

Fishery Management Report No. 09-09

**Chignik Management Area Salmon and Herring
Annual Management Report, 2007**

by

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and

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March 2009

Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



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

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TABLE OF CONTENTS

	Page
LIST OF TABLES.....	iii
LIST OF FIGURES	iv
LIST OF APPENDICES	iv
ABSTRACT	1
INTRODUCTION	1
COMMERCIAL HERRING	2
Herring Management Overview	2
Historical Data	2
2007 Herring Fishery	2
COMMERCIAL SALMON	2
Overview of Management Plans.....	2
Chignik Area Cooperative Purse Seine Salmon Management Plan.....	2
Chignik Salmon Management Plan	3
Cape Igvak Salmon Management Plan	3
Southeastern District Mainland Salmon Management Plan.....	3
Marine Stewardship Council Certification	4
MSC Condition 56	4
MSC Condition 57	4
2007 SALMON MANAGEMENT.....	5
Chignik Bay and Central Districts Commercial Salmon Fishery	5
Eastern District Commercial Salmon Fishery.....	6
Western and Perryville Districts Commercial Salmon Fishery	6
Escapement and Harvest Data	6
Stock Separation Techniques.....	6
Escapement Information.....	6
Chinook Salmon.....	7
Sockeye Salmon	7
Coho Salmon	8
Pink Salmon	8
Chum Salmon.....	9
Harvest Information.....	9
Chinook Salmon	9
Sockeye Salmon	9
Coho Salmon	10
Pink Salmon	10
Chum Salmon.....	10
Economic Value.....	10
Chignik Lagoon Test Fisheries.....	11
CHIGNIK AREA SUBSISTENCE SALMON FISHERIES.....	11

TABLE OF CONTENTS (Continued)

	Page
REFERENCES CITED	12
TABLES AND FIGURES	13
APPENDIX A. MEMORANDUM RECOMMENDING TARGETING THE LOWER BOUNDS OF THE CHIGNIK SOCKEYE SALMON ESCAPEMENT GOALS DURING THE 2007 SEASON	67
APPENDIX B. SUMMARY OF 2007 EMERGENCY ORDERS	75
APPENDIX C. COMMERCIAL SALMON FISHERY CATCH AND EFFORT, BY DAY	79
APPENDIX D. MEMO TO CMA MANAGER REGARDING RUN RECALCULATION, 1973-99.....	83

LIST OF TABLES

Table	Page
1. List of Chignik Management Area herring management units.....	14
2. Chignik Management Area commercial herring harvest, 1980 through 2007.....	14
3. Chignik River sockeye salmon interim escapement objectives, 2007.....	15
4. Estimated Chignik River Chinook, coho, pink, and chum salmon, and Dolly Varden escapement, by day, 2007.....	16
5. Estimated Chignik River Chinook, coho, pink, and chum salmon, and Dolly Varden escapement, 1970 through 2007.....	18
6. Estimated Chignik River sockeye salmon escapement, by day, and management objective period, 2007.....	19
7. Total Chignik River sockeye salmon escapement and escapement goals, based on postseason analysis, by run, 1970 through 2007.....	20
8. Peak sockeye salmon aerial survey escapement estimates for Black Lake tributaries, 1960 through 2007.....	21
9. Peak sockeye salmon aerial survey escapement estimates for Chignik Lake and Black River tributaries, 1960 through 2007.....	22
10. Estimated pink salmon escapement and objectives in the Chignik Management Area, by district and year, 1970 through 2007.....	23
11. Estimated chum salmon escapement and objectives in the Chignik Management Area, by district and year, 1970 through 2007.....	25
12. Total commercial salmon harvests, including home pack and the department's test fishery harvests, from the Chignik Management Area by species and year, 1970 through 2007.....	26
13. Annual Chignik Management Area Chinook salmon harvest, 1970 through 2007.....	27
14. Chignik Management Area Chinook salmon harvest (including home pack and the department's test fishery catches), by district and year, 1970 through 2007.....	28
15. Chignik Management Area Chinook salmon harvest (including home pack and the department's test fishery catches), by district and day, 2007.....	29
16. Total harvest of sockeye salmon considered by regulation to be Chignik-bound in the Chignik, Cape Igvak, and Southeastern District Mainland commercial salmon fisheries, 1978 through 2007.....	31
17. Total annual Chignik Management Area sockeye salmon harvest (including home pack and the department's test fishery catches), by district, 1970 through 2007.....	33
18. Chignik Management Area sockeye salmon harvest (including home pack and the department's test fishery catches), by district and day, 2007.....	34
19. Harvest of sockeye salmon considered by regulation to be Chignik-bound in the Chignik, Cape Igvak, and Southeastern District Mainland commercial salmon fisheries from June 1 to July 25, 1978 through 2007.....	36
20. Chignik sockeye salmon escapement, total harvest considered Chignik-bound, and total run, 1970 through 2007.....	38
21. Chignik sockeye salmon forecasts and actual runs, by run and year, 1993 through 2007.....	39
22. Chignik Management Area coho salmon harvest, by year, 1970 through 2007.....	40
23. Chignik Management Area coho salmon harvest (including home pack and the department's test fishery catches), by district and year, 1970 through 2007.....	41
24. Chignik Management Area coho salmon harvest (including home pack and the department's test fishery catches), by district and day, 2007.....	42
25. Chignik Management Area pink salmon harvest, by year, 1970 through 2007.....	44
26. Chignik Management Area pink salmon harvest (including home pack and the department's test fishery catches), by district and year, 1970 through 2007.....	45
27. Chignik Management Area pink salmon harvest (including home pack and the department's test fishery catches), by district and day, 2007.....	46
28. Chignik Management Area chum salmon harvest, by year, 1970 through 2007.....	48
29. Chignik Management Area chum salmon harvest (including home pack and the department's test fishery catches), by district and year, 1970 through 2007.....	49
30. Chignik Management Area chum salmon harvest (including home pack and the department's test fishery catches), by district and day, 2007.....	50

LIST OF TABLES (Continued)

Table	Page
31. Value of the commercial salmon harvest, by species, and average value per active permit, in dollars, in the Chignik Management Area, 1970 through 2007.	52
32. Number of subsistence permits issued and returned and estimated subsistence salmon harvest, by species and year, 1980 through 2007.	54

LIST OF FIGURES

Figure	Page
1. Map of the Alaska Peninsula illustrating the relative locations of the Chignik, Kodiak, and Alaska Peninsula and Aleutians Islands Management Areas.	55
2. Map of the Chignik Management Area illustrating district and section boundaries and statistical areas.	56
3. Representation of days open to commercial salmon fishing, by district and month, 2007.	57
4. Map of upper Chignik Lagoon showing the location of the Pillar Rock, Mensis Point, and Humes Point marker locations.	58
5. Chignik River estimated daily and cumulative Chinook salmon escapement, 2007.	59
6. Chignik River Chinook salmon escapement as compared to current escapement goals, by year, 1970 to 2007.	60
7. Chignik River sockeye salmon daily and cumulative escapement, 2007.	61
8. Chignik River sockeye salmon early, late, and combined run escapements 1970 through 2007, compared to 2007 sustainable escapement goal.	62
9. Chignik-bound sockeye salmon early-run harvest, 1970 through 2007.	63
10. Chignik-bound sockeye salmon late-run harvest, 1970 through 2007.	64
11. Total sockeye salmon escapement and catch considered Chignik-bound including home pack, the ADF&G's test fishery harvest, and Cape Igvak and SEDM allocations, by year and run, 1970 through 2007.	65
12. Average exvessel value (\$) per permit and total permits fished by year 1970 through 2007.	66

LIST OF APPENDICES

Appendix	Page
A1. Memorandum recommending targeting the lower bounds of the Chignik sockeye salmon escapement goals during the 2007 season.	68
B1. Summary of the 2007 Chignik Management Area Emergency Orders.	76
C1. Commercial salmon fishing effort and harvest (including home pack but not including the department's test fishery harvest), by day in the Chignik Management Area, 2007.	80
D1. Memo to CMA manager regarding Run Recalculation, 1973-99.	84

ABSTRACT

This report summarizes the 2007 commercial Pacific herring *Clupea pallasii* and Pacific salmon *Oncorhynchus spp.* fisheries within the Chignik Management Area (CMA; Area L). The CMA encompasses all coastal waters and inland drainages of the northwest Gulf of Alaska between Kilokak Rocks and Kupreanof Point. There was no commercial herring fishery in the CMA during 2007. All five species of Pacific salmon were commercially harvested in the CMA: Chinook *O. tshawytscha*, sockeye *O. nerka*, coho *O. kisutch*, pink *O. gorbuscha*, and chum *O. keta* salmon. In 2007, the Chinook salmon escapement of 2,000 to the Chignik River was below recent averages but was within the escapement goal range of 1,300 to 2,700 fish. The 2007 Chignik River early-run sockeye salmon escapement of 361,091 was within the early-run escapement goal range of 350,000 to 400,000 fish. The late-run sockeye salmon escapement of 293,883 exceeded the late-run sustainable escapement goal range of 200,000 to 250,000 fish but was within the interim late-run escapement objective of 250,000 to 300,000. The early run and late run were both below recent 5-, 10-, and 20-year escapement averages. A total of 55 Chignik Commercial Fisheries Entry Commission (CFEC) permit holders made deliveries in 2007. The majority of the 2007 CMA sockeye salmon harvest of 834,547 fish occurred in the Chignik Bay District. The 2007 total (including department test fishery harvests and fish retained as home pack) Chignik-bound sockeye salmon harvest of 887,074 fish was less than recent 5-, 10-, and 20-year average harvests.

Key words: Chignik Management Area (CMA), *Oncorhynchus*, *Clupea pallasii*, salmon, herring, Alaska Board of Fisheries (BOF), 2007 commercial fisheries management, FMP, harvest statistics, escapement statistics Annual Management Report.

INTRODUCTION

The Alaska Department of Fish and Game (ADF&G) manages all Pacific herring *Clupea pallasii* and commercial salmon *Oncorhynchus spp.* fisheries within the Chignik Management Area (CMA; Area L). The CMA encompasses all coastal waters and inland drainages of the northwest Gulf of Alaska between Kilokak Rocks and Kupreanof Point (Figure 1). For management purposes, these waters are divided from into five fishing districts: Eastern, Central, Chignik Bay, Western, and Perryville districts. Each district is further broken down into sections and statistical reporting areas (Figure 2).

Five species of Pacific salmon are commercially harvested in the CMA: Chinook *O. tshawytscha*, sockeye *O. nerka*, coho *O. kisutch*, pink *O. gorbuscha*, and chum *O. keta* salmon. Of these, sockeye salmon are the primary species targeted and the most important commercial and subsistence salmon species in the CMA. ADF&G manages all CMA commercial salmon resources by emergency order (EO) based on inseason evaluation of local stock abundance and escapement objectives. The majority of fishing effort is concentrated on salmon returning to the Chignik River watershed. Commercial salmon fishing is the economic mainstay for five villages: Chignik Bay (Anchorage Bay), Chignik Lagoon, Chignik Lake, Perryville, and Ivanof Bay (Figure 1). The majority of salmon harvested in the CMA are delivered to shore-based processing facilities located near the village of Chignik Bay.

This report provides a summary of commercial herring and salmon management plans, fishing activity, harvests, and escapements in the CMA. This report also provides a chronology of significant regulatory changes that influenced the 2007 commercial salmon season. Most tables in this report have been verified against the Westward Region electronic fish ticket and escapement databases that contain historical data from 1970 to the present. The salmon harvest estimates reported in this document were summarized from the fish ticket database on January 15, 2008. Data published in this report supersede any data previously published.

COMMERCIAL HERRING

HERRING MANAGEMENT OVERVIEW

Herring may be harvested in the CMA from April 15 through June 30 (sac roe season) and from August 15 through February 28 (food and bait season), although specific commercial herring fishing periods and areas are allowed only by emergency order (5 AAC 27.560). Herring may be taken only by purse seines not more than 1,000 meshes in depth and 100 fathoms in length (5 AAC 27.575).

There are several distinct locations within the CMA where herring are managed as separate stocks (Table 1). Each individual location is managed on a maximum exploitation rate of 20%, given a threshold biomass is available for harvest. Threshold biomass levels are determined prior to the fishing season after aerial survey estimates are conducted and potential effort levels are determined.

Historical Data

Commercial herring harvests were not recorded in the CMA until 1980 (Nicholson et al. 1980). In years when fisheries occurred, herring harvests ranged from a minimum of 6 tons in 1996 to a maximum of 587 tons in 1980 (Table 2). Due to poor market conditions, there has been limited interest in CMA herring fisheries in recent years. The last herring biomass survey and commercial fishery occurred in 1996 (Table 2; Stichert 2007).

2007 Herring Fishery

There was no 2007 herring fishery in the CMA; no guideline harvest levels were set due to the lack of industry interest.

COMMERCIAL SALMON

OVERVIEW OF MANAGEMENT PLANS

Several management plans have been used to manage the Chignik commercial salmon fishery in the last decade. The 2007 Chignik commercial salmon fishery was managed based on the Chignik Salmon Management Plan, 5 AAC 15.357. Sockeye salmon bound for the Chignik River watershed were also allocated under two additional management plans: the Cape Igvak Salmon Management Plan (5 AAC 18.360) in the Kodiak Management Area (Area K), and the Southeastern District Mainland (SEDM) Salmon Management Plan (5 AAC 09.360) in the Alaska Peninsula Management Area (Area M). The Chignik Area Cooperative Purse Seine Salmon Fishery Management Plan (5 AAC 15.359) was implemented from 2002 to 2006 but was repealed prior to the start of the 2006 commercial salmon season.

Chignik Area Cooperative Purse Seine Salmon Management Plan

The Chignik Area Cooperative Purse Seine Salmon Fishery Management Plan was legally scrutinized since its adoption by the Alaska Board of Fisheries (BOF) in January 2002. Once in regulation, the BOF recognized the potential for conflict under this management strategy and reviewed the cooperative management plan after the 2002, 2003, and 2004 commercial salmon seasons. Commercial, subsistence, and other stakeholder concerns were addressed by the BOF at these meetings through regulatory changes and commissioner's permits.

Prior to the start of the fourth cooperative commercial salmon season (March 2005), the Alaska Supreme Court ruled the original regulation (5 AAC 15.359) contradicted the intent of the Limited Entry Act and repealed the cooperative management plan. In May of that year, the BOF re-established the cooperative management plan by emergency regulation (5 AAC 15.358) and required all active cooperative members to physically participate in the fishery to gain economic benefits. This action was subsequently challenged in the Anchorage Superior Court, where the trial court judge ruled the emergency regulation still violated the spirit and purposes of the Limited Entry Act, as described in the Alaska Supreme Court decision. However, the state appealed the Anchorage Superior Court decision to the Alaska Supreme Court and was granted a stay of decision until after completion of the 2005 season. Before the stay of decision expired, the BOF met again in November of 2005 and adopted the emergency management plan (with some modification) into regulation. This action was challenged in February of 2006, and the Alaska Supreme Court ruled the emergency regulation, and therefore the newly adopted cooperative management plan, was again, not legal and repealed the plan. Since the time of that decision, only a State of Alaska legislative action can establish a cooperative salmon fishery in the Chignik Management Area. No legislative action occurred prior to the start of the 2007 season thus, the 2007 commercial salmon season was not managed as a cooperative fishery.

Chignik Salmon Management Plan

The Chignik Salmon Management Plan (5 AAC 15.357) was originally adopted in 1999. The goal of this plan was to allow traditional salmon fisheries in the CMA while achieving the established escapement goals for both early-run (Black Lake), and late-run (Chignik Lake) sockeye salmon. Purse seines and hand purse seines were the only legal commercial salmon fishing gear within the CMA. Legal seine gear ranged from 100 to 125 fathoms in length in the Chignik Bay District and from 100 to 225 fathoms in length in all other districts. To assist management efforts, the management plan was organized into districts or groups of districts: the Chignik Bay and Central districts, the Eastern District, and the Western and Perryville districts (Figure 2).

Cape Igvak Salmon Management Plan

The 2007 CMA salmon fishery was also influenced by the Cape Igvak Salmon Management Plan (5 AAC 18.360). The Cape Igvak Section is the westernmost component of the Kodiak Management Area (Area K), located directly to the east of the CMA (Figure 1). If the harvestable surplus of sockeye salmon in the CMA was above or expected to be above certain thresholds (5 AAC 18.360 (a-c)), then 15 percent of the total Chignik sockeye salmon harvest (including sockeye salmon caught at Cape Igvak and within certain portions of SEDM) was allocated to Area K fishermen. Based on this management plan, 90 percent of the sockeye salmon harvested within the Cape Igvak Section were considered to be Chignik-bound. This management plan was in effect from the beginning of the fishing season through July 25. After July 25, there were no allocative ties between the CMA and Area K.

Southeastern District Mainland Salmon Management Plan

Certain sockeye salmon harvested by Area M fishermen under the Southeastern District Mainland (SEDM) Salmon Management Plan (5 AAC 09.360) were also allocatively considered Chignik-bound. The SEDM is composed of a group of sections at the eastern end of Area M, located directly southwest of the CMA (Figure 1). The allocation was similar to the Cape Igvak plan; If the harvestable surplus of sockeye salmon in the CMA was above or expected to be

above certain thresholds (5 AAC 09.360 (a-g)), then 7.6 percent of the total estimated Chignik sockeye salmon harvest (including sockeye salmon caught at Cape Igvak and within certain portions of SEDM) was allocated to SEDM fisherman. Based on this management plan, 80 percent of the sockeye salmon harvested within certain SEDM sections during specific times were considered to be Chignik-bound. This management plan was in effect from the beginning of the fishing season through July 25. After July 25, there were no allocative ties between the CMA and Area M.

MARINE STEWARDSHIP COUNCIL CERTIFICATION

The Marine Stewardship Council (MSC), a non-profit organization, certifies that seafood products harvested from wild stock fisheries are sustainably managed. The Alaska salmon fishery managed by ADF&G was originally certified by the MSC in September 2000. The certification is valid for five years after which a recertification examination is conducted. The ADF&G reapplied for certification in 2005; however, due to changes in the methods that the MSC uses to certify fisheries, the process did not begin until 2006. A total of two conditions for certification were developed by the MSC for the Chignik Management Area salmon fishery. A comprehensive review of the MSC conditions for the Chignik Management Area recertification is ongoing and is documented in an ADF&G Regional Information Report (Witteveen and Stichert, 2008). The following is a summary as well as the preliminary actions taken by ADF&G to address the two conditions applicable to the CMA.

MSC Condition 56

This condition states, *‘Collect age-sex-size data for chum salmon, or provide a written explanation and justification that illustrates that the fishery specific harvests are not a significant component of the overall harvest of the stock’.*

Chum salmon harvests in the Chignik Management Area are minor compared to sockeye and pink salmon harvests. Chum salmon are rarely targeted by fishermen except on occasions when a large ikura (salmon roe) market is available at which time fish are harvested very close to their stream of origin late in the season. Due to a low level of industry interest, relatively small harvests, and little concern of harvesting migrating stocks, the department does not currently sample any chum salmon scales in the CMA or the Westward Region. While it is possible to generate brood tables to track production and forecast future returns of chum salmon, the cost of collecting samples from the commercial fishery and the escapement is prohibitive relative to the low level chum salmon harvest and economic gain.

MSC Condition 57

This condition states, *“Provide technical documentation for recent changes in run reconstruction data used to determine stock productivity. This should include: 1) methods used to alter Chignik sockeye catch data since the early 1970s, 2) changes in reported catch database, and 3) changes in brood tables.”*

This condition addresses several minor changes in the historical data records of CMA salmon fisheries. While the department makes efforts to minimize any changes to historical information, changes that correct errors or increase the accuracy of the historical database are necessary. Changes specific to Condition 57 item 1) *methods used to alter Chignik sockeye catch data since the early 1970s* are summarized in an ADF&G Department of Commercial Fisheries

Memorandum (personal communication, Michael Daigneault, habitat biologist, ADF&G, Anchorage Alaska; Appendix D1) and can be obtained by contacting department offices in Kodiak or Chignik.

2007 SALMON MANAGEMENT

The ADF&G targeted the salmon escapement goals during the 2007 season (Table 3; Appendix A) based on limnology data from 2000 through 2006 that suggested the forage base for sockeye salmon was depressed in Chignik Lake (Bouwens and Finkle 2003a, b; Finkle 2005; Finkle 2006a, b; Finkle and Bouwens 2001). The ADF&G first adopted this practice in 2002 to relieve grazing pressure on zooplankton in Chignik Lake to improve juvenile sockeye salmon production.

A total of 55 Chignik CFEC permit holders (excluding ADF&G test fish permit) participated in the 2007 commercial salmon season. The first commercial fishing period began on June 15, and the last commercial fishing period ended on September 5th. The commercial salmon fishery was open for a total of 69 days during 2007 (Figure 3).

All CMA salmon were delivered to one processor in 2007. Trident Seafoods located in Anchorage Bay generally filleted or headed and gutted (H&G) the majority of Chignik salmon. Trident Seafoods processed salmon from the start of the commercial salmon season until September 5th.

CHIGNIK BAY AND CENTRAL DISTRICTS COMMERCIAL SALMON FISHERY

After conducting department test fisheries in Chignik Lagoon and assessing sockeye salmon run strength at the Chignik River weir, the 2007 commercial salmon fishery began in the Chignik Bay and Central districts on June 15 (Figures 2 and 4). The first fishing period lasted 36 hours then closed for approximately seven days to achieve interim sockeye salmon escapement objectives. After this period, sockeye salmon escapement into the Chignik River watershed remained relatively consistent throughout the remaining commercial salmon season. As a result, the Chignik Bay and Central districts reopened on June 25 and largely remained open until the end of the commercial salmon season on September 5th. The fishery was only closed for five separate days during July and one day during August to meet escapement objectives. In total, the Chignik Bay and Central districts were open for 69 days during 2007.

The Chignik Lagoon markers alternated between Humes Point and Mensis Point during the 2007 salmon season (Figure 4). Generally, the Humes Point markers were used for the first 24 to 48 hours of a commercial fishing period to allow the salmon above these markers to escape the fishery. The Humes Point markers were also used when sockeye salmon escapement was at or just above the lower bound of the interim escapement objectives. This increased escapement into the Chignik River and also allowed the ADF&G to assess the magnitude of salmon entering the lagoon by concentrating the effort in the lower lagoon. During periods when sockeye salmon abundance exceeded the upper bound of the interim escapement objective or during periods of limited fleet capacity, the closed waters in Chignik Lagoon were reduced to Mensis Point to control escapement and provide additional harvest opportunities.

The local processor closed for the season on September 5th. No additional commercial salmon periods occurred in the CMA after this date. A summary of emergency orders outlining the commercial salmon fisheries in the Chignik Bay and Central districts is found in Appendix B.

EASTERN DISTRICT COMMERCIAL SALMON FISHERY

The Eastern District, by regulation (5 AAC 15.357 (c)(1)), opened concurrently with the Chignik Bay and Central districts in June (Figures 2 and 4). The Eastern District was also opened concurrently with the Chignik Bay and Central districts through July 6. Despite meeting escapement objectives, there was limited interest and participation in the Eastern District. After July 6 the Eastern District was open for a single 36 hour period. In total, the Eastern District was open to commercial salmon fishing for 17 days during 2007 (Figure 3). A summary of emergency orders outlining the commercial salmon fisheries in the Eastern District is found in Appendix B.

WESTERN AND PERRYVILLE DISTRICTS COMMERCIAL SALMON FISHERY

By regulation the Western and Perryville districts are closed to commercial salmon fishing in June (5 AAC 15.357 (d)). Beginning approximately July 6, these districts can be opened on a commercial test fishery basis targeting migrating pink and chum salmon. Once these fish enter local streams, management shifts to an escapement-based strategy.

The first commercial fishing period in the Western and Perryville districts occurred on July 9 and was extended through July 15 (Figures 2 and 4). Both districts reopened to commercial fishing from July 20 through August 11th. The last fishing period occurred from August 13 to September 5 in the Western District, and from August 13 to August 19 in the Perryville District (Figure 4). In total, the Western and Perryville districts were open for 54 and 37 days respectively. Despite ample fishing opportunity, there was limited participation in the Perryville District during 2007. Commercial fishermen in the Western District primarily targeted pink and coho salmon. A summary of emergency orders outlining the commercial salmon fisheries in the Western and Perryville districts is found in Appendix B.

ESCAPEMENT AND HARVEST DATA

Stock Separation Techniques

Two distinct sockeye salmon runs (an early and late run) enter the Chignik River watershed and temporally overlap during late June and early July (Templin et al. 1999). Prior to 2004, scale pattern analysis (SPA) was used to differentiate stock composition during this time, and the fishery was managed based on the results of this analysis (Witteveen and Botz 2004). This program was discontinued prior to the 2004 season due to funding limitations. However, examination of SPA data revealed that, on average, the number of early-run sockeye salmon that passed the Chignik River weir after July 4 was approximately equal to the number of late-run sockeye salmon that passed the weir prior to July 4. The 2007 fishery was managed based on this date such that through July 4, fishing periods were based on achieving interim early-run escapement objectives and beginning July 5, fishing periods were based on achieving interim late-run escapement objectives (Table 3).

Escapement Information

In June 2004, a salmon escapement goal review team, including staff from the Division of Commercial Fisheries and the Division of Sport Fish , was formed to review salmon escapement goals in the CMA (Witteveen et. al. 2005). The team recommended the Chignik River watershed sockeye salmon escapement goal ranges for the early- (350,000 to 400,000) and late-runs

(200,000 to 250,000) should not be changed (Table 3). However, the team felt scientifically defensible estimates of maximum sustainable yield were no longer possible due to the lack of significant spawner-recruit relationships. Thus, the team recommended Chignik River sockeye salmon escapement goals should be reclassified as sustainable escapement goals (SEGs) rather than biological escapement goals (BEGs). Despite this change, the team noted past run data have indicated that sustained Chignik River sockeye salmon yields have occurred in excess of the 5 to 10 year period specified for SEGs.

The team also recommended establishing two (even- and odd-year) pink salmon aggregate BEGs to replace the five previous district-wide pink salmon SEGs (Witteveen et. al. 2005). The team similarly recommended establishing one area-wide chum salmon SEG to replace the five previous districtwide chum salmon SEGs. The Directors of the Division of Commercial Fisheries and Sport Fish approved the team's escapement goal recommendations, which were implemented for the 2005 season.

In 2007, salmon escapements to the Chignik River were enumerated through the use of a weir. There were two gates in the weir, which were generally always open to allow for unrestricted passage. Underwater video equipment was used to count fish passing through the weir gates. At night, lights allowed fish to be counted. The number of fish passing the weir, by species, were counted for the first 10 minutes of each hour, then multiplied by six to obtain hourly escapement estimates. Hourly estimates were then summed to provide an estimate of daily fish passage. Camera footage from each 10 minute escapement count was recorded and archived.

The majority of the Chignik River Chinook, sockeye, pink, and chum salmon escapements were counted through the weir. Since Dolly Varden *Salvelinus malma* were not commercially harvested or actively managed in the CMA, their escapements are noted in the tables of this document for historical comparisons but not discussed in detail in the escapement section below. The first count of the 2007 season was on May 31, and the last full count of the season was on September 4 after which the weir was removed. A post-weir sockeye salmon escapement estimate was produced using time series analysis and the results were grouped into two reporting periods: September 5 to 15 and September 16 to 30. The 2007 coho salmon run was still building when the weir was removed, thus the coho salmon counts were considered incomplete and it was not possible to estimate a post-weir coho salmon escapement.

Aerial surveys were flown on the spawning grounds of the Chignik River watershed to assess sockeye salmon spawning escapement levels and distribution. Escapements to other CMA streams were also estimated via aerial survey.

Chinook Salmon

Chinook salmon began entering the Chignik River during mid-June. The run peaked by mid-July, and was over by late August (Table 4; Figure 5). The 2007 Chignik River Chinook salmon escapement of 2,000 fish was below recent 5-, 10-, and 20-year average escapements (Table 5) but was within the Chignik River Chinook BEG range of 1,300 to 2,700 fish (Figure 6; Witteveen et. al. 2005). The Chignik River is the only stream with substantial Chinook salmon production within the CMA.

Sockeye Salmon

Chignik River sockeye salmon are managed based on interim escapement objectives, by run (Witteveen et al. 2005). These objectives included an additional 50,000 sockeye salmon above

the late-run SEG (25,000 fish in August and 25,000 fish in September) to meet late-season subsistence needs (Table 3).

The Chignik River sockeye salmon early run peaked in mid-to-late June while the late run peaked during mid July (Table 6; Figure 7). The 2007 estimated total Chignik River sockeye salmon escapement was 654,974 fish, which was similar to the 5-year escapement average but below the 10-year and 20-year escapement averages (Table 7; Figure 8). The early-run escapement was estimated at 361,091 sockeye salmon, which was within the early-run SEG range of 350,000 to 400,000 fish (Table 7; Figure 8). The late-run escapement was estimated at 293,883 sockeye salmon, which exceed the late-run SEG range of 200,000 to 250,000 fish but was within the late run interim escapement objectives (250,000 to 300,000) (Table 3 and 7; Figure 8). Since the weir was removed before the late run was complete, a post-weir sockeye salmon escapement estimate was produced using time series analysis. These results were reported grouped into periods from September 4 to 15 (18,036 fish) and September 16 to 30 (4,919 fish) and included in the late-run total. The early and late runs were below the 5-, 10-, and 20-year average escapements (Table 7; Figure 8).

Peak aerial survey counts of spawning sockeye salmon in Black Lake tributaries were generally higher than the 5-year average but below 10- and 20-year averages (Table 8). Peak aerial survey counts of spawning sockeye salmon in the Chignik Lake tributaries were generally well above the 5-, 10-, and 20-year averages (Table 9).

Sockeye salmon escapements were documented, via aerial survey, in low numbers (generally less than 1,000 fish) in several other CMA streams. Due to small run sizes and limited effort, escapement goals for these streams have not been established (Witteveen et. al. 2005).

Coho Salmon

Coho salmon enter CMA drainages in mid-August and generally continue through November. The 2007 Chignik River coho salmon escapement estimate through September 3 (weir removed September 4) was 10,299 (Table 4), which was lower than the recent 5- and 10-year average escapements (Table 5). Coho salmon escapements were monitored, via aerial survey, in low numbers (generally less than 2,000 fish) in several other CMA streams.

Due to late season run timing and limited directed effort, escapement goals for coho salmon have not been established in the CMA (Witteveen et al. 2005).

Pink Salmon

During 2007, pink salmon began entering the Chignik River during late June and peaked in late August with a total escapement of 20,464 salmon (Table 4). The 2007 pink salmon escapement into the Chignik River was the largest documented escapement on record with approximately 13,000 more salmon than recent 5- and 10-year average escapements (Table 5).

Escapements into other CMA streams were monitored via aerial survey, summed for each district, and compared to district management objectives and the area-wide odd-year aggregate BEG for pink salmon (Witteveen et al. 2005). The management objectives for the Eastern, Chignik Bay, Central, Western, and Perryville districts were met or exceeded in 2007 (Table 10). The 2007 overall combined escapement for the CMA was approximately 1,217,064 pink salmon, which exceeded the area wide aggregate odd-year BEG range of 541,000 to 1,177,000 fish (Table 10).

Chum Salmon

A limited number of chum salmon return to the Chignik River, mainly in August (Table 4). The 2007 Chignik River chum salmon escapement was 118 fish, which was below recent 5- and 10-year average escapements (Table 5).

Escapements into other CMA streams were monitored via aerial survey, summed for each district, and compared to district management objectives and the area-wide SEG for chum salmon (Witteveen et al. 2005). The management objectives for the Chignik Bay, Central, Eastern, Western, and Perryville districts were met or exceeded in 2007 (Table 11). The total 2007 CMA chum salmon escapement of 238,098 was over four times the area wide aggregate SEG of 50,400 (Table 11).

Harvest Information

Commercial salmon harvest information for 2007 was organized into four categories. The first category included salmon that were commercially harvested but retained for private use (home pack). The second category included salmon that were harvested and sold as part of the ADF&G test fishery program. The third category included sockeye salmon commercially harvested within the CMA. The final category included sockeye salmon commercially harvested under the Cape Igvak and SEDM management plans. For allocative purposes, the BOF has determined that specific portions of these harvests were considered bound for the Chignik River.

Salmon harvested under subsistence regulations or the ADF&G Chignik test fishery were not included in any of the current harvest allocations. Home pack fish were not included in the Cape Igvak and SEDM allocations. All harvest information in this report was calculated from the ADF&G fish ticket database and supersedes any previously published data. A complete summary of 2007 commercial salmon harvest and effort is found in Appendix C.

Chinook Salmon

A total of 1,773 Chinook salmon were harvested from the CMA in 2007, which was less than the recent 5-, 10-, and 20-year average Chinook salmon harvests (Table 12). Eleven Chinook salmon were harvested as part of the department's test fishery program, and 16 fish were retained as home pack (Table 13). Most of the CMA Chinook salmon harvest in 2007 came from the Chignik Bay District, but a substantial portion of the total harvest also occurred in the Central and Western districts (Table 14). In 2007 most Chinook salmon were harvested from late June through early August (Table 15).

Sockeye Salmon

A total of 834,547 sockeye salmon were harvested in the CMA during 2007, which was less than the 5-, 10-, and 20-year average harvests (Tables 12 and 16). The department's test fishery program harvested 5,152 of these salmon and an additional 285 fish were retained as home pack (Table 16). The vast majority of the CMA sockeye salmon harvest in 2007 occurred in the Chignik Bay District (Table 17), and most sockeye salmon were harvested from mid-June through the end of July (Table 18).

An additional 52,527 sockeye salmon allocatively considered Chignik-bound were harvested as part of the Cape Igvak fishery during 2007 (Table 16). The Chignik-bound portion of the Cape Igvak harvest totaled 8.0 percent of the total Chignik-bound harvest (allocation 15.0 percent;

Tables 16 and 19). The SEDM fishery was not opened during the allocation period (June 1 through July 25) due to low sockeye salmon harvests in the CMA.

The Chignik River early-run harvest of 267,805 sockeye salmon was over 650,000 fish less than the 20-year early-run harvest average and approximately 450,000 fish less than the 5-year average harvest (Table 20; Figure 9). The 2007 late-run harvest of 619,269 sockeye salmon was below 10- and 20-year harvest averages, but above the 5-year harvest average (Table 20; Figure 10). The 2007 total Chignik-bound sockeye salmon harvest was 887,074 fish for a total run estimate (harvest + escapement) of 1,542,048 sockeye salmon (Table 20; Figure 11).

The early run was below the 2007 forecast by approximately 38 percent while the late run was only one percent above the projected forecast (Table 21). For both runs combined, the 2007 forecast was less accurate than the 5- and 10-year average forecasts (Table 21).

Coho Salmon

A total of 73,277 coho salmon were harvested in the CMA during 2007, which was approximately half the 20-year average harvest (Tables 12 and 22). Coho harvest in the CMA was approximately equal to the 10- year average harvest and well above the 5-year average (Table 12 and 22). Nearly all coho salmon were sold to processors by fishermen (Table 22). The majority of the 2007 coho salmon harvest occurred in the Chignik Bay, Central, and Western districts during July and August (Tables 23 and 24).

Pink Salmon

The 2007 pink salmon harvest in the CMA was the third largest harvest since 1970. A total of 2,019,748 pink salmon were harvested during 2007, which was well above the 5-, 10-, and 20-year average harvests (Tables 12 and 25). All commercially harvested pink salmon were sold to processors by fishermen (Table 25). The majority of pink salmon harvest occurred in the Western District although notable harvests also occurred in the Chignik Bay, Central, and Eastern, and Perryville districts (Table 26). Most pink salmon were harvested between mid-July and mid-August (Tables 27).

Chum Salmon

A total of 78,553 chum salmon were harvested from the CMA during 2007, which was double the 5-year harvest average but below the 10- and 20-year harvest averages (Tables 12 and 28). Nearly all chum salmon were sold to processors by fishermen (Table 28). The majority of the 2007 chum salmon harvest occurred in the Western District during July and early August (Tables 29 and 30).

Economic Value

A total of 55 CMA permit holders made deliveries during 2007, which was just over half of the historic average (Table 31). The exvessel value of the 2007 CMA salmon harvest was about \$5.57 million, or approximately \$101,319 per permit holder, which was above the prior 5- and 10-year exvessel value averages, but below the 20-year exvessel value average of approximately \$130,029 (Table 31; Figure 12). The vast majority of exvessel revenue (\$75,531) was from the sale of sockeye salmon. The large 2007 pink salmon harvest provided about \$18,806 per permit holder while, coho, chum and Chinook salmon provided \$3,559, \$2,947, and \$476, respectively, per active permit holder (Table 31).

CHIGNIK LAGOON TEST FISHERIES

The ADF&G conducts test fisheries in Chignik Lagoon for multiple purposes. Early-season test fisheries are used to determine buildup of salmon prior to the first commercial fishery, to collect sockeye salmon scale samples to determine age composition, and to generate revenue to pay for the vessels chartered to conduct the test fisheries. Subsequent test fisheries are conducted to assess salmon abundance in Chignik Lagoon during fishery closures, and offset operational costs associated with the scale sampling program (Stichert 2007b).

The department conducted six test fisheries during 2007 for a total harvest of 5,169 salmon. The first test fishery occurred on June 9, when 165 sockeye salmon were harvested. Three additional test fisheries were conducted prior to the first commercial fishing period in the CMA. The second, third, and fourth test fisheries occurred on June 11, June 13, and June 14. A total of 2,486 sockeye salmon were harvested during these fisheries. The final two test fisheries occurred on June 19 and June 22 following the closure of the first commercial salmon fishing period. A total of 2,507 sockeye salmon and 11 Chinook salmon were harvested during the final two test fisheries.

CHIGNIK AREA SUBSISTENCE SALMON FISHERIES

In recent years, large pulses of salmon did not build in Chignik Lagoon or pass through the weir. Thus, early-season subsistence fishing opportunities were limited by the slow movement of fish. Consequently, several subsistence users reported they had a difficult time harvesting enough salmon to meet their needs.

In response to these concerns, the BOF (November 2004) increased subsistence fishing opportunities in the CMA. The Chignik River was historically closed to subsistence salmon fishing by regulation (5 AAC 01.475). However, beginning in 2005 the BOF opened the Chignik River to subsistence salmon fishing with some restrictions. The section of Chignik River starting 300 feet below the weir was open to subsistence fishing year-round. The section from 300 feet above the weir to the outlet of Chignik Lake was open year-round, except from July 1 through August 31 to protect spawning Chinook salmon.

Historically, CMA commercial fishing license holders were not allowed to subsistence fish for salmon from 48 hours before the first commercial salmon fishing period through September 30. This regulation was relaxed via provisions of the subsistence fishing permit to allow fishermen to harvest subsistence fish during the commercial fishing season in 2003 and 2004. Beginning in 2005, the BOF adopted formal regulations that allowed commercial salmon fishing license holders to, with certain restrictions (5 AAC 01.485), harvest subsistence salmon during the commercial season.

The BOF also directed the department to manage the August commercial salmon fishery to allow for an additional 25,000 (75,000 total) sockeye salmon to escape into the Chignik River to facilitate additional late-season harvest opportunities.

In 2007, the ADF&G issued 128 subsistence fishing permits in the CMA. Based on the 83 permits returned to the ADF&G Division of Subsistence, the estimated subsistence harvest totaled 13,372 salmon. This harvest was above previous 5-, and 10-year subsistence harvest averages (Table 32). Sockeye salmon comprised the vast majority of the 2007 subsistence harvest.

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TABLES AND FIGURES

Table 1.–List of Chignik Management Area herring management units.

Area	Stat. Area(s)
Chignik Lagoon and Bay	271-10 to 272-40
Kujulik	272-50
Big River	272-60 to 272-70
Cape Kumlik	272-62 to 272-64
Yantarni	272-72 to 272-80
Chiginagak	272-90
Agripina	272-92 to 272-96
Mitrofanina	273-70 to 273-74
Domer Bay	273-82 to 273-84
Castle Cape	273-90 to 273-94
Perryville	275-60
Humpback Bay	275-50
Ivanof Bay	275-40

Table 2.–Chignik Management Area commercial herring harvest, 1980 through 2007.

Year	Harvest (tons)
1980	587
1981	441
1982	190
1983	88
1984	66
1985	0
1986	11
1987	75
1988	59
1989	66
1990	0
1991	0
1992	0
1993	0
1994	0
1995	77
1996	6
1997	0
1998	0
1999	0
2000	0
2001	0
2002	0
2003	0
2004	0
2005	0
2006	0
2007	0

Table 3.–Chignik River sockeye salmon interim escapement objectives, 2007.

Date	Escapement		Date	Escapement	
	Lower	Upper		Lower	Upper
June 2	500	1,000	August 3	4,500	10,500
June 4	2,000	3,000	August 6	8,250	21,750
June 6	5,000	7,000	August 9	15,000	30,000
June 8	10,000	14,000	August 12	22,500	37,500
June 10	20,000	25,000	August 15	30,000	45,000
June 12	30,000	40,000	August 18	37,500	52,500
June 14	50,000	70,000	August 21	45,000	60,000
June 16	75,000	110,000	August 24	53,250	66,750
June 18	125,000	160,000	August 27	64,500	70,500
June 20	175,000	220,000	August 31	75,000	75,000
June 22	225,000	275,000			
June 25	275,000	325,000	September 3	3,000	4,000
June 28	300,000	350,000	September 5	6,000	8,000
July 1	325,000	375,000	September 7	10,000	12,000
July 4	350,000	400,000 ^a	September 9	14,000	16,000
			September 11	18,000	20,000
July 6	5,000	10,000	September 13	22,000	23,000
July 8	15,000	20,000	September 15	25,000	25,000
July 10	30,000	40,000			
July 12	45,000	60,000			
July 14	56,000	75,000			
July 16	67,000	90,000			
July 19	86,000	115,000			
July 21	101,000	135,000			
July 23	120,000	160,000			
July 26	135,000	180,000			
July 29	146,000	195,000			
July 31	150,000	200,000			

Escapement Objectives

Through July 4: 350,000 - 400,000

July 5 - September 15: 250,000 - 400,000^b

^a July 4 is historically the date on which the cumulative inseason escapement most closely approximated the early-run escapement as estimated by post-season scale pattern analysis.

Table 4.—Estimated Chignik River Chinook, coho, pink, and chum salmon, and Dolly Varden escapement, by day, 2007.

Date	Chinook		Coho		Pink		Chum		Dolly Varden	
	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative
5/31	0	0	0	0	0	0	0	0	6	6
6/1	0	0	0	0	0	0	0	0	0	6
6/2	0	0	0	0	0	0	0	0	0	6
6/3	0	0	0	0	0	0	0	0	6	12
6/4	0	0	0	0	0	0	0	0	0	12
6/5	0	0	0	0	0	0	0	0	6	18
6/6	0	0	0	0	0	0	0	0	42	60
6/7	0	0	0	0	0	0	0	0	6	66
6/8	0	0	0	0	0	0	0	0	7	73
6/9	0	0	0	0	0	0	0	0	6	79
6/10	0	0	0	0	0	0	0	0	0	79
6/11	0	0	0	0	0	0	0	0	0	79
6/12	0	0	0	0	0	0	0	0	6	85
6/13	0	0	0	0	0	0	0	0	0	85
6/14	0	0	0	0	0	0	0	0	0	85
6/15	0	0	0	0	0	0	0	0	12	97
6/16	0	0	0	0	0	0	6	6	0	97
6/17	6	6	0	0	0	0	0	6	0	97
6/18	0	6	0	0	0	0	0	6	0	97
6/19	0	6	0	0	18	18	0	6	6	103
6/20	0	6	0	0	0	18	6	12	18	121
6/21	6	12	0	0	0	18	0	12	6	127
6/22	0	12	0	0	6	24	0	12	0	127
6/23	0	12	0	0	0	24	0	12	0	127
6/24	12	24	0	0	6	30	0	12	6	133
6/25	6	30	0	0	0	30	0	12	0	133
6/26	12	42	0	0	0	30	0	12	0	133
6/27	6	48	0	0	6	36	0	12	12	145
6/28	0	48	0	0	5	41	0	12	0	145
6/29	6	54	0	0	18	59	0	12	12	157
6/30	0	54	0	0	6	65	0	12	0	157
7/1	0	54	0	0	0	65	0	12	0	157
7/2	12	66	0	0	12	77	0	12	1	158
7/3	18	84	0	0	12	89	0	12	24	182
7/4	30	114	0	0	18	107	6	18	6	188
7/5	6	120	0	0	0	107	0	18	0	188
7/6	18	138	0	0	6	113	0	18	54	242
7/7	18	156	0	0	12	125	0	18	0	242
7/8	72	228	0	0	12	137	0	18	54	296
7/9	30	258	0	0	6	143	0	18	114	410
7/10	114	372	0	0	18	161	0	18	120	530
7/11	68	440	0	0	18	179	0	18	225	755
7/12	186	626	0	0	48	227	0	18	120	875
7/13	42	668	0	0	18	245	0	18	74	949
7/14	50	718	0	0	7	252	0	18	65	1,014
7/15	64	782	0	0	7	259	0	18	327	1,341
7/16	57	839	0	0	25	284	6	24	287	1,628
7/17	37	876	0	0	24	308	0	24	199	1,827
7/18	161	1,037	0	0	54	362	0	24	854	2,681

-continued-

Table 4.–Page 2 of 2.

Date	Chinook		Coho		Pink		Chum		Dolly Varden	
	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative
7/19	162	1,199	0	0	44	406	6	30	768	3,449
7/20	122	1,321	0	0	66	472	0	30	804	4,253
7/21	6	1,327	0	0	54	526	6	36	174	4,427
7/22	48	1,375	0	0	24	550	6	42	146	4,573
7/23	25	1,400	0	0	63	613	1	43	191	4,764
7/24	62	1,462	0	0	149	762	0	43	250	5,014
7/25	49	1,511	0	0	32	794	0	43	261	5,275
7/26	30	1,541	0	0	138	932	6	49	196	5,471
7/27	4	1,545	0	0	74	1,006	0	49	179	5,650
7/28	14	1,559	0	0	131	1,137	0	49	9	5,659
7/29	30	1,589	0	0	60	1,197	0	49	12	5,671
7/30	21	1,610	6	6	31	1,228	6	55	30	5,701
7/31	12	1,622	0	6	91	1,319	0	55	36	5,737
8/1	29	1,651	0	6	121	1,440	0	55	50	5,787
8/2	26	1,677	0	6	100	1,540	8	63	39	5,826
8/3	7	1,684	0	6	55	1,595	6	69	48	5,874
8/4	36	1,720	0	6	162	1,757	0	69	78	5,952
8/5	12	1,732	6	12	126	1,883	0	69	60	6,012
8/6	0	1,732	0	12	174	2,057	0	69	90	6,102
8/7	0	1,732	0	12	162	2,219	6	75	30	6,132
8/8	18	1,750	0	12	160	2,379	6	81	62	6,194
8/9	18	1,768	6	18	132	2,511	6	87	54	6,248
8/10	40	1,808	6	24	146	2,657	0	87	12	6,260
8/11	0	1,808	6	30	216	2,873	6	93	60	6,320
8/12	1	1,809	0	30	163	3,036	0	93	61	6,381
8/13	18	1,827	0	30	242	3,278	0	93	90	6,471
8/14	3	1,830	9	39	364	3,642	0	93	17	6,488
8/15	1	1,831	0	39	400	4,042	0	93	24	6,512
8/16	12	1,843	6	45	636	4,678	6	99	36	6,548
8/17	13	1,856	16	61	1,404	6,082	6	105	97	6,645
8/18	6	1,862	24	85	1,092	7,174	0	105	48	6,693
8/19	48	1,910	24	109	2,330	9,504	0	105	36	6,729
8/20	3	1,913	19	128	612	10,116	0	105	31	6,760
8/21	18	1,931	0	128	744	10,860	0	105	0	6,760
8/22	8	1,939	37	165	430	11,290	1	106	18	6,778
8/23	18	1,957	102	267	384	11,674	0	106	6	6,784
8/24	0	1,957	56	323	601	12,275	0	106	24	6,808
8/25	6	1,963	54	377	972	13,247	0	106	24	6,832
8/26	6	1,969	156	533	2,720	15,967	6	112	12	6,844
8/27	7	1,976	495	1,028	1,057	17,024	6	118	12	6,856
8/28	6	1,982	1,183	2,211	684	17,708	0	118	18	6,874
8/29	12	1,994	1,088	3,299	666	18,374	0	118	18	6,892
8/30	0	1,994	1,232	4,531	708	19,082	0	118	0	6,892
8/31	6	2,000	1,250	5,781	318	19,400	0	118	0	6,892
9/1	0	2,000	1,381	7,162	376	19,776	0	118	102	6,994
9/2	0	2,000	1,298	8,460	312	20,088	0	118	12	7,006
9/3	0	2,000	1,839	10,299	376	20,464	0	118	66	7,072

Table 5.—Estimated Chignik River Chinook, coho, pink, and chum salmon, and Dolly Varden escapement, 1970 through 2007.

Year	Escapement ^a				
	Chinook ^b	Coho ^c	Pink ^c	Chum ^c	Dolly Varden ^c
1970	2,500	ND	ND	ND	ND
1971	2,000	ND	ND	ND	ND
1972	1,500	ND	ND	ND	ND
1973	822	ND	ND	ND	ND
1974	672	ND	ND	ND	ND
1975	877	ND	ND	ND	ND
1976	700	ND	ND	ND	ND
1977	798	ND	ND	ND	ND
1978	1,197	ND	ND	ND	ND
1979	1,050	ND	ND	ND	ND
1980	876	ND	ND	ND	ND
1981	1,603	ND	ND	ND	ND
1982	2,412	ND	ND	ND	ND
1983	1,943	ND	ND	ND	ND
1984	5,806	ND	ND	ND	ND
1985	3,144	ND	ND	ND	ND
1986	3,612	ND	ND	ND	ND
1987	2,624	ND	ND	ND	ND
1988	4,868	ND	ND	ND	ND
1989	3,316	ND	ND	ND	ND
1990	4,364	ND	ND	ND	ND
1991	4,531	ND	ND	ND	ND
1992	3,806	ND	ND	ND	ND
1993	1,946	ND	ND	ND	ND
1994	2,963	ND	ND	ND	ND
1995	4,288	ND	ND	ND	ND
1996	3,488	16,843	6,030	136	54,726
1997	3,824	10,810	4,880	483	26,657
1998	3,075	14,124	11,490	156	15,235
1999	3,728	2,414	2,524	48	15,025
2000	4,285	7,062	4,284	48	ND
2001	3,028	103	1,464	66	6,416
2002	3,541	9,262	3,417	67	8,179
2003	6,412	7,635	1,897	68	36,397
2004	7,840	18,810	2,243	276	20,086
2005	6,486	18,206	13,637	408	13,940
2006	3,535	37,113	18,401	99	2,031
2007	2,000	10,299	20,464	118	7,072
Averages					
1987-06	4,097	-	-	-	-
1997-06	4,575	12,554	6,424	172	15,996
2002-06	5,563	18,205	7,919	184	16,127

^a A video monitoring system was installed at the Chignik weir in 1994.

^b No escapement adjustments are made for Chinook salmon that spawn below the weir, or those removed by the sport fishery. Only Chinook salmon larger than approximately 650 mm were enumerated for escapement estimates from 1970 to 1993.

^c No reliable escapement estimates were generated for pink, chum, or coho salmon or Dolly Varden from 1970 to 1996. No post-weir estimates are reported here for these species.

Table 6.—Estimated Chignik River sockeye salmon escapement, by day, and management objective period, 2007.

Early Run Through July 4			July 5-July 31			Late Run August			September		
Date	Daily	Total	Date	Daily	Total	Date	Daily	Total	Date	Daily	Total
5/31	0	0	7/5	2,022	2,022	8/1	1,689	1,689	9/1	2,484	2,484
6/1	42	42	7/6	3,466	5,488	8/2	3,478	5,167	9/2	1,499	3,983
6/2	72	114	7/7	9,050	14,538	8/3	1,711	6,878	9/3 ^a	1,612	5,595
6/3	1,590	1,704	7/8	18,416	32,954	8/4	2,661	9,539	9/4-9/15 estimate	18,036	23,631
6/4	1,388	3,092	7/9	13,587	46,541	8/5	3,158	12,697	9/16-9/30 estimate	4,919	28,550
6/5	882	3,974	7/10	13,830	60,371	8/6	3,179	15,876	September total:		28,550
6/6	1,017	4,991	7/11	2,664	63,035	8/7	1,677	17,553			
6/7	4,877	9,868	7/12	3,636	66,671	8/8	2,674	20,227			
6/8	6,006	15,874	7/13	935	67,606	8/9	1,837	22,064			
6/9	3,126	19,000	7/14	1,773	69,379	8/10	1,176	23,240			
6/10	5,873	24,873	7/15	1,274	70,653	8/11	2,764	26,004			
6/11	4,882	29,755	7/16	3,129	73,782	8/12	2,103	28,107	Early run total:		361,091
6/12	6,930	36,685	7/17	2,481	76,263	8/13	3,317	31,424			
6/13	20,828	57,513	7/18	18,114	94,377	8/14	2,739	34,163			
6/14	28,539	86,052	7/19	26,483	120,860	8/15	2,163	36,326	Late run total:		293,883
6/15	16,387	102,439	7/20	31,215	152,075	8/16	2,094	38,420			
6/16	8,984	111,423	7/21	7,437	159,512	8/17	3,992	42,412			
6/17	6,606	118,029	7/22	2,150	161,662	8/18	2,914	45,326	Season total:		654,974
6/18	12,842	130,871	7/23	2,485	164,147	8/19	3,573	48,899			
6/19	22,841	153,712	7/24	4,747	168,894	8/20	1,661	50,560			
6/20	18,352	172,064	7/25	3,264	172,158	8/21	1,296	51,856			
6/21	26,757	198,821	7/26	3,018	175,176	8/22	1,324	53,180			
6/22	22,655	221,476	7/27	2,792	177,968	8/23	1,992	55,172			
6/23	22,784	244,260	7/28	2,818	180,786	8/24	2,934	58,106			
6/24	24,264	268,524	7/29	4,302	185,088	8/25	1,864	59,970			
6/25	12,740	281,264	7/30	2,079	187,167	8/26	3,145	63,115			
6/26	9,310	290,574	7/31	3,105	190,272	8/27	3,699	66,814			
6/27	11,811	302,385	July 5-31 total:		190,272	8/28	2,472	69,286			
6/28	23,288	325,673				8/29	2,378	71,664			
6/29	14,042	339,715				8/30	1,607	73,271			
6/30	3,405	343,120				8/31	1,790	75,061			
7/1	1,759	344,879				August total:		75,061			
7/2	7,448	352,327									
7/3	4,911	357,238									
7/4	3,853	361,091									
Early run total:		361,091									

^a The weir was removed after the completion of the 9/3 count.

Table 7.-Total Chignik River sockeye salmon escapement and escapement goals, based on postseason analysis, by run, 1970 through 2007.

Year	Early Run	Late Run	Total
1970	536,257	119,952	656,209
1971	671,668	232,501	904,169
1972	326,320	231,270	557,590
1973	533,047	249,144	782,191
1974	351,701	326,245	677,946
1975	308,914	268,734	577,648
1976	551,254	279,509	830,763
1977	482,247	251,753	734,000
1978	458,660	223,887	682,547
1979	385,694	352,122	737,816
1980	311,332	352,729	664,061
1981	438,540	392,909	831,449
1982	616,117	221,601	837,718
1983	426,177	409,458	835,635
1984	597,712	267,862	865,574
1985	376,576	369,262	745,838
1986	566,088	207,231	773,319
1987	589,291	214,452	803,743
1988	420,577	255,180	675,757
1989	384,004	557,171	941,175
1990	434,543	335,867	770,410
1991	672,871	367,227	1,040,098
1992	360,681	405,922	766,603
1993	364,261	333,116	697,377
1994	769,462	197,447	966,909
1995	366,163	373,757	739,920
1996	464,461	284,676	749,137
1997	396,667	378,951	775,618
1998	410,659	290,469	701,128
1999	457,429	258,537	715,966
2000	536,141	269,084	805,225
2001	744,013	392,905	1,136,918
2002	380,701	343,616	724,317
2003	350,004	334,119	684,123
2004	363,800	214,459	578,259
2005	355,091	225,366	580,457
2006	366,497	368,996	735,493
2007	361,091	293,883	654,974
SEG	350,000-400,000	200,000-250,000	550,000-650,000
Averages			
1987-06	459,366	320,066	779,432
1997-06	436,100	307,650	743,750
2002-06	363,219	297,311	660,530

Table 8.—Peak sockeye salmon aerial survey escapement estimates for Black Lake tributaries, 1960 through 2007.

Year	Fan Creek	Milk Creek	Boulevard Creek	Alec River	Conglomerate Creek	Broad Creek	Total
1960	38,500	8,000	40,000	30,000	3,000	30,000	149,500
1961	27,000	5,000	28,700	25,000	800	17,000	103,500
1962	18,000	7,000	13,000	60,000	200	15,000	113,200
1963	39,000	ND	36,000	85,000	1,000	61,000	222,000
1964	19,500	3,050	23,850	17,900	9,300	9,500	83,100
1967	20,000	1,000	9,000	156,000	10,000	10,000	206,000
1968	32,000	2,400	20,000	60,000	2,000	4,100	120,500
1969	103,000	2,100	33,000	50,000	4,000	5,000	197,100
1970	146,000	9,000	55,500	198,000	5,000	ND	413,500
1971	105,000	14,000	85,000	158,000	0	ND	362,000
1972	18,000	3,500	19,000	74,000	400	ND	114,900
1973	115,000	4,000	76,000	74,000	5,000	ND	274,000
1974	90,000	5,000	50,000	93,000	5,000	ND	243,000
1975	40,000	4,500	25,000	87,000	0	ND	156,500
1976	78,000	8,900	100,000	119,000	2,000	ND	307,900
1977	88,000	20,000	127,000	133,000	1,000	ND	369,000
1978	114,000	3,300	74,000	83,300	500	ND	275,100
1979	37,000	11,800	32,000	105,100	400	26,100	212,400
1980	127,000	16,000	75,000	70,500	1,500	68,000	358,000
1981	93,000	4,700	59,000	76,500	20,000	27,000	280,200
1982	50,000	5,500	60,000	43,000	20,000	32,000	210,500
1983	ND	ND	ND	ND	ND	ND	-
1984	50,000	22,200	70,000	30,500	31,000	36,000	239,700
1985	28,000	5,500	36,000	65,000	5,500	17,000	157,000
1986	60,000	15,300	47,000	76,000	39,000	27,000	264,300
1987	52,000	12,200	133,000	88,400	45,900	32,500	364,000
1988	54,000	71,000	83,700	106,500	2,300	26,500	344,000
1989	19,300	21,000	64,000	133,000	1,000	7,500	245,800
1990	32,600	7,400	35,900	49,800	2,200	18,000	145,900
1991	14,600	19,500	48,000	ND	2,000	13,000	97,100
1992	ND	ND	ND	392,000	ND	ND	392,000
1993	40,900	12,600	97,600	8,000	77,000	18,200	254,300
1994	70,000	25,000	125,000	350,000	20,000	51,000	641,000
1995	23,000	10,000	60,000	200,000	40,000	60,000	393,000
1996	40,000	24,000	51,000	100,000	50,000	45,000	310,000
1997	60,000	5,000	48,000	166,000	8,000	20,000	307,000
1998	90,000	14,000	100,000	50,000	9,000	62,000	325,000
1999	70,000	8,100	50,000	226,000	1,000	22,000	377,100
2000	41,000	29,000	126,000	210,000	26,000	93,000	525,000
2001	77,000	19,000	265,000	207,000	4,000	89,000	661,000
2002	43,000	ND	20,000	21,000	11,000	7,000	102,000
2003	17,600	400	2,500	188,000	ND	1,000	209,500
2004	4,290	1,490	15,560	137,700	200	ND	159,240
2005	4,300	ND	ND	ND	7,700	ND	12,000
2006	16,000	500	15,500	46,700	2,500	19,800	101,000
2007	40,200	8,800	23,600	199,000	4,000	1,000	276,600
Averages							
1987-06	40,505	16,482	74,487	148,894	17,211	34,441	298,297
1997-06	42,319	9,686	71,396	139,156	7,711	39,225	277,884
2002-06	17,038	797	13,390	98,350	5,350	9,267	116,748

Table 9.—Peak sockeye salmon aerial survey escapement estimates for Chignik Lake and Black River tributaries, 1960 through 2007.

Year	Bearskin Creek	West Fork	Chiaktuak Creek	Total	Clark River	Home Creek	Hatchery Beach	Total
1960	11,600	23,000	19,000	53,600	ND	ND	ND	-
1961	2,500	17,100	20,700	40,300	ND	ND	ND	-
1962	3,000	13,000	24,000	40,000	ND	ND	ND	-
1963	900	5,000	9,000	14,900	ND	ND	ND	-
1964	500	4,500	7,000	12,000	ND	ND	ND	-
1967	10,000	25,000	31,000	66,000	ND	ND	ND	-
1968	1,200	10,500	10,000	21,700	ND	ND	ND	-
1969	50	800	1,500	2,350	ND	ND	ND	-
1970	450	4,000	4,000	8,450	ND	ND	ND	-
1971	3,500	5,500	47,000	56,000	ND	ND	ND	-
1972	1,400	4,300	23,000	28,700	ND	ND	ND	-
1973	13	4,100	1,500	5,613	ND	ND	ND	-
1974	450	8,000	7,000	15,450	ND	ND	ND	-
1975	65	2,500	2,500	5,065	ND	ND	ND	-
1976	2,650	23,700	7,700	34,050	ND	ND	ND	-
1977	200	13,600	6,900	20,700	ND	ND	ND	-
1978	410	9,600	8,500	18,510	ND	ND	ND	-
1979	918	7,610	29,000	37,528	ND	ND	ND	-
1980	3,600	33,000	40,400	77,000	ND	ND	ND	-
1981	950	1,500	18,700	21,150	ND	ND	ND	-
1982	1,066	10,791	5,000	16,857	ND	ND	ND	-
1983	ND	ND	6,000	6,000	ND	ND	ND	-
1984	ND	ND	8,200	8,200	ND	ND	ND	-
1985	350	450	1,200	2,000	ND	ND	ND	-
1986	ND	ND	8,300	8,300	ND	ND	ND	-
1987	ND	ND	1,000	1,000	ND	ND	ND	-
1988	ND	ND	4,600	4,600	ND	ND	ND	-
1989	ND	ND	2,100	2,100	ND	ND	ND	-
1990	300	0	50	350	ND	ND	ND	-
1991	ND	ND	ND	ND	ND	ND	ND	-
1992	ND	ND	ND	ND	ND	ND	ND	-
1993	ND	ND	16,000	16,000	ND	ND	ND	-
1994	5,000	ND	31,000	36,000	18,000	9,200	ND	27,200
1995	7,100	18,000	31,000	56,100	13,000	6,000	150,000	169,000
1996	1,800	22,000	22,000	45,800	13,000	5,500	70,000	88,500
1997	9,000	9,000	23,500	41,500	25,000	8,000	35,000	68,000
1998	4,700	71,000	27,500	103,200	21,000	6,000	62,000	89,000
1999	8,300	17,500	13,000	38,800	8,500	1,620	15,000	25,120
2000	2,600	3,700	10,600	16,900	18,000	19,700	2,000	39,700
2001	ND	ND	9,500	9,500	23,000	11,000	25,000	59,000
2002	ND	15,000	2,300	17,300	ND	ND	ND	-
2003	ND	ND	2,000	2,000	ND	ND	ND	-
2004	100	600	750	1,450	2,500	2,000	ND	4,500
2005	900	900	5,100	6,900	ND	ND	ND	-
2006	1,400	3,500	6,200	11,100	13,500	3,000	3,000	19,500
2007	400	14,500	30,300	45,200	59,000	9,800	65,000	133,800
Averages								
1987-06	3,745	14,655	11,567	22,811	15,550	7,202	45,250	58,952
1997-06	3,857	15,150	10,045	24,865	15,929	7,331	23,667	43,546
2002-06	800	5,000	3,270	7,750	8,000	2,500	3,000	12,000

Table 10.—Estimated pink salmon escapement and objectives in the Chignik Management Area, by district and year, 1970 through 2007.

Year ^a	District ^b					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
1960	ND	28,000	130,000	48,600	123,800	330,400
1961	ND	4,650	9,500	60,100	34,750	109,000
1962	30,000	83,900	401,700	242,000	155,500	913,100
1963	20,700	92,600	126,200	305,000	162,000	706,500
1964	20,000	131,100	605,700	165,000	72,000	993,800
1965	11,000	65,800	64,800	152,000	82,000	375,600
1966	71,300	62,600	302,200	179,300	90,000	705,400
1967	5,700	18,500	56,100	104,400	155,300	340,000
1968	81,400	66,100	390,300	151,300	128,700	817,800
1969	11,700	69,600	46,000	422,000	218,600	767,900
1970	43,600	60,700	201,700	202,000	72,600	580,600
1971	5,500	74,800	23,000	268,800	45,000	417,100
1972	5,800	3,100	15,900	8,600	7,800	41,200
1973	2,200	50,200	12,800	62,400	31,500	159,100
1974	4,000	9,800	76,200	77,400	60,200	227,600
1975	1,200	26,400	23,500	141,700	45,300	238,100
1976	12,300	66,000	228,800	114,200	89,300	510,600
1977	3,000	199,900	76,000	355,500	115,400	749,800
1978	10,700	101,200	309,300	333,400	157,500	912,100
1979	1,200	297,000	194,300	185,000	181,300	858,800
1980	3,000	99,400	425,500	139,500	74,800	742,200
1981	1,400	76,500	154,700	249,300	116,000	597,900
1982	2,400	26,100	301,500	45,900	13,400	389,300
1983	1,000	11,000	46,300	36,000	64,500	158,800
1984	123,200	94,000	486,500	188,000	109,800	1,001,500
1985	ND	7,400	212,100	67,500	235,200	522,200
1986	ND	121,900	580,700	43,800	180,500	926,900
1987	ND	65,700	215,600	38,300	65,700	385,300
1988	22,400	216,400	1,005,400	232,400	181,300	1,657,900
1989	13,500	215,000	881,000	57,900	267,400	1,434,800
1990	6,000	131,900	811,400	44,300	88,400	1,082,000
1991	12,200	201,100	125,000	96,800	343,500	778,600
1992	55,800	223,800	1,318,100	38,800	190,400	1,826,900
1993	2,000	160,900	524,700	45,800	448,400	1,181,800
1994	75,800	178,900	863,300	111,600	153,900	1,383,500
1995	180,500	715,500	1,399,300	554,700	582,100	3,432,100
1996	43,100	237,100	1,059,600	220,800	395,700	1,956,300
1997	59,400	594,600	1,287,700	306,300	221,500	2,469,500
1998	24,400	210,900	1,273,200	150,400	222,800	1,881,700
1999	37,300	374,300	615,100	137,900	179,700	1,344,300

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Table 10.–Page 2 of 2.

Year ^a	District ^b					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
2000	27,400	146,100	810,700	130,100	98,700	1,213,000
2001	19,700	460,400	1,470,200	263,000	150,200	2,363,500
2002	16,917	85,755	777,710	85,501	62,170	1,028,053
2003	143,897	576,510	1,408,060	117,650	99,500	2,345,617
2004	27,300	257,000	601,900	94,340	134,320	1,114,860
2005	160,000	473,400	512,350	257,500	188,600	1,591,850
2006	27,401	36,175	195,950	31,800	83,500	374,826
2007	62,464	291,800	565,800	113,000	184,000	1,217,064
Management Objective ^c	8,000 to 17,000	87,000 to 190,000	276,000 to 601,000	65,000 to 141,000	105,000 to 228,000	541,000 to 1,177,000
Averages						
1987-06	50,264	278,072	857,814	150,795	207,890	1,542,320
1997-06	54,372	321,514	895,287	157,449	144,099	1,572,721
2002-06	75,103	285,768	699,194	117,358	113,618	1,291,041
Odd Year Averages						
1987-05	69,833	383,741	843,901	187,585	254,660	1,732,737
1997-05	84,059	495,842	1,058,682	216,470	167,900	2,022,953
2001-05	107,866	503,437	1,130,203	212,717	146,100	2,100,322

^a From 1984 to 2003 aerial survey escapement estimates were computed by area-under-the-curve methods using a 15.0 day average stream life (Johnson and Barrett 1988). Starting 2004, estimates were computed using peak counts (Witteveen et al. 2005).

^b All estimates were via aerial survey, with the exception of Chignik River which was included in the Chignik Bay District estimate.

^c Management Objectives from Witteveen et al. (2005).

Table 11.—Estimated chum salmon escapement and objectives in the Chignik Management Area, by district and year, 1970 through 2007.

Year ^a	District ^b					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
1970	21,000	23,400	126,000	49,700	13,000	233,100
1971	7,100	29,100	219,200	184,100	30,000	469,500
1972	3,300	14,200	107,400	59,000	11,500	195,400
1973	700	12,200	59,100	35,600	9,300	116,900
1974	2,100	18,100	76,300	39,400	12,500	148,400
1975	2,100	18,800	41,300	43,400	20,500	126,100
1976	2,400	17,800	122,300	55,000	8,900	206,400
1977	2,000	9,300	54,500	70,400	15,400	151,600
1978	2,100	13,800	55,800	27,300	5,300	104,300
1979	1,600	44,800	79,500	42,500	12,800	181,200
1980	300	34,200	107,000	56,500	29,100	227,100
1981	500	26,100	126,000	70,300	19,300	242,200
1982	1,400	49,400	145,400	35,400	23,600	255,200
1983	100	17,000	50,200	20,100	8,200	95,600
1984	300	35,400	214,700	73,800	46,000	370,200
1985	0	9,600	4,900	34,600	12,900	62,000
1986	0	31,000	8,500	5,300	7,700	52,500
1987	100	17,500	38,300	19,700	9,800	85,400
1988	15,300	55,800	221,900	27,400	41,400	361,800
1989	4,200	34,700	74,300	7,400	15,900	136,500
1990	1,500	28,000	139,700	28,800	55,800	253,800
1991	0	18,000	70,400	38,100	343,200	469,700
1992	100	173,100	306,900	53,300	40,300	573,700
1993	300	39,400	135,200	14,000	66,800	255,700
1994	1,500	102,600	129,200	23,000	126,000	382,300
1995	10,300	44,500	112,800	45,700	134,600	347,900
1996	16,400	45,100	130,500	44,500	132,000	368,500
1997	18,500	65,700	290,000	60,500	152,800	587,500
1998	4,500	32,000	97,700	30,600	214,500	379,300
1999	2,300	32,400	167,100	16,300	117,300	335,400
2000	100	22,700	216,000	12,700	51,900	303,400
2001	4,100	36,500	406,900	35,500	67,800	550,800
2002	67	11,615	174,850	17,082	32,020	235,634
2003	899	43,191	152,854	39,050	64,331	300,325
2004	376	30,310	277,240	3,100	38,492	349,518
2005	30,000	159,100	36,350	22,000	61,250	308,700
2006	1,099	3,450	53,940	6,000	29,000	93,489
2007	6,118	25,200	58,000	26,500	122,280	238,098
Management						
Objective ^c	200	6,700	25,200	5,400	12,800	50,400
Averages						
1987-06	5,582	49,783	161,607	27,237	89,760	333,968
1997-06	6,194	43,697	187,293	24,283	82,939	344,407
2002-06	6,488	49,533	139,047	17,446	45,019	257,533

^a From 1984 to 2003 aerial survey escapement estimates were computed by area-under-the-curve methods using a 15.0 day average stream life (Johnson and Barrett 1988). Starting 2004, estimates were computed using peak counts (Witteveen et al. 2005).

^b All estimates were via aerial survey, with the exception of Chignik River which was included in the Chignik Bay District estimate.

^c Management Objectives from Witteveen et al. (2005).

Table 12.—Total commercial salmon harvests, including home pack and the department's test fishery harvests, from the Chignik Management Area by species and year, 1970 through 2007.

Year	Permits Making		Chignik Management Area Harvest					Total
	Deliveries	Landings	Chinook	Sockeye	Coho	Pink	Chum	
1970	80	2,343	1,226	1,325,734	15,348	1,157,172	437,252	2,936,732
1971	77	2,383	2,010	1,016,136	14,557	612,290	353,952	1,998,945
1972	80	1,626	464	378,218	19,615	72,161	78,298	548,756
1973	80	2,187	525	870,354	22,322	25,472	8,717	927,390
1974	94	2,286	255	662,905	12,245	69,515	34,312	779,232
1975	86	1,844	549	399,593	53,283	66,165	25,161	544,751
1976	77	2,407	2,290	1,163,728	35,167	395,287	81,403	1,677,875
1977	88	2,426	710	1,972,207	17,430	604,806	110,452	2,705,605
1978	95	3,005	1,603	1,576,283	20,212	985,114	120,889	2,704,101
1979	103	3,009	1,253	1,049,691	99,129	1,905,198	188,907	3,244,178
1980	104	3,134	2,344	859,966	119,573	1,093,184	252,521	2,327,588
1981	105	4,222	2,694	1,839,469	78,805	1,162,613	580,332	3,663,913
1982	103	3,606	5,236	1,521,686	300,273	873,384	390,096	3,090,675
1983	102	4,357	5,488	1,824,175	61,927	321,178	159,412	2,372,180
1984	100	3,927	4,318	2,660,619	110,128	444,804	63,303	3,283,172
1985	107	3,392	1,887	921,502	191,162	160,128	22,805	1,297,484
1986	102	4,178	3,037	1,645,834	116,633	647,125	176,640	2,589,269
1987	104	3,856	2,651	1,898,838	150,414	246,775	127,261	2,425,939
1988	102	3,895	7,296	795,841	370,420	2,997,159	267,775	4,438,491
1989	101	3,183	3,542	1,159,287	68,233	27,712	1,624	1,260,398
1990	102	5,405	9,901	2,093,650	130,131	550,008	270,004	3,053,694
1991	103	3,856	3,157	1,895,665	165,625	1,169,248	261,096	3,494,791
1992	102	4,172	10,832	1,277,449	310,943	1,554,073	222,134	3,375,431
1993	103	4,241	19,515	1,697,351	229,459	1,648,377	122,360	3,717,062
1994	100	3,707	3,919	1,618,973	237,204	431,063	227,276	2,518,435
1995	101	5,113	5,493	1,724,045	281,518	2,057,998	380,954	4,450,008
1996	101	4,565	3,145	1,958,393	193,246	189,068	120,891	2,464,743
1997	100	3,394	3,120	770,347	90,908	844,431	155,905	1,864,711
1998	86	3,348	4,503	1,054,439	129,539	776,988	128,996	2,094,465
1999	91	4,382	3,507	3,116,527	89,610	1,698,651	140,597	5,048,892
2000	100	3,268	2,612	1,775,225	123,222	428,064	120,957	2,450,080
2001	93	2,906	2,939	1,511,587	131,448	1,281,767	199,003	3,126,744
2002	42	2,432	1,521	1,050,553	49,372	66,050	54,559	1,222,055
2003	44	2,073	3,068	1,100,297	103,896	502,638	64,044	1,773,943
2004	33	1,346	2,520	704,652	37	2,380	505	710,094
2005	97	1,669	3,408	1,152,133	6,956	194,045	8,821	1,365,363
2006	49	2,066	2,256	902,709	39,221	383,547	61,630	1,389,363
2007	56	2,101	1,773	834,547	73,277	2,019,748	78,553	3,007,898
Averages								
1987-06	88	3,444	4,945	1,462,898	145,070	852,502	146,820	2,612,235
1997-06	74	2,688	2,945	1,313,847	76,421	617,856	93,502	2,104,571
2002-06	53	1,917	2,555	982,069	39,896	229,732	37,912	1,292,164

Table 13.—Annual Chignik Management Area Chinook salmon harvest, 1970 through 2007.

Year	Test fish		Commercial Catch		Home Pack		Total	
	Number	Pounds	Number	Pounds	Number	Pounds ^a	Number	Pounds
1970	ND	ND	1,226	28,507	ND	ND	1,226	28,507
1971	ND	ND	2,010	25,887	ND	ND	2,010	25,887
1972	ND	ND	464	8,091	ND	ND	464	8,091
1973	ND	ND	525	17,001	ND	ND	525	17,001
1974	ND	ND	255	5,997	ND	ND	255	5,997
1975	ND	ND	549	14,108	ND	ND	549	14,108
1976	ND	ND	2,290	29,229	ND	ND	2,290	29,229
1977	ND	ND	710	21,176	ND	ND	710	21,176
1978	ND	ND	1,603	42,439	ND	ND	1,603	42,439
1979	ND	ND	1,253	18,998	ND	ND	1,253	18,998
1980	ND	ND	2,344	32,255	ND	ND	2,344	32,255
1981	ND	ND	2,694	50,832	ND	ND	2,694	50,832
1982	ND	ND	5,236	59,753	ND	ND	5,236	59,753
1983	ND	ND	5,488	96,159	ND	ND	5,488	96,159
1984	ND	ND	4,318	99,567	ND	ND	4,318	99,567
1985	10	249	1,877	44,625	ND	ND	1,887	44,874
1986	ND	ND	3,037	66,772	ND	ND	3,037	66,772
1987	0	0	2,651	49,482	ND	ND	2,651	49,482
1988	0	0	7,296	128,880	ND	ND	7,296	128,880
1989	0	0	3,542	76,698	ND	ND	3,542	76,698
1990	0	0	9,901	134,265	ND	ND	9,901	134,265
1991	3	37	3,154	66,666	ND	ND	3,157	66,703
1992	2	8	10,830	138,082	ND	ND	10,832	138,090
1993	14	65	19,501	234,188	ND	ND	19,515	234,253
1994	16	245	3,903	71,620	ND	ND	3,919	71,865
1995	0	0	5,261	111,187	232	4,903	5,493	116,090
1996	0	0	3,105	62,603	40	806	3,145	63,409
1997	7	149	3,025	47,075	88	1,369	3,120	48,593
1998	21	450	4,374	66,080	108	1,632	4,503	68,162
1999	0	0	3,296	56,706	211	3,630	3,507	60,336
2000	0	0	2,592	34,757	20	268	2,612	35,025
2001	4	120	2,845	39,252	90	1,242	2,939	40,614
2002	3	25	1,441	13,725	77	733	1,521	14,483
2003	2	13	2,757	39,716	309	4,451	3,068	44,180
2004	4	57	2,337	43,652	179	3,343	2,520	47,052
2005	1	23	3,137	55,638	271	6,157	3,409	61,818
2006	1	21	2,187	38,015	68	1,536	2,256	39,572
2007	11	228	1,746	29,745	16	308	1,773	30,281
Averages								
1987-06	4	61	4,857	75,414	141	2,506	4,945	76,979
1997-06	4	86	2,799	43,462	142	2,436	2,946	45,984
2002-06	2	28	2,372	38,149	181	3,244	2,555	41,421

^a Weights of home pack fish are not reported on fish tickets; therefore, they were calculated from the average weight of the commercial harvest.

Table 14.–Chignik Management Area Chinook salmon harvest (including home pack and the department’s test fishery catches), by district and year, 1970 through 2007.

Year	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
1970	867	5	55	230	69	1,226
1971	656	23	134	266	931	2,010
1972	226	0	24	72	142	464
1973	520	0	5	0	0	525
1974	200	27	0	28	0	255
1975	542	7	0	0	0	549
1976	2,135	15	3	60	77	2,290
1977	692	12	0	1	5	710
1978	1,386	49	19	130	19	1,603
1979	856	101	6	181	109	1,253
1980	929	148	169	739	359	2,344
1981	2,006	302	188	99	99	2,694
1982	3,269	41	38	1,354	534	5,236
1983	3,560	161	260	1,390	117	5,488
1984	3,696	63	72	487	0	4,318
1985	1,809	50	7	21	0	1,887
1986	2,592	58	14	350	23	3,037
1987	1,931	60	6	512	142	2,651
1988	4,331	1,094	190	1,216	465	7,296
1989	3,532	9	1	0	0	3,542
1990	3,719	2,175	175	3,190	642	9,901
1991	1,996	775	165	197	24	3,157
1992	3,181	2,010	181	4,300	1,160	10,832
1993	5,240	6,865	2,568	3,113	1,729	19,515
1994	1,808	1,303	43	452	313	3,919
1995	3,219	845	108	897	424	5,493
1996	1,590	1,022	263	162	108	3,145
1997	1,384	1,609	60	60	7	3,120
1998	1,805	1,798	79	567	254	4,503
1999	2,270	852	147	216	22	3,507
2000	598	530	53	1,421	10	2,612
2001	1,235	770	302	627	5	2,939
2002	920	17	0	584	0	1,521
2003	2,834	189	0	45	0	3,068
2004	2,520	0	0	0	0	2,520
2005	2,714	391	0	297	6	3,408
2006	2,009	165	3	79	0	2,256
2007	667	421	152	532	1	1,773
Averages						
1987-06	2,442	1,124	217	897	266	4,945
1997-06	1,829	632	64	390	30	2,945
2002-06	2,199	152	1	201	1	2,555

Table 15.–Chignik Management Area Chinook salmon harvest (including home pack and the department’s test fishery catches), by district and day, 2007.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
6/9	0	Closed	Closed	Closed	Closed	0
6/10	Closed	Closed	Closed	Closed	Closed	0
6/11	0	Closed	Closed	Closed	Closed	0
6/12	Closed	Closed	Closed	Closed	Closed	0
6/13	0	Closed	Closed	Closed	Closed	0
6/14	0	Closed	Closed	Closed	Closed	0
6/15	2	3	0	Closed	Closed	5
6/16	2	0	0	Closed	Closed	2
6/17	1	9	0	Closed	Closed	10
6/18	Closed	Closed	Closed	Closed	Closed	0
6/19	0	Closed	Closed	Closed	Closed	0
6/20	Closed	Closed	Closed	Closed	Closed	0
6/21	Closed	Closed	Closed	Closed	Closed	0
6/22	11	Closed	Closed	Closed	Closed	11
6/23	Closed	Closed	Closed	Closed	Closed	0
6/24	Closed	Closed	Closed	Closed	Closed	0
6/25	9	0	0	Closed	Closed	9
6/26	5	4	14	Closed	Closed	23
6/27	Closed	Closed	Closed	Closed	Closed	0
6/28	2	0	5	Closed	Closed	7
6/29	21	10	9	Closed	Closed	40
6/30	10	12	6	Closed	Closed	28
7/1	15	11	23	Closed	Closed	49
7/2	4	21	23	Closed	Closed	48
7/3	37	10	34	Closed	Closed	81
7/4	22	20	24	Closed	Closed	66
7/5	45	12	14	Closed	Closed	71
7/6	2	14	0	Closed	Closed	16
7/7	Closed	Closed	Closed	Closed	Closed	0
7/8	Closed	Closed	Closed	Closed	Closed	0
7/9	40	8	Closed	69	0	117
7/10	49	2	Closed	39	0	90
7/11	70	23	Closed	37	0	130
7/12	36	10	Closed	35	0	81
7/13	40	7	Closed	39	0	86
7/14	76	36	Closed	21	0	133
7/15	16	26	Closed	54	0	96
7/16	35	24	Closed	Closed	Closed	59
7/17	Closed	Closed	Closed	Closed	Closed	0
7/18	Closed	Closed	Closed	Closed	Closed	0
7/19	Closed	Closed	Closed	Closed	Closed	0
7/20	8	5	Closed	7	0	20
7/21	12	10	Closed	4	0	26
7/22	11	5	Closed	13	0	29
7/23	23	13	Closed	16	0	52

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Table 15.–Page 2 of 2.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
7/24	9	12	Closed	3	0	24
7/25	3	2	Closed	2	0	7
7/26	2	25	Closed	6	0	33
7/27	13	8	Closed	0	0	21
7/28	4	4	Closed	3	0	11
7/29	5	10	Closed	4	0	19
7/30	5	18	Closed	15	0	38
7/31	0	9	Closed	1	1	11
8/1	1	2	Closed	18	0	21
8/2	0	4	Closed	4	0	8
8/3	4	3	Closed	13	0	20
8/4	0	0	Closed	19	0	19
8/5	5	2	Closed	4	0	11
8/6	4	3	Closed	1	0	8
8/7	1	4	Closed	0	0	5
8/8	0	8	Closed	0	0	8
8/9	2	1	Closed	1	0	4
8/10	0	5	Closed	7	0	12
8/11	1	3	Closed	9	0	13
8/12	Closed	Closed	Closed	Closed	Closed	0
8/13	0	0	Closed	0	0	0
8/14	2	0	Closed	16	0	18
8/15	0	0	Closed	61	0	61
8/16	0	0	Closed	0	0	0
8/17	0	1	Closed	0	0	1
8/18	0	1	Closed	0	0	1
8/19	1	0	0	0	0	1
8/20	0	0	0	0	Closed	0
8/21	0	0	0	4	Closed	4
8/22	0	0	Closed	1	Closed	1
8/23	0	0	Closed	0	Closed	0
8/24	0	0	Closed	2	Closed	2
8/25	1	0	Closed	3	Closed	4
8/26	0	0	Closed	0	Closed	0
8/27	0	1	Closed	1	Closed	2
8/28	0	0	Closed	0	Closed	0
8/29	0	0	Closed	0	Closed	0
8/30	0	0	Closed	0	Closed	0
8/31	0	0	Closed	0	Closed	0
9/1	0	0	Closed	0	Closed	0
9/2	0	0	Closed	0	Closed	0
9/3	0	0	Closed	0	Closed	0
9/4	0	0	Closed	0	Closed	0
9/5	0	0	Closed	0	Closed	0
9/6		- Processor Closed for Season -				
Total	667	421	152	532	1	1,773

Table 16.—Total harvest of sockeye salmon considered by regulation to be Chignik-bound in the Chignik, Cape Igvak, and Southeastern District Mainland commercial salmon fisheries, 1978 through 2007.

Year	Test fish		Commercial Catch		Home Pack		Total CMA Harvest		Cape Igvak ^a		SEDM ^b		Total Chignik-Bound	
	Number	Pounds	Number	Pounds	Number	Pounds ^c	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1970	ND	ND	1,325,734	9,210,127	ND	ND	1,325,734	9,210,127	ND	ND	ND	ND	1,325,734	9,210,127
1971	ND	ND	1,016,136	7,534,367	ND	ND	1,016,136	7,534,367	ND	ND	ND	ND	1,016,136	7,534,367
1972	ND	ND	378,218	2,863,742	ND	ND	378,218	2,863,742	ND	ND	ND	ND	378,218	2,863,742
1973	ND	ND	870,354	7,023,294	ND	ND	870,354	7,023,294	ND	ND	ND	ND	870,354	7,023,294
1974	ND	ND	662,905	4,756,653	ND	ND	662,905	4,756,653	ND	ND	ND	ND	662,905	4,756,653
1975	ND	ND	399,593	2,773,725	ND	ND	399,593	2,773,725	ND	ND	ND	ND	399,593	2,773,725
1976	ND	ND	1,163,728	8,562,989	ND	ND	1,163,728	8,562,989	ND	ND	ND	ND	1,163,728	8,562,989
1977	ND	ND	1,972,207	17,247,659	ND	ND	1,972,207	17,247,659	ND	ND	ND	ND	1,972,207	17,247,659
1978	ND	ND	1,576,283	12,451,982	ND	ND	1,576,283	12,451,982	225,078	1,583,809	ND	ND	1,801,361	14,035,791
1979	ND	ND	1,049,691	7,862,600	ND	ND	1,049,691	7,862,600	13,950	96,507	ND	ND	1,063,641	7,959,107
1980	ND	ND	859,966	5,795,098	ND	ND	859,966	5,795,098	32	147	63,724	442,601	923,722	6,237,846
1981	ND	ND	1,839,469	13,486,031	ND	ND	1,839,469	13,486,031	282,727	1,876,246	122,198	888,410	2,244,394	16,250,687
1982	ND	ND	1,521,686	11,340,439	ND	ND	1,521,686	11,340,439	166,756	1,162,053	62,789	463,729	1,751,231	12,966,221
1983	ND	ND	1,824,175	11,926,829	ND	ND	1,824,175	11,926,829	318,048	1,926,770	227,392	1,631,668	2,369,615	15,485,267
1984	ND	ND	2,660,619	18,536,287	ND	ND	2,660,619	18,536,287	449,372	2,820,646	423,292	3,053,430	3,533,283	24,410,363
1985	4,875	30,480	916,627	5,415,817	ND	ND	921,502	5,446,297	123,627	637,207	51,421	337,919	1,096,550	6,421,423
1986	ND	ND	1,645,834	11,254,860	ND	ND	1,645,834	11,254,860	188,017	1,153,092	118,006	841,446	1,951,857	13,249,398
1987	679	4,637	1,898,159	13,997,077	ND	ND	1,898,838	14,001,714	321,506	2,146,841	146,886	1,121,094	2,367,230	17,269,649
1988	3,425	24,287	792,416	5,690,165	ND	ND	795,841	5,714,452	10,520	63,641	19,320	140,708	825,681	5,918,801
1989	6,433	46,532	1,152,854	7,922,748	ND	ND	1,159,287	7,969,280	0	0	4,485	32,262	1,163,772	8,001,542
1990	5,522	33,915	2,088,128	13,775,854	ND	ND	2,093,650	13,809,769	107,706	665,309	117,065	783,670	2,318,421	15,258,748
1991	8,106	54,892	1,887,559	12,889,560	ND	ND	1,895,665	12,944,452	324,195	1,886,494	152,714	1,037,726	2,372,574	15,868,672
1992	12,423	80,326	1,265,026	8,292,576	ND	ND	1,277,449	8,372,902	150,434	896,108	93,845	608,765	1,521,728	9,877,775
1993	5,444	34,231	1,691,907	10,228,401	ND	ND	1,697,351	10,262,632	300,055	1,639,082	128,608	847,879	2,126,014	12,749,593
1994	9,139	54,433	1,609,834	10,091,402	ND	ND	1,618,973	10,145,835	250,230	1,423,150	142,350	934,493	2,011,553	12,503,478
1995	9,023	57,674	1,715,022	11,464,647	0	0	1,724,045	11,522,321	169,530	899,572	89,086	547,563	1,982,661	12,969,456
1996	4,317	36,511	1,954,036	14,866,234	40	304	1,958,393	14,903,049	308,327	1,954,430	127,201	884,305	2,393,921	17,741,784
1997	11,299	77,874	758,384	4,782,715	664	4,187	770,347	4,864,776	0	0	0	0	770,347	4,864,776
1998	12,374	66,040	1,041,798	6,372,010	267	1,633	1,054,439	6,439,683	8,813	39,133	66,893	408,902	1,130,145	6,887,718
1999	5,994	42,216	3,110,507	20,527,837	26	172	3,116,527	20,570,225	456,039	2,469,213	173,621	1,086,186	3,746,187	24,125,624
2000	11,604	88,790	1,763,621	13,577,434	0	0	1,775,225	13,666,224	271,344	1,703,875	103,419	737,462	2,149,988	16,107,561

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Table 16.–Page 2 of 2.

Year	Test fish		Commercial Catch		Home Pack		Total CMA Harvest		Cape Igvak ^a		SEDM ^b		Total Chignik-Bound	
	Number	Pounds	Number	Pounds	Number	Pounds ^c	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
2001 ^d	14,011	98,197	1,497,359	10,972,234	217	1,590	1,511,587	11,072,021	215,214	1,287,154	51,141	368,970	1,777,942	12,728,145
2002	9,101	61,656	1,040,081	7,176,261	1,371	9,460	1,050,553	7,247,377	136,488	727,894	63,026	502,353	1,250,067	8,477,624
2003	5,582	36,334	1,092,304	7,137,591	2,411	15,755	1,100,297	7,189,680	121,887	599,342	70,044	466,153	1,292,228	8,255,175
2004	5,919	38,317	697,043	4,460,437	1,690	10,998	704,652	4,509,752	160,665	781,265	55,123	355,703	920,440	5,646,720
2005	7,076	43,988	1,143,693	7,468,609	1,364	8,702	1,152,133	7,521,299	274,328	1,681,630	170,662	1,088,207	1,597,123	10,291,136
2006	6,641	42,420	895,801	5,804,939	267	1,625	902,709	5,848,984	41,834	266,483	62,010	398,724	1,006,553	6,514,191
2007	5,152	38,112	829,110	5,769,736	285	1,346	834,547	5,809,194	52,527	325,619	0	0	887,074	6,134,813
Averages														
1987-06	7,706	51,164	1,454,777	9,874,937	-	-	1,462,898	9,928,821	181,456	1,056,531	91,875	617,556	1,736,229	11,602,908
1997-06	8,960	59,583	1,304,059	8,828,007	828	5,412	1,313,847	8,893,002	168,661	955,599	81,594	541,266	1,564,102	10,389,867
2002-06	6,864	44,543	973,784	6,409,567	1,421	9,308	982,069	6,463,418	147,040	811,323	84,173	562,228	1,213,282	7,836,969

^a The Cape Igvak allocation began in 1978. From 1978 to 2002, 80% of the Cape Igvak sockeye salmon harvest was considered Chignik River-bound. Beginning in 2002, that percentage was changed to 90%.

^b Beginning in 1980, 80% of the SEDM harvest in specific areas during specific times was considered Chignik River-bound.

^c Weights of home pack are not reported on fish tickets; therefore, the weights were calculated from the average weight of the commercial harvest for that year.

^d Due to a strike by Alaska Peninsula fishermen, forgone harvest of 27,896 sockeye salmon was added to the SEDM catch for management purposes; this forgone harvest is not included in this table.

Table 17.—Total annual Chignik Management Area sockeye salmon harvest (including home pack and the department’s test fishery catches), by district, 1970 through 2007.

Year	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
1970	1,122,993	10,252	187,210	3,751	1,528	1,325,734
1971	885,632	41,958	81,155	6,403	988	1,016,136
1972	354,912	2,429	15,985	4,734	158	378,218
1973	845,079	8,039	17,234	2	0	870,354
1974	539,196	120,412	199	3,098	0	662,905
1975	387,128	12,448	0	17	0	399,593
1976	1,112,533	48,327	1,254	425	1,189	1,163,728
1977	1,851,733	119,484	0	909	81	1,972,207
1978	1,474,673	89,826	7,161	4,482	141	1,576,283
1979	909,056	104,892	12,558	20,319	2,866	1,049,691
1980	708,828	74,628	60,947	9,227	6,336	859,966
1981	1,355,524	426,159	36,618	14,751	6,417	1,839,469
1982	1,413,806	66,278	10,209	30,279	1,114	1,521,686
1983	1,597,059	123,590	73,824	25,246	4,456	1,824,175
1984	1,942,822	517,653	184,495	15,470	179	2,660,619
1985	811,956	77,314	18,720	13,175	337	921,502
1986	1,389,172	182,884	6,424	44,362	22,992	1,645,834
1987	1,559,757	255,118	14,498	56,524	12,941	1,898,838
1988	529,540	124,103	25,699	93,070	23,429	795,841
1989	1,156,782	2,473	32	0	0	1,159,287
1990	1,400,069	566,601	51,443	53,192	22,345	2,093,650
1991	1,487,421	315,570	59,751	19,766	13,157	1,895,665
1992	792,889	332,860	12,327	30,004	109,369	1,277,449
1993	762,730	557,020	186,364	54,051	137,186	1,697,351
1994	908,042	573,484	20,041	64,325	53,081	1,618,973
1995	1,083,707	415,436	48,842	79,874	96,186	1,724,045
1996	1,003,683	743,658	145,668	47,529	17,855	1,958,393
1997	407,427	295,084	20,650	44,768	2,418	770,347
1998	622,005	286,643	30,555	87,940	27,296	1,054,439
1999	2,356,146	612,589	79,717	57,859	10,216	3,116,527
2000	1,327,249	358,985	71,572	15,034	2,385	1,775,225
2001	1,082,291	382,172	28,377	17,673	1,074	1,511,587
2002	993,756	44,368	2,835	9,425	169	1,050,553
2003	1,000,247	64,440	1,701	29,069	4,840	1,100,297
2004	704,471	181	0	0	0	704,652
2005	1,039,076	84,879	2	27,927	249	1,152,133
2006	726,749	103,272	3,118	69,570	0	902,709
2007	545,438	138,922	29,882	119,489	816	834,547
Averages						
1987-06	1,047,202	305,947	40,160	42,880	26,710	1,462,898
1997-06	1,025,942	223,261	23,853	35,927	4,865	1,313,847
2002-06	892,860	59,428	1,531	27,198	1,052	982,069

Table 18.—Chignik Management Area sockeye salmon harvest (including home pack and the department’s test fishery catches), by district and day, 2007.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
6/9	165	Closed	Closed	Closed	Closed	165
6/10	Closed	Closed	Closed	Closed	Closed	0
6/11	452	Closed	Closed	Closed	Closed	452
6/12	Closed	Closed	Closed	Closed	Closed	0
6/13	1,107	Closed	Closed	Closed	Closed	1,107
6/14	927	Closed	Closed	Closed	Closed	927
6/15	18,312	1,258	0	Closed	Closed	19,570
6/16	13,819	0	0	Closed	Closed	13,819
6/17	9,153	3,354	0	Closed	Closed	12,507
6/18	Closed	Closed	Closed	Closed	Closed	0
6/19	1,286	Closed	Closed	Closed	Closed	1,286
6/20	Closed	Closed	Closed	Closed	Closed	0
6/21	Closed	Closed	Closed	Closed	Closed	0
6/22	1,215	Closed	Closed	Closed	Closed	1,215
6/23	Closed	Closed	Closed	Closed	Closed	0
6/24	Closed	Closed	Closed	Closed	Closed	0
6/25	19,807	723	730	Closed	Closed	21,260
6/26	18,448	2,252	3,167	Closed	Closed	23,867
6/27	Closed	Closed	Closed	Closed	Closed	0
6/28	6,055	0	2,101	Closed	Closed	8,156
6/29	13,276	2,593	5,002	Closed	Closed	20,871
6/30	12,007	3,675	1,630	Closed	Closed	17,312
7/1	10,434	3,871	5,942	Closed	Closed	20,247
7/2	8,101	2,839	3,115	Closed	Closed	14,055
7/3	10,932	1,677	2,643	Closed	Closed	15,252
7/4	17,313	3,722	2,175	Closed	Closed	23,210
7/5	13,677	2,629	3,377	Closed	Closed	19,683
7/6	4,208	2,087	0	Closed	Closed	6,295
7/7	Closed	Closed	Closed	Closed	Closed	0
7/8	Closed	Closed	Closed	Closed	Closed	0
7/9	13,954	1,910	Closed	5,607	0	21,471
7/10	17,814	641	Closed	3,831	0	22,286
7/11	16,810	4,009	Closed	7,433	0	28,252
7/12	14,590	1,216	Closed	11,273	0	27,079
7/13	15,006	1,987	Closed	5,622	0	22,615
7/14	18,337	6,851	Closed	16,621	0	41,809
7/15	16,321	7,525	Closed	9,297	0	33,143
7/16	14,443	5,134	Closed	Closed	Closed	19,577
7/17	Closed	Closed	Closed	Closed	Closed	0
7/18	Closed	Closed	Closed	Closed	Closed	0
7/19	Closed	Closed	Closed	Closed	Closed	0
7/20	15,605	2,389	Closed	1,446	0	19,440
7/21	15,546	6,902	Closed	2,000	0	24,448
7/22	16,655	9,112	Closed	3,217	0	28,984
7/23	19,882	9,338	Closed	4,477	0	33,697

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Table 18.–Page 2 of 2.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
7/24	12,355	8,199	Closed	3,025	0	23,579
7/25	10,545	2,113	Closed	6,071	0	18,729
7/26	10,738	3,207	Closed	4,384	0	18,329
7/27	11,121	5,441	Closed	3,025	219	19,806
7/28	10,130	1,913	Closed	2,281	0	14,324
7/29	7,120	2,632	Closed	2,685	0	12,437
7/30	6,343	2,850	Closed	6,541	376	16,110
7/31	5,809	3,974	Closed	8,955	221	18,959
8/1	5,647	2,265	Closed	550	0	8,462
8/2	6,268	1,380	Closed	1,650	0	9,298
8/3	5,985	2,815	Closed	808	0	9,608
8/4	6,153	1,798	Closed	1,195	0	9,146
8/5	6,360	1,841	Closed	592	0	8,793
8/6	6,172	918	Closed	802	0	7,892
8/7	3,401	868	Closed	505	0	4,774
8/8	3,584	1,124	Closed	366	0	5,074
8/9	2,378	409	Closed	309	0	3,096
8/10	2,975	1,556	Closed	439	0	4,970
8/11	1,883	2,156	Closed	450	0	4,489
8/12	Closed	Closed	Closed	Closed	Closed	0
8/13	511	0	Closed	0	0	511
8/14	2,532	382	Closed	760	0	3,674
8/15	2,302	669	Closed	560	0	3,531
8/16	2,952	758	Closed	367	0	4,077
8/17	1,865	113	Closed	87	0	2,065
8/18	1,947	389	Closed	20	0	2,356
8/19	1,939	586	0	0	0	2,525
8/20	2,096	376	0	545	Closed	3,017
8/21	1,643	0	0	520	Closed	2,163
8/22	1,798	384	Closed	256	Closed	2,438
8/23	1,629	0	Closed	161	Closed	1,790
8/24	2,746	0	Closed	336	Closed	3,082
8/25	2,198	0	Closed	412	Closed	2,610
8/26	1,145	0	Closed	0	Closed	1,145
8/27	2,090	8	Closed	8	Closed	2,106
8/28	2,157	101	Closed	0	Closed	2,258
8/29	1,517	3	Closed	0	Closed	1,520
8/30	1,885	0	Closed	0	Closed	1,885
8/31	2,363	0	Closed	0	Closed	2,363
9/1	1,730	0	Closed	0	Closed	1,730
9/2	2,191	0	Closed	0	Closed	2,191
9/3	2,129	0	Closed	0	Closed	2,129
9/4	451	0	Closed	0	Closed	451
9/5	998	0	Closed	0	Closed	998
9/6		- Processor Closed for Season -				
Total	545,438	138,922	29,882	119,489	816	834,547

Table 19.—Harvest of sockeye salmon considered by regulation to be Chignik-bound in the Chignik, Cape Igvak, and Southeastern District Mainland commercial salmon fisheries from June 1 to July 25, 1978 through 2007.

Year	Chignik ^a		Cape Igvak ^a		Southeastern District Mainland ^a		Total
	Catch ^b	Percent	Catch ^b	Percent	Catch ^c	Percent	
1978	1,454,389	86.6	225,078	13.4	ND	ND	1,679,467
1979	794,504	98.3	13,950	1.7	ND	ND	808,454
1980	670,001	91.3	32	0.0	63,724	8.7	733,757
1981	1,606,300	79.9	282,727	14.1	122,198	6.1	2,011,225
1982	1,250,768	84.5	166,756	11.3	62,789	4.2	1,480,313
1983	1,450,832	72.7	318,048	15.9	227,392	11.4	1,996,272
1984	2,474,405	73.9	449,372	13.4	423,292	12.6	3,347,069
1985	690,698	79.8	123,627	14.3	51,421	5.9	865,746
1986	1,456,729	82.6	188,017	10.7	118,006	6.7	1,762,752
1987	1,659,236	78.0	321,506	15.1	146,886	6.9	2,127,628
1988	675,487	95.8	10,520	1.5	19,320	2.7	705,327
1989	496,044	99.1	0	0.0	4,485	0.9	500,529
1990	1,205,575	84.3	107,706	7.5	117,065	8.2	1,430,346
1991 ^d	1,962,583	80.5	324,195	13.3	152,714	6.3	2,439,492
1992	1,054,309	81.2	150,434	11.6	93,845	7.2	1,298,588
1993	1,495,098	77.7	300,055	15.6	128,608	6.7	1,923,761
1994 ^e	1,632,435	80.6	250,230	12.4	142,350	7.0	2,025,015
1995	1,024,785	79.8	169,530	13.2	89,086	6.9	1,283,401
1996	1,710,249	79.7	308,327	14.4	127,201	5.9	2,145,777
1997	443,892	100.0	0	0.0	0	0.0	443,892
1998 ^f	786,466	91.2	8,813	1.0	66,893	7.8	862,172
1999	2,326,811	78.7	456,039	15.4	173,621	5.9	2,956,471
2000	1,509,652	80.1	271,344	14.4	103,419	5.5	1,884,415
2001 ^g	1,134,991	79.4	215,214	15.1	79,037	5.5	1,429,242
2002	849,980	81.0	136,488	13.0	63,026	6.0	1,049,494
2003	855,179	81.7	121,887	11.6	70,044	6.7	1,047,110
2004	681,120	75.9	160,665	17.9	55,123	6.1	896,908
2005	1,098,718	70.8	274,328	17.7	177,906	11.5	1,550,952
2006	741,887	87.7	41,834	4.9	62,010	7.3	845,731
2007	601,213	92.0	52,527	8.0	0	0.0	653,740
Averages							
1987-06	1,167,225	83	181,456	11	93,632	6	1,442,313
1997-06	1,042,870	83	168,661	11	85,108	6	1,296,639
2002-06	845,377	79	147,040	13	85,622	8	1,078,039

^a Through 2001, the Cape Igvak and Southeastern District Mainland figures represent 80% of the total sockeye salmon catch for those areas through July 25, based on the regulations in effect during those years. In 2002 the BOF increased the percentage of sockeye salmon harvest considered Chignik bound from 80% to 90% in the Cape Igvak fishery. The figures reported in this table are the portion of the catches considered Chignik-bound. These figures do not include Chignik test fishery harvests or fish retained for home pack as they are not included in the allocation scheme.

^b Beginning in 1978 the Cape Igvak Salmon Management Plan allocated up to 15% of the total catch of Chignik-bound sockeye salmon to the Cape Igvak fishery.

^c Beginning in 1985 the Southeastern District Mainland was allowed an allocation of 6.2% of the total harvest of Chignik bound sockeye salmon through July 25. Certain areas (which changed frequently) were excluded from the allocation and managed for local (Orzinski Lake) stocks (see regulations from the individual years). After July 25 the entire Southeast District Mainland was managed based on local stock abundance. The allocation level changed to 6.0% beginning in 1988. Beginning in 1992, the allocation of Chignik bound sockeye to the Southeastern District Mainland fishery was increased to 7.0%. Prior to the 1996 season, the BOF decreased the allocation from 7.0% to 6.0%. The allocation was increased from 6.0% to 7.6% prior to the 2007 season.

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Table 19.–Page 2 of 2.

- ^d Includes a forgone harvest of 278,305 sockeye salmon during a Chignik area strike (June 23 to July 4).
 - ^e Includes a forgone harvest of 208,921 sockeye salmon during a Chignik area strike (June 2 to June 25).
 - ^f Includes a forgone harvest of 52,131 sockeye salmon during a Chignik area strike (June 16 to June 29).
 - ^g Includes a forgone harvest of 389,887 sockeye salmon in Chignik during a Chignik area strike (June 16 to 29), and foregone harvest of 27,896 sockeye salmon in the SEDM during a strike on the South Peninsula (June 14 to July 2).
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Table 20.—Chignik sockeye salmon escapement, total harvest considered Chignik-bound, and total run, 1970 through 2007.

Year	Early Run			Late Run			Total Run ^{a,b,c}		
	Esc.	Harvest	Run	Esc.	Harvest	Run	Esc.	Harvest	Run
1970	536,257	1,566,065	2,102,322	119,952	262,244	382,196	656,209	1,828,309	2,484,518
1971	671,668	555,832	1,227,500	232,501	709,190	941,691	904,169	1,265,022	2,169,191
1972	326,320	43,220	369,540	231,270	386,615	617,885	557,590	429,835	987,425
1973	533,047	610,488	1,143,535	249,144	355,195	604,339	782,191	965,683	1,747,874
1974	351,701	204,722	556,423	326,245	648,283	974,528	677,946	853,005	1,530,951
1975	308,914	7,873	316,787	268,734	417,560	686,294	577,648	425,433	1,003,081
1976	551,254	599,341	1,150,595	279,509	727,043	1,006,552	830,763	1,326,384	2,157,147
1977	482,247	534,198	1,016,445	251,753	1,602,363	1,854,116	734,000	2,136,561	2,870,561
1978	458,660	940,188	1,398,848	223,887	885,173	1,109,060	682,547	1,825,361	2,507,908
1979	385,694	186,537	572,231	352,122	933,788	1,285,910	737,816	1,120,325	1,858,141
1980	311,332	73,742	385,074	352,729	849,980	1,202,709	664,061	923,722	1,587,783
1981	438,540	800,364	1,238,904	392,909	1,444,030	1,836,939	831,449	2,244,394	3,075,843
1982	616,117	1,324,396	1,940,513	221,601	426,835	648,436	837,718	1,751,231	2,588,949
1983	426,177	1,128,246	1,554,423	409,458	1,241,369	1,650,827	835,635	2,369,615	3,205,250
1984	597,712	2,919,984	3,517,696	267,862	613,299	881,161	865,574	3,533,283	4,398,857
1985	376,576	654,431	1,031,007	369,262	442,119	811,381	745,838	1,096,550	1,842,388
1986	566,088	1,364,295	1,930,383	207,231	587,562	794,793	773,319	1,951,857	2,725,176
1987	589,291	1,947,088	2,536,379	214,452	420,142	634,594	803,743	2,367,230	3,170,973
1988	420,577	271,377	691,954	255,180	554,304	809,484	675,757	825,681	1,501,438
1989	384,004	234,237	618,241	557,171	929,535	1,486,706	941,175	1,163,772	2,104,947
1990	434,543	582,520	1,017,063	335,867	1,735,901	2,071,768	770,410	2,318,421	3,088,831
1991	657,511	1,711,549	2,384,420	382,587	661,025	1,028,252	1,040,098	2,372,574	3,412,672
1992	360,681	744,417	1,105,098	405,922	777,311	1,183,233	766,603	1,521,728	2,288,331
1993	364,261	926,892	1,291,153	333,116	1,199,122	1,532,238	697,377	2,126,014	2,823,391
1994	769,462	1,595,176	2,364,638	197,447	416,377	613,824	966,909	2,011,553	2,978,462
1995	366,163	666,799	1,032,962	373,757	1,315,862	1,689,619	739,920	1,982,661	2,722,581
1996	464,461	1,688,264	2,152,725	284,676	705,657	990,333	749,137	2,393,921	3,143,058
1997	396,667	234,824	631,491	378,951	535,523	914,474	775,618	770,347	1,545,965
1998	410,659	313,158	723,817	290,469	816,987	1,107,456	701,128	1,130,145	1,831,273
1999	457,429	2,022,272	2,479,701	258,537	1,723,915	1,982,452	715,966	3,746,187	4,462,153
2000	536,141	1,574,391	2,110,532	269,084	575,597	844,681	805,225	2,149,988	2,955,213
2001	744,013	563,539	1,307,552	392,905	1,214,403	1,607,308	1,136,918	1,777,942	2,914,860
2002	380,701	684,728	1,065,428	343,616	565,339	908,955	724,317	1,250,067	1,974,383
2003	350,004	640,084	990,088	334,119	652,144	986,263	684,123	1,292,228	1,976,351
2004	363,800	727,975	1,091,775	214,459	192,465	406,924	578,259	920,440	1,498,700
2005	355,091	1,109,881	1,464,972	225,366	487,242	712,608	580,457	1,597,123	2,177,580
2006	366,497	436,028	802,525	368,996	570,525	939,521	735,493	1,006,553	1,742,046
2007	361,091	267,805	628,896	293,883	619,269	913,152	654,974	887,074	1,542,048
Averages									
1987-06	458,598	933,760	1,393,126	320,834	802,469	1,122,535	779,432	1,736,229	2,515,660
1997-06	436,100	830,688	1,266,788	307,650	733,414	1,041,064	743,750	1,564,102	2,307,852
2002-06	363,219	719,739	1,082,958	297,311	493,543	790,854	660,530	1,213,282	1,873,812

^a Includes Cape Igvak and SEDM harvests considered Chignik-bound as defined in regulation. However, portions of the harvests from Cape Igvak and SEDM from 1970 to 1979 were not considered Chignik-bound by regulation, but were included in this table for comparison purposes.

^b Does not include subsistence-caught fish.

^c Includes harvests from the Chignik Lagoon test fishery and fish retained for home pack.

Table 21.–Chignik sockeye salmon forecasts and actual runs, by run and year, 1993 through 2007.

Year	Early Run (millions)			Late Run (millions)			Total Run (millions)		
	Forecast	Actual	% Error	Forecast	Actual	% Error	Forecast	Actual	% Error
1993	1.60	1.29	19	0.95	1.53	-61	2.55	2.82	-11
1994	1.80	2.36	-31	1.30	0.61	53	3.10	2.98	4
1995	1.90	1.03	46	0.90	1.69	-88	2.80	2.72	3
1996	1.40	2.15	-54	1.60	0.99	38	3.00	3.14	-5
1997	1.00	0.63	37	1.60	0.91	43	2.60	1.55	41
1998	0.90	0.72	20	1.10	1.11	-1	2.00	1.83	8
1999	1.05	2.48	-136	1.29	1.98	-54	2.34	4.46	-91
2000	3.90	2.11	46	1.09	0.84	23	4.99	2.96	41
2001	1.00	1.31	-31	0.91	1.61	-77	1.91	2.91	-53
2002	1.03	1.07	-4	1.09	0.91	17	2.12	1.98	7
2003	1.64	0.99	40	1.19	0.99	17	2.83	1.98	30
2004	1.26	1.09	13	1.08	0.41	62	2.34	1.50	36
2005	1.84	1.46	21	0.55	0.71	-29	2.39	2.18	9
2006	1.21	0.80	34	0.28	0.94	-236	1.49	1.74	-17
2007	1.02	0.63	38	0.90	0.90	0	1.92	1.53	20
Averages									
1997-06	1.48	1.27	3.92	1.02	1.04	-23.50	2.50	2.31	1.11
2002-06	1.40	1.08	20.76	0.84	0.79	-33.88	2.23	1.88	12.91

Table 22.–Chignik Management Area coho salmon harvest, by year, 1970 through 2007.

Year	Test fish		Commercial Catch		Home Pack		Total	
	Number	Pounds	Number	Pounds	Number	Pounds ^a	Number	Pounds
1970	ND	ND	15,348	103,879	ND	ND	15,348	103,879
1971	ND	ND	14,557	96,832	ND	ND	14,557	96,832
1972	ND	ND	19,615	138,345	ND	ND	19,615	138,345
1973	ND	ND	22,322	172,190	ND	ND	22,322	172,190
1974	ND	ND	12,245	97,037	ND	ND	12,245	97,037
1975	ND	ND	53,283	467,912	ND	ND	53,283	467,912
1976	ND	ND	35,167	294,954	ND	ND	35,167	294,954
1977	ND	ND	17,430	156,418	ND	ND	17,430	156,418
1978	ND	ND	20,212	158,270	ND	ND	20,212	158,270
1979	ND	ND	99,129	725,035	ND	ND	99,129	725,035
1980	ND	ND	119,573	771,392	ND	ND	119,573	771,392
1981	ND	ND	78,805	602,603	ND	ND	78,805	602,603
1982	ND	ND	300,273	2,373,268	ND	ND	300,273	2,373,268
1983	ND	ND	61,927	488,203	ND	ND	61,927	488,203
1984	ND	ND	110,128	949,965	ND	ND	110,128	949,965
1985	0	0	191,162	1,709,637	ND	ND	191,162	1,709,637
1986	ND	ND	116,633	867,195	ND	ND	116,633	867,195
1987	0	0	150,414	1,189,803	ND	ND	150,414	1,189,803
1988	0	0	370,420	2,889,427	ND	ND	370,420	2,889,427
1989	0	0	68,233	559,140	ND	ND	68,233	559,140
1990	0	0	130,131	933,745	ND	ND	130,131	933,745
1991	42	253	165,583	1,182,704	ND	ND	165,625	1,182,957
1992	1	8	310,942	2,362,683	ND	ND	310,943	2,362,691
1993	356	2,024	229,103	1,459,220	ND	ND	229,459	1,461,244
1994	103	506	237,101	1,996,320	ND	ND	237,204	1,996,826
1995	0	0	280,605	2,062,086	913	6,709	281,518	2,068,795
1996	0	0	193,226	1,485,947	20	154	193,246	1,486,101
1997	0	0	90,908	756,509	0	0	90,908	756,509
1998	0	0	129,512	1,045,823	27	218	129,539	1,046,041
1999	0	0	89,410	617,320	200	1,381	89,610	618,701
2000	0	0	123,222	943,536	0	0	123,222	943,536
2001	0	0	131,441	1,012,153	7	54	131,448	1,012,207
2002	0	0	49,208	360,781	164	1,202	49,372	361,983
2003	44	287	103,778	857,097	74	611	103,896	857,995
2004	0	0	37	283	0	0	37	283
2005	0	0	6,951	46,970	5	30	6,956	47,000
2006	0	0	39,046	290,720	175	1,312	39,221	292,032
2007	0	0	73,221	543,761	56	416	73,277	544,177
Averages								
1987-06	27	154	144,964	1,102,613	132	973	145,070	1,103,351
1997-06	4	29	76,351	593,119	65	481	76,421	593,629
2002-06	9	57	39,804	311,170	84	631	39,896	311,859

^a Weights of home pack fish are not reported on fish tickets; therefore, the weights were calculated from the average weight of the commercial harvest for that year.

Table 23.—Chignik Management Area coho salmon harvest (including home pack and the department's test fishery catches), by district and year, 1970 through 2007.

Year	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
1970	4,578	62	399	9,745	564	15,348
1971	10,928	62	301	2,297	969	14,557
1972	17,692	2	160	1,579	182	19,615
1973	22,304	6	12	0	0	22,322
1974	11,056	414	0	775	0	12,245
1975	52,407	260	0	0	616	53,283
1976	34,426	173	109	32	427	35,167
1977	16,810	189	7	378	46	17,430
1978	14,467	24	21	3,848	1,852	20,212
1979	52,966	3,556	3,869	31,300	7,438	99,129
1980	49,784	7,167	13,872	34,631	14,119	119,573
1981	35,578	8,693	6,222	22,047	6,265	78,805
1982	132,262	6,564	31,476	122,707	7,264	300,273
1983	29,519	330	441	27,173	4,464	61,927
1984	72,722	1,705	403	33,263	2,035	110,128
1985	156,553	7,111	3,203	23,357	938	191,162
1986	60,197	3,027	1,033	33,726	18,650	116,633
1987	77,333	3,806	7	58,688	10,580	150,414
1988	94,292	21,628	6,167	207,086	41,247	370,420
1989	68,231	2	0	0	0	68,233
1990	61,260	27,659	32	23,422	17,758	130,131
1991	56,574	9,294	1,187	57,373	41,197	165,625
1992	80,946	19,612	4,260	140,560	65,565	310,943
1993	48,808	36,421	4,240	84,056	55,934	229,459
1994	70,541	19,794	176	110,476	36,217	237,204
1995	54,646	46,975	458	88,116	91,323	281,518
1996	45,361	35,440	33	91,587	20,825	193,246
1997	32,847	45,878	1,801	9,139	1,243	90,908
1998	23,070	32,743	1,227	55,359	17,140	129,539
1999	23,144	24,308	3,095	36,405	2,658	89,610
2000	11,620	37,943	2,555	69,599	1,505	123,222
2001	10,007	31,062	2,303	86,580	1,496	131,448
2002	8,461	4,442	0	36,283	186	49,372
2003	37,800	7,632	0	55,225	3,239	103,896
2004	37	0	0	0	0	37
2005	510	730	12	5,045	659	6,956
2006	7,057	2,170	1	29,993	0	39,221
2007	11,790	12,830	420	47,525	712	73,277
Averages						
1987-06	40,627	20,377	1,378	62,250	20,439	145,070
1997-06	15,455	18,691	1,099	38,363	2,813	76,421
2002-06	10,773	2,995	3	25,309	817	39,896

Table 24.–Chignik Management Area coho salmon harvest (including home pack and the department’s test fishery catches), by district and day, 2007.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
6/9	0	Closed	Closed	Closed	Closed	0
6/10	Closed	Closed	Closed	Closed	Closed	0
6/11	0	Closed	Closed	Closed	Closed	0
6/12	Closed	Closed	Closed	Closed	Closed	0
6/13	0	Closed	Closed	Closed	Closed	0
6/14	0	Closed	Closed	Closed	Closed	0
6/15	0	0	0	Closed	Closed	0
6/16	0	0	0	Closed	Closed	0
6/17	0	0	0	Closed	Closed	0
6/18	Closed	Closed	Closed	Closed	Closed	0
6/19	0	Closed	Closed	Closed	Closed	0
6/20	Closed	Closed	Closed	Closed	Closed	0
6/21	Closed	Closed	Closed	Closed	Closed	0
6/22	0	Closed	Closed	Closed	Closed	0
6/23	Closed	Closed	Closed	Closed	Closed	0
6/24	Closed	Closed	Closed	Closed	Closed	0
6/25	0	1	0	Closed	Closed	1
6/26	0	0	0	Closed	Closed	0
6/27	Closed	Closed	Closed	Closed	Closed	0
6/28	0	0	20	Closed	Closed	20
6/29	0	13	67	Closed	Closed	80
6/30	0	27	0	Closed	Closed	27
7/1	0	60	76	Closed	Closed	136
7/2	0	109	54	Closed	Closed	163
7/3	0	53	46	Closed	Closed	99
7/4	49	175	51	Closed	Closed	275
7/5	1	83	106	Closed	Closed	190
7/6	2	487	0	Closed	Closed	489
7/7	Closed	Closed	Closed	Closed	Closed	0
7/8	Closed	Closed	Closed	Closed	Closed	0
7/9	3	160	Closed	1,008	0	1,171
7/10	3	23	Closed	247	0	273
7/11	3	139	Closed	329	0	471
7/12	6	132	Closed	354	0	492
7/13	4	112	Closed	2,081	0	2,197
7/14	0	196	Closed	1,486	0	1,682
7/15	1	289	Closed	1,307	0	1,597
7/16	80	178	Closed	Closed	Closed	258
7/17	Closed	Closed	Closed	Closed	Closed	0
7/18	Closed	Closed	Closed	Closed	Closed	0
7/19	Closed	Closed	Closed	Closed	Closed	0
7/20	5	141	Closed	363	0	509
7/21	18	416	Closed	505	0	939
7/22	21	332	Closed	308	0	661
7/23	15	688	Closed	987	0	1,690

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Table 24.–Page 2 of 2.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
7/24	1	324	Closed	704	0	1,029
7/25	0	74	Closed	193	0	267
7/26	12	294	Closed	329	0	635
7/27	3	716	Closed	275	12	1,006
7/28	8	235	Closed	126	0	369
7/29	25	606	Closed	167	0	798
7/30	39	636	Closed	1,245	453	2,373
7/31	33	330	Closed	572	247	1,182
8/1	21	365	Closed	1,733	0	2,119
8/2	11	113	Closed	2,064	0	2,188
8/3	6	64	Closed	2,106	0	2,176
8/4	4	98	Closed	2,420	0	2,522
8/5	19	195	Closed	2,529	0	2,743
8/6	64	277	Closed	1,424	0	1,765
8/7	25	122	Closed	1,765	0	1,912
8/8	56	324	Closed	1,610	0	1,990
8/9	102	217	Closed	1,517	0	1,836
8/10	50	288	Closed	1,186	0	1,524
8/11	10	957	Closed	1,709	0	2,676
8/12	0	Closed	Closed	Closed	Closed	0
8/13	4	0	Closed	0	0	4
8/14	72	261	Closed	3,649	0	3,982
8/15	96	661	Closed	2,121	0	2,878
8/16	312	514	Closed	1,610	0	2,436
8/17	120	43	Closed	223	0	386
8/18	76	241	Closed	11	0	328
8/19	61	481	0	0	0	542
8/20	138	146	0	966	Closed	1,250
8/21	96	0	0	1,385	Closed	1,481
8/22	171	220	Closed	816	Closed	1,207
8/23	195	0	Closed	667	Closed	862
8/24	459	0	Closed	834	Closed	1,293
8/25	370	0	Closed	2,527	Closed	2,897
8/26	166	0	Closed	0	Closed	166
8/27	526	67	Closed	67	Closed	660
8/28	509	147	Closed	0	Closed	656
8/29	505	0	Closed	0	Closed	505
8/30	797	0	Closed	0	Closed	797
8/31	1,053	0	Closed	0	Closed	1,053
9/1	933	0	Closed	0	Closed	933
9/2	1,126	0	Closed	0	Closed	1,126
9/3	1,493	0	Closed	0	Closed	1,493
9/4	822	0	Closed	0	Closed	822
9/5	990	0	Closed	0	Closed	990
9/6			- Processor Closed for Season -			
Total	11,790	12,830	420	47,525	712	73,277

Table 25.–Chignik Management Area pink salmon harvest, by year, 1970 through 2007.

Year	Test fish		Commercial Catch		Home Pack		Total	
	Number	Pounds	Number	Pounds	Number	Pounds ^a	Number	Pounds
1970	ND	ND	1,157,172	4,104,927	ND	ND	1,157,172	4,104,927
1971	ND	ND	612,290	2,291,832	ND	ND	612,290	2,291,832
1972	ND	ND	72,161	278,778	ND	ND	72,161	278,778
1973	ND	ND	25,444	104,457	ND	ND	25,444	104,457
1974	ND	ND	69,515	290,712	ND	ND	69,515	290,712
1975	ND	ND	66,165	260,631	ND	ND	66,165	260,631
1976	ND	ND	395,287	1,749,923	ND	ND	395,287	1,749,923
1977	ND	ND	604,806	2,435,862	ND	ND	604,806	2,435,862
1978	ND	ND	985,114	3,454,877	ND	ND	985,114	3,454,877
1979	ND	ND	1,905,198	7,154,954	ND	ND	1,905,198	7,154,954
1980	ND	ND	1,093,184	3,635,145	ND	ND	1,093,184	3,635,145
1981	ND	ND	1,162,613	4,479,368	ND	ND	1,162,613	4,479,368
1982	ND	ND	873,384	2,916,671	ND	ND	873,384	2,916,671
1983	ND	ND	321,178	1,200,888	ND	ND	321,178	1,200,888
1984	ND	ND	444,804	1,651,249	ND	ND	444,804	1,651,249
1985	0	0	160,128	643,731	ND	ND	160,128	643,731
1986	ND	ND	647,125	2,374,311	ND	ND	647,125	2,374,311
1987	0	0	246,775	899,560	ND	ND	246,775	899,560
1988	0	0	2,997,159	10,723,505	ND	ND	2,997,159	10,723,505
1989	0	0	27,712	94,269	ND	ND	27,712	94,269
1990	0	0	550,008	1,675,644	ND	ND	550,008	1,675,644
1991	2,660	9,237	1,166,588	3,348,394	ND	ND	1,169,248	3,357,631
1992	114	536	1,553,959	5,798,623	ND	ND	1,554,073	5,799,159
1993	1,826	5,539	1,646,551	5,308,258	ND	ND	1,648,377	5,313,797
1994	14	55	431,049	1,494,604	ND	ND	431,063	1,494,659
1995	0	0	2,057,998	7,350,386	0	0	2,057,998	7,350,386
1996	0	0	183,806	536,218	5,262	15,351	189,068	551,569
1997	0	0	844,431	2,784,333	0	0	844,431	2,784,333
1998	0	0	776,988	2,586,026	0	0	776,988	2,586,026
1999	0	0	1,698,651	4,845,435	0	0	1,698,651	4,845,435
2000	0	0	428,064	1,183,004	0	0	428,064	1,183,004
2001	0	0	1,281,760	4,077,814	7	22	1,281,767	4,077,836
2002	66	276	65,984	206,385	0	0	66,050	206,661
2003	570	2,167	501,661	1,951,928	407	1,584	502,638	1,955,679
2004	0	0	2,380	7,589	0	0	2,380	7,589
2005	8	48	193,803	611,023	234	813	194,045	611,884
2006	0	0	383,574	1,403,428	0	0	383,574	1,403,428
2007	0	0	2,019,748	7,388,012	0	0	2,019,748	7,388,012
Averages								
1987-06	263	893	851,945	2,844,321	493	1,481	852,503	2,846,103
1997-06	64	249	617,730	1,965,697	65	242	617,859	1,966,187
2002-06	129	498	229,480	836,071	128	479	229,737	837,048

^a Weights of home pack fish are not reported on fish tickets; therefore, they were calculated from the average weight of the commercial harvest.

Table 26.—Chignik Management Area pink salmon harvest (including home pack and the department's test fishery catches), by district and year, 1970 through 2007.

Year	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
1970	46,297	27,919	268,857	442,684	371,415	1,157,172
1971	65,281	20,518	28,959	285,447	212,085	612,290
1972	31,606	766	12,928	14,880	11,981	72,161
1973	22,674	293	2,477	28	0	25,472
1974	33,484	22,084	568	13,379	0	69,515
1975	27,377	31,342	0	7,446	0	66,165
1976	108,827	16,583	28,828	135,803	105,246	395,287
1977	60,932	120,018	239	379,038	44,579	604,806
1978	137,074	61,224	86,778	419,280	280,758	985,114
1979	312,406	284,414	292,364	744,613	271,401	1,905,198
1980	180,912	108,682	472,510	216,460	114,620	1,093,184
1981	121,380	210,023	173,293	433,605	224,312	1,162,613
1982	82,973	80,606	89,074	602,408	18,323	873,384
1983	27,284	7,861	7,817	164,338	113,878	321,178
1984	165,178	47,250	57,715	173,820	841	444,804
1985	14,429	16,087	6,570	80,577	42,465	160,128
1986	191,264	44,127	49,635	200,793	161,306	647,125
1987	13,887	7,769	2,079	187,701	35,339	246,775
1988	119,794	318,370	1,006,366	1,141,382	411,247	2,997,159
1989	27,691	21	0	0	0	27,712
1990	94,528	233,677	40,574	135,810	45,419	550,008
1991	76,163	173,967	27,979	419,264	471,875	1,169,248
1992	178,105	205,750	183,119	628,900	358,199	1,554,073
1993	55,909	205,037	52,755	685,605	649,071	1,648,377
1994	59,425	99,149	12,952	174,641	84,896	431,063
1995	106,939	469,745	8,572	791,718	681,024	2,057,998
1996	1,804	20,717	7,201	100,871	58,475	189,068
1997	39,461	603,575	72,347	118,003	11,045	844,431
1998	26,054	233,732	66,725	343,187	107,290	776,988
1999	59,001	664,208	40,571	771,411	163,460	1,698,651
2000	28,067	271,417	10,500	106,147	11,933	428,064
2001	75,142	641,438	97,438	424,537	43,212	1,281,767
2002	10,253	17,580	0	36,918	1,299	66,050
2003	56,042	88,736	267	326,239	31,354	502,638
2004	2,378	2	0	0	0	2,380
2005	71,438	99,491	21	20,952	2,143	194,045
2006	62,419	79,726	79,465	161,964	0	383,574
2007	187,670	612,921	43,379	1,152,331	23,447	2,019,748
Averages						
1987-06	58,225	221,705	85,447	328,763	158,364	852,503
1997-06	43,026	269,991	36,733	230,936	37,174	617,859
2002-06	40,506	57,107	15,951	109,215	6,959	229,737

Table 27.--Chignik Management Area pink salmon harvest (including home pack and the department's test fishery catches), by district and day, 2007.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
6/9	0	Closed	Closed	Closed	Closed	0
6/10	Closed	Closed	Closed	Closed	Closed	0
6/11	0	Closed	Closed	Closed	Closed	0
6/12	Closed	Closed	Closed	Closed	Closed	0
6/13	0	Closed	Closed	Closed	Closed	0
6/14	0	Closed	Closed	Closed	Closed	0
6/15	1	12	0	Closed	Closed	13
6/16	1	0	0	Closed	Closed	1
6/17	8	201	0	Closed	Closed	209
6/18	Closed	Closed	Closed	Closed	Closed	0
6/19	0	Closed	Closed	Closed	Closed	0
6/20	Closed	Closed	Closed	Closed	Closed	0
6/21	Closed	Closed	Closed	Closed	Closed	0
6/22	0	Closed	Closed	Closed	Closed	0
6/23	Closed	Closed	Closed	Closed	Closed	0
6/24	Closed	Closed	Closed	Closed	Closed	0
6/25	2	52	137	Closed	Closed	191
6/26	1	218	995	Closed	Closed	1,214
6/27	Closed	Closed	Closed	Closed	Closed	0
6/28	0	0	1,209	Closed	Closed	1,209
6/29	0	398	3,832	Closed	Closed	4,230
6/30	7	692	1,584	Closed	Closed	2,283
7/1	26	1,491	4,275	Closed	Closed	5,792
7/2	7	1,364	2,349	Closed	Closed	3,720
7/3	9	753	2,181	Closed	Closed	2,943
7/4	52	1,565	2,333	Closed	Closed	3,950
7/5	116	986	2,650	Closed	Closed	3,752
7/6	40	2,351	0	Closed	Closed	2,391
7/7	Closed	Closed	Closed	Closed	Closed	0
7/8	Closed	Closed	Closed	Closed	Closed	0
7/9	120	675	Closed	6,500	0	7,295
7/10	135	273	Closed	3,668	0	4,076
7/11	180	1,711	Closed	8,365	0	10,256
7/12	34	836	Closed	12,117	0	12,987
7/13	197	825	Closed	10,926	0	11,948
7/14	146	4,345	Closed	15,610	0	20,101
7/15	231	4,170	Closed	9,486	0	13,887
7/16	483	3,905	Closed	Closed	Closed	4,388
7/17	Closed	Closed	Closed	Closed	Closed	0
7/18	Closed	Closed	Closed	Closed	Closed	0
7/19	Closed	Closed	Closed	Closed	Closed	0
7/20	1,105	5,781	Closed	7,282	0	14,168
7/21	2,208	16,698	Closed	5,157	0	24,063
7/22	2,939	19,574	Closed	9,154	0	31,667
7/23	6,221	30,350	Closed	24,931	0	61,502

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Table 27.–Page 2 of 2.

Date	Chignik Bay	Central	Eastern	Western	Perryville	Total
7/24	6,762	22,186	Closed	11,193	0	40,141
7/25	5,202	13,408	Closed	19,112	0	37,722
7/26	9,661	15,332	Closed	33,948	0	58,941
7/27	6,078	24,882	Closed	25,957	8,252	65,169
7/28	5,124	34,898	Closed	19,351	0	59,373
7/29	4,859	26,563	Closed	22,830	0	54,252
7/30	5,557	28,553	Closed	49,169	8,828	92,107
7/31	6,816	29,339	Closed	43,962	6,367	86,484
8/1	5,673	13,645	Closed	38,138	0	57,456
8/2	9,979	7,870	Closed	54,074	0	71,923
8/3	8,143	37,106	Closed	67,222	0	112,471
8/4	7,319	12,443	Closed	70,823	0	90,585
8/5	8,350	23,206	Closed	63,522	0	95,078
8/6	9,968	14,740	Closed	49,662	0	74,370
8/7	4,708	17,739	Closed	63,146	0	85,593
8/8	7,756	27,395	Closed	52,339	0	87,490
8/9	5,998	16,564	Closed	40,122	0	62,684
8/10	6,708	25,795	Closed	50,912	0	83,415
8/11	8,097	33,333	Closed	51,608	0	93,038
8/12	Closed	Closed	Closed	Closed	Closed	0
8/13	1,400	0	Closed	0	0	1,400
8/14	4,974	9,707	Closed	55,040	0	69,721
8/15	7,243	21,558	Closed	48,358	0	77,159
8/16	8,337	25,469	Closed	38,894	0	72,700
8/17	3,462	3,103	Closed	4,463	0	11,028
8/18	2,934	6,114	Closed	1,701	0	10,749
8/19	2,042	12,987	0	0	0	15,029
8/20	2,706	4,712	21,834	14,218	Closed	43,470
8/21	2,324	0	0	18,084	Closed	20,408
8/22	2,738	3,556	Closed	8,868	Closed	15,162
8/23	2,217	0	Closed	4,291	Closed	6,508
8/24	0	0	Closed	6,843	Closed	6,843
8/25	0	0	Closed	11,080	Closed	11,080
8/26	0	0	Closed	0	Closed	0
8/27	150	205	Closed	205	Closed	560
8/28	116	1,029	Closed	0	Closed	1,145
8/29	0	258	Closed	0	Closed	258
8/30	0	0	Closed	0	Closed	0
8/31	0	0	Closed	0	Closed	0
9/1	0	0	Closed	0	Closed	0
9/2	0	0	Closed	0	Closed	0
9/3	0	0	Closed	0	Closed	0
9/4	0	0	Closed	0	Closed	0
9/5	0	0	Closed	0	Closed	0
9/6		- Processor Closed for Season -				
Total	187,670	612,921	43,379	1,152,331	23,447	2,019,748

Table 28.—Chignik Management Area chum salmon harvest, by year, 1970 through 2007.

Year	Test fish		Commercial Catch		Home Pack		Total	
	Number	Pounds	Number	Pounds	Number	Pounds ^a	Number	Pounds
1970	ND	ND	437,252	3,004,113	ND	ND	437,252	3,004,113
1971	ND	ND	353,952	2,420,446	ND	ND	353,952	2,420,446
1972	ND	ND	78,298	603,726	ND	ND	78,298	603,726
1973	ND	ND	8,717	67,972	ND	ND	8,717	67,972
1974	ND	ND	34,312	246,288	ND	ND	34,312	246,288
1975	ND	ND	25,161	176,046	ND	ND	25,161	176,046
1976	ND	ND	81,403	678,545	ND	ND	81,403	678,545
1977	ND	ND	110,452	937,365	ND	ND	110,452	937,365
1978	ND	ND	120,889	984,141	ND	ND	120,889	984,141
1979	ND	ND	188,907	1,378,938	ND	ND	188,907	1,378,938
1980	ND	ND	252,521	1,765,287	ND	ND	252,521	1,765,287
1981	ND	ND	580,332	4,502,632	ND	ND	580,332	4,502,632
1982	ND	ND	390,096	3,231,403	ND	ND	390,096	3,231,403
1983	ND	ND	159,412	1,205,266	ND	ND	159,412	1,205,266
1984	ND	ND	63,303	485,967	ND	ND	63,303	485,967
1985	0	0	22,805	145,276	ND	ND	22,805	145,276
1986	ND	ND	176,640	1,304,418	ND	ND	176,640	1,304,418
1987	0	0	127,261	943,941	ND	ND	127,261	943,941
1988	0	0	267,775	2,196,377	ND	ND	267,775	2,196,377
1989	0	0	1,624	11,888	ND	ND	1,624	11,888
1990	0	0	270,004	1,757,019	ND	ND	270,004	1,757,019
1991	607	4,260	260,489	1,671,939	ND	ND	261,096	1,676,199
1992	16	140	222,118	1,592,186	ND	ND	222,134	1,592,326
1993	57	300	122,303	735,747	ND	ND	122,360	736,047
1994	521	3,437	226,755	1,627,574	ND	ND	227,276	1,631,011
1995	0	0	380,949	2,814,987	5	37	380,954	2,815,024
1996	0	0	99,791	779,840	21,100	164,891	120,891	944,731
1997	0	0	155,905	1,196,999	0	0	155,905	1,196,999
1998	0	0	128,841	917,648	155	1,104	128,996	918,752
1999	0	0	140,594	1,064,433	3	0	140,597	1,064,433
2000	0	0	120,957	1,033,665	0	0	120,957	1,033,665
2001	0	0	198,874	1,609,533	129	1,044	199,003	1,610,577
2002	46	334	54,513	406,382	0	0	54,559	406,716
2003	137	1,394	63,907	447,921	0	0	64,044	449,315
2004	0	0	505	3,803	0	0	505	3,803
2005	2	15	8,704	63,379	115	825	8,821	64,219
2006	0	0	61,630	450,686	0	0	61,630	450,686
2007	0	0	78,552	648,355	1	8	78,553	648,363
Averages								
1987-06	69	494	145,675	1,066,297	1,792	13,992	146,820	1,075,186
1997-06	19	174	93,443	719,445	40	297	93,502	719,916
2002-06	37	349	37,852	274,434	23	165	37,912	274,948

^a Weights of home pack fish are not reported on fish tickets; therefore, they were calculated from the average weight of the commercial harvest.

Table 29.—Chignik Management Area chum salmon harvest (including home pack and the department's test fishery catches), by district and year, 1970 through 2007.

Year	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
1970	1,660	28,628	241,108	139,551	26,305	437,252
1971	19,449	13,723	102,344	177,534	40,902	353,952
1972	18,178	1,566	27,723	18,535	12,296	78,298
1973	7,254	229	1,218	16	0	8,717
1974	17,317	13,516	255	3,224	0	34,312
1975	21,137	3,225	0	799	0	25,161
1976	19,237	3,358	10,020	33,051	15,737	81,403
1977	8,621	8,888	1,507	88,027	3,409	110,452
1978	15,020	10,317	17,451	45,991	32,110	120,889
1979	32,176	11,427	36,090	82,326	26,888	188,907
1980	19,944	38,902	56,805	91,868	45,002	252,521
1981	38,061	160,730	108,668	221,579	51,294	580,332
1982	16,034	33,669	64,513	253,299	22,581	390,096
1983	16,747	9,815	8,250	101,959	22,641	159,412
1984	8,173	8,150	21,134	25,364	482	63,303
1985	4,905	5,242	864	10,704	1,090	22,805
1986	18,167	29,502	17,880	74,070	37,021	176,640
1987	5,163	9,437	8,890	86,898	16,873	127,261
1988	7,013	39,316	77,511	102,730	41,205	267,775
1989	1,587	34	3	0	0	1,624
1990	11,460	113,741	27,463	91,603	25,737	270,004
1991	17,545	51,429	4,925	98,603	88,594	261,096
1992	12,711	45,569	61,209	65,466	37,179	222,134
1993	8,116	43,306	21,157	25,045	24,736	122,360
1994	25,250	69,552	4,333	94,116	34,025	227,276
1995	14,588	107,066	8,074	158,273	92,953	380,954
1996	782	46,993	19,837	36,303	16,976	120,891
1997	20,978	104,259	11,397	16,280	2,991	155,905
1998	7,352	43,191	5,180	41,425	31,848	128,996
1999	12,150	75,495	11,332	37,089	4,531	140,597
2000	8,389	66,904	8,045	34,823	2,796	120,957
2001	11,534	84,132	50,911	37,466	14,960	199,003
2002	3,949	9,643	513	40,337	117	54,559
2003	10,891	11,304	50	39,883	1,916	64,044
2004	499	6	0	0	0	505
2005	2,370	5,329	2	1,054	66	8,821
2006	2,303	9,455	776	49,096	0	61,630
2007	3,829	19,595	7,851	46,943	335	78,553
Averages						
1987-06	9,232	46,808	16,080	52,825	21,875	146,820
1997-06	8,042	40,972	8,821	29,745	5,923	93,502
2002-06	4,002	7,147	268	26,074	420	37,912

Table 30.–Chignik Management Area chum salmon harvest (including home pack and the department’s test fishery catches), by district and day, 2007.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
6/9	0	Closed	Closed	Closed	Closed	0
6/10	Closed	Closed	Closed	Closed	Closed	0
6/11	0	Closed	Closed	Closed	Closed	0
6/12	Closed	Closed	Closed	Closed	Closed	0
6/13	0	Closed	Closed	Closed	Closed	0
6/14	0	Closed	Closed	Closed	Closed	0
6/15	1	299	0	Closed	Closed	300
6/16	1	0	0	Closed	Closed	1
6/17	8	442	0	Closed	Closed	450
6/18	Closed	Closed	Closed	Closed	Closed	0
6/19	0	Closed	Closed	Closed	Closed	0
6/20	Closed	Closed	Closed	Closed	Closed	0
6/21	Closed	Closed	Closed	Closed	Closed	0
6/22	0	Closed	Closed	Closed	Closed	0
6/23	Closed	Closed	Closed	Closed	Closed	0
6/24	Closed	Closed	Closed	Closed	Closed	0
6/25	0	9	265	Closed	Closed	274
6/26	0	97	2178	Closed	Closed	2,275
6/27	Closed	Closed	Closed	Closed	Closed	0
6/28	0	0	197	Closed	Closed	197
6/29	1	236	578	Closed	Closed	815
6/30	0	346	318	Closed	Closed	664
7/1	1	635	892	Closed	Closed	1,528
7/2	0	419	521	Closed	Closed	940
7/3	0	189	688	Closed	Closed	877
7/4	194	394	699	Closed	Closed	1,287
7/5	1	190	847	Closed	Closed	1,038
7/6	0	456	0	Closed	Closed	456
7/7	Closed	Closed	Closed	Closed	Closed	0
7/8	Closed	Closed	Closed	Closed	Closed	0
7/9	0	265	Closed	4200	0	4,465
7/10	0	135	Closed	2600	0	2,735
7/11	0	363	Closed	4052	0	4,415
7/12	0	214	Closed	1767	0	1,981
7/13	2	685	Closed	2895	0	3,582
7/14	3	795	Closed	1312	0	2,110
7/15	4	897	Closed	1453	0	2,354
7/16	31	465	Closed	Closed	Closed	496
7/17	Closed	Closed	Closed	Closed	Closed	0
7/18	Closed	Closed	Closed	Closed	Closed	0
7/19	Closed	Closed	Closed	Closed	Closed	0
7/20	6	68	Closed	772	0	846
7/21	6	476	Closed	918	0	1,400
7/22	0	490	Closed	2266	0	2,756
7/23	1	947	Closed	2141	0	3,089

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Table 30.–Page 2 of 2.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
7/24	2	737	Closed	1111	0	1,850
7/25	4	1113	Closed	883	0	2,000
7/26	9	277	Closed	1033	0	1,319
7/27	7	535	Closed	841	38	1,421
7/28	1	282	Closed	440	0	723
7/29	13	528	Closed	547	0	1,088
7/30	20	615	Closed	1614	169	2,418
7/31	12	492	Closed	836	128	1,468
8/1	37	197	Closed	1092	0	1,326
8/2	131	177	Closed	1172	0	1,480
8/3	277	467	Closed	1528	0	2,272
8/4	135	260	Closed	1220	0	1,615
8/5	129	251	Closed	1017	0	1,397
8/6	139	128	Closed	831	0	1,098
8/7	22	250	Closed	861	0	1,133
8/8	35	352	Closed	703	0	1,090
8/9	45	253	Closed	421	0	719
8/10	94	347	Closed	570	0	1,011
8/11	88	431	Closed	717	0	1,236
8/12	Closed	Closed	Closed	Closed	Closed	0
8/13	17	0	Closed	0	0	17
8/14	211	265	Closed	1096	0	1,572
8/15	91	481	Closed	816	0	1,388
8/16	162	638	Closed	608	0	1,408
8/17	70	72	Closed	132	0	274
8/18	162	263	Closed	35	0	460
8/19	66	318	0	0	0	384
8/20	156	173	668	754	Closed	1,751
8/21	140	0	0	600	Closed	740
8/22	102	136	Closed	332	Closed	570
8/23	425	0	Closed	129	Closed	554
8/24	132	0	Closed	186	Closed	318
8/25	134	0	Closed	436	Closed	570
8/26	43	0	Closed	0	Closed	43
8/27	76	6	Closed	6	Closed	88
8/28	53	36	Closed	0	Closed	89
8/29	48	3	Closed	0	Closed	51
8/30	71	0	Closed	0	Closed	71
8/31	35	0	Closed	0	Closed	35
9/1	24	0	Closed	0	Closed	24
9/2	60	0	Closed	0	Closed	60
9/3	55	0	Closed	0	Closed	55
9/4	22	0	Closed	0	Closed	22
9/5	14	0	Closed	0	Closed	14
9/6		- Processor Closed for Season -				
Total	3,829	19,595	7,851	46,943	335	78,553

Table 31.—Value of the commercial salmon harvest, by species, and average value per active permit, in dollars, in the Chignik Management Area, 1970 through 2007.

Year	Chinook		Sockeye		Coho		Pink		Chum		Total Value	Number of Permits ^c	Value Per Permit
	Total ^a	Average ^b											
1970	6,129	77	2,190,272	27,378	18,397	230	635,673	7,946	376,025	4,700	3,226,496	80	40,331
1971	6,472	84	2,034,279	26,419	23,240	302	366,693	4,762	326,760	4,244	2,757,444	77	35,811
1972	2,028	25	825,498	10,319	35,699	446	48,401	605	87,759	1,097	999,385	80	12,492
1973	5,255	67	3,030,057	38,355	73,663	932	20,610	261	10,180	129	3,139,765	79	39,744
1974	2,941	31	3,618,781	38,498	31,933	340	64,069	682	51,125	544	3,768,849	94	40,094
1975	6,561	76	1,384,271	16,096	213,539	2,483	104,115	1,211	61,704	717	1,770,190	86	20,584
1976	13,800	179	4,751,000	61,701	138,000	1,792	568,300	7,381	183,600	2,384	5,654,700	77	73,438
1977	18,828	214	14,553,720	165,383	104,819	1,191	920,881	10,465	368,066	4,183	15,966,314	88	181,435
1978	56,700	597	15,653,500	164,774	116,400	1,225	1,131,500	11,911	404,500	4,258	17,362,600	95	182,764
1979	32,050	311	11,345,503	110,151	710,192	6,895	2,622,269	25,459	126,866	1,232	14,836,880	103	144,047
1980	67,657	651	5,532,290	53,195	520,655	5,006	1,477,060	14,203	1,061,963	10,211	8,659,625	104	83,266
1981	75,231	716	17,262,119	164,401	439,900	4,190	1,881,334	17,917	2,431,421	23,156	22,090,005	105	210,381
1982	75,276	731	13,038,510	126,587	1,782,027	17,301	578,184	5,613	1,356,597	13,171	16,830,594	103	163,404
1983	96,159	943	10,728,088	105,177	219,650	2,153	240,171	2,355	421,713	4,134	11,705,781	102	114,763
1984	114,502	1,145	20,402,076	204,021	759,972	7,600	330,916	3,309	146,024	1,460	21,753,490	100	217,535
1985	67,088	633	7,997,834	75,451	1,471,418	13,881	140,076	1,321	59,475	561	9,735,891	106	91,848
1986	84,800	831	16,882,290	165,513	667,740	6,546	356,147	3,492	456,546	4,476	18,447,523	102	180,858
1987	72,739	706	24,783,033	240,612	1,035,129	10,050	269,868	2,620	339,819	3,299	26,500,588	103	257,287
1988	286,740	2,839	14,350,354	142,083	4,153,424	41,123	6,771,266	67,042	2,189,293	21,676	27,751,077	101	274,763
1989	78,999	790	13,047,378	130,474	436,892	4,369	32,994	330	4,745	47	13,601,008	100	136,010
1990	185,256	1,834	22,509,923	222,871	700,309	6,934	502,693	4,977	878,510	8,698	24,776,691	101	245,314
1991	50,027	490	11,002,784	107,870	650,626	6,379	402,916	3,950	502,860	4,930	12,609,213	102	123,620
1992	193,326	1,914	12,552,025	124,277	1,323,107	13,100	811,882	8,038	414,005	4,099	15,294,345	101	151,429
1993	175,690	1,722	8,210,106	80,491	730,622	7,163	637,666	6,252	184,012	1,804	9,938,096	102	97,432
1994	38,096	385	10,046,245	101,477	1,094,415	11,055	226,504	2,288	430,888	4,352	11,836,148	99	119,557
1995	60,174	602	11,969,210	119,692	834,337	8,343	977,811	9,778	634,780	6,348	14,476,312	100	144,763
1996	25,041	250	12,640,560	126,406	447,228	4,472	24,827	248	32,279	323	13,169,935	100	131,699
1997	20,642	211	4,860,589	49,598	453,905	4,632	348,042	3,551	239,400	2,443	5,922,578	98	60,434
1998	31,934	376	6,631,192	78,014	397,413	4,675	310,323	3,651	137,647	1,619	7,508,509	85	88,335
1999	27,212	302	21,132,550	234,806	170,931	1,899	578,861	6,432	118,547	1,317	22,028,101	90	244,757

-continued-

Table 31.–Page 2 of 2.

Year	Chinook		Sockeye		Coho		Pink		Chum		Total Value	Number of Permits ^c	Value Per Permit
	Total ^a	Average ^b											
2000	16,336	165	11,812,368	119,317	283,061	2,859	106,470	1,075	93,030	940	12,311,264	99	124,356
2001	12,205	133	7,419,339	80,645	263,160	2,860	366,714	3,986	209,239	2,274	8,270,657	92	89,898
2002	3,516	36	4,564,214	46,103	36,078	364	10,333	104	40,671	411	4,654,812	99	47,018
2003	20,212	202	5,283,962	52,840	173,625	1,736	182,100	1,821	71,140	711	5,731,039	100	57,310
2004	26,191	262	3,568,350	35,684	59	1	835	8	647	6	3,596,082	100	35,961
2005	36,060	377	6,314,036	64,429	11,280	115	55,070	562	10,917	111	6,427,363	98	65,585
2006	26,895	560	4,703,317	97,986	105,132	2,190	126,309	2,631	81,123	1,690	5,042,776	48	105,058
2007 ^d	26,176	476	4,154,210	75,531	195,754	3,559	1,034,322	18,806	162,089	2,947	5,572,550	55	101,319
Averages													
1987-06	69,365	708	10,870,077	112,784	665,037	6,716	637,174	6,467	330,678	3,355	12,572,330	96	130,029
1997-06	22,120	262	7,628,992	85,942	189,464	2,133	208,506	2,382	100,236	1,152	8,149,318	91	91,871
2002-06	22,575	287	4,886,776	59,408	65,235	881	74,929	1,025	40,900	586	5,090,414	89	62,187

^a Total value of commercial catch in dollars, by species. Value does not include home pack or department test fishery.

^b Average value of commercial catch in dollars, by species. Average value does not include home pack or department test fishery.

^c Includes the number of commercial permits that received income from the harvest. These figures do not include department test fishery harvests.

^d Values represent the initial price paid, and do not include any post-season adjustments by any processor. The average 2007 exvessel prices per pound were: Chinook- \$0.86, sockeye- \$0.72, coho- \$0.36, pink- \$0.14, chum- \$0.25.

Table 32.—Number of subsistence permits issued and returned and estimated subsistence salmon harvest, by species and year, 1980 through 2007.

Year	Permits		Estimated Salmon Harvest					Total
	Issued	Returned	Chinook	Sockeye	Coho	Chum	Pink	
1980	82	37	6	12,475	32	169	478	13,160
1981	29	7	0	2,049	0	0	0	2,049
1982	59	15	3	8,532	12	0	2	8,549
1983	32	21	0	3,078	1,319	850	1,250	6,497
1984	77	64	23	8,747	464	204	330	9,768
1985	59	48	1	7,177	50	25	26	7,279
1986	74	38	4	10,347	205	77	98	10,731
1987	2	1	0	400	0	0	0	400
1988	80	34	9	9,073	1,455	142	54	10,733
1989	68	23	24	7,551	384	147	81	8,187
1990	72	23	103	8,099	210	115	470	8,997
1991	95	58	42	11,483	13	81	275	11,894
1992	98	19	55	8,648	709	145	305	9,862
1993	201	141	122	14,710	3,765	642	1,265	20,504
1994	219	122	165	13,978	4,055	382	1,720	20,300
1995	111	95	98	9,563	1,191	150	723	11,725
1996	119	104	48	7,357	2,126	355	2,204	12,090
1997	126	103	28	13,442	2,678	840	2,035	19,023
1998	104	72	91	7,750	1,390	186	1,007	10,424
1999	106	88	243	9,040	1,679	136	1,191	12,289
2000	130	112	163	9,561	1,802	517	1,185	13,228
2001	135	122	171	8,633	1,859	213	2,787	13,663
2002	120	86	74	10,092	1,401	23	390	11,980
2003	146	127	267	10,989	2,256	286	1,597	15,395
2004	104	57	88	7,029	1,981	202	1,047	10,357
2005	119	100	224	8,171	2,112	353	730	11,590
2006	113	79	258	8,079	1,539	275	1,035	11,186
2007	128	83	84	10,191	1,936	165	996	13,372
Averages								
1987-06	113	78	114	9,182	1,630	260	1,005	12,191
1997-06	120	95	161	9,279	1,870	303	1,300	12,914
2002-06	120	90	182	8,872	1,858	228	960	12,102

Source: Alaska Department of Fish and Game, Division of Subsistence, Alaska Subsistence Fisheries Database.

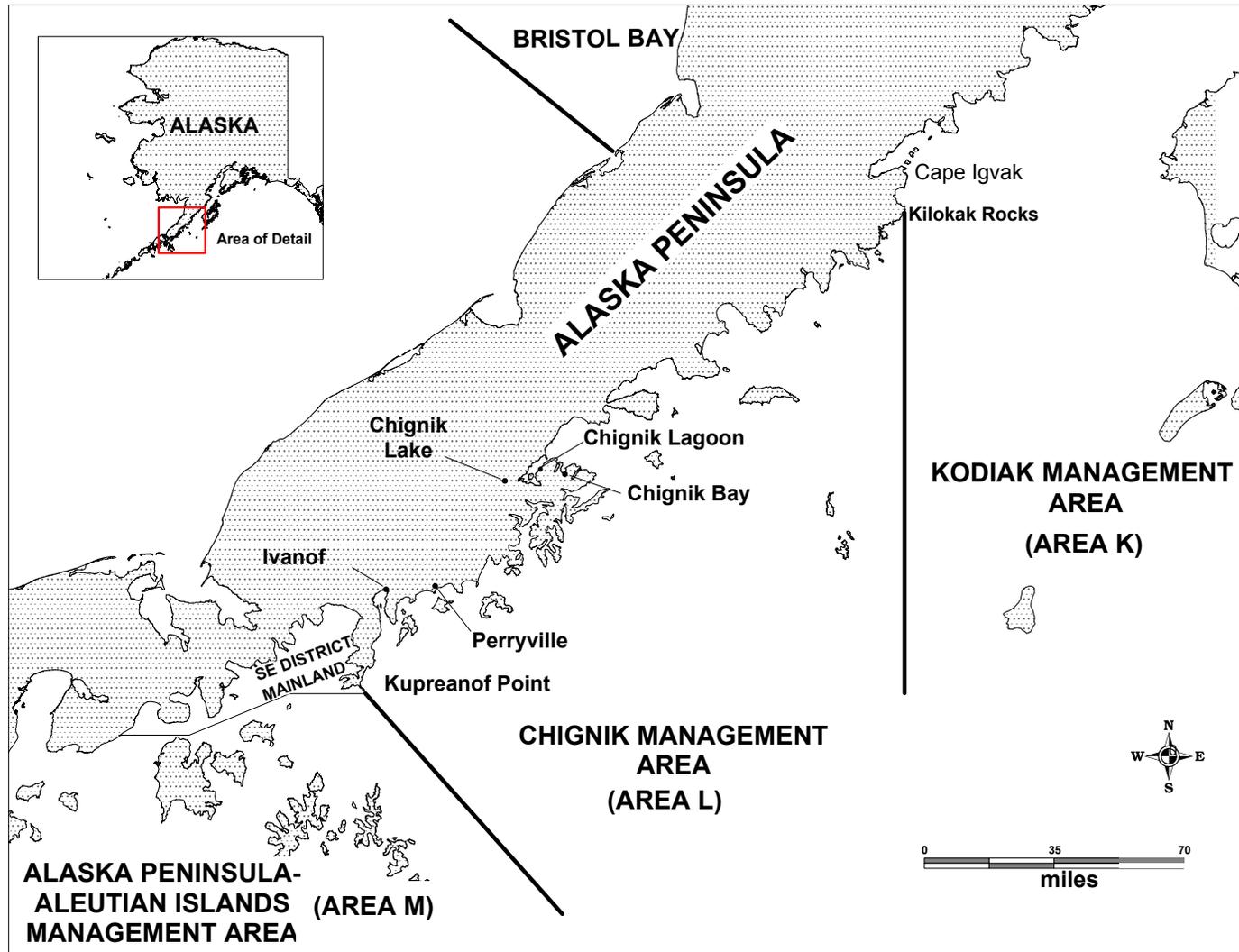


Figure 1.—Map of the Alaska Peninsula illustrating the relative locations of the Chignik, Kodiak, and Alaska Peninsula and Aleutians Islands Management Areas.

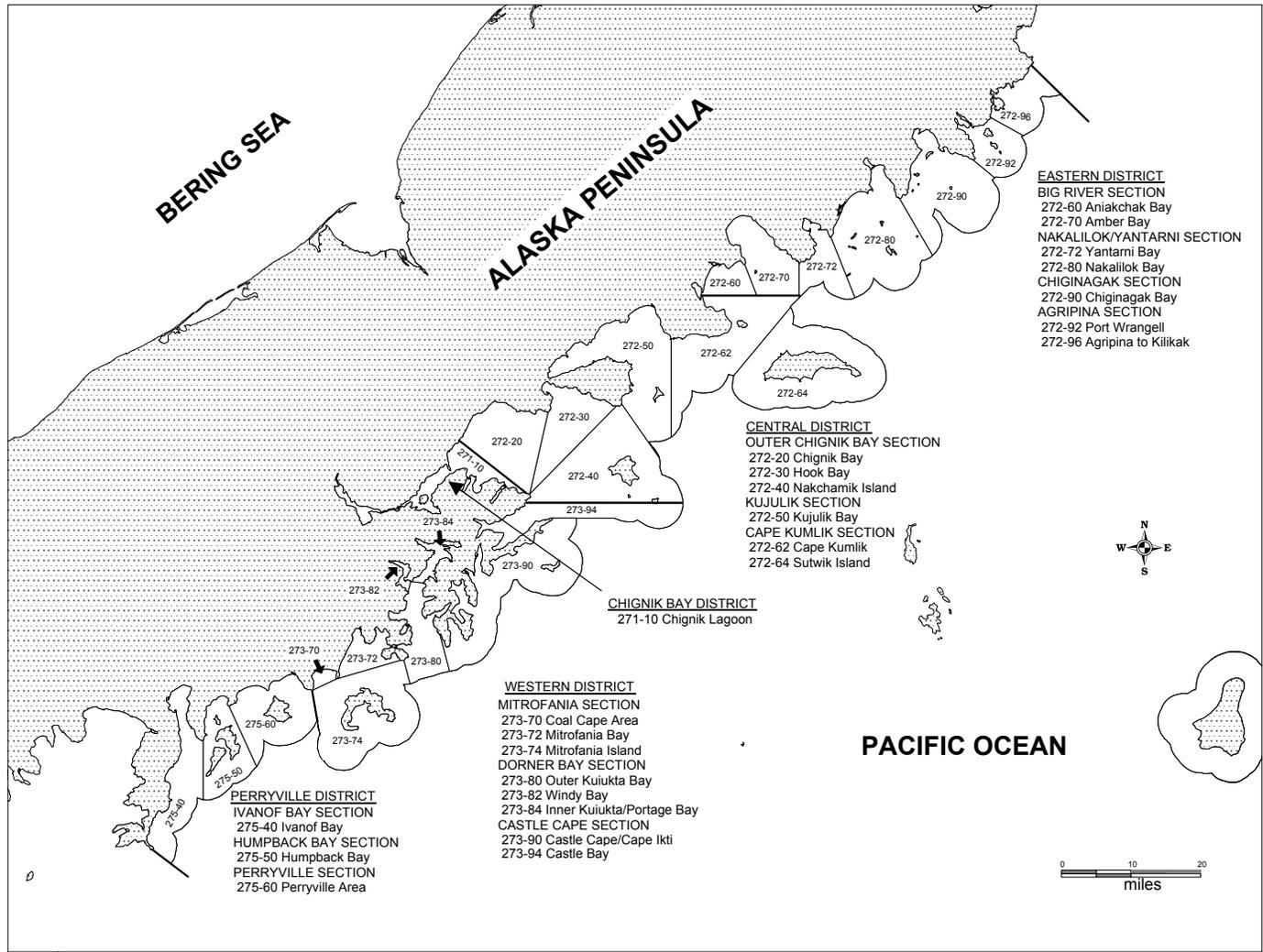


Figure 2.—Map of the Chignik Management Area illustrating district and section boundaries and statistical areas.

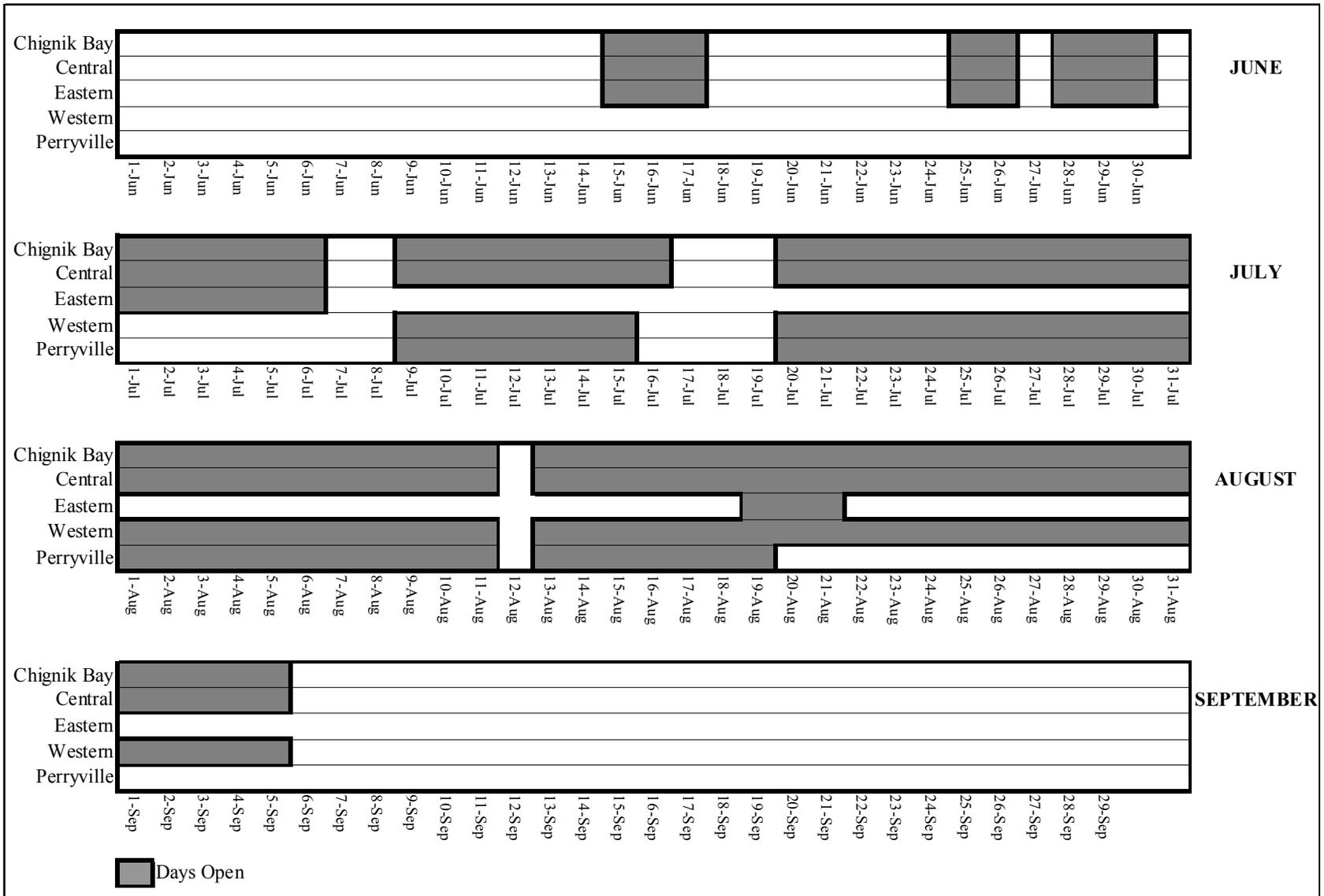


Figure 3.—Representation of days open to commercial salmon fishing, by district and month, 2007.

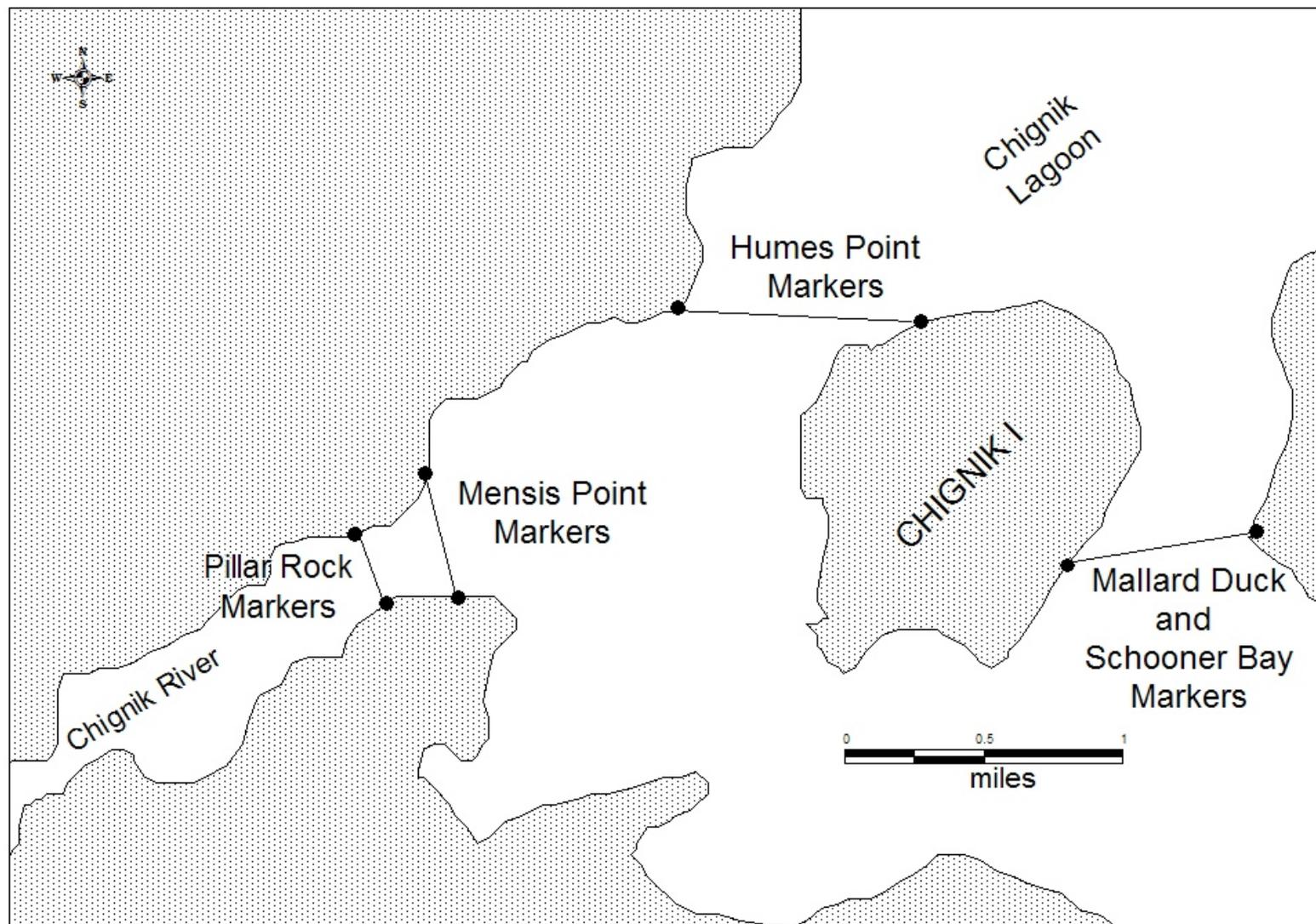


Figure 4.—Map of upper Chignik Lagoon showing the location of the Pillar Rock, Mensis Point, and Humes Point marker locations.

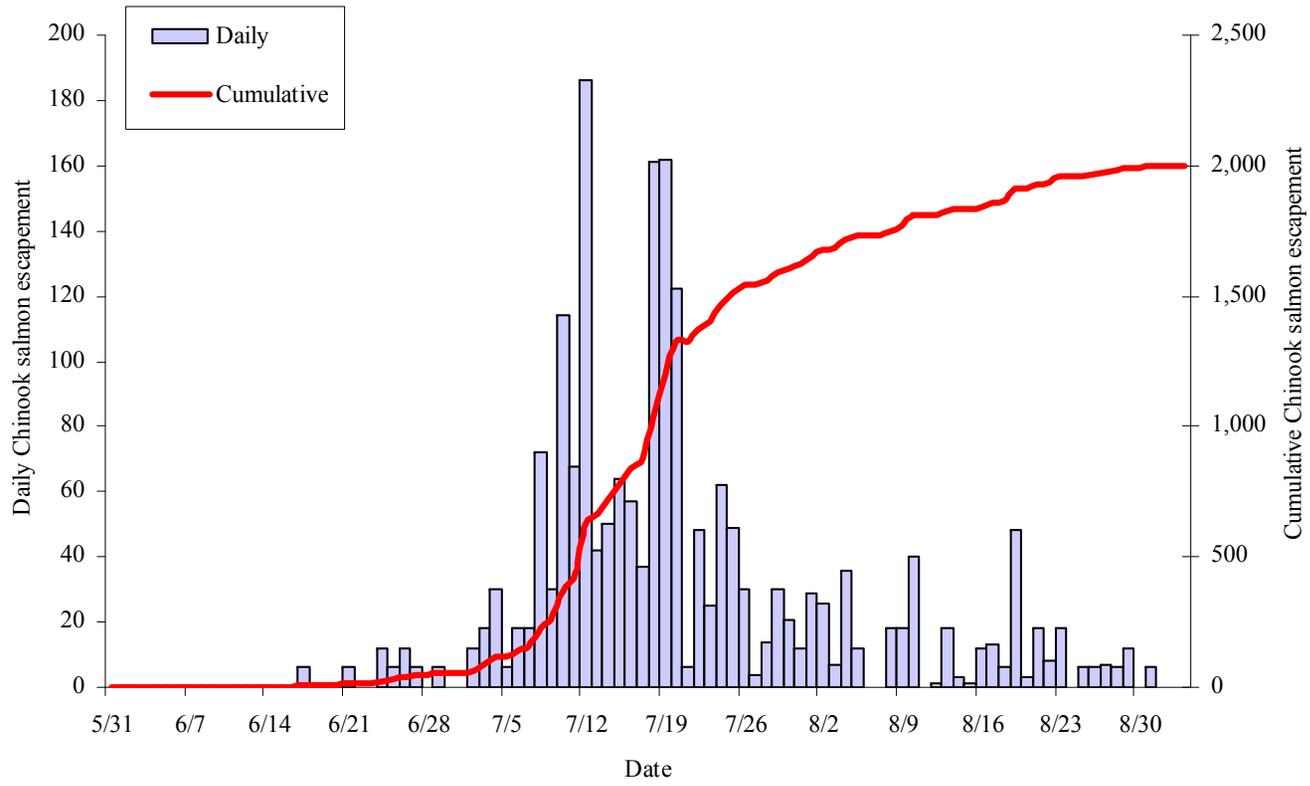


Figure 5.—Chignik River estimated daily and cumulative Chinook salmon escapement, 2007.

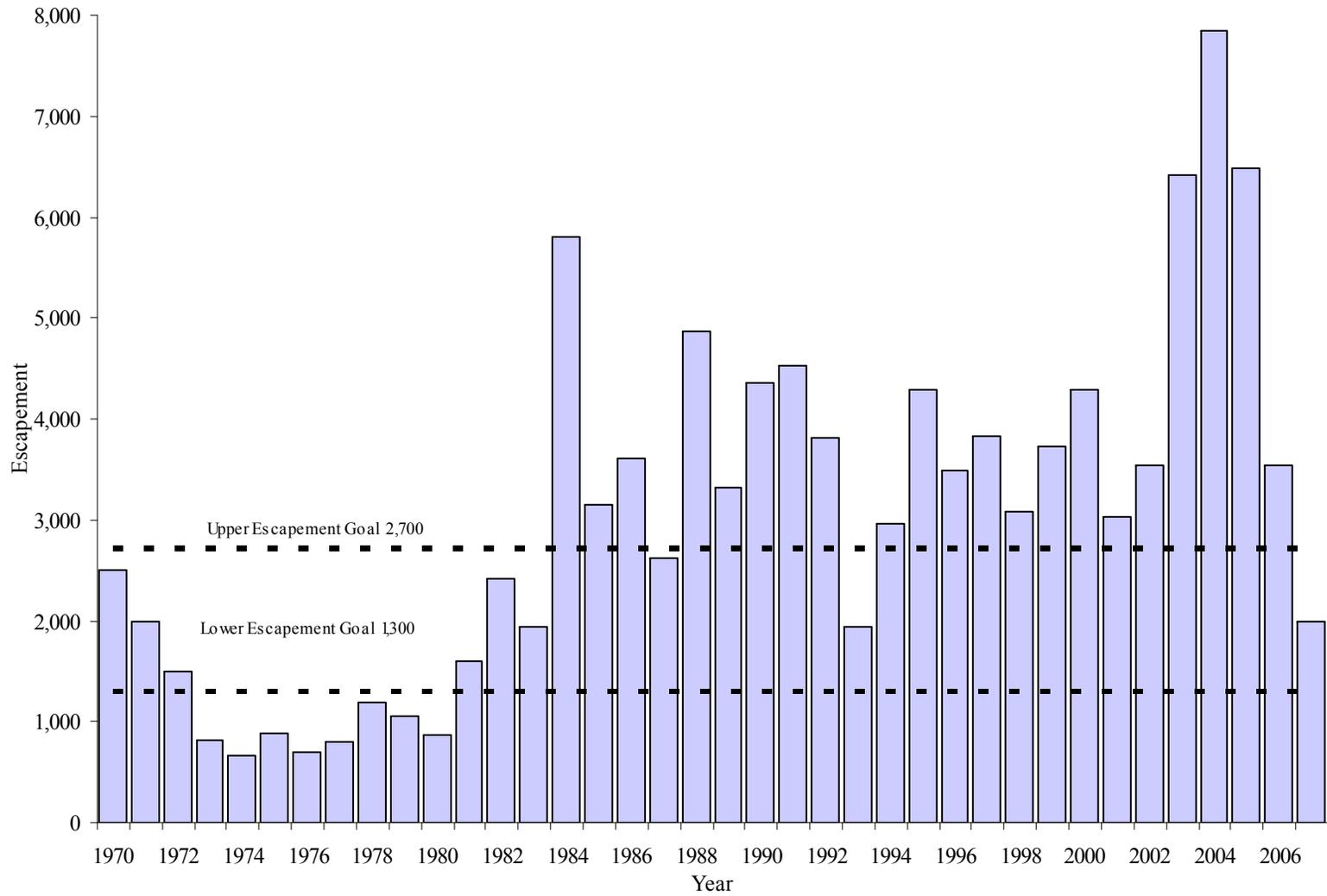


Figure 6.—Chignik River Chinook salmon escapement as compared to current escapement goals, by year, 1970 to 2007.

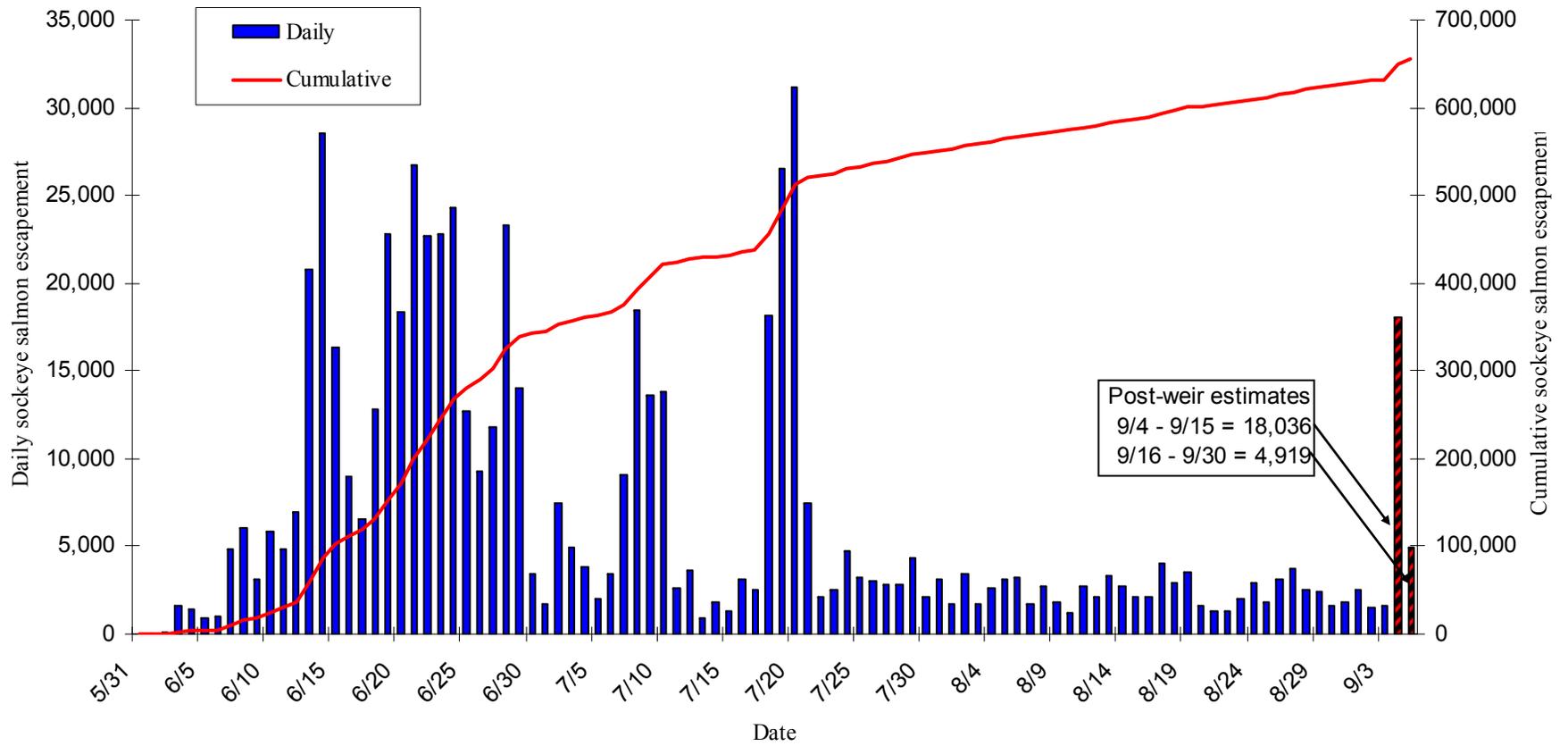


Figure 7.—Chignik River sockeye salmon daily and cumulative escapement, 2007.

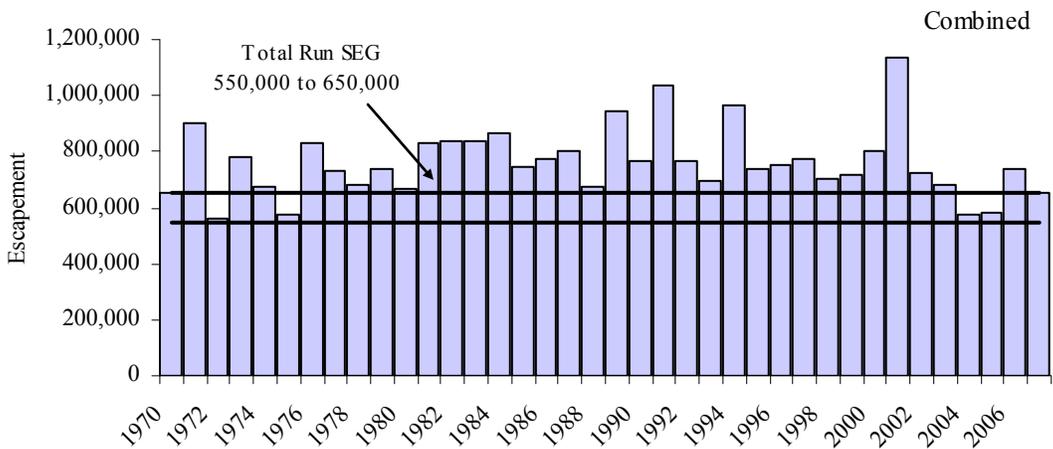
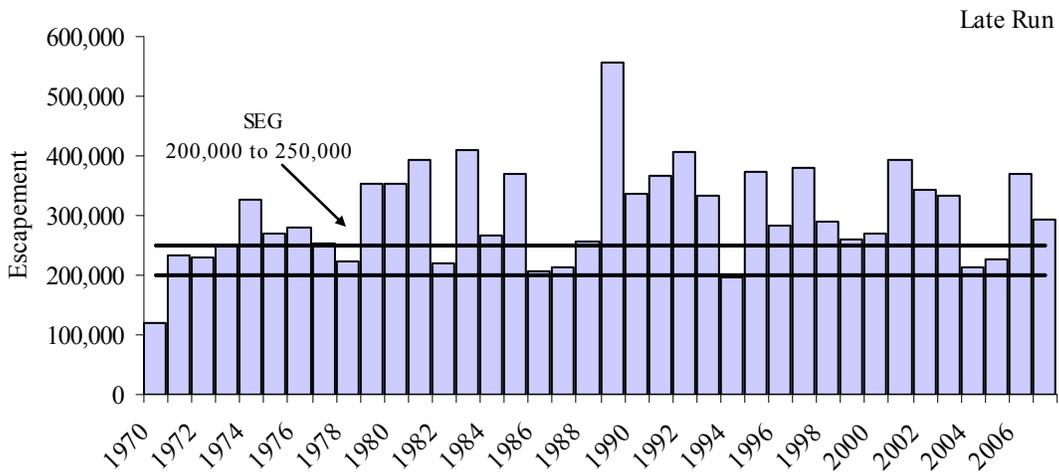
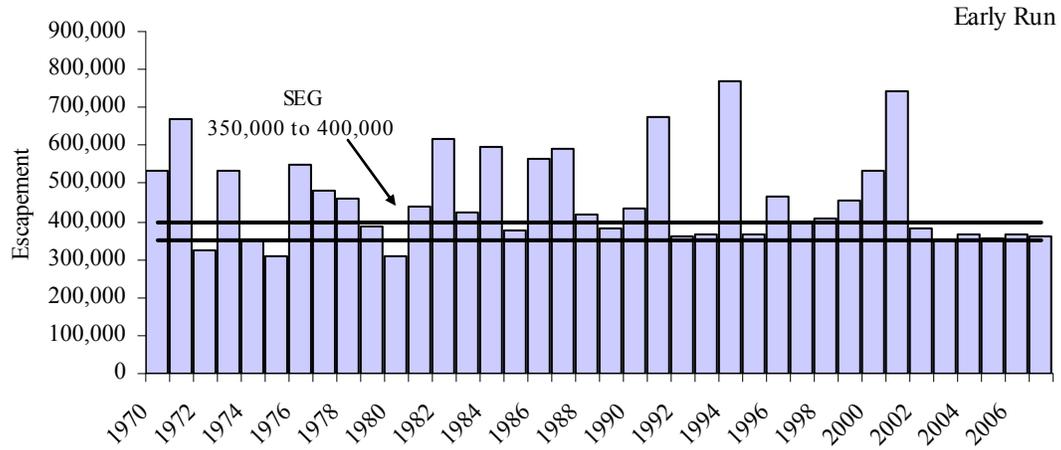


Figure 8.—Chignik River sockeye salmon early, late, and combined run escapements 1970 through 2007, compared to 2007 sustainable escapement goal.

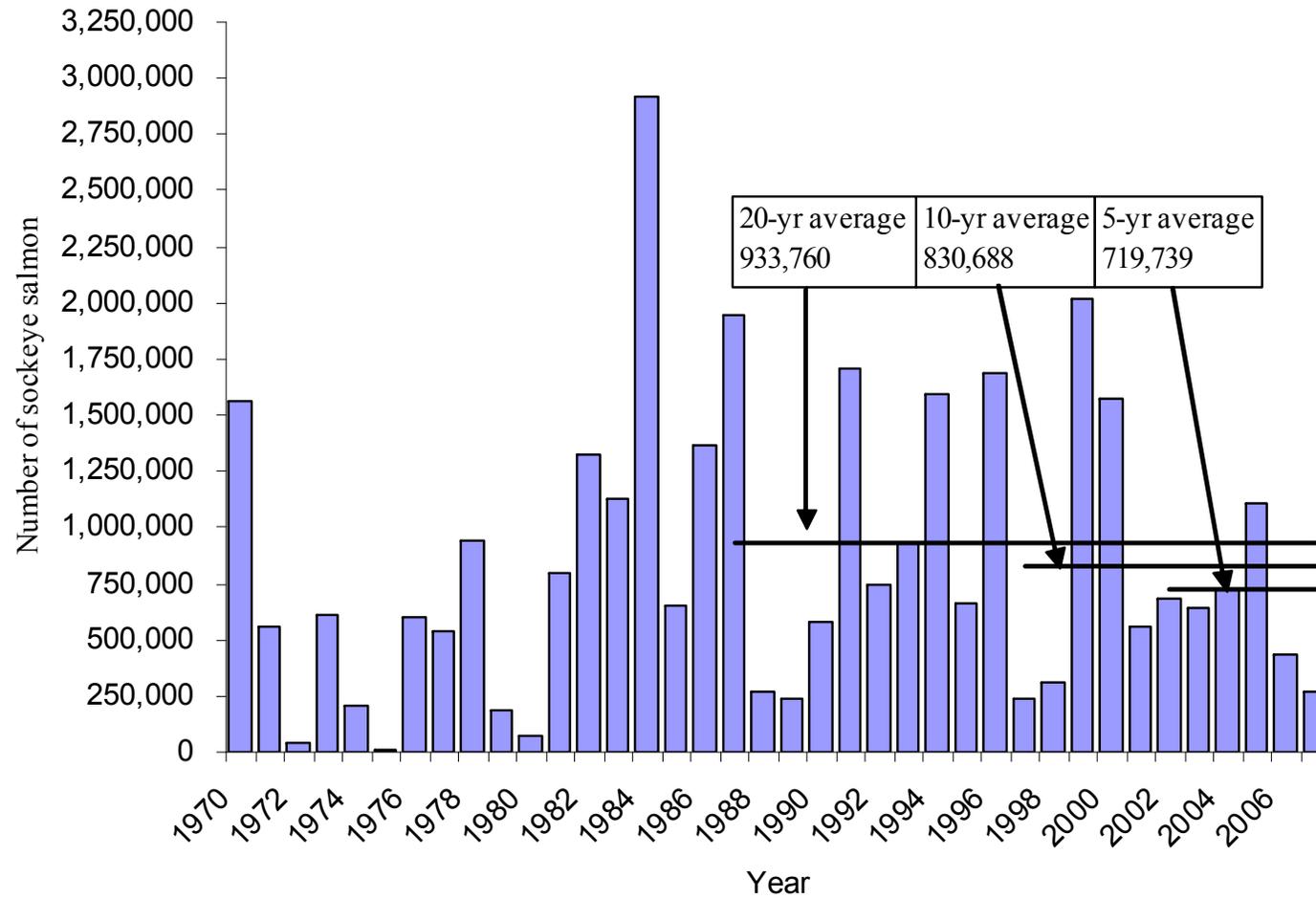


Figure 9.—Chignik-bound sockeye salmon early-run harvest, 1970 through 2007.

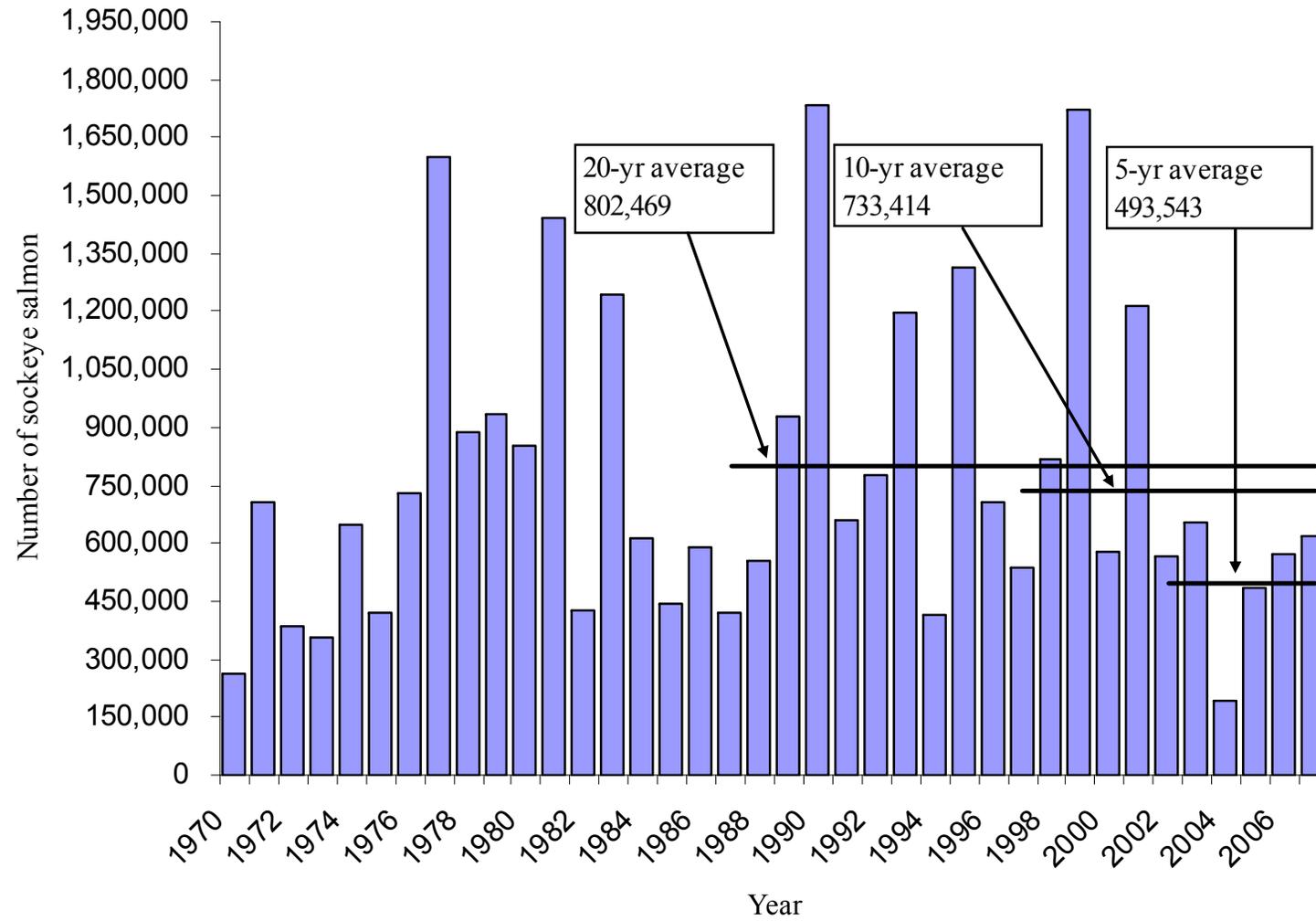


Figure 10.—Chignik-bound sockeye salmon late-run harvest, 1970 through 2007.

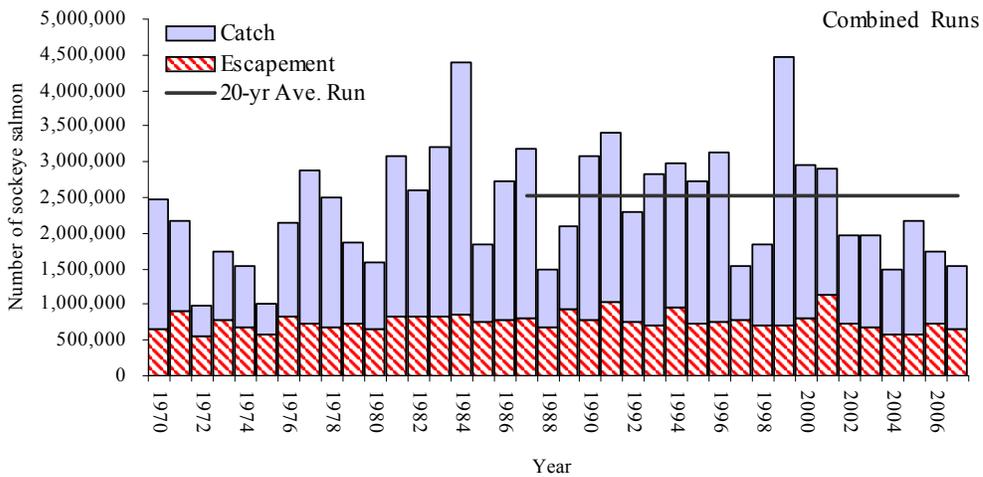
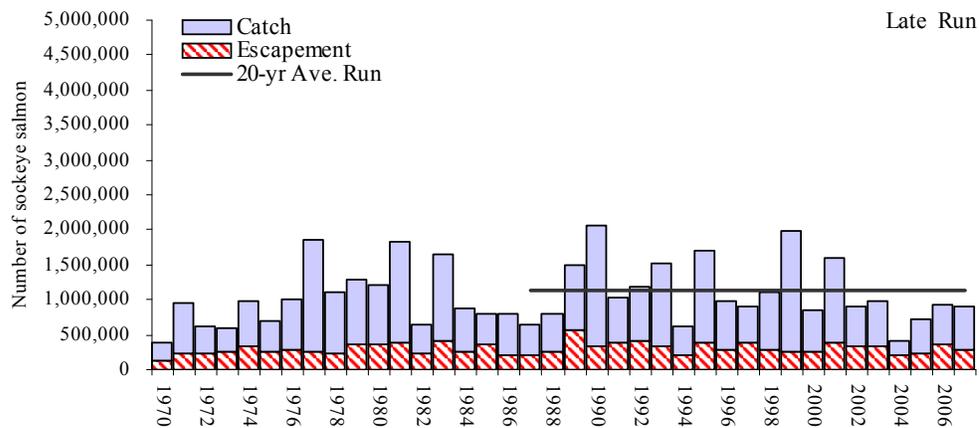
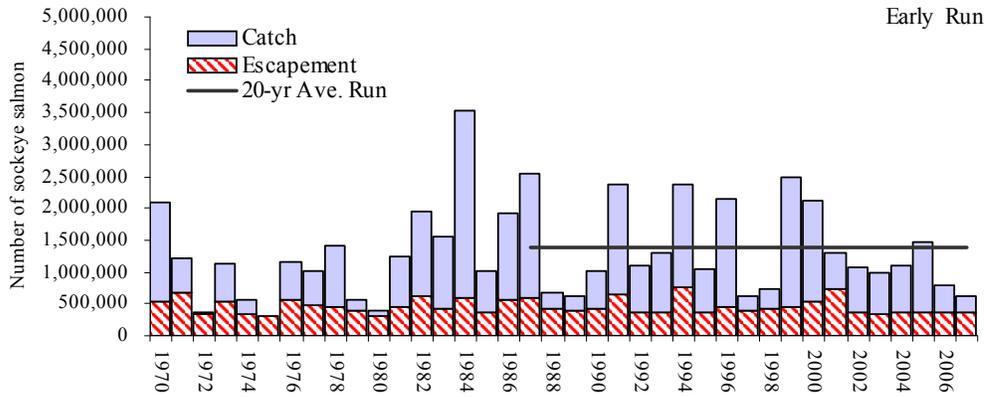


Figure 11.—Total sockeye salmon escapement and catch considered Chignik-bound including home pack, the ADF&G's test fishery harvest, and Cape Igvak and SEDM allocations, by year and run, 1970 through 2007.

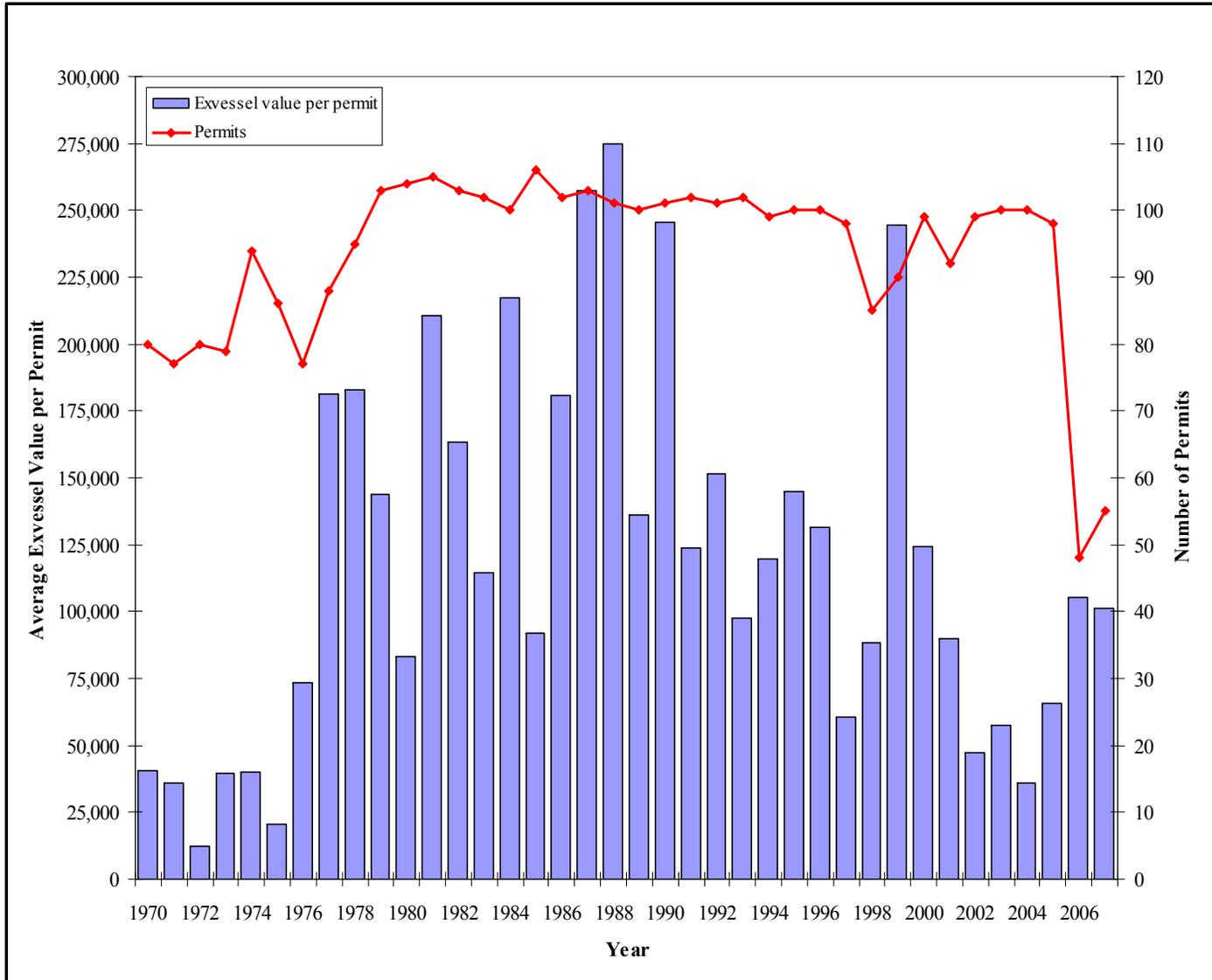


Figure 12.—Average exvessel value (\$) per permit and total permits fished by year 1970 through 2007.

**APPENDIX A. MEMORANDUM RECOMMENDING
TARGETING THE LOWER BOUNDS OF THE CHIGNIK
SOCKEYE SALMON ESCAPEMENT GOALS
DURING THE 2007 SEASON**



ALASKA DEPARTMENT OF FISH AND GAME

DIVISION OF COMMERCIAL FISHERIES

MEMORANDUM

TO: Jim McCullough
Regional Supervisor
Division of Commercial Fisheries
Region IV – Kodiak
and
Steve Honnold
Regional Finfish Research Supervisor
Division of Commercial Fisheries
Region IV – Kodiak

DATE: April 19, 2007

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THRU: Mark Witteveen
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Division of Commercial Fisheries
Region IV – Kodiak
and
Mark Stichert
Chignik Area Management Biologist
Division of Commercial Fisheries
Region IV – Kodiak

FROM: Heather Finkle
Finfish Research Biologist
Division of Commercial Fisheries
Region IV - Kodiak

SUBJECT: Chignik River Watershed
Sustainable Escapement
Goal Recommendation

The purpose of this memorandum is to discuss the current escapement goals to the Chignik River watershed in terms of the health of the sockeye salmon rearing habitat in Chignik and Black lakes. This discussion is based on preliminary data from the Chignik Lakes Ecological Assessment Project, the Chignik Smolt Enumeration Project,

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current management objectives, recent adult return data, and the dissolution of harvest allocations for the Chignik cooperative and competitive fleets.

The current Chignik River watershed sustainable escapement goals (SEGs) and management objectives should be noted first. During the November 2004 meeting, the Board of Fisheries (BOF) concurred with the department's review of leaving the early run (Black Lake) biological escapement goal (BEG) range between 350,000 and 400,000 fish through July 4 and the late run (Chignik Lake) BEG range between 200,000 and 250,000 fish from July 5 to the end of the run. The BEGs, however, were reclassified as SEGs. Supplemental to the late-run SEG, a September management objective of 25,000 fish (September 1-15), originally established in 1989 (Witteveen et al. 2005), was unchanged. However, an additional late-run management objective of 25,000 fish from August 1 to August 31 was added by the board. This yielded a total late-run escapement and management objective range of 250,000 to 300,000 sockeye salmon.

Respective to the current SEGs (550,000-650,000 fish), total sockeye salmon escapement estimates have been in excess of the SEG ranges for 13 of the past 15 years (1992 – 2006; Table 1). From 1992 to 2006 the early-run escapements have exceeded the current SEG upper range six times. The late-run escapements have failed to meet the current SEG lower range one time and exceeded the SEG upper range 12 times during the same time period. Since 2002, the lower ranges of the escapement goals were targeted for both early and late runs. Regardless of this effort, the total late-run escapement exceeded the upper range of the goal (250,000 fish) by almost 100,000 sockeye salmon in 2002. In 2003 the early-run escapement estimate barely exceeded the lower range of the goal (350,000 fish) although the late-run escapement exceeded the upper range of its goal (250,000 fish). In 2004, escapements for both runs fell just above the lower ranges of their respective goals, however, the late run did not fulfill its September management objective of 25,000 fish. In 2005, despite meeting its goal, the late run failed to achieve both the August and September management objectives. The total sockeye salmon escapements to the Chignik River watershed in 2004 and 2005 were the lowest since 1992. In 2006, the late run exceeded its combined goal and management objectives by almost 70,000 fish.

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Table 1. Sockeye salmon escapements in the Chignik River watershed from 1992 to 2006.

	Early Run Escapement	Late Run Escapement	Total Escapement
Escapement Goal	350,000 - 400,000	200,000 - 250,000	550,000 - 650,000
Management Objective	0	25,000 – August	
Year		25,000-September	50,000
1992	360,681	403,755	764,436
1993	364,263	333,114	697,377
1994	769,464	197,445	966,909
1995	366,163	373,757	739,920
1996	464,750	284,387	749,137
1997	396,668	378,950	775,618
1998	410,659	290,469	701,128
1999	457,425	258,541	715,966
2000	519,661	285,614	805,275
2001	744,013	392,905	1,136,918
2002	380,701	344,519	725,220
2003	350,004	334,119	684,123
2004	363,800	214,459	578,259
2005	355,091	225,366	580,457
2006	366,497	368,996	735,493

Fluctuations in escapement and their subsequent smolt production can greatly affect juvenile fish life history strategies. Zooplankton are the forage base for juvenile sockeye salmon, and a high abundance of juvenile sockeye salmon, resulting from high escapement levels, can negatively impact the juvenile sockeye salmon food supply. The zooplankton community is a complex, dynamic web of different species that are susceptible to different selective pressures. The abundance, species composition, and even the size of the zooplankton can change via either bottom-up pressures such as nutrient limitations and phytoplankton species composition or from top-down pressures from extensive grazing (Kerfoot 1987; Kyle 1996). Limnology data collected from both Black and Chignik lakes indicated that the forage base was overgrazed from 2000 to 2006 (Finkle and Bouwens 2001; Bouwens and Finkle 2003; Finkle 2006a; Finkle 2006b; Finkle *in prep*). In the Chignik River watershed, top-down pressures appear to be regulating the zooplankton population as evidenced by Zooplankton species composition: High grazing pressure on zooplankton can cause a shift in zooplankton abundance and species composition to fewer and less nutritional species of sockeye salmon forage (Kerfoot 1987; Koenings and Burkett 1987). This seems to have occurred in both Black and Chignik lakes between 2000 and 2006 compared to data taken in 1991 (Kyle 1992). From 2000 to 2006, *Bosmina* and *Cyclops* predominated the zooplankton species composition in both lakes. Both of the dominant

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species are inefficient grazers on phytoplankton, and are poor transmitters of energy and nutrients through the food web (Kerfoot 1987). Although juvenile sockeye salmon do prey upon *Bosmina* and *Cyclops*, they are not preferred sockeye salmon forage. *Daphnia* are the preferred species, which were nearly absent in both lakes from 2000 to 2002, and from 2005 to 2006. However, *Daphnia* were more abundant in Chignik Lake in 1991, 2003, and 2004, which followed years when total escapements for each run were closer to their BEGs than in past years. Although the dominant zooplankton species composition still varied in 2003 and 2004, the increase in *Daphnia* abundance may also suggest that top-down pressures on the preferred juvenile sockeye salmon forage, and thus the zooplankton community, were reduced. Further, rotifers, a type of smaller zooplankton unavailable as juvenile sockeye salmon forage, have been very abundant in recent years.

Zooplankton size: The size of individual zooplankton (especially *Bosmina*) can change in response to high grazing pressure. The mean size of the *Bosmina* in both lakes was very small and below the elective feeding size threshold of sockeye salmon from 2000 to 2006. The zooplankton lengths, by taxa, were similar to those in 1991 (Kyle 1992). Escapement levels were also comparable around these two time periods (Witteveen et al. 2005).

Zooplankton Biomass: The average 2000-2006 weighted mean zooplankton biomass (regardless of species or size) in Chignik Lake was about 503 mg/m². In 2001, the weighted mean biomass in Chignik Lake was very low (170 mg/m²). In 2006, the Chignik Lake weighted mean zooplankton biomass was 580 mg/m². For comparison, the weighted mean biomass of Chignik Lake in 1991 was 916 mg/m². Edmundson and Mazumder (2001) suggested that juvenile sockeye salmon starve when zooplankton biomass levels approach about 100 mg/m² and are fully satiated at levels above 1,000 mg/m². The increase in the 2006 mean weighted biomass suggests that top-down pressures have been reduced in Chignik Lake, improving rearing conditions. The 2006 zooplankton biomass increase in Chignik Lake follows a relatively low 2005 late-run escapement. It should be noted that the Black Lake weighted mean zooplankton biomass was 28 mg/m² in 2006. This was the lowest weighted zooplankton biomass recorded since 2000, however only two samples were collected between June and July, which were comparable to prior years' data (Finkle *In prep*). Historically, Black Lake zooplankton biomass substantially increases in August and September coinciding with the emigration of juvenile sockeye to Chignik Lake (Finkle *In prep*).

Phytoplankton abundance: Phytoplankton is the forage of zooplankton. Chlorophyll *a* is used as an indicator of phytoplankton production as it is a necessary component of phytoplankton respiration. High chlorophyll-*a* levels and nutrient data indicated that the Chignik River watershed was not limited by nutrient abundance from 2000 to 2006. Chlorophyll-*a* levels were relatively moderate to high in both lakes from 2000 to 2006 compared to some standards for oligotrophic lakes (COLAP 2001). This indicated that the zooplankton community was unable to transfer the energy and nutrients from the phytoplankton to sockeye salmon, indicating a bottleneck through top-down limitations of zooplankton production (Bouwens and Finkle 2003). Therefore, based on chlorophyll-*a* levels, the primary production of the system was high, but it was not transferred up the food web to juvenile sockeye salmon. In 2002 and 2003, chlorophyll-*a* levels were lower or comparable to other Alaska Peninsula lakes (Finkle 2006b), which suggested that phytoplankton were more efficiently consumed by zooplankton. This may also suggest that grazing pressure was less in 2002 and 2003 relative to more recent years (Finkle 2006b). The high chlorophyll-*a* levels in 2006 suggest that zooplankton were overgrazed in both lakes.

Stomach content analysis: Preliminary juvenile sockeye salmon stomach content analysis from 2001 and 2002 data suggested that prey items other than zooplankton have been a major portion of the diet of rearing sockeye salmon in Black Lake, Chignik River, and Chignik Lagoon. The alternative prey included insects and amphipods. These prey were consumed less in 2002 (when there was a higher zooplankton abundance and biomass) than in 2001, indicating that they might be chosen secondarily if zooplankton are not available. Stomach content data were not collected from 2003 to 2006.

Juvenile sockeye salmon catch data: Juvenile sockeye salmon were sampled in Black Lake, Black River, Chignik Lake, Chignik River, and Chignik Lagoon from 2000 to 2003. Juvenile sockeye salmon sampling was reduced to

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Black Lake and Chignik Lagoon from 2004 to 2006. These data are not yet fully analyzed, but preliminary analyses indicate that the majority of the young-of-the-year juvenile sockeye salmon emigrate from Black Lake to Chignik Lake during July and August of each year. This has been consistent with findings of studies over 30 years ago by Parr (1972) and Narver (1966) and more recent work by Ruggerone (1994). Therefore, it appears that Chignik Lake is an important rearing area for both stocks. We were unable to derive juvenile sockeye salmon abundance estimates; thus, catch rates were used as an indicator of relative abundance. During years when juvenile sockeye salmon catch rates in Chignik Lake were high (especially 2001) zooplankton biomass was low. Furthermore, the catch rates of juvenile sockeye salmon in Chignik River and Chignik Lagoon were higher than in Chignik Lake in 2001. This suggests that the juvenile sockeye salmon were forced to utilize alternative habitats when the zooplankton population was overtaxed. The 2004 through 2006 Chignik Lagoon catch rates were comparable to 2001 catch rates.

Data from the Chignik Smolt Enumeration Project (Bouwens and Newland 2003; Finkle and Newland 2005, Finkle and Ruhl 2007) indicated that the past (1997-2002) numbers of juvenile sockeye salmon rearing in the freshwater ecosystem may have taxed the available forage base; in subsequent years, about 6.75 million smolt emigrated in 2003, 8.66 million smolt emigrated in 2004, 4.44 million smolt in 2005, and 7.56 million smolt in 2006. Compared to a 1997-2002 average of 20 million smolt per year, these were four of the five lowest estimates of juvenile sockeye salmon outmigration from the watershed. The proportion of age-2. smolt in the emigration has been relatively low from 2001 to 2004 compared to the prior seven years (1994 and 2000). The smolt that would have emigrated in 2003 as age-2. smolt experienced very poor feeding conditions in 2001 and slightly better conditions in 2002 in Chignik Lake. This is further evidenced by the lack of an age-3. component from 2003 and 2004 smolt trap sample catches. Similar circumstances existed for age-2. smolt rearing in the watershed during 2002 and 2003. The increase in age-0. fish in the smolt trap catch during 2005 and 2006 may also indicate a downstream migration to Chignik Lagoon from Chignik Lake to find better rearing conditions. Thus, the freshwater survival of juvenile sockeye salmon may have been low in recent years because of low food availability due to overgrazing from prior years of rearing juvenile sockeye salmon.

Recent organizational changes to the commercial fishing fleet must also be considered when targeting escapements for the Chignik sockeye salmon stocks. With the dissolution of the Chignik Cooperative fleet, management will lack the same levels of control over fishing effort, and subsequently escapement. When the fishery was prosecuted with solely a competitive fleet, it was frequently overescapement. Targeting the lower ranges of the SEGs would reduce the risk of overescapement the system and increasing competition in already forage-taxed nursery lakes.

The lower-than-average 2004-2006 adult runs were the recruits of overescapement brood years (1998-2000) that were subject to poor zooplankton forage base conditions in 2000 and 2001. The goal of targeting the lower ranges of the escapement objectives was implemented from 2002 to 2005 to relieve the top-down pressure on the zooplankton populations from overescapement to each lake. Subsequently, this recommendation is expected to increase the overall ecological health of the system in terms of sockeye salmon production. The effects of the targeted lower escapement goal ranges from 2003 to 2006 will not be realized until the young of the year sockeye salmon have reared in the watershed and return as adults starting in 2008. However, to date, the general response to this strategy has been an increase in the zooplankton forage base in both lakes. This protocol is still relevant because early-run juvenile sockeye salmon, which rear and compete in Chignik Lake, can still deplete the forage base shared by both stocks, let alone in their natal Black Lake. Thus, it is recommended that the lower end of the early-run escapement objective (350,000 fish) be targeted in 2006. However, because of the recent low late-run returns, it is recommended to target the middle of the late-run escapement objective range (275,000 fish). This strategy may provide stronger, future late-run returns while allowing subsistence needs to be met without depleting zooplankton levels in each nursery lake.

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APPENDIX B. SUMMARY OF 2007 EMERGENCY ORDERS

Appendix B1.–Summary of the 2007 Chignik Management Area Emergency Orders.

E.O. Number	Issued	Effective	Action taken
4-FS-L-01-07	8:15 AM 6/14/2007	4:00 AM 6/15/2007	Opens the Chignik Bay, Central, and Eastern districts for 36 hours from 4:00 AM Friday, June 15 until 4:00 PM Saturday, June 16. Closed Waters Effective 4:00 AM June 15 salmon may only be taken northeast of Humes Point.
4-FS-L-02-07	8:30 AM 6/16/2007	4:00 PM 6/16/2007	Extends the current commercial salmon fishing period in the Chignik Bay, Central, and Eastern districts for 24 hours from 4:00 PM Saturday, June 16 until 4:00 PM Sunday, June 17.
4-FS-L-03-07	1:15 PM 6/24/2007	2:00 PM 6/25/2007	Opens the Chignik Bay, Central, and Eastern districts for 24 hours from 2:00 PM Monday, June 25 until 2:00 PM Tuesday, June 26. Closed Waters Effective 2:00 PM June 25 salmon may only be taken northeast of Humes Point
4-FS-L-04-07	6:15 PM 6/27/2007	4:30 PM 6/28/2007	Opens the Chignik Bay, Central, and Eastern districts for 24 hours from 4:30 PM Thursday, June 28 until 4:30 PM Friday, June 29. Closed Waters Effective 4:30 PM June 28 salmon may only be taken northeast of Humes Point.
4-FS-L-05-07	8:00 PM 6/28/2007	4:30 PM 6/29/2007	Extends the current commercial salmon fishing period in the Chignik Bay, Central, and Eastern districts for 26 hours from 4:30 PM Friday, June 29 until 6:30 PM Saturday, June 30.
4-FS-L-06-07	1:30 PM 6/29/2007	4:30 PM 6/29/2007	Closed Waters Effective 4:30 PM June 29 the upper Chignik Lagoon markers will move to Mensis Point.
4-FS-L-07-07	9:00 AM 6/30/2007	6:30 PM 6/30/2007	Extends the current commercial salmon fishing period in the Chignik Bay, Central, and Eastern districts for 24 hours from 6:30 PM Saturday, June 30 until 6:30 PM Sunday, July 1. Closed Waters Effective 6:30 PM June 30 the upper Chignik Lagoon markers will move to Humes Point.
4-FS-L-08-07	8:00 PM 6/30/2007	6:30 PM 7/1/2006	Extends the Chignik Bay, Central, and Eastern districts for 24 hours from 6:30 PM Sunday, July 1 until 6:30 PM Monday, July 2.
4-FS-L-09-07	10:00 AM 7/2/2007	6:30 AM 7/3/2007	Opens the Chignik Bay, Central, and Eastern districts for 24 hours from 6:30 AM Tuesday, July 3 until 6:30 AM Wednesday, July 4. Closed Waters Effective 6:30 AM July 3 salmon may only be taken northeast of Humes Point.
4-FS-L-10-07	6:15 PM 7/2/2007	6:30 AM 7/3/2007	Closed Waters Effective 6:30 AM July 3 the upper Chignik Lagoon markers will move to Mensis Point.
4-FS-L-11-07	2:00 PM 7/3/2007	6:30 AM 7/4/2007	Extends the Chignik Bay, Central, and Eastern districts for 24 hours from 6:30 AM Wednesday, July 4 until 6:30 AM Thursday, July 5.
4-FS-L-12-07	5:00 PM 7/4/2007	6:30 AM 7/5/2007	Extends the Chignik Bay, Central, and Eastern districts for 24 hours from 6:30 AM Thursday, July 5 until 6:30 AM Friday, July 6.

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Appendix B1.–Page 2 of 3.

E.O. Number	Issued	Effective	Action taken
4-FS-L-13-07	9:00 AM 7/8/2007	6:00 AM 7/9/2007	Opens the Chignik Bay and Central districts for 48 hours from 12:15 PM Monday, July 9 until 12:15 PM Wednesday, July 11. Closed Waters Effective 12:15 PM July 9 salmon may only be taken northeast of Humes Point. Opens the Western and Perryville districts for 42 hours from 6:00 AM Monday, July 9 until 11:59 PM Tuesday, July 10.
4-FS-L-14-07	6:15 PM 7/9/2007	12:15 PM 7/10/2007	Closed Waters Effective 12:15 PM July 10 the upper Chignik Lagoon markers will move to Mensis Point.
4-FS-L-15-07	9:15 AM 7/10/2007	12:15 PM 7/11/2007	Extends the Chignik Bay and Central districts for 48 hours from 12:15 PM Wednesday, July 11 to 12:15 PM Friday, July 13.
4-FS-L-16-07	6:15 PM 7/10/2007	11:59 PM 7/11/2007	Extends the Western and Perryville districts for 60 hours from 11:59 PM Tuesday, July 11 until 11:59 AM Friday, July 13.
4-FS-L-17-07	12:00 PM 7/12/2007	11:59 AM 7/13/2007	Extends the Western and Perryville districts for 48 hours from 11:59 AM Friday, July 13 to 11:59 AM Sunday, July 15. Extends the Chignik Bay and Central districts for 54 hours from 12:15 PM Friday, July 13 to 6:15 PM Sunday, July 15.
4-FS-L-18-07	10:00 AM 7/14/2007	6:15 PM 7/15/2007	Extends the Chignik Bay and Central districts for 24 hours from 6:15 PM Sunday, July 15 to 6:15 PM Monday, July 16.
4-FS-L-19-07	9:00 AM 7/19/2007	8:00 AM 7/20/2007	Opens the Chignik Bay, Central, Western and Perryville districts for 48 hours from 8:00 AM Friday, July 20 to 8:00 AM Sunday, July 22. Closed Waters Effective 8:00 AM July 20 salmon may only be taken northeast of Humes Point.
4-FS-L-20-07	3:15 PM 7/20/2007	8:00 PM 7/20/2007	Closed Waters Effective 8:00 PM July 20 the upper Chignik Lagoon markers will move to Mensis Point.
4-FS-L-21-07	10:30 AM 7/21/2007	8:00 PM 7/22/2007	Extends the Chignik Bay, Central, Western and Perryville districts for 96 hours from 8:00 AM Sunday, July 22 to 8:00 AM Thursday, July 26.
4-FS-L-22-07	9:00 AM 7/24/2007	9:00 AM 7/24/2007	Closed Waters Effective 9:00 AM July 24 those Mitrofanía Island (273-74) waters extending 2 nautical miles east of a line that starts at 55°49.641' N latitude, 158°42.621' W longitude to 55°70.749' N latitude, 158°42.641' W longitude are closed to commercial salmon fishing until further notice.
4-FS-L-23-07	6:00 PM 7/24/2007	8:00 AM 7/26/2007	Extends the Chignik Bay, Central, Western and Perryville districts for 96 hours from 8:00 AM Thursday, July 26 until 8:00 AM Monday, July 30.
4-FS-L-24-07	6:00 PM 7/28/2007	8:00 AM 7/30/2007	Extends the Chignik Bay, Central, Western and Perryville districts for 84 hours from 8:00 AM Monday, July 30 to 8:00 PM Thursday, August 2.
4-FS-L-25-07	3:15 PM 8/1/2007	8:00 PM 8/2/2007	Extends the Chignik Bay, Central, Western and Perryville districts for 48 hours from 8:00 PM Thursday, August 2 to 8:00 PM Saturday, August 4. Closed Waters Effective 8:00 PM August 2 those waters near the southeastern most point of Mitrofanía Island in the Western District will be reopened to commercial salmon fishing until further notice.

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E.O. Number	Issued	Effective	Action taken
4-FS-L-26-07	6:15 AM 8/3/2007	8:00 PM 8/4/2007	Extends the Chignik Bay, Central, Western and Perryville districts for 50 hours from 8:00 PM Saturday, August 4 until 10:00 PM Monday, August 6.
4-FS-L-27-07	6:15 PM 8/5/2007	10:00 PM 8/6/2007	Extends the Chignik Bay, Central, Eastern, Western and Perryville districts for 48 hours from 10:00 PM Monday, August 6 until 10:00 PM Wednesday, August 8.
4-FS-L-28-07	6:15 PM 8/7/2007	10:00 PM 8/8/2007	Extends the Chignik Bay, Central, Eastern, Western and Perryville districts for 72 hours from 10:00 PM Wednesday, August 8 until 10:00 PM Saturday, August 11.
4-FS-L-29-07	12:00 PM 8/12/2007	6:00 PM 8/13/2007	Opens the Chignik Bay, Central, Western and Perryville districts for 50 hours from 6:00 PM Monday, August 13 until 8:00 PM Wednesday, August 15. Closed Waters Effective 6:00 PM August 13 salmon may only be taken northeast of Humes Point.
4-FS-L-30-07	6:15 PM 8/14/2007	8:00 PM 8/15/2007	Extends the Chignik Bay, Central, Western and Perryville districts for 48 hours from 8:00 PM Wednesday, August 15 until 8:00 PM Friday, August 17. Closed Waters Effective 8:00 PM August 15 the upper Chignik Lagoon markers will move to Mensis Point.
4-FS-L-31-07	6:15 PM 8/16/2007	8:00 PM 8/17/2007	Extends the Chignik Bay, Central, Western and Perryville districts for 48 hours from 8:00 PM Friday, August 17 until 8:00 PM Sunday, August 19.
4-FS-L-32-07	12:45 PM 8/18/2007	12:00 PM 8/19/2007	Opens the Eastern district for 48 hours from 12:00 PM Sunday, August 19 until 12:00 PM Tuesday, August 21.
4-FS-L-33-07	6:15 PM 8/18/2007	8:00 PM 8/19/2007	Extends the Chignik Bay, Central, and Western districts for 72 hours from 8:00 PM Sunday, August 19 until 8:00 PM Wednesday, August 22.
4-FS-L-34-07	6:15 PM 8/21/2007	8:00 PM 8/22/2007	Extends the Chignik Bay, Central and Western districts for 48 hours from 8:00 PM Wednesday, August 22 until 8:00 PM Friday, August 24. Closed Waters Effective 8:00 PM August 22 the Mitrofanina Island section (273-74) in the Western District will close to commercial salmon fishing until further notice.
4-FS-L-35-07	7:15 PM 8/23/2007	8:00 PM 8/24/2007	Extends the Chignik Bay, Central, and Western districts for 36 hours from 8:00 PM Friday, August 24 until 8:00 AM Sunday, August 26.
4-FS-L-36-07	9:15 AM 8/25/2007	8:00 AM 8/26/2007	Extends the Chignik Bay, Central, and Western districts for 48 hours from 8:00 AM Sunday, August 26 until 8:00 AM Tuesday, August 28.
4-FS-L-37-07	10:15 AM 8/27/2007	8:00 AM 8/28/2007	Extends the Chignik Bay, Central, and Western districts for 88 hours from 8:00 AM Tuesday, August 28 until 11:59 PM Friday, August 31.
4-FS-L-38-07	9:15 AM 8/31/2007	11:59 PM 8/31/2007	Extends the Chignik Bay, Central, and Western districts for 72 hours from 11:59 PM Friday, August 31 until 11:59 PM Monday, September 3.
4-FS-L-39-07	8:00 PM 9/2/2007	11:59 PM 9/3/2007	Extends the Chignik Bay, Central, and Western districts for 48 hours from 11:59 PM Monday, September 3 until 11:59 PM Wednesday, September 5.

**APPENDIX C. COMMERCIAL SALMON FISHERY CATCH
AND EFFORT, BY DAY**

Appendix C1.—Commercial salmon fishing effort and harvest (including home pack but not including the department’s test fishery harvest), by day in the Chignik Management Area, 2007.

Date	Effort		Chinook		Sockeye		Coho		Pink		Chum		Total	
	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
12-Jun							Fishery Closed							
13-Jun							Fishery Closed							
14-Jun							Fishery Closed							
15-Jun	42	44	5	132	19,570	139,427	0	0	13	54	300	2,663	19,888	142,276
16-Jun	38	39	2	43	13,819	97,957	0	0	1	2	1	7	13,823	98,009
17-Jun	41	41	10	196	12,507	88,823	0	0	209	697	450	3,666	13,176	93,382
18-Jun							Fishery Closed							
19-Jun							Fishery Closed							
20-Jun							Fishery Closed							
21-Jun							Fishery Closed							
22-Jun							Fishery Closed							
23-Jun							Fishery Closed							
24-Jun							Fishery Closed							
25-Jun	38	42	9	182	21,260	145,904	1	9	191	674	274	1,881	21,735	148,650
26-Jun	44	46	23	493	23,867	169,100	0	0	1,214	4,178	2,275	19,515	27,379	193,286
27-Jun							Fishery Closed							
28-Jun	29	29	7	126	8,156	53,316	20	109	1,209	3,756	197	1,778	9,589	59,085
29-Jun	46	50	40	618	20,871	140,358	80	489	4,230	13,541	815	7,090	26,036	162,096
30-Jun	44	46	28	453	17,312	121,603	27	167	2,283	7,330	664	5,572	20,314	135,125
1-Jul	44	48	48	804	20,247	131,734	136	854	5,792	18,470	1,528	13,379	27,751	165,241
2-Jul	44	44	48	697	14,055	90,573	163	1,133	3,720	11,852	940	8,103	18,926	112,358
3-Jul	40	42	81	1,377	15,252	107,913	99	593	2,943	9,729	877	7,102	19,252	126,714
4-Jul	44	48	66	1,144	23,210	166,083	275	2,153	3,950	12,371	1,287	10,291	28,788	192,042
5-Jul	37	43	70	1,562	19,683	137,360	189	1,228	3,752	12,838	1,037	8,437	24,731	161,425
6-Jul	16	16	16	286	6,295	42,698	489	2,935	2,391	7,805	456	3,853	9,647	57,577
7-Jul							Fishery Closed							
8-Jul							Fishery Closed							
9-Jul	44	44	117	2,084	21,471	161,320	1,171	8,406	7,295	23,957	4,465	34,322	34,519	230,089
10-Jul	40	46	90	1,778	22,286	163,855	273	1,882	4,076	13,802	2,735	21,791	29,460	203,108
11-Jul	43	53	130	2,684	28,252	204,883	471	3,273	10,256	34,462	4,415	36,187	43,524	281,489
12-Jul	46	50	81	1,335	27,079	180,722	492	3,304	12,987	43,548	1,981	17,088	42,620	245,997
13-Jul	39	41	83	1,429	22,615	167,798	2,197	12,790	11,948	41,634	3,582	28,940	40,425	252,591

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Date	Effort		Chinook		Sockeye		Coho		Pink		Chum		Total	
	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
14-Jul	43	48	133	2,318	41,809	270,627	1,682	11,806	20,101	68,811	2,110	17,906	65,835	371,468
15-Jul	42	52	96	1,197	33,143	216,587	1,597	11,308	13,887	49,103	2,354	20,405	51,077	298,600
16-Jul	41	44	59	783	19,577	136,507	258	1,978	4,388	15,353	496	4,470	24,778	159,091
17-Jul							Fishery Closed							
18-Jul							Fishery Closed							
19-Jul							Fishery Closed							
20-Jul	39	41	20	391	19,440	143,868	509	3,347	14,168	50,389	846	6,749	34,983	204,744
21-Jul	41	46	26	322	24,448	169,654	939	6,142	24,063	89,286	1,400	11,699	50,876	277,103
22-Jul	43	48	28	426	28,984	206,985	661	4,504	31,667	114,833	2,756	21,613	64,096	348,361
23-Jul	41	51	52	794	33,697	246,431	1,690	12,427	61,502	208,717	3,089	26,909	100,030	495,278
24-Jul	40	49	24	500	23,579	169,529	1,029	5,991	40,141	159,149	1,850	15,134	66,623	350,303
25-Jul	32	37	7	175	18,729	133,792	267	1,957	37,722	137,463	2,000	17,082	58,725	290,469
26-Jul	37	45	33	715	18,329	131,631	635	4,424	58,941	198,872	1,319	12,013	79,257	347,655
27-Jul	40	46	18	325	19,806	141,721	1,006	6,547	65,169	236,330	1,421	12,522	87,420	397,445
28-Jul	35	41	11	150	14,324	103,717	369	2,944	59,373	191,697	723	6,524	74,800	305,032
29-Jul	35	43	18	265	12,437	88,161	798	5,124	54,252	203,796	1,088	9,540	68,593	306,886
30-Jul	39	43	38	550	16,110	112,862	2,373	16,496	92,107	327,756	2,418	21,129	113,046	478,793
31-Jul	39	41	11	173	18,959	118,260	1,182	8,132	86,484	311,924	1,468	11,331	108,104	449,820
1-Aug	33	37	21	148	8,462	57,481	2,119	15,056	57,456	216,433	1,326	11,612	69,384	300,730
2-Aug	34	36	8	122	9,298	61,654	2,188	15,901	71,923	256,787	1,480	12,808	84,897	347,272
3-Aug	36	37	18	218	9,601	67,050	2,176	15,872	112,471	374,612	2,272	19,829	126,538	477,581
4-Aug	33	33	19	284	9,146	62,780	2,522	18,832	90,585	361,974	1,615	12,448	103,887	456,318
5-Aug	35	36	8	87	8,793	61,784	2,743	20,249	95,078	336,376	1,397	12,974	108,019	431,470
6-Aug	34	37	8	125	7,892	53,868	1,765	12,971	74,370	296,681	1,098	8,793	85,133	372,438
7-Aug	32	32	5	72	4,774	33,709	1,912	13,974	85,593	278,906	1,133	9,698	93,417	336,359
8-Aug	29	29	8	146	5,020	34,513	1,990	14,503	87,490	351,337	1,090	8,755	95,598	409,254
9-Aug	26	27	4	82	3,096	21,915	1,836	13,503	62,684	214,675	719	6,208	68,339	256,383
10-Aug	26	27	12	92	4,960	34,746	1,524	11,152	83,415	335,165	1,011	8,300	90,922	389,455
11-Aug	25	27	13	122	4,478	31,502	2,676	19,455	93,038	326,687	1,236	10,184	101,441	387,950
12-Aug							Fishery Closed							
13-Aug	5	5	0	0	511	3,568	4	33	1,400	5,320	17	125	1,932	9,046
14-Aug	27	28	17	272	3,674	25,132	3,982	28,685	69,721	267,693	1,572	12,055	78,966	333,837

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Date	Effort		Chinook		Sockeye		Coho		Pink		Chum		Total	
	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
15-Aug	24	26	61	1,266	3,531	23,686	2,878	21,795	77,159	280,508	1,388	11,114	85,017	338,369
16-Aug	26	27	0	0	4,077	26,508	2,436	17,983	72,700	294,819	1,408	10,809	80,621	350,119
17-Aug	14	14	1	6	2,065	14,178	386	3,397	11,028	45,144	274	2,068	13,754	64,793
18-Aug	10	10	1	24	2,356	16,324	328	2,633	10,749	43,379	460	3,577	13,894	65,937
19-Aug	13	13	1	17	2,525	16,900	542	4,317	15,029	61,274	384	3,015	18,481	85,523
20-Aug	15	15	0	0	2,914	19,599	1,250	9,720	43,470	167,993	1,751	12,024	49,385	209,336
21-Aug	13	13	4	49	2,163	13,700	1,481	11,582	20,408	81,643	740	5,719	24,796	112,693
22-Aug	11	11	1	20	2,438	16,128	1,207	9,543	15,162	60,484	570	4,461	19,378	90,636
23-Aug	7	8	0	0	1,790	11,725	862	8,050	6,508	26,386	554	4,264	9,714	50,425
24-Aug	10	10	2	36	3,082	20,467	1,293	11,482	6,843	27,348	318	2,331	11,538	61,664
25-Aug	9	10	4	39	2,610	17,636	2,897	23,313	11,080	44,290	570	4,622	17,161	89,900
26-Aug	4	4	0	0	1,145	7,646	166	1,318	0	0	43	294	1,354	9,258
27-Aug	6	6	2	11	2,106	13,622	660	5,434	560	2,326	88	700	3,416	22,093
28-Aug	6	6	0	0	2,258	15,280	656	5,358	1,145	4,561	89	680	4,148	25,879
29-Aug	6	6	0	0	1,500	9,829	490	4,112	258	1,032	51	394	2,299	15,367
30-Aug	7	7	0	0	1,885	12,187	797	6,824	0	0	71	507	2,753	19,518
31-Aug	6	6	0	0	2,363	15,479	1,053	9,232	0	0	35	247	3,451	24,958
1-Sep	7	7	0	0	1,730	11,001	933	7,952	0	0	24	184	2,687	19,137
2-Sep	6	6	0	0	2,191	14,133	1,126	8,996	0	0	60	335	3,377	23,464
3-Sep	6	6	0	0	2,049	12,928	1,453	11,904	0	0	55	310	3,557	25,142
4-Sep					Confidential Information									
5-Sep	4	4	0	0	998	6,466	990	8,763	0	0	14	88	2,002	15,317
					Processor Closed For Season									
Total	1,933	2,095	1,746	29,745	829,110	5,769,736	73,221	543,762	2,019,748	7,388,012	78,552	648,355	3,002,377	14,379,610

**APPENDIX D. MEMO TO CMA MANAGER REGARDING
RUN RECALCULATION, 1973-99**



ALASKA DEPARTMENT OF FISH AND GAME

DIVISION OF COMMERCIAL FISHERIES

MEMORANDUM

TO: George Pappas
Chignik Management Area Manager, FBIII
Division of Commercial Fisheries
Region IV - Kodiak

DATE: December 13, 2001

PHONE: (907) 486-1806
FAX: (907) 486-1841

FROM: Michael Daigneault
Chignik Management Area Asst. Manager
Division of Commercial Fisheries
Region IV - Kodiak

SUBJECT: Run Recalculation, 1973-99

The following information describes the rationale and methods for recalculating Black Lake and Chignik Lake sockeye escapement, catch, and total run numbers from 1973-99.

In preparing BOF reports and AMRs, it was discovered that BOF Table 6/AMR Table 34 had considerable inconsistencies in how catch and potentially escapement were applied to run apportionment percentages to calculate total run numbers for each run. The most significant problem with the table is that Igvak and SEDM catch post July 25 was applied to the Chignik catch numbers and apportioned between Black and Chignik Lake, most of which applied to the Chignik Lake run. Another inconsistency in the table is that different travel times to Chignik Lagoon have been used annually from areas within the CMA and adjacent areas (Igvak, SEDM) along with travel time from the lagoon to the Chignik Weir.

Escapement data for 1973-90 were obtained from daily weir counts published in the AMRs while escapement data for 1991-99 were obtained from the Alaska Peninsula Weir Report. Travel time from the lagoon to the weir was assumed to be 1 day.

Catch numbers for 1973-1999 were obtained from the fish ticket database. The following catch numbers and travel times to the lagoon were used in the recalculation:

- 80% Igvak catch through July 25 (5 days)
- 80% SEDM catch through July 25 (actual stat areas varied from year to year based on regulation changes [5 days])

-continued-

- Chignik Lagoon catch for the entire season
- Chignik/Hook/Kujulik Bays for the entire season (1 day)
- Cape Kumlik/South Aniakchak and Western District (2 days)
- Eastern District and Perryville District (3 days)

Escapement and catch data, adjusted to Chignik Lagoon date, were multiplied by the available stock separation percentages published in the AMRs. From 1973-81, the only stock separation data available is the early and late run age composition data by sampling period. Sampling periods usually ranged from 1 day to 2 weeks, but typically were 2-6 days long, with shorter sampling periods during the run transition period. The total number of fish apportioned to each run during a sample period was summed, then divided by the total run for that sample period to obtain stock separation percentages for the sample period. Thus, the daily stock separation percentages were identical over the sample period and then would often change substantially from one time period to the next. This method has the potential of both overestimating and underestimating the individual run escapement and catch based on static stock separation percentages over sample periods. However, the magnitude of these over- and underestimates can vary among sample periods and years based on the actual catch and escapement numbers recorded on any given day. No stock separation data were available in the 1982 AMR, therefore, escapement, catch, and total run were not recalculated for 1982. From 1983-99, daily escapement and catch estimates for each run obtained from postseason scale pattern analysis was summed then divided by the total run for that day to obtain daily stock separation percentages.

The calculated stock separation percentages were multiplied by the daily escapement and adjusted catch numbers to obtain daily catch and escapement numbers for each run. The daily numbers were summed for each run to obtain the new season totals, which were inserted into the aforementioned tables.

The file with all run recalculations is available for scrutiny at G:\alluse\miked\histrunpart_recalc.xls. The catch numbers are located in two separate files: Igvak/SEDM catch is located at G:\alluse\miked\HISTCHGIGSTEP.xls and the partitioned Chignik catch is located at G:\alluse\miked\732001CHIGNIK.xls.

Attached is a new and old version of the BOF/AMR table with significant changes (ie >5,000 fish) to the previously reported numbers highlighted along with the resulting net change in the total run.

cc. Campbell
Nelson
Lloyd
Witteveen
Bouwens
Vining