the KMA (Table 4; Figure 2; Tiernan *in prep*). The three largest systems are Karluk River (at Karluk Lagoon), Ayakulik River (at the outlet), and South Olga Lakes (at the outlet of South Olga Creek at Upper Station). Five smaller systems are Afognak Lake (at Litnik), Saltery Lake, Big Creek, and Buskin River (at Buskin Lake and also Lake Louise) and Dog Salmon River. On the Dog Salmon River, a fish pass is also operated upstream near the outlet of Frazer Lake. To avoid counting fish twice when summing escapement totals (Table 4), the Dog Salmon weir counts are considered the total escapement for all species in this system, with the exception of sockeye salmon. Since a significant number of sockeye salmon that pass the Dog Salmon weir do not ascend the fish pass and are not likely to

reproduce, the cumulative sockeye salmon count through the fish pass is considered the escapement for this drainage.

The majority of sockeye salmon and most Chinook salmon ascending rivers in the KMA were counted through these weirs (Tables 3–5; Tiernan *in prep*). The availability 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 also collected from fixed-wing aircraft surveys of bays and streams. Coverage of coho salmon systems was often 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 were considered an index of the actual escapement for use in season 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 two counts which 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 (Tiernan *in prep*).

STOCK STATUS

Chinook Salmon

There has been concern about declining escapements of Chinook salmon escapement in the Karluk and Ayakulik rivers in recent years. In an attempt to increase escapements, regulation 5 AAC 18.395 provides the department emergency order (EO) 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 when weir counts indicate inadequate escapement.

Due to weak sockeye salmon runs to Karluk River in 2010, no commercial fishery occurred in the Inner Karluk and Outer Karluk sections of the Southwest Kodiak District until September 7, which reduced interception of Karluk Chinook salmon. Despite this, the Karluk River Chinook salmon season total weir count of 2,917 fish (Table 4; Tiernan *in prep*) was below the escapement goal range of 3,600–7,300 (Table 3; Honnold et al. 2007). Since the sport fishery was also closed on the Karluk River in 2010, all the fish were part of the escapement. This was the fourth consecutive year the Chinook salmon escapement goal was not met in the Karluk River.

In 2010, a total of 5,301 Chinook salmon were counted through the Ayakulik River weir (Table 4; Tiernan *in prep*). An estimated 10 Chinook salmon were harvested upstream of the

weir in the sport fishery (Donn Tracy, personal communication), resulting in an escapement of 5,291 that was within the escapement goal range of 4,800–9,600 (Table 3; Honnold et al. 2007).

Dog Salmon Creek has a run of Chinook salmon originally introduced in 1970. A total of 354 were counted through the weir in 2010 (Table 4; Tiernan *in prep*). There is no escapement goal established for this system, but the average total season cumulative weir count in the previous decade (2000–2009) was 357 fish (Tiernan and Caldentey 2010). There is no sport fishery allowed for Chinook salmon on Dog Salmon River so the escapement is considered to be the total season cumulative weir count.

Sockeye Salmon

Sockeye salmon counted through weirs accounted for about 89% (977,596 fish) of all documented sockeye salmon escapements in 2010. Additional escapements of 117,862 sockeye salmon were estimated by aerial and foot surveys in other systems such as Malina Creek, Pasagshak Lake, Ocean Beach, Kafia Lake, Uganik Lake, Little River Lake, Thorshiem Lake, Pauls Lake, and Swikshak Lagoon (Tiernan *in prep*). Sockeye salmon escapements generally met escapement goals with the exception of the Karluk early-run stock (Table 3).

Coho Salmon

Estimating coho salmon escapements to KMA streams is difficult because of survey conditions and cost. Coho salmon often do not migrate into streams until late fall, when rains cause water levels to rise, and create difficult survey conditions due to reduced stream water clarity. Late-season escapement surveys are also limited by budget constraints. Coho salmon escapement goals were reevaluated in 2007 (Honnold et al. 2007). Information adequate for establishment of escapement goals is available for only 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 2010, coho salmon escapement goals were achieved in the Buskin and Pasagshak rivers, but not in the American and Olds rivers (Table 3).

With the exception of the Buskin River and Big Creek weirs, most of the weirs are pulled 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 about 58% of the 2010 KMA pink salmon escapement by number was counted through salmon weirs (Tables 4 and 5). The Ayakulik and Karluk rivers had strong returns, but many other systems had average or weak runs. The 2010 pink salmon escapement of 3,378,483 fish in the Kodiak Island Archipelago was within the escapement goal range of 2,000,000–5,000,000 fish (Table 3; Honnold et al. 2007). The Mainland District pink salmon escapement of 265,650 fish was within the escapement goal range of 250,000–750,000 fish (Table 3; Honnold et al. 2007). Districtwide peak escapements are shown in Appendix M1.

Chum Salmon

After the most recent escapement goal review by the department salmon management and research staff in 2007 (Honnold et al. 2007), the KMA districtwide chum salmon escapement goals were aggregated and changed to separate lower bound sustainable escapement goal (SEG) for the Kodiak Archipelago and the Mainland District. The majority of the 2010 chum salmon escapement was estimated from aerial surveys, with less than 1% 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 their remoteness, 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 or impossible. Because of this, estimates based on aerial surveys are considered minimum estimates of actual escapement.

The 2010 chum salmon escapement in the Mainland District was 144,715 fish, above the minimum goal of 104,000 fish (Table 3; Honnold et al. 2007). The chum salmon escapement for the Kodiak Archipelago of 155,570 fish exceeded the minimum goal of 151,000 fish (Table 3; Honnold et al. 2007).

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 2010, there were 593 commercial salmon fishing permits available in the KMA, of which 315 were fished (Table 7; Commercial Fisheries Entry Commission (CFEC) 2010). This was above the recent 10-year average (2000–2009) of 305 permits fished annually.

Inseason management of the KMA commercial salmon fishery is structured around seven districts that are subdivided into 56 sections (Appendices A1–A8). These sections are occasionally subdivided further inseason 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 or groups of sections or districts that are opened or closed together are referred to as management units. The board has also designated five Special Harvest Areas (SHAs; 5 AAC 40.085) and one Terminal Harvest Area (THA; 5 AAC 18.378) within the KMA to provide harvest opportunity of enhanced salmon runs (Jackson and Dinnocenzo 2010).

GEAR TYPES

In the KMA, there are restrictions on the types of gear that can be used in specific management units 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. In the Alitak Bay, Moser Bay, and Olga Bay sections of the Alitak District, set gillnets are the only legal gear (5 AAC 18.330(d)(2)), except seine gear is allowed after September 4. These sections were designated set gillnet only prior to Alaska being granted statehood. In 1970, this regulation was amended such that the Moser Bay and Olga Bay sections remained set gillnet only through September 4; afterward, seine gear is legal in the entire Alitak District.

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 (5 AAC

18.330(b)). Since 1974, the geographical areas currently open to specific gear types have remained unchanged.

BOARD OF FISHERIES-APPROVED REGULATORY MANAGEMENT PLANS

To regulate Kodiak commercial salmon fisheries, department staff are guided by ten KMA salmon management plans that describe biological and allocative constraints and were adopted into regulation by the Board of Fisheries (board) (5 AAC 18.360–369). These plans were all in effect for the KMA in 2010 (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. These plans are the *Alitak District Salmon Management Plan Management Plan* (MP) (Appendix D), *Westside Kodiak Salmon MP* (Appendix E), *Eastside Afognak MP* (Appendix G), *Eastside Kodiak Salmon MP* (Appendix I), *Mainland District Salmon MP* (Appendix K), and *North Afognak/Shuyak Island Salmon MP* (Appendix J). The Cape Igvak Salmon (Appendix C) and North Shelikof Strait Sockeye Salmon (Appendix F) management plans affect Kodiak purse seine permit holders' opportunity to target salmon migrating through the KMA to spawning systems in the Chignik and Cook Inlet management areas. The Crescent Lake Coho Salmon and Spiridon Bay Sockeye Salmon management plans (Appendix H) provide for full utilization of enhanced stocks while protecting local natural stocks.

RECENT REGULATION CHANGES

The board reviews the salmon fishery regulations every three years. The most recent review, in January of 2008, resulted in the following four notable changes:

1. A new regulation (5 AAC 18.331(j)) was adopted which allows a permit holder who owns two Kodiak set gillnet permits to operate them both simultaneously.
2. Purse seine practice sets are now allowed to occur in designated areas beginning May 25 (previously June 1; 5 AAC 18.337(a)).
3. In the *North Shelikof Strait Sockeye Salmon Management Plan*, the shoreward zone of the Northwest Afognak Section was increased from waters inshore of a cape-to-cape line to a line connecting points one half mile west of these capes (5 AAC 18.363(3)(C)).
4. A new regulation (5 AAC 18.350(a)(8)) formalized the adoption of closed waters upstream of the stream terminus of streams designated on the Kodiak Area Salmon Statistical Chart (revised in 2008).

In addition, there were some minor changes made to boundary lines of management units and closed waters. Precise language describing the details is available in the published regulations (ADF&G 2008).

SALMON FORECASTS

The department forecasts salmon runs to inform the 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 pre-season based on the magnitude of the pink salmon forecast (Jackson and Dinnocenzo 2010). Chinook, coho, pink, and chum salmon harvests are projected by broad geographic area, while forecasts are made for major individual sockeye salmon stocks. Projected harvests are summarized by fishery and geographic area (Eggers et al. 2010; Table 9).

The 2010 commercial Chinook salmon projected harvest was approximately 20,000 fish (Table 9). The sockeye salmon harvest was forecasted to be 2,491,584 fish (Table 9). This projection included formal forecasts for the major sockeye salmon systems of Karluk, Ayakulik, Upper Station, and Dog Salmon (Alitak District), plus projected harvests from minor sockeye salmon systems, supplemental production (from enhancement projects), the Cape Igvak Section, and other miscellaneous systems. The 2010 projected KMA harvest was 413,108 coho; 11,400,000 pink; and 1,016,668 chum salmon (Table 9). These projections included expected supplemental production of salmon from Kitoi Bay hatchery and the Spiridon Bay enhancement projects.

2010 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 and Chinook 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 from July through August. Coho salmon are generally present from August through October. Commercial salmon fisheries are structured around the seasonal abundance of specific salmon species.

The 2010 Kodiak Area Commercial Salmon Fishery Harvest Strategy, released in April 2010, outlined the approaching fishing season (Jackson and Dinnocenzo 2010). This document contained a synopsis of the expected chronology of the 2010 commercial salmon fisheries by species, expected escapements and harvests, an overview of pertinent regulations, and a summary of the MPs that guide management throughout the season.

Inseason management actions follow a generalized plan described in a harvest strategy issued annually. This strategy details a specific chronology of management actions related to salmon run timing by species. Sockeye salmon are the primary species on which fisheries are targeted 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

Based primarily on the forecast of a weak early-run sockeye salmon run at Karluk River, the 2010 harvest strategy listed June 9 as the initial opening date of the early-run sockeye salmon fishery (Figure 3; Jackson and Dinnocenzo 2010). 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, the Inner Kitoi Bay, Outer Kitoi Bay, Duck Bay, and Izhut Bay sections were slated to open to continuous fishing on June 9. The Alitak District was scheduled to open on June 9 if the run strength of early-run sockeye salmon passing Dog Salmon and Upper Station weirs was as strong as expected. The initial opening would be for 33 hours with no extensions. The first fishing period in the Cape Igvak Section

could occur as early as June 1, if the Chignik Lake sockeye salmon early run was as strong as expected, and the run timing was normal.

An initial 33-hour opening was scheduled to start June 9 in the Anton Larsen, 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 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. After June 10, additional fishing time in Westside fisheries was to be based solely on the strength of the sockeye 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, (Eggers et al. 2010) projected a small harvestable surplus which could be utilized during short openings near the peak of 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 Section 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, Swikshak, and Kafilja Lake systems.

The initial fishing period targeting pink salmon was scheduled to begin July 6, and subsequent weekly fishing periods for July and August were projected (Jackson and Dinnocenzo 2010). Based on the forecasted pink salmon run strength, the initial general pink salmon opening was set at 57 hours in length, with the two subsequent fishing periods following in July set at 81 hours per week. Adjustments in fishing time in late July and August in most areas are predicated on the strength of local pink and chum salmon runs and in September on the strength of coho salmon runs.

2010 COMMERCIAL SALMON FISHERY SUMMARY

The 2010 Kodiak commercial salmon fishery began on June 9 with a 33-hour opening in the Central and North Cape sections 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. A 33-hour period in the Alitak District also occurred as anticipated on June 9 (Appendix B1 and B2). The Chignik sockeye salmon run was later than normal, although two short fishing periods were allowed in the Cape Igvak Section in June. The two 33-hour openings scheduled for June 14 and 21 in the Eastside Kodiak District and the Outer Kukak and Big River sections of the Mainland District occurred as scheduled. The first two openings in the Anton Larsen, Sharatin Bay, Terror Bay, Inner Uganik Bay, Spiridon Bay, and Uyak Bay sections of the Northwest Kodiak District also occurred as anticipated on June 9 and 14 when it became apparent that local chum salmon runs were as strong as anticipated. A 57-hour fishing period in the Outer Ayakulik Section was allowed to harvest Ayakulik River sockeye salmon starting June 21. The pink salmon fishery started as scheduled with a 57-hour

weekly fishing period on July 6. The Cape Igvak fishery was allowed to reopen on July 17 during the late sockeye salmon run at Chignik, which was as strong as forecast.

Beyond the anticipated fishery openings in the harvest strategy, additional fishing opportunities were provided by emergency order to facilitate 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 2010, the KMA commercial salmon harvest occurred over a 104-day period, with the last reported landing occurring on September 20 (Figure 3). A total of 13 shore-based plants processed salmon from the 2010 KMA fishery (Table 10).

PERMIT HOLDER PARTICIPATION

A total of 315 KMA commercial salmon fishing permit holders reported harvests in the common property fishery in 2010. This was 25 more than during the 2009 season and above the recent 10-year average (2000–2009) of 305 permits (Table 7). Purse seine participation during the 2010 season (155 permits) was 2 permits less than the 2009 season (157 permits) and slightly above the previous 10-year average of 153 permits. Only two beach seine permit holders were active during the 2010 season. Set gillnet participation in the 2010 KMA commercial salmon fishing season, as portrayed in the harvest database was 158 permits, an increase of 26 permits above the 2009 season (132 permits). The increase in reported set gillnet permit participation in 2010 could be due to the new practice by CFEC of issuing dual permit holders two permit cards. Set gillnet participation was above the recent 10-year average of 152 permits (Table 7).

Starting in 2008, KMA set gillnet permit holders could own and operate up to 2 permits at once. Although 38 set gillnet permit holders held dual permits at some time during the 2010 season (CFEC, memo, September 23, 2010, Juneau), the number of sets of gear fished is unknown. Since adoption of this regulation, the department has not collected accurate effort statistics from the fish ticket data in the KMA set gillnet fishery because the current fish ticket does not document the number of dual permit holders fishing both sets of gear.

In 2008 and 2009, dual permit holders were issued only one card that could be used to imprint on a fish ticket. In 2010, dual permit holders were issued two cards, either of which could be used to imprint on a fish ticket. This inconsistency in how cards were issued, along with the department not documenting the use of multiple permits on one delivery of fish, has caused permit participation statistics to be distorted.

HARVEST

A total of 11,317,189 salmon were harvested in the 2010 KMA commercial fisheries (common property and cost recovery combined), which was below the recent 10-year (2000–2009) average of 24,565,808 salmon (Table 6).

Seine permit holders (purse and beach seiners combined) caught 86.6% (8,911,889) of the total number of salmon harvested (Table 11), which included 13,370 Chinook; 1,116,374 sockeye; 235,135 coho; 6,897,117 pink; and 649,893 chum salmon in the common property fishery. Set gillnet permit holders caught 13.4% (1,379,560) of the salmon harvested (Table 11), which included 1,180 Chinook; 306,098 sockeye; 30,840 coho; 958,475 pink; and 82,967 chum salmon in the common property fishery.

CHINOOK SALMON

The Chinook salmon harvest of 14,550 fish was less than the 2000–2009 average of 17,912 fish (Table 6) and below the projected harvest of 20,000 fish (Table 9). The average weight of Chinook salmon was 7.98 pounds (Table 11). More than half of the Chinook salmon harvest was taken by seine fishermen during June and early July in the Northwest Kodiak and Eastside Kodiak districts.

SOCKEYE SALMON

The sockeye salmon harvest of 1,436,606 fish (Table 6) was below the forecast of 2,491,584 fish (Table 9) and below the 2000–2009 average catch of 2,578,531 fish (Table 6). The average weight of sockeye salmon was 5.35 pounds (Table 11). Approximately 21% of the sockeye salmon harvest (297,150 fish) came from the Westside Kodiak fishery¹. The combined Kitoi Bay Hatchery early and late runs produced a harvest of 91,124 fish and the Spiridon Lake enhancement project produced an estimated harvest of 174,473 sockeye salmon, of which 6% (10,840 fish) were harvested for cost recovery (Table 9).

COHO SALMON

The coho salmon harvest of 266,431 fish (Table 6) was below the forecast of 413,108 fish (Table 9) and also below the 2000–2009 average of 396,153 fish (Table 6). The average weight of coho salmon was 7.53 pounds (Table 11). Westside fisheries caught approximately 58,138 coho salmon, below the forecast of 136,000 fish (Table 9). The Eastside/North end Kodiak coho salmon harvest² of 32,115 fish was below the forecast of 51,000 fish (Table 9). The Afognak nonhatchery harvest of 25,949 coho salmon was below the forecast of 42,000 fish (Table 9). The coho salmon harvest attributed to the Kitoi Bay Hatchery was 113,909 fish, which was below the hatchery forecast of 155,108 fish (Table 9).

PINK SALMON

The pink salmon harvest of 8,864,796 fish (Table 6) was below the forecasted harvest of 11,400,000 fish (Table 9) and below the most recent five even-year (2000–2008) average of 18,035,567 fish (Table 6). The average weight of 3.57 pounds (Table 11) of pink salmon harvested was below the 2008 average weight of 3.70 pounds. The nonhatchery (wild stock) pink salmon harvest of 5,614,327 fish was very close to the harvest projection of 5,700,000 fish. The Westside Kodiak fishery, accounting for more than 47% of the harvest (2,645,798 fish), was below the forecast of 4,109,700 fish (Table 9). Fisheries associated with the Kitoi Bay Hatchery accounted for 3,250,469 pink salmon which was below the forecast of 5,700,000 fish (Table 9). Kitoi Bay Hatchery cost recovery accounted for 31% or 1,009,202 of those fish. Additional hatchery-bound pink salmon were likely harvested along the west side and east side of Kodiak and Afognak islands. However, the department does not have a stock separation program for pink salmon and is unable to differentiate stocks.

¹ From the Southwest Afognak Section (251-10 & 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.

² 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, Sharatin, and Kizhuyak sections, plus part of the Central Section (259-35–259-39)

CHUM SALMON

The chum salmon harvest of 734,806 fish (Table 6) was below the forecast of 1,016,668 fish (Table 9) and below the 2000–2009 average of 932,402 fish (Table 6). The average weight of the chum salmon harvested in 2010 was 7.68 pounds (Table 11). Westside Kodiak fisheries harvested 175,305 chum salmon, which was below the forecast of 291,000 fish (Table 9); Eastside/North end Kodiak fishery harvest totaled 136,434 chum salmon, which was below the forecast of 220,000 fish. Mainland District harvest totaled 175,340 chum salmon, just above the forecast of 154,000 fish (Table 9). The chum salmon harvest attributed to the Kitoi Bay Hatchery of 191,284 fish was less than the forecast of 273,668 fish (Table 9).

EXVESSEL VALUE

The estimated total exvessel value of the 2010 fishery was \$24,267,934 (Table 11), which was above the 2000–2009 average value of \$22,343,086 (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.

Purse seine permit holders' gross earnings averaged \$130,009 (2000–2009 average \$114,313; Table 12). Gillnet permit holders' gross earnings averaged \$25,720 (2000–2009 average \$35,617; Table 12).

COST RECOVERY

KRAA conducted a program to defray operational costs at the Kitoi Bay Hatchery from 1987 through 1989 and 2003 through 2009. In 2010, KRAA conducted two cost recovery programs in the KMA (Schrof and Aro 2010). A cost recovery harvest occurred August 2 through 14 within the Inner Kitoi Bay Section to defray hatchery operational costs and included 3,294 sockeye; 456 coho; 1,009,202 pink; and 1,935 chum salmon. Also, for the first time, a cost recovery program in Spiridon Bay SHA (in Telrod Cove) was conducted to defray the cost of running the enhancement program in Spiridon Lake. From June 22 through 30, 10,840 sockeye, 2 pink, and 11 chum salmon were harvested in this program. The entire cost recovery harvest supporting KRAA programs in the KMA in 2010 included 14,134 sockeye; 456 coho; 1,009,204 pink; and 1,946 chum salmon.

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 the department 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 over-exploitation)

and some areas near heavily exploited salmon systems were closed to subsistence salmon fishing by regulation (5 AAC 01.525).

From 2002 through 2007, varying curtailment measures of the subsistence fishery were necessary to conserve Afognak Lake sockeye salmon for escapement. In 2008 and 2009, the Afognak Lake sockeye salmon run was strong enough to allow subsistence harvest without increasing closed waters or shortening fishing time, but commercial fishing was not allowed. In 2010, the run was strong and closed waters were reduced inseason for both subsistence and commercial fisheries in an attempt to keep sockeye salmon escapement within desired escapement goals.

The 2010 Chinook salmon run to the Karluk River was forecast to be weak, necessitating an emergency order closure of subsistence fishing for Chinook salmon in that drainage on April 30 to conserve fish needed for escapement. This was the third year that restriction of the Chinook salmon subsistence fishery was necessary on the Karluk River. The 2010 run was as weak as forecast, and the subsistence fishery remained closed the entire season.

The 2010 Ayakulik River Chinook salmon run was of moderate strength and, unlike the last 2 years, curtailment of the subsistence fishery was not necessary to conserve fish needed for escapement.

The 2010 Buskin Lake sockeye salmon run was weak, although not quite as weak as in 2009. Subsistence salmon fishing near the mouth of this stream was closed on June 15. As a result, sockeye salmon escapement rates increased and the fishery was reopened on June 30.

The 2010 subsistence harvest data were not summarized at the time this report was written. However, 1,780 of the 2009 permit holders returned subsistence permits reported a harvest of 29,688 salmon, consisting of 176 Chinook; 23,114 sockeye; 4,127 coho; 1,926 pink; and 345 chum salmon (Table 13). Historically, the most utilized subsistence fishery areas are the north end of Kodiak Island, the Buskin and Pasagshak rivers, and the southeast side of Afognak Island at Litnik. Reported subsistence salmon harvests averaged 36,411 fish annually for the 10-year period 2000–2009 (Table 13). Sockeye salmon have accounted for 78% of the recent 10-year average harvest (28,336 fish), followed by coho salmon at 16% (5,819 fish), pink salmon at 4% (1,558 fish), and both chum salmon (363 fish), and Chinook salmon (336 fish) at about 1% (Table 13).

RETENTION OF SALMON TAKEN IN COMMERCIAL FISHERIES

In 1994, the board readopted regulation 5 AAC 39.010, which allowed commercial fishermen to retain legally-harvested salmon for their own use. 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)). In 1997, 10 permit holders reported 784 salmon retained for their own use (Table 14). This use increased dramatically in 2003, when 36 permit holders retained 24,985 salmon (Table 14). Many salmon were “custom processed” at local processors, normally as vacuum-packed, frozen fillets. It was reported that these salmon were destined for sale as part of direct marketing efforts.

Because of the significant increase of retained salmon and the likelihood that some of these salmon were being sold illegally, the board in December of 2003 rewrote the original regulation (5 AAC 18.355(b)) to clarify the intent and to reiterate the unlawful practice of selling

commercially-retained salmon without appropriate permits. The board also placed the regulation under *General Provisions* (5 AAC 39.010) which reads, “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 2010, 42 permit holders reported retaining 11,748 salmon from their commercial harvest for “home pack” or personal use. This included 160 Chinook; 2,330 sockeye; 2,976 coho; 6,267 pink; and 15 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 District	Number of Streams ^a	Number of Streams with each Species ^b				
		Chinook	Sockeye	Coho	Pink	Chum
Afognak	91	0	21	84	91	9
Northwest Kodiak	67	0	4	31	67	22
Southwest Kodiak	10	2	3	5	10	5
Alitak	30	1	7	9	30	15
Eastside Kodiak	89	0	8	35	89	50
Northeast Kodiak	27	3	1	27	20	12
Mainland	97	0	5	13	97	61
Total	411	6	49	204	404	174

^a The State of Alaska's Habitat Division identifies over 750 streams in the Kodiak Management Area that have documented use by anadromous fish (Johnson and Blanche 2010). Many of these streams are very small and may only be used by pink salmon in years with very large returns. The streams identified in this table are depicted on the Kodiak Areas Salmon Statistical Map (revised May 2008), and have documented annual use.

^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, 1994–2010.

Year	Number of Salmon				
	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	116,036	3,241,345	191,277	3,859,981
<u>Average</u>					
2000–2009	325,265	148,746	6,982,463	198,258	7,654,733

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 -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 Settlers 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 2010 salmon peak escapements and escapement goals of index streams or districts, by species, in the Kodiak Management Area.

<i>Species</i>	Stream	Escapement Goal		Escapement
System (or group of systems)	Number	Lower	Upper	Estimate ^a
<i>Chinook</i>				
Karluk ^b	255-101	3,600	7,300	2,917
Ayakulik ^b	256-201	4,800	9,600	5,291
<i>Sockeye</i>				
Malina	251-105	1,000	10,000	4,000
Afognak	252-342	20,000	50,000	52,255
Little River	253-115	3,000		3,200
Uganik	253-122	24,000		30,700
Karluk	255-101			
Early run		110,000	250,000	70,544
Late run		170,000	380,000	277,558
Ayakulik	256-201	200,000	500,000	262,327
Upper Station	257-304			
Early run		30,000	65,000	42,060
Late run		120,000	265,000	141,139
Frazer	257-403	75,000	170,000	94,680
Buskin	259-211	8,000	13,000	9,800
Pasagshak	259-411	3,000	12,000	4,800
Saltery	259-415	15,000	30,000	26,809
<i>Coho</i>				
Buskin	259-211	3,200	7,200	6,808
American	259-231	400	900	58
Olds (Sid Olds)	259-242	1,000	2,200	127
Pasagshak	259-411	1,200	3,300	1,971
<i>Pink</i>				
Mainland District		250,000	750,000	265,650
Kodiak Archipelago		2,000,000	5,000,000	3,378,483
<i>Chum</i>				
Mainland District		104,000		144,715
Kodiak Archipelago		151,000		155,570

^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 above the weir.

Table 4.—Fish weir installation and removal dates and cumulative salmon weir counts for systems with weirs in the Kodiak Management Area, 2010.

Weir Locations	Dates		Number of salmon ^a				
	Installed	Removed	Chinook	Sockeye	Coho	Pink	Chum
Karluk River	5/23	9/18	2,917	348,102	14,778	1,324,368	150
Ayakulik River	5/21	8/14	5,301	262,327	227	532,428	63
Dog Salmon Creek ^b	5/25	8/12	354	135,100	86	170,645	3,696
Frazer Lake fish pass ^{bc}	5/20	9/12	41	94,680	0	11,451	2
Upper Station River (Olga River)	5/20	9/18	0	183,199	11,157	19,434	0
Litnik (Afognak River)	5/16	9/7	1	52,255	10,288	62,237	59
Buskin River	5/21	10/7	6	9,800	6,808	15,781	67
Lake Louise	5/24	9/15	0	421	3	440	0
Saltery River	6/23	8/9	0	26,809	0	3,107	4
Big Bay Creek	8/5	9/7	0	3	1,999	3,305	0
Totals			8,579 ^b	977,596 ^c	45,346 ^b	2,131,745 ^b	4,039 ^b

^a Counts include post weir estimates after weirs were removed.

^b Salmon counted at the Frazer Lake fish pass were initially counted at the Dog Salmon weir, and all species except sockeye salmon are not included in totals.

^c Since sockeye salmon that pass Dog Salmon weir fail to get counted at Frazer fish pass may not spawn, the fish pass count is considered the best escapement estimate of sockeye salmon, and the Dog Salmon sockeye salmon count is omitted from the totals.

Table 5.—Indexed salmon escapements, by species, in the Kodiak Management Area, 1979–2010.

Year	Number of Salmon					
	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
1989 ^a	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
<u>Average—Previous 10 Years:</u>						
2000–2009	16,608	1,446,467	114,928	5,092,811	473,392	7,144,206
Odd Years Only				4,043,350		
Even Years Only				6,142,272		
<u>Average—Previous Decades:</u>						
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
<u>Average—Overall:</u>						
1979–2010	19,411	1,706,195	144,635	4,934,303	589,858	7,394,400

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 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, 1882–2010.

Year	Number of Salmon ^a					Total
	Chinook	Sockeye	Coho	Pink	Chum	
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	267,3675	212,492	4,674,095
1926	596	3,015,366	174,475	4,606,694	324,706	8,121,837
1927	4,358	1,155,202	151,548	5,297,305	417,956	7,026,369
1928	2,546	1,592,003	290,645	1,535,313	726,480	4,146,987
1929	3,200	712,126	144,226	6,108,402	1,057,662	8,025,616
1930	4,991	466,409	228,800	1,651,398	419,011	2,770,609

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Table 6.–Page 2 of 3.

Year	Number of Salmon ^a					Total
	Chinook	Sockeye	Coho	Pink	Chum	
1931	1,541	1,183,074	170,075	6,839,906	183,737	8,378,333
1932	1,873	1,058,446	52,192	4,719,939	237,023	6,069,473
1933	1,140	1,428,373	91,428	6,573,660	536,935	8,631,536
1934	1,300	1,828,953	89,588	7,641,891	661,341	10,223,073
1935	1,393	1,613,519	76,849	10,780,612	381,753	12,854,126
1936	2,548	2,657,195	183,903	5,647,726	328,218	8,819,590
1937	1,257	1,881,304	164,902	16,787,150	346,238	19,180,851
1938	1,232	1,965,943	154,959	8,397,981	640,119	11,160,234
1939	2,272	1,786,445	112,171	11,741,218	641,693	14,283,799
1940	1,233	1,318,233	148,016	9,997,899	673,265	12,138,646
1941	2,571	1,730,201	199,515	7,601,531	444,521	9,978,339
1942	1,329	1,281,529	106,865	6,092,526	564,924	8,047,173
1943	1,133	1,990,557	59,661	12,479,608	454,205	14,985,164
1944	668	1,817,875	51,675	4,955,354	506,703	7,332,275
1945	2,021	2,041,090	60,122	9,044,544	559,332	11,707,109
1946	129	838,863	56,425	9,545,871	298,486	10,739,774
1947	99	993,394	76,230	8,856,666	294,518	10,220,907
1948	1,401	1,260,465	32,364	5,968,487	330,795	7,593,512
1949	851	892,336	53,737	4,927,779	699,548	6,574,251
1950	2,127	920,885	40,653	5,304,701	685,109	6,953,475
1951	2,402	467,875	48,792	2,100,377	483,057	3,102,503
1952	1,081	603,677	51,567	4,576,726	1,243,227	6,476,278
1953	2,991	317,150	41,681	5,174,645	547,574	6,084,041
1954	942	325,157	66,430	8,439,231	1,250,833	10,082,593
1955	2,428	164,482	34,582	10,794,164	482,425	11,478,081
1956	1,123	271,249	52,844	3,318,841	705,047	4,349,104
1957	1,030	234,253	34,995	4,716,482	1,208,472	6,195,232
1958	1,942	288,014	20,555	4,038,938	930,698	5,280,147
1959	1,837	330,087	14,512	1,967,058	733,784	3,047,278
1960	1,238	362,525	54,308	673,781	1,300,386	8,456,274
1961	864	407,979	28,579	3,926,023	518,935	4,882,380
1962	1,095	784,664	54,583	14,113,851	794,727	15,748,920
1963	286	407,040	57,011	5,480,158	305,061	6,249,556
1964	1,306	498,488	35,535	12,044,341	1,134,163	13,713,833
1965	786	346,237	26,672	2,886,831	431,340	3,691,866
1966	599	631,646	67,700	10,755,582	762,766	12,218,293
1967	1,753	308,756	10,354	187,813	226,681	735,357
1968	1,936	760,393	56,629	8,768,122	750,428	10,337,508
1969	2,469	591,481	48,759	12,500,823	534,933	13,678,465
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	294,280	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

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Table 6.–Page 3 of 3.

Year	Number of Salmon ^a					Total
	Chinook	Sockeye	Coho	Pink	Chum	
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 ^b	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
<u>Averages^b</u>						
2000-2009	17,912	2,578,531	396,153	20,640,809	932,402	24,565,808
Even Years, 2000-2008				18,035,567		
Odd Years, 2001-2009				23,246,051		
1882-2009	5,273	1,824,771	135,676	7,759,774	552,658	10,276,919
1949-2009	8,076	1,656,538	171,872	10,944,664	813,913	13,596,236
Even Years, 1950-2008				10,560,668		
Odd Years, 1949-2009				11,328,659		

Source: 1882–1947 data are from processors case pack information. 1948–2010 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.

^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, 1980–2010.

Year	Purse Seine		Beach Seine		Set Gillnet		Total		Percent
	Available	Fished	Available	Fished	Available	Fished	Available	Fished	
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
<u>Average—Previous 10 Years:</u>									
2000–2009	378	153	32	1	188	152	598	305	51
<u>Average—Previous Decades:</u>									
1990–1999	386	292	36	9	189	176	611	476	75
1980–1988 ^a	385	317	35	24	188	172	608	513	85
<u>Average^a—Overall:</u>									
1975–2009	383	252	34	11	188	166	605	429	71

Source: Commercial Fisheries Entry Commission Summary Information and Reports (CFEC 2010) 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 Since 2008, a provision allowing set gillnet permit holders to fish 2 permits has resulted in the second permit not being recorded in the harvest data.

Table 8.—Alaska Board of Fisheries-approved salmon management plans for the Kodiak Management Area, 2010.

Management Plan	Year Initiated	Management Units Affected	Dates in 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
North Shelikof Strait Sockeye Salmon	1991	SW Afognak Section NW Afognak Section Shuyak Island Section Big River Section Hollo Bay Section Inner and Outer Kukak Bay Sections Dakavak Bay Section	7/6–7/25
Crescent Lake Coho Salmon	1990	Special Harvest Area in the Central Section near Port Lions	7/15–10/31
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 2010 commercial salmon harvest, by species and fishery, for the Kodiak Management Area.

	Number of Salmon					
	Chinook	Sockeye	Coho	Pink	Chum	Total
Projected Harvest 2010 ^a	20,000	2,491,584	413,108	11,400,000	1,016,668	15,341,360
Actual Harvest 2010 ^a	14,550	1,436,606	266,431	8,864,796	734,806	11,317,189

FISHERY	2010 Harvest	
	Projection ^b	Actual ^c
Early Sockeye Salmon Fisheries (6/1–7/15 except Cape Igvak which is 6/1–26)		
Kitoi Bay Hatchery ^d	30,646	63,833
Cape Igvak ^e	109,477	175,955
Karluk ^f	55,000	107,129
Ayakulik ^g	294,000	91,916
Alitak District ^h	176,000	30,691
Minor Enhancement ^j	30,400	44,840
Spiridon ^k	88,000	103,587
Other ⁱ	309,000	187,066
Subtotal	1,092,523	805,017
Late Sockeye Salmon Fisheries (7/16–10/31 except Cape Igvak which is 7/8–25)		
Kitoi Bay Hatchery ^d	40,598	27,291
Cape Igvak ^e	96,463	29,815
Karluk ^f	440,000	190,021
Ayakulik ^g	126,000	177,527
Alitak District ^h	213,000	85,247
Spiridon ^k	88,000	70,886
Other ⁱ	395,000	50,802
Subtotal	1,399,061	631,589
Total Sockeye	2,491,584	1,436,606
Coho Salmon Fisheries		
Kitoi Bay Hatchery ^d	155,108	113,909
Afognak (non-hatchery) ^l	42,000	25,949
Westside Kodiak ^m	136,000	58,138
Alitak District	9,000	14,547
Eastside/Northend Kodiak ⁿ	51,000	32,115
Mainland District	20,000	21,773
Subtotal	413,108	266,431

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Table 9.—Page 2 of 3.

FISHERY	2010 Harvest	
	Projection ^b	Actual ^c
Pink Salmon Fisheries		
Kitoi Bay Hatchery ^d	5,700,000	3,250,469
Afognak (non-hatchery) ^l	416,100	1,997,971
Westside Kodiak ^m	4,109,700	2,645,798
Alitak District ⁿ	484,500	146,363
Eastside/Northend Kodiak ⁿ	467,400	682,887
Mainland District	222,300	141,308
Subtotal/Wild stock pinks	5,700,000	5,614,327
Subtotal/all pinks	11,400,000	8,864,796
Chum Salmon Fisheries		
Kitoi Bay Hatchery ^d	273,668	191,284
Afognak (non-hatchery) ^l	30,000	37,607
Westside Kodiak ^m	291,000	175,305
Alitak District	48,000	18,836
Eastside/Northend Kodiak ⁿ	220,000	136,434
Mainland District	154,000	175,340
Subtotal	1,016,668	734,806
Grand Total ^o	15,341,360	11,317,189

^a In number of salmon. Includes cost recovery harvests, but does not include subsistence, sport, personal use, or ADF&G test fishery harvests.

^b Projected harvests for enhanced and major sockeye systems are based on formal forecasts for those individual stocks (total run minus escapement); the projected harvest from minor sockeye systems and other salmon species are based on less formal escapement to return relationships, environmental factors, and interspecies competition (Eggers et al, 2010).

^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 through 25.

^f 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 through July 15 and 100 % after July 31 minus the estimated contribution from the Spiridon SHA. Includes the majority of Karluk sockeye salmon harvest.

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

^h From the Alitak District.

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- ⁱ Includes sockeye salmon harvested from minor systems at Inner and Outer Ugak Bay (Saltery), Buskin River, Perenosa Bay (Portage), Northwest Afognak (Thorsheim & Long Lagoon), Big River (Swishak), and Outer Kukak Bay (Kafliia and Kuliuk) sections and migrating fish of undetermined origin.
- ^j From the Foul Bay, Waterfall Bay, and Settler Cove Special Harvest Areas.
- ^k From the Spiridon Bay Special Harvest Area (Telrod Cove), plus an estimate of the Spiridon-bound sockeye contributing to the Westside Kodiak fishery.
- ^l From the Afognak District except the Duck, Izhut, 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 Larson, Sharatin, and Kizhuyak sections and part of the Central Section (259-30 to 259-39).
- ⁿ From the Eastside Kodiak District (all 258s, and 259-40 to 259-42), Northeast Kodiak District (259-21 to 259-25, 259-10), and the North Cape, Anton Larson, Sharatin and Kizhuyak sections, plus part of the Central Section (259-30 to 259-39)
- ^o Includes the projected 2010 harvest of 20,000 Chinook salmon, the actual harvest of 14,550 Chinook salmon.

Table 10.—Commercial salmon buyers and processing plants active in the Kodiak Management Area, by geographic area and type, 2010.

Buyers/Processors	Shore-based Processors			Floating Processors		
	Kodiak City	Kodiak Borough	Other Areas	Kodiak City	Kodiak Borough	Other Areas
Icicle Seafoods		X				
Alaska Pacific Seafoods	X					
International Seafoods of Alaska	X					
Western Alaska Seafoods	X					
Ocean Beauty Seafoods Kodiak	X					
Trident Seafoods	X					
Ocean Beauty Seafoods Alitak		X				
Alaska Fresh Seafoods	X					
Sun'aq Tribe	X					
Kodiak Island Smokehouse	X					
Island Seafoods	X					
Wild Alaska Salmon			X			
Homer Fish Processing			X	X		
William Pierszalowski F/V Shawnee				X		
Mark Gladu F/V Salmon Bay				X		
Al Cratty F/V Ashlee Christine C					X	
Totals	9	2	2	3	1	0

Table 11.—Commercial salmon harvest and value, by gear and species, in the Kodiak Management Area, 2010.

	Number of Salmon						
	Chinook	Sockeye	Coho	Pink	Chum	Total	%
Purse/Beach Seine							
Total # ^a	13,370	1,116,374	235,135	6,897,117	649,893	8,911,889	86.6
<u>Avg. Wt.</u>	<u>7.84</u>	<u>5.29</u>	<u>7.50</u>	<u>3.52</u>	<u>7.67</u>		
Total Lbs. ^a	104,847	5,906,204	1,762,946	24,310,956	4,983,046	37,067,999	85.4
<u>Avg. \$/Lb.</u> ^b	<u>\$ 1.01</u>	<u>\$ 1.39</u>	<u>\$ 0.67</u>	<u>\$ 0.34</u>	<u>\$ 0.49</u>		
Exvessel \$	\$105,895.47	\$8,209,623.56	\$1,181,173.82	\$8,265,725.04	\$2,441,692.54	\$20,204,110.43	83.3
# of Permits = 157							
Average Value \$	\$674.49	\$52,290.60	\$7,523.40	\$52,647.93	\$15,552.18	\$128,688.60	
Percent %	0.5	40.6	5.8	40.9	12.1	100.0	
Set Gillnet							
Total # ^a	1,180	306,098	30,840	958,475	82,967	1,379,560	13.4
<u>Avg. Wt.</u>	<u>9.52</u>	<u>5.57</u>	<u>7.80</u>	<u>3.92</u>	<u>7.74</u>		
Total Lbs. ^a	11,238	1,705,536	240,528	3,760,641	641,765	6,359,708	14.6
<u>Avg. \$/Lb.</u> ^b	<u>\$1.15</u>	<u>\$1.37</u>	<u>\$0.71</u>	<u>\$0.32</u>	<u>\$0.53</u>		
Exvessel \$	\$12,923.70	\$2,336,584.32	\$170,774.88	\$1,203,405.12	\$340,135.45	\$4,063,823.47	16.7
# of Permits = 158							
Average Value \$	\$81.80	\$14,788.51	\$1,080.85	\$7,616.49	\$2,152.76	\$25,720.40	
Percent %	0.3	57.5	4.2	29.6	8.4	100.0	
Total All Gear							
Total # ^a	14,550	1,422,472	265,975	7,855,592	732,860	10,291,449	100.0
<u>Avg. Wt.</u>	<u>7.98</u>	<u>5.35</u>	<u>7.53</u>	<u>3.57</u>	<u>7.68</u>		
Total Lbs. ^a	116,085	7,611,740	2,003,474	28,071,597	5,624,811	43,427,707	100.0
<u>Avg. \$/Lb.</u> ^b	<u>\$1.02</u>	<u>\$1.39</u>	<u>\$0.67</u>	<u>\$0.34</u>	<u>\$0.49</u>		
Exvessel \$	\$118,819.17	\$10,546,207.88	\$1,351,948.70	\$9,469,130.16	\$2,781,827.99	\$24,267,933.90	100.0
% of Total Value	0.5	43.5	5.6	39.0	11.5	100.0	

^a Numbers and pounds of fish are derived from ADF&G fish ticket summaries. There were 6,193 fish tickets generated in 2010; each ticket represents a landing. Each gear type had the following landings: Purse and Beach Seine – 3,299; Set Gillnet – 2,894. Numbers do not include cost recovery, commercially-harvested salmon retained, but not sold, or subsistence, or sport fishery harvests.

^b Average price per pound figures 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.

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, 1975–2010.

Year	Total Catch ^a	Total Value ^b	Average Exvessel Value ^c		
			Purse Seine	Gillnet	Beach Seine
1975	3,187,410	\$3,831,000	\$13,300	\$3,849	\$5,600
1976	12,484,451	\$16,976,000	\$43,017	\$14,481	\$11,035
1977	7,976,691	\$18,873,142	\$46,942	\$19,117	\$12,107
1978	16,942,215	\$30,357,179	\$70,685	\$22,711	\$14,772
1979	12,420,260	\$22,958,317	\$51,263	\$23,363	\$20,348
1980	19,157,249	\$27,410,296	\$62,363	\$21,215	\$23,385
1981	13,094,099	\$32,647,230	\$79,877	\$34,785	\$26,946
1982	10,891,952	\$18,803,822	\$39,309	\$28,889	\$11,038
1983	7,081,976	\$13,405,578	\$30,239	\$16,689	\$5,918
1984	13,678,005	\$25,948,012	\$71,560	\$26,552	\$12,341
1985	9,897,903	\$20,428,111	\$57,782	\$27,517	\$8,405
1986	16,304,165	\$38,723,961	\$92,693	\$68,700	\$11,885
1987	7,746,980	\$31,107,864	\$79,812	\$41,163	\$15,664
1988	19,009,757	\$103,816,936	\$252,388	\$119,013	\$47,017
1989 ^d	26,455,944	\$61,046,024	\$146,502	\$72,955	\$28,288
1990	12,121,689	\$52,761,885	\$111,524	\$71,015	\$10,277
1991	23,721,741	\$31,484,142	\$65,445	\$46,663	\$4,518
1992	8,461,325	\$40,464,655	\$97,917	\$42,133	\$5,414
1993	39,339,737	\$38,729,798	\$95,375	\$44,055	\$8,276
1994	12,097,170	\$27,469,284	\$67,701	\$47,690	\$9,447
1995	49,186,147	\$53,912,881	\$135,605	\$66,413	\$14,337
1996	9,214,520	\$27,528,528	\$70,737	\$52,608	\$2,947
1997	14,458,296	\$21,148,836	\$55,390	\$38,213	\$8,571
1998	26,444,087	\$34,847,388	\$119,512	\$52,082	— ^e
1999	17,776,604	\$34,084,142	\$109,243	\$57,927	\$7,308
2000	14,372,182	\$22,103,837	\$71,536	\$35,386	— ^e
2001	23,710,148	\$18,898,115	\$78,114	\$27,218	\$0
2002	21,314,421	\$12,651,332	\$68,552	\$26,206	\$0
2003	18,030,034	\$16,307,461	\$79,869	\$30,349	\$0
2004	25,359,691	\$19,260,231	\$93,942	\$37,246	\$0
2005	31,434,179	\$24,067,755	\$129,181	\$40,172	\$0
2006	32,595,862	\$23,788,440	\$150,318	\$27,740	— ^e
2007	26,238,930	\$27,224,796	\$148,355	\$41,058	\$3,484
2008	10,127,638	\$25,415,333	\$148,605	\$43,202	\$0
2009	28,338,462	\$33,713,563	\$174,661	\$47,593	— ^e
2010	10,291,449	\$24,267,934	\$130,009	\$25,720	— ^e
<u>Average—Previous 10 Years:</u>					
2000–2009	23,152,155	\$22,343,086	\$114,313	\$35,617	\$498
<u>Average ^f - Previous Decades:</u>					
1990–1999	21,282,132	\$36,243,154	\$92,845	\$51,880	\$7,899
1980–1988	12,984,676	\$34,699,090	\$85,114	\$42,725	\$18,067
<u>Average ^f—Overall</u>					
1970–2009	18,065,176	\$29,151,466	\$90,083	\$39,500	\$10,035

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Source: ADF&G Annual Management Reports and Commercial Fisheries Entry Commission reports.

- ^a Number of fish. Includes commercial harvest that was sold, but not that set aside for personal use or test fishery harvest, and cost recovery harvests.
- ^b Exvessel values for 1975–1976 and 2001–2010 are based on inseason price estimates, and do not include postseason adjustments. Values from 1977–1988 and 1990–2000 are from Commercial Fisheries Entry Commission reports.
- ^c Exvessel value is based on fish ticket information. These average values do not reflect payments made to harvesters for iced fish, dock deliveries, and postseason settlements.
- ^d In 1989, due to the presence of oil from the M/V Exxon Valdez spill, there were extensive fishery closures. Harvest figures include actual and projected harvest of wild stocks and actual harvest of hatchery stocks from a supplemental cost recovery fishery. The 1989 exvessel value is estimated by multiplying price information from CFEC records for the limited fisheries that did occur by the projected total harvest had there been no oil spill. The 1989 exvessel value by gear type is estimated by using 1988 gear levels and proportional harvest by gear type, as if a normal fishery had occurred on a normal distribution of fish (Barrett et al. 1990).
- ^e Confidential data.
- ^f 1989 data not included in averages.

Table 13.—Subsistence salmon fishery harvest from ADF&G permit reports, by species, for the Kodiak Management Area, 1970–2009.

Year	Permits Issued	Permits Returned	Percent Returned	Number of Salmon					
				Chinook	Sockeye	Coho	Pink	Chum	Total
1978	860	539	63	50	7,239	3,699	2,747	572	14,307
1979	1,085	697	64	111	10,376	3,840	3,300	333	17,960
1980	1,239	756	61	67	13,746	4,407	2,755	566	21,541
1981	1,166	658	56	49	12,924	4,029	2,458	484	19,944
1982	1,276	993	78	110	16,615	7,192	3,558	667	28,142
1983	1,307	1,082	83	111	15,526	6,283	2,536	800	25,256
1984	1,240	1,061	86	265	17,620	5,808	1,877	720	26,290
1985	1,476	1,196	81	172	16,231	8,873	2,756	855	28,887
1986	1,244	996	80	90	14,391	6,998	2,371	605	24,455
1987	1,124	878	78	101	13,198	6,463	2,421	1,299	23,482
1988 ^a	-	2,066	N/A	108	10,081	4,291	1,320	371	16,171
1989 ^{a,b}	-	1,994	N/A	43	12,638	4,123	1,553	419	18,776
1990 ^a	-	2,340	N/A	131	17,959	8,627	1,605	655	28,977
1991 ^a	-	2,660	N/A	177	21,835	8,208	1,743	714	32,677
1992 ^a	-	2,614	N/A	318	20,684	8,643	1,646	643	31,934
1993 ^a	-	1,774	N/A	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 ^c	1,950	1,218	62	175	19,416	5,603	1,548	293	27,035
1996 ^c	1,567	1,429	91	253	28,287	5,117	1,125	381	35,163
1997 ^c	2,098	1,648	79	383	33,293	6,369	1,458	234	41,737
1998 ^c	1,845	1,145	62	350	20,459	5,348	1,412	214	27,783
1999 ^c	1,845	1,437	78	397	26,534	4,974	1,229	388	33,522
2000 ^c	1,711	1,679	98	351	31,667	6,383	977	375	39,753
2001 ^c	2,378	2,009	84	273	33,878	5,920	1,158	427	41,656
2002 ^c	2,277	2,068	91	588	33,844	6,175	1,665	350	42,622
2003 ^c	2,272	2,052	90	510	32,193	6,098	1,509	388	40,698
2004 ^c	2,241	2,063	92	379	30,503	5,857	1,403	261	38,403
2005 ^c	2,290	1,958	86	434	27,664	7,703	2,350	592	38,743
2006 ^c	2,095	1,911	91	280	22,985	6,640	1,827	441	32,173
2007 ^c	2,096	1,929	92	207	25,656	4,715	1,585	266	32,429
2008 ^c	2,037	1,745	86	159	21,852	4,570	1,180	186	27,947
2009 ^c	1,926	1,780	92	176	23,114	4,127	1,926	345	29,688
<u>Recent 10-year Average</u>									
2000–2009	2,132	1,919	90	336	28,336	5,819	1,558	363	36,411
species composition by percent				1%	78%	16%	4%	1%	100%
<u>Averages ^b—Previous Decades:</u>									
1990–1999	1,976	1,778	90	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
<u>Average ^b—Overall</u>									
1970–2008	1,738	1,545	79	233	21,200	6,052	1,932	507	29,924

Source: 1981 and 1986 to 2009 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 may not represent the total KMA subsistence salmon harvest.

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Table 13.–Page 2 of 2.

- ^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.
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Table 14.—Retention of salmon taken in commercial salmon fisheries but not sold, by species, for the Kodiak Management Area, 1997–2010.

Year	Permits	Landings	Number of Salmon ^a					Total
			Chinook	Sockeye	Coho	Pink	Chum	
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 ^c	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	32	49	805	2,726	883	6	4,469
2010	42	74	160	2,330	2,976	6,267	15	11,748
10-yearAverage:								
2000–2009	21	42	51	3,418	3,209	1,218	31	7,927

Source: ADF&G fish ticket data base

^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).

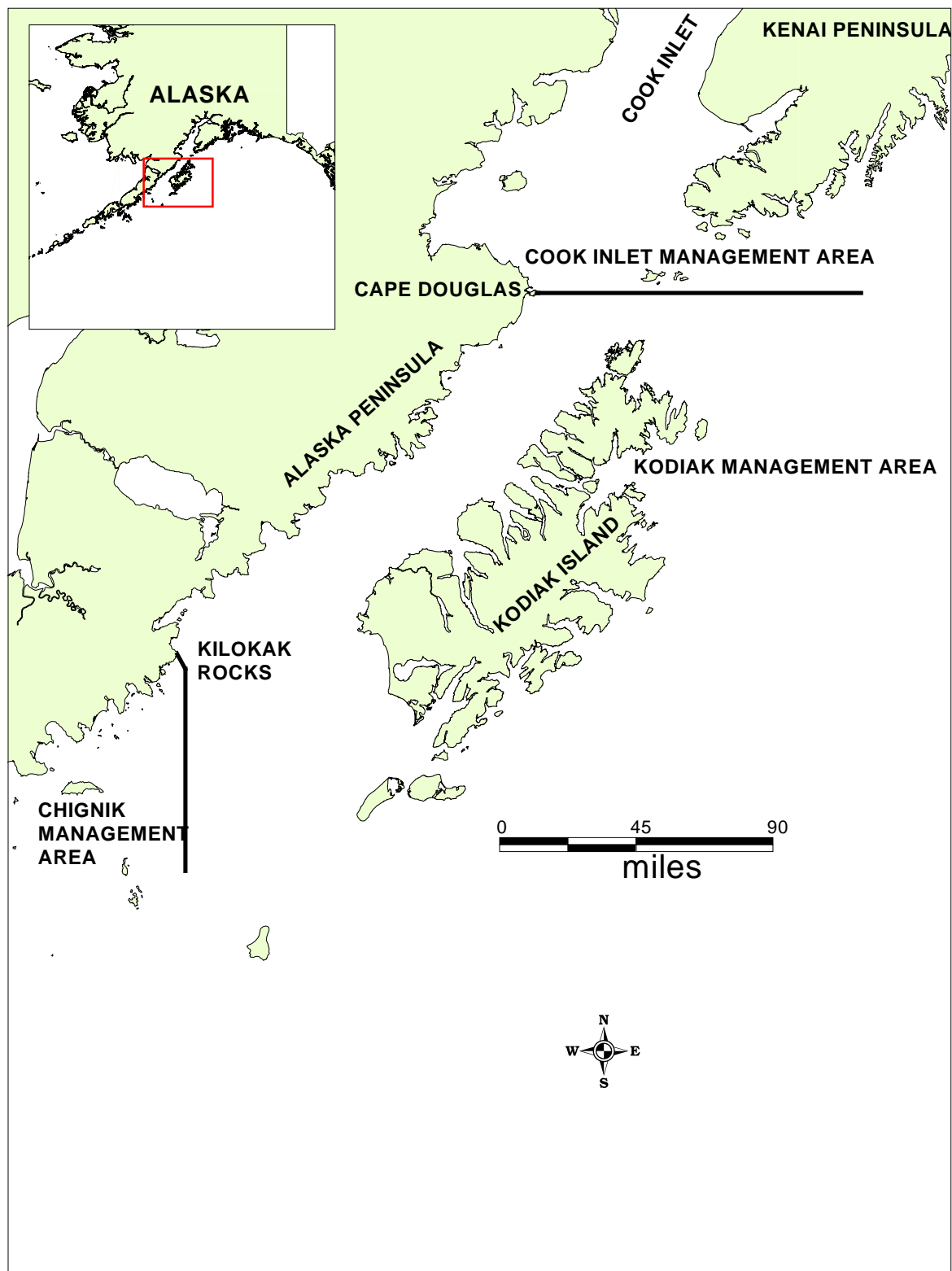


Figure 1.—Map of the Kodiak Management Area and neighboring management areas, 2010.

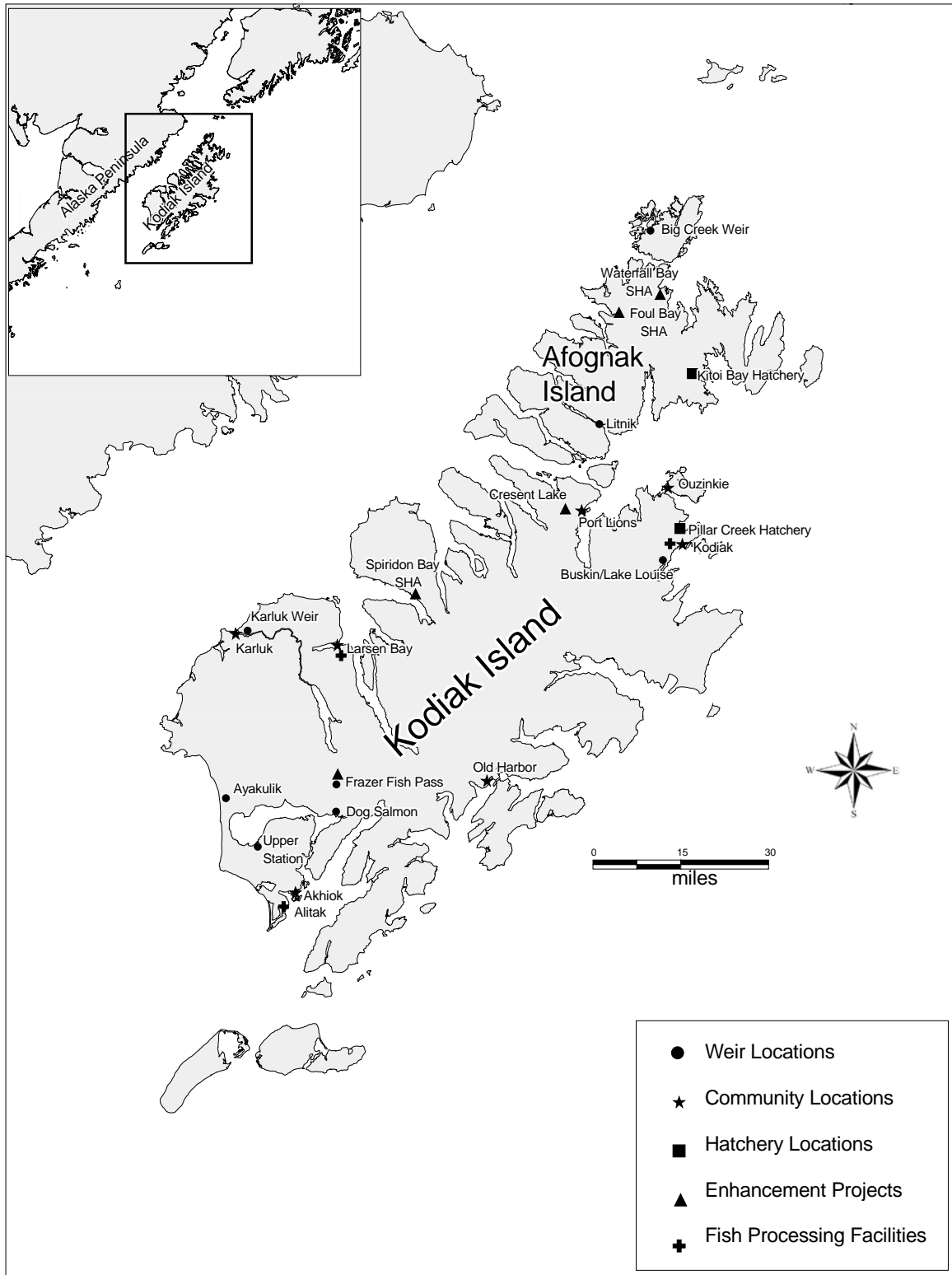


Figure 2.—Map of the Kodiak Archipelago showing communities, fish processing facilities, sockeye salmon enhancement projects, weir, and hatchery locations in the Kodiak Management Area, 2010.

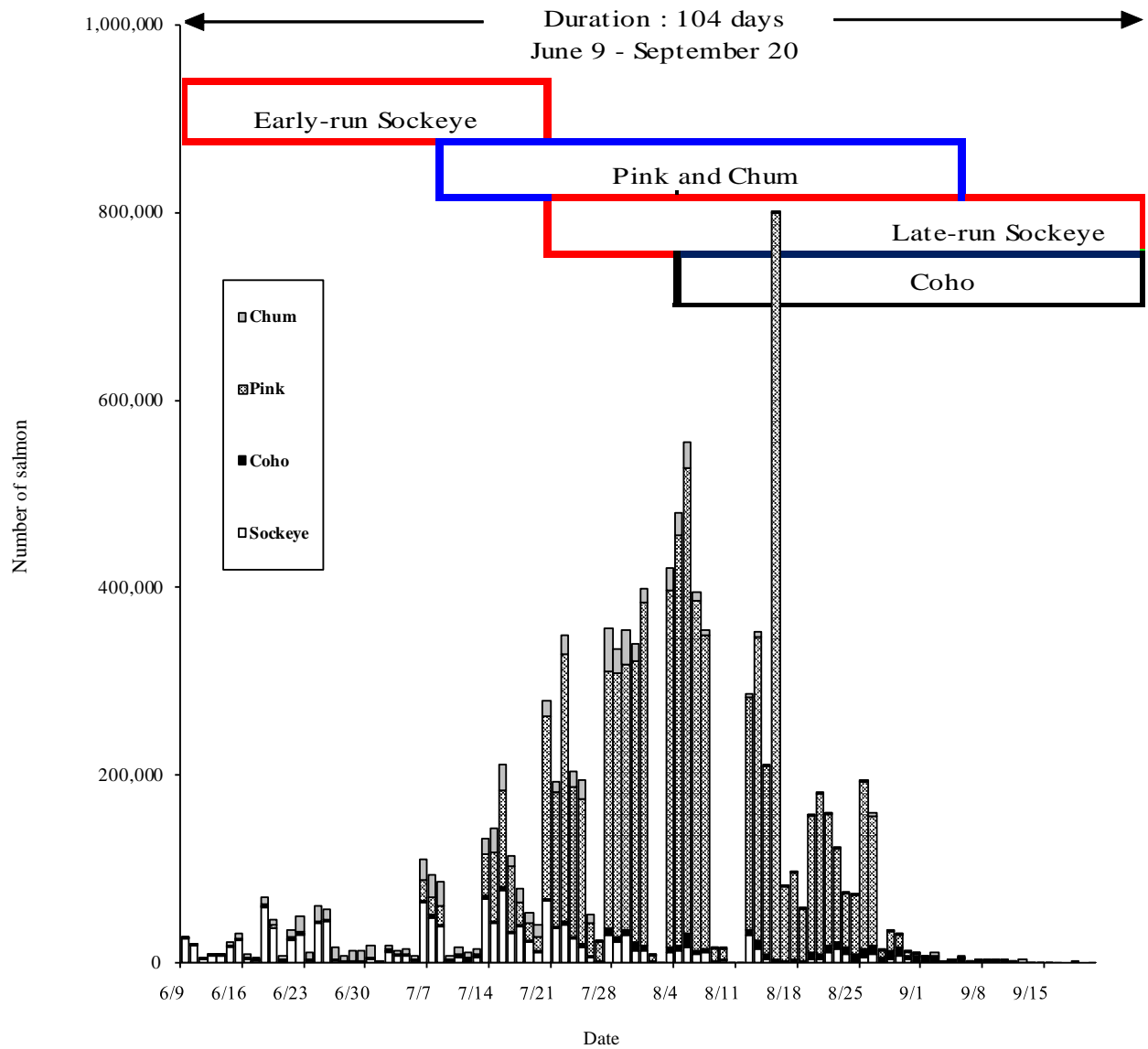
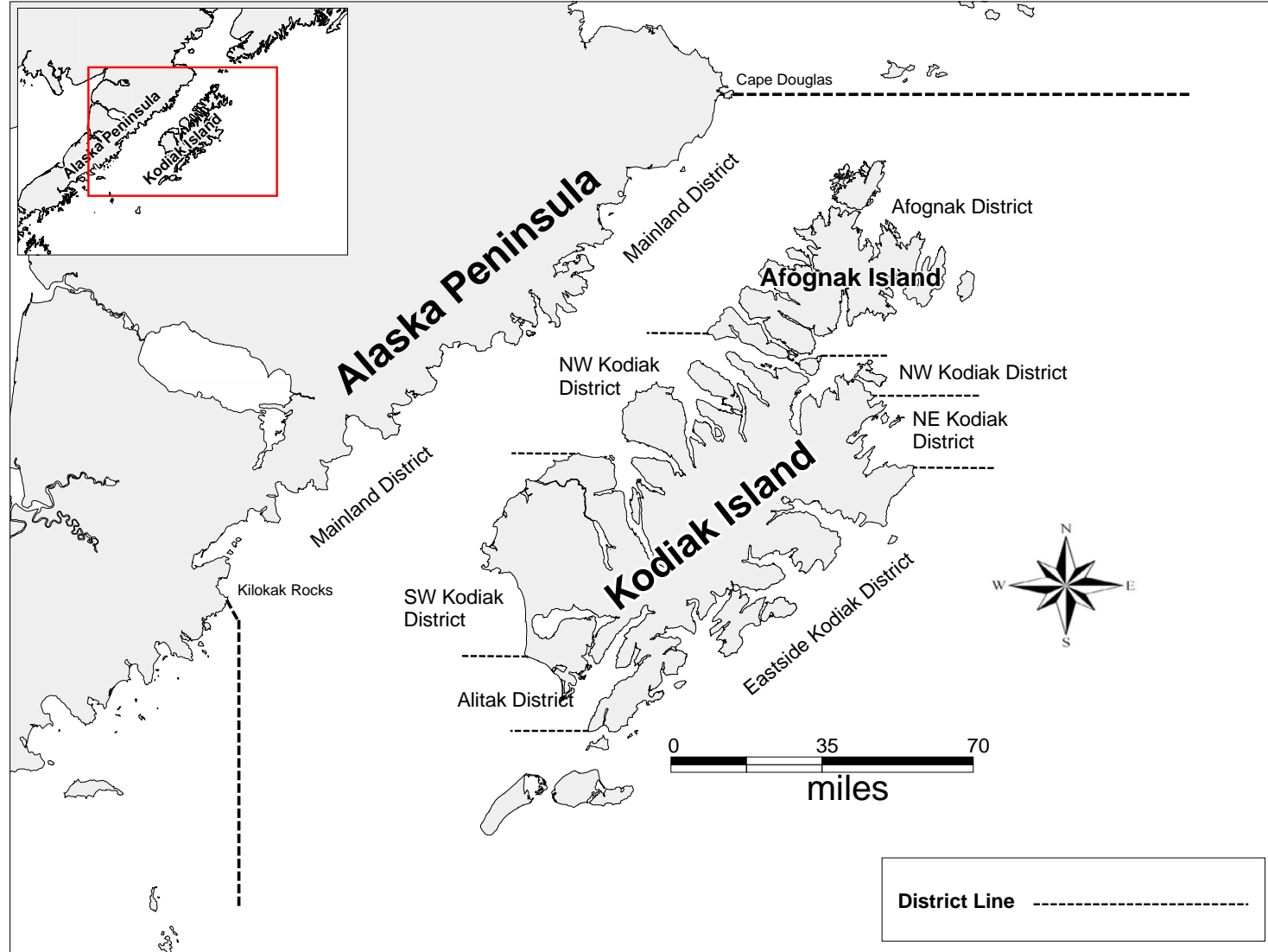
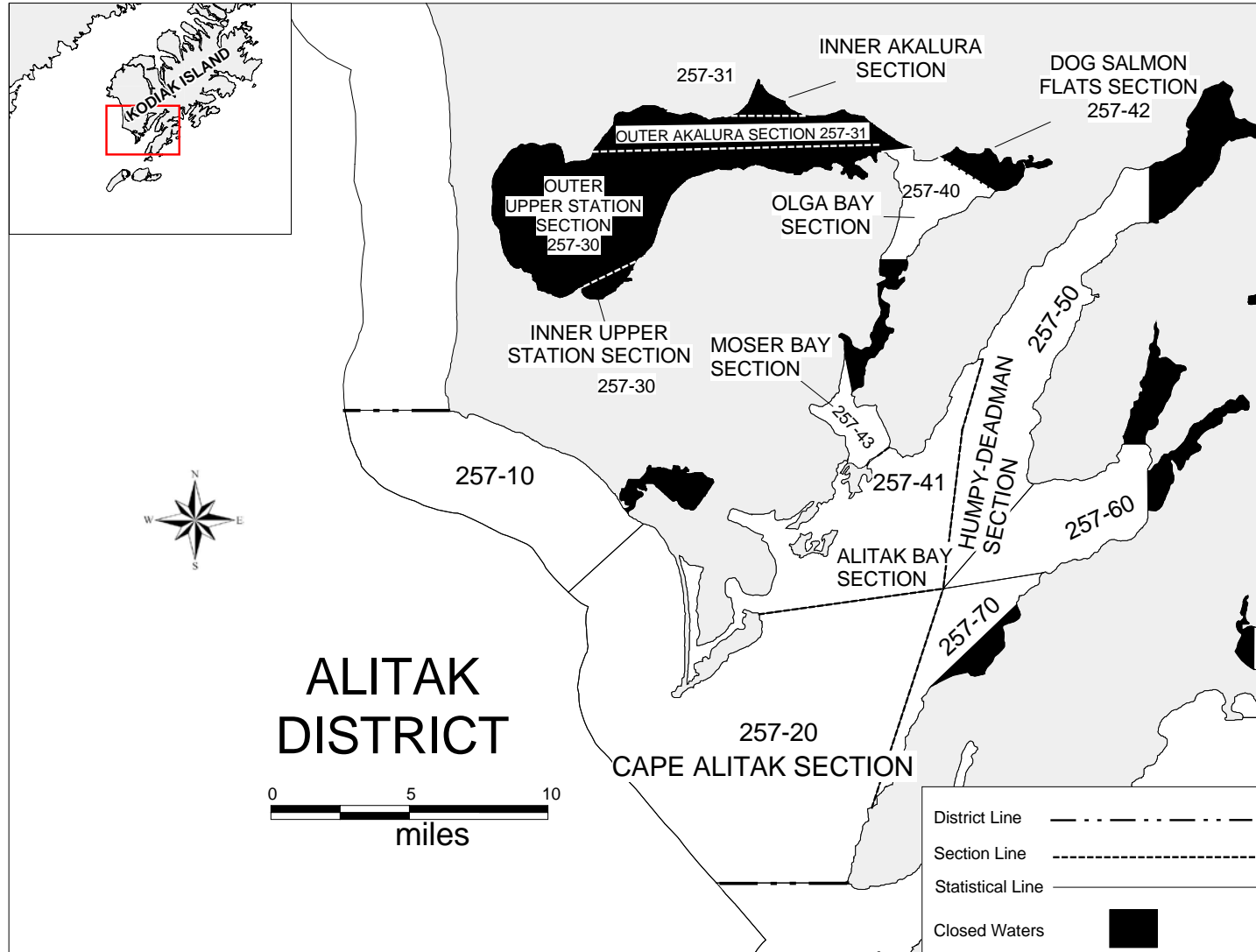


Figure 3.—Commercial salmon fishery chronology and daily harvest by date and species of management focus, Kodiak Management Area, 2010.

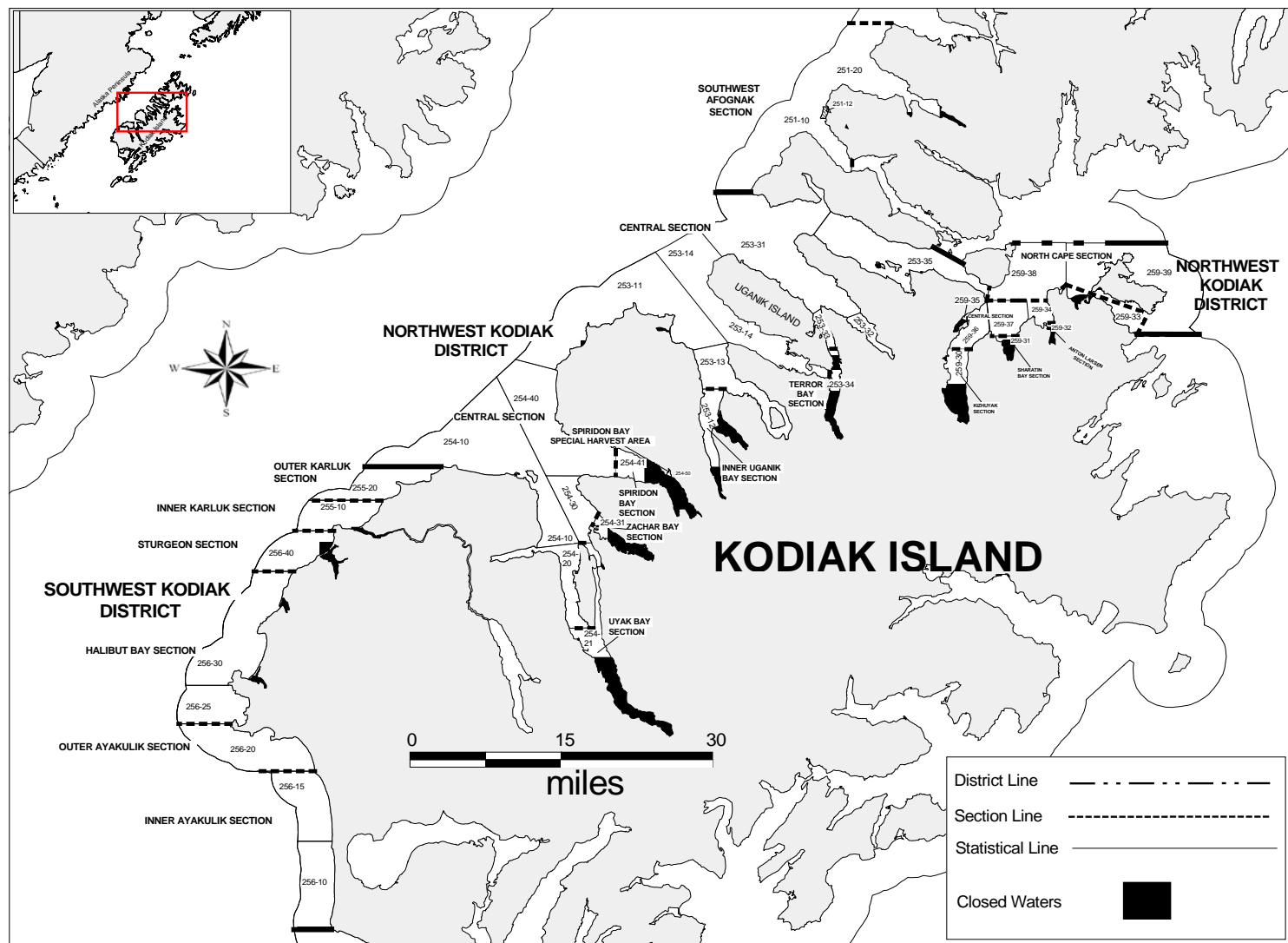
APPENDIX A. MAPS OF FISHING DISTRICTS



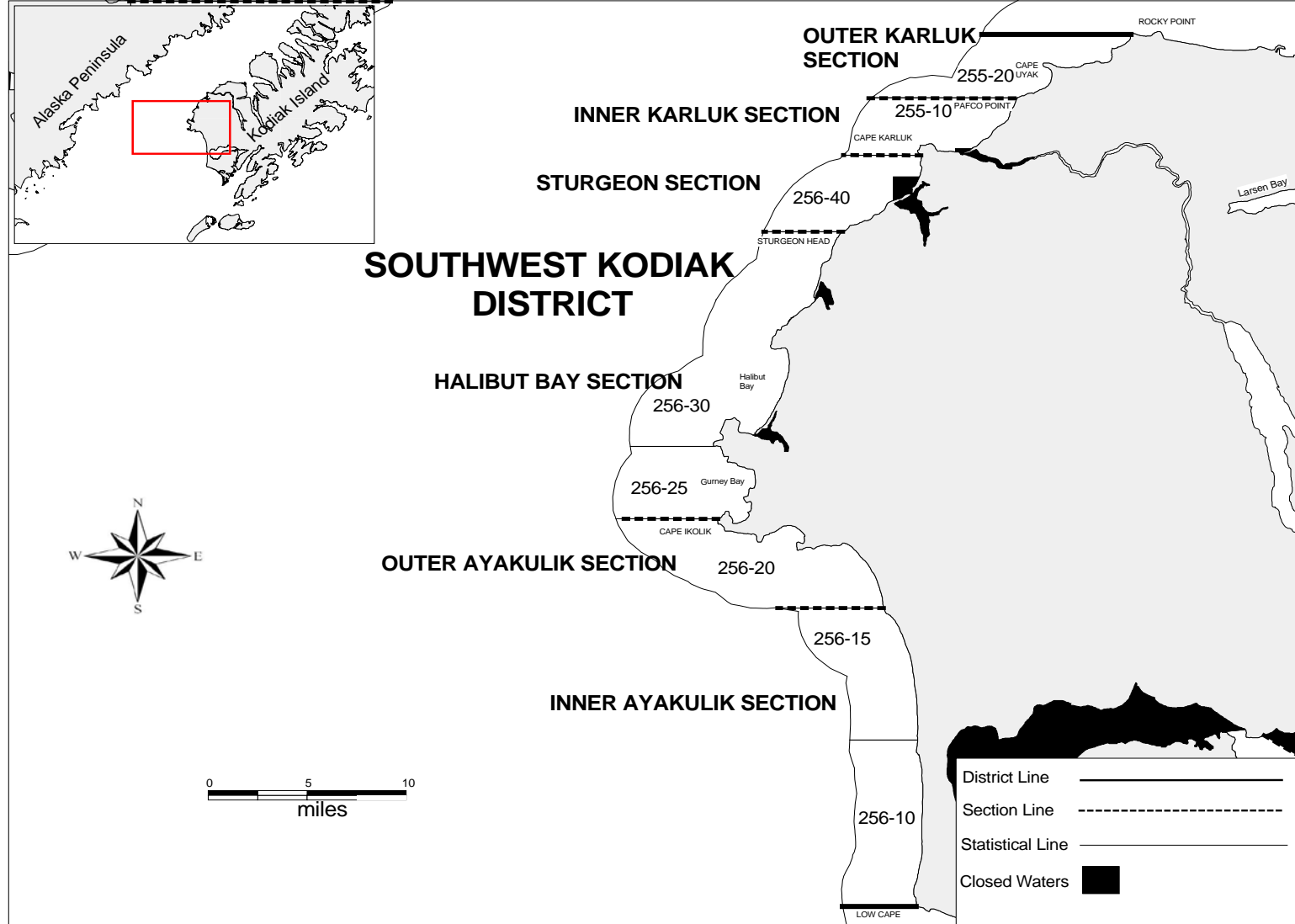
Appendix A1.—Map of the Kodiak Management Area commercial salmon fishing districts.



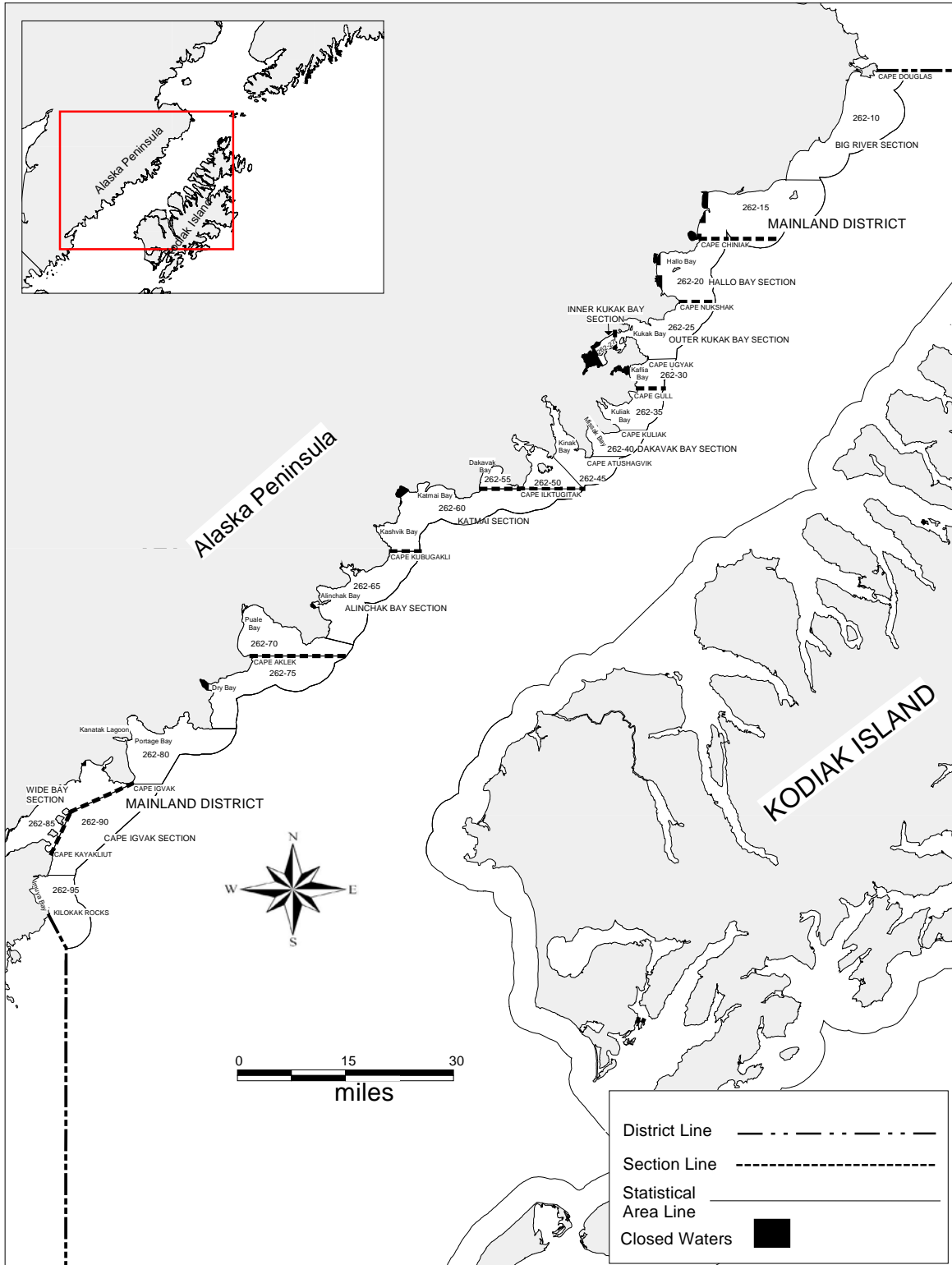
Appendix A2.—Map of the Alitak District commercial salmon fishing sections and statistical areas.



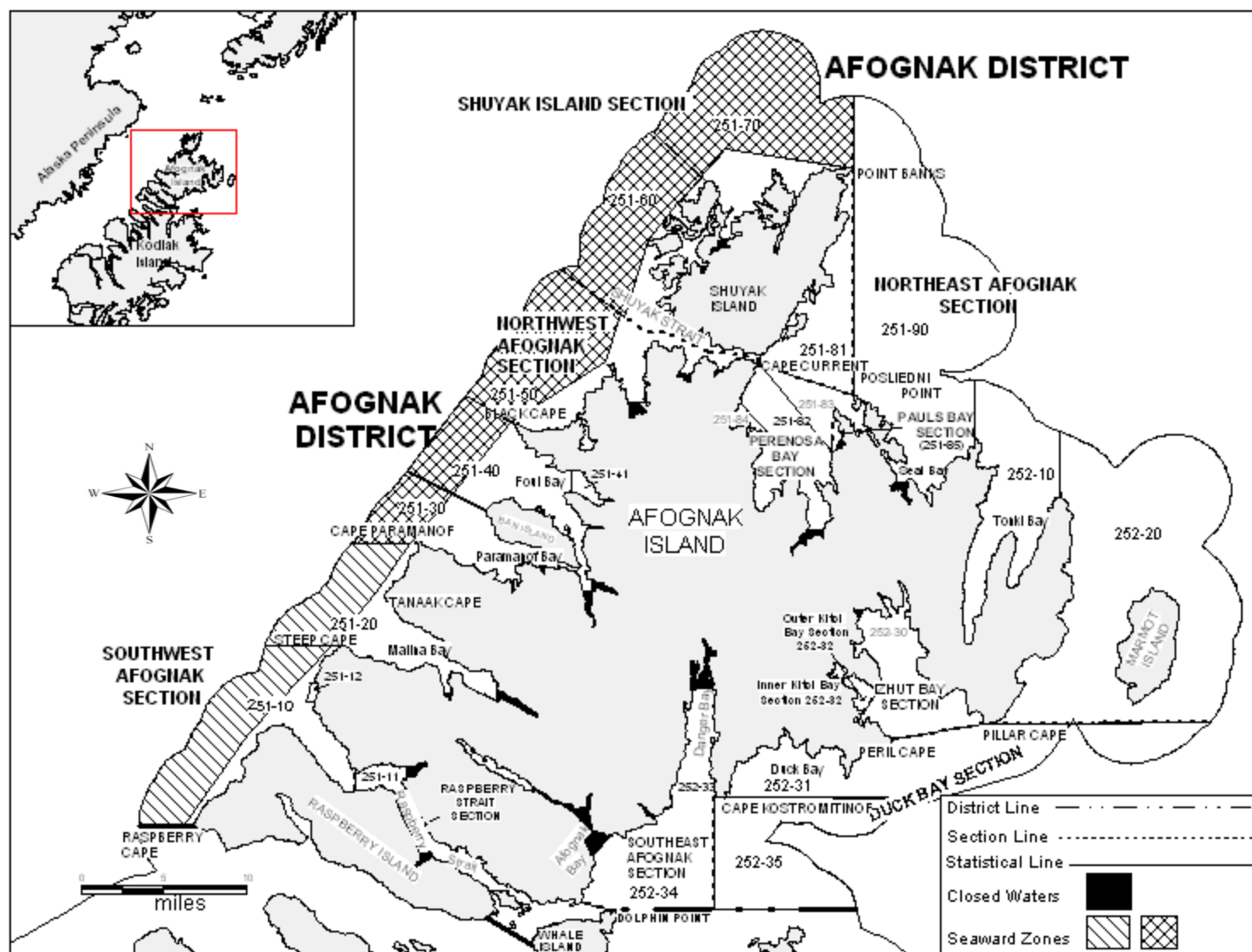
Appendix A3.—Map of the Northwest Kodiak District commercial salmon fishing sections and statistical areas.

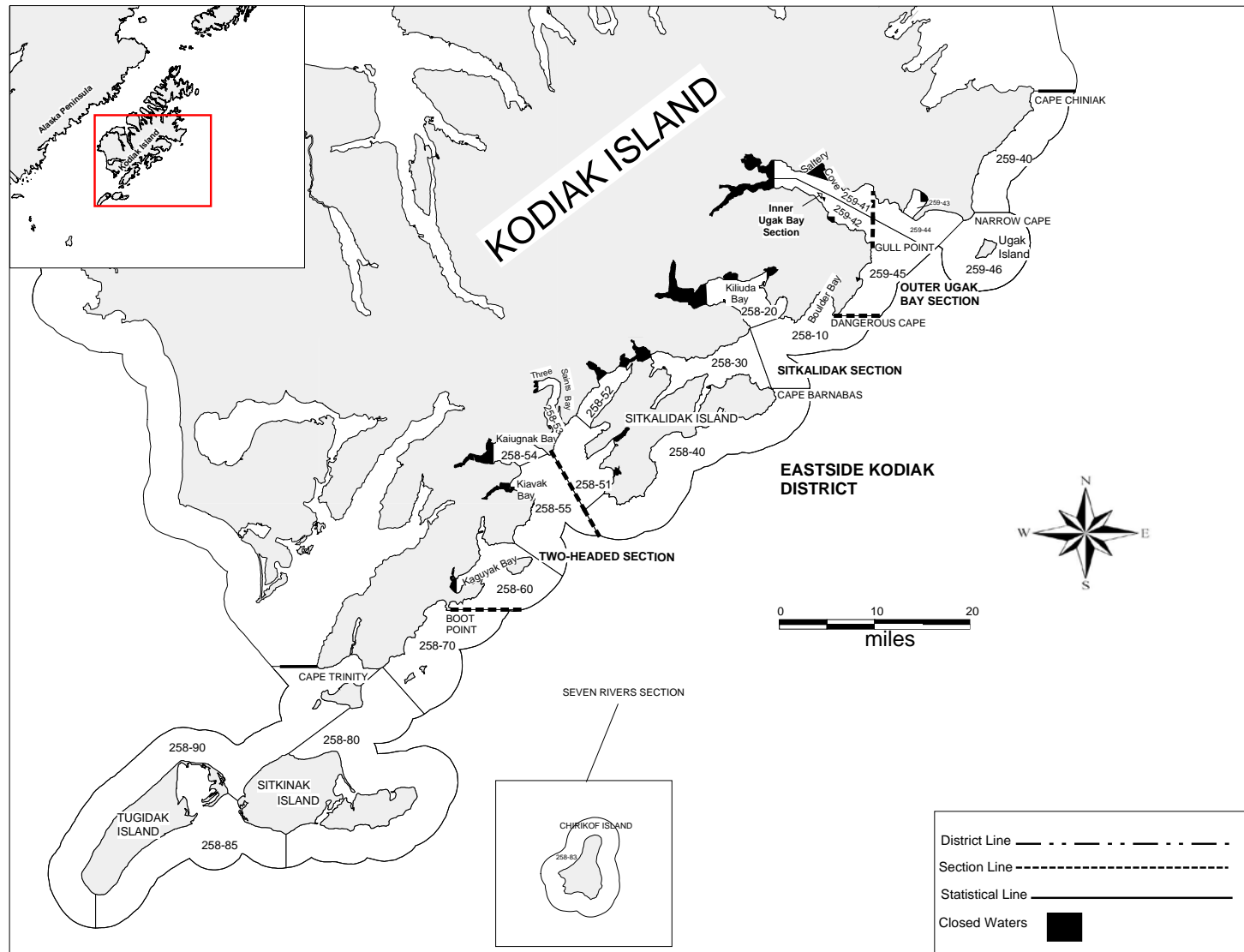


Appendix A4.—Map of the Southwest Kodiak District commercial salmon fishing sections and statistical areas.



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 A8.—Map of the Northeast Kodiak District commercial salmon fishing sections and statistical areas.

APPENDIX B. INSEASON MANAGEMENT ACTIONS

Appendix B1.—Commercial salmon fishing time, by district and section, in the Kodiak Management Area, 2010.

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
Northwest Kodiak	Central																														
	North Cape																														
	Anton Larson																														
	Sharatin																														
	Kizhuyak																														
	Terror Bay																														
	Inner Uganik Bay																														
	Spiridon SHA																														
	Spiridon Bay																														
	Zachar Bay																														
	Uyak Bay																														
Southwest Kodiak	Outer Karluk																														
	Inner Karluk																														
	Sturgeon																														
	Halibut Bay																														
	Outer Ayakulik																														
	Inner Ayakulik																														
Alitak	Olga Bay																														
	Moser																														
	Alitak Bay																														
	Cape Alitak																														
	Humpy - Deadman																														
	Dog Salmon Flats																														
	Outer Akalura																														
	Inner Akalura																														
	Outer Upper Station																														
	Inner Upper Station																														
Eastside Kodiak	Seven Rivers																														
	Two Headed																														
	Sitkalidak																														
	Outer Ugak Bay																														
	Inner Ugak Bay																														
fishing time in entire section																															
fishing time in partial section																															

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Appendix B1.–Page 2 of 8.

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
Northeast Kodiak	Outer Chiniak																														
	Inner Chiniak																														
	Buskin River																														
	Monashka-Mill Bay																														
Afognak	Southeast Afognak																														
	Duck Bay																														
	Izhut Bay																														
	Inner Kitoi Bay																														
	Outer Kitoi Bay																														
	Northeast Afognak																														
	Pauls Bay																														
	Perenosa																														
	Waterfall Bay SHA																														
	Shuyak Island																														
	Northwest Afognak																														
	Foul Bay SHA																														
	Southwest Afognak																														
	Malina THA																														
	Raspberry Strait																														
Mainland	Big River																														
	Hallo Bay																														
	Outer Kukak Bay																														
	Inner Kukak Bay																														
	Dakavak Bay																														
	Katmai																														
	Alinchak																														
	Cape Igvak																														
	Wide Bay																														
fishing time in entire section																															
fishing time in partial section																															

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Appendix B1.–Page 3 of 8.

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
Northwestern Kodiak	Central																															
	North Cape																															
	Anton Larson																															
	Sharatin																															
	Kizhuyak																															
	Terror Bay																															
	Inner Uganik Bay																															
	Spiridon SHA																															
	Spiridon Bay																															
	Zachar Bay																															
	Uyak Bay																															
Southwest Kodiak	Outer Karluk																															
	Inner Karluk																															
	Sturgeon																															
	Halibut Bay																															
	Outer Ayakulik																															
	Inner Ayakulik																															
Alitak	Olga Bay																															
	Moser																															
	Alitak Bay																															
	Cape Alitak																															
	Humpy - Deadman																															
	Dog Salmon Flats																															
	Outer Akalura																															
	Inner Akalura																															
	Outer Upper Station																															
	Inner Upper Station																															
Eastside Kodiak	Seven Rivers																															
	Two Headed																															
	Sitkalidak																															
	Outer Ugak Bay																															
	Inner Ugak Bay																															
fishing time in entire section																																
fishing time in partial section																																

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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
Northeast Kodiak	Outer Chiniak																															
	Inner Chiniak																															
	Buskin River																															
	Monashka-Mill Bay																															
Afognak	Southeast Afognak																															
	Duck Bay																															
	Izhut Bay																															
	Inner Kitoi Bay																															
	Outer Kitoi Bay																															
	Northeast Afognak																															
	Pauls Bay																															
	Perenosia																															
	Waterfall Bay SHA																															
	Shuyak Island																															
	Northwest Afognak																															
	Foul Bay SHA																															
	Southwest Afognak																															
	Malina THA																															
	Raspberry Strait																															
Mainland	Big River																															
	Hallo Bay																															
	Outer Kukak Bay																															
	Inner Kukak Bay																															
	Dakavak Bay																															
	Katmai																															
	Alinchak																															
	Cape Igvak																															
	Wide Bay																															
fishing time in entire section																																
fishing time in partial section																																

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Appendix B1.–Page 5 of 8.

Districts/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
Northwest Kodiak	Central																															
	North Cape																															
	Anton Larson																															
	Sharatin																															
	Kizhuyak																															
	Terror Bay																															
	Inner Uganik Bay																															
	Spiridon SHA																															
	Spiridon Bay																															
	Zachar Bay																															
	Uyak Bay																															
		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
Southwest Kodiak	Outer Karluk																															
	Inner Karluk																															
	Sturgeon																															
	Halibut Bay																															
	Outer Ayakulik																															
	Inner Ayakulik																															
		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
Alitak	Olga Bay																															
	Moser																															
	Alitak Bay																															
	Cape Alitak																															
	Humpy - Deadman																															
	Dog Salmon Flats																															
	Outer Akalura																															
	Inner Akalura																															
	Outer Upper Station																															
	Inner Upper Station																															
		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
Eastside Kodiak	Seven Rivers																															
	Two Headed																															
	Sitkalidak																															
	Outer Ugak Bay																															
	Inner Ugak Bay																															
fishing time in entire section																																
fishing time in partial section																																

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Appendix B1.–Page 6 of 8.

Districts/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
Northeast Kodiak	Outer Chiniak																															
	Inner Chiniak																															
	Buskin River																															
	Monashka-Mill Bay																															
Afognak		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
	Southeast Afognak																															
	Duck Bay																															
	Izhut Bay																															
	Inner Kitoi Bay																															
	Outer Kitoi Bay																															
	Northeast Afognak																															
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	Foul Bay SHA																															
	Southwest Afognak																															
	Malina THA																															
	Raspberry Strait																															
Mainland		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
	Big River																															
	Hallo Bay																															
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	Inner Kukak Bay																															
	Dakavak Bay																															
	Katmai																															
	Alinchak																															
	Cape Igvak																															
	Wide Bay																															
fishing time in entire section																																
fishing time in partial section																																

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Districts/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	9/17	9/18	9/19	9/20	9/21	9/22	9/23	9/24	9/25	9/26	9/27	9/28	9/29	9/30
Northwest Kodiak	Central																														
	North Cape																														
	Anton Larson																														
	Sharatin																														
	Kizhuyak																														
	Terror Bay																														
	Inner Uganik Bay																														
	Spiridon SHA																														
	Spiridon Bay																														
	Zachar Bay																														
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Southwest Kodiak	Outer Karluk																														
	Inner Karluk																														
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	Outer Ayakulik																														
	Inner Ayakulik																														
Alitak	Olga Bay																														
	Moser																														
	Alitak Bay																														
	Cape Alitak																														
	Humpy - Deadman																														
	Dog Salmon Flats																														
	Outer Akalura																														
	Inner Akalura																														
	Outer Upper Station																														
	Inner Upper Station																														
Eastside Kodiak	Seven Rivers																														
	Two Headed																														
	Sitkalidak																														
	Outer Ugak Bay																														
	Inner Ugak Bay																														
fishing time in entire section																															
fishing time in partial section																															

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Appendix B1.–Page 8 of 8.

Districts/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	9/17	9/18	9/19	9/20	9/21	9/22	9/23	9/24	9/25	9/26	9/27	9/28	9/29	9/30
Northeast Koodlak	Outer Chiniak																														
	Inner Chiniak																														
	Buskin River																														
	Monashka-Mill Bay																														
Afognak		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	9/17	9/18	9/19	9/20	9/21	9/22	9/23	9/24	9/25	9/26	9/27	9/28	9/29	9/30
	Southeast Afognak																														
	Duck Bay																														
	Izhut Bay																														
	Inner Kitoi Bay																														
	Outer Kitoi Bay																														
	Northeast Afognak																														
	Pauls Bay																														
	Perenosa																														
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	Shuyak Island																														
	Northwest Afognak																														
	Foul Bay SHA																														
	Southwest Afognak																														
	Malina THA																														
	Raspberry Strait																														
Mainland		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	9/17	9/18	9/19	9/20	9/21	9/22	9/23	9/24	9/25	9/26	9/27	9/28	9/29	9/30
	Big River																														
	Hallo Bay																														
	Outer Kukak Bay																														
	Inner Kukak Bay																														
	Dakavak Bay																														
	Katmai																														
	Alinchak																														
	Cape Igvak																														
	Wide Bay																														
fishing time in entire section																															
fishing time in partial section																															

Appendix B2.—Summary of emergency orders issued in the Kodiak Management Area, 2010.

E.O. #	Issued	Effective	Action in Effect
1	10:30 AM 6/5/10	NOON 6/9/10	<p><u>Opening</u> for 33 hours, until 9:00 PM 6/10:</p> <ul style="list-style-type: none"> Northwest Kodiak District (except the Kizhuyak section which remained closed) Alitak District
		NOON 6/9/10	<p><u>Opening</u> until further notice:</p> <ul style="list-style-type: none"> Foul Bay Special Harvest Area (FBSHA) Waterfall Bay Special Harvest Area (WBSHA) Inner Kitoi Bay, Outer Kitoi Bay, Duck Bay, Izhut Bay sections
		NOON 6/9/10	<p><u>Closed water adjustments:</u></p> <ul style="list-style-type: none"> Reduced until further notice in Foul Bay and Waterfall Bay
2	3:30 PM 6/7/10	NOON 6/9/10	<p><u>Opening</u> for 33 hours until 9:00 PM 6/10:</p> <ul style="list-style-type: none"> Southeast Afognak Section <p><u>Open</u> until further notice:</p> <ul style="list-style-type: none"> FBSHA WBSHA Duck Bay, Izhut Bay, Inner Kitoi Bay, and Outer Kitoi Bay sections <p><u>Closed water adjustments:</u></p> <ul style="list-style-type: none"> Reduced until further notice in Foul Bay and Waterfall
3	11:30 AM 6/8/10	6:00 PM 6/9/10	<p><u>Extension</u> until further notice:</p> <ul style="list-style-type: none"> Southeast Afognak Section Eastside Kodiak District
		NOON 6/9/10	<p><u>Closed Water Adjustment:</u></p> <p>Reduced until further notice:</p> <ul style="list-style-type: none"> Afognak Bay <p><u>Open</u> until further notice:</p> <ul style="list-style-type: none"> FBSHA WBSHA Duck Bay, Izhut Bay, Inner Kitoi Bay and Outer Kitoi Bay sections <p><u>Closed water adjustments:</u></p> <ul style="list-style-type: none"> Reduced until further notice in Foul Bay and Waterfall

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E.O. #	Issued	Effective	Action in Effect
6	6:30 PM 6/16/10	12:01 AM 6/18/10	<p><u>Opening</u> for 48 hours until 12:01 AM 6/20:</p> <ul style="list-style-type: none"> • Cape Igvak Section <p><u>Open</u> until further notice:</p> <ul style="list-style-type: none"> • FBSHA • WBSHA • Duck Bay, Izhut Bay, Inner Kitoi Bay, and Outer Kitoi Bay sections • Southeast Afognak Section <p><u>Closed Water Adjustment:</u></p> <ul style="list-style-type: none"> • Reduced until further notice in Foul Bay and Waterfall Bay • Reduced until further notice in Afognak Bay
7	3:30 PM 6/17/10	NOON 6/21/10 NOON 6/21/10	<p><u>Opening</u> for 33 hours until 9:00 PM 6/22:</p> <ul style="list-style-type: none"> • Northwest Afognak, Pauls Bay and Perenosa Bay sections • Eastside Kodiak District • Big River and Outer Kukak sections <p><u>Closed Water Adjustments:</u> Reduced until 9:00 PM 6/22</p> <ul style="list-style-type: none"> • Kafia Bay <p><u>Open</u> until further notice:</p> <ul style="list-style-type: none"> • FBSHA • WBSHA • Duck Bay, Izhut Bay, Inner Kitoi Bay, and Outer Kitoi Bay sections • Southeast Afognak Section <p><u>Closed Water Adjustment:</u></p> <ul style="list-style-type: none"> • Reduced until further notice in Foul Bay and Waterfall Bay • Reduced until further notice in Afognak Bay
8	9:30 AM 6/20/10	NOON 6/21/10	<p><u>Opening</u> for 57 hours until 9:00 PM 6/23:</p> <ul style="list-style-type: none"> • Outer Ayakulik Section <p><u>Non-retention</u> of Chinook salmon 28 inches or longer until 9:00 PM 6/23:</p> <ul style="list-style-type: none"> • Outer Ayakulik Section <p><u>Open</u> until further notice:</p> <ul style="list-style-type: none"> • FBSHA • WBSHA • Duck Bay, Izhut Bay, Inner Kitoi Bay, and Outer Kitoi Bay sections • Southeast Afognak Section <p><u>Closed Water Adjustment:</u></p> <ul style="list-style-type: none"> • Reduced until further notice in Foul Bay and Waterfall Bay • Reduced until further notice in Afognak Bay

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E.O. #	Issued	Effective	Action in Effect
9	11:45 AM 6/23/10	NOON 6/24/10	<p><u>Opening</u> for 36 hours until 12:01 AM 6/26:</p> <ul style="list-style-type: none"> • Cape Igvak Section <p><u>Open</u> until further notice:</p> <ul style="list-style-type: none"> • FBSHA • WBSHA • Duck Bay, Izhut Bay, Inner Kitoi Bay, and Outer Kitoi Bay sections • Southeast Afognak Section <p><u>Closed Water Adjustment:</u></p> <ul style="list-style-type: none"> • Reduced until further notice in Foul Bay and Waterfall Bay • Reduced until further notice in Afognak Bay
10	11:00 AM 6/28/10	9:00 PM 6/30/10	<p><u>Closes</u> until further notice:</p> <ul style="list-style-type: none"> • Inner Kitoi Bay, Outer Kitoi Bay, and Izhut Bay sections <p><u>Open</u> until further notice:</p> <ul style="list-style-type: none"> • FBSHA • WBSHA • Duck Bay Section • Southeast Afognak Section <p><u>Closed Water Adjustment:</u></p> <ul style="list-style-type: none"> • Reduced until further notice in Foul Bay and Waterfall Bay • Reduced until further notice in Afognak Bay
11	9:30 AM 7/1/10	6:00 AM 7/2/10 NOON 7/2/10	<p><u>Opening</u> in the Alitak District as follows:</p> <ul style="list-style-type: none"> • Olga Bay Section from 6:00 AM 7/2 to 9:00 AM 7/4 • Moser Bay Section from NOON 7/2 to 3:00 PM 7/4 • Alitak Bay Section from 6:00 PM 7/2 to 9:00 PM 7/4 • Cape Alitak and Humpy-Deadman sections from 6:00 AM 7/3 to 9:00 AM 7/5 <p><u>Opening</u> until further notice:</p> <ul style="list-style-type: none"> • Spiridon Bay Special Harvest Area <p><u>Closed Water Adjustment:</u></p> <ul style="list-style-type: none"> • Reduced until further notice in Foul Bay and Waterfall Bay • Reduced until further notice in Afognak Bay <p><u>Open</u> until further notice:</p> <ul style="list-style-type: none"> • FBSHA • WBSHA • Duck Bay Section • Southeast Afognak Section

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E.O. #	Issued	Effective	Action in Effect
12	4:30 PM 7/2/10	NOON 7/6/10	<p><u>Opening</u> for 57 hours until 9:00 PM 7/8:</p> <ul style="list-style-type: none"> Northwest Kodiak District (except the Kizhuyak Section which remains closed) Afognak District (except the Pauls Bay, Inner Kitoi Bay, Outer Kitoi Bay and Izhut Bay sections remain closed) Northeast Kodiak District (except the Buskin River Section which remains closed) Mainland District (except the Cape Igvak and Wide Bay sections which remain closed) Eastside Kodiak District <p>NOON 7/6/10</p> <p><u>Closed Water Adjustments</u></p> <ul style="list-style-type: none"> Reduced until 9:00 PM 7/8: <ul style="list-style-type: none"> Settlers Cove <p><u>Closed Water Adjustment:</u></p> <ul style="list-style-type: none"> Reduced until further notice in Foul Bay and Waterfall Bay Reduced until further notice in Afognak Bay <p><u>Open</u> until further notice:</p> <ul style="list-style-type: none"> FBSHA WBSHA SBSHA Duck Bay Section Southeast Afognak Section
13	10:00 AM 7/8/10	1:00 PM 7/8/10	<p><u>Closes</u> until further notice:</p> <ul style="list-style-type: none"> Seaward zones of the Northwest Afognak and Shuyak sections <p><u>Opening</u> for 48 hours until 12:01 AM 7/11</p> <ul style="list-style-type: none"> Cape Igvak Section <p><u>Closed Water Adjustment:</u></p> <ul style="list-style-type: none"> Reduced until further notice in Foul Bay and Waterfall Bay Reduced until further notice in Afognak Bay <p><u>Open</u> until further notice:</p> <ul style="list-style-type: none"> FBSHA WBSHA SBSHA Duck Bay Section Southeast Afognak Section

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E.O. #	Issued	Effective	Action in Effect
14	4:00 PM 7/9/10	NOON 7/13/10	<u>Opening</u> for 81 hours until 9:00 PM 7/16: <ul style="list-style-type: none"> Northwest Kodiak District Afognak District (except the Inner Kitoi Bay and Outer Kitoi Bay sections, the southern portion of Izhut Bay section and the seaward zones of the Northwest Afognak and Shuyak sections, which remain closed and the Duck Bay and Southeast Afognak sections which are open until further notice) Northeast Kodiak District (except the Buskin River Section which remains closed) Outer Ayakulik Section Eastside Kodiak District
		NOON 7/13/10	<u>Opening</u> for 57 hours until 9:00 PM 7/15: <ul style="list-style-type: none"> Cape Igvak and Wide Bay sections
		5:00 PM 7/10/10	<u>Opening</u> until further notice: <ul style="list-style-type: none"> That portion of the Izhut Bay Section north of a line from Pillar Cape to Haystack Rock
		9:00 PM 7/16/10	<u>Closes</u> until further notice: <ul style="list-style-type: none"> FBSHA WBSHA
		9:00 PM 7/16/10	<u>Closed Water Adjustment:</u> Increased at: <ul style="list-style-type: none"> FBSHA WBSHA <u>Open</u> until further notice: <ul style="list-style-type: none"> SBSHA Duck Bay and Southeast Afognak sections <u>Closed Water Adjustment:</u> <ul style="list-style-type: none"> Reduced until further notice in Afognak Bay
15	11:00 AM 7/12/10	NOON 7/13/10	<u>Opening</u> for 81 hours until 9:00 PM 7/16: <ul style="list-style-type: none"> Buskin River Section Inner Ayakulik Section
		9:00 PM 7/16/10	<u>Closes</u> until further notice: <ul style="list-style-type: none"> FBSHA WBSHA
		NOON 7/13/10	<u>Closed Water Adjustments</u> <u>Increased</u> until 9:00 PM 7/16: <ul style="list-style-type: none"> Ayakulik River

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E.O. #	Issued	Effective	Action in Effect
15 (cont.)			<p><u>Open</u> until further notice</p> <ul style="list-style-type: none"> • Duck Bay Section • SBSHA • Northern portion of Izhut Bay Section <p><u>Closed Water Adjustment:</u></p> <ul style="list-style-type: none"> • Reduced until further notice in Afognak Bay
16	10:00 AM 7/15/10	12:01 AM 7/17/10	<p><u>Opening</u> for 48 hours until 12:01 AM 7/19:</p> <ul style="list-style-type: none"> • Cape Igvak Section <p>6:00 AM 7/16/10</p> <p><u>Opening</u> in the Alitak District as follows:</p> <ul style="list-style-type: none"> • Olga Bay Section from 6:00 AM 7/16 to 9:00 AM 7/18 • Moser Bay Section from NOON 7/16 to 3:00 PM 7/18 • Alitak Bay Section from 6:00 PM 7/16 to 9:00 PM 7/18 • Cape Alitak Sections from 6:00 AM 7/17 to 9:00 AM 7/19 <p>9:00 PM 7/16</p> <p><u>Extension</u> for 48 hours until 9:00 PM 7/18:</p> <ul style="list-style-type: none"> • Inner Ayakulik and Outer Ayakulik sections <p>9:00 PM 7/16</p> <p><u>Closed Water Adjustment:</u></p> <ul style="list-style-type: none"> • Increased until 9:00 PM 7/18 at Ayakulik River <p><u>Open</u> until further notice</p> <ul style="list-style-type: none"> • Duck Bay Section • SBSHA • Northern portion of Izhut Bay Section <p><u>Closed Water Adjustment:</u></p> <ul style="list-style-type: none"> • Reduced until further notice in Afognak Bay
17	NOON 7/16/10	9:00 PM 7/16/10	<p><u>Extension</u> for 48 hours until 9:00 PM 7/18:</p> <ul style="list-style-type: none"> • Inner Ugak Section <p>NOON 7/20/10</p> <p><u>Opening</u> for 81 hours until 9:00 PM 7/23:</p> <ul style="list-style-type: none"> • Northwest Kodiak District • Raspberry Strait, Southwest Afognak, Northwest Afognak, Shuyak Island, Northeast Afognak, Pauls Bay, and Perenosa Bay sections (except the seaward zones of the Northwest Afognak and Shuyak Island sections remain closed) • Northeast Kodiak District • Eastside Kodiak District • Humpy-Deadman Section

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E.O. #	Issued	Effective	Action in Effect
17 (cont.)		NOON 7/20/10	<p><u>Opening</u> for 57 hours until 9:00 PM 7/22:</p> <ul style="list-style-type: none"> • Big River, Hallo Bay, Inner Kukak, Outer Kukak, Dakavak Bay, Katmai, and Alinchak Bay sections (except the seaward zones of the Dakavak Bay, Outer Kukak, Hallo Bay, and Big River sections which remain closed) <p><u>Open</u> until further notice</p> <ul style="list-style-type: none"> • Duck Bay Section • SBSHA • Northern portion of Izhut Bay Section <p><u>Closed Water Adjustment:</u></p> <ul style="list-style-type: none"> • Reduced until further notice in Afognak Bay
18	10:00 AM 7/17/10	9:00 AM 7/18/10	<p><u>Opening</u> in the Alitak District for as follows:</p> <ul style="list-style-type: none"> • Olga Bay Section from 9:00 AM 7/18 until 9:00 AM 7/20 • Moser Bay Section from 3:00 PM 7/18 until 3:00 PM 7/20 • Alitak Bay Section from 9:00 PM 7/18 until 9:00 PM 7/20 • Cape Alitak Section from 9:00 AM 7/19 until 9:00 AM 7/21 <p><u>Open</u> until further notice</p> <ul style="list-style-type: none"> • Duck Bay Section • SBSHA • northern portion of Izhut Bay Section <p><u>Closed Water Adjustment:</u></p> <ul style="list-style-type: none"> • Reduced until further notice in Afognak Bay
19	4:30 PM 7/18/10	12:01 AM 7/19/10	<p><u>Extension</u> of the current fishing period for 24 hours:</p> <ul style="list-style-type: none"> • Cape Igvak Section <p>NOON 7/20/10</p> <p><u>Opening</u> for 81 hours until 9:00 PM 7/23:</p> <ul style="list-style-type: none"> • Inner Ayakulik and Outer Ayakulik sections <p>NOON 7/20/10</p> <p><u>Closed Water Adjustment:</u></p> <ul style="list-style-type: none"> • Increased until 9:00 PM 7/23 at Ayakulik River <p><u>Open</u> until further notice</p> <ul style="list-style-type: none"> • Duck Bay Section • SBSHA • Northern portion of Izhut Bay Section <p><u>Closed Water Adjustment:</u></p> <ul style="list-style-type: none"> • Reduced until further notice in Afognak Bay

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E.O. #	Issued	Effective	Action in Effect
20	10:30 AM 7/19/10	9:00 AM 7/20/10	<p><u>Extension</u> of the current fishing period in the Alitak district as follows:</p> <ul style="list-style-type: none"> • Olga Bay Section from 9:00 AM 7/20 until 9:00 AM 7/23 • Moser Bay Section from 3:00 PM 7/20 until 3:00 PM 7/23 • Alitak Bay Section from 9:00 PM 7/20 until 9:00 PM 7/23 • Cape Alitak Section from 9:00 AM 7/21 until 9:00 AM 7/24 <p><u>Open</u> until further notice</p> <ul style="list-style-type: none"> • Duck Bay Section • SBSHA • Northern portion of Izhut Bay Section <p><u>Closed Water Adjustment:</u></p> <ul style="list-style-type: none"> • Reduced until further notice in Afognak Bay
21	NOON 7/19/10	NOON 7/20/10	<p><u>Opening</u> for 81 hours until 9:00 PM 7/23</p> <ul style="list-style-type: none"> • Halibut Bay Section <p><u>Open</u> until further notice</p> <ul style="list-style-type: none"> • Duck Bay Section • SBSHA • Northern portion of Izhut Bay Section <p><u>Closed Water Adjustment:</u></p> <ul style="list-style-type: none"> • Reduced until further notice in Afognak Bay
22	2:30 PM 7/20/10	12:01 AM 7/22/10	<p><u>Opening</u> for 48 hours until 12:01 AM 7/24:</p> <ul style="list-style-type: none"> • Cape Igvak Section <p><u>Open</u> until further notice</p> <ul style="list-style-type: none"> • Duck Bay Section • SBSHA • Northern portion of Izhut Bay Section <p><u>Closed Water Adjustment:</u></p> <ul style="list-style-type: none"> • Reduced until further notice in Afognak Bay
23	11:00 AM 7/23/10	12:01 AM 7/24/10	<p><u>Extension</u> for 48 hours until 12:01 AM 7/26:</p> <ul style="list-style-type: none"> • Cape Igvak Section

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E.O. #	Issued	Effective	Action in Effect
23 (cont.)		9:00 PM 7/23/10	<u>Extension</u> for 24 hours until 9:00 PM 7/24: <ul style="list-style-type: none"> Northwest Kodiak District Raspberry Strait, Southwest Afognak, Northwest Afognak, Shuyak Island, Northeast Afognak, Pauls Bay, and Perenosa Bay sections (except the seaward zones of the Northwest Afognak and Shuyak Island sections remain closed) Northeast Kodiak District Eastside Kodiak District (except the Inner Ugak Bay Section which is being extended until further notice)
		9:00 PM 7/23/10	<u>Extension</u> until further notice: <ul style="list-style-type: none"> Inner Ugak Bay Section
		9:00 PM 7/23/10	<u>Closed Water Adjustments</u> <u>Reduced</u> until further notice at: <ul style="list-style-type: none"> Saltery Cove
			<u>Open</u> until further notice <ul style="list-style-type: none"> Duck Bay Section SBSHA Northern portion of Izhut Bay Section <u>Closed Water Adjustment:</u> <ul style="list-style-type: none"> Reduced until further notice in Afognak Bay
24	11:45 AM 7/25/10	NOON 7/27/10	<u>Opening</u> for 81 hours until 9:00 PM 7/30: <ul style="list-style-type: none"> Northwest District Raspberry Strait, Southwest Afognak, Northwest Afognak, Shuyak Island, Northeast Afognak, Pauls Bay, and Perenosa Bay sections Humpy Deadman Section Eastside Kodiak District <u>Open</u> until further notice <ul style="list-style-type: none"> Duck Bay Section SBSHA northern portion of Izhut Bay Section Inner Ugak Bay Section <u>Closed Water Adjustment:</u> <ul style="list-style-type: none"> Reduced until further notice in Afognak Bay Reduced until further notice at Saltery Cove

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E.O. #	Issued	Effective	Action in Effect
25	10:00 AM 7/28/10	6:00 AM 7/29/10	<p><u>Opening</u> in the Alitak District as follows:</p> <ul style="list-style-type: none"> • Olga Bay Section from 6:00 AM 7/29 until 9:00 AM 7/31 • Moser Bay Section from NOON 7/29 until 3:00 PM 7/31 • Alitak Bay Section from 6:00 PM 7/29 until 9:00 PM 7/31 • Cape Alitak Section from 6:00 AM 7/30 until 9:00 AM 8/1 <p><u>Open</u> until further notice</p> <ul style="list-style-type: none"> • Duck Bay Section • SBSHA • Northern portion of Izhut Bay Section • Inner Ugak Bay Section <p><u>Closed Water Adjustment:</u></p> <ul style="list-style-type: none"> • Reduced until further notice in Afognak Bay • Reduced until further notice at Saltery Cove
26	11:00 AM 7/30/10	9:00 PM 7/30/10	<p><u>Extension</u> of the current fishing period for 24 hours until 9:00 PM 7/31:</p> <ul style="list-style-type: none"> • Central, North Cape, Uyak Bay, Zachar Bay, Spiridon Bay, Sharatin Bay, and Anton Larsen Bay sections • Raspberry Strait, Southwest Afognak, Northwest Afognak, Shuyak Island, Northeast Afognak, Pauls Bay, and Perenosa Bay sections • Humpy Deadman Section • Eastside Kodiak District
		9:00 PM 7/31/10	<p><u>Closes</u> until further notice</p> <ul style="list-style-type: none"> • Southeast Afognak and Duck Bay sections and the northern portion of the Izhut Bay Section • Inner Ugak Bay Section <p><u>Open</u> until further notice</p> <ul style="list-style-type: none"> • SBSHA <p><u>Closed Water Adjustment:</u></p> <ul style="list-style-type: none"> • Reduced until further notice in Afognak Bay • Reduced until further notice at Saltery Cove
27	11:45 AM 8/1/10	NOON 8/3/10	<p><u>Opening</u> for 81 hours until 9:00 PM 8/6:</p> <ul style="list-style-type: none"> • Northwest Kodiak District (except the Inner Uganik Bay, Terror Bay and Kizhuyak Bay sections which remain closed) • Afognak District (except the Inner Kitoi Bay, Outer Kitoi Bay, Dick Bay, and Izhut Bay sections which remain closed) • Humpy-Deadman Section • Eastside Kodiak District • Northeast Kodiak District

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E.O. #	Issued	Effective	Action in Effect
27 (cont.)		NOON 8/3/10	<p><u>Opening</u> for 57 hours until 9:00 PM 8/6</p> <ul style="list-style-type: none"> • Mainland District <p><u>Closed Water Adjustment:</u></p> <ul style="list-style-type: none"> • Increased until further notice in Afognak Bay • Increased until further notice at Saltery Cove <p><u>Open</u> until further notice</p> <ul style="list-style-type: none"> • SBSHA
28	9:30 AM 8/3/10	NOON 8/4/10	<p><u>Opening</u> for 57 hours until 9:00 PM 8/6:</p> <ul style="list-style-type: none"> • Halibut Bay Section <p><u>Open</u> until further notice</p> <ul style="list-style-type: none"> • SBSHA
29	10:00 AM 8/6/10	6:00 AM 8/7/10	<p><u>Opening</u> in the Alitak District as follows:</p> <ul style="list-style-type: none"> • Olga Bay Section from 6:00 AM 8/7 until 9:00 AM 8/9 • Moser Bay Section from NOON 8/7 until 3:00 PM 8/9 • Alitak Bay Section from 6:00 PM 8/7 until 9:00 pm 8/9 • Cape Alitak Section from 6:00 AM 8/8 until 9:00 AM 8/10
		9:00 PM 8/6/10	<p><u>Extension</u> of the current fishing period for 24 hours until 9:00 PM 8/7:</p> <ul style="list-style-type: none"> • North Cape, Central, and Uyak Bay sections • Afognak District (except the Inner Kitoi Bay, Outer Kitoi Bay, Dick Bay, and Izhut Bay sections which remain closed) <p><u>Open</u> until further notice</p> <ul style="list-style-type: none"> • SBSHA
30	11:00 AM 8/10/10	NOON 8/12/10	<p><u>Opening</u> for 57 hours until 900 PM 8/14:</p> <ul style="list-style-type: none"> • North Cape, Central, Uyak Bay, Sharatin Bay, and Anton Larsen Bay sections • Outer Ayakulik Section • Raspberry Strait, Southwest Afognak, Northwest Afognak, Shuyak Island, Northeast Afognak, Pauls Bay, and Perenosa Bay sections
		NOON 8/12/10	<p><u>Opening</u> for 6 hours until 6:00 PM 8/12:</p> <ul style="list-style-type: none"> • Inner Ayakulik Section
		NOON 8/12/10	<p><u>Closed Water Adjustment:</u></p> <ul style="list-style-type: none"> • Increased until 6:00 PM 8/12 at Ayakulik River <p><u>Open</u> until further notice</p> <ul style="list-style-type: none"> • SBSHA

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E.O. #	Issued	Effective	Action in Effect
31	11:45 AM 8/12/10	2:00 PM 8/15/10	<p><u>Opening</u> until further notice:</p> <ul style="list-style-type: none"> • Duck Bay Section <p><u>Open</u> until further notice</p> <ul style="list-style-type: none"> • SBSHA
32	10:00 AM 8/14/10	8:00 PM 8/15/10 9:00 PM 8/14/10 2:00 PM 8/15/10	<p><u>Closed</u> until further notice:</p> <ul style="list-style-type: none"> • SBSHA <p><u>Opening</u> for 6 hours until 8:00 PM 8/15:</p> <ul style="list-style-type: none"> • Inner Kitoi Bay Section <p><u>Closed Water Adjustments</u> Reduced until 8:00 PM 8/15 at:</p> <ul style="list-style-type: none"> • Little Kitoi Stream and Big Kitoi Creek <p><u>Open</u> until further notice:</p> <ul style="list-style-type: none"> • Duck Bay Section
33	NOON 8/16/10	NOON 8/17/10	<p><u>Opening</u> until further notice:</p> <ul style="list-style-type: none"> • That portion of the Izhut Bay Section north of line from Pillar Cape to Haystack Rock <p><u>Open</u> until further notice:</p> <ul style="list-style-type: none"> • Duck Bay Section
34	NOON 8/18/10	NOON 8/19/10 NOON 8/19/10 NOON 8/19/10	<p><u>Opening</u> until further notice:</p> <ul style="list-style-type: none"> • That portion of the Izhut Bay Section south of line from Pillar Cape to Haystack Rock <p><u>Opening</u> for 57 hours until 9:00 PM 8/21:</p> <ul style="list-style-type: none"> • Afognak District (except the Southwest Afognak, Inner Kitoi Bay, and Outer Kitoi Bay sections will remain closed and the Duck Bay Section and northern portion of Izhut Bay Section are already open until further notice and the southern portion of the Izhut Bay Section is opening until further notice) <p><u>Opening</u> for 81 hours until 9:00 PM 8/22:</p> <ul style="list-style-type: none"> • Outer Ayakulik Section <p><u>Open</u> until further notice:</p> <ul style="list-style-type: none"> • Duck Bay Section • Northern portion of the Izhut Bay Section

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E.O. #	Issued	Effective	Action in Effect
35	10:00 AM 8/20/10	6:00 AM 8/21/10	<p><u>Opening</u> in the Alitak District as follows:</p> <ul style="list-style-type: none"> • Olga Bay Section from 6:00 AM 8/21 until 9:00 AM 8/23 • Moser Bay Section from NOON 8/21 until 3:00 PM 8/23 • Alitak Bay Section from 6:00 PM 8/21 until 9:00 pm 8/23 • Cape Alitak Section from 6:00 AM 8/22 until 9:00 AM 8/24 <p><u>Open</u> until further notice:</p> <ul style="list-style-type: none"> • Duck Bay Section • Izhut Bay Section
36	10:30 AM 8/21/10	9:00 PM 8/22/10	<p><u>Extension</u> for 48 hours until further 9:00 PM 8/24:</p> <ul style="list-style-type: none"> • Outer Ayakulik Section <p>NOON 8/23/10</p> <p><u>Opening</u> until further notice:</p> <ul style="list-style-type: none"> • Outer Kitoi Bay Section <p><u>Open</u> until further notice:</p> <ul style="list-style-type: none"> • Duck Bay Section • Izhut Bay Section
37	11:00 AM 8/24/10	9:00 PM 8/24/10	<p><u>Extension</u> of the current fishing period for 48 hours until 9:00 PM 8/26:</p> <ul style="list-style-type: none"> • Outer Ayakulik Section <p>NOON 8/25/10</p> <p><u>Opening</u> for 33 hours until 9:00 PM 8/26:</p> <ul style="list-style-type: none"> • Central and North Cape sections • Southwest Afognak Section • Outer Karluk Section <p><u>Open</u> until further notice:</p> <ul style="list-style-type: none"> • Duck Bay Section • Izhut Bay Section • Outer Kitoi Bay Section
38	NOON 8/26/10	NOON 8/28/10	<p><u>Opening</u> for 54 hours until 6:00 PM 8/30:</p> <ul style="list-style-type: none"> • Afognak District (except the Southwest Afognak Section will close at 9:00 PM 8/26, the Inner Kitoi bay Section will remain closed, Duck Bay, Outer Kitoi Bay, and Izhut Bay sections are already open until further notice) • Outer Kukak, Big River, and Hallo Bay sections <p>NOON 8/28/10</p> <p><u>Opening</u> for 78 hours until 6:00 PM 8/31:</p> <ul style="list-style-type: none"> • Outer Ayakulik Section

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E.O. #	Issued	Effective	Action in Effect
38 (cont.)		6:00 AM 8/28/10	<p><u>Opening</u> in the Alitak District as follows:</p> <ul style="list-style-type: none"> • Olga Bay Section from 6:00 AM 8/28 until 9:00 AM 8/30 • Moser Bay Section from NOON 8/28 until 3:00 PM 8/20 • Alitak Bay Section from 6:00 PM 8/28 until 9:00 PM 8/30 • Cape Alitak Section from 6:00 AM 8/29 until 9:00 AM 8/31 <p><u>Open</u> until further notice:</p> <ul style="list-style-type: none"> • Duck Bay Section • Izhut Bay Section • Outer Kitoi Bay Section
39	10:00 AM 8/29/10	9:00 AM 8/30/10	<p><u>Extension</u> of the current fishing period in the Alitak District as follows:</p> <ul style="list-style-type: none"> • Olga Bay Section from 9:00 AM 8/30 until 9:00 AM 9/1 • Moser Bay Section from 3:00 PM 8/30 until 3:00 PM 9/1 • Alitak Bay Section from 9:00 PM 8/30 until 9:00 PM 9/1 • Cape Alitak Section from 9:00 AM 8/31 until 9:00 AM 9/2 <p><u>Open</u> until further notice:</p> <ul style="list-style-type: none"> • Duck Bay Section • Izhut Bay Section • Outer Kitoi Bay Section
40	10:30 AM 9/1/10	NOON 9/2/10	<p><u>Opening</u> for 78 hours until 6:00 PM 9/5:</p> <ul style="list-style-type: none"> • Outer Ayakulik Section • Outer Kukak Bay, Hallo Bay, and Big River sections • Afognak District (except the Southwest Afognak and Inner Kitoi Bay sections I remain closed, the Duck Bay, Outer Kitoi Bay, and Izhut Bay sections are already open until further notice) <p>NOON 9/2/10</p> <p><u>Opening</u> for 30 hours until 6:00 PM 9/3:</p> <ul style="list-style-type: none"> • Inner Kukak Bay Section <p><u>Open</u> until further notice:</p> <ul style="list-style-type: none"> • Duck Bay Section • Izhut Bay Section • Outer Kitoi Bay Section
41	10: 0 AM 9/3/10	6:00 AM 9/4/10	<p><u>Opening</u> in the Alitak District as follows:</p> <ul style="list-style-type: none"> • Olga Bay Section from 6:00 AM 9/4 until 9:00 AM 9/8 • Moser Bay Section from NOON 9/4 until 3:00 PM 9/8 • Alitak Bay Section from 6:00 PM 9/4 until 9:00 PM 9/8 • Cape Alitak Section from 6:00 AM 9/5 until 9:00 AM 9/9

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E.O. #	Issued	Effective	Action in Effect
41 (cont.)			<u>Open</u> until further notice: <ul style="list-style-type: none"> • Duck Bay Section • Izhut Bay Section
42	9:30 AM 9/5/10	6:00 PM 9/5/10	<u>Extension</u> of the current fishing period for 72 hours until 6:00 PM 9/8: <ul style="list-style-type: none"> • Outer Ayakulik Section • Outer Kukak, Big River, and Hallo Bay sections • Afognak District (except the Southwest Afognak and Inner Kitoi Bay sections remain closed, and the Duck Bay, Outer Kitoi Bay, and Izhut Bay sections are already open until further notice) <u>Open</u> until further notice: <ul style="list-style-type: none"> • Duck Bay Section • Izhut Bay Section
43	8:30 AM 9/6/10	NOON 9/7/10	<u>Opening</u> for 54 hours until 6:00 PM 9/9: <ul style="list-style-type: none"> • Outer Karluk Section • North Cape and Central sections • Southwest Afognak Section <u>Open</u> until further notice: <ul style="list-style-type: none"> • Duck Bay Section • Izhut Bay Section
44	10:00 AM 9/8/10	6:00 PM 9/9/10 NOON 9/9/10 6:00 PM 9/8/10	<u>Extension</u> of the current fishing period for 72 hours until 6:00 PM 9/12: <ul style="list-style-type: none"> • Outer Karluk Section • North Cape and Central sections • Southwest Afognak Section <u>Opening</u> for 78 hours until 6:00 PM 9/12: <ul style="list-style-type: none"> • Uyak Bay, Zachar Bay, Spiridon Bay, Inner Uganik Bay, Terror Bay, Kizhuyak Bay, Sharatin Bay, and Anton Larsen Bay sections <u>Extension</u> of the current fishing period until further notice: <ul style="list-style-type: none"> • Outer Ayakulik Section • Outer Kukak, Big River, and Hallo Bay sections • Afognak District (except the Southwest Afognak Section closes at 6:00 PM 9/12, the Inner Kitoi Bay Section remains closed, and the Duck Bay, Outer Kitoi Bay, and Izhut Bay sections are already open until further notice) <u>Open</u> until further notice: <ul style="list-style-type: none"> • Duck Bay Section • Izhut Bay Section

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E.O. #	Issued	Effective	Action in Effect
45	11:00 AM 9/9/10	NOON 9/10/10	<p><u>Opening</u> for 54 hours until 6:00 PM 9/12:</p> <ul style="list-style-type: none"> • Inner Ayakulik, Halibut Bay, and Sturgeon sections <p><u>Open</u> until further notice:</p> <ul style="list-style-type: none"> • Duck Bay Section • Izhut Bay Section • Outer Ayakulik Section • Outer Kukak, Big River, and Hallo Bay sections • Afognak District (except the Southwest Afognak Section closes at 6:00 PM 9/12, the Inner Kitoi Bay Section remains closed, and the Duck Bay, Outer Kitoi Bay, and Izhut Bay sections are already open until further notice)
46	NOON 9/10/10	NOON 9/11/10	<p><u>Opening</u> for 54 hours until 6:00 PM 9/13:</p> <ul style="list-style-type: none"> • Humpy-Deadman Section • Eastside Kodiak District <p>6:00 PM 9/12/10</p> <p><u>Extension</u> of the current fishing period for 72 hours until 6:00 PM 9/15:</p> <ul style="list-style-type: none"> • Outer Karluk Section • Northwest Kodiak District • Southwest Afognak Section <p>NOON 9/11/10</p> <p><u>Closed Water Adjustments</u> <u>Increased</u> until further notice:</p> <ul style="list-style-type: none"> • Gull Cape Lagoon • Sitkalidak Section <p><u>Open</u> until further notice:</p> <ul style="list-style-type: none"> • Duck Bay Section • Izhut Bay Section • Outer Ayakulik Section • Outer Kukak, Big River, and Hallo Bay sections • Afognak District (except the Southwest Afognak Section closes at 6:00 PM 9/15, the Inner Kitoi Bay Section remains closed, and the Duck Bay, Outer Kitoi Bay, and Izhut Bay sections are already open until further notice)

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E.O. #	Issued	Effective	Action in Effect
47	10:00 AM 9/14/10	6:00 PM 9/15/10	<p><u>Extension</u> of the current period for 72 hours until 6:00 PM 9/18:</p> <ul style="list-style-type: none"> • Outer Karluk Section • Northwest Kodiak District • Southwest Afognak Section <p><u>Open</u> until further notice:</p> <ul style="list-style-type: none"> • Duck Bay Section • Izhut Bay Section • Outer Ayakulik Section • Outer Kukak, Big River, and Hallo Bay sections • Afognak District (except the Southwest Afognak Section closes at 6:00 PM 9/18, the Inner Kitoi Bay Section remains closed, and the Duck Bay, Outer Kitoi Bay, and Izhut Bay sections are already open until further notice) <p><u>Closed Water Adjustments</u> <u>Increased</u> until further notice:</p> <ul style="list-style-type: none"> • Gull Cape Lagoon • Sitkalidak Section
48	10:00 AM 9/17/10	NOON 9/18/10 6:00 PM 9/18/10	<p><u>Opening</u> for 78 hours until 6:00 PM 9/21:</p> <ul style="list-style-type: none"> • Humpy-Deadman Section • Eastside Kodiak District <p><u>Extension</u> of the current period for 72 hours until 6:00 PM 9/21:</p> <ul style="list-style-type: none"> • Outer Karluk Section • Northwest Kodiak District • Southwest Afognak Section <p><u>Open</u> until further notice:</p> <ul style="list-style-type: none"> • Duck Bay Section • Izhut Bay Section • Outer Ayakulik Section • Outer Kukak, Big River, and Hallo Bay sections • Afognak District (except the Southwest Afognak Section closes at 6:00 PM 9/21, the Inner Kitoi Bay Section remains closed, and the Duck Bay, Outer Kitoi Bay, and Izhut Bay sections are already open until further notice) <p><u>Closed Water Adjustments</u> <u>Increased</u> until further notice:</p> <ul style="list-style-type: none"> • Gull Cape Lagoon • Sitkalidak Section

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E.O. #	Issued	Effective	Action in Effect
49	3:00 PM 9/17/10	NOON 9/18/10	<p><u>Closed Water Adjustments</u> <u>Reduced</u> until further notice at:</p> <ul style="list-style-type: none"> • Gull Cape Lagoon <p><u>Open</u> until further notice:</p> <ul style="list-style-type: none"> • Duck Bay Section • Izhut Bay Section • Outer Ayakulik Section • Outer Kukak, Big River, and Hallo Bay sections • Afognak District (except the Southwest Afognak Section closes at 6:00 PM 9/21, the Inner Kitoi Bay Section remains closed, and the Duck Bay, Outer Kitoi Bay, and Izhut Bay sections are already open until further notice) <p><u>Closed Water Adjustments</u> <u>Increased</u> until further notice:</p> <ul style="list-style-type: none"> • Sitkalidak Section
50	11:00 AM 9/20/10	6:00 PM 9/21/10	<p><u>Extension</u> of the current period for 72 hours until 6:00 PM 9/24:</p> <ul style="list-style-type: none"> • Outer Karluk Section • Northwest Kodiak District • Southwest Afognak Section • Eastside Kodiak District • Humpy-Deadman Section <p><u>Open</u> until further notice:</p> <ul style="list-style-type: none"> • Duck Bay Section • Izhut Bay Section • Outer Ayakulik Section • Outer Kukak, Big River, and Hallo Bay sections • Afognak District (except the Southwest Afognak Section closes at 6:00 PM 9/24, the Inner Kitoi Bay Section remains closed, and the Duck Bay, Outer Kitoi Bay, and Izhut Bay sections are already open until further notice) <p><u>Closed Water Adjustments</u> <u>Increased</u> until further notice:</p> <ul style="list-style-type: none"> • Sitkalidak Section

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APPENDIX C. CAPE IGVAK FISHERY SUMMARY

Introduction

Beginning in 1964, a purse seine fishery developed along the capes in the Cape Igvak Section of the Mainland District (Appendix C2). Tagging studies and stock identification studies using average weight and age composition conducted in 1968 and 1969 concluded that up to 80 percent of the sockeye salmon harvested in the Cape Igvak Section were of Chignik origin (from the unpublished Kodiak Area Annual Report, 1969, ADF&G, Kodiak). The issue of interception of Chignik-bound sockeye salmon in the Cape Igvak Section came before the board several times over the next ten years, and management of this section was modified many times. From 1974 through 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 board. 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 board 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 (KMA) fleet to harvest up to 15% of the Chignik-bound sockeye salmon harvest¹. 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 had to begin in the CMA before fisheries were allowed in the Cape Igvak Section (Jackson and Dinnocenzo 2010).

Since this plan was adopted in 1978, the catch of Chignik-bound sockeye salmon from the Cape Igvak Section has ranged from 0% to 17.9% of the total Chignik sockeye salmon harvest (Appendix C3) and has averaged 10.4% of the total CMA sockeye salmon harvest (Appendix C4). The Cape Igvak harvest has met or exceeded its 15% allocation level in only 7 of the 33 years the plan has been in place (Appendices C3 and C4).

2010 Cape Igvak Fishery

Early Run

The 2010 preseason forecast for the Chignik system predicted a return of approximately 1,080,000 early-run (Black Lake) sockeye salmon. The early-run escapement goal is 350,000 to 400,000 sockeye salmon by July 4 (Witteveen et al. 2007). This left a forecasted harvestable surplus of 730,000 early-run sockeye salmon (Eggers et al. 2010).

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¹ 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 2010 early Chignik sockeye salmon return was late, but came in as forecast. The Cape Igvak Section opened on June 18 and 4 days of fishing were allowed in June (Appendix C5). Through June 25, there were 175,955 sockeye salmon harvested from the Cape Igvak Section. An estimated 90% of these sockeye salmon, or 158,360 fish, were considered Chignik bound. Combined with the harvest in the CMA and with Chignik-bound sockeye salmon harvested in the Southeastern District Mainland Fishery of Area M, the cumulative Cape Igvak harvest was 24.95% of the total Chignik sockeye harvest through June 25. 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 was closed from June 26 through July 8.

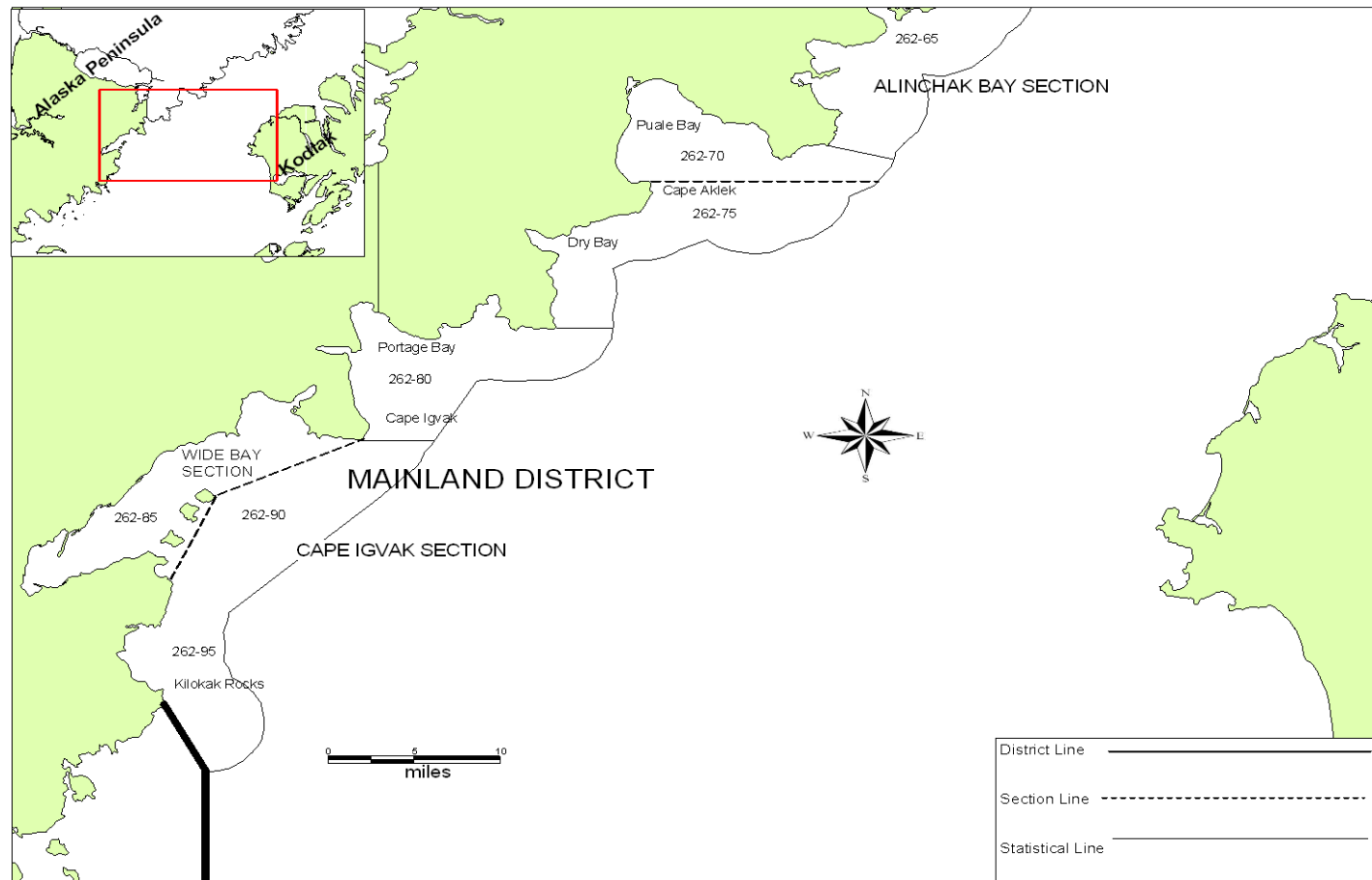
Late Run

The preseason forecast for late-run (Chignik Lake) sockeye salmon was approximately 1,110,000 fish in 2010. The late-run escapement objective was 250,000 to 400,000 sockeye salmon (Witteveen et al. 2007). This resulted in a forecasted harvestable surplus of 857,000 sockeye salmon (Eggers et al. 2010).

Like the early run, the 2010 Chignik late-run (Chignik Lake) came in as forecast. The first fishing period after the “overlap period” occurred on July 17. Seven and a half days of fishing were allowed during the late-run to Chignik through July 25 (Appendix C5). 29,815 sockeye were harvested during this time and 26,834 (90%) were considered to be Chignik bound. The season cumulative harvest of Chignik-bound sockeye salmon from the Cape Igvak Section was 185,193 fish or 13.27% of the total Chignik sockeye salmon harvest (Appendix C3).

REFERENCES CITED

- Eggers, D. M., M. D. Plotnick and A. M. Carroll. 2010. Run forecasts and harvest projections for the 2010 Alaska salmon fisheries and review of the 2009 season. Alaska Department of Fish and Game, Special Publication No. 10-02, Anchorage.
- Jackson, J. and J. Dinnocenzo. 2010. Kodiak management area harvest strategy for the 2010 commercial salmon fishery. Alaska Department of Fish and Game, Fisheries Management Report No.10-16, Anchorage.
- Witteveen M. J., H. Finkle, J. J. Hasbrouck, and I. Vining. 2007. Review of salmon escapement goals in the Chignik Management Area, 2007. Alaska Department of Fish and Game, Fishery Manuscript No. 07-09, Anchorage.
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Appendix C2.—Map of the Cape Igvak Section of the Kodiak Management Area, 2010.

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 2010.

Year	Chignik		Cape Igvak ^a		Southeastern District Mainland ^a		Total
	Catch ^b	Percent	Catch ^b	Percent	Catch ^b	Percent	
1978 ^{c,d}	1,454,389	86.60	225,078	13.40	N/A	N/A	1,679,467
1979 ^e	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 ^f	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	^g	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 ^h	1,962,583	80.45	324,195	13.29	152,714	6.26	2,439,492
1992 ⁱ	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 ^j	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 ^k	1,710,249	79.70	308,327	14.37	127,201	5.93	2,145,777
1997	443,892	100.00	^g	0.00	^g	0.00	443,892
1998 ^l	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 ^m	1,134,991	79.41	215,214	15.06	79,037	5.53	1,429,242
2002 ⁿ	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 ^o	601,213	91.97	52,527	8.03	^g	0.00	653,740
2008	455,199	100.00	^g	0.00	^g	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

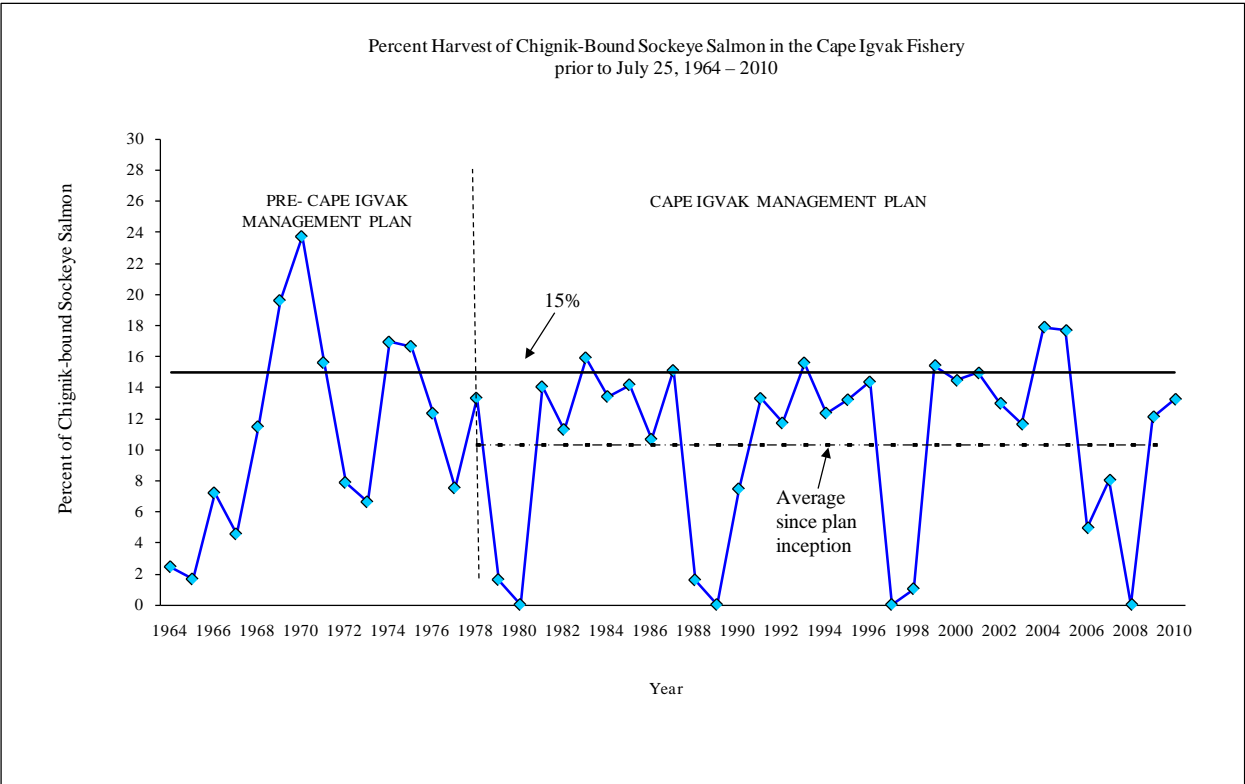
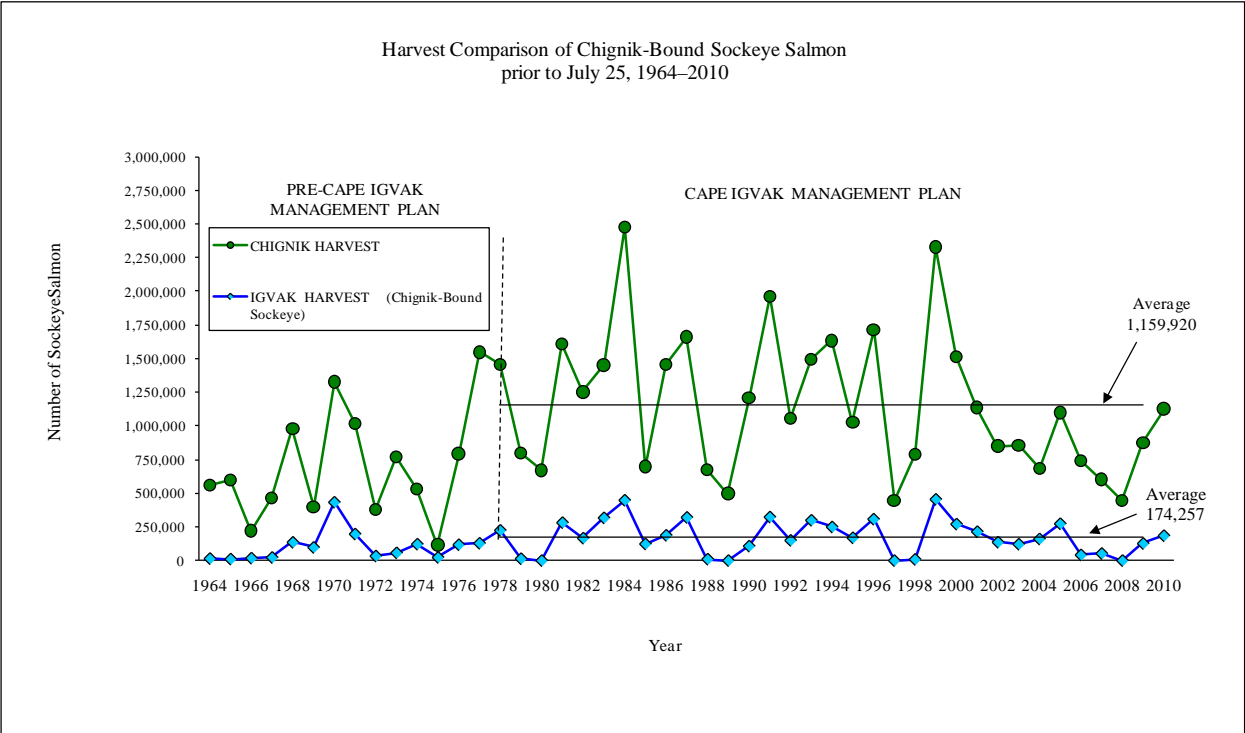
^a Through 2001, the Cape Igvak and Southeastern District Mainland figures represent 80% of the total sockeye salmon catch for those areas, based on the premise that 80% of the sockeye caught in those areas are destined for Chignik (excluding sockeye caught in the Northwest Stepovak Section from 1964 to 1991 and during July from 1996 through 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 Catch numbers were last generated from the ADF&G computerized historical fish ticket database in 2010.

^c 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.

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- ^d 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.
 - ^e From 1979 through 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.
 - ^f 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.
 - ^g No fishery.
 - ^h Includes overescapement of 208,305 sockeye salmon, counted through the Chignik weir during a Chignik Area seiners strike (June 23 to July 4).
 - ⁱ Beginning in 1992, after a board review of historical records, the allocation of Chignik-bound sockeye salmon to the Southeastern District Mainland fishery (excluding Orzinski Bay) was increased to 7.0%, through July 25.
 - ^j Includes overescapement of 208,921 sockeye salmon, counted through the Chignik weir during a Chignik Area seiners strike (June 2 to June 25).
 - ^k In January 1996, the board 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 board also decreased the percentage of Chignik-bound sockeye salmon allocated to the Southeastern District Mainland fishery from 7.0% to 6.0%.
 - ^l Includes 7,714 sockeye salmon caught on June 18 by the Chignik Seiners Association (CSA), and an overescapement of 52,131 sockeye salmon counted past the weir during the CSA boycott (June 16 to June 29).
 - ^m Includes 176,605 sockeye salmon caught June 16–29 by the CSA, and foregone harvest due to overescapement of 398,887 in the CMA and 27,896 in the Southeast District Mainland during the fishermen's strike (June 14 to July 2).
 - ⁿ In 2002, the board 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.
 - ^o In 2007, the board changed the Southeastern District Mainland allocation from 6.0% of the total Chignik-bound harvest to 7.6% of the total Chignik Area harvest.
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Appendix C4.–Impact of the Cape Igvak Salmon Management Plan.

Appendix C5.–Purse seine daily harvest, by species, for the Cape Igvak sockeye salmon fishery, 2010.

			Chinook		Sockeye		Coho		Pink		Chum	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
First Period (June 18–June 19)												
18-Jun	38	38	308	1,886	57,352	312,616	20	116	1,242	3,622	4,250	32,014
19-Jun	32	32	116	1,686	35,769	192,502	0	0	1,434	4,575	3,334	25,359
Subtotal	43	70	424	3,572	93,121	505,118	20	116	2,676	8,197	7,584	57,373
Second Period (June 24–June 25)												
24-Jun	30	30	175	1,225	40,557	214,307	0	0	1,918	6,030	3,182	25,699
25-Jun	29	29	170	1,372	42,277	250,497	0	0	1,969	5,189	3,659	26,672
Subtotal	51	59	345	2,597	82,834	464,804	0	0	3,887	11,219	6,841	52,371
Third Period (July 17–July 20)												
17-Jul	22	22	181	1,731	7,843	48,272	1,700	12,015	8,083	25,226	10,178	80,131
18-Jul	17	17	104	918	4,638	27,837	1,254	9,762	6,341	20,625	9,603	73,233
19-Jul	17	20	235	1,937	5,184	32,626	1,384	10,228	6,910	23,206	10,290	83,353
20-Jul	3	3	4	71	1,185	6,558	99	823	1,680	5,206	702	6,119
Subtotal	30	62	524	4,657	18,850	115,293	4,437	32,828	23,014	74,263	30,773	242,836
Fourth Period (July 22–July 25)												
22-Jul ^a												
23-Jul ^a												
24-Jul	3	3	24	192	4,032	24,237	676	5,905	4,817	18,676	7,141	59,914
25-Jul	7	7	37	410	3,029	16,966	1,305	9,869	8,115	25,341	9,391	80,509
Subtotal	8	14	243	2,173	10,965	65,145	2,671	21,581	16,746	58,755	24,522	207,542
Season												
total	67	205	1,536	12,999	205,770	1,150,360	7,128	54,525	46,323	152,434	69,720	560,122
Avg.Wt.				8.46		5.59		7.70		3.29		8.03

Note: Only 90% of the sockeye caught in the Cape Igvak fishery are defined by regulation to be Chignik bound.

^a Confidential.

APPENDIX D. ALITAK DISTRICT FISHERY SUMMARY

Introduction

The Alitak District (AD) fishery is unique in the Kodiak Management Area (KMA) because set gillnet and seine gear can both fish in this district, but are segregated by sections. Set gillnets are allowed only in the inside waters of the Alitak Bay, Moser Bay, and Olga Bay sections, while 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 AD 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 (5AAC 18.361). This plan details the key species and targeted stocks that are managed for in each section of the district throughout the fishing season. The stated intent of this plan is that salmon be harvested in the "traditional" fisheries located in the Cape Alitak, Humpy-Deadman, Alitak Bay, Moser Bay, and Olga Bay sections (Jackson and Dinnocenzo 2010).

This management plan has been in effect since 1988 and was most recently revised by the board in 2005. The board divided the former Moser-Olga Bay and Alitak Bay sections into three separate sections: Olga Bay, Moser Bay, and Alitak Bay. Each section was given a specific statistical area number. The initial commercial fishing period remained a 33-hour, commercial test fishery, for the entire AD (Jackson and Dinnocenzo 2010). However, through September 15, all subsequent commercial salmon fisheries in the Cape Alitak Section and the new Alitak Bay, Moser Bay, and Olga Bay sections have staggered opening and closing times according to regulation (5 AAC 18.361(c)). Also, from the conclusion of the test fishing period until September 15, there shall be a minimum closure of 69 consecutive hours in every 10-day period, to apply to each section individually as each section closes, unless the department determines that the sockeye salmon escapement goals will be achieved for both the Frazer and Upper Station sockeye salmon runs.

2010 Alitak Fishery

The 2010 total run forecast for the Frazer Lake system was 258,000 sockeye salmon (Eggers et al. 2010), with an estimated harvestable surplus of approximately 133,000 sockeye salmon. The total run forecast for Upper Station early run was 91,000 sockeye salmon, with an estimated harvestable surplus of approximately 43,000 sockeye salmon (Eggers et al. 2010).

A 33-hour commercial salmon test fishing period was tentatively scheduled for June 9 in the AD (Jackson and Dinnocenzo 2010). Normally, the Upper Station early-run sockeye salmon has earlier run timing than the Frazer system. The intent of the early opening was to allow commercial fishermen the opportunity to harvest Upper Station early-run sockeye salmon prior to the Frazer Lake system sockeye salmon peak run timing. In 2010, the sockeye salmon run to the Upper Station system appeared to have normal timing, but was only of moderate strength and cumulative escapement was slightly below the desired range on June 5. Also at that time, almost no sockeye salmon had passed Dog Salmon weir, which was later than normal. A 33-hour test fishery was announced for June 9 and the subsequent harvest indicated an increasing abundance of sockeye salmon in the AD.

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Daily weir counts through the Upper Station weir increased following the announcement of the test fish opening, resulting in cumulative escapement consistently within desired ranges after June 10. Although few sockeye salmon had passed the Dog Salmon weir, several thousand were staging on Dog Salmon Flats (Appendix D2).

The build-up of sockeye salmon on Dog Salmon Flats continued growing even during the test fishery although very few fish had moved through Dog Salmon weir. Based on increasing abundance of fish on Dog Salmon flats, continued adequate weir counts at Upper Station, and a general increase in abundance indicated in the test fishing period, the fishery was reopened for 51 hours on June 12 and the resulting harvest indicated a declining abundance of sockeye salmon in the district and the period was not extended. Despite the harvest from this period, cumulative escapement past Upper Station weir was still within the desired inseason escapement range although the buildup on Dog Salmon Flats did not start to move upstream in significant numbers until June 17.

Both the Frazer and early-run Upper Station sockeye salmon runs proved to be moderately weak and the fishery was kept closed until July 2 when the cumulative escapement through Dog Salmon weir had increased to fall within the desired inseason escapement range.

Cumulative escapement into the Upper Station Lakes through July 15 was 42,060 sockeye salmon (Tiernan *in prep*), which was within the early Upper Station sustainable escapement goal (SEG) range (30,000 – 65,000 fish; Honnold et al. 2007).

The cumulative sockeye salmon escapement of Frazer Lake sockeye salmon through the Dog Salmon weir by July 15 was 102,254 fish (Tiernan *in prep*), which was within the desired range for this date, as well as annual escapement goal range (95,000–190,000 fish; Honnold et al. 2007).

The *Alitak District Management Plan (ADMP; 5AAC 18.361)* dictates that during even-numbered years (as in 2010), from July 16 through August 9, commercial salmon fishing must be managed in the Cape Alitak, Moser, and Olga Bay sections based on the sockeye salmon return to the Frazer or Upper Station systems.

With the Frazer sockeye salmon minimum escapement goal already achieved by July 16, management consideration focused on late-run Upper Station sockeye salmon run which was expected to be moderately strong. A 75-hour fishing period was established to allow a harvest while testing the strength of the late run. Resulting harvest indicated sockeye salmon were of relatively low abundance although cumulative late-run escapement past Upper Station weir was tracking just below the desired range. The fishing period was extended twice, in part to allow harvest opportunity of Frazer sockeye salmon that were in excess of escapement needs. A relatively long (six-day) closure was then implemented to allow adequate escapement to Upper Station. Although the late run to Upper Station was weaker than forecasted, two short fishing periods were allowed beginning on July 29 and August 7.

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After July 15, the Humpy-Deadman Section was managed based on the strength of salmon runs to local systems through season's end. Local pink and chum streams in the Humpy-Deadman Section had weak returns resulting in three short fishing periods in late July and early August followed by a continuous closure from August 7 until September 11, when a short opening was established to allow the greatly diminished fleet an opportunity to harvest a small buildup of chum salmon in excess of escapement needs.

From August 10 through August 25 in even numbered years, the Cape Alitak, Alitak Bay, Moser Bay, and Olga Bay sections are managed based on conservation of Frazer pink salmon and late-run sockeye salmon returning to Upper Station. Unlike pink salmon runs to streams in Humpy-Deadman Section, pink salmon returning to streams in Olga Bay including Frazer, were unusually strong, especially for an even year. The management concern was focused on late-run Upper Station sockeye salmon run which was forecasted to produce a total run of 399,000 fish (Eggers et al. 2010), of which approximately 186,000 were in excess of escapement needs. By August 10, two earlier fishing openings had indicated low abundance of sockeye salmon in the district and the cumulative escapement at Upper Station weir had fallen well below the desired escapement range. The fishery was kept closed until August 21 when cumulative sockeye salmon counts through Upper Station had risen into the desired inseason range. The harvest during the short opening was small indicating low abundance.

After August 25, the Alitak District salmon fishery is managed on coho and sockeye salmon runs to Olga Bay. In an attempt to attain a season sockeye salmon escapement closer to the midpoint of the escapement goal range for Upper Station (186,000 fish, Honnold et al. 2007), another fishing period was not allowed until August 28 when industry interest was starting to decline. Despite a small harvest, a final period was allowed starting September 4 to allow the diminishing fleet an opportunity to harvest a few more fish before the cannery quit operating for the season.

The 2010 late-run Upper Station cumulative escapement was 141,139 sockeye salmon (Tiernan *in prep*), within the established SEG of 120,000 to 265,000 fish (Honnold et al. 2007).

Season Totals

In 2010, set gillnet harvest in the Olga Bay Section (statistical area 257-40), by 23 permit holders included 1 Chinook; 27,662 sockeye; 1,016 coho; 20,161 pink; and 1,140 chum salmon (Appendix D3). Set gillnet harvest in the Moser Bay Section (statistical area 257-43) by 27 permit holders included 1 Chinook; 30,511 sockeye; 1,526 coho; 18,547 pink; and 811 chum salmon (Appendix D3). Set gillnet harvest in the Alitak Bay Section (statistical area 257-41) by 29 permit holders included 3 Chinook; 33,224 sockeye; 1,055 coho; 25,462 pink; and 1,822 chum salmon (Appendix D3).

In 2010, seine harvest in the Cape Alitak Section (statistical areas 257-10 and -20) by 26 permit holders included 137 Chinook; 21,494 sockeye; 10,448 coho; 34,463 pink; and 5,716 chum salmon (Appendix D4). Seine harvest in the Humpy-Deadman Section (statistical areas 257-50, -60, and -70) by 11 permit holders included 16 Chinook; 3,045 sockeye, 261 coho, 47,729 pink and 8,599 chum salmon (Appendix D4). Less than 3 seine fishermen elected to fish in the Alitak Bay,

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Moser Bay, and Olga Bay sections when allowed by regulation starting September 5, and their harvest is confidential.

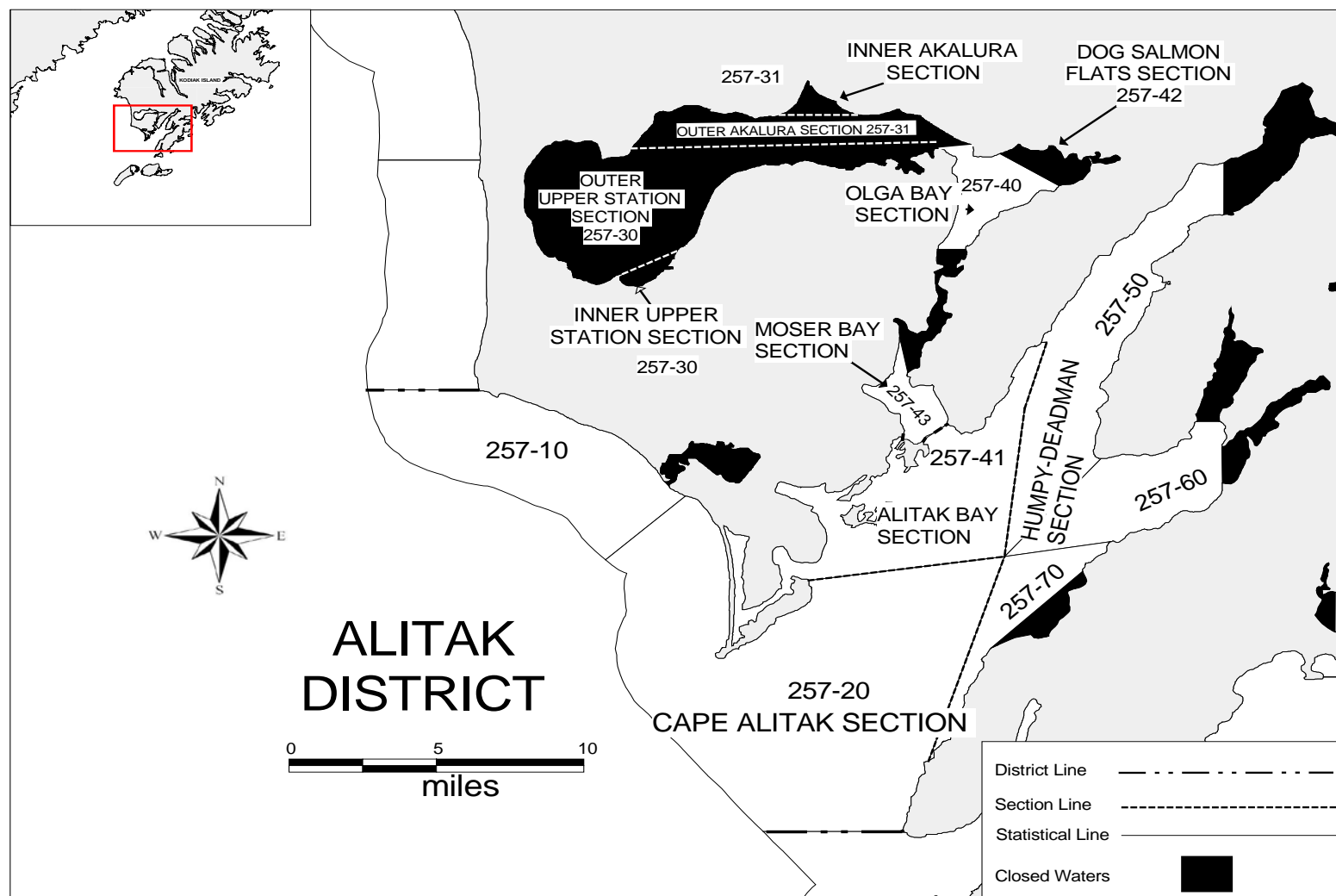
Twenty-seven purse seine permit holders fished in the AD fisheries, and harvested 153 Chinook (97% of the total AD Chinook harvest); 24,541 sockeye (21%); 10,950 coho (75%); 82,193 pink (56%); and 15,063 chum salmon (80%; Appendices D4, D5 and D6). Sixty-seven gillnet permit holders fished in the AD, and harvested 5 Chinook (3%); 91,397 sockeye (79%); 3,597 coho (25%); 64,170 pink (44%); and 3,773 chum salmon (20%; Appendices D3, D5 and D6).

Terminal harvest fisheries were not prosecuted in 2010 in the AD. There was no salmon harvest allowed in the Dog Salmon Flats Section (statistical area 257-42), the Inner and Outer Upper Station Section (statistical area 257-30), or the Akalura Section (statistical area 257-31).

The Frazer Lake escapement (counted through the Dog Salmon weir) equaled 135,100 sockeye salmon (Tiernan *in prep*; Table 4) of which 94,680 fish went through the Frazer Lake fish pass, within the current escapement goal range of 75,000 to 170,000 fish (Honnold et al. 2007). The total sockeye salmon escapement into the Upper Station system was 183,199 fish (Tiernan *in prep*; Table 4) which was within the combined early and late-run escapement goals of 150,000 to 330,000 fish (Honnold et al. 2007).

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Appendix D2.—Map of the Alitak District showing sections, statistical areas, and closed waters, 2010.

Appendix D3.—Set gillnet daily salmon harvest, by species and section, for the Alitak District, 2010.

Statistical Area	Date	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
				Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Olga Bay	9-Jun	9	9	0	0	2,494	12,537	0	0	0	0	3	22
Section	10-Jun	11	15	0	0	1,173	6,242	0	0	0	0	3	24
257-40	12-Jun	9	9	0	0	1,710	8,230	0	0	0	0	1	6
	13-Jun	9	9	1	19	376	1,861	0	0	0	0	1	8
	14-Jun	4	4	0	0	58	292	0	0	0	0	0	0
	2-Jul	12	15	0	0	2,353	11,562	0	0	0	0	122	1,034
	3-Jul	7	9	0	0	271	1,340	0	0	0	0	35	287
	4-Jul	7	7	0	0	135	675	0	0	0	0	52	445
	16-Jul	8	8	0	0	1,228	7,152	0	0	129	588	29	218
	17-Jul	8	10	0	0	423	2,476	0	0	56	228	22	165
	18-Jul	3	3	0	0	21	125	0	0	6	25	3	21
	19-Jul	3	3	0	0	14	79	0	0	1	4	3	25
	20-Jul ^a												
	21-Jul	3	3	0	0	36	194	0	0	14	53	0	0
	22-Jul	4	4	0	0	80	440	0	0	30	136	3	24
	29-Jul	10	14	0	0	1,982	11,726	10	47	2,414	10,297	65	454
	30-Jul	9	11	0	0	303	1,727	1	5	1,176	4,987	28	202
	31-Jul	4	4	0	0	63	363	1	5	399	1,680	7	48
	7-Aug	12	27	0	0	2,127	11,748	21	152	8,598	34,567	228	1,635
	8-Aug	12	18	0	0	677	3,739	7	46	4,272	17,932	113	859
	9-Aug	6	6	0	0	165	802	3	16	638	2,736	15	101
	21-Aug	10	18	0	0	4,081	23,226	79	759	1,170	4,784	103	864
	22-Aug	9	17	0	0	1,727	9,945	123	1,018	701	2,969	128	974
	23-Aug	4	4	0	0	128	721	7	62	50	218	16	100
	28-Aug	8	11	0	0	2,023	11,282	163	1,391	219	940	46	292

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Statistical Area	Date	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
				Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Olga Bay	29-Aug	6	9	0	0	923	5,325	86	745	99	431	12	79
Section	30-Aug	6	10	0	0	702	3,970	124	1,093	79	324	30	209
257-40	31-Aug	5	8	0	0	442	2,516	93	770	47	199	13	88
(cont.)	1-Sep	4	4	0	0	172	1,008	16	154	5	20	4	28
	4-Sep	5	7	0	0	829	4,687	90	864	12	51	29	226
	5-Sep	5	7	0	0	346	1,880	73	791	15	55	11	88
	6-Sep	3	3	0	0	192	1,067	26	234	1	4	2	17
	7-Sep	4	5	0	0	154	846	56	621	5	21	5	37
	8-Sep	4	4	0	0	209	1,154	37	344	0	0	4	29
Total		23	297	1	19	27,662	151,187	1,016	9,117	20,161	83,343	1,140	8,638
Average weight					19.00		5.47		8.97		4.13		7.58
Moser Bay	9-Jun	5	5	0	0	480	2,378	0	0	0	0	0	0
Section	10-Jun	10	16	0	0	959	4,787	0	0	0	0	1	8
257-43	12-Jun	9	10	0	0	1,077	5,526	0	0	0	0	1	7
	13-Jun	9	11	0	0	840	4,362	0	0	0	0	2	15
	14-Jun	9	9	0	0	432	2,146	0	0	0	0	1	7
	2-Jul	10	10	0	0	931	4,926	0	0	3	11	32	262
	3-Jul	9	12	0	0	1,285	7,012	0	0	4	14	52	405
	4-Jul	10	10	0	0	547	2,926	0	0	1	4	56	437
	16-Jul	11	11	0	0	1,433	8,209	0	0	349	1,250	29	208
	17-Jul	15	18	0	0	1,048	5,847	0	0	348	1,371	32	245
	18-Jul	11	13	0	0	810	4,506	0	0	342	1,287	65	485
	19-Jul	9	10	0	0	368	2,055	0	0	141	531	8	63
	20-Jul	10	11	0	0	461	2,577	1	5	298	1,118	27	210
	21-Jul	12	15	0	0	802	4,450	3	22	760	3,064	32	226
	22-Jul	12	14	0	0	750	4,214	1	6	821	3,289	48	372
	23-Jul	9	9	1	8	444	2,488	0	0	343	1,369	21	157
	29-Jul	9	9	0	0	904	5,012	4	36	1,784	7,084	49	438

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Statistical Area	Date	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
				Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Moser Bay	30-Jul	10	12	0	0	757	4,352	7	55	1,785	7,026	26	222
Section	31-Jul	9	9	0	0	323	1,710	5	39	937	3,763	15	135
257-43	7-Aug	12	12	0	0	850	4,782	14	110	2,513	10,084	31	267
(cont.)	8-Aug	13	18	0	0	1,263	6,745	17	149	4,506	15,578	42	356
	9-Aug	10	11	0	0	576	3,292	3	28	1,691	6,878	7	64
	21-Aug	9	9	0	0	1,869	10,533	78	817	369	1,607	29	258
	22-Aug	13	16	0	0	2,522	14,390	146	1,440	771	3,112	65	484
	23-Aug	9	10	0	0	704	4,000	38	394	263	1,074	19	167
	28-Aug	9	9	0	0	1,013	5,646	187	1,807	96	370	14	121
	29-Aug	11	11	0	0	2,113	11,873	185	1,714	173	708	13	106
	30-Aug	10	12	0	0	1,373	7,585	192	1,781	105	432	21	158
	31-Aug	9	13	0	0	1,231	6,900	226	2,158	69	283	26	190
	1-Sep	8	11	0	0	857	4,814	150	1,454	38	156	9	77
	4-Sep	4	4	0	0	129	693	23	213	6	23	1	6
	5-Sep	10	13	0	0	707	3,888	129	1,245	19	74	13	100
	6-Sep	8	8	0	0	530	2,910	83	810	9	38	20	129
	7-Sep	7	8	0	0	115	640	33	319	3	11	3	20
	8-Sep	3	3	0	0	8	41	1	10	0	0	1	9
Total		27	382	1	8	30,511	168,215	1,526	14,612	18,547	71,609	811	6,414
Average weight					8.00		5.51		9.58		3.86		7.91
Alitak Bay	9-Jun	3	3	0	0	286	1,374	0	0	0	0	1	9
Section	10-Jun	14	19	2	28	1,137	5,641	0	0	0	0	1	7
257-41	12-Jun	4	5	0	0	786	4,144	0	0	0	0	5	37
	13-Jun	10	11	0	0	1,205	6,462	0	0	0	0	0	0
	14-Jun	11	11	0	0	547	2,854	0	0	0	0	3	19
	2-Jul	3	3	0	0	65	349	0	0	2	7	4	33
	3-Jul	12	18	0	0	1,121	6,158	1	7	33	114	90	741
	4-Jul	11	14	0	0	1,249	6,783	1	10	5	15	109	890
	16-Jul ^a												
	17-Jul	14	19	0	0	1,042	5,775	1	7	507	1,799	56	409

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Statistical				Chinook		Sockeye		Coho		Pink		Chum	
Area	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Alitak Bay	18-Jul	10	13	0	0	957	5,132	2	12	450	1,536	52	382
Section	19-Jul	8	10	0	0	655	3,538	0	0	331	1,188	42	320
257-41	20-Jul	11	13	1	8	792	4,297	0	0	449	1,618	50	377
(cont.)	21-Jul	7	9	0	0	829	4,581	0	0	664	2,454	52	423
	22-Jul	9	10	0	0	681	3,861	0	0	590	2,311	67	503
	23-Jul	10	12	0	0	652	3,526	1	12	833	2,955	33	252
	29-Jul	3	3	0	0	293	1,710	8	66	1,075	4,399	44	356
	30-Jul	13	22	0	0	1,354	7,244	11	99	4,226	15,531	106	894
	22-Jul	9	10	0	0	681	3,861	0	0	590	2,311	67	503
	23-Jul	10	12	0	0	652	3,526	1	12	833	2,955	33	252
	29-Jul	3	3	0	0	293	1,710	8	66	1,075	4,399	44	356
	30-Jul	13	22	0	0	1,354	7,244	11	99	4,226	15,531	106	894
	31-Jul	13	19	0	0	967	5,354	11	82	2,707	10,707	119	964
	7-Aug	2	2	0	0	117	671	0	0	668	2,619	18	150
	8-Aug	12	15	0	0	1,049	5,621	2	17	3,623	14,031	81	713
	9-Aug	16	20	0	0	1,992	10,986	15	127	5,441	21,519	153	1,333
	21-Aug	6	6	0	0	477	2,633	14	142	228	926	20	169
	22-Aug	14	24	0	0	3,637	19,004	149	1,361	1,116	4,463	131	1,071
	23-Aug	12	22	0	0	4,093	21,085	160	1,437	1,955	7,820	195	1,635
	28-Aug ^a												
	29-Aug	13	18	0	0	1,883	10,078	222	2,050	185	734	112	907
	30-Aug	11	16	0	0	1,774	9,424	173	1,648	170	685	121	982
	31-Aug	10	15	0	0	1,232	6,351	112	1,007	28	106	36	276
	1-Sep	12	14	0	0	934	5,025	96	902	77	311	52	406
	4-Sep ^a												
	5-Sep	6	8	0	0	241	1,217	21	209	5	16	9	73
	6-Sep	8	8	0	0	256	1,358	11	99	8	30	17	129
	7-Sep	8	10	0	0	523	2,747	32	282	6	24	22	176
	8-Sep	5	5	0	0	145	770	5	42	1	4	10	78
Total		29	402	3	36	33,224	177,189	1,055	9,698	25,462	98,332	1,822	14,800
Average weight					12.00		5.33		9.19		3.86		8.12
Grand Total		67	1,055	5	63	91,397	496,591	3,597	33,427	64,170	253,284	3,773	29,852
Average weight					12.60		5.43		9.29		3.95		7.91

^a Confidential

Appendix D4.—Purse seine daily salmon harvest, by species and section, for the Alitak District, 2010.

Management Unit	Date	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
				Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Cape Alitak Section (257-10 & 20)	9-Jun	9	9	8	129	2,621	12,703	0	0	1	3	3	31
	10-Jun	4	4	4	93	899	4,496	0	0	1	3	0	0
	13-Jun ^a												
	14-Jun	5	5	8	138	972	4,728	0	0	3	9	11	98
	3-Jul	15	15	10	165	3,544	17,709	1	5	79	248	329	2,748
	4-Jul ^a												
	17-Jul	5	5	12	210	1,238	7,314	19	149	1,780	11,055	2,240	21,919
	18-Jul	4	4	3	48	865	4,891	10	68	1,010	4,874	650	5,918
	19-Jul	3	4	11	238	1,435	7,117	15	115	4,645	13,936	340	2,836
	21-Jul ^a												
	22-Jul ^a												
	30-Jul	4	4	2	49	1,190	6,551	6,560	19,833	9,384	28,756	885	7,945
	31-Jul ^a												
	1-Aug ^a												
	8-Aug	4	4	0	0	78	391	11	96	1,096	3,314	67	461
	9-Aug ^a												
	22-Aug	6	6	5	62	2,762	13,818	623	5,647	2,035	6,128	126	984
	23-Aug	6	6	1	8	2,846	14,463	693	6,051	1,222	3,665	130	995
	29-Aug	7	7	21	281	1,454	7,272	1,476	15,806	1,176	3,525	80	653
	30-Aug ^a												
	31-Aug ^a												
	1-Sep ^a												
	2-Sep ^a												
	5-Sep ^a												
	6-Sep ^a												
	7-Sep ^a												
Total		26	92	137	2,147	21,494	109,713	10,448	58,870	34,463	112,129	5,716	52,011
Average weight					15.67		5.10		5.63		3.25		9.10

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Management				Chinook		Sockeye		Coho		Pink		Chum	
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Olga Bay													
Section (257-40)	5-Sep ^a												
Total	^a												
Humpty-Deadman													
Section	9-Jun ^a												
(257-50, 60 & 70)	13-Jun ^a												
	3-Jul ^a												
	5-Jul ^a												
	21-Jul ^a												
	22-Jul ^a												
	23-Jul ^a												
	27-Jul ^a												
	28-Jul	4	4	0	0	179	926	0	0	6,396	21,326	514	4,161
	3-Aug	5	5	0	0	466	2,333	3	20	9,827	29,484	2,800	22,391
	4-Aug ^a												
	5-Aug	7	7	16	168	740	4,031	215	1,510	21,647	79,041	2,265	18,129
	6-Aug ^a												
Total		11	30	16	168	3,045	15,969	261	1,888	47,729	163,867	8,599	67,373
Average weight					10.50		5.24		7.23		3.43		7.83
Grand Total		27	122	153	2,315	24,541	125,694	10,950	63,450	82,193	276,001	15,063	125,307
Average weight					15.13		5.12		5.79		3.36		8.32

^a Confidential

Appendix D5.—Salmon harvest by gear type and species, for the Alitak District, 2010.

	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum		Total	
			Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Purse Seine														
Total	27	122	153	2,315	24,541	125,694	10,950	63,450	82,193	276,001	15,063	125,307	132,900	592,767
Avg.Wt.				15.13		5.12		5.79		3.36		8.32		4.46
Set Gillnet	67	1,055	5	63	91,397	496,591	3,597	33,427	64,170	253,284	3,773	29,852	162,942	813,217
Total														
Avg.Wt.				12.60		5.43		9.29		3.95		7.91		
Year Total	94	1,177	158	2,378	115,938	622,285	14,547	96,877	146,363	529,285	18,836	155,159	295,842	1,405,984
Avg.Wt.				15.05		5.37		6.66		3.62		8.24		

Appendix D6.—Commercial salmon harvest, by species with percent harvest by gear type, in the Alitak District, 1954–2010.

Year	Chinook ^a			Sockeye ^a			Coho ^a			Pink ^a			Chum ^a			Total ^a		
	Number	GN%	PS%	Number	GN%	PS%	Number	GN%	PS%	Number	GN%	PS%	Number	GN%	PS%	Number	GN%	PS%
1954	3	33%	67%	44,448	94%	6%	1,118	93%	7%	490,038	47%	53%	55,788	19%	81%	591,395	48%	52%
1955	38	74%	26%	56,058	89%	11%	410	68%	32%	1,656,363	15%	85%	100,031	17%	83%	1,812,900	18%	82%
1956	10	10%	90%	62,673	77%	23%	904	25%	75%	335,669	30%	70%	55,967	11%	89%	455,223	34%	66%
1957	7	14%	86%	15,365	88%	12%	378	31%	69%	410,620	12%	88%	49,661	27%	73%	476,031	16%	84%
1958	11	0%	100%	30,542	79%	21%	488	33%	67%	770,851	29%	71%	81,255	8%	92%	883,147	29%	71%
1959	11	18%	82%	24,888	59%	41%	378	30%	70%	544,592	23%	77%	70,589	8%	92%	640,458	23%	77%
1960	29	17%	83%	68,472	77%	23%	2,129	77%	23%	1,561,476	25%	75%	102,432	13%	87%	1,734,538	26%	74%
1961	23	4%	96%	145,781	67%	33%	1,470	49%	51%	1,589,027	14%	86%	60,600	18%	82%	1,796,901	19%	81%
1962	5	20%	80%	124,496	75%	25%	1,792	79%	21%	1,886,769	23%	77%	54,115	26%	74%	2,067,177	26%	74%
1963	30	7%	93%	54,992	60%	40%	1,202	31%	69%	1,522,856	14%	86%	42,836	10%	90%	1,621,916	15%	85%
1964	29	10%	90%	50,167	72%	28%	2,324	76%	24%	1,408,731	46%	54%	34,460	13%	87%	1,495,711	46%	54%
1965	16	6%	94%	68,876	68%	32%	688	16%	84%	1,129,185	11%	89%	20,604	17%	83%	1,219,369	14%	86%
1966	2	50%	50%	70,526	91%	9%	585	78%	22%	429,204	40%	60%	33,153	18%	82%	533,470	46%	54%
1967	6	0%	100%	14,227	82%	18%	50	0%	100%	84,918	66%	34%	17,377	55%	45%	116,578	66%	34%
1968	16	44%	56%	40,662	86%	14%	3,701	79%	21%	1,046,221	21%	79%	29,450	35%	65%	1,120,050	24%	76%
1969	27	37%	63%	98,722	54%	46%	7,240	7%	93%	3,768,917	8%	92%	45,134	15%	85%	3,920,040	10%	90%
1970	8	50%	50%	81,528	76%	24%	4,540	73%	27%	949,488	27%	73%	93,306	15%	85%	1,128,870	30%	70%
1971	33	30%	70%	124,480	55%	45%	2,261	66%	34%	1,066,180	10%	90%	191,437	7%	93%	1,384,391	14%	86%
1972	15	40%	60%	22,127	70%	30%	1,270	51%	49%	187,154	17%	83%	93,236	6%	94%	303,802	18%	82%
1973	4	50%	50%	10,338	62%	38%	125	70%	30%	49,932	35%	65%	24,408	19%	81%	84,807	34%	66%
1974	19	16%	84%	66,605	52%	48%	1,284	49%	51%	363,389	9%	91%	22,220	9%	91%	453,517	16%	84%
1975	0	0%	0%	16,515	72%	28%	1,627	3%	97%	235,720	11%	89%	2,855	40%	60%	256,717	15%	85%
1976	18	28%	72%	96,668	71%	29%	3,518	53%	47%	1,804,003	26%	74%	66,183	14%	86%	1,970,390	28%	72%
1977	20	40%	60%	78,805	69%	31%	1,343	57%	43%	961,673	23%	77%	70,978	12%	88%	1,112,819	26%	74%
1978	694	58%	42%	218,165	59%	41%	2,788	52%	48%	4,191,756	12%	88%	72,166	16%	84%	4,485,569	14%	86%
1979	108	24%	76%	317,906	50%	50%	15,007	54%	46%	1,664,249	7%	93%	22,454	32%	68%	2,019,724	14%	86%
1980	34	21%	79%	208,200	83%	17%	12,972	34%	66%	2,033,236	12%	88%	67,471	12%	88%	2,321,913	18%	82%
1981	45	13%	87%	346,073	74%	26%	17,011	55%	45%	2,073,629	13%	87%	61,513	37%	63%	2,498,271	22%	78%
1982	43	30%	70%	476,862	86%	14%	29,378	40%	60%	519,880	27%	73%	101,543	22%	78%	1,127,706	52%	48%
1983	159	12%	88%	460,087	59%	41%	28,953	45%	55%	1,318,526	7%	93%	107,786	21%	79%	1,915,511	21%	79%
1984	290	11%	89%	382,729	67%	33%	25,299	51%	49%	433,806	25%	75%	84,924	24%	76%	927,048	43%	57%
1985	199	21%	79%	703,186	63%	37%	43,914	48%	52%	1,057,912	14%	86%	84,760	33%	67%	1,889,971	34%	66%
1986	134	17%	83%	1,247,976	58%	42%	30,548	44%	56%	728,205	17%	83%	75,643	16%	84%	2,082,506	42%	58%
1987	105	11%	89%	515,410	63%	37%	17,959	53%	47%	916,875	9%	91%	59,723	37%	63%	1,510,072	29%	71%
1988	624	11%	89%	1,123,474	58%	42%	30,001	38%	62%	385,735	35%	65%	93,391	35%	65%	1,633,225	51%	49%

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Appendix D6.–Page 2 of 2.

Year	Chinook ^a			Sockeye ^a			Coho ^a			Pink ^a			Chum ^a			Total ^a		
	Number	GN%	PS%	Number	GN%	PS%	Number	GN%	PS%	Number	GN%	PS%	Number	GN%	PS%	Number	GN%	PS%
1989 ^b	106	100%	0%	1,284,174	100%	0%	1,613	100%	0%	182,217	100%	0%	19,911	100%	0%	1,488,021	100%	0%
1990	807	17%	83%	1,435,461	52%	48%	18,176	65%	35%	144,927	13%	87%	50,304	36%	64%	1,649,675	48%	52%
1991	821	10%	90%	2,062,718	58%	42%	24,601	52%	48%	2,373,516	5%	95%	83,003	24%	76%	4,544,659	30%	70%
1992	1,056	9%	91%	525,158	53%	47%	24,548	55%	45%	59,268	28%	72%	34,580	43%	57%	644,610	50%	50%
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%	115,938	79%	21%	14,547	25%	75%	146,363	44%	56%	18,836	20%	80%	295,842	55%	45%
Averages ^b :																		
1954–2009	302	19%	79%	431,514	66%	34%	11,350	48%	52%	1,369,119	19%	81%	62,325	21%	79%	1,874,604	30%	70%
2000–2009	386	8%	92%	485,700	59%	41%	7,731	41%	59%	1,692,764	13%	88%	46,895	17%	83%	2,233,444	32%	68%

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 (WKSMP) is the achievement of long-term management strategies which 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 the inshore migration the plan is complex, but provides a predictable framework for the major 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, 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 two distinct areas, the outer cape area and the inner bays. The Central, North Cape, and Southwest Afognak sections consists 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 the eight bays in the Northwest Kodiak District. From east to west they are the 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 open and closed based on Karluk Lake early-run sockeye salmon escapement. From June 1 through June 15 the department is directed to open two mandatory 33-hour fishing periods to gauge the run strength of sockeye salmon returning to Karluk, Ayakulik, and Olga Bay systems. The Southwest Afognak Section can only open for one 33-hour fishing period from June 1 through June 15. From June 15 through 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 are 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 the pink salmon run. 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.

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During the August overlap period from approximately August 16 through 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. By this time the majority of the pink salmon have been harvested and Karluk Lake late-run sockeye salmon escapement has begun to increase. From August 25 through 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 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 through June 15 the department is directed to open two mandatory 33-hour fishing periods at the same time as those in the Central and North Cape sections. From June 16 through July 5 openings are based on local sockeye and early-run chum salmon returning to each individual section.

From July 6 through 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. Openings from August 1 through August 24 are based on pink salmon returning to each individual section. From August 25 through 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 only open to seine gear and consists of the areas from Low Cape in the south to Rocky Point in the north. The Southwest Kodiak District can be broken down into three different areas. In the north there are the Inner and Outer Karluk sections, in the south the Inner and Outer Ayakulik sections and in the middle the Halibut Bay and Sturgeon sections. The dominant driving forces in the Inner and Outer Karluk sections are salmon returning to the Karluk system. The driving forces in the Inner and Outer Ayakulik sections are salmon returning to the Ayakulik system. The Halibut Bay and Sturgeon sections are managed based on mixture of Olga Bay, Ayakulik, local, and Karluk salmon stocks. Both the Karluk and Ayakulik systems have very defined even year dominant pink salmon runs (Donnelly 1983; Eggers and Peltz 1991). This dramatic difference between the two runs has evolved very different management practices throughout the Southwest Kodiak District between even and odd years in July.

Inner and Outer Karluk Sections

From June 1 through 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 the department determines that the early-run Karluk sockeye salmon escapement goal will be exceeded. The inability to open the Inner Karluk Section until

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the early-run escapement goal has been exceeded led to continued overescapement of Karluk Lake sockeye salmon from 1999 to 2005. This produced a highly competitive rearing environment, taxing the forage base of Karluk Lake and affecting the growth of Karluk Lake sockeye salmon. This overescapement led to the poor Karluk Lake sockeye salmon runs in 2008 through 2010.

In odd years, from July 16 through August 24, Inner and Outer Karluk openings are based on late-run Karluk Lake sockeye salmon. In even years openings are based on both late-run Karluk Lake sockeye salmon and Karluk pink salmon. Openings from August 25 through September 5 are based on late-run Karluk Lake sockeye salmon. After September 5, openings are based on both late-run Karluk Lake sockeye and Karluk coho salmon.

Inner and Outer Ayakulik sections

From June 1 through July 15 the Inner and Outer Ayakulik sections are opened based on early-run sockeye salmon returning to Red Lake (Ayakulik River). In odd years, from July 16 through August 24, openings are based on late-run Ayakulik Lake sockeye salmon. In even years during this timeframe, Inner and Outer Ayakulik are opened based on late-run sockeye salmon returning to Ayakulik Lake and Ayakulik pink salmon. The Ayakulik River has one of the largest documented coho salmon runs in the Kodiak Management Area. After approximately August 24 openings 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 through June 22 due to the mixing of Karluk, Ayakulik, and Olga Bay sockeye salmon stocks. From June 23 through 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 KMA 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 through August 24 in either even or odd years, both areas are either opened based on Ayakulik or Karluk late-run sockeye salmon or pink salmon. After August 25, both areas are opened based on either Karluk or Ayakulik late-run sockeye and local coho.

2010 Westside Kodiak Fisheries

The department's preseason salmon forecasts predicted a surplus (in excess of escapement needs) of early-run sockeye salmon returning to Karluk Lake (forecasted harvestable surplus of approximately 55,000 fish), Frazer Lake (133,000 fish), early-run Upper Station Lake (43,000 fish), and Ayakulik River (420,000 fish; Eggers et al. 2010). Due to the forecast of a weak Karluk Lake early-run and a low cumulative escapement in early June, the first commercial test fishing period in the Northwest Kodiak District was delayed until June 9 and was only 33-hours in duration. The resulting harvest indicated a weaker than expected run of sockeye salmon traveling along the Westside fishery. As prescribed in the WKSMP, a second 33-hour period was allowed beginning June 14 in the Northwest Kodiak District to test the strength of early-run Karluk and local west side sockeye and chum salmon runs. The harvest from this opening indicated continued low sockeye salmon abundance.

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Sockeye salmon escapement through Karluk weir was very low and there was no indication of any significant numbers of fish in Karluk Lagoon. The Westside fishery remained closed until further notice. Cumulative Karluk River escapement remained inadequate throughout the remainder of the early-run and no additional fishing periods were allowed.

For the third consecutive year, the 2010 Karluk Lake early-run sockeye salmon escapement of 70,544 fish (Table 3; Tiernan *in prep*) was below the desired range of 110,000 to 250,000 fish (Honnold et al. 2007). From June 1 through July 15, approximately 122,660 sockeye salmon were harvested in the Westside fishery (Table 9).

Due to the weak wild stock pink salmon forecast, the first two pink salmon fishing periods in the Northwest Kodiak District (July 6 and 13) were set at 57 and 81 hours (Jackson and Dinnocenzo 2010). When pink salmon catches proved to be stronger than forecasted, the third opening on July 20 was extended 24 hours (up to 105 hours) until July 24. The fourth opening on July 27 was set at 81 hours. However, early aerial surveys indicated Uganik, Terror, and Kizhuyak river pink salmon escapement was below average for that time of year. However, since pink salmon harvest was still above average, the department decided to extend the Central, North Cape, Inner Uyak Bay, Zachar Bay, Spiridon Bay, Sharatin Bay, and Anton Larson Bay sections of the Northwest Kodiak District. The fifth pink salmon opening on August 3 was set at 81 hours and included all the Northwest Kodiak District except the Inner Uganik, Terror, and Kizhuyak bay sections. During this opening, continued aerial surveys indicated that several streams in the Northwest Kodiak District were not going to meet their escapement objectives unless they were closed to commercial fishing. However, pink salmon harvest was still above average and the department decided to extend the Central, North Cape, and Inner Uyak Bay sections of the Northwest Kodiak District for an additional 24 hours. The sixth and final pink salmon opening was set for 57 hours and began on August 12. This opening only included the Central, North Cape, Uyak Bay, Sharatin Bay, and Anton Larsen Bay sections of the Northwest Kodiak District.

When the Northwest Kodiak District closed on August 14 the estimated inseason pink salmon escapement totaled approximately 150,000 fish. The total even year escapement objective for Northwest Kodiak District pink salmon is between 315,000 to 945,000 fish. Furthermore, on August 16 the management of the Westside also has to take into consideration Karluk Lake late-run sockeye salmon. Through August 15, the cumulative late-run sockeye salmon escapement through Karluk weir of 10,498 fish was the second lowest escapement on this date as far back as (at least) 1986. This combined concern for both late-run Karluk Lake sockeye and Northwest Kodiak District pink salmon resulted in no additional openings until the end of the August overlap period (August 16–24).

Despite the continued closure, Karluk weir cumulative late-run sockeye salmon continued to be very low although there was some sign of a moderate buildup of salmon in the lagoon starting in late-August. Many of these fish were pink salmon and it was extremely difficult to quantify the sockeye salmon present. On August 25 the department decided to conduct a 33-hour commercial salmon fishing period in the Central and North Cape sections of the Northwest

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Kodiak District. However, all of the Northwest Kodiak District inner bays remained closed due to inadequate pink salmon escapement. Commercial salmon harvest during the test fishery indicated a weaker than expected run of sockeye salmon traveling along through the Westside fishery. Finally on September 5, a large wave of sockeye salmon passed the weir, bringing the cumulative escapement close to the desired escapement goal range. The department opened the Outer Karluk, Central, North Cape, and Southwest Afognak sections to commercial salmon fishing for 54 hours. Due to poor catches, and very limited effort, the Outer Karluk, Central, North Cape, and Southwest Afognak sections were extended through the end of the season.

The Karluk late-run (post July 15) sockeye salmon escapement of 277,558 fish was within the desired escapement goal range of 170,000 to 380,000 fish (Table 3; Honnold et al. 2007) and the Westside post July 15 harvest included 219,501 sockeye salmon.

The 2010 Ayakulik sockeye salmon run came in as expected and the cumulative escapement stayed within the desired range until the end of the season. The cumulative escapement began to fall within desired ranges after June 19. Starting July 21, a 57-hour fishing period was allowed in the Outer Ayakulik Section targeting Ayakulik River sockeye salmon. During this opening, retention of Chinook salmon over 28 inches was not allowed to conserve fish needed for escapement. Through July 12, the cumulative sockeye salmon escapement of 199,849 fish was just below the minimum escapement goal (escapement goal range of 200,000 to 500,000 fish; Honnold et al. 2007). On July 13 the department opened an 81 hour commercial salmon fishing period in both Inner and Outer Ayakulik. Initial catches were strong and the department extended the fishery for another 48 hours. Through July 20, the cumulative sockeye salmon escapement of 203,970 was well ahead of escapement for that date and above the lower escapement goal. On July 20, both the Inner and Outer Ayakulik and Halibut Bay sections opened to commercial salmon fishing for 81 hours. Due to high effort both escapement and harvest fell off and Inner and Outer Ayakulik and Halibut Bay sections closed on July 23.

From July 23 through August 11, the Inner and Outer Ayakulik sections were closed due to inadequate Ayakulik late-run sockeye salmon escapement. However, on August 4 the Halibut Bay Section opened for 57 hours due to adequate Ayakulik River pink salmon escapement. Between August 5 and 11 Ayakulik sockeye salmon escapement picked up and on August 12 the Outer Ayakulik Section opened for 57 hours and the Inner Ayakulik Section opened for 6 hours. Effort was high and the salmon harvest amount and species composition was about as expected by department staff.

Due to budget restrictions the Ayakulik weir was pulled a full two weeks ahead of schedule. Because of this it was impossible to assess the remaining coho salmon run strength and all further openings were confined to the Outer Ayakulik Section. Due to adequate Ayakulik late-run sockeye escapement the Outer Ayakulik Section was open continuously from August 19 through August 31. From September 5 through the end of the season, the Outer Ayakulik Section was open weekly to harvest coho salmon.

The total sockeye salmon escapement through the Ayakulik weir (262,327; Table 3; Tiernan *in prep*) was within established goals (200,000 to 500,000 fish; Honnold et al. 2007). The harvest of Ayakulik sockeye salmon (269,442 fish) was below forecast (420,000 fish; Eggers al. 2010).

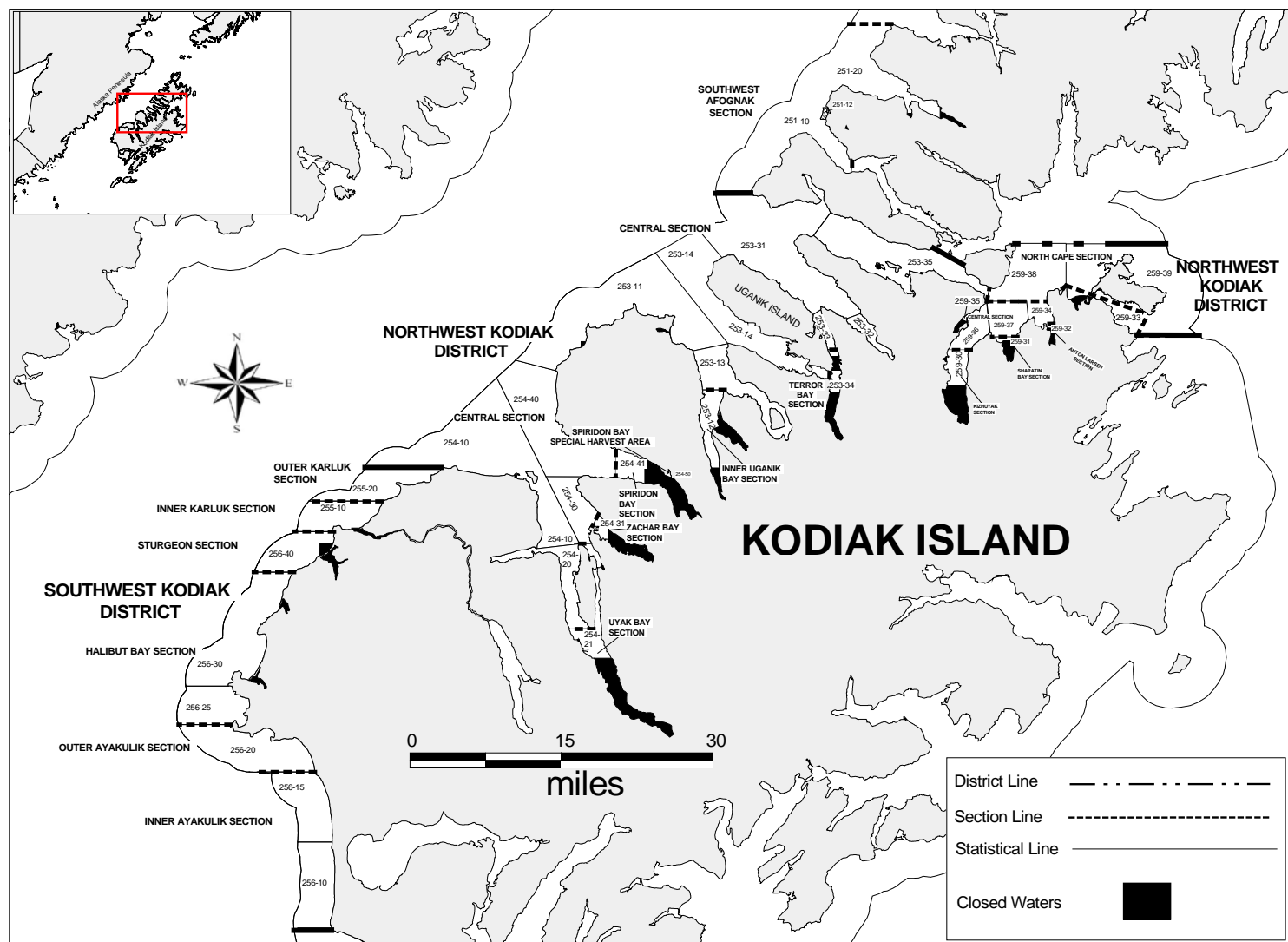
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The total commercial harvest from Westside Kodiak management units (Southwest Afognak to Ayakulik¹) was 4,786,650 salmon, including 6,062 Chinook; 640,339 sockeye; 75,331 coho; 3,837,746 pink; and 227,172 chum salmon in 2,982 landings (Appendix E3). There were 143 seine permit holders that made 1,144 landings for 4,887 Chinook; 425,840 sockeye; 48,106 coho; 2,944,327 pink; and 148,295 chum salmon (Appendix E4). There were 92 set gillnet permit holders that made 1,838 landings for 1,175 Chinook; 214,499 sockeye; 27,225 coho; 893,419 pink; and 78,877 chum salmon. Commercial salmon harvests, by gear type, for individual Westside management units can be found in Appendices E5 and E6.

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¹ Westside Kodiak salmon harvest totals in Appendix E do not include salmon taken in the 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.



Appendix E2.—Map of the west side of Kodiak Island including Southwest 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, 1975–2010.

Year	Permits	Landings	Number of Salmon					Total
			Chinook	Sockeye	Coho	Pink	Chum	
1975	274	2,001	50	75,983	14,439	1,441,658	36,358	1,568,488
1976	346	4,678	253	350,403	10,412	4,786,866	91,524	5,239,458
1977	324	3,462	454	363,690	12,619	2,107,769	115,435	2,599,967
1978	385	6,001	1,352	491,503	20,216	6,245,588	134,794	6,893,453
1979	399	5,121	611	185,363	47,043	3,860,734	59,469	4,153,220
1980	413	6,913	397	412,418	44,674	11,347,713	133,117	11,938,319
1981	374	4,810	911	415,405	36,672	3,188,599	247,097	3,888,684
1982	408	6,077	858	427,454	128,718	5,538,196	450,819	6,546,045
1983	398	5,141	2,353	297,330	49,418	1,730,453	374,319	2,453,873
1984	390	8,065	3,634	925,236	104,347	9,291,637	166,069	10,490,923
1985	365	6,097	4,306	920,143	97,516	1,981,000	226,819	3,229,784
1986	392	12,070	3,728	1,632,227	102,304	9,472,330	584,538	11,795,127
1987	380	6,360	2,268	754,943	85,055	1,643,187	261,601	2,747,054
1988	416	11,700	11,848	998,895	141,115	8,574,478	609,946	10,336,282
1989 ^a	5	10	0	3,489	986	1,005	53	5,533
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	8,497	12,795	2,734,413	104,836	4,114,567	267,471	7,234,082
2000	306	7,555	9,382	1,600,262	111,908	5,343,309	379,444	7,444,305
2001	265	6,815	18,317	1,617,700	143,681	3,687,193	381,098	5,847,989
2002	228	5,369	14,921	1,179,697	166,377	9,445,914	250,153	11,057,062
2003	227	7,511	13,775	2,975,163	156,308	5,406,727	329,543	8,881,516
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	8,277	16,139	1,200,357	251,605	20,205,610	402,314	22,076,025
2007	219	6,868	13,384	1,512,091	167,437	8,720,592	219,689	10,633,193
2008	199	3,387	13,124	634,056	92,170	3,732,346	223,658	4,695,354
2009	197	3,505	1,621	577,894	57,364	4,936,957	353,915	5,927,751
2010	235	2,982	6,062	640,339	75,331	3,837,746	227,172	4,786,650
Average ^a								
2000–2009	228	6,488	13,544	1,516,807	158,951	8,241,446	338,740	10,269,487
1975–2009	331	7,529	9,106	1,370,294	112,487	6,600,599	297,751	8,390,237

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

^a Commercial salmon fisheries were severely restricted in 1989 due to the presence of oil from the M/V Exxon Valdez spill. Averages do not include 1989.

Appendix E4.—Commercial salmon harvest, by gear type and species, for Westside management units, 2010.

Gear	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum		Total	
			Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Seine	143	1,144	4,887	38,824	425,840	2,255,411	48,106	382,016	2,944,327	10,286,627	148,295	1,202,195	3,571,455	14,165,073
Average weight				9.62		5.26		8.57		3.35		8.08		
Set Gillnet	92	1,838	1,175	11,175	214,499	1,207,890	27,225	206,971	893,419	3,503,812	78,877	609,693	1,215,195	5,539,541
Average weight				9.51		5.63		7.60		3.92		7.73		
Grand total	235	2,982	6,062	49,999	640,339	3,463,301	75,331	588,987	3,837,746	13,790,439	227,172	1,811,888	4,786,650	19,704,614
Average weight				8.25		5.41		7.82		3.59		7.98		

Note: Westside Kodiak Management Plan units include the Southwest Afognak Section, the Northwest Kodiak District, except for the Spiridon Bay 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, 2010.

Management				Chinook		Sockeye		Coho		Pink		Chum	
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Southwest Afognak Section													
	15-Jun	5	5	36	195	1,454	6,602	0	0	128	421	309	2,235
	6-Jul ^a												
	7-Jul ^a												
	8-Jul ^a												
	13-Jul	7	7	96	555	3,215	16,960	128	959	11,725	46,530	1,234	10,221
	14-Jul	9	10	109	770	2,856	13,791	166	1,192	18,911	49,641	1,154	8,926
	15-Jul	3	3	9	155	799	4,384	66	437	6,267	19,879	508	4,530
	16-Jul	6	6	254	1,656	2,322	12,448	333	2,274	19,138	68,400	2,321	17,024
	20-Jul	8	8	69	572	3,979	23,575	356	2,484	47,944	176,543	1,782	13,646
	21-Jul	3	3	4	46	1,145	6,043	31	228	17,107	56,477	376	3,085
	22-Jul	12	12	50	503	4,852	24,479	360	2,459	81,364	272,597	1,845	15,316
	23-Jul	6	6	38	379	2,458	13,564	162	1,118	47,592	155,600	1,467	10,271
	24-Jul	7	8	10	95	1,795	9,196	116	794	38,994	125,767	1,033	7,926
	27-Jul	11	12	24	273	1,466	8,318	348	2,741	41,321	137,353	913	6,906
	28-Jul	13	13	67	476	1,876	9,872	330	2,369	60,072	202,646	1,602	11,903
	29-Jul	4	4	56	596	782	3,835	329	2,177	29,862	116,740	1,407	9,181
	31-Jul	4	4	186	1,062	1,411	8,410	889	7,356	34,656	125,167	1,973	14,546
	3-Aug	8	8	83	774	1,293	5,846	702	5,503	61,480	227,873	1,231	9,860
	4-Aug	9	9	28	286	641	3,625	462	3,681	44,213	155,891	775	6,609
	5-Aug	10	10	57	696	1,328	7,559	586	4,449	70,105	236,848	687	5,233
	6-Aug	11	11	81	689	1,362	7,185	747	5,491	69,325	220,698	925	6,408
	7-Aug	15	15	18	147	1,476	7,867	736	5,536	63,350	227,974	681	5,358
	12-Aug	6	7	4	58	708	4,078	468	4,321	52,182	184,277	246	1,996
	13-Aug	5	5	5	50	496	2,485	567	4,467	37,716	142,073	210	1,714
	14-Aug ^a												
	25-Aug	7	7	16	143	375	1,912	798	6,334	26,031	88,117	62	495
	26-Aug	4	4	1	35	160	1,006	298	2,335	9,516	38,248	26	221
	9-Sep ^a												
Total		67	185	1,448	11,179	40,992	217,935	9,205	70,757	898,312	3,113,239	23,929	182,724
Average weight					7.72		5.32		7.69		3.47		7.64

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Management				Chinook		Sockeye		Coho		Pink		Chum	
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Northwest Kodiak District													
	9-Jun	9	9	25	227	3,835	21,785	0	0	10	31	104	847
	10-Jun	9	9	71	407	3,084	14,720	0	0	27	91	75	518
	14-Jun	8	8	11	114	6,020	33,284	0	0	38	116	157	1,156
	15-Jun	13	13	7	65	5,611	28,670	0	0	22	106	709	5,092
	6-Jul	17	17	46	557	3,888	19,564	86	545	5,402	17,739	7,934	63,076
	7-Jul	21	21	94	661	6,470	33,509	159	959	4,147	14,480	9,819	94,026
	8-Jul	23	24	23	250	4,176	22,217	156	951	4,952	16,613	7,527	69,920
	13-Jul	12	12	18	146	1,223	6,532	75	590	4,490	16,042	3,013	25,431
	14-Jul	19	19	28	268	1,468	8,164	184	1,230	18,386	59,728	9,873	85,572
	15-Jul	19	20	192	1,612	5,330	29,938	228	1,898	36,846	105,913	6,778	53,584
	16-Jul	13	13	17	125	2,986	14,925	87	631	17,515	66,483	2,879	22,379
	20-Jul	25	25	82	668	8,031	49,076	407	3,272	52,493	194,605	6,977	55,331
	21-Jul	17	17	16	121	8,630	47,026	171	1,225	38,363	134,808	2,379	16,888
	22-Jul	25	26	67	609	7,128	38,125	521	3,428	74,597	274,699	5,713	43,383
	23-Jul	16	16	80	486	1,729	9,182	313	2,018	21,278	76,338	2,559	19,718
	24-Jul	21	21	121	1,000	3,597	17,808	529	3,464	41,886	160,935	4,860	40,556
	27-Jul	27	27	126	1,540	7,160	42,775	1,311	10,226	94,934	321,039	7,334	60,956
	28-Jul	23	23	157	1,233	4,500	23,930	1,105	7,969	79,043	258,439	3,105	25,777
	29-Jul	17	17	188	1,467	4,513	23,118	768	5,313	39,462	142,079	2,150	17,157
	30-Jul	23	26	43	359	1,675	9,260	552	4,396	70,997	257,227	4,708	38,390
	31-Jul	27	27	762	4,491	3,243	16,476	1,552	10,540	97,234	333,592	3,533	25,457
	3-Aug	34	34	188	1,289	2,835	15,343	1,848	13,837	106,643	406,207	4,196	33,126
	4-Aug	25	25	187	1,570	2,423	12,287	1,654	12,950	96,007	336,433	2,824	22,009
	5-Aug	34	35	172	1,521	2,365	11,975	1,924	14,752	121,056	442,001	4,106	31,882
	6-Aug	22	22	91	913	1,004	5,315	1,315	9,575	88,735	341,122	1,778	13,890
	7-Aug	26	26	60	418	814	3,936	1,190	8,971	54,458	205,428	2,226	16,514
	12-Aug	29	31	35	373	1,742	8,974	2,105	17,403	97,636	339,894	2,364	17,894
	13-Aug	24	24	35	430	1,633	8,263	1,781	13,898	72,204	246,625	1,088	8,841
	14-Aug	12	12	12	106	736	3,777	755	6,385	31,546	107,121	664	5,931
	25-Aug	15	15	23	204	783	3,907	1,293	10,799	63,997	231,598	252	1,866

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Management				Chinook		Sockeye		Coho		Pink		Chum	
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Nothwest Kodiak District													
(cont.)	26-Aug	23	23	14	107	2,050	10,709	2,275	18,174	52,961	193,839	272	2,076
	7-Sep ^a												
	9-Sep ^a												
	10-Sep ^a												
	11-Sep ^a												
Total		125	642	2,991	23,337	110,688	594,590	24,851	191,095	1,487,893	5,303,414	111,967	919,313
Average weight					7.80		5.37		7.69		3.56		8.21
Inner & Outer Karluk sections													
	7-Sep ^a												
	8-Sep	3	3	0	0	91	443	70	522	36	127	6	44
	9-Sep ^a												
	10-Sep ^a												
Total		5	6	0	0	376	2,208	399	3,172	57	211	38	289
Average weight							5.87		7.95		3.70		7.61
Remainder of Southwest Kodiak District													
	21-Jun	10	10	3	27	2,512	12,494	0	0	28	86	138	1,091
	22-Jun	9	9	7	110	4,484	19,650	0	0	4	12	76	632
	23-Jun	10	10	9	78	1,880	11,162	1	6	53	138	473	3,484
	13-Jul	17	17	12	99	40,553	213,592	2	17	2,701	8,705	48	412
	14-Jul	7	7	3	28	12,747	65,151	12	84	3,454	10,916	374	3,210
	15-Jul	20	21	31	224	29,740	159,460	69	489	16,346	54,914	2,204	19,806
	16-Jul	5	5	10	60	11,682	60,582	37	264	4,172	14,147	357	3,113
	17-Jul	17	17	19	160	21,953	121,130	83	593	9,685	34,813	519	4,388
	18-Jul	17	19	11	145	15,862	83,635	40	277	8,469	26,700	503	4,102
	20-Jul	30	33	122	1,130	37,784	199,347	216	1,590	57,222	186,843	1,709	13,042
	21-Jul	10	11	16	122	8,425	43,046	142	966	27,983	88,517	627	4,732

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Management				Chinook		Sockeye		Coho		Pink		Chum	
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Remainder of Southwest Kodiak District													
(cont.)	22-Jul	18	20	62	633	14,436	76,590	265	2,021	56,922	177,819	2,704	21,818
	23-Jul	8	8	39	268	6,689	35,066	60	487	18,276	60,275	277	2,475
	4-Aug	6	6	8	131	1,574	8,199	279	2,059	13,826	44,972	139	1,112
	5-Aug	4	4	45	582	2,138	11,757	670	5,356	16,883	51,094	263	2,026
	6-Aug ^a												
	12-Aug	26	27	2	17	23,664	123,514	44	317	24,762	79,885	18	131
	13-Aug	6	6	0	0	8,603	44,433	21	163	6,178	19,372	1	4
	14-Aug	3	3	0	0	1,219	6,087	2	16	822	3,068	0	0
	15-Aug ^a												
	19-Aug	7	7	1	28	3,637	16,771	925	7,565	42,467	158,267	301	2,406
	20-Aug	6	6	1	8	1,708	8,982	590	4,412	25,622	90,416	128	980
	21-Aug	8	8	3	37	4,430	22,507	1,263	10,805	27,999	103,279	169	1,126
	22-Aug	11	11	8	64	4,188	24,799	1,063	9,261	36,393	124,056	325	1,972
	23-Aug	6	6	8	88	1,702	8,340	434	3,862	22,408	79,448	102	736
	24-Aug	8	8	3	36	2,032	11,238	785	6,278	33,787	116,388	254	1,768
	25-Aug	10	10	17	160	2,192	11,449	1,070	8,724	39,900	125,619	271	2,071
	26-Aug	14	14	0	0	4,308	22,469	1,468	12,711	47,419	163,548	269	2,332
	28-Aug	8	8	1	14	1,482	8,220	2,075	19,808	6,945	24,047	45	335
	29-Aug	7	7	0	0	887	4,474	1,034	8,434	3,333	10,037	45	375
	30-Aug ^a												
	31-Aug ^a												
	4-Sep ^a												
Total		66	325	448	4,308	273,784	1,440,679	13,651	116,992	558,065	1,869,763	12,361	99,869
Average weight					9.62		5.26		8.57		3.35		8.08
Grand Total		143	1,144	4,887	38,824	425,840	2,255,411	48,106	382,016	2,944,327	10,286,627	148,295	1,202,195

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

^a Confidential.

Appendix E6.—Set gillnet salmon harvest, by species for Westside Management Plan units, 2010.

Management				Chinook		Sockeye		Coho		Pink		Chum	
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Northwest													
Kodiak District													
	9-Jun	29	30	31	249	5,070	28,845	0	0	33	170	131	976
	10-Jun	44	53	37	418	10,873	57,012	0	0	8	38	468	3,247
	14-Jun	23	23	9	57	3,201	16,573	0	0	98	367	202	1,498
	15-Jun	41	46	20	188	6,684	36,392	0	0	69	245	379	2,739
	6-Jul	34	41	10	135	7,196	39,410	28	186	2,320	8,637	1,586	12,083
	7-Jul	50	58	36	538	11,109	61,924	47	316	4,455	16,517	2,429	18,615
	8-Jul	45	49	31	401	8,682	49,769	40	304	4,350	15,103	2,065	16,439
	13-Jul	41	46	7	69	8,676	50,251	58	381	9,780	38,336	2,767	22,432
	14-Jul	55	74	55	530	14,761	82,902	388	2,690	23,965	92,694	4,863	39,877
	15-Jul	46	48	57	537	11,349	65,939	159	1,118	19,144	72,701	3,307	26,021
	16-Jul	52	68	28	213	8,604	49,318	326	2,525	22,190	83,269	3,700	30,170
	20-Jul	35	44	12	135	9,731	57,504	211	1,427	17,307	68,041	2,033	17,663
	21-Jul	51	67	22	321	15,454	88,640	690	4,812	49,075	186,881	5,806	45,343
	22-Jul	53	68	97	629	7,257	42,938	633	4,497	34,399	134,905	3,605	27,801
	23-Jul	42	51	19	206	4,995	28,344	389	2,906	21,824	86,843	2,316	17,181
	24-Jul	48	64	28	258	4,877	28,591	795	5,808	34,015	132,352	3,048	23,734
	27-Jul	47	55	38	379	9,722	54,820	1,061	7,564	35,700	142,227	3,645	27,570
	28-Jul	53	65	60	577	9,678	53,855	1,054	7,702	47,594	187,913	4,164	32,101
	29-Jul	58	66	91	787	11,784	64,679	1,840	11,972	46,019	184,078	4,392	35,157
	30-Jul	52	56	64	453	3,239	18,469	750	5,745	34,363	134,150	2,415	19,212
	31-Jul	56	77	113	951	4,728	27,628	1,221	9,269	58,710	231,619	3,366	28,384
	3-Aug	56	84	63	562	4,793	26,772	1,144	8,835	65,567	255,358	6,333	38,141
	4-Aug	47	56	23	244	3,886	21,561	1,124	8,325	46,193	187,973	3,081	24,019
	5-Aug	60	74	45	490	5,519	31,208	1,486	11,342	62,666	247,788	3,229	24,932
	6-Aug	59	63	22	201	4,338	24,448	1,012	7,476	51,253	200,518	2,279	17,623
	7-Aug	52	66	15	150	3,210	18,589	1,215	9,076	47,778	187,611	2,557	19,713

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Appendix E6.–Page 2 of 2.

Management				Chinook		Sockeye		Coho		Pink		Chum	
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Northwest													
Kodiak District													
(cont.)	12-Aug	50	69	13	139	2,965	16,997	2,021	15,629	46,500	179,842	1,382	11,044
	13-Aug	39	44	18	215	2,844	15,926	1,545	11,961	37,371	149,750	1,475	12,017
	14-Aug	35	36	16	181	1,487	7,953	1,382	11,081	24,725	96,288	852	6,969
	15-Aug	3	3	0	0	123	800	139	1,119	3,163	11,090	79	601
	25-Aug	34	43	14	129	2,079	11,069	1,193	9,064	21,429	85,688	317	2,180
	26-Aug	40	44	18	208	2,655	13,582	847	6,971	18,549	74,093	303	2,201
	7-Sep	11	11	0	0	482	2,502	714	5,500	714	2,653	53	361
	8-Sep	19	20	15	135	712	3,654	839	6,585	977	3,691	78	534
	9-Sep	21	22	23	202	694	3,616	1,496	12,642	596	2,276	78	507
	10-Sep	13	13	5	81	353	1,751	387	3,360	256	1,054	34	221
	11-Sep	18	18	9	94	325	1,743	388	3,603	182	724	33	216
	12-Sep	5	5	4	52	49	259	123	1,019	6	24	9	66
	13-Sep	10	10	5	53	202	1,051	258	2,350	55	221	11	63
	14-Sep	3	3	2	8	28	162	90	719	7	27	4	25
	15-Sep	4	4	0	0	51	261	52	491	14	57	3	17
	18-Sep ^a												
Total		92	1,838	1,175	11,175	214,499	1,207,890	27,225	206,971	893,419	3,503,812	78,877	609,693
Average weight					9.51		5.63		7.60		3.92		7.73

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

^a Confidential.

APPENDIX F. NORTH SHELKOF FISHERY SUMMARY

INTRODUCTION

In 1988 there was a significant harvest of large (greater than 6 pound) 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). Though the Cook Inlet sockeye salmon run was at a record level, the board felt that this was an expanding, nontraditional harvest pattern. 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 through July 25 and establishes two specific sockeye salmon harvest "triggers" for defined management units within the affected zone. These triggers were established to protect Cook Inlet-bound sockeye salmon that migrate through the Shelikof Strait. The Southwest Afognak management unit (comprised of the Southwest Afognak Section) and the North Shelikof management unit (comprised 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) has 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 comprised of all waters seaward of a line which is drawn from cape to cape¹. The seaward zone of the Southwest Afognak management unit closes to fishing if 50,000 sockeye salmon are harvested from July 6 through July 25. The seaward zone of the North Shelikof management unit closes to fishing if 15,000 sockeye salmon are harvested from July 6 through 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; Jackson and Dinnocenzo 2010).

In the nineteen 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 three times (in 1992, 1993, and 2003; Appendix F4).

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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 1/2 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 1/2 mile offshore of the line running cape to cape in order to allow for traditional harvest opportunities for pink salmon.

2010 Summary

With the expectation of a weak pink salmon run in 2010 (Eggers et al. 2010), one 57-hour and two 81-hour fishing periods were scheduled preseason in the Southwest Afognak management unit and that portion of the North Shelikof management units including the Northwest Afognak and Shuyak sections during the period when the NSSSSMP was in effect (July 6 through July 25; Jackson and Dinnocenzo 2010). The NSSSSMP prescribes 57-hour fishing periods in that portion of the North Shelikof management unit in the Mainland District and three fishing periods were scheduled to open simultaneously with openings elsewhere in the North Shelikof Strait fishery, primarily to help disperse the fleet.

First Fishing Period (July 6 to 8)

The first fishing period was characterized by moderate sockeye salmon abundance. Twelve permit holders made 16 landings in the North Shelikof management unit and harvested 528 Chinook; 14,441 sockeye; 1,355 coho; 2,946 pink; and 5,530 chum salmon (Appendix F5). Toward the end of this period it appeared the harvest trigger of 15,000 sockeye salmon would be achieved, and the seaward zones of the North Shelikof management units were closed at 1:00 PM on July 8.

Fishing was slow and effort was light in the Southwest Afognak management unit with 5 permit holders harvesting 146 Chinook; 2,602 sockeye; 33 coho; 2,962 pink; and 1,121 chum salmon in the first period (Appendix F6).

Second Fishing Period (July 13 to 16)

With the seaward zones closed, the number of the boats fishing in the North Shelikof management unit during this period was down from the first period. Seven permit holders in the North Shelikof management unit caught 80 Chinook; 1,842 sockeye; 58 coho; 6,246 pink; and 1,934 chum salmon (Appendix F5).

During the second period in the Southwest Afognak management unit, the fleet increased to 18 boats which harvested 468 Chinook; 9,192 sockeye; 693 coho; 56,041 pink; and 5,217 chum salmon (Appendix F6).

Third Fishing Period (July 20 to 24)

Effort continued to drop during the third period in the North Shelikof management unit and 6 permit holders harvested 1 Chinook; 2,637 sockeye; 596 coho; 66,289 pink; and 3,356 chum salmon (Appendix F5).

Effort increased during this period in the Southwest Afognak Section, but it was apparent that the 50,000 sockeye salmon harvest trigger would not be reached. From July 20 through July 24, 21 permit holders harvested 171 Chinook; 14,229 sockeye; 1,025 coho; 233,001 pink; and 6,503 chum salmon in the Southwest Afognak unit (Appendix F6).

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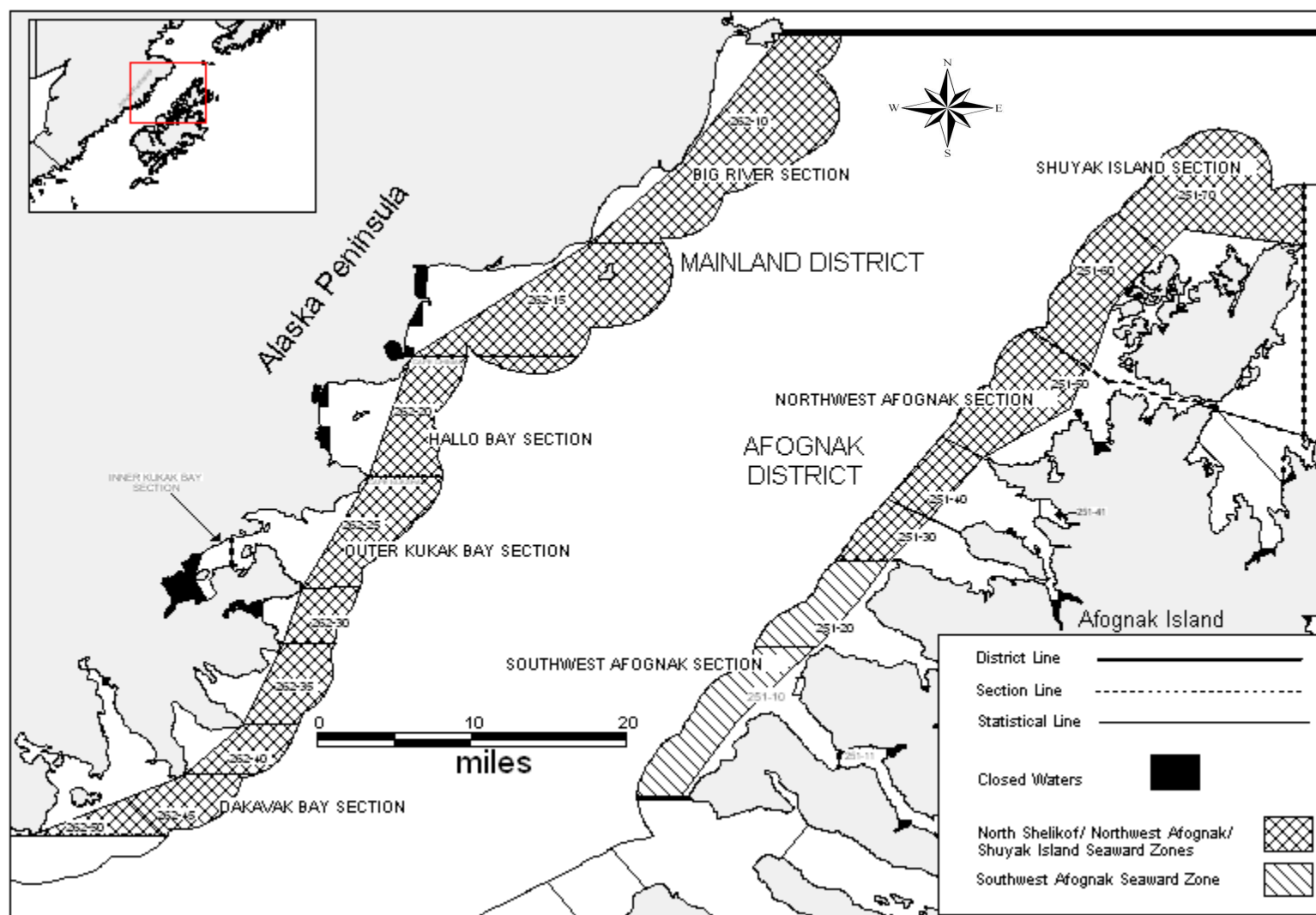
Season Totals

The 2010 North Shelikof management unit harvest for the time period of July 6 through July 25 totaled 609 Chinook; 18,920 sockeye; 2,009 coho; 75,481 pink; and 10,820 chum salmon, taken by 19 permit holders (Appendix F3 and F5). The average weight of the sockeye salmon harvested in the North Shelikof Unit was 5.7 pounds.

The 2010 Southwest Afognak Unit harvest for the time period of July 6 through July 25 totaled 785 Chinook; 26,023 sockeye; 1,751 coho; 292,004 pink; and 12,841 chum salmon, taken by 33 permit holders (Appendices F4 and F6). The average weight of the sockeye salmon harvested in the Southwest Afognak management unit was 5.3 pounds (Appendix F6).

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- Jackson, J. and J. Dinnocenzo. 2010. Kodiak management area harvest strategy for the 2010 commercial salmon fishery. Alaska Department of Fish and Game, Fisheries Management Report No.10-16, Anchorage.
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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, 1991–2010.

Year	Mainland		N. Afognak		Zone Closure		Sockeye Harvest at time of zone closure	Number of Vessels	Total Salmon Harvest by Species - July 6 through July 25					Upper Cook Inlet sockeye harvest (in millions)
	# of days open to fishing	# of days Seaward Zone closed	# of days open to fishing	# of days Seaward Zone closed	Date	Time			Chinook	Sockeye	Coho	Pink	Chum	
1991	7.1	0.0	13.1	0.0	none	none	no closure	42	2,500	18,800	2,700	44,800	3,800	2.2
1992	7.1	5.1	9.1	7.1	7/8	1:00 PM	13,500	77	900	128,400	3,100	24,300	12,000	8.9
1993	7.1	4.7	13.8	8.9	7/10	5:00 PM	15,220	89	1,200	78,400	2,000	75,600	4,200	4.7
1994	7.1	2.8	9.1	4.8	7/14	11:00 AM	22,830	58	165	38,800	2,400	52,000	10,500	3.5
1995	7.1	3.3	13.3	8.5	7/13	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	7/15	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	7/8	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	7/16	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	7/13	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	7/16	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	7/15	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	7/8	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	7/13	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	7/13	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	7/14	NOON	15,000	31	482	82,538	8,312	146,445	33,075	2.4
2007	7.1	4.7	13.8	8.9	7/8	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	7/15	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	7/8	1:00 PM	14,441	19	609	18,920	2,009	75,481	10,820	2.8

Note: In 1988, the Upper Cook Inlet sockeye salmon run was 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).

Appendix F4.—Summary of fishing time, zone closures, effort, and harvest by species, for the Southwest Afognak management unit of the Kodiak Management Area, 1991–2010.

Year	Zone Closure				Sockeye Harvest at time of zone closure	Number of Vessels	Total Salmon Harvest by Species - July 6 through July 25					Upper Cook Inlet sockeye harvest (in millions)
	# of days open to fishing	# of days Seaward Zone closed	Date	Time			Chinook	Sockeye	Coho	Pink	Chum	
1991	13.1	0.0	none	none	no closure	55	300	34,200	3,600	100,700	4,000	2.2
1992	9.1	4.7	7/14	1:00 PM	48,200	84	300	50,600	600	30,000	6,800	8.9
1993	13.6	7.7	7/14	1:00 PM	45,900	87	860	74,000	7,100	243,000	7,400	4.7
1994	9.6	0.0	none	none	no closure	45	360	13,600	1,000	64,300	3,100	3.5
1995	13.6	0.0	none	none	no closure	64	760	21,360	1,750	490,510	22,200	2.9
1996	7.6	0.0	none	none	no closure	32	185	10,510	803	79,205	10,785	3.9
1997	10.6	0.0	none	none	no closure	61	1,500	18,120	1,760	62,730	8,440	4.1
1998	10.6	0.0	none	none	no closure	22	240	10,340	2,290	82,685	1,900	1.2
1999	10.6	0.0	none	none	no closure	38	700	18,725	375	41,960	4,720	2.7
2000	10.6	0.0	none	none	no closure	31	90	17,810	1,220	37,340	7,225	1.3
2001	10.6	0.0	none	none	no closure	48	517	33,289	7,139	191,947	15,913	1.8
2002	10.6	0.0	none	none	no closure	32	502	23,691	3,742	122,892	4,821	2.8
2003	13.1	6.4	7/16	8:00 PM	66,000	41	125	119,490	6,006	238,088	15,829	3.5
2004	13.1	0.0	none	none	no closure	25	3,048	24,515	7,918	227,062	19,315	4.9
2005	13.1	0.0	none	none	no closure	29	492	30,262	1,501	156,150	2,754	5.1
2006	16.7	0.0	none	none	no closure	22	1,858	24,182	3,626	154,352	15,151	2.4
2007	13.1	0.0	none	none	no closure	26	2,222	20,704	2,899	191,203	5,353	3.3
2008	8.6	0.0	none	none	no closure	22	2,105	17,216	1,564	99,923	11,727	2.8
2009	14.3	0.0	none	none	no closure	26	182	42,687	1,957	169,217	12,828	2.3
2010	10.1	0.0	none	none	no closure	33	785	26,023	1,751	292,004	12,841	2.8

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).

Appendix F5.—Daily salmon harvest by species for the North Shelikof management units of the North Shelikof Strait Sockeye Salmon Management Plan, 2010.

Date	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
			Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
First Period (July 6–July 8)												
6-Jul	3	3	187	872	3,901	23,239	376	2,505	690	2,071	1,063	10,635
7-Jul	6	6	332	2,019	8,405	50,640	903	7,237	1,576	4,928	2,815	19,723
8-Jul	7	7	9	41	2,135	11,651	76	536	680	2,046	1,652	11,405
Total	12	16	528	2,932	14,441	85,530	1,355	10,278	2,946	9,045	5,530	41,763
Avg. Wt.				5.55		5.92		7.59		3.07		7.55
Second Period (July 13–16)												
13-Jul	4	4	1	26	509	3,100	31	196	1,419	4,358	931	7,971
14-Jul ^a												
15-Jul ^a												
Total	7	8	80	422	1,842	9,475	58	359	6,246	18,487	1,934	15,042
Avg. Wt.				5.28		5.14		6.19		2.96		7.78
Third Period (July 20–24)												
20-Jul ^a												
21-Jul ^a												
22-Jul ^a												
23-Jul ^a												
24-Jul	3	3	0	0	690	3,650	122	694	22,592	47,910	539	3,781
Total	6	9	1	9	2,637	13,065	596	2,795	66,289	199,721	3,356	23,043
Avg. Wt.				9.00		4.95		4.69		3.01		6.87
<u>North Shelikof Management Harvest July 6–25</u>												
Total	19	33	609	3,363	18,920	108,070	2,009	13,432	75,481	227,253	10,820	79,848
Avg. Wt.				5.52		5.71		6.69		3.01		7.38

^a Confidential.

Appendix F6.–Daily salmon harvest by species, in the Southwest Afognak management units of the North Shelikof Strait Sockeye Salmon Management Plan, 2010.

Date	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
			Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
First Period (July 6–8)												
6-Jul ^a												
7-Jul ^a												
8-Jul ^a												
Total	5	5	146	959	2,602	14,219	33	241	2,962	11,185	1,121	8,741
Avg. Wt.				6.57		5.46		7.30		3.78		7.80
Second Period (July 13–16)												
13-Jul	7	7	96	555	3,215	16,960	128	959	11,725	46,530	1,234	10,221
14-Jul	9	10	109	770	2,856	13,791	166	1,192	18,911	49,641	1,154	8,926
15-Jul	3	3	9	155	799	4,384	66	437	6,267	19,879	508	4,530
16-Jul	6	6	254	1,656	2,322	12,448	333	2,274	19,138	68,400	2,321	17,024
Total	18	26	468	3,136	9,192	47,583	693	4,862	56,041	184,450	5,217	40,701
Avg. Wt.				6.70		5.18		7.02		3.29		7.80
Third Period (July 20–24)												
20-Jul	8	8	69	572	3,979	23,575	356	2,484	47,944	176,543	1,782	13,646
21-Jul	3	3	4	46	1,145	6,043	31	228	17,107	56,477	376	3,085
22-Jul	12	12	50	503	4,852	24,479	360	2,459	81,364	272,597	1,845	15,316
23-Jul	6	6	38	379	2,458	13,564	162	1,118	47,592	155,600	1,467	10,271
24-Jul	7	8	10	95	1,795	9,196	116	794	38,994	125,767	1,033	7,926
Total	21	37	171	1,595	14,229	76,857	1,025	7,083	233,001	786,984	6,503	50,244
Avg. Wt.				9.33		5.40		6.91		3.38		7.73
Season												
Total	33	68	785	5,690	26,023	138,659	1,751	12,186	292,004	982,619	12,841	99,686
Avg. Wt.				7.22		5.34		6.97		3.39		7.77

^a Confidential.

APPENDIX G. EASTSIDE AFOGNAK FISHERY SUMMARY

INTRODUCTION

In 1990 the board 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 eastside 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 which are managed in each of these sections throughout the fishing season.

2010 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 6 based on local pink, chum, and coho salmon. A strong return of sockeye salmon was apparent early in the season and the Southeast Afognak Section was opened with the initial opening for KMA sockeye salmon on June 9. Closed waters for the subsistence fishery were reduced to the stream terminus of Afognak River, and closed waters for the commercial fishery were reduced to the former subsistence markers. The run continued to be strong and the Southeast Afognak Section stayed open to continuous fishing until July 31. After July 31 fishing time in the Southeast Afognak Section occurred at the same time as most of the Afognak District with normal closed waters. A total of 46 permit holders harvested 83 Chinook; 12,533 sockeye; 2,663 coho; 352,432 pink; and 5,485 chum salmon (Appendix G3). The 2010 sockeye salmon escapement into Afognak Lake was 52,255 fish (Table 4; Tiernan *in prep*), which was above the escapement goal range of 20,000 to 50,000 fish (Honnold et al. 2007).

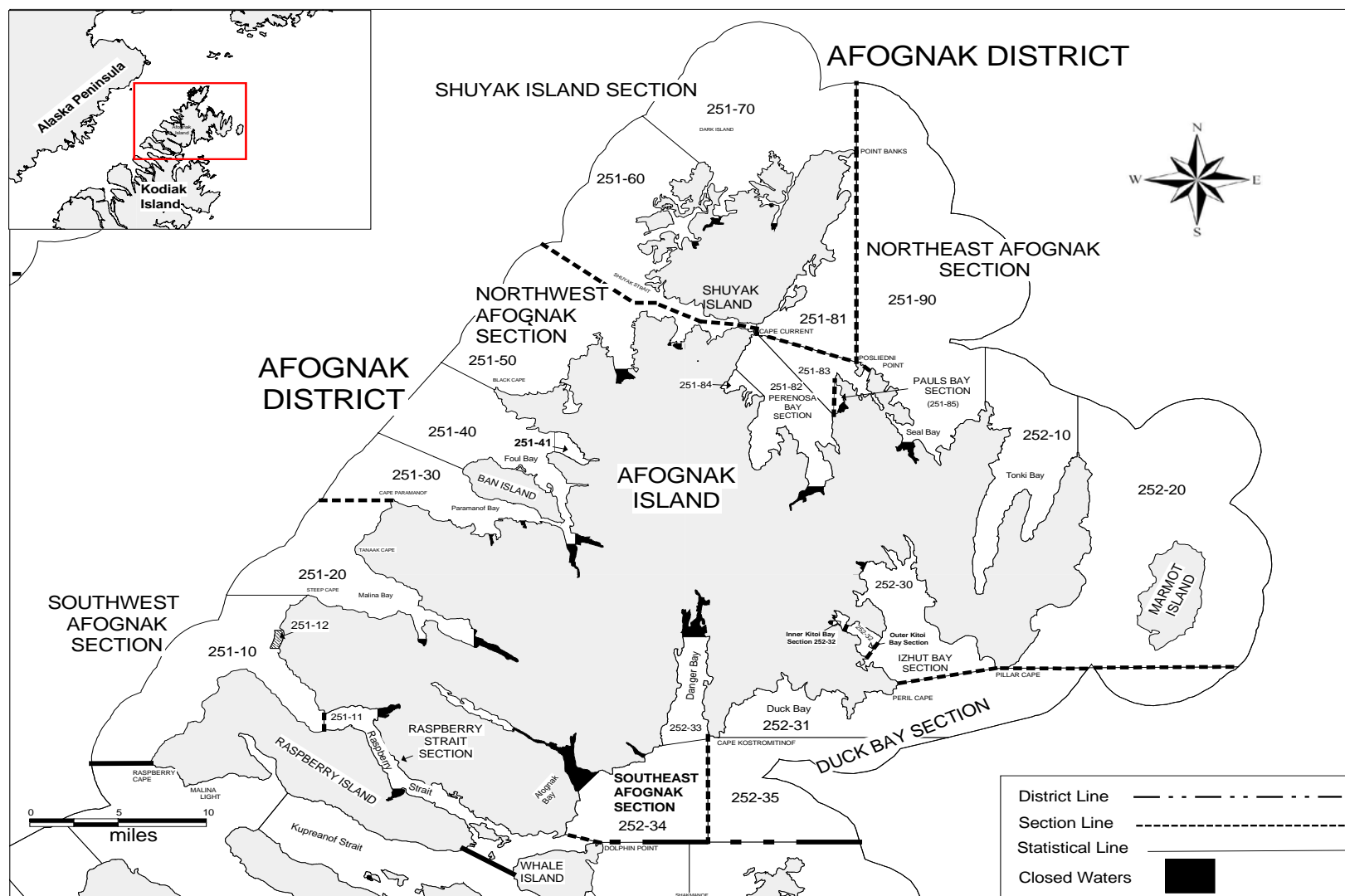
The commercial salmon fishery targeting Kitoi Bay Hatchery fish began on June 9 with the last delivery occurring on September 20. In fisheries targeting the Kitoi Bay Hatchery return, which include the Duck Bay, Izhut Bay, Inner Kitoi, and Outer Kitoi Bay sections, 138 permit holders harvested 554 Chinook; 91,124 sockeye; 113,909 coho; 3,250,469 pink; and 191,284 chum salmon (Appendix G3). The hatchery pink, coho, and chum salmon harvests were below harvest forecasts (Table 9; Eggers et al. 2010), but the sockeye salmon harvest was stronger than expected.

There was a cost recovery fishery near the Kitoi Bay Hatchery, with mostly pink salmon harvested and sold by Kodiak Regional Aquaculture Association. The cost recovery fishery took approximately 1.0 million pink salmon (4.1 million pounds), about 31% of the Kitoi Bay Hatchery pink salmon 2010 harvest. In 2010, 3,294 sockeye, 456 coho, and 1,935 chum salmon were also harvested in the cost recovery fishery.

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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, 2010.

Management Unit	Date	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
				Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Raspberry Strait													
Section	28-Jul ^a												
251-11	7-Aug ^a												
	9-Sep ^a												
Total		4	4	10	82	344	2,082	112	1,112	9,835	34,462	623	4,647
Average weight					8.20		6.05		9.93		3.50		7.46
Southeast Afognak													
Section	9-Jun	8	8	3	32	3,792	16,594	0	0	0	0	0	0
252-34 & 33	10-Jun ^a												
	12-Jun	3	3	2	43	1,651	7,597	0	0	0	0	0	0
	13-Jun	4	5	9	73	3,156	12,740	2	7	157	396	426	2,553
	14-Jun ^a												
	15-Jun ^a												
	16-Jun ^a												
	30-Jun ^a												
	1-Jul ^a												
	8-Jul ^a												
	9-Jul ^a												
	28-Jul ^a												
	29-Jul ^a												
	30-Jul	7	8	2	28	599	3,342	268	1,858	65,031	232,575	421	3,113
	31-Jul	5	5	0	0	226	1,070	174	1,232	19,790	78,609	264	1,584
	3-Aug	4	4	0	0	134	690	36	268	28,853	110,656	91	681
	4-Aug	8	9	9	100	374	2,183	163	1,241	81,012	270,633	282	2,074
	5-Aug	6	6	2	17	196	945	109	846	34,546	128,831	219	2,103
	6-Aug	11	12	43	490	263	1,389	237	1,571	45,932	162,463	906	5,653
	7-Aug	10	11	0	0	133	641	126	965	33,563	119,821	103	783
	19-Aug	5	5	0	0	10	51	114	885	7,327	24,915	4	16
	20-Aug	4	5	0	0	64	312	464	3,714	19,804	71,234	12	82
	21-Aug	4	4	0	0	9	43	115	876	3,751	13,868	2	11
	28-Aug ^a												
	29-Aug ^a												
Total		46	102	83	871	12,533	57,315	2,663	19,932	352,432	1,258,718	5,485	39,293
Average weight					10.49		4.57		7.48		3.57		7.16

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Management		Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
Unit	Date			Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Izhut Bay Section													
252-30													
	14-Jun ^a												
	15-Jun ^a												
	16-Jun	3	3	5	37	480	2,284	0	0	376	2,072	1,047	8,166
	17-Jun ^a												
	18-Jun	3	3	0	0	169	788	0	0	140	465	1,042	7,063
	19-Jun	3	3	1	4	256	1,234	0	0	2	3	1,276	9,787
	20-Jun ^a												
	22-Jun	5	5	26	159	1,626	7,940	0	0	26	90	6,914	50,468
	23-Jun	3	3	0	0	468	2,163	0	0	2	7	1,743	12,592
	24-Jun	3	3	12	52	870	3,923	0	0	4	14	4,230	28,493
	25-Jun ^a												
	26-Jun	10	10	20	130	1,463	6,607	0	0	49	154	8,090	57,556
	27-Jun	3	3	5	32	663	3,353	0	0	18	61	3,275	20,445
	28-Jun	8	8	7	61	1,421	6,679	1	6	185	554	7,181	50,324
	29-Jun	10	10	4	43	1,232	5,721	0	0	157	461	5,888	39,949
	30-Jun	7	7	4	34	590	2,922	2	10	126	375	2,941	19,091
	10-Jul	7	7	3	22	2,536	12,408	94	666	569	1,741	4,534	30,907
	11-Jul	8	8	4	51	1,511	7,726	115	688	649	1,898	2,700	18,135
	12-Jul ^a												
	13-Jul ^a												
	14-Jul ^a												
	15-Jul ^a												
	16-Jul	3	3	1	6	1,331	7,009	82	574	581	1,746	1,665	10,493
	17-Jul	3	3	2	16	1,874	8,980	68	404	1,069	3,530	1,093	7,958
	19-Jul ^a												
	20-Jul ^a												
	21-Jul ^a												
	24-Jul ^a												
	25-Jul	3	3	0	0	810	4,437	105	757	6,824	24,855	259	2,301
	27-Jul ^a												
	28-Jul	3	3	0	0	470	2,660	45	346	16,287	52,052	161	1,304
	29-Jul	5	5	0	0	295	1,985	31	237	17,943	60,383	114	940
	30-Jul	8	8	1	26	551	3,013	111	727	25,669	92,863	364	2,696
	31-Jul	15	16	0	0	675	3,668	260	1,803	44,074	166,084	509	3,357
	17-Aug	24	24	0	0	72	381	1,444	11,115	18,673	67,648	13	87
	18-Aug	14	14	0	0	49	246	1,226	9,244	12,373	46,441	83	656
	19-Aug	15	16	1	15	112	599	3,251	25,980	33,724	124,126	18	120

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Management				Chinook		Sockeye		Coho		Pink		Chum	
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Izhut Bay Section													
252-30 (cont.)	20-Aug	13	13	0	0	61	329	1,234	10,776	23,270	82,771	22	136
	21-Aug	16	17	0	0	93	494	1,576	13,300	24,291	87,684	22	153
	22-Aug	18	18	0	0	79	449	2,422	22,575	21,670	76,212	16	102
	23-Aug	9	10	0	0	37	183	2,269	19,272	6,275	22,391	14	60
	24-Aug	11	11	0	0	52	269	4,926	42,822	11,602	38,301	0	0
	25-Aug	4	4	0	0	11	44	1,681	14,934	2,587	10,069	4	20
	26-Aug	8	8	0	0	39	247	2,175	20,002	4,698	16,341	10	78
	27-Aug	7	7	0	0	27	143	3,453	28,944	3,927	13,372	4	22
	28-Aug	5	5	0	0	14	78	2,378	22,175	6,177	20,016	1	9
	29-Aug	6	6	0	0	6	13	2,140	19,787	2,277	7,701	0	0
	30-Aug	4	4	0	0	12	58	2,360	19,744	2,468	8,754	4	23
	31-Aug	6	6	0	0	0	0	1,165	9,293	1,159	4,150	0	0
	1-Sep	6	6	0	0	9	41	2,678	14,200	1,404	5,112	0	0
	2-Sep	8	8	0	0	19	80	4,326	35,535	1,743	6,345	4	18
	3-Sep	3	3	0	0	0	0	435	3,586	100	371	0	0
	4-Sep	5	5	0	0	4	20	1,209	9,929	452	1,576	0	0
	5-Sep ^a												
	6-Sep ^a												
	8-Sep ^a												
	9-Sep ^a												
	12-Sep ^a												
	16-Sep ^a												
Total		87	330	141	1,089	26,270	133,172	47,623	391,801	304,451	1,082,429	69,776	488,305
Average weight					7.72		5.07		8.23		3.56		7.00
Duck Bay Section													
252-31 & 35	9-Jun	5	5	43	414	916	4,585	0	0	9	29	49	277
	12-Jun ^a												
	13-Jun ^a												
	14-Jun ^a												
	15-Jun	3	3	14	152	1,463	5,908	0	0	873	2,182	906	6,332
	16-Jun ^a												
	17-Jun	3	3	12	128	347	1,738	0	0	576	1,859	280	1,969
	19-Jun	7	7	2	13	1,111	5,669	0	0	1,753	5,674	942	6,918

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Management				Chinook		Sockeye		Coho		Pink		Chum	
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Duck Bay Section													
252-31 & 35 (cont.)	20-Jun	3	3	0	0	397	1,780	0	0	126	383	375	2,634
	21-Jun	3	3	5	24	405	2,299	0	0	237	737	604	4,763
	22-Jun	6	6	2	51	1,205	6,925	0	0	539	1,673	2,108	14,012
	23-Jun	6	6	0	0	1,167	5,511	0	0	105	307	2,194	13,984
	24-Jun ^a												
	25-Jun	5	5	3	27	572	2,844	0	0	49	157	1,379	10,304
	26-Jun ^a												
	27-Jun	6	6	6	61	730	3,509	1	5	100	281	1,850	12,782
	28-Jun	6	6	0	0	599	2,970	2	11	158	526	2,284	15,801
	29-Jun	10	10	2	13	1,060	5,008	2	11	218	680	3,983	26,804
	30-Jun	9	9	32	665	1,996	10,169	16	114	434	1,432	5,248	36,521
	1-Jul	3	3	0	0	525	2,637	5	31	78	273	2,176	14,744
	2-Jul	3	3	0	0	659	3,138	9	51	188	670	3,799	26,400
	3-Jul ^a												
	4-Jul ^a												
	5-Jul ^a												
	6-Jul	3	3	2	18	1,313	7,067	211	1,409	456	1,776	2,197	15,386
	7-Jul	4	4	5	57	2,159	11,274	201	1,428	1,512	4,821	2,467	17,386
	8-Jul	6	7	33	211	4,274	24,428	777	5,490	3,201	10,205	6,399	47,335
	9-Jul	4	4	1	17	1,151	6,425	193	1,341	883	2,676	1,728	12,642
	10-Jul	5	5	3	25	2,742	13,929	652	3,033	2,578	8,985	3,069	18,422
	11-Jul	9	9	3	34	1,472	8,895	360	2,418	1,354	4,631	2,532	17,849
	12-Jul	4	4	0	0	598	3,321	137	865	700	2,588	565	4,759
	13-Jul	4	4	8	61	1,433	7,333	182	1,229	1,999	7,790	667	4,345
	14-Jul ^a												
	15-Jul	7	9	4	31	4,314	24,564	1,291	9,230	6,086	22,793	3,476	26,144
	16-Jul ^a												
	18-Jul ^a												
	19-Jul ^a												
	21-Jul ^a												
	22-Jul ^a												
	23-Jul	3	3	5	61	467	3,053	452	3,365	6,276	20,197	363	2,907
	24-Jul ^a												
	25-Jul	6	6	5	31	1,203	6,457	238	1,828	20,132	72,789	454	3,675

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Management				Chinook		Sockeye		Coho		Pink		Chum	
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Duck Bay Section													
252-31 & 35 (cont.)	26-Jul	8	8	1	7	975	4,782	743	4,964	21,734	87,097	608	4,025
	27-Jul	6	6	5	52	1,009	5,734	314	2,566	21,491	86,523	617	5,151
	28-Jul	7	7	3	18	421	2,172	287	1,778	32,455	111,376	583	4,738
	29-Jul	13	13	10	144	820	4,887	385	3,188	77,949	261,822	1,370	11,378
	30-Jul	11	11	8	66	499	2,625	526	3,473	53,600	200,040	636	4,668
	31-Jul	16	16	2	34	924	4,886	562	4,047	80,282	302,494	876	6,761
	13-Aug	42	44	3	49	2,055	9,966	2,844	22,223	137,337	487,046	1,410	11,634
	14-Aug	21	22	1	10	567	2,789	2,688	20,971	110,075	376,757	341	2,733
	15-Aug	13	13	5	28	109	572	397	3,359	29,384	111,648	29	167
	16-Aug	25	25	1	13	316	1,625	1,569	12,075	81,130	260,324	131	981
	17-Aug	18	18	0	0	253	1,284	1,579	11,970	75,785	250,906	70	527
	18-Aug	15	15	0	0	202	1,055	1,732	13,386	43,959	161,068	64	479
	19-Aug	12	12	5	25	173	854	989	7,542	28,119	102,880	72	429
	20-Aug	20	21	18	112	285	1,407	2,630	18,901	56,185	195,839	97	631
	21-Aug	21	21	0	0	237	1,139	3,231	26,916	52,755	182,996	34	247
	22-Aug	19	19	0	0	188	927	2,702	21,618	38,193	130,546	50	308
	23-Aug	14	14	0	0	190	1,005	2,983	22,400	24,798	88,808	28	217
	24-Aug	14	14	0	0	169	875	1,987	15,964	17,356	60,414	19	128
	25-Aug	12	13	0	0	154	805	3,170	26,428	24,944	84,353	29	191
	26-Aug	3	4	0	0	123	494	2,873	21,334	4,294	14,498	2,012	8,535
	27-Aug	4	4	0	0	32	164	2,518	21,026	3,309	11,295	701	2,821
	28-Aug	4	4	0	0	37	174	1,629	12,709	4,133	14,369	3	20
	29-Aug	5	5	0	0	7	36	2,094	15,488	3,108	9,991	0	0
	30-Aug ^a												
	2-Sep ^a												
	3-Sep ^a												
	5-Sep ^a												
Total		108	494	308	3,155	51,494	273,109	47,866	366,192	1,083,279	3,809,670	76,075	528,825
Average weight					10.24		5.30		7.65		3.52		6.95
Inner & Outer Kitoi													
252-32	11-Jun ^a												
	13-Jun ^a												
	14-Jun ^a												
	16-Jun	6	6	14	74	891	3,871	0	0	200	603	3,775	26,131
	17-Jun ^a												

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Management Unit	Date	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
				Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Inner & Outer Kitoi 252-32 (cont.)	18-Jun	7	7	16	82	1,269	5,481	0	0	596	1,940	2,847	19,593
	19-Jun ^a												
	20-Jun	4	4	7	21	725	3,342	0	0	222	736	3,419	20,793
	21-Jun ^a												
	22-Jun	4	4	10	51	430	1,846	0	0	2	8	4,402	24,670
	23-Jun	3	3	10	71	699	3,353	0	0	90	272	3,566	26,094
	24-Jun	8	8	0	0	1,035	4,683	0	0	4	10	9,688	66,562
	25-Jun ^a												
	26-Jun	6	6	2	9	843	3,856	0	0	20	62	4,794	32,084
	27-Jun	3	3	4	25	370	1,638	0	0	39	116	870	6,016
	28-Jun	3	3	0	0	387	1,807	0	0	1	4	1,150	7,050
	29-Jun ^a												
	30-Jun	5	5	2	15	262	1,202	1	2	3	11	1,673	10,282
	27-Jul ^a												
	31-Jul ^a												
	2-Aug ^a												
	3-Aug ^a												
	4-Aug ^a												
	5-Aug ^a												
	6-Aug ^a												
	7-Aug ^a												
	8-Aug ^a												
	9-Aug ^a												
	10-Aug ^a												
	11-Aug ^a												
	12-Aug ^a												
	13-Aug ^a												
	14-Aug ^a												
	15-Aug	78	98	9	51	1,097	5,410	1,961	13,935	763,026	2,740,965	309	2,417
	19-Aug ^a												
	23-Aug	3	3	0	0	0	0	358	3,462	1,919	7,582	2	14
	24-Aug ^a												

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Management Unit	Date	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
				Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Inner & Outer Kitoi													
252-32 (cont.)	25-Aug ^a												
	26-Aug ^a												
	27-Aug ^a												
	28-Aug ^a												
	29-Aug ^a												
	30-Aug	4	4	0	0	2	6	887	7,103	854	3,047	9	78
	31-Aug	8	8	0	0	6	29	3,034	22,130	2,337	8,243	0	0
	1-Sep	4	4	0	0	0	0	348	2,452	432	1,488	0	0
	2-Sep ^a												
	4-Sep ^a												
	5-Sep ^a												
	6-Sep ^a												
	7-Sep ^a												
	8-Sep ^a												
	10-Sep ^a												
	11-Sep ^a												
	13-Sep ^a												
	15-Sep ^a												
	18-Sep ^a												
	20-Sep ^a												
Total		94	222	105	581	13,360	62,580	18,420	139,296	1,862,739	7,187,711	45,433	308,358
Average weight					5.53		4.68		7.56		3.86		6.79
Management Units Targeting Kitoi Hatchery (Inner & Outer Kitoi, Izhut and Duck Bay Sections)													
Subtotal		138	1,019	554	4,825	91,124	468,861	113,909	897,289	3,250,469	12,079,810	191,284	1,325,488
Avg.Wt.					8.71		5.15		7.88		3.72		6.93
East Afognak Management Units													
Grand Total		139	1,118	647	5,778	104,001	528,258	116,684	918,333	3,612,736	13,372,990	197,392	1,369,428
Average weight					8.93		5.08		7.87		3.70		6.93

^a Confidential.

APPENDIX H. SPIRIDON BAY SPECIAL HARVEST AREA FISHERY SUMMARY

INTRODUCTION

Adult sockeye salmon return each year to Telrod Cove in Spiridon Bay as a result of a juvenile stocking program of Spiridon Lake conducted by Kodiak Regional Aquaculture Association (KRAA; Appendix H2). Some of these fish are 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 176,000 Spiridon Lake sockeye salmon was expected in 2010 (Eggers et al. 2010). Sockeye salmon stocked into Spiridon Lake were from Sallery Lake stocks. 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 Sallery Lake sockeye salmon stock.

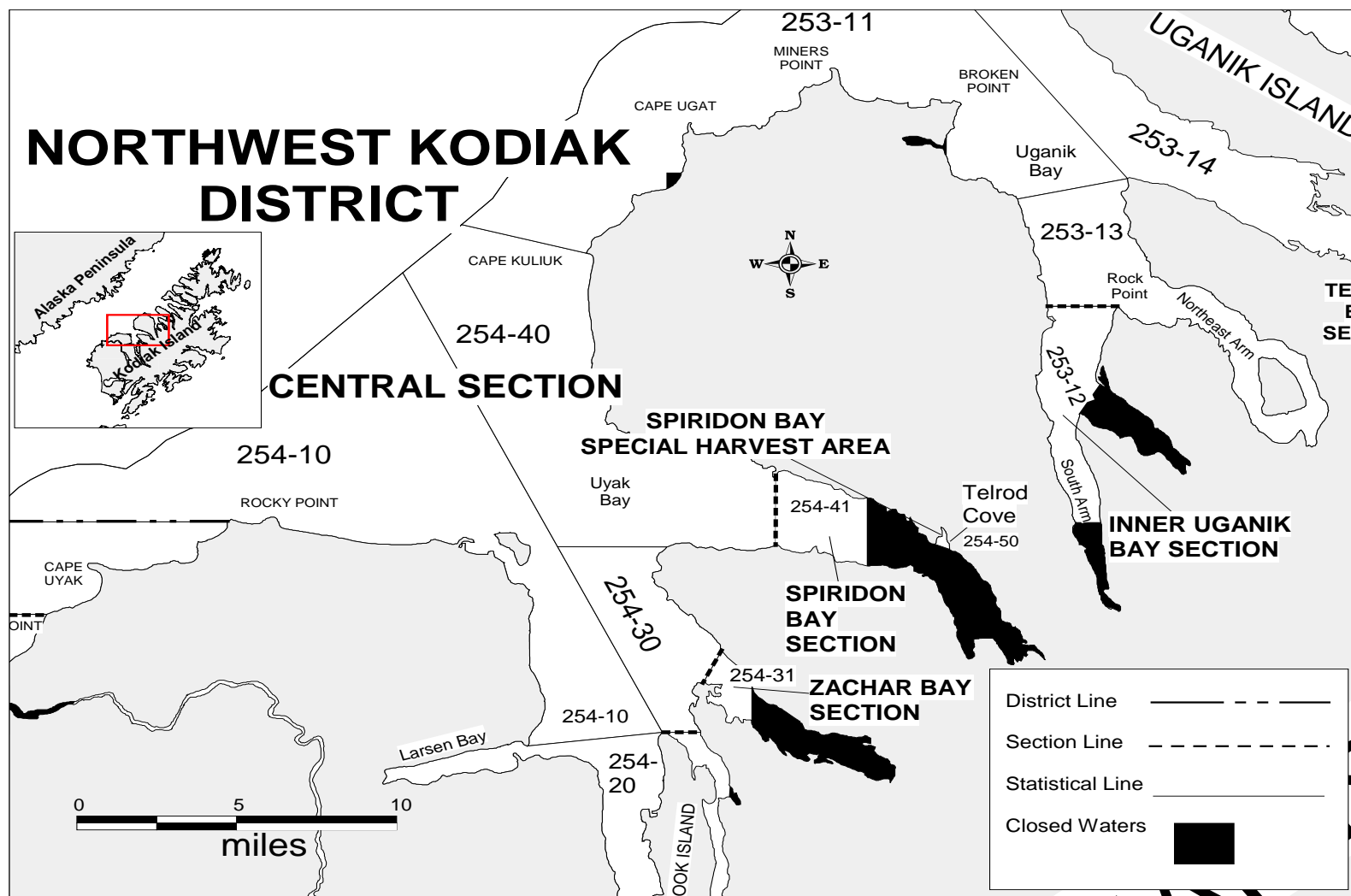
2010 Spiridon Bay sockeye salmon fishery

For the first time, KRAA conducted a cost recovery harvest to defray costs of this project. The cost recovery harvest began on June 22 and continued until June 30, and harvested 10,840 sockeye, 2 pink and 11 chum salmon. With the conclusion of the cost recovery harvest, the common property fishery was opened on July 2 and remained open through August 14 after the sockeye salmon run had subsided. Twenty-five seiners harvested 1 Chinook; 89,887 sockeye; 36 coho; 53,514 pink; and 5,876 chum salmon in the common property fishery in the SBSHA (Appendix H3). The total number of sockeye salmon harvested in Telrod Cove was 100,727 fish, 11% (10,840 fish) of which was harvested for cost recovery (Appendix H4).

In 2010, salmon purse seine and set gillnet permit holders had a relatively restrictive fishing schedule in July and early August along the west side of Kodiak Island in traditional fishing areas during fisheries directed at weak west side pink and chum salmon runs. A lower percentage of Spiridon-bound sockeye salmon were harvested in those fisheries than in 2009, when the local pink and chum salmon runs were strong and fishing time was relatively liberal. The total return of sockeye salmon to the Spiridon enhancement project in 2010 was estimated at 174,473 fish, with approximately 58% (100,727 fish) harvested within the SBSHA and an estimated 42% (73,746 fish) harvested in the Southwest Afognak Section and Central and North Cape sections of the Northwest Kodiak District (Appendix H4). This estimate was based on analyses of commercial catch samples collected inseason from the Westside Kodiak fisheries in 2010 (Matt Foster, personal communication), using the same analytical protocols used in 2008 and 2009 (Dinnocenzo 2010).

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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, 2010.

Management		Chinook				Sockeye		Coho		Pink		Chum	
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Spiridon Bay SHA													
	2-Jul	17	17	0	0	10,203	57,511	0	0	31	124	52	572
	3-Jul	9	9	0	0	3,331	19,169	0	0	12	46	21	237
	4-Jul	16	17	0	0	5,948	32,900	0	0	249	1,003	32	344
	5-Jul	9	9	1	5	2,066	11,823	0	0	17	74	12	93
	6-Jul	11	11	0	0	7,153	39,878	0	0	76	268	88	815
	7-Jul	5	5	0	0	1,649	9,223	0	0	30	126	31	329
	8-Jul	12	12	0	0	6,150	32,844	0	0	232	870	260	2,167
	9-Jul	7	7	0	0	2,654	15,937	0	0	143	580	201	2,032
	10-Jul	9	9	0	0	1,062	5,618	0	0	4	14	22	220
	11-Jul	4	4	0	0	202	1,219	0	0	5	21	10	80
	12-Jul	9	9	0	0	5,957	32,748	0	0	301	1,026	185	1,407
	13-Jul	4	4	0	0	2,677	14,990	0	0	111	470	49	512
	14-Jul	6	6	0	0	2,709	15,471	0	0	324	1,306	231	2,363
	15-Jul	10	10	0	0	8,483	46,408	0	0	916	2,985	351	3,639
	16-Jul	6	6	0	0	1,713	9,087	0	0	1,938	7,734	75	774
	17-Jul	9	9	0	0	3,594	18,895	0	0	1,404	5,058	263	2,233
	18-Jul	3	3	0	0	406	2,263	0	0	276	1,123	54	585
	19-Jul	5	5	0	0	3,188	17,118	1	6	1,829	6,990	448	3,535
	20-Jul	4	4	0	0	972	5,217	1	6	827	3,237	476	4,137
	21-Jul	3	3	0	0	549	3,026	0	0	918	3,679	120	1,216
	22-Jul	3	3	0	0	275	1,729	0	0	991	3,980	185	1,727
	23-Jul	5	7	0	0	2,523	15,259	18	130	5,223	20,972	941	7,078
	24-Jul	3	3	0	0	282	1,535	0	0	713	2,730	153	1,395
	25-Jul	4	4	0	0	300	1,520	0	0	212	849	23	261
	26-Jul	4	4	0	0	560	2,361	0	0	538	1,879	75	543
	27-Jul	6	6	0	0	1,859	9,936	4	30	3,542	11,701	319	2,512
	28-Jul	6	6	0	0	2,469	12,826	2	19	5,175	16,331	141	1,446

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Appendix H3.–Page 2 of 2.

Management				Chinook		Sockeye		Coho		Pink		Chum	
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Spiridon Bay SHA													
(cont.)	29-Jul ^a												
	30-Jul	3	3	0	0	835	4,508	0	0	4,664	16,047	39	315
	31-Jul ^a												
	1-Aug	3	4	0	0	2,717	14,950	0	0	6,547	23,952	136	1,097
	2-Aug ^a												
	3-Aug ^a												
	4-Aug	3	3	0	0	2,514	13,745	0	0	3,750	16,086	300	2,401
	5-Aug ^a												
	6-Aug ^a												
	7-Aug	3	3	0	0	852	4,632	1	6	4,628	18,505	90	797
	8-Aug ^a												
	9-Aug	3	3	0	0	425	2,273	2	15	1,273	4,976	70	590
	10-Aug ^a												
	11-Aug ^a												
Total		25	222	1	5	89,887	495,386	36	258	53,514	200,739	5,876	50,691
Average weight					5.00		5.51		7.17		3.75		8.63

Note: Harvest in this table does not include cost recovery.

^a Confidential.

Appendix H4.–Estimated contribution to the commercial harvest of the sockeye salmon Spiridon Lake enhancement project, by locality, in the Kodiak Management Area, 2010.

	Actual	Estimated	
	Telrod Cove	Southwest Afognak Section and NW Kodiak District	Westside Total
Cost recovery	10,840	0	10,840
Common property	89,887	73,746	163,633
Total harvest	100,727	73,746	174,473
Percent	58%	42%	100%

APPENDIX I. EASTSIDE KODIAK FISHERY SUMMARY

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 were to remain closed to commercial salmon fishing until July 6, when the general pink salmon fishery began for most of the Kodiak Management Area (Jackson and Dinnocenzo 2010). Fishing opportunities through August 24 were based on the abundance of local and mixed pink and chum salmon, except that in the Buskin River Section from July 6 to 15 fishing could be allowed based on local pink salmon and Buskin River sockeye salmon. From August 25 to September 5, fishing periods were 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 2010 (Appendix I3), not more than two 33-hour fishing periods could occur from June 14 to 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 from June 14 to June 21. From June 22 to July 5, fishing opportunities were based on sockeye salmon bound to either the Pasagshak River in Outer Ugak Section or the Sallery River in Inner Ugak Section. From July 6 through August 24, fishing opportunities in all sections were based on the abundance of local and mixed pink and chum salmon, except that in Inner Ugak, Sallery sockeye salmon must be considered through July 31. From August 25 to September 5, fishing periods were based on the abundance of local pink, chum, and coho salmon and after September 5, on local coho salmon (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 which is targeted by a large number of subsistence fishermen. A weir is operated on the Buskin River to enumerate escapement. Within the Inner Ugak Section of the Eastside Kodiak District, the Sallery Lake system produces a significant run of sockeye salmon. A weir is operated on this stream by Kodiak Regional Aquaculture Association (KRAA) and the department to enumerate sockeye salmon. Other minor sockeye salmon systems are present in the Eastside Kodiak District, including Pasagshak Lake, Lake Miam, and Ocean Beach.

2010 Eastside Kodiak Fisheries

In 2010, the Sallery River weir was operated by KRAA and the department. The Sallery River weir provides increased precision and timeliness of management of fisheries targeting this sockeye salmon run. Despite late run timing, the sockeye salmon escapement past Sallery weir was 26,809 fish (Table 4; Tiernan *in prep*), within the desired escapement goal range of 15,000 to 30,000 fish (Jackson and Dinnocenzo 2010). The Inner Ugak Bay Section was first opened on June 14, then reopened on June 21 for two 33-hour periods in June. Due to the late sockeye salmon run timing, this section remained closed until July 6, when it opened for 57 hours coinciding with the first pink opening for most of the archipelago. The next period occurred on

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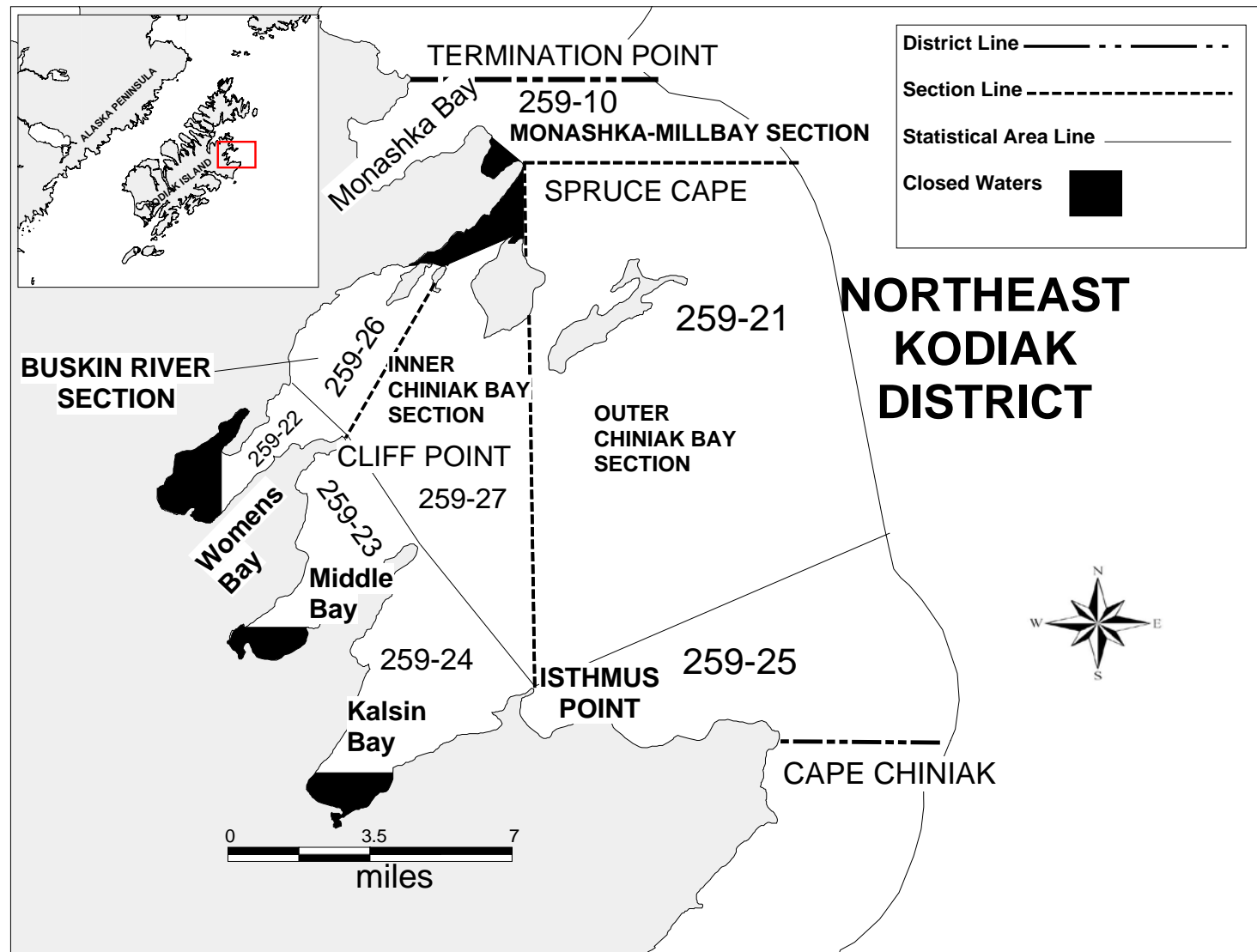
July 13 and was extended on July 16 for 48 hours, with closed waters reduced to the stream terminus. On July 20, the Inner Ugak Bay Section opened until further notice with reduced closed waters until further notice. This section was closed on July 31 to conserve pink and chum salmon needed for escapement in Saltery River and adjacent streams.

For the third year in a row, the Buskin River had a weak run of sockeye salmon. The subsistence fishery was closed on June 15 to conserve sockeye salmon needed for escapement. On June 30, subsistence fishing reopened when it became apparent that the escapement goal would be achieved. A total of 9,800 sockeye salmon escaped through Buskin River weir (Table 4; Tiernan *in prep*), within the escapement goal range of 8,000 to 13,000 fish (Table 3; Honnold et al. 2007).

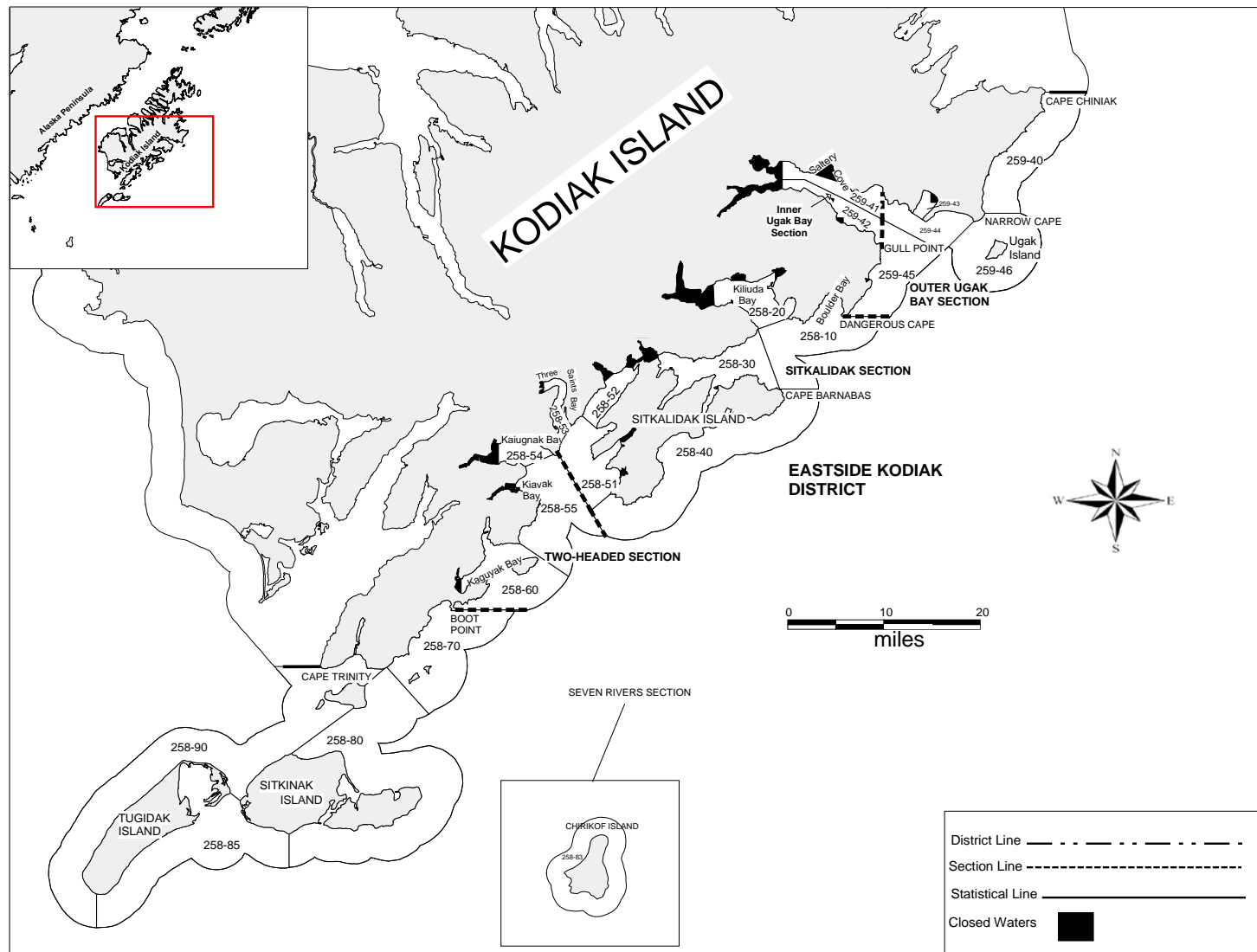
Generally, pink and chum salmon runs in the Eastside Kodiak fishery were weak. As a result, the Eastside Kodiak management units (Northeast and Eastside Kodiak districts) were closed most of August through mid-September to conserve pink and chum salmon needed for escapement in these areas. The total commercial harvest for the Eastside Kodiak management units by 63 permit holders included 3,556 Chinook; 150,848 sockeye; 24,091 coho; 335,735 pink; and 102,609 chum salmon (Appendix I4). The last landing from Eastside Kodiak management units occurred on September 18.

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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, 2010.

Management Unit				Chinook		Sockeye		Coho		Pink		Chum	
	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Eastside Kodiak District													
	14-Jun ^a												
	15-Jun ^a												
	21-Jun	17	17	249	1,642	20,637	105,124	0	0	1,066	3,343	4,914	39,341
	22-Jun	10	10	164	919	16,165	92,812	4	27	1,226	3,395	3,138	24,511
	6-Jul	19	19	411	2,593	32,309	153,032	1,904	12,922	9,624	29,801	7,018	52,599
	7-Jul	9	10	128	819	12,971	64,883	1,812	6,971	4,865	15,100	4,447	25,128
	8-Jul	20	21	318	2,581	12,114	69,361	1,298	9,568	6,197	19,252	6,640	48,427
	13-Jul	9	9	130	1,193	6,760	29,951	3,591	17,530	8,290	24,940	4,870	34,269
	14-Jul	5	5	295	2,670	5,703	29,010	922	7,362	6,696	20,513	4,495	35,987
	15-Jul	12	14	438	2,858	13,938	72,869	1,163	8,846	11,343	43,245	6,311	50,982
	16-Jul	5	5	33	300	1,933	10,609	116	931	2,323	7,000	1,072	7,753
	17-Jul ^a												
	20-Jul	5	5	237	2,439	2,169	12,377	368	2,721	15,513	52,874	1,728	15,655
	21-Jul	5	5	125	947	1,462	8,920	125	1,126	6,205	19,416	1,122	9,978
	22-Jul	5	5	160	1,687	3,041	16,384	390	2,426	13,130	45,386	2,637	19,335
	23-Jul	3	3	111	415	1,834	8,966	152	851	8,752	30,439	1,720	9,686
	24-Jul	7	8	137	1,301	1,257	7,293	56	318	5,240	18,933	3,090	21,865
	27-Jul	10	10	76	933	3,032	15,700	457	3,333	30,934	96,528	6,699	54,132
	28-Jul	6	6	52	578	935	4,879	203	1,513	9,472	28,682	1,989	16,055
	29-Jul	11	11	145	1,846	2,231	11,903	307	2,191	40,503	139,562	7,189	65,204
	30-Jul	6	6	28	187	1,334	6,731	243	1,690	22,844	71,784	3,299	29,469
	31-Jul	12	13	36	443	708	3,815	256	1,654	17,823	63,054	3,655	28,785
	3-Aug	17	17	45	546	1,115	5,853	1,302	8,586	36,606	131,288	8,741	63,452
	4-Aug	7	7	103	736	916	4,791	806	5,650	26,538	97,906	2,742	22,605
	5-Aug	11	11	49	366	1,439	7,492	5,518	20,321	27,763	91,629	8,421	70,667
	6-Aug	5	5	12	121	324	1,818	152	1,078	9,529	38,363	2,274	18,188
	11-Sep ^a												
	12-Sep ^a												
	18-Sep ^a												
Total		55	231	3,529	28,749	150,502	774,854	23,870	137,983	322,836	1,093,787	101,709	793,543
Average weight					8.15		5.15		5.78		3.39		7.80

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Management				Chinook		Sockeye		Coho		Pink		Chum	
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Northeast Kodiak District													
	15-Jul ^a												
	16-Jul ^a												
	23-Jul ^a												
	3-Aug	3	3	0	0	25	137	7	43	6,235	26,403	26	208
	4-Aug	3	3	1	13	8	46	6	35	2,798	11,829	32	249
	5-Aug ^a												
	6-Aug ^a												
Total		8	13	27	157	346	1,877	221	1,396	12,899	53,369	900	7,055
Average weight					5.81		5.42		6.32		4.14		7.84
Eastside Management													
Plan Total													
Total		63	244	3,556	28,906	150,848	776,731	24,091	139,379	335,735	1,147,156	102,609	800,598
Avg. wt.					8.13		5.15		5.79		3.42		7.80

^a Confidential.

APPENDIX J. NORTH AFOGNAK/SHUYAK FISHERY SUMMARY

INTRODUCTION

In November of 1995, the board 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 beginning in the early 1970s, with the harvest strategy remaining basically 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 was first in effect during the 1996 season and was most recently modified in January of 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 through 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 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 Pauls and Portage Lakes sockeye salmon. 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, though 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

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salmon bound for the Hidden Lake system, but again only in the FBSHA. From July 6 to 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.

2010 North Afognak/Shuyak Island Fisheries

In 2010, 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 the WBSHA. The 2010 sockeye salmon harvest in FBSHA was the largest since 2003. There were twenty permit holders that harvested 4 Chinook; 31,810 sockeye; 366 coho; 35,006 pink; and 713 chum salmon. (Appendix J3). The WBSHA also had a strong return of sockeye salmon and 4 permit holders harvested 1 Chinook; 13,779 sockeye; 12 coho; 3,891 pink; and 3 chum salmon (Appendix J3).

The Pauls Bay Section opened on June 14 and 21 for two 33-hour periods in order to test the strength of the sockeye salmon run. (Appendix J3). Due to budget constraints, the Pauls Bay weir was not operated in 2010. Aerial and foot surveys were used to determine sockeye salmon escapement. The Pauls Bay Section opened along with most other areas in the KMA to allow the harvest of pink salmon on July 13 for 81 hours, July 20 for 105 hours and July 27 for 105 hours. However, no effort occurred in July. Coho salmon returns were mediocre and fishing time in August occurred on August 3 for 105 hours, August 12 for 57 hours, August 19 for 57 hours, and August 28 for 57 hours. On September 2, the Pauls Bay Section was opened until further notice, but no effort occurred. Effort was low in the Pauls Bay Section when compared to previous years with 17 permit holders harvesting 2 Chinook; 11,243 sockeye; 2,208 coho; 69,027 pink; and 436 chum salmon (Appendix J3).

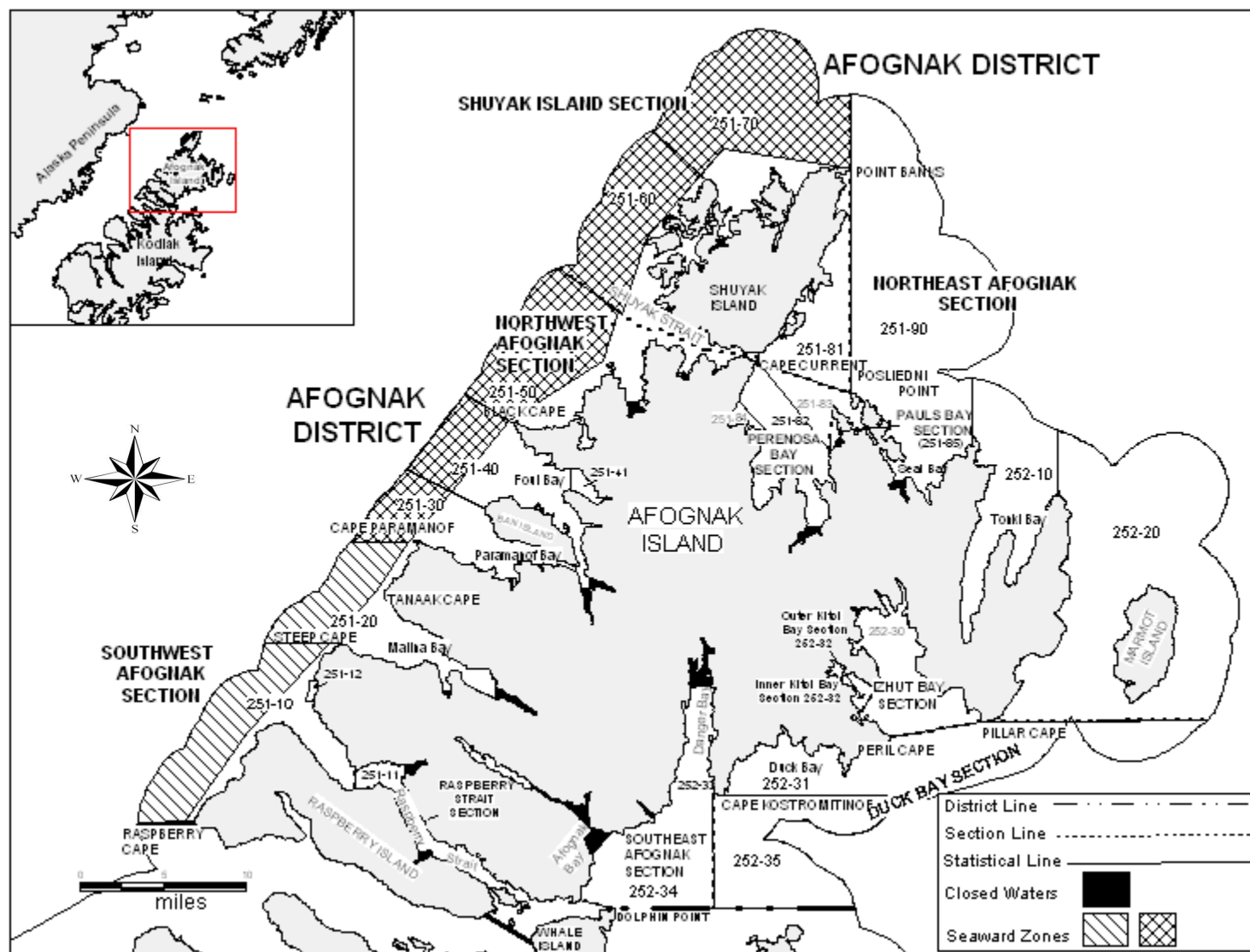
The Department of Natural Resources, local Division of Parks staff, and volunteers operated a fish counting weir on Big Bay Creek on the west side of Shuyak Island from August 5 through September 7, 2010 to enumerate coho salmon. The data from this weir was used inseason as an index of local coho salmon run strength in the Shuyak Island Section. A total of 1,999 coho salmon were counted through the weir (Tiernan *in prep*; Table 4). Fishing time in August coincided with the Pauls Bay Section and effort was low. A total of seven permit holders harvested 34 sockeye; 1,161 coho; 7,538 pink; and 45 chum salmon (Appendix J3).

The last landing in the North Afognak/Shuyak Island management units occurred on September 5. In all the units of the North Afognak/Shuyak fishery combined, 63 permit holders harvested 720 Chinook; 69,308 sockeye; 13,969 coho; 737,392 pink; and 7,570 chum salmon in 203 landings during 2010 (Appendix J3).

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Appendix J3.—Daily salmon harvest, by species, for the North Afognak/Shuyak Island management units, 2010.

Management Unit	Date	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
				Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Northeast Afognak Section													
	27-Jul ^a												
	28-Jul ^a												
	29-Jul ^a												
	3-Aug ^a												
	4-Aug ^a												
	5-Aug	9	10	2	9	497	2,966	398	3,221	109,483	380,385	527	3,690
	6-Aug	5	5	0	0	192	1,121	160	1,250	28,915	104,274	1,261	5,980
	7-Aug	10	11	2	11	681	3,898	600	5,400	81,442	299,082	492	3,778
	19-Aug	3	3	1	3	124	680	269	2,160	15,438	48,604	28	223
	20-Aug ^a												
	21-Aug	4	4	0	0	155	635	534	4,161	17,858	69,655	37	262
	5-Sep												
Total		21	44	8	43	2,350	13,406	3,663	28,083	321,444	1,138,548	2,846	17,658
Avg. Weight					5.38		5.70		7.67		3.54		6.20
Northwest Afognak Section													
(excluding Foul Bay SHA)	14-Jun ^a												
	15-Jun	3	3	158	796	1,932	8,778	0	0	12	42	422	2,680
	21-Jun ^a												
	22-Jun ^a												
	15-Jul ^a												
	22-Jul ^a												
	23-Jul ^a												
	24-Jul ^a												
	27-Jul	3	3	0	0	518	2,949	40	276	14,532	51,380	232	2,148
	28-Jul ^a												
	29-Jul ^a												
	30-Jul ^a												
	3-Aug	3	4	6	81	145	657	132	1,151	26,720	95,977	261	2,356
	5-Aug ^a												
	6-Aug	6	6	4	29	279	1,639	183	1,488	32,450	111,872	122	1,006
	7-Aug	5	5	0	0	314	1,631	68	584	14,473	60,379	170	1,334
	12-Aug ^a												
	13-Aug ^a												
	19-Aug ^a												
20-Aug	3	3	1	45	1,228	6,153	776	6,018	28,006	104,430	101	789	

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Appendix J3.—Page 2 of 4.

Management Unit	Date	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
				Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Northwest Afognak Section (excluding Foul Bay SHA) (cont.)	21-Aug 29-Aug ^a 2-Sep ^a	4	4	0	0	238	1,421	322	2,599	8,952	32,066	44	361
Total		30	49	701	3,095	9,279	47,550	2,645	20,397	220,674	782,286	3,169	24,108
Avg. Weight					4.42		5.12		7.71		3.54		7.61
Foul Bay Special Harvest Area													
	9-Jun ^a												
	10-Jun ^a												
	11-Jun ^a												
	13-Jun ^a												
	14-Jun ^a												
	15-Jun ^a												
	16-Jun	3	3	0	0	1,614	5,992	0	0	0	0	0	0
	17-Jun	4	4	0	0	2,362	8,461	0	0	0	0	0	0
	18-Jun	5	5	0	0	2,090	7,892	0	0	1	3	0	0
	19-Jun ^a												
	20-Jun	4	4	0	0	1,816	8,570	0	0	1	4	0	0
	21-Jun ^a												
	22-Jun ^a												
	25-Jun ^a												
	26-Jun ^a												
	27-Jun ^a												
	28-Jun ^a												
	30-Jun ^a												
	4-Jul ^a												
	7-Jul ^a												
	8-Jul ^a												
	23-Jul ^a												
	24-Jul ^a												
	5-Aug ^a												
	19-Aug ^a												
Total		20	45	4	71	31,810	136,468	366	2,493	35,006	110,495	713	4,862
Avg. Weight					17.75		4.29		6.81		3.16		6.82

-continued-

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Management Unit				Chinook		Sockeye		Coho		Pink		Chum	
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Pauls Bay Section													
	14-Jun	3	3	0	0	2,731	13,634	0	0	0	0	12	88
	15-Jun ^a												
	21-Jun	4	4	0	0	401	1,630	0	0	0	0	59	415
	22-Jun ^a												
	6-Aug	3	3	0	0	114	595	260	1,903	27,877	102,314	114	905
	7-Aug ^a												
	12-Aug ^a												
	13-Aug ^a												
	14-Aug	3	4	0	0	96	586	525	4,207	14,732	55,922	56	482
	19-Aug	3	3	0	0	4	22	202	1,996	1,820	6,294	0	0
Total		17	26	2	29	11,243	51,042	2,208	17,518	69,027	250,160	436	3,348
Avg. Weight					14.50		4.54		7.93		3.62		7.68
Perenos Bay Section (Excluding Waterfall Bay SHA)													
	5-Aug ^a												
	6-Aug	3	3	3	28	60	347	99	766	8,669	32,190	131	860
	7-Aug ^a												
	12-Aug ^a												
	13-Aug ^a												
	14-Aug	5	5	0	0	233	1,164	525	4,030	11,553	43,240	25	221
	19-Aug ^a												
	20-Aug	5	5	1	11	171	982	962	7,428	15,196	61,671	42	331
	21-Aug	3	3	0	0	36	187	201	1,457	3,571	14,284	14	94
	28-Aug												
Total		15	25	4	39	813	4,425	3,914	30,625	79,812	293,331	358	2,713
Avg. Weight					9.75		5.44		7.82		3.68		7.58
Waterfall Bay Special Harvest Area													
	9-Jun ^a												
	11-Jun ^a												
	12-Jun ^a												
	14-Jun ^a												
	15-Jun ^a												
	16-Jun ^a												
	17-Jun ^a												
	19-Jun ^a												
	7-Aug ^a												
Total		4	11	1	6	13,779	59,985	12	89	3,891	12,063	3	21
Avg. Weight					6.00		4.35		7.42		3.10		7.00

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Management Unit	Date	Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
				Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Shuyak Island Section													
	3-Aug ^a												
	13-Aug ^a												
	19-Aug ^a												
	21-Aug ^a												
	29-Aug ^a												
	30-Aug ^a												
Total		7	8	0	0	34	177	1,161	9,058	7,538	25,751	45	416
Avg. Weight	Total				0.00		5.21		7.80		3.42		9.24
North Afognak/ Shuyak Management Plan Units													
Total		63	203	720	3,283	69,308	313,053	13,969	108,263	737,392	2,612,634	7,570	53,126
Avg. Weight					4.6		4.5		7.8		3.5		7.0

^a Confidential

APPENDIX K. MAINLAND DISTRICT FISHERY SUMMARY

INTRODUCTION

The Mainland District in the Kodiak Management Area (KMA; Appendix K2) is covered under three separate regulatory management plans, two 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 and, from July 6 to 25, 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).

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

2010 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 Kafia and Swikshak sockeye salmon. During the pink salmon season through July 25, the entire Mainland District (with the exception of the Wide Bay Section, which stayed closed and the Cape Igvak Section, in which two long openings were allowed through July 25, under the CISMP) was opened three 57-hour fishing periods between July 6 and July 22 (with some sections under the NSSSSMP).

Pink and chum salmon runs were weak in the Mainland District and due to the continued necessity to conserve pink and chum salmon for escapement, only two more openings were allowed during the pink salmon run: an 81-hour opening on July 27, and a 57-hour opening on August 3. The estimated pink salmon escapement of 265,650 fish (Table 3) was just within the escapement goal range of 250,000 to 750,000 fish (Honnold et al. 2007).

Additional fishing time was not allowed again in the Mainland District until August 28, and then only in the Outer Kukak, Big River, and Hallo Bay sections, to allow the diminished fleet to test the strength of the coho salmon run. There was almost no effort or harvest (Appendix K3). By September 2, with the exception of Kukak Bay, chum salmon escapements were adequate in most

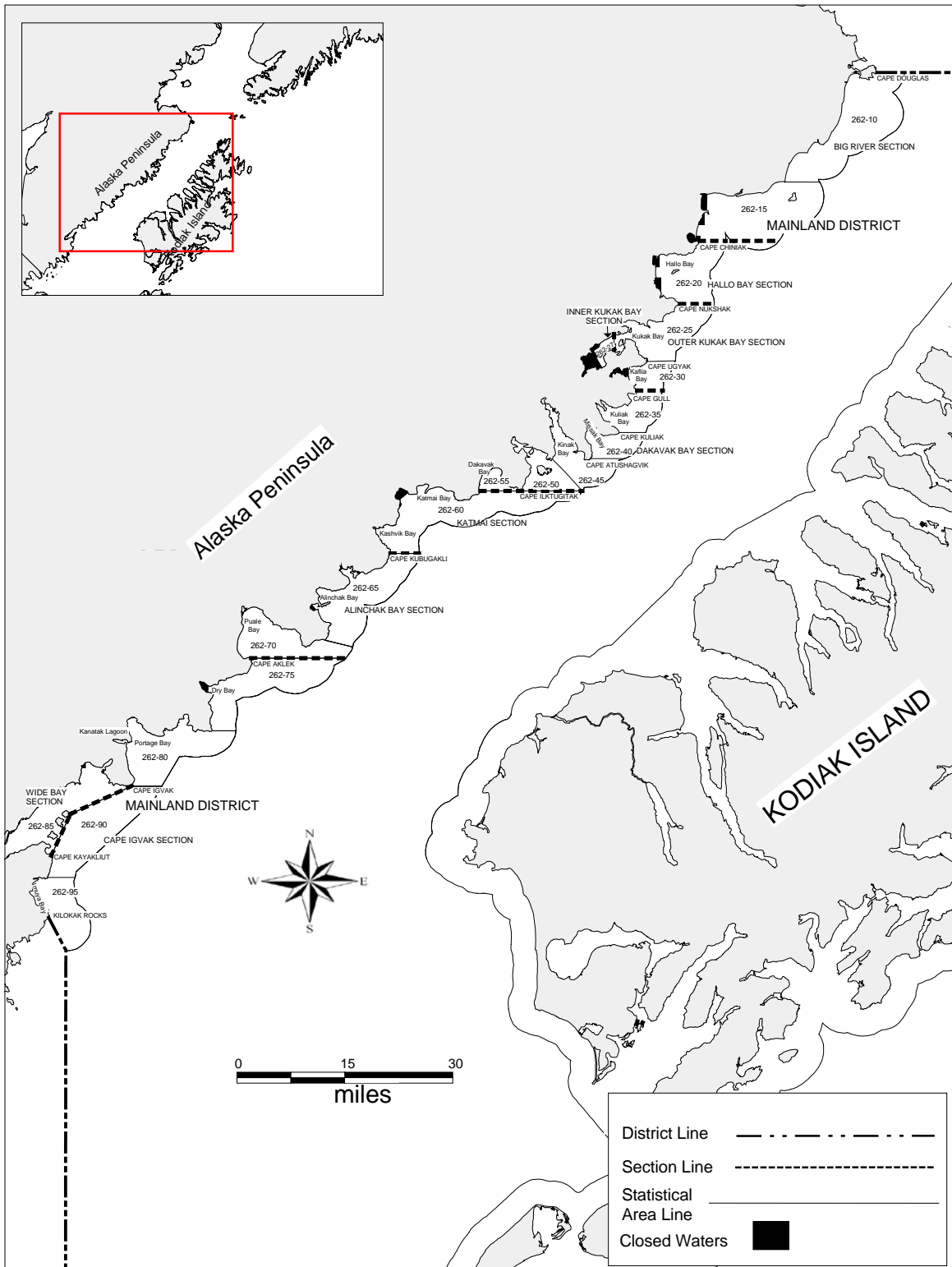
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streams of the Mainland District. There was however a buildup of chum salmon in excess of escapement needs in Inner Kukak Bay and a 30-hour opening was allowed to harvest a portion of those fish. At the same time, a 78-hour opening was established in the Outer Kukak, Big River, and Hallo Bay sections to allow additional coho salmon harvest opportunity, which was later extended until further notice with little industry interest. (Appendix K3).

During 2010, the total commercial harvest by 73 permit holders in the Mainland District included 3,406 Chinook; 255,445 sockeye; 21,773 coho; 141,308 pink; and 175,340 chum salmon (Appendix K3). This includes all salmon harvested along the Mainland, including those harvested under the direction of the CISMP and the NSSSSMP.

REFERENCES CITED

Honnold S. G., M. J. Witteveen, M. B. Foster, I. Vining, and J. J. Hasbrouck. 2007. Review of escapement goals for salmon stocks in the Kodiak Management Area, Alaska. Alaska Department of Fish and Game, Fishery Manuscript No. 07-10, Anchorage.



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, 2010.

Management		Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
Unit	Date			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
Hallo Bay Section													
Total		0	0	0	0	0	0	0	0	0	0	0	0
Outer Kukak Bay Section													
	14-Jun ^a												
	15-Jun ^a												
	21-Jun ^a												
	13-Jul ^a												
	27-Jul ^a												
	28-Jul ^a												
	4-Aug ^a												
	29-Aug ^a												
	2-Sep ^a												
	3-Sep ^a												
Total		12	17	27	123	2,741	13,219	994	7,782	2,789	10,338	5,179	47,174
Avg. Weight					4.56		4.82		7.83		3.71		9.11
Inner Kukak Bay Section													
	20-Jul ^a												
	4-Aug ^a												
	2-Sep ^a												
	4-Sep ^a												
Total		4	4	0	0	0	0	28	197	866	2,958	1,898	14,432
Avg. Weight									7.04		3.42		7.60

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Management				Chinook		Sockeye		Coho		Pink		Chum	
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Dakavak													
Bay Section													
	6-Jul	3	3	187	872	3,901	23,239	376	2,505	690	2,071	1,063	10,635
	7-Jul	5	5	332	2,019	8,292	50,074	894	7,163	1,483	4,650	2,760	19,338
	8-Jul	6	6	9	41	2,036	11,254	76	536	674	2,029	1,652	11,405
	13-Jul	3	3	1	26	207	1,431	19	128	805	2,513	559	4,608
	14-Jul ^a												
	15-Jul ^a												
	21-Jul ^a												
	27-Jul ^a												
	28-Jul ^a												
	29-Jul ^a												
	30-Jul ^a												
	4-Aug	7	8	14	294	195	983	594	3,816	32,539	130,163	8,706	62,334
	5-Aug ^a												
Total		21	36	628	3,690	19,191	110,461	4,335	28,296	49,672	191,687	21,424	160,823
Avg. Weight					5.88		5.76		6.53		3.86		7.51
Katmai													
Section													
	6-Jul ^a												
	7-Jul ^a												
	13-Jul ^a												
	15-Jul ^a												
	29-Jul ^a												
Total		6	8	315	2,165	3,690	23,189	368	2,850	5,303	30,745	3,184	29,292
Avg. Weight					6.87		6.28		7.74		5.80		9.20
Alinchak													
Bay Section													
	6-Jul	3	3	78	749	5,989	32,619	186	1,229	647	2,159	1,864	13,073
	7-Jul	3	3	245	1,273	4,407	24,845	244	1,371	575	1,718	1,216	8,917
	8-Jul	5	5	19	152	731	3,820	51	339	165	548	493	4,248
	13-Jul	4	4	26	209	2,844	18,897	460	3,061	1,331	5,576	2,523	20,718
	15-Jul	5	5	39	491	1,490	7,710	323	2,587	1,771	5,315	2,645	23,865

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Appendix K3.—Page 3 of 4.

Management				Chinook		Sockeye		Coho		Pink		Chum	
Unit	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Alinchak													
Bay Section													
(cont.)	27-Jul	5	6	126	829	680	3,496	492	3,563	1,952	6,856	13,723	112,066
	28-Jul ^a												
	29-Jul	3	3	0	0	62	402	118	944	870	3,172	10,342	82,006
	30-Jul ^a												
	5-Aug ^a												
Total		16	34	545	3,808	16,269	92,154	1,999	14,210	10,038	34,830	43,164	351,800
Avg. Weight					6.99		5.66		7.11		3.47		8.15
Cape Igvak													
Section													
	18-Jun	38	38	308	1,886	57,352	312,616	20	116	1,242	3,622	4,250	32,014
	19-Jun	32	32	116	1,686	35,769	192,502	0	0	1,434	4,575	3,334	25,359
	24-Jun	30	30	175	1,225	40,557	214,307	0	0	1,918	6,030	3,182	25,699
	25-Jun	29	29	170	1,372	42,277	250,497	0	0	1,969	5,189	3,659	26,672
	17-Jul	22	22	181	1,731	7,843	48,272	1,700	12,015	8,083	25,226	10,178	80,131
	18-Jul	17	17	104	918	4,638	27,837	1,254	9,762	6,341	20,625	9,603	73,233
	19-Jul	17	20	235	1,937	5,184	32,626	1,384	10,228	6,910	23,206	10,290	83,353
	20-Jul	3	3	4	71	1,185	6,558	99	823	1,680	5,206	702	6,119
	22-Jul ^a												
	23-Jul ^a												
	24-Jul	3	3	24	192	4,032	24,237	676	5,905	4,817	18,676	7,141	59,914
	25-Jul	7	7	37	410	3,029	16,966	1,305	9,869	8,115	25,341	9,391	80,509

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Management		Permits	Landings	Chinook		Sockeye		Coho		Pink		Chum	
Unit	Date			Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
Cape Igvak Section													
(cont.)	27-Jul	9	10	195	1,592	2,646	16,322	2,412	20,724	7,937	33,583	11,462	101,352
	28-Jul	3	3	41	327	1,023	5,370	964	7,017	2,925	10,883	3,564	30,484
	29-Jul	7	7	40	403	1,752	9,030	960	7,158	5,182	17,493	6,549	55,309
	30-Jul ^a												
	4-Aug ^a												
	5-Aug	3	3	57	450	2,032	7,404	2,472	10,852	3,615	11,842	6,409	26,142
Total		71	230	1,891	15,951	213,554	1,190,143	14,049	101,065	72,640	252,625	100,491	793,610
Avg. Weight					8.44		5.57		7.19		3.48		7.90
Wide Bay Section													
Total		0	0	0	0	0	0	0	0	0	0	0	0
Avg. Weight													
Mainland District													
Grand Total		73	327	3,406	25,736	255,445	1,429,166	21,773	154,400	141,308	523,183	175,340	1,397,130
Avg. Weight					7.56		5.59		7.09		3.70		7.97

^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, 2010.

Section (Stat Area)	Stat week	Week end	Chinook			Sockeye			Coho			Pink			Chum		
			No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.
S.W. Afognak & Raspberry Straits (combined) (251-10, 11, 12, 20)	25	20-Jun	36	195	5.4	1,454	6,602	4.5	0	0	0.0	128	421	3.3	309	2,235	7.2
	28	11-Jul	146	959	6.6	2,602	14,219	5.5	33	241	7.3	2,962	11,185	3.8	1,121	8,741	7.8
	29	18-Jul	468	3,136	6.7	9,249	47,916	5.2	693	4,862	7.0	56,041	184,450	3.3	5,217	40,701	7.8
	30	25-Jul	171	1,595	9.3	14,229	76,857	5.4	1,025	7,083	6.9	233,001	786,984	3.4	6,503	50,244	7.7
	31	1-Aug	341	2,479	7.3	5,701	31,515	5.5	1,938	15,063	7.8	171,511	601,506	3.5	6,456	46,746	7.2
	32	8-Aug	269	2,602	9.7	6,221	32,751	5.3	3,233	24,660	7.6	312,663	1,083,951	3.5	4,360	33,900	7.8
	33	15-Aug	10	118	11.8	1,345	7,239	5.4	1,095	9,255	8.5	96,199	352,436	3.7	496	4,079	8.2
	35	29-Aug	17	178	10.5	535	2,918	5.5	1,096	8,669	7.9	35,547	126,365	3.6	88	716	8.1
	37	12-Sep	0	0	0.0	0	0	0.0	204	2,036	10.0	95	403	4.2	2	9	4.5
	Total		1,458	11,262	7.7	41,336	220,017	5.3	9,317	71,869	7.7	908,147	3,147,701	3.5	24,552	187,371	7.6
N.W. Afognak (251-30, 40, 41, 50)	24	13-Jun	4	71	17.8	11,834	55,451	4.7	0	0	0.0	0	0	0.0	0	0	0.0
	25	20-Jun	158	796	5.0	13,216	57,008	4.3	0	0	0.0	14	49	3.5	440	2,799	6.4
	26	27-Jun	531	2,130	4.0	6,441	25,540	4.0	1	4	4.0	85	340	4.0	128	926	7.2
	27	4-Jul	0	0	0.0	2,578	9,370	3.6	0	0	0.0	102	331	3.2	0	0	0.0
	28	11-Jul	0	0	0.0	212	963	4.5	9	74	8.2	99	295	3.0	55	385	7.0
	29	18-Jul	0	0	0.0	390	2,186	5.6	15	91	6.1	2,608	7,829	3.0	114	798	7.0
	30	25-Jul	0	0	0.0	2,547	12,633	5.0	219	1,289	5.9	65,591	197,182	3.0	1,634	11,299	6.9
	31	1-Aug	0	0	0.0	1,032	6,019	5.8	181	1,257	6.9	29,318	111,364	3.8	564	4,795	8.5
	32	8-Aug	10	110	11.0	963	5,212	5.4	540	4,556	8.4	91,113	334,942	3.7	690	5,839	8.5
	33	15-Aug	0	0	0.0	62	335	5.4	136	1,140	8.4	14,867	54,205	3.6	67	585	8.7
	34	22-Aug	2	59	29.5	1,737	8,915	5.1	1,377	10,673	7.8	51,179	184,093	3.6	185	1,513	8.2
	35	29-Aug	0	0	0.0	73	366	5.0	232	1,397	6.0	623	1,870	3.0	4	25	6.3
	36	5-Sep	0	0	0.0	4	20	5.0	301	2,409	8.0	81	281	3.5	1	6	6.0
	Total		705	3,166	4.5	41,089	184,018	4.5	3,011	22,890	7.6	255,680	892,781	3.5	3,882	28,970	7.5
Shuyak (251-60, 70, 81)	32	8-Aug	0	0	0.0	10	45	4.5	8	84	10.5	3,122	10,663	3.4	32	313	9.8
	33	15-Aug	0	0	0.0	24	132	5.5	45	364	8.1	3,873	13,345	3.4	13	103	7.9
	34	22-Aug	0	0	0.0	0	0	0.0	687	5,279	7.7	500	1,612	3.2	0	0	0.0
	35	29-Aug	0	0	0.0	0	0	0.0	378	2,893	7.7	0	0	0.0	0	0	0.0
	36	5-Sep	0	0	0.0	0	0	0.0	43	438	10.2	43	131	3.0	0	0	0.0
Total			0	0	0.0	34	177	5.2	1,161	9,058	7.8	7,538	25,751	3.4	45	416	9.2
Perenosa (251-82, 83, 84, 85)	24	13-Jun	0	0	0.0	9,619	43,196	4.5	0	0	0.0	0	0	0.0	0	0	0.0
	25	20-Jun	1	6	6.0	8,597	38,541	4.5	0	0	0.0	0	0	0.0	118	831	7.0
	26	27-Jun	1	11	11.0	6,477	27,437	4.2	0	0	0.0	0	0	0.0	59	415	7.0
	32	8-Aug	3	28	9.3	280	1,529	5.5	1,010	7,466	7.4	59,830	213,021	3.6	353	2,750	7.8
	33	15-Aug	1	18	18.0	641	3,509	5.5	3,286	26,097	7.9	68,854	248,309	3.6	206	1,631	7.9
	34	22-Aug	1	11	11.0	221	1,240	5.6	1,736	13,847	8.0	23,375	92,008	3.9	61	455	7.5
	35	29-Aug	0	0	0.0	0	0	0.0	102	822	8.1	671	2,216	3.3	0	0	0.0
Total			7	74	10.6	25,835	115,452	4.5	6,134	48,232	7.9	152,730	555,554	3.6	797	6,082	7.6

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Appendix L1.–Page 2 of 8.

Section (Stat Area)	Stat week	Week end	Chinook			Sockeye			Coho			Pink			Chum		
			No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.
N.E.Afognak (251-90, 252-10, 20)	31	1-Aug	1	4	4.0	368	2,037	5.5	233	1,514	6.5	16,911	50,743	3.0	221	1,480	6.7
	32	8-Aug	6	36	6.0	1,661	9,822	5.9	1,323	11,446	8.7	267,903	959,478	3.6	2,556	15,660	6.1
	34	22-Aug	1	3	3.0	312	1,499	4.8	845	6,661	7.9	36,465	127,764	3.5	69	518	7.5
	36	5-Sep	0	0	0.0	9	48	5.3	1,262	8,462	6.7	165	563	3.4	0	0	0.0
	Total		8	43	5.4	2,350	13,406	5.7	3,663	28,083	7.7	321,444	1,138,548	3.5	2,846	17,658	6.2
Izhut (252-30)	25	20-Jun	18	117	6.5	1,224	5,911	4.8	0	0	0.0	528	2,570	4.9	5,582	42,197	7.6
	26	27-Jun	67	387	5.8	5,768	26,682	4.6	0	0	0.0	103	338	3.3	28,121	192,804	6.9
	27	4-Jul	15	138	9.2	3,243	15,322	4.7	3	16	5.3	468	1,390	3.0	16,010	109,364	6.8
	28	11-Jul	7	73	10.4	4,047	20,134	5.0	209	1,354	6.5	1,218	3,639	3.0	7,234	49,042	6.8
	29	18-Jul	32	333	10.4	5,955	31,039	5.2	278	1,785	6.4	2,343	7,681	3.3	10,137	73,081	7.2
	30	25-Jul	0	0	0.0	3,039	17,586	5.8	371	2,632	7.1	12,571	42,440	3.4	1,230	11,399	9.3
	31	1-Aug	1	26	26.0	2,262	12,689	5.6	474	3,332	7.0	107,851	383,031	3.6	1,246	8,928	7.2
	34	22-Aug	1	15	15.0	466	2,498	5.4	11,153	92,990	8.3	134,001	484,882	3.6	174	1,254	7.2
	35	29-Aug	0	0	0.0	186	977	5.3	19,022	167,936	8.8	37,543	128,191	3.4	33	189	5.7
	36	5-Sep	0	0	0.0	80	334	4.2	13,358	101,765	7.6	7,766	28,016	3.6	9	47	5.2
	37	12-Sep	0	0	0.0	0	0	0.0	1,715	13,021	7.6	59	251	4.3	0	0	0.0
	38	19-Sep	0	0	0.0	0	0	0.0	1,040	6,970	6.7	0	0	0.0	0	0	0.0
	Total		141	1,089	7.7	26,270	133,172	5.1	47,623	391,801	8.2	304,451	1,082,429	3.6	69,776	488,305	7.0
Kitoi Bay (252-32)	24	13-Jun	27	138	5.1	459	1,897	4.1	1	2	2.0	52	129	2.5	1,587	13,137	8.3
	25	20-Jun	38	182	4.8	3,143	13,838	4.4	0	0	0.0	1,023	3,291	3.2	12,016	80,642	6.7
	26	27-Jun	29	195	6.7	3,953	18,150	4.6	0	0	0.0	157	474	3.0	25,832	175,977	6.8
	27	4-Jul	2	15	7.5	702	3,268	4.7	1	2	2.0	4	15	3.8	3,145	19,587	6.2
	31	1-Aug	0	0	0.0	191	1,003	5.3	192	1,215	6.3	8,063	30,566	3.8	122	897	7.4
	32	8-Aug	0	0	0.0	2,478	12,354	5.0	66	497	7.5	452,895	1,810,112	4.0	1,626	8,693	5.3
	33	15-Aug	9	51	5.7	2,385	11,858	5.0	2,356	16,500	7.0	1,389,562	5,302,550	3.8	1,082	9,254	8.6
	34	22-Aug	0	0	0.0	0	0	0.0	21	167	8.0	826	2,809	3.4	1	4	4.0
	35	29-Aug	0	0	0.0	19	88	4.6	3,306	29,346	8.9	5,384	20,781	3.9	10	76	7.6
	36	5-Sep	0	0	0.0	8	35	4.4	5,676	43,105	7.6	4,126	14,583	3.5	10	84	8.4
	37	12-Sep	0	0	0.0	22	89	4.0	4,628	33,840	7.3	647	2,401	3.7	2	7	3.5
	38	19-Sep	0	0	0.0	0	0	0.0	2,141	14,334	6.7	0	0	0.0	0	0	0.0
	39	26-Sep	0	0	0.0	0	0	0.0	32	288	9.0	0	0	0.0	0	0	0.0
	Total		105	581	5.5	13,360	62,580	4.7	18,420	139,296	7.6	1,862,739	7,187,711	3.9	45,433	308,358	6.8

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Section (Stat Area)	Stat week	Week end	Chinook			Sockeye			Coho			Pink			Chum		
			No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.
Duck Bay (252-31, 35)	24	13-Jun	46	450	9.8	2,272	10,293	4.5	0	0	0.0	106	309	2.9	424	2,842	6.7
	25	20-Jun	28	293	10.5	3,989	18,504	4.6	0	0	0.0	3,615	11,063	3.1	3,013	21,276	7.1
	26	27-Jun	19	184	9.7	4,293	22,297	5.2	1	5	5.0	1,072	3,284	3.1	8,247	56,670	6.9
	27	4-Jul	69	997	14.4	5,632	27,601	4.9	66	422	6.4	1,297	4,224	3.3	24,958	169,765	6.8
	28	11-Jul	47	362	7.7	14,547	80,886	5.6	2,520	16,003	6.4	10,419	34,522	3.3	21,511	151,484	7.0
	29	18-Jul	12	92	7.7	8,157	47,205	5.8	2,015	13,949	6.9	10,987	42,047	3.8	6,592	48,436	7.3
	30	25-Jul	25	219	8.8	2,852	16,029	5.6	1,862	13,708	7.4	32,985	119,567	3.6	1,514	11,262	7.4
	31	1-Aug	29	321	11.1	4,648	25,086	5.4	2,817	20,016	7.1	287,511	1,049,352	3.6	4,690	36,721	7.8
	33	15-Aug	9	87	9.7	2,731	13,327	4.9	5,929	46,553	7.9	276,796	975,451	3.5	1,780	14,534	8.2
	34	22-Aug	24	150	6.3	1,654	8,291	5.0	14,432	112,408	7.8	376,126	1,284,559	3.4	518	3,602	7.0
	35	29-Aug	0	0	0.0	712	3,553	5.0	17,254	135,349	7.8	81,942	283,728	3.5	2,792	11,912	4.3
	36	5-Sep	0	0	0.0	7	37	5.3	970	7,779	8.0	423	1,564	3.7	36	321	8.9
	Total		308	3,155	10.2	51,494	273,109	5.3	47,866	366,192	7.7	1,083,279	3,809,670	3.5	76,075	528,825	7.0
S.E.Afognak (252-33, 34)	24	13-Jun	14	148	10.6	8,737	37,768	4.3	2	7	3.5	157	396	2.5	427	2,562	6.0
	25	20-Jun	2	5	2.5	408	1,772	4.3	0	0	0.0	6	20	3.3	140	812	5.8
	27	4-Jul	10	79	7.9	1,181	6,038	5.1	5	21	4.2	223	688	3.1	2,417	18,252	7.6
	28	11-Jul	0	0	0.0	116	590	5.1	9	59	6.6	207	621	3.0	100	777	7.8
	31	1-Aug	2	28	14.0	862	4,664	5.4	455	3,218	7.1	90,032	331,093	3.7	777	5,460	7.0
	32	8-Aug	54	607	11.2	1,100	5,848	5.3	671	4,891	7.3	223,906	792,404	3.5	1,601	11,294	7.1
	34	22-Aug	0	0	0.0	83	406	4.9	693	5,475	7.9	30,882	110,017	3.6	18	109	6.1
	35	29-Aug	1	4	4.0	46	229	5.0	828	6,261	7.6	7,019	23,479	3.3	5	27	5.4
	Total		83	871	10.5	12,533	57,315	4.6	2,663	19,932	7.5	352,432	1,258,718	3.6	5,485	39,293	7.2
Central, Terror Bay, Inner Uganik, Spiridon, Zachar, & Uyak combined (253-11, 12, 13, 14, 31 32, 33, 34, 35, 254-10, 20, 21, 30, 31, 40, 41, 50)	24	13-Jun	163	1,294	7.9	19,647	106,674	5.4	0	0	0.0	78	330	4.2	775	5,570	7.2
	25	20-Jun	44	399	9.1	16,443	89,253	5.4	0	0	0.0	166	614	3.7	883	6,347	7.2
	26	27-Jun	0	0	0.0	6,005	33,249	5.5	0	0	0.0	0	0	0.0	0	0	0.0
	27	4-Jul	0	0	0.0	24,317	136,816	5.6	0	0	0.0	294	1,179	4.0	116	1,276	11.0
	28	11-Jul	192	2,229	11.6	56,469	310,339	5.5	135	883	6.5	18,631	63,370	3.4	29,897	264,212	8.8
	29	18-Jul	366	3,198	8.7	76,617	429,537	5.6	767	5,661	7.4	145,157	506,519	3.5	34,863	287,978	8.3
	30	25-Jul	517	4,204	8.1	76,730	436,682	5.7	3,950	28,118	7.1	380,822	1,429,250	3.8	36,746	281,535	7.7
	31	1-Aug	1,630	12,088	7.4	65,450	360,372	5.5	9,830	70,738	7.2	521,136	1,863,141	3.6	30,979	245,563	7.9
	32	8-Aug	827	7,020	8.5	34,525	187,147	5.4	11,044	84,588	7.7	608,947	2,312,700	3.8	22,943	164,423	7.2
	33	15-Aug	129	1,444	11.2	10,513	57,235	5.4	7,994	63,228	7.9	254,089	923,873	3.6	4,276	33,645	7.9
	35	29-Aug	69	647	9.4	7,527	39,061	5.2	5,434	43,384	8.0	155,021	579,099	3.7	1,114	8,099	7.3
	37	12-Sep	56	564	10.1	2,621	13,545	5.2	4,454	38,405	8.6	3,259	12,465	3.8	296	1,976	6.7
	38	19-Sep	7	61	8.7	315	1,657	5.3	480	4,161	8.7	76	305	4.0	18	105	5.8
	Total		4,000	33,148	8.3	397,179	2,201,567	5.5	44,088	339,166	7.7	2,087,676	7,692,845	3.7	162,906	1,300,729	8.0

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Section (Stat Area)	Stat week	Week end	Chinook			Sockeye			Coho			Pink			Chum		
			No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.
North Cape, Anton	24	13-Jun	1	7	7.0	3,215	15,688	4.9	0	0	0.0	0	0	0.0	3	18	6.0
Larsen, Sheratin,	25	20-Jun	3	25	8.3	5,073	25,666	5.1	0	0	0.0	61	220	3.6	564	4,138	7.3
& Kizhuyak combined	28	11-Jul	49	318	6.5	5,988	32,596	5.4	381	2,378	6.2	7,502	27,672	3.7	2,087	15,683	7.5
(259-30, 31, 32, 33, 34, 35,	29	18-Jul	36	302	8.4	3,319	18,294	5.5	738	5,402	7.3	12,429	48,349	3.9	3,525	29,001	8.2
36, 37, 38, 39)	30	25-Jul	27	229	8.5	2,788	15,956	5.7	729	4,881	6.7	15,128	63,594	4.2	4,896	45,411	9.3
	31	1-Aug	12	149	12.4	3,388	20,007	5.9	1,390	10,007	7.2	103,622	400,068	3.9	8,546	70,546	8.3
	32	8-Aug	39	338	8.7	3,326	19,687	5.9	2,876	20,603	7.2	145,516	554,793	3.8	10,443	83,563	8.0
	33	15-Aug	0	0	0.0	1,598	8,684	5.4	1,736	14,263	8.2	60,979	214,310	3.5	3,731	30,506	8.2
	35	29-Aug	0	0	0.0	40	205	5.1	174	1,624	9.3	1,915	6,119	3.2	30	224	7.5
Total			167	1,368	8.2	28,735	156,783	5.5	8,024	59,158	7.4	347,152	1,315,125	3.8	33,825	279,090	8.3
Outer Karluk (255-20)	37	12-Sep	0	0	0.0	376	2,208	5.9	399	3,172	7.9	57	211	3.7	38	289	7.6
Total			0	0	0.0	376	2,208	5.9	399	3,172	7.9	57	211	3.7	38	289	7.6
Halibut Bay	29	18-Jul	0	0	0.0	1,761	8,958	5.1	0	0	0.0	854	2,769	3.2	22	226	10.3
(256-25, 30)	30	25-Jul	160	1,437	9.0	11,846	63,329	5.3	338	2,431	7.2	78,511	253,474	3.2	3,188	25,335	7.9
	32	8-Aug	60	772	12.9	4,054	21,840	5.4	1,060	8,303	7.8	33,288	103,802	3.1	421	3,313	7.9
	35	29-Aug	0	0	0.0	287	1,639	5.7	73	584	8.0	2,943	10,894	3.7	14	136	9.7
Total			220	2,209	10.0	17,948	95,766	5.3	1,471	11,318	7.7	115,596	370,939	3.2	3,645	29,010	8.0
Inner & Outer	26	27-Jun	19	215	11.3	8,876	43,306	4.9	1	6	6.0	85	236	2.8	687	5,207	7.6
Ayakulik	29	18-Jul	86	716	8.3	130,776	694,592	5.3	243	1,724	7.1	43,973	147,426	3.4	3,983	34,805	8.7
(256-10, 15, 20)	30	25-Jul	79	716	9.1	55,488	290,720	5.2	345	2,633	7.6	81,892	259,980	3.2	2,129	16,732	7.9
	33	15-Aug	2	17	8.5	34,212	177,666	5.2	71	528	7.4	32,350	104,389	3.2	20	139	7.0
	34	22-Aug	13	137	10.5	13,963	73,059	5.2	3,841	32,043	8.3	132,481	476,018	3.6	923	6,484	7.0
	35	29-Aug	29	298	10.3	12,316	64,551	5.2	6,793	59,233	8.7	150,849	508,193	3.4	972	7,481	7.7
	36	5-Sep	0	0	0.0	205	1,019	5.0	886	9,507	10.7	839	2,582	3.1	2	11	5.5
Total			228	2,099	9.2	255,836	1,344,913	5.3	12,180	105,674	8.7	442,469	1,498,824	3.4	8,716	70,859	8.1
Cape Alitak	24	13-Jun	12	222	18.5	3,791	18,548	4.9	0	0	0.0	2	6	3.0	3	31	10.3
(257-10, 20)	25	20-Jun	8	138	17.3	972	4,728	4.9	0	0	0.0	3	9	3.0	11	98	8.9
	27	4-Jul	10	165	16.5	3,680	18,391	5.0	1	5	5.0	89	278	3.1	366	3,045	8.3
	29	18-Jul	15	258	17.2	2,103	12,205	5.8	29	217	7.5	2,790	15,929	5.7	2,890	27,837	9.6
	30	25-Jul	12	255	21.3	1,637	8,225	5.0	15	115	7.7	5,826	17,486	3.0	837	7,313	8.7
	31	1-Aug	5	122	24.4	1,645	9,055	5.5	6,589	20,069	3.0	16,678	51,159	3.1	1,031	9,222	8.9
	32	8-Aug	0	0	0.0	78	391	5.0	11	96	8.7	1,096	3,314	3.0	67	461	6.9
	33	15-Aug	0	0	0.0	277	1,384	5.0	9	72	8.0	3,404	10,212	3.0	144	1,150	8.0
	34	22-Aug	5	62	12.4	2,762	13,818	5.0	623	5,647	9.1	2,035	6,128	3.0	126	984	7.8
	35	29-Aug	22	289	13.1	4,300	21,735	5.1	2,169	21,857	10.1	2,398	7,190	3.0	210	1,648	7.8
	36	5-Sep	33	434	13.2	214	1,055	4.9	843	9,197	10.9	139	407	2.9	25	172	6.9
	37	12-Sep	15	202	13.5	35	178	5.1	159	1,595	10.0	3	11	3.7	6	50	8.3
Total			137	2,147	15.7	21,494	109,713	5.1	10,448	58,870	5.6	34,463	112,129	3.3	5,716	52,011	9.1

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Section (Stat Area)	Stat week	Week end	Chinook			Sockeye			Coho			Pink			Chum		
			No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.
Moser/Olga Bay & Dog Salmon Flats (257-30, 31, 40, 41, 42, 43)	24	13-Jun	3	47	15.7	12,523	63,544	5.1	0	0	0.0	0	0	0.0	19	143	7.5
	25	20-Jun	0	0	0.0	1,037	5,292	5.1	0	0	0.0	0	0	0.0	4	26	6.5
	27	4-Jul	0	0	0.0	7,957	41,731	5.2	2	17	8.5	48	165	3.4	552	4,534	8.2
	29	18-Jul	0	0	0.0	6,978	39,312	5.6	3	19	6.3	2,222	8,210	3.7	291	2,156	7.4
	30	25-Jul	2	16	8.0	6,609	36,550	5.5	6	45	7.5	5,300	20,184	3.8	390	2,981	7.6
	31	1-Aug	0	0	0.0	6,946	39,198	5.6	58	434	7.5	16,503	65,474	4.0	459	3,713	8.1
	32	8-Aug	0	0	0.0	6,083	33,306	5.5	61	474	7.8	24,180	94,811	3.9	513	3,980	7.8
	33	15-Aug	0	0	0.0	2,733	15,080	5.5	21	171	8.1	7,770	31,133	4.0	175	1,498	8.6
	34	22-Aug	0	0	0.0	14,313	79,731	5.6	589	5,537	9.4	4,355	17,861	4.1	476	3,820	8.0
	35	29-Aug	0	0	0.0	12,953	70,434	5.4	1,055	9,680	9.2	3,059	12,371	4.0	430	3,431	8.0
	36	5-Sep	0	0	0.0	11,135	60,892	5.5	1,759	16,981	9.7	701	2,948	4.2	1,128	8,869	7.9
	37	12-Sep	0	0	0.0	2,132	11,533	5.4	284	2,761	9.7	33	132	4.0	84	624	7.4
	Total		5	63	12.6	91,399	496,603	5.4	3,838	36,119	9.4	64,171	253,289	3.9	4,521	35,775	7.9
Humpy-Deadman (257-50, 60, 70)	24	13-Jun	0	0	0.0	449	2,285	5.1	0	0	0.0	1	3	3.0	4	40	10.0
	27	4-Jul	0	0	0.0	234	1,170	5.0	1	6	6.0	28	85	3.0	24	192	8.0
	28	11-Jul	0	0	0.0	48	240	5.0	0	0	0.0	10	30	3.0	18	150	8.3
	30	25-Jul	0	0	0.0	543	2,793	5.1	8	66	8.3	2,090	7,151	3.4	810	4,959	6.1
	31	1-Aug	0	0	0.0	191	986	5.2	0	0	0.0	8,892	28,815	3.2	541	4,408	8.1
	32	8-Aug	16	168	10.5	1,580	8,495	5.4	252	1,816	7.2	36,708	127,783	3.5	7,202	57,624	8.0
	Total		16	168	10.5	3,045	15,969	5.2	261	1,888	7.2	47,729	163,867	3.4	8,599	67,373	7.8
Seven Rivers (258-70, 80, 85, 90)	25	20-Jun	32	542	16.9	4,098	20,495	5.0	0	0	0.0	226	792	3.5	917	6,677	7.3
	26	27-Jun	127	842	6.6	15,807	89,811	5.7	2	15	7.5	1,316	3,659	2.8	3,917	30,588	7.8
	28	11-Jul	126	1,253	9.9	13,582	73,864	5.4	1,074	7,552	7.0	5,379	16,469	3.1	6,224	46,013	7.4
	29	18-Jul	0	0	0.0	332	1,500	4.5	2	13	6.5	107	321	3.0	15	106	7.1
	31	1-Aug	1	30	30.0	233	1,282	5.5	89	711	8.0	2,291	6,876	3.0	358	3,222	9.0
	32	8-Aug	64	438	6.8	1,768	9,091	5.1	1,574	11,304	7.2	19,606	60,969	3.1	2,117	17,063	8.1
	Total		350	3,105	8.9	35,820	196,043	5.5	2,741	19,595	7.1	28,925	89,086	3.1	13,548	103,669	7.7
Two-Headed (258-54, 55, 60)	26	27-Jun	41	321	7.8	2,571	12,848	5.0	0	0	0.0	188	548	2.9	1,024	8,825	8.6
	28	11-Jul	0	0	0.0	3,595	17,977	5.0	26	189	7.3	461	1,385	3.0	299	2,396	8.0
	29	18-Jul	0	0	0.0	142	712	5.0	0	0	0.0	109	327	3.0	42	334	8.0
	31	1-Aug	0	0	0.0	26	143	5.5	10	79	7.9	255	764	3.0	40	358	9.0
	Total		41	321	7.8	6,334	31,680	5.0	36	268	7.4	1,013	3,024	3.0	1,405	11,913	8.5

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Section (Stat Area)	Stat week	Week end	Chinook			Sockeye			Coho			Pink			Chum		
			No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.
Sitkalidak (258-10, 20, 30, 40, 51, 52, 53)	25	20-Jun	5	30	6.0	1,790	8,235	4.6	0	0	0.0	34	115	3.4	93	725	7.8
	26	27-Jun	233	1,311	5.6	17,899	92,863	5.2	2	12	6.0	781	2,507	3.2	3,090	24,278	7.9
	28	11-Jul	711	4,567	6.4	37,373	179,726	4.8	3,835	21,083	5.5	14,464	45,084	3.1	11,111	74,303	6.7
	29	18-Jul	710	5,358	7.5	26,035	129,893	5.0	5,738	34,263	6.0	27,592	91,860	3.3	16,202	124,597	7.7
	30	25-Jul	497	4,039	8.1	8,946	49,038	5.5	991	6,711	6.8	44,110	149,589	3.4	9,171	67,235	7.3
	31	1-Aug	146	1,388	9.5	5,989	30,793	5.1	1,212	8,339	6.9	104,356	337,697	3.2	14,445	125,543	8.7
	32	8-Aug	125	1,059	8.5	1,898	10,166	5.4	6,132	23,775	3.9	78,346	288,691	3.7	13,135	107,529	8.2
Total			2,427	17,752	7.3	99,930	500,714	5.0	17,910	94,183	5.3	269,683	915,543	3.4	67,247	524,210	7.8
Inner & Outer Ugak (259-40, 41, 42, 43, 44, 45, 46)	26	27-Jun	12	87	7.3	525	2,414	4.6	0	0	0.0	7	24	3.4	21	161	7.7
	28	11-Jul	20	173	8.7	2,844	15,709	5.5	79	637	8.1	382	1,215	3.2	471	3,442	7.3
	29	18-Jul	196	1,720	8.8	2,112	11,885	5.6	56	416	7.4	922	3,507	3.8	525	4,183	8.0
	30	25-Jul	273	2,750	10.1	817	4,902	6.0	100	731	7.3	4,730	17,459	3.7	1,126	9,284	8.2
	31	1-Aug	190	2,569	13.5	1,992	10,810	5.4	155	1,252	8.1	14,674	54,273	3.7	7,988	64,522	8.1
	32	8-Aug	20	272	13.6	128	697	5.4	72	556	7.7	2,484	9,526	3.8	6,926	50,320	7.3
	37	12-Sep	0	0	0.0	0	0	0.0	963	8,564	8.9	16	130	8.1	2,452	21,839	8.9
	38	19-Sep	0	0	0.0	0	0	0.0	1,758	11,781	6.7	0	0	0.0	0	0	0.0
Total			711	7,571	10.6	8,418	46,417	5.5	3,183	23,937	7.5	23,215	86,134	3.7	19,509	153,751	7.9
Outer Chiniak (259-21, 25)	29	18-Jul	13	79	6.1	279	1,514	5.4	127	778	6.1	1,058	4,589	4.3	361	2,350	6.5
	30	25-Jul	13	65	5.0	33	174	5.3	73	485	6.6	617	2,506	4.1	178	1,583	8.9
	Total		26	144	5.5	312	1,688	5.4	200	1,263	6.3	1,675	7,095	4.2	539	3,933	7.3
Inner Chiniak (259-23, 24, 27)	32	8-Aug	0	0	0.0	0	0	0.0	0	0	0.0	112	446	4.0	140	1,258	9.0
	Total		0	0	0.0	0	0	0.0	0	0	0.0	112	446	4.0	140	1,258	9.0
Buskin River (259-22, 26)	32	8-Aug	0	0	0.0	0	0	0.0	0	0	0.0	112	446	4.0	140	1,257	9.0
	Total		0	0	0.0	0	0	0.0	0	0	0.0	112	446	4.0	140	1,257	9.0
Monaska/Mill Bay (259-10)	32	8-Aug	1	13	13.0	34	189	5.6	21	133	6.3	11,000	45,382	4.1	81	607	7.5
	Total		1	13	13.0	34	189	5.6	21	133	6.3	11,000	45,382	4.1	81	607	7.5

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Section (Stat Area)	Stat week	Week end	Chinook			Sockeye			Coho			Pink			Chum		
			No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.
Outer Kukak (262-25, 30)	25	20-Jun	0	0	0.0	1,026	4,617	4.5	0	0	0.0	30	104	3.5	78	547	7.0
	26	27-Jun	16	73	4.6	1,074	4,942	4.6	0	0	0.0	27	91	3.4	64	501	7.8
	29	18-Jul	0	0	0.0	302	1,669	5.5	12	68	5.7	614	1,845	3.0	372	3,363	9.0
	31	1-Aug	11	50	4.5	315	1,880	6.0	412	2,723	6.6	1,635	6,603	4.0	811	6,176	7.6
	32	8-Aug	0	0	0.0	5	27	5.4	4	35	8.8	210	752	3.6	23	198	8.6
	35	29-Aug	0	0	0.0	14	57	4.1	345	2,970	8.6	160	545	3.4	331	2,813	8.5
	36	5-Sep	0	0	0.0	5	27	5.4	221	1,986	9.0	113	398	3.5	3,500	33,576	9.6
Total			27	123	4.6	2,741	13,219	4.8	994	7,782	7.8	2,789	10,338	3.7	5,179	47,174	9.1
Inner Kukak (262-27)	30	25-Jul	0	0	0.0	0	0	0.0	0	0	0.0	141	422	3.0	1,171	8,436	7.2
	32	8-Aug	0	0	0.0	0	0	0.0	0	0	0.0	725	2,536	3.5	86	734	8.5
	36	5-Sep	0	0	0.0	0	0	0.0	28	197	7.0	0	0	0.0	641	5,262	8.2
	Total		0	0	0.0	0	0	0.0	28	197	7.0	866	2,958	3.4	1,898	14,432	7.6
Dakavak (262-35, 40, 45, 50, 55)	28	11-Jul	528	2,932	5.6	14,229	84,567	5.9	1,346	10,204	7.6	2,847	8,750	3.1	5,475	41,378	7.6
	29	18-Jul	80	422	5.3	1,150	5,620	4.9	31	200	6.5	3,024	8,813	2.9	1,448	10,881	7.5
	30	25-Jul	1	9	9.0	90	432	4.8	377	1,506	4.0	557	2,117	3.8	551	3,308	6.0
	31	1-Aug	5	32	6.4	3,486	18,652	5.4	1,823	11,419	6.3	9,727	37,932	3.9	4,640	38,693	8.3
	32	8-Aug	14	294	21.0	236	1,190	5.0	758	4,966	6.6	33,517	134,075	4.0	9,310	66,563	7.1
	Total		628	3,689	5.9	19,191	110,461	5.8	4,335	28,295	6.5	49,672	191,687	3.9	21,424	160,823	7.5
Katmai (262-60)	28	11-Jul	173	1,054	6.1	1,622	8,815	5.4	124	903	7.3	183	515	2.8	596	4,292	7.2
	29	18-Jul	40	389	9.7	481	2,736	5.7	49	370	7.6	950	4,190	4.4	597	5,256	8.8
	31	1-Aug	102	722	7.1	1,587	11,638	7.3	195	1,577	8.1	4,170	26,040	6.2	1,991	19,744	9.9
	Total		315	2,165	6.9	3,690	23,189	6.3	368	2,850	7.7	5,303	30,745	5.8	3,184	29,292	9.2
Alinchak (262-65, 70)	28	11-Jul	342	2,174	6.4	11,127	61,284	5.5	481	2,939	6.1	1,387	4,425	3.2	3,573	26,238	7.3
	29	18-Jul	65	700	10.8	4,334	26,607	6.1	783	5,648	7.2	3,102	10,891	3.5	5,168	44,583	8.6
	31	1-Aug	126	829	6.6	742	3,898	5.3	610	4,507	7.4	3,630	12,796	3.5	34,295	279,710	8.2
	32	8-Aug	12	105	8.8	66	365	5.5	125	1,116	8.9	1,919	6,718	3.5	128	1,269	9.9
	Total		545	3,808	7.0	16,269	92,154	5.7	1,999	14,210	7.1	10,038	34,830	3.5	43,164	351,800	8.2

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Section (Stat Area)	Stat week	Week end	Chinook			Sockeye			Coho			Pink			Chum		
			No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.	No.	lbs.	avg.
Cape Igvak (262-75, 80, 90, 95)	25	20-Jun	424	3,572	8.4	93,121	505,118	5.4	20	116	5.8	2,676	8,197	3.1	7,584	57,373	7.6
	26	27-Jun	345	2,597	7.5	82,834	464,804	5.6	0	0	0.0	3,887	11,219	2.9	6,841	52,371	7.7
	29	18-Jul	285	2,649	9.3	12,481	76,109	6.1	2,954	21,777	7.4	14,424	45,851	3.2	19,781	153,364	7.8
	30	25-Jul	482	4,181	8.7	17,334	104,329	6.0	4,154	32,632	7.9	25,336	87,167	3.4	35,514	297,014	8.4
	31	1-Aug	298	2,502	8.4	5,747	32,353	5.6	4,449	35,688	8.0	16,450	63,339	3.9	22,263	192,652	8.7
	32	8-Aug	57	450	7.9	2,037	7,430	3.6	2,472	10,852	4.4	9,867	36,852	3.7	8,508	40,836	4.8
Total			1,891	15,951	8.4	213,554	1,190,143	5.6	14,049	101,065	7.2	72,640	252,625	3.5	100,491	793,610	7.9
Grand total			14,550	116,085	8.0	1,436,606	7,688,665	5.4	266,431	2,006,496	7.5	8,864,796	32,176,431	3.6	734,806	5,638,143	7.7

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, 2010.

District	Number of Fish				
	Chinook	Sockeye	Coho	Pink	Chum
Afognak	1	70,768	39,932	326,977	256
Northwest Kodiak	0	33,965	25,455	341,400	38,500
Southwest Kodiak	8,208	610,429	15,005	2,036,796	8,613
Alitak Bay	354	322,799	12,157	323,379	22,461
Eastside Kodiak	0	35,209	3,171	256,050	65,140
Northeast Kodiak	6	9,788	7,336	93,881	20,600
Mainland	0	12,500	5,025	265,650	144,715
Total	8,569	1,095,458	108,081	3,644,133	300,285